COMPRESSOR BUILDING AREA SOIL REMOVAL FORMER STIMSON LUMBER MILLSITE BONNER, MONTANA

NewFields

Envirocon

NOVEMBER 2016

November 30, 2016

Keith Large
Montana Department of Environmental Quality
Remediation Division
1225 Cedar Street
Helena, Montana 59620

Subject: Phase 4 Remedial Action Report – Compressor Building Area Soil Removal

Dear Mr. Large,

Stimson Lumber Company presents this revision to the Phase 4 Remedial Action Report. The revisions were requested by DEQ to the report submitted on June 13, 2016. This revised report progresses remedial action work under the Administrative Order on Consent in Docket No. SF-10-0001, between Stimson, the Montana Department of Justice, and the Montana Department of Environmental Quality (DEQ), dated April 29, 2010 (AOC). If you have any questions about the enclosed report or require additional copies, please contact me at (406) 549-8270.

Sincerely,

Tyler Etzel
Senior Geologist

cc: Steven Petrin, Stimson Lumber Company
Brent Sasser, International Paper
Jeanette Schuster, Tonkin Torp
Kris Cook, Envirocon
Michelle Hutchinson, MCCWQD

Remedial Action Report
Phase 4

Compressor Building Area Soil Removal
Bonner Mill Cooling Pond and Vicinity
Bonner, Montana

Submitted to:
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Submittal Date: November 30, 2016
Project No. 350.0033

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1.0 INTRODUCTION

This removal action (RA) report documents work completed by Stimson Lumber Company (Stimson) under the approved *Addendum 2 to Final Cooling Pond Removal Work Plan, Work Plan for Compressor Building Area Soil Removal*, NewFields and Envirocon, December 23, 2015 (Work Plan Addendum 2), which addressed the removal of polychlorinated biphenyl (PCB)-contaminated soil from an area around a building historically referred to as the "steam plant" or "compressor building" (Compressor Building Area) at the former Bonner Mill in Bonner, Montana (Site) (**Figure 1**). The work described in this report is part of Addendum 2 to the approved *Final Cooling Pond Work Plan*, Envirocon, January 29, 2010 (Work Plan), which implemented RA work at the Site under the Administrative Order on Consent in Docket No. SF-10-0001, dated April 29, 2010 (AOC), between Stimson, the Montana Department of Justice, and the Montana Department of Environmental Quality (DEQ). Stimson is the former owner of the Site.

The Work Plan addressed the remediation of three areas at the Site: (1) the Fire Pond Lagoon (FPL) and related petroleum hydrocarbons; (2) the cooling pond and adjacent areas impacted by PCBs and petroleum hydrocarbons; and (3) portions of the east log track area impacted by petroleum and PCBs. This remediation work is described in the Draft RA Report – Bonner Mill Cooling Pond and Vicinity (Envirocon, 2012). This work is referred to as Phase 1 of the RA. Phase 2 of the RA expanded an onsite repository to receive additional low-level waste excavated during Phase 1 activities.

The first addendum to the Work Plan (*Addendum 1 to Final Cooling Pond Removal Work Plan, Phase III Removal Activities*, NewFields and Envirocon, November 13, 2013 [Work Plan Addendum 1]) was prepared to address the remediation of additional PCB soil contamination discovered during the final days of the Phase 1 RA in the area of monitoring well MW-13. This work is referred to as Phase 3 of the RA work. In addition to the MW-13 area, Addendum 1 addressed three other areas of the Site: the MW-11 area, the MW-15 area, and the SB-3 area. The implementation of Addendum 1 activities in these four areas is described in the *Remedial Action Report, Phase 3 – Bonner Mill Cooling Pond and Vicinity*, Envirocon, September 12, 2014. Addendum 1 was intended to address the final phase of the remedial action required to be performed by Stimson under the AOC.

In May 2014, the current owner of the Site, Bonner Property Development, L.L.C. (BPD), informed Stimson and DEQ that it had found a limited area of PCB soil contamination in the course of demolishing the Compressor Building (**Figure 2**). BPD's sampling indicated that PCB-impacted soil was present along the northwest corner of the Compressor Building. On October 6, 2014, Stimson and DEQ met with BPD to discuss actions required to investigate this area. Stimson conducted the Compressor Building investigation between May and August 2015. A report describing the results of this investigation was submitted to DEQ on October 8, 2015, which was titled *Compressor Building Assessment Report, Addendum 2 to Final Cooling Pond Removal Work Plan*, NewFields, October 2015 (Compressor Building Assessment Report). This report concluded that approximately 2,565 cubic yards of PCB-impacted soils were present at the Compressor Building Area. To address removal of the PCB-impacted soil identified in the Compressor Building Assessment Report, Stimson prepared Work Plan Addendum 2. The work described in this report documents the removal of contaminated soil from the Compressor Building area in accordance with the AOC and the approved Work Plan 2 Addendum. This work is referred to as Phase 4 of the RA.

2.0 SITE DESCRIPTION

2.1 BACKGROUND

The Site was formerly operated by Stimson as a sawmill and plywood manufacturing facility. A general description of background and work approach for the Site as a whole has already been provided in the Work Plan and in the Work Plan Addendum 1, and is not repeated here. Background information specific to the Phase 4 RA work addressed in this report is provided in **Sections 1.0** and **3.0**.

2.2 SITE SETTING

2.2.1 Location and Topography

The Site is located in the Blackfoot River Valley at an approximate elevation of 3,240 feet above mean sea level (ft amsl) in Missoula County, Montana (**Figure 1**). The investigation area for the Phase 4 RA work is approximately 200 feet south of the Blackfoot River (River or Blackfoot River). The approximate center of the Compressor Building area is at latitude 46.8754 and longitude -113.86793.

2.2.2 Hydrology and Hydrogeology

The mountains surrounding the lower Blackfoot River Valley represent the northern boundary of the Sapphire block, which is primarily composed of Precambrian-aged Belt Supergroup metasedimentary rocks. Nearby faults include the Clark Fork Fault, which is coincident with the Clark Fork River Valley; and the Blackfoot Thrust Fault, which is coincident with the Lower Blackfoot River Valley. Quaternary-aged alluvium in these valleys lies on top of the bedrock and generally consists of inter-bedded sand, gravel, and boulders with clay. The shallow alluvial aquifer system is unconfined and is hydraulically connected to the regional Missoula Aquifer system located to the west. The alluvial aquifer thickness below the Site is estimated to be approximately 100 feet, with the bedrock surface ranging from 120 to 150 feet below ground surface (ft bgs) from east to west. Groundwater recharge is primarily from underflow through the Blackfoot River Valley with smaller recharge volumes leaking from the River. Minor recharge likely comes from direct precipitation and groundwater flow from the upgradient bedrock located north of the Site (Weston, 2008).

Groundwater level measurements have been conducted routinely at monitoring wells located near the former Compressor Building since December 2011. Seasonal high groundwater levels generally occur in June, followed by a gradual decline into the winter months, with a gradual increase usually beginning in March. Groundwater depths near the Compressor Building area range from approximately 35 to 45 ft bgs. Groundwater flow direction is to the south immediately adjacent to the River, which suggests a losing stretch of the River in the vicinity of the Compressor Building. Farther south from the River, groundwater flow generally parallels the flow of the River.

2.3 SUMMARY OF PAST ENVIRONMENTAL ASSESSMENTS, REMEDIAL ACTIONS, AND MONITORING

2.3.1 Soil Assessments

In August of 2002, water levels in the River were lowered approximately 5 feet for a test drawdown of the Milltown Reservoir. The lowered water levels exposed sediments in the bottom of the former FPL and petroleum sheen was observed in the standing water of the lagoon. Stimson completed a sediment assessment in August 2002 to determine the source of the petroleum sheen. The laboratory results indicated that the petroleum sheen was hydraulic oil, and the results suggested that the source of the sheen was from soil located south and east of the FPL and not from sediment within the FPL (Land & Water, 2002).

Stimson completed assessment of the FPL area in August and September 2003 to define the extent of soil and groundwater impacts located adjacent to the FPL. The assessment included advancing 21 direct-push borings and completion of four groundwater monitoring wells. The assessment results identified significant petroleum impacts to soil and limited impacts to groundwater near the FPL area (Land & Water, 2003a).

In March 2006, DEQ performed an assessment on sediments within the Cooling Pond using EPA Preliminary Assessment/Site Investigation funds. Four borings were advanced within sediments in the Cooling Pond and samples were collected for a variety of parameters. The assessment showed the primary chemicals of concern (CoCs) were petroleum and PCBs, and that these CoCs were distributed throughout the pond sediments (Olympus, 2006).

DEQ performed additional site characterization work for the Cooling Pond in October and November 2006 to further assess the distribution of elevated concentrations of CoCs within the Cooling Pond. The site characterization work included collection of subsurface soil samples from 23 borings, groundwater sampling, and collection of sediment samples from the bed of the Blackfoot River. The 2006 site characterization work identified additional CoCs for the site including PCBs, C11-C22 range aromatic hydrocarbons, C19-C36 range aliphatic hydrocarbons, and manganese (Olympus, 2007). No CoCs were found in the sediments of the Blackfoot River.

In January and February 2010, Stimson advanced 60 rotosonic borings in the Cooling Pond sediments and adjacent areas to characterize *in situ* petroleum and PCBs concentrations in the soil. Over 250 subsurface soil samples were collected and submitted for analysis of PCBs and petroleum. The early-2010 results were used by Envirocon in design of an excavation plan (Envirocon, 2012)

In December 2010, Stimson completed seven borings using a limited access, air rotary drilling rig inside the former Studmill building to delineate CoCs beneath and adjacent to this building. Twenty-seven (27) subsurface soil samples were collected and submitted for laboratory analysis. Samples collected beneath the former Studmill building had detectable concentrations of petroleum. PCBs concentrations were all below 0.74 ppm. The results from the December 2010 investigation were used by Envirocon to revise the excavation plan for the Studmill area (Envirocon, 2012).

In October and November 2011, Stimson installed nine monitoring wells (MW-10 through MW-18) to evaluate groundwater conditions following Phase I RA work completed in 2011, and three additional monitoring wells (MW-19, MW-20, and MW-21) to evaluate groundwater conditions adjacent to the onsite repository of PCBs-impacted soil. Three soil borings (SB-1, SB-2, and SB-3) were advanced to investigate soil conditions in other areas within the AOC boundary. PCBs and petroleum were detected

in borehole soil samples from three of the new wells (MW-8, MW-13, MW-16) and one of the soil borings (SB-3). Particularly high concentrations of PCBs were observed in borehole soil samples from well MW-13. In February 2012, Stimson advanced 11 rotosonic borings to delineate CoC impacts above cleanup levels near well MW-13. Sixty-three (63) subsurface soil samples were collected from the borings. In December 2012, seven rotosonic borings and one monitoring well (MW-15R) were completed to characterize petroleum impacts beneath and along the perimeter of the former Studmill building. Results from investigations conducted from October 2011 through December 2012 were used to develop the excavation plan for Phase 3 RA activities (Envirocon, 2012).

2.3.2 Soil Removals

Corrective actions related to DEQ petroleum release #4161 included removal and disposal of 306 cubic yards (cy) of concrete/buried piping and 1,180 cy of contaminated soil and wood fill material from the FPL area from September through December 2004. Petroleum hydrocarbon-impacted material in excess of DEQ Tier 1 Risk-Based Screening Level (RBSLs) remained outside the excavated area, but the removal of this material was not feasible at the time due to existing infrastructure associated with the former mill and elevated groundwater due to the Milltown Dam reservoir (removed in 2008). Removal of this material is addressed in the Phase I RA discussion below. A total of 2,234 cy of material was excavated in 2004. PCBs analysis was not completed on any soil during this RA (Land & Water, 2005).

During groundwater monitoring activities in spring 2006, a hydraulic leak was identified along the East Log Track area under the log-processing track. Under the direction of DEQ, Stimson removed approximately 26 cy of petroleum hydrocarbon-impacted soil from the East Log Track area in June 2006. Confirmation samples collected from the excavation indicated that petroleum remained under the log track after removal. A confirmation soil sample collected from the base of the excavation was analyzed for PCBs, and contained Aroclor 1254 below DEQ and EPA residential cleanup levels at 0.03 ppm (PBS&J, 2006a).

The Phase I RA, pursuant to the AOC and approved work plan discussed in **Section 1.0**, was conducted from September 2010 through May 2011, which included excavation in the Cooling Pond, FPL area (related to release #4161), East Log Track, and Studmill Building areas. A total of 4,385 cy of material with PCBs concentrations above 50 ppm was excavated and transported to a Toxic Substances Control Act (TSCA) landfill facility. A total of 32,200 cy of material impacted by petroleum and lower concentrations of PCBs was excavated and transported to the Missoula Landfill, which was operated by Allied Waste at the time (Envirocon, 2012).

From October through December 2011, the Phase 2 RA was completed and included design and construction of an onsite repository, which contains 41,961 cy of low-level waste (i.e., soil with PCB concentrations from 0.22 to 10 ppm). The Phase 2 RA also involved removing an additional 8,500 cy of uncontaminated material from the edge of the Blackfoot River and rebuilding about 1,400 feet of the Blackfoot River's embankment using 49,890 cy of previously excavated, clean material (Envirocon, 2012).

Stimson completed Phase 3 RA work from November 2013 through February 2014, which included excavation of the MW-13, MW-15, and SB-3 areas. Actions in the MW-13 area included excavating a

total of 12,324 cy of soil, with 6,346 cy disposed at the Missoula Landfill and 3,500 cy disposed at the TSCA facility. The MW-15 area actions involved excavation of 11,770 cy of soil, with 3,165 cy of petroleum-impacted soil hauled to the Missoula Landfill. The SB-3 area actions removed a total of 308 cy of soil, all of which was hauled to the Missoula Landfill for disposal. Approximately 24,402 cy of material was excavated during the Phase 3 RA (Envirocon, 2014).

2.3.3 Groundwater Monitoring

Groundwater monitoring began in September 2003 at the Stimson Lumber Site with four wells (MW-1, MW-2, MW-3, and MW-4), which were related to DEQ petroleum release #4161. The initial groundwater monitoring events showed no DEQ Tier 1 RBSL exceedances for known CoCs at the time, which were volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) (Land & Water, 2003).

During excavations in September through December 2004, MW-2 was removed. Two groundwater monitoring wells (MW-2b and MW-5) were installed in March 2005. Free-product (light non-aqueous phase liquid [LNAPL]) hydraulic oil was measured at over 4-feet-thick in well MW-2b during a Milltown reservoir drawdown event in November/December 2005. Groundwater monitoring results in March 2005 showed EPH detections in MW-2b and no detections in the remaining four wells. In December 2005, all five monitoring wells were below laboratory detection limits for all petroleum constituents except for a trace toluene detection in MW-2b (PBS&J, 2006b).

In April and May 2006, three additional groundwater monitoring wells (MW-6, MW-7, and MW-8) were installed at the Site along with eight LNAPL extraction wells (EW-1, EW-2, EW-3, EW-4, EW-5, EW-6, EW-7, and EW-8). The extraction wells were installed adjacent to MW-2b in order to remove LNAPL and monitor potential LNAPL migration potentially to the Blackfoot River during the Milltown reservoir drawdown planned for June 2006 (PBS&J, 2006c).

Three groundwater monitoring events were completed in December 2006, May 2009, and November 2009. During that time period, MW-1 and MW-2b were the only wells with EPH detections at concentrations requiring EPH fractionation. No EPH fractions from well MW-2b exceeded DEQ Tier 1 RBSLs. Samples from MW-1 collected in May 2009 had detections of C19-C36 aliphatics and C11-C22 aromatics above DEQ Tier 1 RBSLs (PBS&J, 2009). The November 2009 groundwater monitoring event was the final groundwater monitoring associated with DEQ petroleum release #4161.

From December 2011 through December 2015, groundwater monitoring was completed in accordance with the AOC and RA work plan on a semi-annual schedule for the following Site wells : MW-10, MW-11, MW-12, MW-13, MW-13R, MW-14, MW-15, MW-15R, MW-16, MW-17, MW-18, MW-19, MW-20, MW-21, and MW-22. MW-11 was sampled intermittently, due to occasional presence of LNAPL. During the most recent groundwater monitoring event completed in December 2015, groundwater results were below DEQ Numeric Groundwater Quality Standards and Tier 1 RBSLs in the following monitoring wells: MW-10, MW-13R, MW-14, and MW-15R. The repository wells (MW-19, MW-20 and MW-21) have never had exceedances of DEQ Numeric Groundwater Standards or Tier 1 RBSLs (NewFields, 2015c). **Tables 1, 2,** and **3** summarize groundwater monitoring results completed for the AOC area since December 2011.

3.0 SAMPLING PRIOR TO PHASE 4 SOIL REMOVAL

As stated in **Section 1.0**, BPD informed Stimson and DEQ that it had identified PCB-impacted soil during demolition of the Compressor Building. The sampling performed by BPD in May 2014 indicated the presence of PCB-impacted soil adjacent to the northwest corner of the Compressor Building.

Stimson performed an assessment of the Compressor Building area between May and August 2015 to characterize PCB-impacted soil in the Compressor Building area. Results of the assessment are presented in an assessment report to DEQ dated October 8, 2015 (**Appendix A**). Nineteen (19) soil samples were collected from seven test pits, which were excavated to total depths ranging from 7 to 15 ft bgs. Eleven (11) of the 19 soil samples analyzed for PCBs exceeded the AOC cleanup level of 0.74 ppm total PCBs. The test pit results indicated that additional assessment was required to fully delineate PCB impacts in soil deeper than the reach of the excavation equipment (i.e., deeper than 15 ft bgs).

Eight rotosonic borings were advanced in June 2015. Thirty-three (33) soil samples were collected and submitted for PCBs analysis. Samples from five borings (CB-1, CB-2, CB-4 CB-5, and CB-7) had total PCBs concentrations greater than 0.74 ppm, and two of these borings (CB-1 and CB-5) contained samples that exceeded the TSCA waste cleanup level of 50 ppm total PCBs. Both CB-1 and CB-5 were located in an area of the former Compressor Building where compressor equipment was historically operated.

In August 2015, supplemental Compressor Building assessment work was completed which included drilling five rotosonic soil borings. Results showed nine samples exceeding 0.74 ppm for total PCBs, with each soil borings (CB-10 through CB-14) containing at least one sample that exceeded this concentration. One of the soil samples collected from CB-14 also exceeded the TSCA waste cleanup level.

The soil sample data showed that the highest concentration of PCB-impacted soil was located beneath the western end of the Compressor Building (**Figure 2**). Many of the soil samples collected outside of the Compressor Building footprint exceeded 0.74 ppm total PCBs; however, none of the borings outside the former Compressor Building footprint contained PCB concentrations exceeding the TSCA waste cleanup level.

4.0 OBJECTIVES

The objective of the Phase 4 RA for the Compressor Building area was to excavate and properly dispose of soil and materials beneath and adjacent to the Compressor Building area that contained PCBs above 0.74 ppm. Material above 0.74 ppm and below 50 ppm PCBs was disposed at the Missoula Republic Services Landfill and material above 50 ppm PCBs was disposed at the US Ecology TSCA facility near Grand View, Idaho.

5.0 PROJECT ACTIVITIES

NewFields and Envirocon conducted the Phase 4 RA work using protocols described in the Work Plan and the Cooling Pond, FPL & East Log Track Area, Sampling and Analysis Plan (SAP) (Envirocon & PBS&J, 2009), which are included as **Appendix B**. The RA included the tasks listed below, presented in chronological order of completion and reorganized from the order presented in the Work Plan.

5.1 PERMIT/STORMWATER APPLICATIONS

Since the excavation was smaller than 1 acre, neither a Storm Water Construction General Permit nor a Storm Water Pollution Prevention Plan was required. Instead, Stimson prepared and implemented an erosion control plan. The control measures utilized are shown on **Figure 3**. A TSCA Risk-Based Approval under 40 Code of Federal Regulations (CFR) 761.61 (c) was obtained from Francis Tran of the Region 8 Environmental Protection Agency (EPA) via email to DEQ on December 3, 2015.

5.2 MOBILIZATION AND STAFFING

Mobilization of construction equipment and personnel began the week of January 4, 2016. Envirocon project staff totaled seven individuals, including a project manager, superintendent, Health and Safety Officer (HSO), loader operator, two excavator operators, and a truck driver. Two PC400 excavators, one with interchangeable demolition and excavating attachments, performed a majority of the work. The project was also supported with five pickup trucks, a fuel service truck, one off-road haul truck, a front-end loader, and a dozer. NewFields personnel included one staff scientist and one project manager.

5.3 HEALTH AND SAFETY

The HSO was assigned to the Phase 4 RA, and served as the Site HSO supervisor as defined in Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations (29 CFR 1910.120/1926.65(b)). The HSO was authorized to administer the requirements of Health and Safety Programs of Stimson, NewFields, and Envirocon, and to ensure compliance with applicable Occupational Safety and Health Administration (OSHA) regulations. The HSO implemented the provisions of the Health and Safety Plan (HASP), conducted onsite training and daily meetings, PCB industrial hygiene monitoring, and daily site safety inspections. The HSO position was performed by Tracy Lane with Envirocon.

A HASP was prepared for the Phase 1 RA and remained in effect for the Phase 4 RA (Envirocon, 2010b). The HASP, Activity Hazard Analysis, and site safety procedures that address site hazards (such as weather-related hazards, electrical hazards, work near water, and heavy equipment operation) were reviewed with all personnel working on site prior to initiating work. Training included daily morning safety briefings where employees reviewed safety issues relevant to the day's activities including changes in work zones, schedules, traffic routes, etc. Attendees also reviewed lessons learned from previous work. Flagging, signage, and orange traffic control candles were utilized to delineate the work area. A permanent perimeter fence surrounding the entire facility controlled public access. Health and Safety statistics for the Project included no first aid incidents, no OSHA Recordables, and no Days-Away-from-Work injuries.

5.4 Site Preparation

Site preparation involved the following activities:

- Installing safety barriers and signs to isolate the excavation, haul roads, stockpiles, high-pressure gas line, and other hazardous areas;
- Installing silt fences, straw waddles, and other sediment controls in accordance with industry standard stormwater guidelines as approved by the DEQ;
- Decommissioning electric lines associated with the sump pump adjacent to MW-11;
- Removing by vacuum truck the existing sediment within the storm drain located north of the planned excavation;
- Clearing and grubbing of the planned excavation area in and around the Compressor Building;
- Establishing soil stockpile areas. Stockpile areas for soil containing PCBs equal to or greater than 50 ppm were created in compliance with 40 CFR 761.65 and requirements of the AOC;
- Constructing onsite haul roads and defining controlled site-access points for transport trucks;
- Placing crushed gravel on unpaved stockpile footprints; and,
- Demolishing concrete and other structures that obstructed the excavation.

5.5 Excavated Material Classification

The excavated material was categorized into one of the three following disposal classes:

1. Soil and other materials with PCB concentrations below 0.74 ppm – This class of material could be used as backfill in accordance with the AOC, however, only within the excavation limit and at depths greater than 10 feet above the observed water table in the excavation.
2. Soil and impacted materials containing PCB concentrations equal to or greater than 0.74 ppm, but less than 50 ppm – This class of material, with the exception of material placed in the onsite repository (see **Section 2.3.2**), was disposed of at the Republic Services landfill in Missoula in accordance with the AOC.
3. Soil and impacted materials containing PCB concentrations equal to or greater than 50 ppm – This class of material required disposal at the US Ecology facility near Grand View, Idaho, permitted to accept TSCA wastes.

5.6 Design and Delineation of Excavation Limits

The project design was based on *in situ* soil analytical results collected during the Compressor Building assessment discussed above in **Section 3.0**. The design included soil excavation, segregation, and disposal from locations depicted on **Figures 4** and **5**. Per EPA TSCA requirements, the sample results were used to delineate excavation cells. The cells were developed by creating one longitudinal-axis cross section (A-A') along the western portion of the Compressor Building and four latitudinal-axis cross sections (B-B', C-C', D-D', and E-E') across the entire projected excavation. The cell excavation depths and lateral limits from cross sections were used to create a model to guide the excavation limits and depict the expected location of each of the types of material listed in **Section 5.5** above. **Figure 5** depicts a plan view of the general area along with the locations of five cross sections. Cross sections showing the extent of excavation and where breaks were expected to occur between material types are provided in **Figure 6**.

The design drawings were used by the surveyor to stake and control the excavation limits. A final survey of the excavated area was performed to produce as-built drawings documenting volumes removed and final site grades after backfill. The extent of the excavation was determined based on the results of soil confirmation samples. In cells where initial confirmation sample results (discussed in **Section 5.9**) indicated that soil remained with PCB concentrations exceeding 0.74 ppm PCBs, further excavation was conducted and additional confirmation sampling of that area was completed. This procedure was repeated until the sample results were below 0.74 ppm PCBs in that cell. This process caused the excavation to expand from the original design.

5.7 Abandoning Monitoring Well MW-22

During the design phase of the excavation, no monitoring wells appeared to be within the footprint of the Compressor Building excavation; however, excavation limits expanded laterally to the east and as a result, MW-22 required abandonment. PCBs were not detected in four consecutive sampling events (two semi-annual events in 2014 and two semi-annual events in 2015) in MW-22. After receiving DEQ approval, MW-22 was abandoned by filling the entire well casing with 3/8-inch bentonite chips, then hydrating the chips. After these steps were taken, the portion of the casing located within the excavation was removed. The field log notes documenting the abandonment are included in **Appendix C**, and the location of the abandoned monitoring well is shown on **Figure 7**.

5.8 Excavation, Stockpiling, Disposition, and Material Handling

Excavation of the Compressor Building area began on January 12, 2016 and was complete on February 25, 2016 when DEQ provided approval to begin backfilling. The final stockpile load designated for the local landfill in Missoula was removed from the Site on March 22, 2016. Backfilling and site restoration was complete on March 25, 2016. The final load of stockpiled TSCA waste was removed from the Site on April 6, 2016.

During excavation, cells of material pre-defined based on the Phase 4 Compressor Building Assessment (**Section 3.0**) were removed and temporarily stockpiled by disposal class as listed in **Section 5.5**, and

then disposed in accordance with Work Plan requirements. Excavators for the removal action were equipped with Global Positioning System (GPS) technology. The lateral location of each cell and the elevation parameters of each lens were programmed into the GPS for each excavator to enable precise removal and disposition of material. Limits and elevation contours of the final excavation are shown along with cross section locations on **Figure 8**. Cross sections of the as-built final excavation are provided in **Figure 9**. An Excavation Field Tracking Log (**Appendix D**) was maintained on a daily basis, and lists the number of truck-loads removed from each cell, by date, together with the disposition of the material.

Excavation began southwest of the Compressor Building footprint in the CB-13 grid. Soil and debris were removed separately in each cell. Excavation of a ramp was performed to allow access for a 30-ton articulated haul truck. Excavation progressed to the vertical and horizontal extent established during the design phase of this project. The GPS model guided the excavation equipment and eliminated the need for grade checking by an individual accessing the excavation area on-foot.

Throughout the excavation phase, piping, concrete blocks, concrete slabs, concrete walls, and general debris were encountered. Concrete and piping encountered within the PCB-impacted grids was sampled and characterized for disposal. The concrete and piping was segregated as backfill (less than 0.74 ppm PCBs), local landfill waste (0.74 ppm to less than 50 ppm), or TSCA waste (greater than 50 ppm). A Komatsu PC-490 hydraulic excavator equipped with a 10,000-pound hammer and interchangeable pulverizer demolished and processed concrete and other solid materials for stockpiling and disposal.

For TSCA waste, an over-the-road truck-loading area was established adjacent to the excavation zone to minimize material handling. This loading area was covered with a thin layer of crushed rock to minimize tracking. The existing concrete pad, utilized in previous phases of work, was also used as a stockpiling location for TSCA waste. The truck loading area was cleaned frequently to minimize contact of waste with truck tires. After tarps were secured over each truck of TSCA waste, the trucks were inspected and broom-swept (as necessary) prior to being released for offsite transport and disposal.

5.9 Confirmation Soil Sampling

When the designed limits of excavation were reached, the base and sidewalls were sampled to determine whether *in situ* soils contained PCBs at acceptable concentrations (i.e., less than 0.74 ppm). Analysis of the confirmation samples was performed with a 2-day turnaround time. The SAP (**Appendix B**) includes detailed protocols, analytical methods, and quality assurance information for the sampling. Confirmation samples were collected as five-point composites at the following frequencies:

- Base of excavation – One composite sample from an approximately 9 meter by 9 meter area (approximately 871 square feet), and
- Excavation sidewall – One composite sample for every 9 lineal meters (approximately every 29.5 feet).

Where confirmation sample results exceeded the cleanup levels, additional material was excavated and the new sidewall or base was resampled. The additional excavation proceeded in the following manner:

- Where confirmation sampling indicated remaining PCB-impacted soil along the sidewalls of the excavation, the excavation was extended 1 foot laterally and then re-sampled,
- Where confirmation sampling indicated remaining PCB-impacted soil along the base of the excavation, the excavation was extended 2 feet vertically and then re-sampled.

Cross sections in **Figure 9** depict the initial design extent of the excavation and the as-built final extent of the excavation. Soil confirmation analytical laboratory reports are presented in **Appendix E**, and results are summarized in **Table 4**.

Confirmation samples were collected by a staff scientist wearing disposable nitrile gloves and using a stainless-steel trowel decontaminated between samples. Subsamples were mixed in a disposable plastic container to create composite samples. The composited samples were placed in three 4-ounce amber glass pre-cleaned jars. One of the jars was submitted to Energy Laboratories in Billings, Montana for analysis, and the second jar was archived and subsequently conveyed to the DEQ case manager. The third jar was archived at NewFields' office. Disposable nitrile gloves were worn during all sampling activities, and non-disposable items in contact with the sampled material (for example, buckets or stainless steel implements) were decontaminated by removing all visible soil and then washing with Alconox®, as needed, followed by rinsing with tap water, methanol, and then deionized water. Samples collected from within excavations were obtained using safe excavation entry procedures as described in the HASP.

All sampling, sample preservation, shipping, and documentation were conducted according to standard operating procedures detailed in the SAP (**Appendix B**). Chain-of-custody forms were completed and samples were placed on ice in coolers for shipment to the lab. Samples were analyzed by Energy Laboratories of Billings, Montana for PCBs by EPA Method 8082. DEQ was provided confirmation sample results within 24 hours of receiving the preliminary results from the laboratory.

5.10 Concrete and Piping Confirmation Sampling

Concrete and piping removed from the excavation with visible petroleum hydrocarbon staining was segregated based on relative amount of visible petroleum stainage, and then sampled. Concrete cores were analyzed for PCBs and subsequently disposed based on the material classifications described in **Section 5.5.** Piping was sampled by scraping and compositing soil adhered to the length of the pipe. The piping was also disposed based on the material classifications described in **Section 5.5.** Results for concrete and piping confirmation samples are shown in **Table 6**.

5.11 Water in the Excavation

No dewatering was required for this work. Seasonally-high groundwater was measured in MW-15R on June 10, 2015 at approximately 39.58 feet below the top of the monitoring well casing. Groundwater depth during the planned excavation period was expected to be 5 to 10 feet below the seasonally high level measured in June 2015. The final excavation depth was expected to be 40 to 45 ft bgs.

Groundwater was encountered at approximately 43 ft bgs in cells CB-1/CB-14 and CB-5 on February 23 and 25, 2016, respectively.

5.12 Disposal of Impacted Materials

Onsite Soil Disposition

Per the requirements of the AOC and Work Plan, all material containing PCB concentrations less than 0.74 ppm was temporarily stockpiled and then used to backfill the Compressor Building excavation. Clean backfill was placed in the very bottom of the excavation to create a 10-foot vertical separation from groundwater, and a minimum of 2 feet of clean backfill was placed on the surface of the excavation area. Overburden and other non-impacted material that was excavated, stockpiled, and then placed back into the excavation totaled 4,099 cy.

Offsite Soil Disposal

Material containing PCB concentrations equal to or greater than 0.74 ppm was removed from the Site in one of the two waste categories described below:

- Material Transported to the Missoula Republic Landfill – Prior to transport and disposal of PCB-impacted soils and other materials with concentrations between 0.74 and 50 ppm, formal approval was obtained from Republic Services via their standard profiling process for special waste. Disposal quantities were tracked using Republic Service's standard weigh tickets that showed truck identification, time of arrival, and net tonnage of material delivered. Total concrete and piping disposed at the Missoula Republic Landfill was 1,369 cy. The total volume of material disposed at the Missoula Republic Landfill, including concrete, piping, and soil, was 7,566 cy. **Appendix F** includes the Republic Landfill Disposal Ticket Summary.

- Transported to the US Ecology TSCA Facility – Prior to transport and disposal at the TSCA disposal facility, a uniform hazardous waste manifest was completed for each load leaving the Site. A summary sheet listing dates and quantities for material disposed at the TSCA facility are included as **Appendix G**. All applicable legal requirements were followed during transporting and disposing of the waste, including the TSCA regulations at 40 CFR 761.61 and 40 CFR 761.65. Total concrete and piping disposed at the TSCA facility was 175 cy. The total volume of all material disposed at the US Ecology Facility was 3,231 cy.

5.13 Transportation Methods and Routes

Material disposed at the local Missoula landfill was transported using over-the-road dump trucks with covered beds. These trucks, after being inspected and swept at the Site, entered Highway 200 from the east mill entrance and traveled along the route shown on **Figure 10**.

Material that required disposal at the US Ecology TSCA landfill near Grand View, Idaho was manifested and shipped in accordance with applicable laws and regulations, including relevant requirements of 49 CFR 170 through 180. Trucks hauling TSCA waste off-site were TSCA-certified to haul to the US Ecology landfill facility. The transportation route to the US Ecology TSCA landfill is shown on **Figure 11**.

5.14 Traffic Control

The haul trucks used an existing entrance on the east side of the Site, and haul truck drivers followed the requirements for normal truck traffic in and out of the Site. No additional signage was necessary.

5.15 Dust Control

Due to the time of year the project was completed (moist winter conditions), dust control was not required.

5.16 Equipment Decontamination

All trucks and equipment leaving the Site were inspected and decontaminated prior to exiting. Care was taken during loading operations to minimize tire contact with soil. All trucks transporting materials destined for offsite disposal were inspected for adhered soil prior to exiting the Site. Dry decontamination methods, including the use of brooms, shovels and other implements, were employed to remove any loose dirt or materials from the wheels and chassis of these trucks.

5.17 Haul Road and Stockpile Confirmation Sampling

Confirmation sampling was completed on four non-paved haul road areas and one stockpile area (see **Figure 12**) on March 11, 2016 upon completion of the excavation. Five-point composite samples were collected at a frequency of one sample for approximately 150 to 160 lineal feet of haul road. The initial surface samples were collected from depths of 0 to 3 inches below grade, in accordance with Phase 1, 2, and 3 road clearance sampling protocols. None of the initial surface sample results met the cleanup level of 0.74 mg/kg, and a second set of surface samples from identical locations at 6 to 8 inches below grade were collected and submitted for laboratory analysis on March 15, 2016. The second sample from the stockpile area did not pass the cleanup level, and two of the second samples from the haul road areas also did not pass the cleanup level. On March 22, 2016, 12 inches of additional soil was removed and disposed from these three areas, and then the remaining surface was resampled. After shallow excavation in haul road and stockpile footprints, all sample results were below the cleanup standard of 0.74 ppm, and DEQ subsequently approved backfilling these areas.

5.18 Final Re-Grading of the Site

Final grading of the Compressor Building area was completed to the surface grade shown on **Figure 13**. Depressions, other than those required for stormwater collection/retention, were eliminated, and the disturbed area was blended with surrounding areas.

5.19 Storm Drain Catch Basin Sediment Removal

On January 7, 2016 a vacuum truck removed all existing sediment within the MW-11 storm drain catch basin located north of the planned excavation (**Figure 8**). The sediment was removed as a preventative

measure for post-excavation monitoring of the Best Management Practices (BMPs) employed during Phase 4 construction activities.

5.20 Monitoring Well (MW-23) Installation

In accordance with the requirements listed in the Work Plan Addendum 2, a two-inch, PVC groundwater monitoring well was installed on April 28, 2016 at a location downgradient from the Phase 4 RA and identified MW-23 (**Figure 7**). The well was installed to 60 ft bgs with 30 feet of 0.20 slot screen from 60 ft bgs to 30 ft bgs.

6.0 DEVIATIONS FROM OR MODIFICATIONS TO THE WORK PLAN

Stimson requested and received DEQ approval to modify the following activities from procedures described in the Work Plan, Work Plan Addendum 1, and Work Plan Addendum 2:

1. Stimson received DEQ approval on February 16, 2016 to modify composite sampling protocol for overburden stockpiles from 400 cy per composite sample to 1,000 cy per composite sample.

2. Stimson received DEQ approval on February 23, 2016 to backfill cells CB-1/CB-14 and the east portion of CB-5 with clean backfill to allow safe access for work to proceed with soil removals in the west base of CB-5, the east and west walls of CB-1/CB-14 and CB-5, the south wall of CB-5, and the north wall of CB-11.

3. Stimson received DEQ approval on February 24, 2016 to re-sample three stockpile locations due to laboratory QC issues.

4. Stimson received DEQ approval on February 29, 2016 to average PCB concentrations from all five overburden stockpile sample locations.

5. Stimson received DEQ approval on March 16, 2016 to modify road closure sampling protocols by excavating an additional 12 inches of material prior to collection of a confirmation sample.

Correspondence with DEQ documenting the approved Work Plan deviations are included in **Appendix H.**

7.0 CONFIRMATION SAMPLE RESULTS

7.1 EXCAVATED SOIL

As described in **Section 5.9**, when initial confirmation sample results from the limits of the designed excavation exceeded cleanup levels, additional material was excavated and the new sidewall or base sample was collected. This continued until confirmation sample results were below cleanup standards in all sampled locations, or until expansion of the excavation reached previously-excavated areas containing clean backfill.

When resampling was required, the resampled area was identified by the number "2" following the sample identification (ID) number. When a subsequent third sampling was required, the area was identified by the number "3" following the sample ID number. Specifics of the initial, second, and third sampling are provided below:

- Initial Sampling - A total of 53 initial soil confirmation samples were collected and analyzed for PCBs by EPA Method 8082. Laboratory results showed that 40 of the initial soil confirmation samples exceeded the cleanup level of 0.74 ppm. These 40 areas then required additional excavation.

- Second Sampling - Following additional excavation in these 40 areas, 32 locations were resampled. Twelve (12) of the 32 resampled areas failed to meet cleanup levels. These 12 areas were excavated further.

- Third Sampling - Ten (10) of the 12 areas were sampled a third time, and 2 of the sampled areas failed to meet cleanup levels at the base of the excavation. Per the SAP, these areas were excavated a minimum of 2 feet into groundwater, and no additional confirmation samples were collected.

The soil confirmation analytical laboratory reports are presented in **Appendix E**, and tabulated summaries of the results are presented in **Tables 4** and **5**. **Table 4** presents the results as one row for each sample, with rows grouped by cell ID. **Table 5** also presents the sampling results with rows grouped by cell ID, but shows results from resampling (second and third, where applicable) as additional columns to the right. **Table 5** provides GPS coordinates for each sample.

7.2 CONCRETE AND PIPING

Petroleum-stained concrete and piping was encountered within the excavation. Confirmation sampling was conducted on all concrete and piping removed from the PCB-impacted areas. Ten concrete and six piping confirmation samples were collected and analyzed for PCBs by EPA Method 8082. Concrete and piping material was segregated based on the sampling results and stockpiled for disposal. Total concrete and piping disposed at the Missoula Republic Landfill was 1,369 cy. Total concrete and piping disposed at the TSCA facility was 175 cy. The concrete and piping laboratory analytical report is presented in **Appendix I** and the results are summarized in **Table 6.**

7.3 Overburden and Haul Road Footprints

Figure 12 shows the locations where soil confirmation sampling was conducted in the footprint of haul roads and soil stockpiles (overburden). The haul road footprint sampling protocols and results are described in **Section 5.17**, above. The laboratory analytical reports for these samples are presented in **Appendix J** and the results are summarized in **Table 7.**

7.4 Quality Assurance and Quality Control Results

In order to ensure that high quality data was collected, Quality Assurance (QA) measures were taken by field personnel and the laboratory, and Quality Control (QC) samples were collected during the RA project. All sampling activities were conducted according to the Standard Operating Procedures included in the Work Plan's Appendix B.

Field duplicate samples (DUP) were collected at an approximate rate of 5 percent (1 per 20 natural samples). The overall number of field duplicates exceeded 5 percent of the total number of samples, however, duplicate frequency varied during the project. Field duplicates precision was associated with natural (i.e., non-QC) samples based on the date collected, with no more than 20 natural samples assigned to each duplicate. Equipment rinsate blanks (ERBs) were collected at an approximate rate of 5 percent and/or one per laboratory data package. Trip blanks were not considered relevant for this project, as the target analytes have low volatility. Laboratory QA/QC complied with the Energy Laboratories, Inc. standard Quality Assurance Manual.

During the course of the Phase 4 RA, 27 data packages were sent to Energy Laboratories, Inc. in Billings, Montana. Data validation summaries are provided in **Appendix K** for each data package. Data validation summaries show that surrogate recoveries were variable, however such results are common with coelution, matrix interference, and dilution. In addition, some spike recovery results were outside standard acceptance ranges, however none of the spike recovery results changed interpretation of the results compared to screening levels.

All results for this cleanup project passed NewFields internal QC review, and were accepted as valid and useable. Any shortcomings or deviations are considered minor and do not affect the usability of the data.

7.5 Discussion of Confirmation Sample Results

Pre-excavation laboratory results indicated where cleanup was necessary, and post-excavation results confirmed that effective cleanup had been performed. Specifically, post-excavation confirmation soil sample results (**Tables 4** and **5**) indicated that the Site soil no longer contained PCB concentrations above cleanup thresholds described in the Work Plan. Backfilling of the removal area was not approved by DEQ until all areas within the removal area were confirmed to be below 0.74 ppm PCBs.

8.0 CONCLUSION

This Phase 4 RA Report, in conjunction with the Phase 1, 2, and 3 RA Reports, demonstrates that Stimson has completed all appropriate RA as required by DEQ pursuant to the AOC and associated remedial action work plans. Stimson has properly abandoned all monitoring wells for which closure was approved by DEQ and will conduct all required post-remediation operation, maintenance, and monitoring activities as provided in Section 4.21 of the Work Plan and in accordance with the *Stimson Lumber Company – Bonner Mill Site, PCB Repository Operation, Maintenance, and Monitoring Plan (*Envirocon, 2016) to ensure that land uses remain protective of human health and the environment.

9.0 FINAL INSPECTION

The final site inspection was conducted by DEQ on April 14, 2016. In attendance at this inspection were Keith Large with DEQ, Steven Petrin with Stimson Lumber Company, and Tyler Etzel with NewFields. The inspection included visual inspection of all portions of the Site affected by work under the AOC, not just Phase 4 of the RA. The Phase 4 RA work and overall AOC-required work was inspected and judged acceptable by Mr. Large, with no stated deficiencies, and no follow-up Phase 4 was required. Consequently, all work required under the AOC has been completed.

10.0 CERTIFICATION

Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:_____

Title: ____Sr. Geologist / Project Manager_____

Date: ____November 29, 2016_____

11.0 REFERENCES

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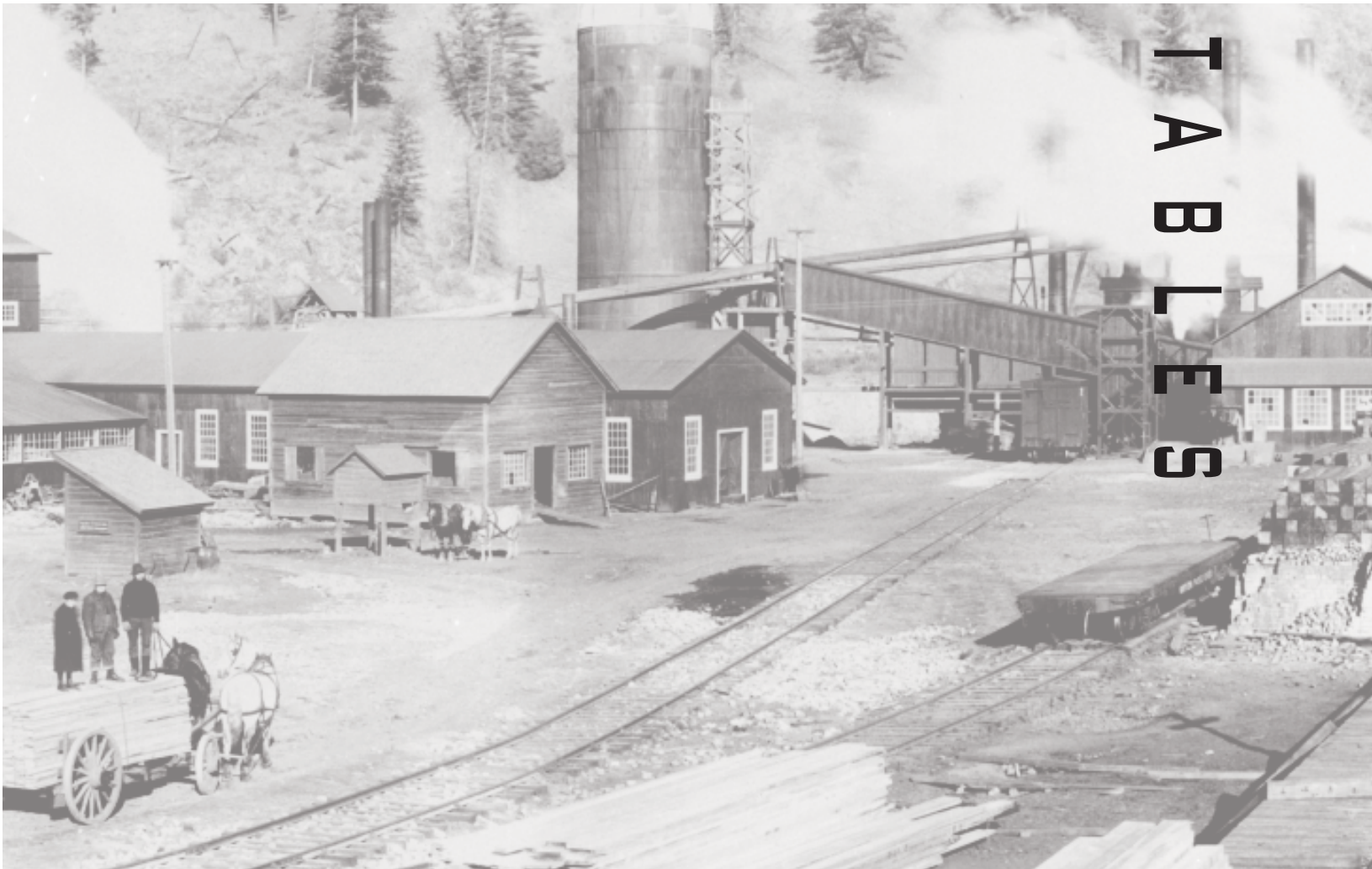

TABLES

Table 1 - Monitoring Well Groundwater Elevations
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana
Groundwater Elevations

Well	Date	Casing Elevation (ft AMSL)	Depth to Water (ft)	Groundwater Elevation (ft AMSL)
MW-10	12/14/2011	3285.46	41.54	3243.92
MW-10	7/26/2012	3285.46	38.85	3246.61
MW-10	1/8/2013	3285.46	42.16	3243.30
MW-10	6/26/2013	3285.46	37.59	3247.87
MW-10	12/2/2013	3285.46	41.82	3243.64
MW-10	6/25/2014	3285.46	36.41	3249.05
MW-10	12/22/2014	3285.46	41.34	3244.12
MW-10	6/9/2015	3285.46	37.40	3248.06
MW-10	12/30/2015	3285.46	42.55	3242.91
MW-11	12/14/2011	3278.48	35.20	3243.28
MW-11	7/25/2012	3278.48	31.96	3246.52
MW-11	1/8/2013	3278.48	35.56	3242.92
MW-11	6/27/2013	3278.48	32.00	3246.48
MW-11	12/1/2013	3278.48	34.96	3243.52
MW-11	6/11/2015	3278.48	30.93	3247.55
MW-11	12/31/2015	3278.48	35.66	3242.82
MW-12	12/14/2011	3279.14	32.91	3246.23
MW-12	7/27/2012	3279.14	30.32	3248.82
MW-12	1/8/2013	3279.14	33.51	3245.63
MW-12	6/27/2013	3279.14	29.05	3250.09
MW-12	12/1/2013	3279.14	30.71	3248.43
MW-13	12/14/2011	3276.70	32.91	3243.79
MW-13	7/27/2012	3276.70	30.32	3246.38
MW-13	1/9/2013	3276.70	33.51	3243.19
MW-13	6/27/2013	3276.70	29.05	3247.65
MW-13	12/1/2013	3276.70	33.14	3243.56
MW-13R	6/25/2014	3279.55	30.40	3249.15
MW-13R	12/22/2014	3279.55	35.04	3244.51
MW-13R	6/10/2015	3279.55	31.49	3248.06
MW-13R	12/31/2015	3279.55	36.31	3243.24
MW-14	12/15/2011	3281.58	37.79	3243.79
MW-14	7/27/2012	3281.58	35.13	3246.45
MW-14	1/9/2013	3281.58	38.41	3243.17
MW-14	6/27/2013	3281.58	33.87	3247.71
MW-14	12/1/2013	3281.58	38.00	3243.58
MW-14	6/26/2014	3281.58	32.62	3248.96
MW-14	12/22/2014	3281.58	37.47	3244.11
MW-14	6/10/2015	3281.58	33.98	3247.60
MW-14	12/30/2015	3281.58	38.77	3242.81
MW-15	12/15/2011	3280.09	37.62	3242.47
MW-15	7/26/2012	3280.09	37.19	3242.90
MW-15	9/14/2012	3280.09	36.53	3243.56
MW-15R	1/9/2013	3287.12	44.29	3242.83
MW-15R	6/27/2013	3287.12	39.71	3247.41
MW-15R	12/2/2013	3287.12	43.87	3243.25
MW-15R	6/26/2014	3287.12	38.19	3248.93
MW-15R	12/22/2014	3287.12	43.06	3244.06
MW-15R	6/10/2015	3287.12	39.58	3247.54
MW-15R	12/31/2015	3287.12	44.32	3242.80
MW-16	12/15/2011	3281.76	37.97	3243.79

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Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana
Groundwater Elevations

Well	Date	Casing Elevation (ft AMSL)	Depth to Water (ft)	Groundwater Elevation (ft AMSL)
MW-16	7/26/2012	3281.76	35.18	3246.58
MW-16	1/9/2013	3281.76	38.58	3243.18
MW-16	6/26/2013	3281.76	33.94	3247.82
MW-16	12/1/2013	3281.76	38.17	3243.59
MW-17	12/14/2011	3282.91	39.11	3243.80
MW-17	7/26/2012	3282.91	36.42	3246.49
MW-17	1/9/2013	3282.91	39.76	3243.15
MW-17	6/26/2013	3282.91	35.13	3247.78
MW-17	12/1/2013	3282.91	39.33	3243.58
MW-18	12/14/2011	3284.32	40.49	3243.83
MW-18	7/26/2012	3284.32	37.76	3246.56
MW-18	1/8/2013	3284.32	41.10	3243.22
MW-18	6/26/2013	3284.32	36.51	3247.81
MW-18	12/1/2013	3284.32	40.73	3243.59
MW-18	6/25/2014	3284.32	35.31	3249.01
MW-18	12/22/2014	3284.32	40.25	3244.07
MW-19	12/14/2011	3292.22	48.46	3243.76
MW-19	7/26/2012	3292.22	45.70	3246.52
MW-19	1/8/2013	3292.22	49.08	3243.14
MW-19	12/2/2013	3292.22	48.73	3243.49
MW-19	6/26/2014	3292.22	43.27	3248.95
MW-19	12/23/2014	3292.22	48.18	3244.04
MW-19	12/31/2015	3292.22	49.50	3242.72
MW-19	6/11/2015	3292.22	46.15	3246.07
MW-20	12/14/2011	3292.15	48.51	3243.64
MW-20	7/25/2012	3292.15	45.65	3246.50
MW-20	1/8/2013	3292.15	49.07	3243.08
MW-20	12/2/2013	3292.15	48.71	3243.44
MW-20	6/26/2014	3292.15	43.24	3248.91
MW-20	12/23/2014	3292.15	48.23	3243.92
MW-20	12/30/2015	3292.15	49.50	3242.65
MW-20	6/11/2015	3292.15	46.16	3245.99
MW-21	12/14/2011	3293.32	49.64	3243.68
MW-21	7/25/2012	3293.32	46.85	3246.47
MW-21	1/8/2013	3293.32	50.28	3243.04
MW-21	12/2/2013	3293.32	49.92	3243.40
MW-21	6/25/2014	3293.32	44.48	3248.84
MW-21	12/23/2014	3293.32	49.36	3243.96
MW-21	6/9/2015	3293.32	47.30	3246.02
MW-21	12/30/2015	3293.32	50.68	3242.64
MW-22	12/30/2015	3280.11	37.29	3242.82
MW-22	6/10/2015	3280.11	32.61	3247.50
MW-22	12/22/2014	3280.11	36.02	3244.09
MW-22	6/26/2014	3280.11	31.16	3248.95

Notes:
data collected prior to December 2013 obtained from Atkins reports supplied by Stimson
ft - feet
AMSL - above mean sea level

Table 2 - EPH Analytical Data Summary - Groundwater
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

Well	Date	EPH Screen (SW 8015M)	EPH Fractions (MA-EPH) C9-C18 Aliphatics	Q	C19-C36 Aliphatics	Q	C11-C22 Aromatics	Q	TEH	Q	Laboratory
RBSLs		1,000 [1]	1,000		1,000		1,000		1,000		
MW-10	12/14/2011	ND	----		----		----		----		ENERGY
MW-10	7/26/2012	303	U		----		----		----		ENERGY
MW-10	1/8/2013	ND	----		----		----		----		ENERGY
MW-10	6/26/2013	300	U		----		----		----		ENERGY
MW-10	12/2/2013	300	U		----		----		----		ENERGY
MW-10	6/25/2014	300	U		----		----		----		ENERGY
MW-10	12/22/2014	300	U		----		----		----		ENERGY
MW-10	6/9/2015	300	U		----		----		----		ENERGY
MW-10	12/30/2015	292	J		----		----		----		ENERGY
MW-11	12/14/2011	ND	----		----		----		----		ENERGY
MW-11	7/26/2012	**327**	----		----		----		----		ENERGY
MW-11	6/11/2015	**476**	----		----		----		----		ENERGY
MW-12	12/14/2011	ND	----		----		----		----		ENERGY
MW-12	7/27/2012	**404**	----		----		----		----		ENERGY
MW-12	1/8/2013	ND	----		----		----		----		ENERGY
MW-12	6/27/2013	300	U		----		----		----		ENERGY
MW-12	12/1/2013	300	U		----		----		----		ENERGY
MW-13	12/14/2011	ND	----		----		----		----		ENERGY
MW-13	7/27/2012	**405**	----		----		----		----		ENERGY
MW-13	1/9/2013	ND	----		----		----		----		ENERGY
MW-13	6/27/2013	**339**	----		----		----		----		ENERGY
MW-13	12/1/2013	300	U		----		----		----		ENERGY
MW-13R	6/25/2014	300	U		----		----		----		ENERGY
MW-13R	12/22/2014	300	U		----		----		----		ENERGY
MW-13R	6/10/2015	**2,780**	300	U	300	U	300	U	**498**		ENERGY
MW-13R	12/31/2015	251	J		----		----		----		ENERGY
MW-14	12/15/2011	ND	----		----		----		----		ENERGY
MW-14	7/27/2012	309	U		----		----		----		ENERGY
MW-14	1/9/2013	ND	----		----		----		----		ENERGY
MW-14	6/27/2013	300	U		----		----		----		ENERGY
MW-14	12/1/2013	300	U		----		----		----		ENERGY
MW-14	6/26/2014	300	U		----		----		----		ENERGY
MW-14	12/22/2014	300	U		----		----		----		ENERGY
MW-14	6/10/2015	**684**	----		----		----		----		ENERGY
MW-14	12/30/2015	291	J		----		----		----		ENERGY
MW-15	12/15/2011	**423**	----		----		----		----		ENERGY
MW-15	7/26/2012	**29,600**	303	U	**21,800**		**3,140**		**29,600**		ENERGY
MW-15	9/14/2012	**557**	----		----		----		----		ENERGY
MW-15R	1/9/2013	ND	----		----		----		----		ENERGY
MW-15R	6/27/2013	300	U		----		----		----		ENERGY
MW-15R	12/2/2013	300	U		----		----		----		ENERGY
MW-15R	6/27/2014	300	U		----		----		----		ENERGY
MW-15R	12/22/2014	300	U		----		----		----		ENERGY
MW-15R	6/10/2015	300	U		----		----		----		PACE
MW-15R	12/31/2015	292	J		----		----		----		PACE
MW-16	12/15/2011	ND	----		----		----		----		ENERGY
MW-16	7/26/2012	**920**	----		----		----		----		ENERGY
MW-16	1/9/2013	ND	----		----		----		----		ENERGY
MW-16	6/26/2013	**590**	----		----		----		----		ENERGY
MW-16	12/1/2013	300	U		----		----		----		ENERGY
MW-17	12/14/2011	ND	----		----		----		----		ENERGY
MW-17	7/26/2012	312	U		----		----		----		ENERGY
MW-17	1/9/2013	ND	----		----		----		----		ENERGY

Table 2 - EPH Analytical Data Summary - Groundwater
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

Well	Date	EPH Screen (SW 8015M)	EPH Fractions (MA-EPH) C9-C18 Aliphatics	Q	C19-C36 Aliphatics	Q	C11-C22 Aromatics	Q	TEH	Q	Laboratory
RBSLs		1,000 [1]	1,000		1,000		1,000		1,000		
MW-17	6/26/2013	300 U	----		----		----		----		ENERGY
MW-17	12/1/2013	300 U	----		----		----		----		ENERGY
MW-18	12/14/2011	ND	----		----		----		----		ENERGY
MW-18	7/26/2012	306 U	----		----		----		----		ENERGY
MW-18	1/8/2013	ND	----		----		----		----		ENERGY
MW-18	6/26/2013	303 U	----		----		----		----		ENERGY
MW-18	12/1/2013	300 U	----		----		----		----		ENERGY
MW-18	6/25/2014	300 U	----		----		----		----		ENERGY
MW-18	12/22/2014	300 U	----		----		----		----		ENERGY
MW-19	12/14/2011	ND	----		----		----		----		ENERGY
MW-19	7/26/2012	ND	----		----		----		----		ENERGY
MW-19	1/8/2013	ND	----		----		----		----		ENERGY
MW-19	6/26/2013	300 U	----		----		----		----		ENERGY
MW-19	12/2/2013	300 U	----		----		----		----		ENERGY
MW-19	6/26/2014	**445**	----		----		----		----		ENERGY
MW-19	12/23/2014	300 U	----		----		----		----		ENERGY
MW-19	6/11/2015	300 U	----		----		----		----		ENERGY
MW-19	12/31/2015	284 J	----		----		----		----		ENERGY
MW-20	12/14/2011	ND	----		----		----		----		ENERGY
MW-20	7/25/2012	ND	----		----		----		----		ENERGY
MW-20	1/8/2013	ND	----		----		----		----		ENERGY
MW-20	6/26/2013	300 U	----		----		----		----		
MW-20	12/2/2013	300 U	----		----		----		----		ENERGY
MW-20	6/26/2014	300 U	----		----		----		----		ENERGY
MW-20	12/23/2014	300 U	----		----		----		----		ENERGY
MW-20	12/30/2015	300 U	----		----		----		----		ENERGY
MW-20	6/11/2015	**324**	----		----		----		----		ENERGY
MW-21	12/14/2011	ND	----		----		----		----		ENERGY
MW-21	7/25/2012	ND	----		----		----		----		ENERGY
MW-21	1/8/2013	ND	----		----		----		----		ENERGY
MW-21	6/26/2013	300 U	----		----		----		----		
MW-21	12/2/2013	300 U	----		----		----		----		ENERGY
MW-21	6/25/2014	300 U	----		----		----		----		ENERGY
MW-21	12/23/2014	300 U	----		----		----		----		ENERGY
MW-21	6/9/2015	300 U	----		----		----		----		ENERGY
MW-22	6/26/2014	300 U	----		----		----		----		ENERGY
MW-22	12/22/2014	300 U	----		----		----		----		ENERGY
MW-22	6/10/2015	**587**	----		----		----		----		ENERGY
MW-22	12/30/2015	**304**	----		----		----		----		ENERGY

Notes:

[1] A total extractable hydrocarbon (TEH) concentration of 1,000 µg/L is used to determine if fractionation is needed.
ND indicates the parameter was not detected above the Method Detection Limit (MDL) but the MDL is not known
Data collected prior to **December 2013** obtained from Atkins reports supplied by Stimson
Concentrations for all parameters in ug/L (ppb)
Bolded text indicates analyte detected above the Method Detection Limit (MDL)
Bold/Shaded text indicates analyte detected above DEQ RBSL

----	sample not analyzed for indicated parameter
Q	Laboratory qualifier
U	Indicates the value reported is the practical quatitation limit for the sample using the described method
J	Present, but concentration estimated or below the quantitation limit
D	RL increased due to sample matrix interference

Table 3 - PCBs Analytical Data Summary - Groundwater
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

		Polychlorinated Biphenyls (PCBs)																		
Well	Date	Aroclor 1016	Q	Aroclor 1221	Q	Aroclor 1232	Q	Aroclor 1242	Q	Aroclor 1248	Q	Aroclor 1254	Q	Aroclor 1260	Q	Aroclor 1262	Q	Aroclor 1268	Q	Laboratory
MT DEQ WQB-7		0.5		0.5		0.5		0.5		0.5		0.5		0.5		0.5		0.5		
MW-10	6/26/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-10	12/2/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-10	6/25/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-10	12/22/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-10	6/9/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-10	12/30/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-11	7/26/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-11	6/11/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-12	6/27/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-12	12/1/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-13	12/14/2011	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	**5.2**		0.50	U	0.50	U	0.50	U	ENERGY
MW-13	7/27/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	**9.0**		0.50	U	0.50	U	0.50	U	ENERGY
MW-13	1/9/2013	0.50	U	0.50	U	0.50	U	0.50	U	10	D	**7.8**		0.50	U	0.50	U	0.50	U	ENERGY
MW-13	6/27/2013	0.50	U	0.50	U	0.50	U	0.50	U	20	D	**5.5**		0.50	U	0.50	U	0.50	U	ENERGY
MW-13	12/1/2013	0.50	U	0.50	U	0.50	U	0.50	U	25	D	**7.8**		0.50	U	0.50	U	0.50	U	ENERGY
MW-13R	6/25/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-13R	12/22/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-13R	6/10/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-13R	12/31/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-14	6/27/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-14	12/1/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-14	6/26/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-14	12/22/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-14	6/10/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-14	12/30/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15	12/15/2011	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15	7/26/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.27	J	0.50	U	0.50	U	0.50	U	ENERGY
MW-15	9/14/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15R	1/9/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15R	6/27/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15R	12/2/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15R	6/26/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15R	12/22/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15R	6/10/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-15R	12/31/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-16	12/15/2011	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-16	7/26/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-16	1/9/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-16	6/26/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-16	12/1/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-17	12/14/2011	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-17	7/26/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-17	1/9/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-17	6/26/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-17	12/1/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-18	12/14/2011	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-18	7/26/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-18	1/8/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-18	2/26/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-18	6/26/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY

Table 3 - PCBs Analytical Data Summary - Groundwater
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

		Polychlorinated Biphenyls (PCBs)																		
Well	Date	Aroclor 1016	Q	Aroclor 1221	Q	Aroclor 1232	Q	Aroclor 1242	Q	Aroclor 1248	Q	Aroclor 1254	Q	Aroclor 1260	Q	Aroclor 1262	Q	Aroclor 1268	Q	Laboratory
MT DEQ WQB-7		0.5		0.5		0.5		0.5		0.5		0.5		0.5		0.5		0.5		
MW-18	12/1/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-18	6/25/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-18	12/22/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	12/14/2011	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	7/26/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	1/8/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	6/26/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	12/2/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	6/26/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	12/23/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	6/11/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-19	12/31/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	12/14/2011	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	7/25/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	1/8/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	6/26/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	12/2/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	6/26/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	12/23/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	6/11/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-20	12/30/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-21	12/14/2011	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-21	7/25/2012	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-21	1/8/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-21	6/26/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-21	12/2/2013	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-21	6/25/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-21	12/23/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-21	6/9/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-22	6/26/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-22	12/22/2014	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-22	6/10/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY
MW-22	12/30/2015	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ENERGY

Notes:

ND indicates the parameter was not detected above the Method Detection Limit (MDL) but the MDL is not known

Data collected prior to December 2013 obtained from Atkins reports supplied by Stimson

Concentrations for all parameters in ug/L (ppb)

Bolded text indicates analyte detected above the Method Detection Limit (MDL)

Bold/Shaded text indicates analyte detected above Montana DEQ WQB-7 standard

Q Laboratory qualifier

U Indicates the value reported is the practical quatitation limit for the sample using the described method

J Present, but concentration estimated or below the quantitation limit

Table 4 - Soil Confirmation Sample Results
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

Cell ID	Sample ID & Location	Date	PCB Aroclor 1254 Result (mg/kg)	Sample Depth (ft bgs)	Comments
CB-1	CB-1-Eastwall	2/9/2016	**1970**	26.7	CB-1-Eastwall sampled via CB-14 Eastwall
	CB-1-Westwall	2/9/2016	**1310**	26.0	CB-1-Westwall sampled via CB-14 Westwall
	CB-1-Base	2/15/2016	0.016	37.7	
CB-2	CB-2-Base	1/26/2016	0.18	13.9	
	CB-2-Northwall	1/26/2016	**3.2**	----	
	CB-2-Eastwall	1/26/2016	1.4	----	
	CB-2-Westwall	1/26/2016	**456**	----	No further excavation west here. CB-2 borders CB-14 and samples were collected from base of CB-14.
	CB-2-Northwall-2	2/3/2016	0.042	16.3	
	CB-2-Eastwall-2	2/1/2016	0.24	13.5	
CB-4	CB-4-Base	1/25/2016	0.24	12.0	
	CB-4-Eastwall	1/25/2016	**11**	9.2	Excavated four (4) feet to the east and encountered fill material from MW-15 excavation
	CB-4-Southwall	1/25/2016	**2.3**	8.8	
	CB-4-Eastwall-2	1/28/2016	**5.0**	10.4	
	CB-4-Southwall-2	1/28/2016	**1.7**	9.8	
	CB-4-Southwall-3	2/2/2016	0.42	8.9	
CB-5	CB-5-Eastwall	2/9/2016	**31**	29.1	
	CB-5-Southwall	2/9/2016	**609**	31.3	CB-5-Southwall no longer exits - excavated out via CB-7
	CB-5-Westwall	2/9/2016	**3000**	25.7	
	CB-5-Base	2/15/2016	**28**	35.7	
	CB-5-Eastwall-2	2/23/2016	0.18	30.1	
	CB-5-Westwall-2	2/12/2016	**1.6**	26.2	
	CB-5-EBase	2/16/2016	0.39	25.0	
	CB-5-WBase	2/16/2016	**63**	29.0	
	CB-5-Westwall-3	2/23/2016	0.28	32.5	
	CB-5-Wbase-2	2/23/2016	**5.9**	40.2	Excavated 2 feet into groundwater, no additional sample collected
CB-7	CB-7-Base	2/8/2016	**1710**	25.9	
	CB-7-Southwall	2/8/2016	0.73	23.4	
	CB-7-Eastwall	2/8/2016	**2.4**	23.1	
	CB-7-Westwall	2/8/2016	**176**	23.3	
	CB-7-Base-2	2/12/2016	**3.2**	33.3	
	CB-7-Eastwall-2	2/23/2016	0.38	35.4	
	CB-7-Westwall-2	2/12/2016	0.21	24.0	
	CB-7-WBase	2/16/2016	0.24	28.4	
CB-10	CB-10-Base	1/25/2016	0.11	3.8	
	CB-10-Northwall	1/25/2016	0.12	1.9	
	CB-10-Eastwall	1/25/2016	0.089	0.9	
	CB-10-Westwall	1/25/2016	**2.2**	2.1	CB-10-Westwall-2 could not be sampled - no sidewall left after additl 4' excavation
CB-11	CB-11-Base	2/5/2016	**1.2**	30.0	
	CB-11-Southwall	2/5/2016	**1.8**	25.4	
	CB-11-Eastwall	2/5/2016	0.44	25.4	
	CB-11-Northwall	2/5/2016	**73**	24.4	CB-11-Northwall no longer exits - adjacent to CB-5
	CB-11-Westwall	2/5/2016	**1,730**	27.3	CB-11-Westwall no longer exits - adjacent to CB-5
	CB-11-Base-2	2/12/2016	0.22	33.2	
	CB-11-Southwall-2	2/12/2016	0.66	27.3	

Table 4 - Soil Confirmation Sample Results
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

Cell ID	Sample ID & Location	Date	PCB Aroclor 1254 Result (mg/kg)	Sample Depth (ft bgs)	Comments
CB-12	CB-12 South Wall	1/18/2016	0.19	11.3	
	CB-12 West Wall	1/18/2016	**0.89**	11.9	
	CB-12 East Wall	1/18/2016	**1.4**	8.4	
	CB-12 Base	1/18/2016	**1.4**	----	
	CB-12-Westwall-2	1/26/2016	0.42	16.3	
	CB-12-Eastwall-2	1/26/2016	0.69	10.6	
	CB-12-Base-2	1/26/2016	0.32	11.6	
CB-13	CB-13-South Wall	1/15/2016	**11**	2.0	
	CB-13-North Wall	1/15/2016	ND	3.5	
	CB-13-Base	1/15/2016	**2.9**	4.5	
	CB-13-West Wall	1/15/2016	**3.7**	3.2	
	CB-13-Southwall-2	1/21/2016	**1.7**	3.3	
	CB-13-Base-2	1/21/2016	**0.97**	6.5	
	CB-13-Westwall-2	1/21/2016	**2.7**	2.9	
	CB-13-Southwall-3	1/27/2016	0.26	6.4	
	CB-13-Base-3	1/27/2016	0.025	10.8	
	CB-13-Westwall-3	1/27/2016	0.18	7.1	
CB-14	CB-14-Northwall	1/26/2016	**1.1**	16.4	
	CB-14-Northwall-2	2/1/2016	0.028	19.5	
	CB-14-Eastwall	2/9/2016	**794**	25.7	
	CB-14-Westwall	2/9/2016	**500**	25.5	
	CB-14-Base	2/16/2016	0.20	40.4	
	CB-14-EBase	2/16/2016	0.29	21.9	
	CB-14-Eastwall-2	2/23/2016	0.22	27.8	
	CB-14-Westwall-2	2/23/2016	0.38	26.8	
CB-TP-1	CB-TP-1-Northwall	1/27/2016	**1.0**	13.1	
	CB-TP-1-Westwall	1/27/2016	**1.4**	14.9	
	CB-TP-1-Base	1/27/2016	**6.4**	14.9	
	CB-TP-1-Northwall-2	2/4/2016	0.090	14.2	
	CB-TP-1-Westwall-2	2/4/2016	ND	11.5	
	CB-TP-1-Base-2	2/4/2016	ND	18.6	
	CB-TP-1-Westwall-3	2/11/2016	0.035	11.5	
CB-TP-2	CB-TP-2-Southwall	1/27/2016	**4.9**	12.6	
	CB-TP-2-Westwall	1/27/2016	**2.9**	14.3	
	CB-TP-2-Base	1/27/2016	**0.96**	16.8	
	CB-TP-2-Southwall-2	2/4/2016	**1.5**	14.2	
	CB-TP-2-Westwall-2	2/4/2016	0.51	12.1	
	CB-TP-2-Base-2	2/4/2016	**1.3**	19.3	
	CB-TP-2-Southwall-3	2/11/2016	0.15	16.5	
	CB-TP-2-Base-3	2/11/2016	**0.75**	21.9	CB-TP-2-Base was sampled by expansion of CB-5 to the west via #CB-5-Westwall-3 (into groundwater)
CB-TP-5	CB-TP-5-Base	1/25/2016	**110**	15.8	
	CB-TP-5-Eastwall	1/25/2016	0.34	12.8	
	CB-TP-5-Southwall	1/25/2016	**0.82**	14.3	
	CB-TP-5-Base-2	1/29/2016	0.049	19.0	

Table 4 - Soil Confirmation Sample Results
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

Cell ID	Sample ID & Location	Date	PCB Aroclor 1254 Result (mg/kg)	Sample Depth (ft bgs)	Comments
	CB-TP-5-Southwall-2	1/28/2016	0.53	5.9	
CB-TP-7	CB-TP-7-Base	1/25/2016	**3.0**	8.9	
	CB-TP-7-Northwall	1/25/2016	**2.5**	6.8	
	CB-TP-7-Eastwall	1/25/2016	**1.9**	7.3	CB-TP-7-Eastwall-2 could not be sampled - no sidewall left after additl 4' excavation
	CB-TP-7-Base-2	1/28/2016	0.029	13.5	
	CB-TP-7-Northwall-2	1/28/2016	**0.86**	10.0	Excavated four (4) feet to the north and encountered fill material from MW-13 excavation

Notes:

	>50 ppm (TSCA disposal required)
	>0.74 ppm and <50 ppm (Republic landfill disposal)
	<0.74 ppm (no disposal required - confirmation sample passed cleanup level)
mg/kg	milligrams per kilogram (ppm)
----	the data was either not collected or not recorded

Table 5 - Excavation Progression Via Soil Confirmation Results
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

Cell ID	Initial Sample ID & Location	Date	PCB Aroclor 1254 Result (mg/kg)	Northing	Easting	Elevation (ft)	Cleanup Level Pass / Fail	Second Resample ID & Location	Date	Second PCB Aroclor 1254 Result (mg/kg)	Northing	Easting	Elevation (ft)	Cleanup Level Pass / Fail	Third Resample ID & Location	Date	Third PCB Aroclor 1254 Result (mg/kg)	Northing	Easting	Elevation (ft)	Cleanup Level Pass / Fail
CB-13	CB-13-South Wall	1/15/2016	11	17044945.0	923351.7	3282.4	Fail	CB-13-Southwall-2	1/21/2016	1.7	17044940.2	923346.4	3281.1	Fail	CB-13-Southwall-3	1/27/2016	0.26	17044933.6	923343.8	3278.0	Pass
	CB-13-North Wall	1/15/2016	ND	17044971.65	923358.10	3280.9	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-13-Base	1/15/2016	2.9	17044958.55	923355.3	3279.95	Fail	CB-13-Base-2	1/21/2016	0.97	17044952.6	923352.65	3277.9	Fail	CB-13-Base-3	1/27/2016	0.025	17044957.3	923352.0	3273.65	Pass
	CB-13-West Wall	1/15/2016	3.7	17044960.95	923340.7	3281.2	Fail	CB-13-Westwall-2	1/21/2016	2.7	17044963.0	923334.25	3281.5	Fail	CB-13-Westwall-3	1/27/2016	0.18	17044959.75	923331.5	3277.3	Pass
CB-12	CB-12 South Wall	1/18/2016	0.19	17044917.8	923376.9	3274.3	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-12 West Wall	1/18/2016	0.89	17044929.75	923363.6	3273.65	Fail	CB-12-Westwall-2	1/26/2016	0.42	17044929.85	923379.1	3269.25	Pass	---	---	---	---	---	---	---
	CB-12 East Wall	1/18/2016	1.4	17044926.15	923395.55	3277.2	Fail	CB-12-Eastwall-2	1/26/2016	0.69	17044927.0	923397.7	3275.0	Pass	---	---	---	---	---	---	---
	CB-12 Base	1/18/2016	1.4	----	----	----	Fail	CB-12-Base-2	1/26/2016	0.32	17044930.55	923360.25	3274.0	Pass	---	---	---	---	---	---	---
CB-4	CB-4-Base	1/25/2016	0.24	17045001.65	923472.65	3271.9	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-4-Eastwall	1/25/2016	11	17044995.4	923498.95	3274.65	Fail	CB-4-Eastwall-2	1/28/2016	5.0	17044992.75	923500.6	3273.5	Fail	Excavated four (4) feet to the east and encountered fill material from MW-15 excavation						
	CB-4-Southwall	1/25/2016	2.3	17044976.95	923476.80	3275.1	Fail	CB-4-Southwall-2	1/28/2016	1.7	17044972.1	923482.2	3274.1	Fail	CB-4-Southwall-3	2/2/2016	0.42	17044960.45	923476.4	3275.0	Pass
CB-TP-7	CB-TP-7-Base	1/25/2016	3.0	17045026.65	923439.65	3274.05	Fail	CB-TP-7-Base-2	1/28/2016	0.029	17045023.65	923438.4	3269.5	Pass							
	CB-TP-7-Northwall	1/25/2016	2.5	17045043.45	923440.55	3276.15	Fail	CB-TP-7-Northwall-2	1/28/2016	0.86	17045041.8	923446.2	3273.0	Fail	Excavated four (4) feet to the north and encountered fill material from MW-13 excavation						
	CB-TP-7-Eastwall	1/25/2016	1.9	17045031.95	923452.55	3275.7	Fail	CB-TP-7-Eastwall-2 could not be sampled - sidewall expanded into previous excavation					---	---	---	---	---	---	---	---	---
CB-10	CB-10-Base	1/25/2016	0.11	17045022.45	923481.6	3273.85	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-10-Northwall	1/25/2016	0.12	17045038.0	923481.0	3275.75	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-10-Eastwall	1/25/2016	0.089	17045019.95	923501.4	3276.7	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-10-Westwall	1/25/2016	2.2	17045030.01	923467.7	3275.55	Fail	CB-10-Westwall-2 could not be sampled - sidewall expanded into previous excavation					---	---	---	---	---	---	---	---	---
CB-TP-5	CB-TP-5-Base	1/25/2016	110	17044982.9	923429.4	3268.15	Fail (TSCA)	CB-TP-5-Base-2	1/29/2016	0.049	17044978.2	923430.9	3265.0	Pass	---	---	---	---	---	---	---
	CB-TP-5-Eastwall	1/25/2016	0.34	17044974.3	923451.8	3271.15	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-TP-5-Southwall	1/25/2016	0.82	17044966.0	923437.65	3269.7	Fail	CB-TP-5-Southwall-2	1/28/2016	0.53	17044953.1	923435.35	3278.1	Pass	---	---	---	---	---	---	---
CB-2	CB-2-Base	1/26/2016	0.18	17045005.95	923429.05	3269.7	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-2-Northwall	1/26/2016	3.2	----	----	----	Fail	CB-2-Northwall-2[1]	2/3/2016	0.042	17045024.45	923443.9	3267.3	Pass	---	---	---	---	---	---	---
	CB-2-Eastwall	1/26/2016	1.4	----	----	----	Fail	CB-2-Eastwall-2	2/1/2016	0.24	17045001.1	923464.0	3270.1	Pass	---	---	---	---	---	---	---
	CB-2-Westwall	1/26/2016	456	----	----	----	Fail (TSCA)	Did not excavate further to the west here because it bordered CB-14 and samples were collected from base of CB-14							---	---	---	---	---	---	---
CB-14	CB-14-Northwall	1/26/2016	1.1	17045026.9	923408.15	3267.6	Fail	CB-14-Northwall-2	2/1/2016	0.028	17045027.5	923407.0	3264.5	Pass	---	---	---	---	---	---	---
CB-TP-1	CB-TP-1-Northwall	1/27/2016	1.0	17045030.2	923377.8	3269.9	Fail	CB-TP-1-Northwall-2	2/4/2016	0.090	17045040.35	923379.7	3268.85	Pass	---	---	---	---	---	---	---
	CB-TP-1-Westwall	1/27/2016	1.4	17045020.0	923363.20	3268.1	Fail	CB-TP-1-Westwall-2	2/4/2016	ND	17045021.65	923356.7	3271.50	Pass	CB-TP-1-Westwall-3[2]	2/11/2016	0.035	17045022.75	923351.9	3271.5	Pass
	CB-TP-1-Base	1/27/2016	6.4	17045015.15	923377.9	3268.1	Fail	CB-TP-1-Base-2	2/4/2016	ND	17045015.2	923377.4	3264.4	Pass	---	---	---	---	---	---	---
CB-TP-2	CB-TP-2-Southwall	1/27/2016	4.9	17044965.8	923367.7	3272.4	Fail	CB-TP-2-Southwall-2	2/4/2016	1.5	17044963.5	923361.5	3270.8	Fail	CB-TP-2-Southwall-3	2/11/2016	0.15	17044963.4	923348.2	3268.5	Pass
	CB-TP-2-Westwall	1/27/2016	2.9	17044989.25	923361.5	3270.7	Fail	CB-TP-2-Westwall-2	2/4/2016	0.51	17044986.3	923352.6	3272.9	Pass	---	---	---	---	---	---	---
	CB-TP-2-Base	1/27/2016	0.96	17044988.4	923371.9	3268.2	Fail	CB-TP-2-Base-2	2/4/2016	1.3	17044988.35	923373.2	3265.65	Fail	CB-TP-2-Base-3	2/11/2016	0.75	17044985.75	923370.5	3263.1	Fail[3]
CB-11	CB-11-Base	2/5/2016	1.2	17044962.1	923412.45	3253.75	Fail	CB-11-Base-2	2/12/2016	0.22	17044961.8	923412.55	3250.5	Pass	---	---	---	---	---	---	---
	CB-11-Southwall	2/5/2016	1.8	17044949.2	923408.1	3258.35	Fail	CB-11-Southwall-2	2/12/2016	0.66	17044943.3	923409.7	3256.4	Pass	---	---	---	---	---	---	---
	CB-11-Eastwall	2/5/2016	0.44	17044959.2	923424.7	3258.3	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-11-Northwall	2/5/2016	73	17044975.8	923417.2	3259.3	Fail (TSCA)	CB-11-Northwall no longer existed - excavated via CB-5			---	---	---	---	---	---	---	---	---	---	---
	CB-11-Westwall	2/5/2016	1,730	17,044,966	923400.5	3256.4	Fail (TSCA)	CB-11-Westwall no longer existed - excavated via CB-5			---	---	---	---	---	---	---	---	---	---	---

Table 5 - Excavation Progression Via Soil Confirmation Results
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

Cell ID	Initial Sample ID & Location	Date	PCB Aroclor 1254 Result (mg/kg)	Northing	Easting	Elevation (ft)	Cleanup Level Pass / Fail	Second Resample ID & Location	Date	Second PCB Aroclor 1254 Result (mg/kg)	Northing	Easting	Elevation (ft)	Cleanup Level Pass / Fail	Third Resample ID & Location	Date	Third PCB Aroclor 1254 Result (mg/kg)	Northing	Easting	Elevation (ft)	Cleanup Level Pass / Fail
CB-7	CB-7-Base	2/8/2016	1710	17044959.4	923387.55	3258.0	Fail (TSCA)	CB-7-Base-2	2/12/2016	3.2	17044957.1	923386.4	3250.6	Fail	CB-7-WBase	2/16/2016	0.24	17044968.7	923366.5	3255.5	Pass
	CB-7-Southwall	2/8/2016	0.73	17044936.85	923380	3260.5	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-7-Eastwall	2/8/2016	2.4	17044942.6	923396.9	3260.85	Fail	CB-7-Eastwall-2	2/23/2016	0.38	17044964.0	923404.1	3248.5	Pass	---	---	---	---	---	---	---
	CB-7-Westwall	2/8/2016	176	17044962.9	923371.2	3260.6	Fail (TSCA)	CB-7-Westwall-2	2/12/2016	0.21	17044971.65	923350.10	3259.90	Pass	---	---	---	---	---	---	---
CB-5	CB-5-Eastwall	2/9/2016	31	17044990.0	923410.6	3255.6	Fail	CB-5-Eastwall-2	2/23/2016	0.18	17044986.8	923420.45	3254.6	Pass	---	---	---	---	---	---	---
	CB-5-Southwall	2/9/2016	609	17044971.3	923389.5	3253.4	Fail (TSCA)	CB-5-Southwall no longer existed - excavated via CB-7			---	---	---	---	---	---	---	---	---	---	---
	CB-5-Westwall	2/9/2016	3000	17044989.6	923383.5	3259.0	Fail (TSCA)	CB-5-Westwall-2	2/12/2016	1.6	17044990.0	923355.5	3258.5	Fail	CB-5-Westwall-3	2/23/2016	0.28	17044992.5	9233737.35	3252.2	Pass
	CB-5-Base	2/15/2016	28	17044983.55	923397.3	3249.0	Fail	CB-5-EBase	2/16/2016	0.39	17044987.2	923428.8	3259.75	Pass	---	---	---	---	---	---	---
								CB-5-WBase	2/16/2016	63	17044988.35	923371.0	3255.7	Fail (TSCA)	CB-5-Wbase-2	2/23/2016	5.9	17044998.3	923387.8	3244.5	Fail [4]
CB-14	CB-14-Eastwall	2/9/2016	794	17045011.0	923415.1	3258.35	Fail (TSCA)	CB-14-Eastwall-2	2/23/2016	0.22	17045013.15	923378.9	3256.2	Pass	---	---	---	---	---	---	---
	CB-14-Westwall	2/9/2016	500	17045013.1	923389.9	3258.5	Fail (TSCA)	CB-14-Westwall-2	2/23/2016	0.38	17045013.15	923378.9	3257.2	Pass	---	---	---	---	---	---	---
	CB-14-Base	2/16/2016	0.20	17045013.35	923401.50	3243.60	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	CB-14-EBase	2/16/2016	0.29	17045005.6	923433	3262.1	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CB-1	CB-1-Eastwall	2/9/2016	1970	17044997.6	923410.7	3257.3	Fail (TSCA)	CB-1-Eastwall sampled via CB-14 Eastwall			---	---	---	---	---	---	---	---	---	---	---
	CB-1-Westwall	2/9/2016	1310	17045000.1	923385.3	3258.0	Fail (TSCA)	CB-1-Westwall sampled via CB-14 Westwall			---	---	---	---	---	---	---	---	---	---	---
	CB-1-Base	2/15/2016	0.016	17044996.3	923397.5	3246.3	Pass	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:

[1] CB-2 base passed, but CB-2 northwall failed. TP-7-Base passed (at same elevation as CB-2 Northwall). Envirocon was directed to remove soil 2 feet down and 4 feet north and south of CB-2 northwall for this sample.

[2] This additional sample was collected because a deeper lens of impacted material was discovered beneath TP-1-Westwall-2.

[3] CB-TP-2-Base sample failed, but the excavation extended into groundwater an no followup sample was required.

[4] CB-5-WBase sample failed, but the excavation extended into groundwater an no followup sample was required.

---- the data was either not collected or not recorded

PCB - Polychlorinated Biphenyl

mg/kg - milligram per kilogram (ppm)

TSCA - Toxic Substances Control Act

ft - feet

Table 6 - Concrete and Piping Material Confirmation Sample Results
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

Material	Sample ID	Date	PCB Aroclor 1254 Result (mg/kg)	Comments
Soil on Piping	Pipe - 1	1/14/2016	**89**	All piping removed from the excavation with petroleum-stained soil was disposed at the TSCA facility.
Soil on Piping	Pipe - 2	1/14/2016	**6,170**	All piping removed from the excavation with petroleum-stained soil was disposed at the TSCA facility.
Soil on Piping	Pipe - 3	1/14/2016	**3,940**	All piping removed from the excavation with petroleum-stained soil was disposed at the TSCA facility.
Soil on Piping	Pipe - 4	1/14/2016	**4,560**	All piping removed from the excavation with petroleum-stained soil was disposed at the TSCA facility.
Soil on Piping	Pipe - 5	1/14/2016	**20,500**	All piping removed from the excavation with petroleum-stained soil was disposed at the TSCA facility.
Soil on Piping	Pipe - 6	1/14/2016	**265**	All piping removed from the excavation with petroleum-stained soil was disposed at the TSCA facility.
Concrete	Concrete - 1	1/15/2016	**1.0**	All petroleum-stained (black) concrete was disposed at the Missoula Republic Landfill.
Concrete	Concrete - 2	1/15/2016	**9,560**	Hydraulic oil staining (pink) visible on concrete. All pink-stained concrete was disposed at the TSCA facility
Concrete	Concrete - 3	1/15/2016	**14**	All petroleum-stained (black) concrete was disposed at the Missoula Republic Landfill.
Concrete	Concrete - 4	1/15/2016	**10**	All petroleum-stained (black) concrete was disposed at the Missoula Republic Landfill.
Concrete	Concrete - 5	1/15/2016	**8,960**	Hydraulic oil staining (pink) visible on concrete. All pink-stained concrete was disposed at the TSCA facility
Concrete	Concrete - 6	1/15/2016	**0.90**	All petroleum-stained (black) concrete was disposed at the Missoula Republic Landfill.
Concrete	Concrete - 7	1/15/2016	**13**	All petroleum-stained (black) concrete was disposed at the Missoula Republic Landfill.
Concrete	Concrete - 8	1/15/2016	**105**	All petroleum-stained (black) concrete was disposed at the Missoula Republic Landfill.
Concrete	Concrete - 9	1/15/2016	0.32	No petroleum staining visible. All non-stained concrete was segragated and used as backfill.
Concrete	Concrete - 10	1/15/2016	**6.7**	All petroleum-stained (black) concrete was disposed at the Missoula Republic Landfill.

Notes:

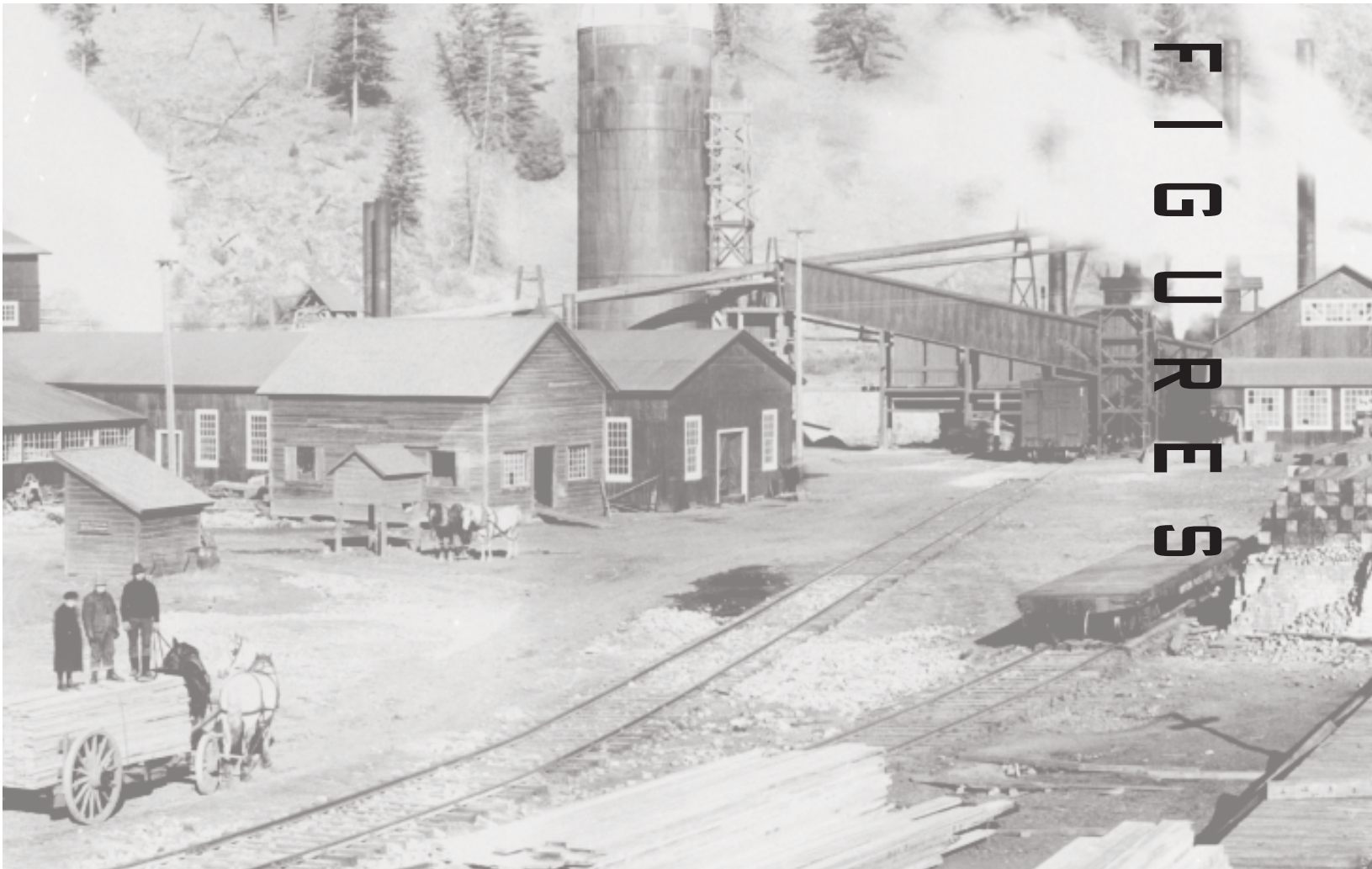
	>50 ppm (TSCA disposal required)
	>0.74 ppm and <50 ppm (Republic landfill disposal)
	<0.74 ppm (no disposal required - confirmation sample passed cleanup
mg/kg	milligrams per kilogram (ppm)
PCB	Polychlorinated Biphenyl

Table 7 - Overburden Stockpile and Haul Road Soil Confirmation Sample Results
Compressor Building Area Soil Removal
Former Stimson Lumber Millsite, Bonner Montana

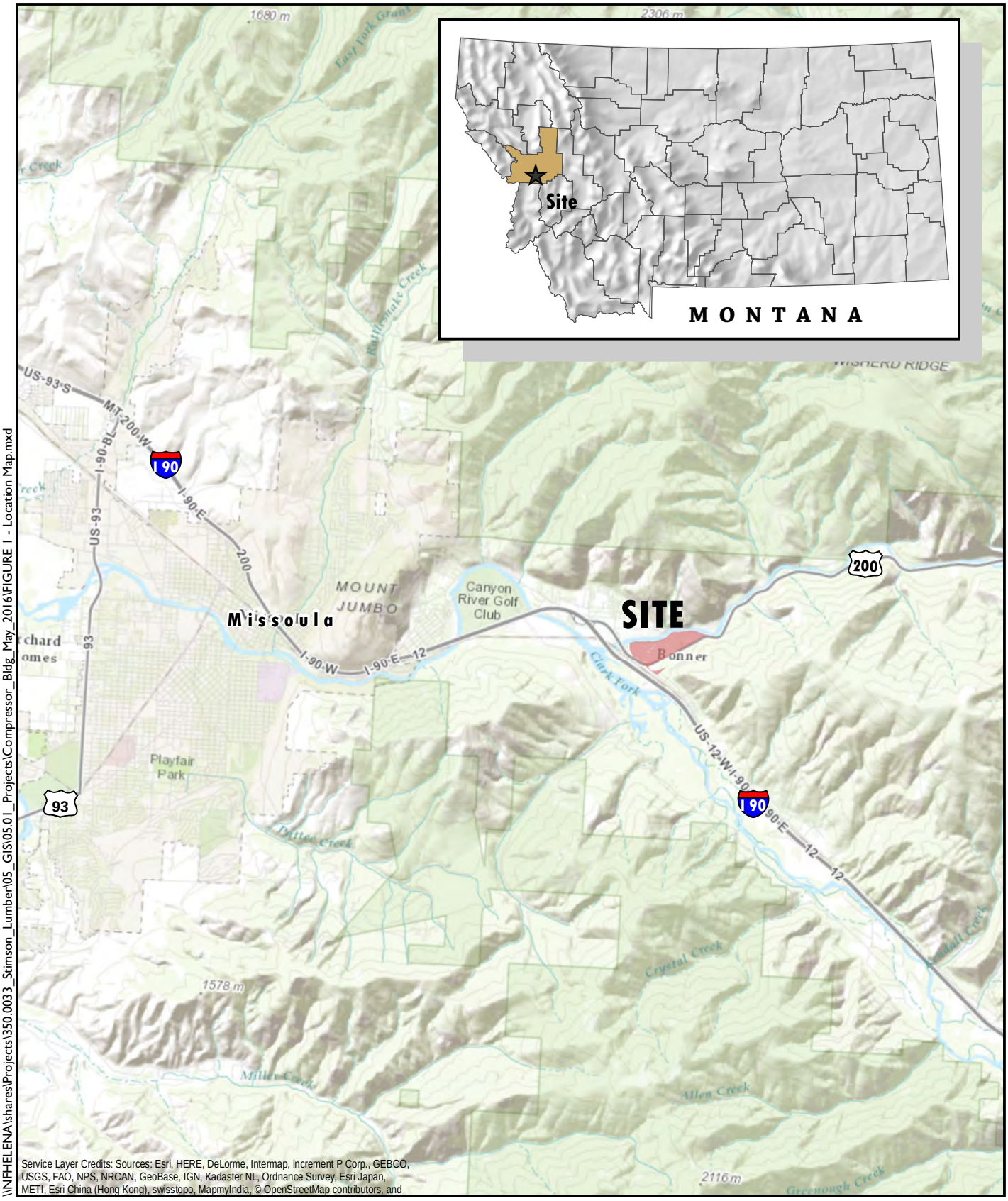
Sample ID	Sample Location	Collection Date	Analysis Date	PCB Aroclor 1254 (mg/kg)	Sample Depth (in bgs)
Overburden #1	Stockpile #1	02/17/16	02/19/16	0.71	12 - 60 in (into stockpile)
Overburden #2	Stockpile #2	02/17/16	02/19/16	0.66	12 - 60 in (into stockpile)
Overburden #3	Stockpile #3	02/17/16	02/19/16	**1.8**	12 - 60 in (into stockpile)
Overburden #4	Stockpile #4	02/17/16	02/19/16	**4.2**	12 - 60 in (into stockpile)
Overburden #5	Stockpile #5	02/17/16	02/19/16	**1.3**	12 - 60 in (into stockpile)
Overburden #3-2	Stockpile #3	02/24/16	02/25/16	0.70	12 - 60 in (into stockpile)
Overburden #4-2	Stockpile #4	02/24/16	02/25/16	**0.80**	12 - 60 in (into stockpile)
Overburden #5-2	Stockpile #5	02/24/16	02/25/16	0.55	12 - 60 in (into stockpile)
Comp1a	Overburden #1	3/9/2016	3/11/2016	**34**	surface soil
Comp1b	Overburden #1	3/9/2016	3/15/2016	**0.86**	6-8 in bgs
Comp1c	Overburden #1	3/22/2016	3/23/2016	0.043	18 in bgs
Comp 2a	Haul Road #2	3/9/2016	3/11/2016	**1.9**	surface soil
Comp2b	Haul Road #2	3/9/2016	3/15/2016	0.34	6-8 in bgs
Comp3a	Haul Road #3	3/9/2016	3/11/2016	**2.4**	surface soil
Comp3b	Haul Road #3	3/9/2016	3/15/2016	0.33	6-8 in bgs
Comp4a	Haul Road #4	3/9/2016	3/11/2016	**2.7**	surface soil
Comp4b	Haul Road #4	3/9/2016	3/15/2016	**2.5**	6-8 in bgs
Comp4c	Haul Road #4	3/21/2016	3/22/2016	0.35	18 in bgs
Comp5a	Haul Road #5	3/9/2016	3/11/2016	**3.8**	surface soil
Comp5b	Haul Road #5	3/9/2016	3/15/2016	**1.3**	6-8 in bgs
Comp5c	Haul Road #5	3/21/2016	3/22/2016	0.39	18 in bgs

Notes:

PCB - Polychlorinated Biphenyl
mg/kg - milligrams per kilogram (ppm)
in bgs - inches below ground surface
bolded/shaded result indicates sample exceeds 0.74 ppm



FIGURES



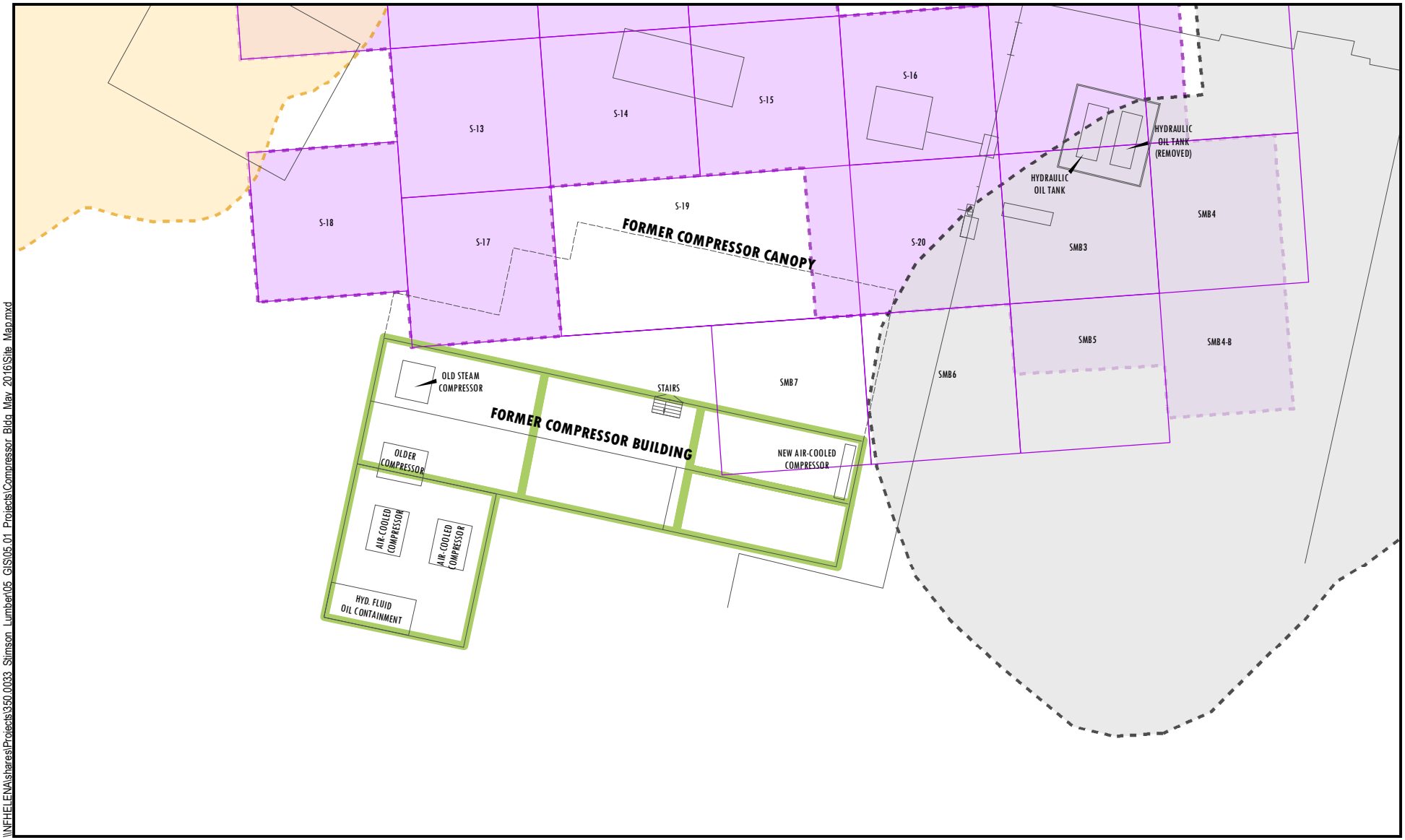
\\NFHELENA\shares\Projects\350.0033_Stimson_Lumber\05_GIS\05.01_Projects\Compressor_Bldg_May_2016\FIGURE 1 - Location Map.mxd

N

0 Miles 2

NewFields

Location Map
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 1



\\NFHELENA\shares\Projects\350.0033_Stimson_Lumber\05_GIS\05.01_Projects\Compressor_Bldg_May_2016\Site_Map.mxd

0 Feet 30

NewFields

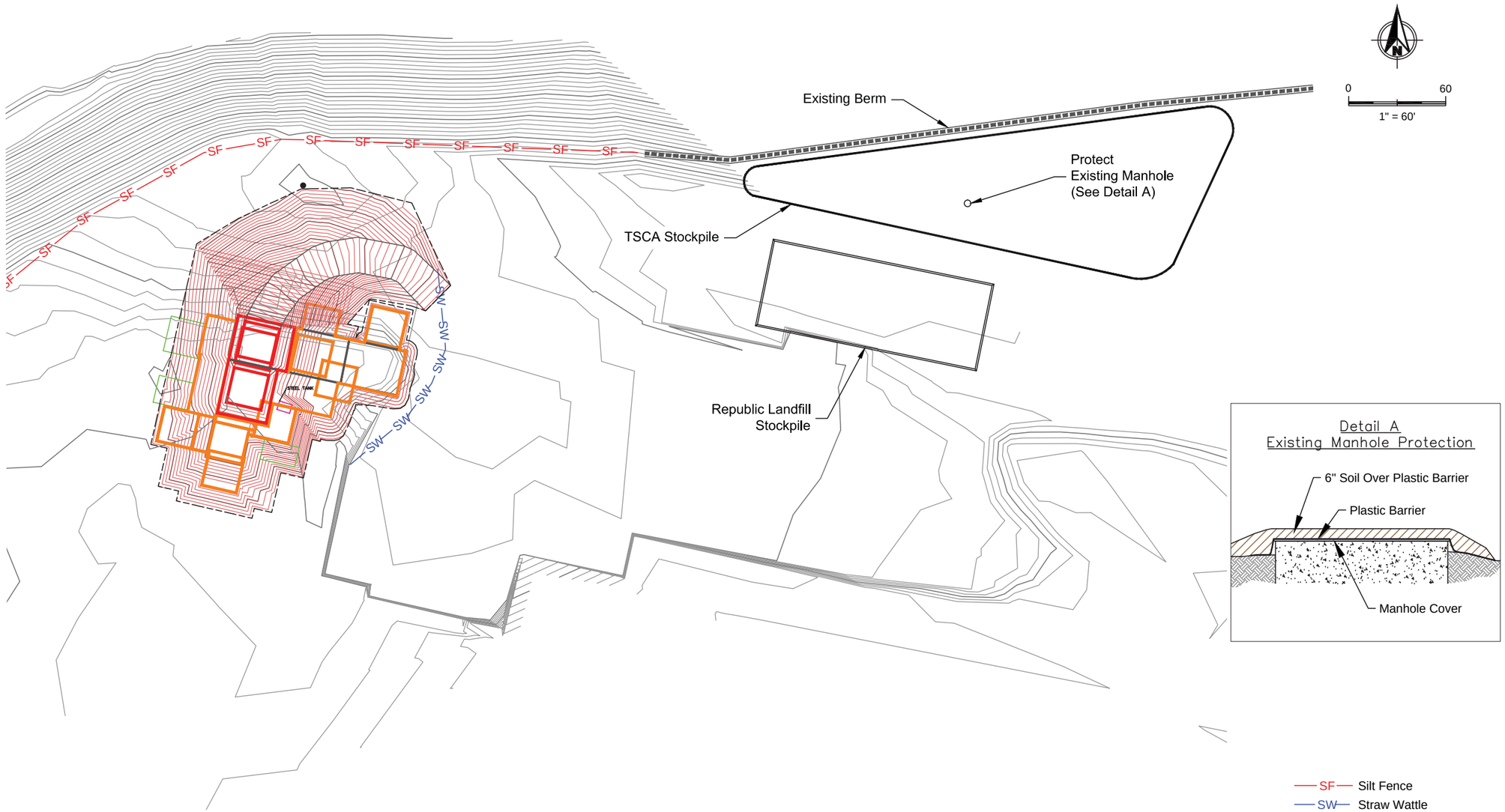
MW-13 Area Excavation

MW-15 Area Excavation Extent

Fire Pond Lagoon Excavation

Grid

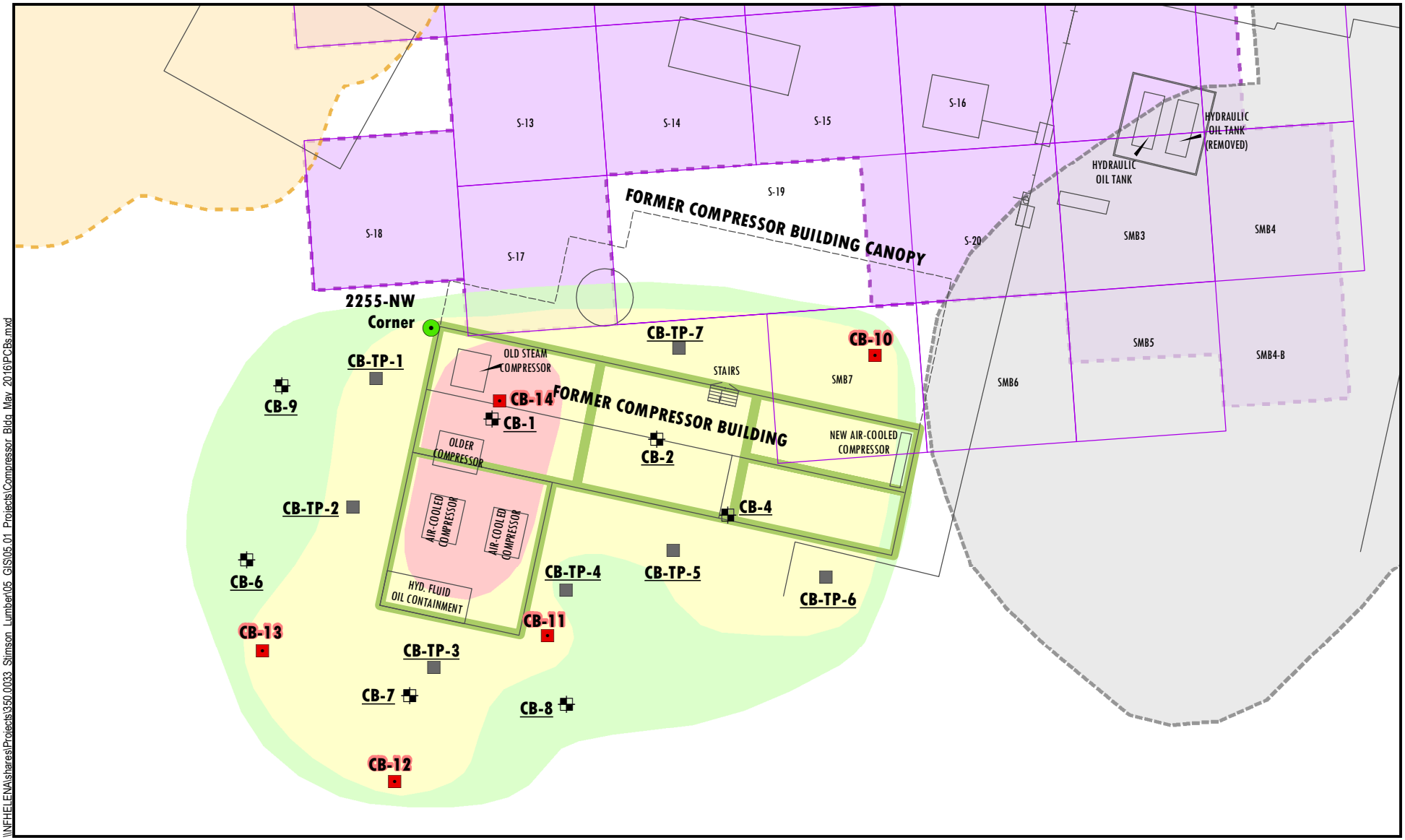
Site Map
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 2



Envirocon

NewFields

Erosion Control Plan
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 3



\\NFHELENA\shares\Projects\350.0033_Stimson_Lumber\05_GIS\05.01_Projects\Compressor_Bldg_May_2016\PCBs.mxd

0 Feet 30

NewFields

Respec Sample Location #2255-NW Corner

Boring Locations (2015)

Supplemental Boring Locations (2015)

Test Pit Locations (2015)

MW-13 Area Excavation

MW-15 Area Excavation Area

Fire Pond Lagoon Excavation

Phase 1, 2, & 3 Cell Grids

Phase 4 Cell Grid

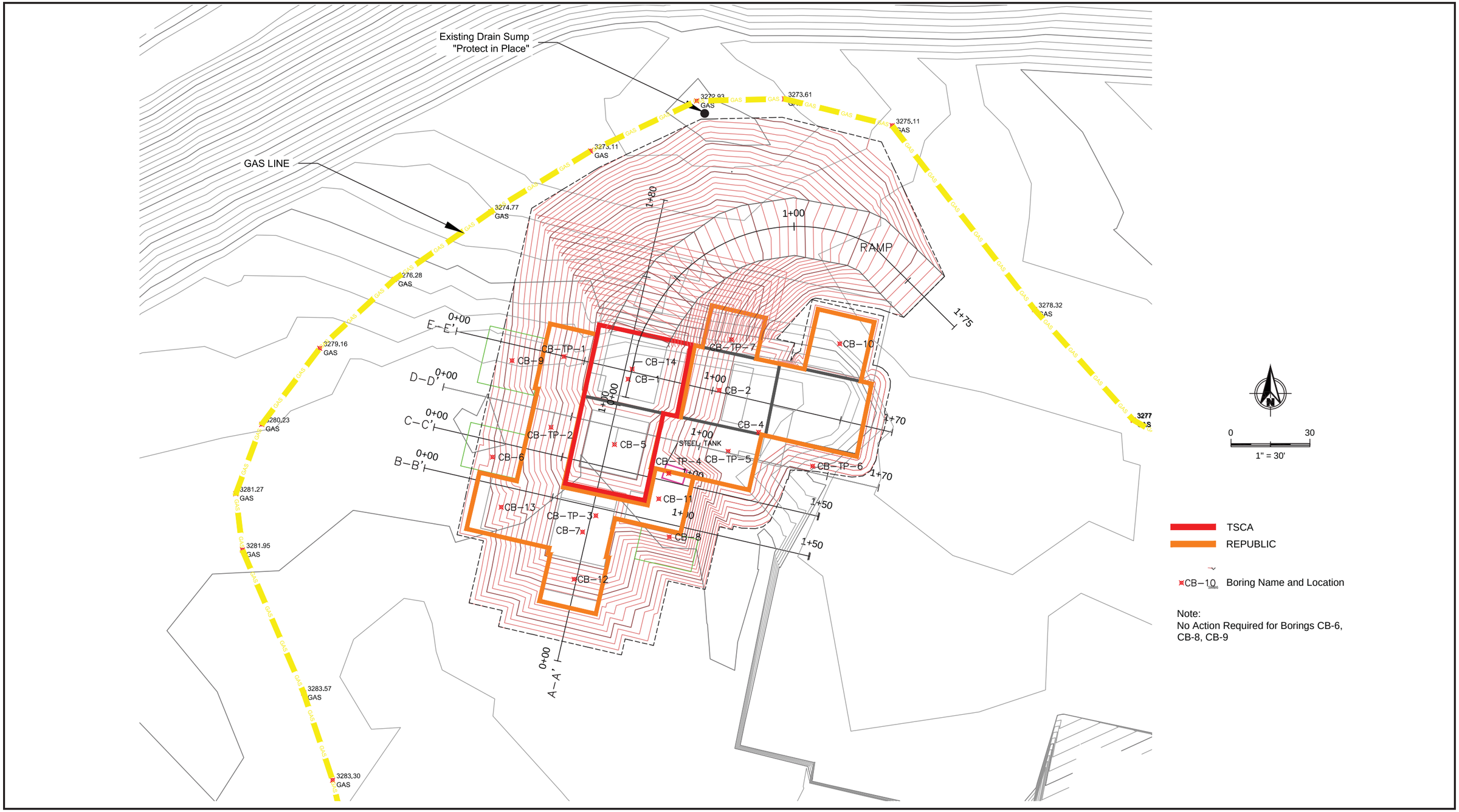
PCBs (ppm)

> 50

0.74 - 50

<0.74

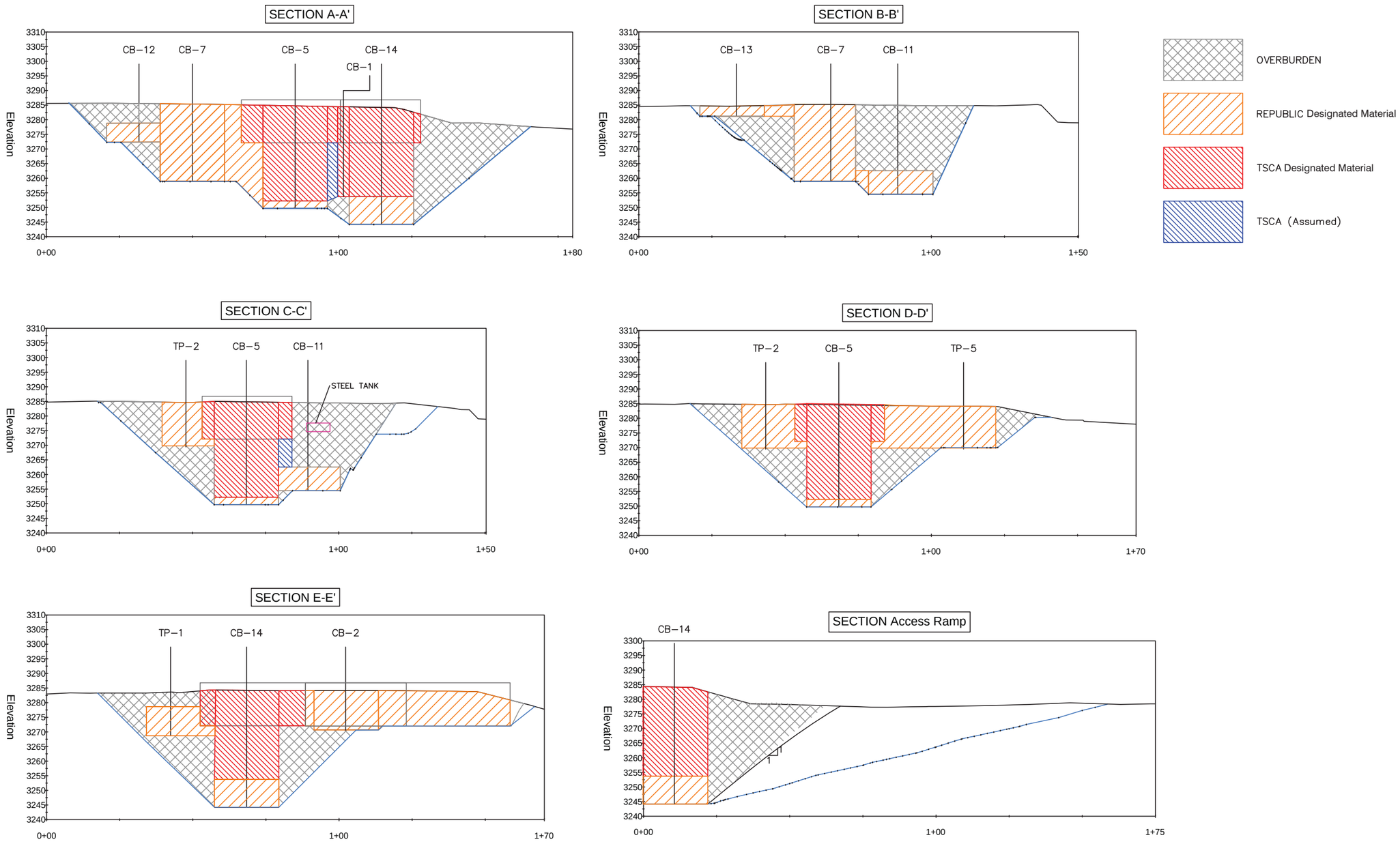
Predicted Areal Extent of PCBs
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 4



Envirocon

NewFields

Designed Plan View of Excavation Area
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 5



Note: Cross Sections of Plan View
Shown on Figure 5

Envirocon
NewFields

Designed Excavation Area Cross Sections
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 6

\\NFHELENA\shares\Projects\350.0033_Stimson_Lumber\05_GIS\05.01_Projects\Compressor_Bldg_May_2016\Aerial_MWells.mxd

N

0 200
Feet

NewFields

AOC Boundary (2016)

Existing Monitoring Wells

Monitoring Well Removed During Phase 4 RA Activities

Newly Installed Monitoring Well

Current Post-Excavation Site Features
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 7

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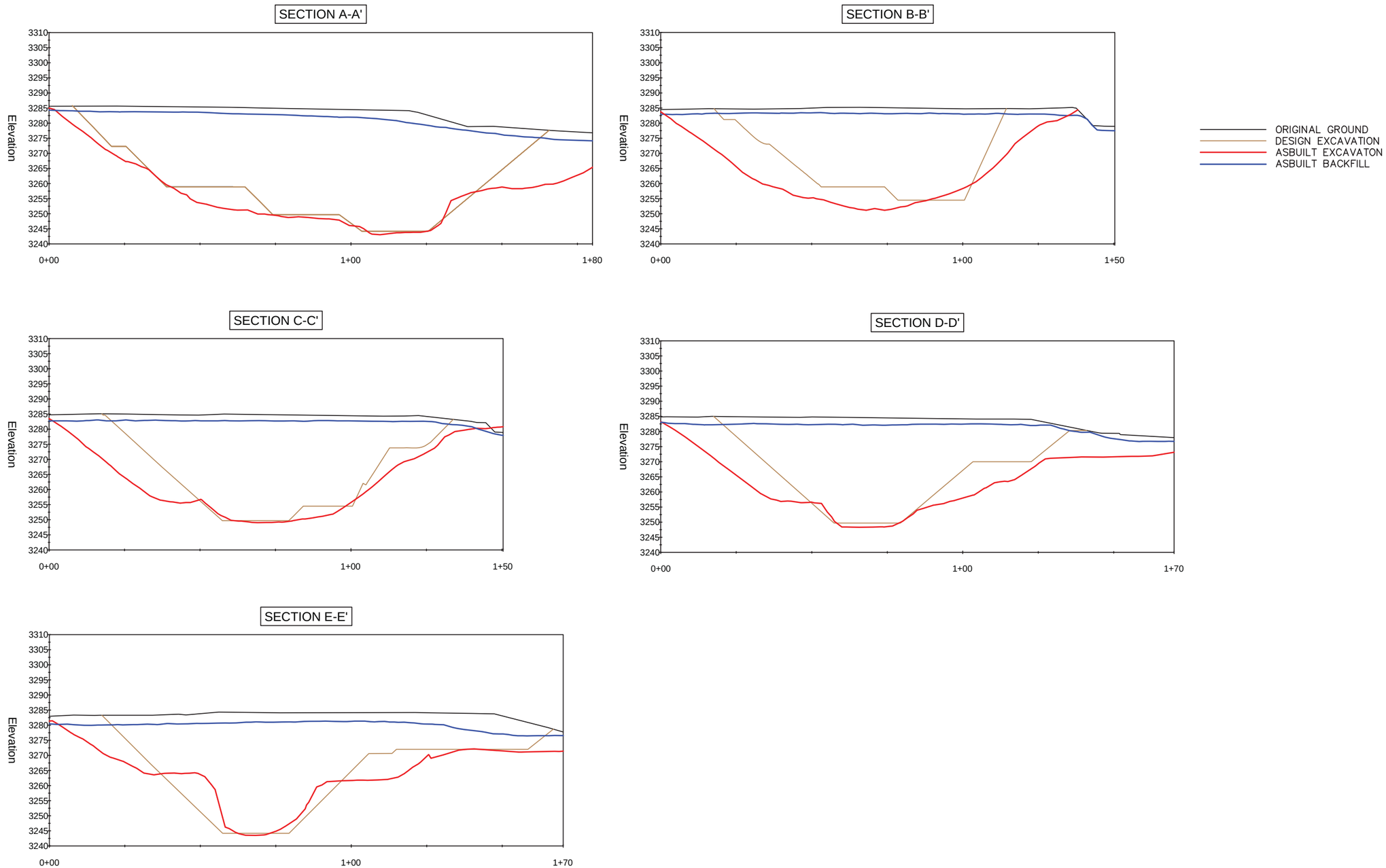
Limits of Excavation

As-Built Plan View of Excavation Area
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 8



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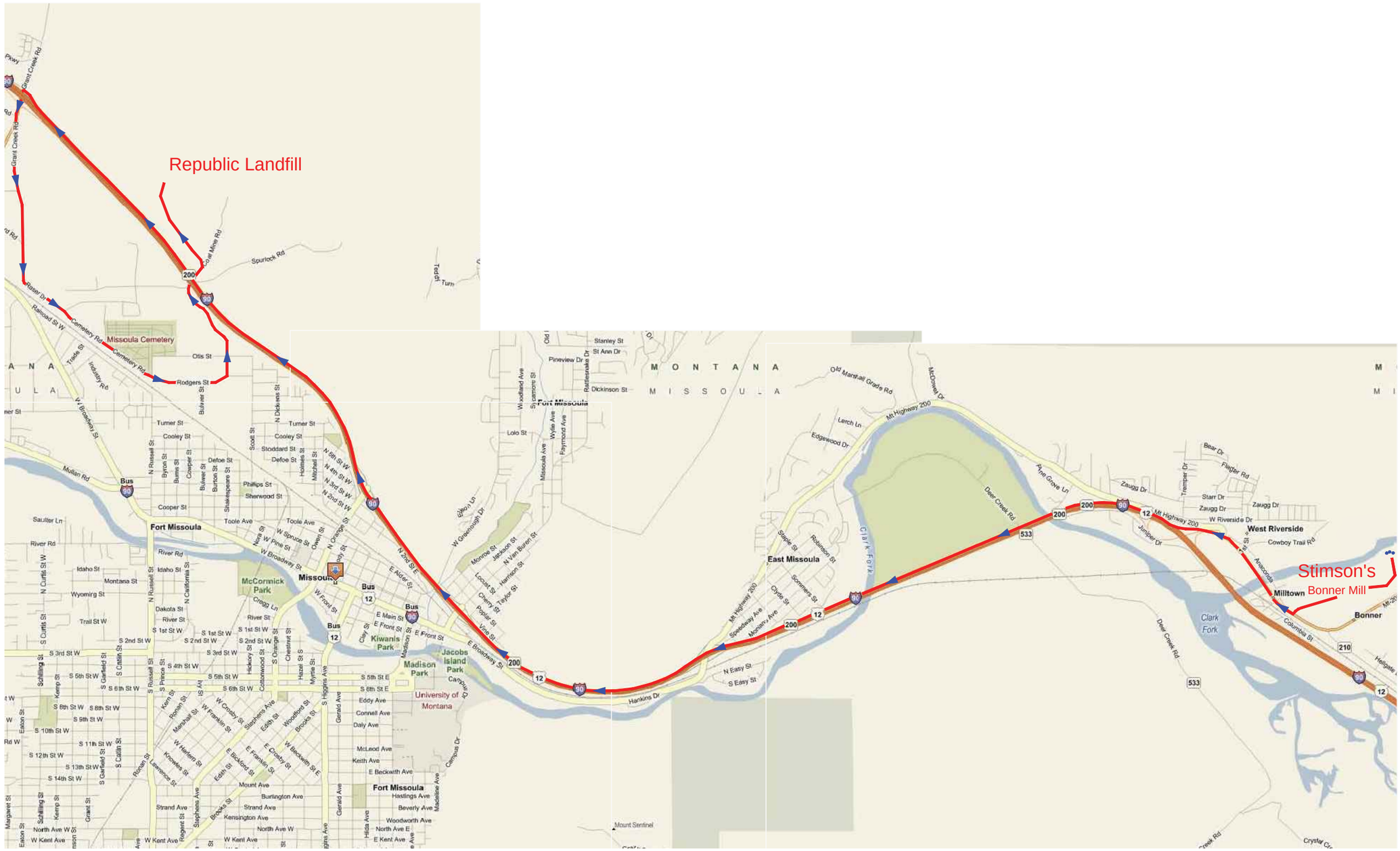
NewFields

Note: Cross Sections Shown in Plan View on Figure 8

As-Built Cross Sections of Excavation Area
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 9



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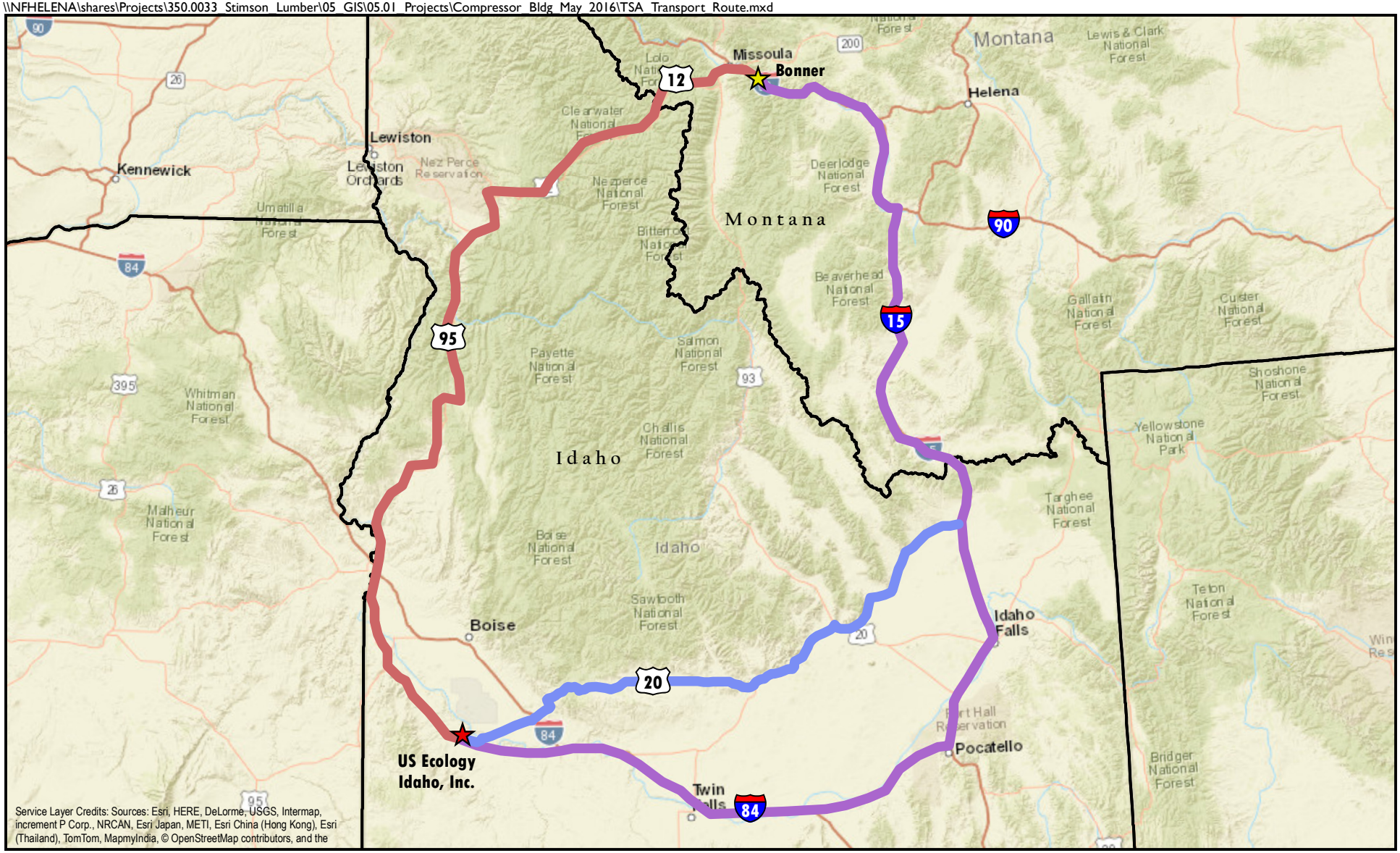
Republic Transport Route
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 10

\\NFHELENA\shares\Projects\350.0033_Stimson_Lumber\05_GIS\05.01_Projects\Compressor_Bldg_May_2016\TSA_Transport_Route.mxd



0 Miles 60

NewFields

TSCA Transport Route
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 11

Haul Road Sampling Area

Overburden Stockpile Sampling Area

Republic Stockpile Sampling Area

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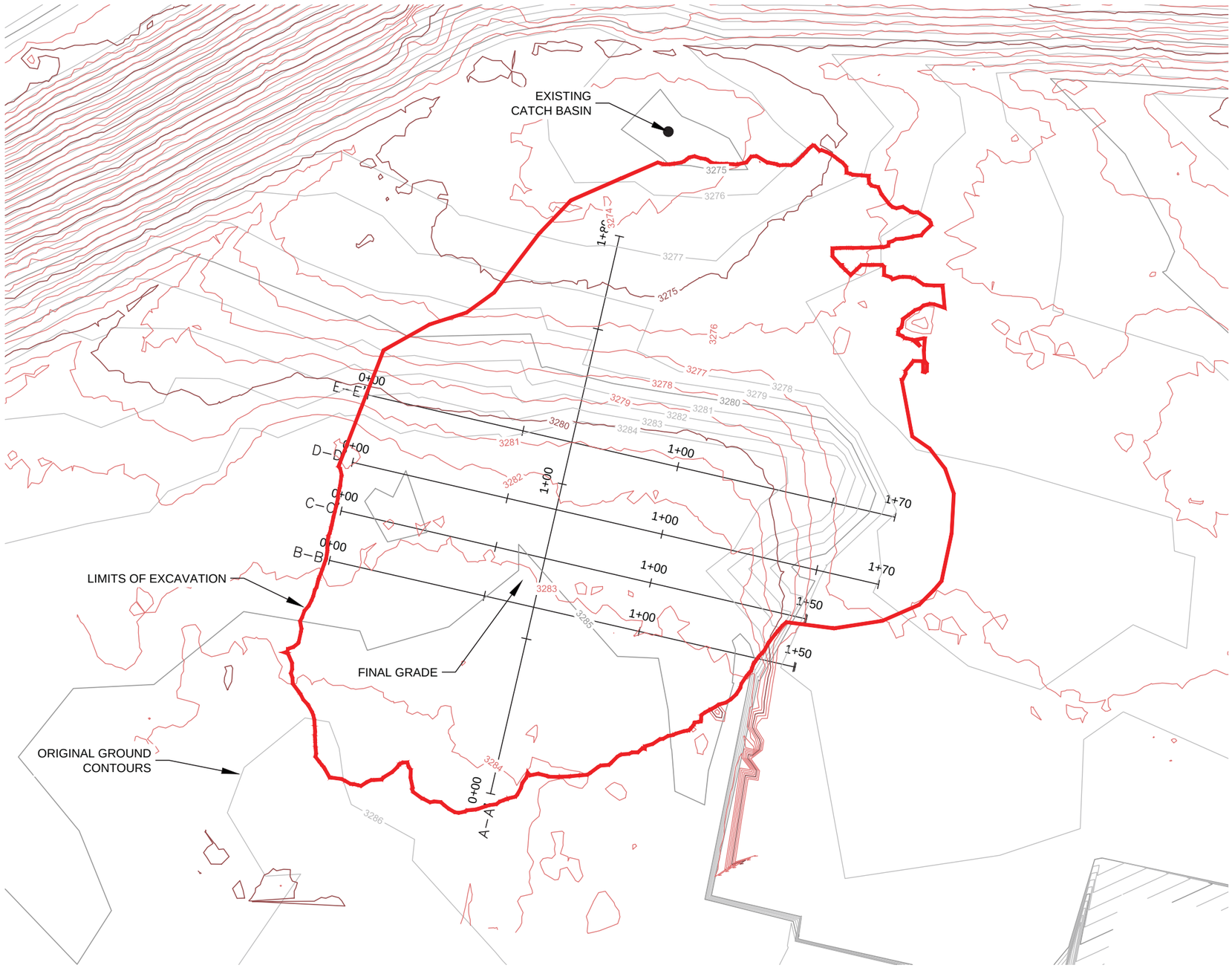
Haul Road and Stockpile Sampling Locations
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 12



0 30
1" = 30'

Limits of Excavation

Envirocon
NewFields

Final Grade As-Built
Phase 4 RA - Compressor Building
Soil Removal
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 13

Compressor Building Assessment Report

Appendix A

NewFields
Perspective. Vision. Solutions.

October 8, 2015

Keith Large
Montana Department of Environmental Quality
Remediation Division
1225 Cedar Street
Helena, Montana 59620

Subject: Compressor Building Assessment Report for the Stimson Cooling Pond Removal

Dear Mr. Large,

On behalf of the Stimson Lumber Company, NewFields submits this Compressor Building Assessment Report to progress remedial action work under the Administrative Order on Consent in Docket No. SF-10-0001, between Stimson, the Montana Department of Justice, and the Montana Department of Environmental Quality (DEQ), dated April 29, 2010 (AOC). This report addresses the area formerly known as the Steam Plant or Compressor Building at the former Stimson Lumber Mill in Bonner, Montana. If you have any questions about the enclosed report or require additional copies, please contact me at (406) 549-8270.

Sincerely,

Tyler Etzel
Senior Geologist

cc: Steven Petrin, Stimson Lumber Company
Brent Sasser, International Paper
Jeanette Schuster, Tonkin Torp
Al Brule, Envirocon
Michelle Hutchinson, MCCWQD

Compressor Building Assessment Report Addendum 2 to Final Cooling Pond Removal Work Plan

Compressor Building Investigation
Bonner Mill Cooling Pond and Vicinity
Bonner, Montana 59702

Submitted to:
Montana Department of Environmental Quality
1225 Cedar Street
Helena, Montana 59620

Prepared for:
Stimson Lumber Company
520 SW Yamhill, Suite 700
Portland, Oregon 97204-1330

Prepared by:
NewFields Companies, LLC
1120 Cedar Street
Missoula, Montana 59802

NewFields

October 2015
Project 350.0033.005

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EXECUTIVE SUMMARY

This report presents results of a site assessment conducted by NewFields Companies, LLC (NewFields) on behalf of Stimson Lumber Company (Stimson) to investigate and characterize soil potentially impacted by polychlorinated biphenyls (PCBs) at an area of the former Bonner Mill in Bonner, Montana (Site) (Figure 1) that was the location of a building historically referred to as the "steam plant" or the "compressor building" (Compressor Building) (Figure 2). The current owner of the Site, Western Montana Development, L.L.C., demolished the above-ground portions of the Compressor Building in 2014.

The work described in this report was conducted in compliance with the second addendum to the existing approved work plan, Final Cooling Pond Work Plan, Envirocon, January 29, 2010, that was prepared to implement remedial action work under the Administrative Order on Consent in Docket No. SF-10-0001 between Stimson and the Montana Department of Environmental Quality (DEQ) and the Montana Department of Justice, dated April 29, 2010 (AOC). The Addendum 2 to Final Cooling Pond Removal Work Plan (Work Plan) was prepared in accordance with DEQ's comments and submitted to DEQ on January 9, 2015.

The Compressor Building assessment was completed in three field events between May and August 2015. The first two field events included test pit excavations performed on May 27, 2015 and drilling rotosonic borings on June 4, 5 and 9, 2015. The initial results of these activities indicated that further characterization of PCB-impacted soil was necessary and, supplemental borings were completed on August 18 and 19, 2015.

The first task of the work plan included excavation of seven test pits. Nineteen soil samples were collected from the seven test pits, which were excavated to depths ranging from 7 to 15 feet below ground surface (ft bgs). Eleven of the 19 soil samples analyzed for PCBs exceeded 0.74 milligram per kilogram (mg/kg) total PCBs, which is the required cleanup level under the AOC. These test pit results indicated that rotosonic soil borings were required to fully delineate PCB impacts in soil vertically below 15 feet.

The second task of the Work Plan was implemented by drilling eight rotosonic borings in June 2015. Thirty-three soil samples were collected and submitted for PCBs analysis. Five borings (CB-1, CB-2, CB-4 CB-5, and CB-7) contained samples that exceeded 0.74 mg/kg total PCBs, and two of these borings (CB-1 and CB-5) exceeded the Toxic Substances Control Act (TSCA) waste cleanup level of 50 mg/kg total PCBs. Both CB-1 and CB-5 are located in an area of the former Compressor Building where compressor equipment was historically operated.

The sample results from Test Pits completed in May 2015 and rotosonic borings completed in June 2015 indicated that further assessment of PCB-impacted soil was necessary to fully characterize the vertical and horizontal extent of total PCBs in subsurface soil adjacent to the Compressor Building.

The August 2015 supplemental assessment work included drilling five rotosonic soil borings. Results showed that nine samples exceeded 0.74 mg/kg for total PCBs, with each soil boring (CB-10 through CB-

14) containing at least one sample that exceeds this level. One of the soil samples collected from CB-14 exceeds the TSCA waste cleanup level.

The soil sample data show that the highest concentrations of PCB-impacted soil are located beneath the western end of the Compressor Building (**Figure 2**). Many of the soil samples collected outside of the Compressor Building footprint exceed 0.74 mg/kg of total PCBs; however, none of the borings outside the former Compressor Building footprint contain PCB concentrations exceeding the TSCA waste cleanup level. The assessment generally delineated the areal extent of impacted soil associated with the former Compressor Building; although samples from borings CB-7, CB-11, and CB-12 suggest PCB-impacted soil extends a short distance to the south of the former Compressor Building.

NewFields estimates the total volume of PCB-impacted soil above 0.74 mg/kg for the former Compressor Building area is 2,565 cubic yards, with approximately 1,230 cubic yards of this total exceeding the TSCA waste disposal level.

1.0 INTRODUCTION

This document presents the results of a site assessment to delineate and characterize PCBs in soil under and around the Compressor Building Site (**Figure 1**). The work was performed according to the second addendum to the existing approved work plan, *Final Cooling Pond Work Plan*, Envirocon, January 29, 2010, that was prepared to implement remedial action work under the AOC between Stimson and the DEQ and the Montana Department of Justice, dated April 29, 2010. The Work Plan was prepared in accordance with DEQ's comments and submitted to DEQ on January 9, 2015.

The Work Plan addressed the remediation of three areas at the Site: (i) Fire Pond Lagoon and related petroleum hydrocarbons (PHCs); (ii) cooling pond and adjacent areas impacted by PCBs and PHCs; and (iii) portions of the east log track area impacted by PHCs and PCBs. This remediation work is described in the *Draft Remedial Action Report – Bonner Mill Cooling Pond and Vicinity*, February 21, 2012 (Envirocon, 2012). This work is referred to as the Phase I removal action. Phase 2 of the removal action expanded an on-site repository to receive additional low-level waste excavated during Phase 1.

The first addendum to the Work Plan (Addendum 1) was prepared to address the remediation of PCB soil contamination discovered during Phase 1 of the removal action (MW-13 area). In addition to the MW-13 area, Addendum 1 also addressed three other areas of the Site: (i) MW-11 area; (ii) MW-15 area; and (iii) SB-3 area. Implementation of the Addendum 1 activities in these four areas is described in the *Remedial Action Report, Phase 3 – Bonner Mill Cooling Pond and Vicinity*, September 12, 2014 (Envirocon, 2014). Addendum 1 was intended to address the final phase of the removal action required to be performed by Stimson under the AOC.

Shortly after completion of the Addendum 1/Phase 3 work activities, the current owner of the Site, Western Montana Development, LLC (WMD), informed Stimson and DEQ that it had found a limited area of PCB-impacted soil during demolition of the Compressor Building. The sampling performed by WMD in May 2014 indicated that PCB-impacted soil was present adjacent to the northwest corner of the Compressor Building (see **Figure 2**, Respec sample location). Stimson began discussions with DEQ on August 25, 2014 related to the investigation of the Compressor Building area. On behalf of Stimson Lumber, NewFields submitted a sampling work plan to DEQ, *Addendum 2 to Final Cooling Pond Removal Work Plan, Sampling Work Plan for Compressor Building Investigation*, NewFields, March 31, 2015 (NewFields, 2015a), to assess PCB soil impacts in the Compressor Building area and a supplemental sampling work plan, *Addendum 2 to Final Cooling Pond Removal Work Plan - Supplemental, Sampling Work Plan for Compressor Building Investigation*, NewFields, August 6, 2015 (NewFields, 2015b).

2.0 PROJECT DESCRIPTION

The Site is a closed sawmill and plywood manufacturing facility located in Bonner, Montana (**Figure 1**). The Compressor Building formerly occupied the northeastern portion of the Site. The former footprint of the building is shown on **Figure 2**. The Compressor Building was originally constructed prior to 1912 and remodeled several times between approximately 1920 and 1970.

Previous remedial soil excavation actions (Fire Pond Lagoon area, MW-13 area, and MW-15 area) were performed at neighboring locations to the Compressor Building (**Figure 2**). Each of these excavations exhibited soil sample results below 0.74 mg/kg total PCBs proximate to the former Compressor Building. Because of these results, the previous remedial excavation areas did not extend closer to the Compressor Building area.

2.1 PROJECT OBJECTIVES

The objective of the Compressor Building assessment was to evaluate potential PCB impacts by collection of subsurface fill and soil material samples from beneath and adjacent to the footprint of the building; and analyze the samples for total PCBs. Results of laboratory analysis for total PCBs were compared to the cleanup level of 0.74 milligram per kilogram (mg/kg) and the Toxic Substances Control Act (TSCA) waste cleanup level of 50 mg/kg.

2.2 SITE SETTING

2.2.1 Location and Topography

The Compressor Building area is located at the Site in the Blackfoot River valley at an approximate elevation of 3,240 feet above mean sea level (ft amsl) in Missoula County, Montana (**Figure 1**). The investigation area is 200 feet south of the Blackfoot River. The approximate center of the former Compressor Building is located at latitude 46.8754 and longitude -113.86793.

2.2.2 Hydrology/Hydrogeology

The mountains surrounding the lower Blackfoot River valley represent the northern boundary of the Sapphire block which is primarily composed of Precambrian-aged Belt Supergroup metasedimentary rocks. Nearby faults include the Clark Fork Fault, which is coincident with the Clark Fork River Valley; and the Blackfoot Thrust Fault, which is coincident with the Lower Blackfoot River Valley. Quaternary-aged alluvium in these valleys lies on top of the bedrock and generally consists of inter-bedded sand, gravel, and boulders with clay. The shallow alluvial aquifer system is unconfined and is hydraulically connected to the regional Missoula Aquifer system located to the west. The alluvial aquifer thickness below the former Site is estimated to be approximately 100 feet, with the bedrock surface ranging from 120 to 150 feet below ground surface (ft bgs) from east to west. Groundwater recharge is primarily from underflow through the Blackfoot River valley with smaller recharge volumes leaking from the Blackfoot River. Minor recharge likely comes from direct precipitation and groundwater flow from the upgradient bedrock located north of the Site (Weston, 2008).

Groundwater level measurements have been conducted routinely at monitoring wells located near the former Compressor Building since July 2012. Seasonal high groundwater levels occur in June, followed by a gradual decline into the winter months, with a gradual increase beginning in March/April. Groundwater depths near the Compressor Building area range from approximately 30 to 50 ft bgs. Groundwater flows to the south immediately adjacent to the Blackfoot River (River), which suggests a losing stretch of the River in the vicinity of the Compressor Building. Farther south from the River, groundwater flow generally parallels the flow of the River.

3.0 SITE ASSESSMENT

The *Addendum 2 to Final Cooling Pond Removal Work Plan - Sampling Work Plan for Compressor Building Investigation*, March 2015 (NewFields, 2015a), describes the study boundaries, sampling plan and protocols, and field sampling procedures used during May and June 2015 assessment activities. The supplemental Sampling Work Plan, *Addendum 2 to Final Cooling Pond Removal Work Plan – Supplemental*, August 2015 (NewFields 2015b), describes the study boundaries, sampling plan and protocols, and field sampling procedures used during August 2015 assessment activities. All drilling, field screening, and sampling methods not listed in the Addendum 2 Work Plans followed the previously approved Standard Operating Procedures (SOPs) found in the Sampling and Analysis Plan (SAP) for the Cooling Pond, Fire Pond Lagoon and East Log Track Areas (Envirocon & PBS&J, 2009).

3.1 Sampling Work Plan and Field Activities

Field activities were conducted in general accordance with the Sampling Work Plans and SAP. The assessment work was completed in three field events between May and August 2015. The first two field events included test pit excavations performed in late-May 2015 and drilling of rotosonic borings in early-June 2015. The initial results indicated that further characterization of PCB impacts in soil was necessary to more fully delineate PCBs in the Compressor Building area, and therefore, a supplemental assessment was completed in August 2015. A summary of field activities and sampling, including any deviations from the Work Plans, are detailed below.

3.2 Site Surveys

Envirocon performed a survey of the assessment area using established survey control points in preparation for the Compressor Building assessment activities. Prior to the May/June 2015 assessment activities, test pit and rotosonic boring locations were established to assure that investigation locations corresponded to the former Compressor Building footprint. During the May/June 2015 assessment activities, the prearranged test pit and rotosonic boring locations encountered refusal due to large amounts of subsurface concrete and steel. Many proposed exploration locations had to be moved due to the subsurface obstructions. The revised exploration locations were re-surveyed following the June 2015 field work, and the supplemental investigation locations were surveyed following the August 2015 field work.

3.3 Test Pits

On May 27, 2015, Envirocon and NewFields excavated seven test pits for subsurface sample collection (CB-TP-1 through CB-TP-7; **Figure 3**). The seven test pits were excavated to 15 ft bgs, with two exceptions. Test Pit CB-TP-4 (TP-4) was terminated at 7 ft bgs when the bottom of a metal tank was encountered (see photographs in **Appendix A**). The metal tank contained what appeared to be boiler ash. Because the contents of the tank were unknown, TP-4 was terminated at the bottom of the tank and a sample of ash material was collected from inside the tank area. Test Pit TP-7 was terminated at 13 ft bgs due to a large concrete structure that the excavator was not able to remove. For the remaining test pits, samples were collected from 5 foot vertical intervals (5, 10, and 15 ft bgs).

Test pit soil samples were manually collected from the leading edge of the backhoe bucket, ensuring that the collected sample volume was not in direct contact with the backhoe bucket. A total of 19 soil samples were collected from the seven test pits and submitted for laboratory analysis of PCBs using United States Environmental Protection Agency (EPA) Method 8082. EPA Method 8082 analyzes for the nine most common commercial mixtures of PCBs historically sold in the United States: Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, Aroclor 1262, and Aroclor 1268.

In addition to PCB sample collection, PetroFlag® (Petroflag) immunoassay field screening was used to confirm whether PHC impacts were evident at the bottom of each test pit. When Petroflag screening indicated minimal or no PHC impacts to soil at the depth of 15 ft bgs, the test pit was terminated and a confirmation sample was collected from the base of the test pit. During the test pit excavations, all material removed from each test pit was temporarily piled next to the test pit on plastic sheeting. At the completion of each test pit, the material was immediately placed back into the test pit in the reverse order in which it was removed. Test pit field notes include sample information, sample descriptions, Petroflag results, and field observations (**Appendix B**). A brief description of observations from each of the seven test pits is included below. Locations of the test pits are shown on **Figure 3**.

3.3.1 Test Pit TP-1

CB-TP-1 (TP-1) was excavated to a depth of 15 ft bgs adjacent the northwestern corner of the former Compressor Building, nearest the sample collected by WMD in May 2014. Material encountered within the test pit appeared to be all fill material, consisting of gravel fill, pipes, and large blocks of concrete. PHC staining was observed from approximately 7 to 12 ft bgs along the southern edge of the pit (**Appendix A**, photographs #1 & #2).

3.3.2 Test Pit TP-2

TP-2 was excavated to a depth of 15 ft bgs near the west-central side of the former Compressor Building. This test pit was excavated between two concrete foundations. The concrete on the west wall extended from near ground surface to 6 ft bgs, while the concrete on the east wall extended to approximately 12 ft bgs. Material encountered between these concrete structures consisted of gravel fill material with numerous pipes and remnants from the building demolition, including wood debris and dark organics.

3.3.3 Test Pit TP-3

TP-3 was excavated to a depth of 15 ft bgs south of the southwest portion of the former Compressor Building. Material encountered within this test pit appeared to be entirely fill material, consisting of gravel fill, wood beams and wood waste material, pipes, electrical conduit, and numerous large blocks of concrete. A concrete chamber was encountered from approximately 2 to 12 ft bgs, and the test pit was advanced adjacent to the north side of this structure. Staining was observed from approximately 2 to 10 ft bgs within the pit, with no staining or odor in the gravel fill material from 10 to 15 ft bgs (**Appendix A**, photographs #3 & #4).

3.3.4 Test Pit TP-4

TP-4 was excavated to a depth of 7 ft bgs on the east side of the southwest portion of the former Compressor Building. Material encountered within this test pit included light brown soil and gravel fill material from ground surface to 2 ft bgs. Dark blue-black material presumed to be boiler ash was encountered at 2 ft bgs. As the excavation progressed below 2 feet bgs, it became apparent that the test pit was located inside of a buried tank with no lid or cover present. The test pit reached the flat bottom of the tank at approximately 7 ft bgs. The TP-4 excavation was halted, and subsequently backfilled after a sample of boiler ash was collected from the bottom of the tank (**Appendix A**, photographs #6 & #7).

3.3.5 Test Pit TP-5

TP-5 was excavated to a depth of 15 ft bgs south of the central portion of the former Compressor Building. The test pit uncovered a large concrete block from 0.5 to 3 ft bgs. The concrete block was removed prior to advancing the test pit past 3 ft bgs. From approximately 3.5 to 10 ft bgs, several pipes were encountered along with black stained soil/gravel fill material. Reddish-brown gravel fill material with numerous concrete blocks was encountered from 10 to 15 ft bgs.

3.3.6 Test Pit TP-6

TP-6 was excavated to a depth of 15 ft bgs adjacent the southeastern corner of the former Compressor Building. Loamy, dark colored soil containing broken brick, concrete, and other building demolition debris was observed within the test pit from ground surface to 5 ft bgs. Cobbles, boulders, and concrete with gravel fill material were primarily encountered below 5 ft bgs.

3.3.7 Test Pit TP-7

TP-7 was excavated to a depth of 13 ft bgs north of the central portion of the former Compressor Building, proximate to the former stairs and doorway along the north side of the building. This test pit encountered substantial amounts of concrete, brick debris, and pipe, with minor amounts of gravel fill material from ground surface to 13 ft bgs. This test pit was terminated at 13 ft bgs due to a large concrete structure that the excavator was unable to move (**Appendix A**, photograph #9).

3.4 Rotosonic Soil Borings – June 2015

On June 4, 5, and 8, 2015, Environmental West Exploration, Inc. drilled eight rotosonic borings in the former Compressor Building area. Four borings were completed within the footprint of the building (CB-1, CB-2, CB-4 and CB-5), and four borings were completed outside the building footprint (CB-6, CB-7, CB-8 and CB-9) and beyond the extent of the test pits (**Figure 3**). The additional borings placed outside the test pit assessment area were completed to delineate the horizontal and vertical extent of impacted soil identified during the May 2015 test pit assessment work. The June 2015 soil boring logs are included in **Appendix C**.

Thirty-three soil samples were collected from the eight borings and submitted for PCB analysis (EPA Method 8082) to delineate the extent of impacted soil in the former Compressor Building area. The soil cores from each boring were divided into intervals based on observed matrix characteristics, and

discrete samples were collected from the intervals that displayed PHC impacts. If no PHC impacts were observed, a representative sample from each interval was submitted for PCB analysis. In many instances, sample core recovery was not adequate to accurately characterize each 5-foot interval as described in the Work Plan. Also, concrete cores were not collected from the foundation of the Compressor Building as discussed in the Work Plan, because distinguishing between foundation concrete and the large amount of subsurface concrete encountered during drilling made this task difficult to achieve.

The soil borings were advanced to depths ranging from 28 to 39 ft bgs; with variations dependent on observed soil types, PHC impacts, and drilling refusal. Six of the eight borings did not reach the planned depth of 35 ft bgs due to drilling refusal. Several borings were attempted within the footprint of the former Compressor Building, but were not completed due to drilling refusal at depths ranging from 4.5 to 13 ft bgs.

Select samples were field-screened using Petroflag immunoassay test kits. A total of 43 discrete intervals from the soil borings were analyzed in the field using Petroflag. The Petroflag field screening was used to identify elevated PHC-impacted sample intervals from each boring for selection of samples submitted to the laboratory for analysis of PCBs.

3.5 Rotosonic Soil Borings – August 2015

On August 18 and 19, 2015, Environmental West Exploration, Inc. drilled five supplementary rotosonic borings at the former Compressor Building area. Four borings (CB-10, CB-11, CB-12 and CB-13) were completed laterally outside the June 2015 boring locations, and one boring (CB-14) was completed to further define PCB impacts to soil within the footprint of the building (**Figure 3**). The supplementary borings were each completed to 40 ft bgs. In each boring, one sample from approximately each 5-foot interval was collected and submitted for laboratory analysis of PCBs. Boring CB-14 was drilled adjacent to boring CB-1 to determine impacts below 27 ft bgs. Initial attempts to drill CB-14 immediately adjacent CB-1 encountered refusal and the location of CB-14 had to be moved farther from CB-1 than was planned. The August 2015 soil boring logs are included in **Appendix D**.

A total of 26 soil samples were collected from the five supplemental borings and submitted for analysis of PCBs (EPA Method 8082). No soil samples in the August 2015 supplemental assessment were field-screened using Petroflag immunoassay test kits because each sample collected was submitted for laboratory analysis. Laboratory analysis of samples from CB-10, CB-11, CB-12, and CB-13 was performed in phases, with the upper five samples analyzed first. If samples collected from the 20 to 25 ft bgs interval contained PCBs above 0.74 mg/kg total PCBs, the deeper samples were also analyzed for PCBs. The bottom sample from CB-11 (23 to 24 ft bgs) exceeded 0.74 mg/kg total PCBs; therefore, the additional deeper samples from that boring were analyzed. No other soil samples collected deeper than 25 ft bgs were analyzed for PCBs.

3.6 Analytical Results

3.6.1 Test Pit Results

The test pit sample results included analysis of 19 samples from seven test pits for PCBs (**Figure 3**). Eleven of the 19 soil samples analyzed exceed 0.74 mg/kg total PCBs; however, none of the test pit samples exceed the TSCA waste cleanup level of 50 mg/kg total PCBs. Only Aroclor 1254 was detected in the total PCBs analysis. The test pit results showed that additional borings were required to delineate PCB impacts in soil outside the footprint of the former Compressor Building. Tabulated sample results for the test pit samples are in **Table 1**, and laboratory analytical results are in **Appendix E**.

3.6.2 Rotosonic Soil Boring Results – June 2015

The June 2015 rotosonic soil boring sample results included analysis of 33 samples collected from eight borings (**Figure 3**). Thirteen of the 33 soil samples exceed 0.74 mg/kg total PCBs. As in the test pit results, only Aroclor 1254 was detected in the total PCBs analysis. Seven of the 13 samples that exceed the 0.74 mg/kg cleanup level also exceed the TSCA waste cleanup level of 50 mg/kg total PCBs. Five borings (CB-1, CB-2, CB-4, CB-5, and CB-7) had exceedances of 0.74 mg/. Two of these borings (CB-1 and CB-5) also show exceedances of the TSCA waste cleanup level. Tabulated sample results from the June 2015 soil borings are in **Table 2**, and laboratory analytical results are in **Appendix F**.

3.6.3 Rotosonic Soil Boring Results – August 2015

The August 2015 rotosonic soil borings were completed to further delineate impacts identified in the June 2015 soil boring assessment activities. Twenty-six soil samples were collected from the five supplemental borings and submitted for analysis of PCBs (**Figure 3**).

Results show nine of the 26 soil samples exceed 0.74 mg/kg total PCBs, with each soil boring containing at least one sample that exceeds this level. The sample collected at 23 to 24 ft bgs in CB-11 (CB-11-5) detected total PCBs at 1.2 mg/kg, and per the Sampling Work Plan, all three samples beneath this sample interval were subsequently submitted for laboratory analysis. Sample (CB-11-6) collected at 28 to 29 ft bgs showed an Aroclor 1254 concentration at 1.3 mg/kg. Samples in CB-11 collected from 33 to 34 ft bgs and 39 to 40 ft bgs were below 0.74 mg/kg total PCBs.

CB-14 was drilled adjacent to CB-1 to delineate PCB impacts deeper than 27 ft bgs. Each of the three samples collected in CB-14 detected concentrations above 0.74 mg/kg. Sample CB-14-1, collected from a depth of 28 to 29 ft bgs, detected PCBs at 470 mg/kg. The bottom two samples collected from CB-14 at 32 to 33 ft bgs and 39 to 40 ft bgs both exceed 0.74 mg/kg total PCBs. Tabulated sample results from the August 2015 soil borings are in **Table 3**, and laboratory analytical results are in **Appendix G**.

4.0 CONCLUSIONS

The objective of this assessment was to collect sufficient data to assess the presence and distribution of PCB-impacted soil in the vicinity of the former Compressor Building. The analytical data will be used to estimate the quantity of impacted soil associated with the former Compressor Building area for future remedial actions.

Sample results indicate that the highest concentrations of PCB-impacted soil are located beneath the western end of the former Compressor Building (**Figures 2 and 3**). All soil samples that exceed the TSCA waste cleanup level were collected in this area of the former building. Borings located in this area include CB-1, CB-5, and CB-14. PCB impacts in soil above the TSCA waste disposal level of 50 mg/kg extend from approximately 8 to 30 ft bgs in the western portion of the former building. No samples collected from outside the footprint of the former building exceed the TSCA waste disposal level; however, samples outside the former building area exceed 0.74 mg/kg total PCBs. The majority of samples exceeding 0.74 mg/kg are within 15 feet of ground surface, with the exception of CB-7 and CB-11 which exceed this level from 25 to 29 ft bgs, respectively.

The assessment delineated the areal extent of PCB-impacted soil to the north, west, south, and southwest of the former building. Delineation to the east of the building was not necessary because the prior MW-15 remedial excavation had already been completed in that area. Boring CB-12 shows impacted soil above 0.74 mg/kg from 8 to 13 ft bgs south of the building; however, based on the presence of impacts detected in CB-7 (from 6 to 25 ft bgs), which is located immediately north of CB-12, the aerial extent of impacted soils appears to quickly diminish as distance from the presumed source area increases.

Figure 4 shows the approximate areal extent of PCB-impacted soil characterized in this investigation. NewFields estimates the total volume of PCB-impacted soil (exceeding 0.74 mg/kg) for the former Compressor Building area is 2,565 cubic yards, with approximately 1,230 cubic yards of this total exceeding the TSCA waste disposal level.

5.0 LIMITATIONS

This assessment has been conducted in a professional manner in accordance with generally accepted practices, using the degree of skill and care ordinarily exercised by environmental consultants under similar circumstances. No other warranties, expressed or implied, are made. Opinions and conclusions presented in this report are based on the site conditions at the time of the work and for the laws in effect at that time. We are not responsible for any changes in environmental standards, practices, or regulations subsequent to performance of services. This report is not meant to represent a legal opinion. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report. This report was prepared by:

NewFields Companies, LLC

Tyler Etzel
Senior Geologist

Doug Rogness
Principal Scientist

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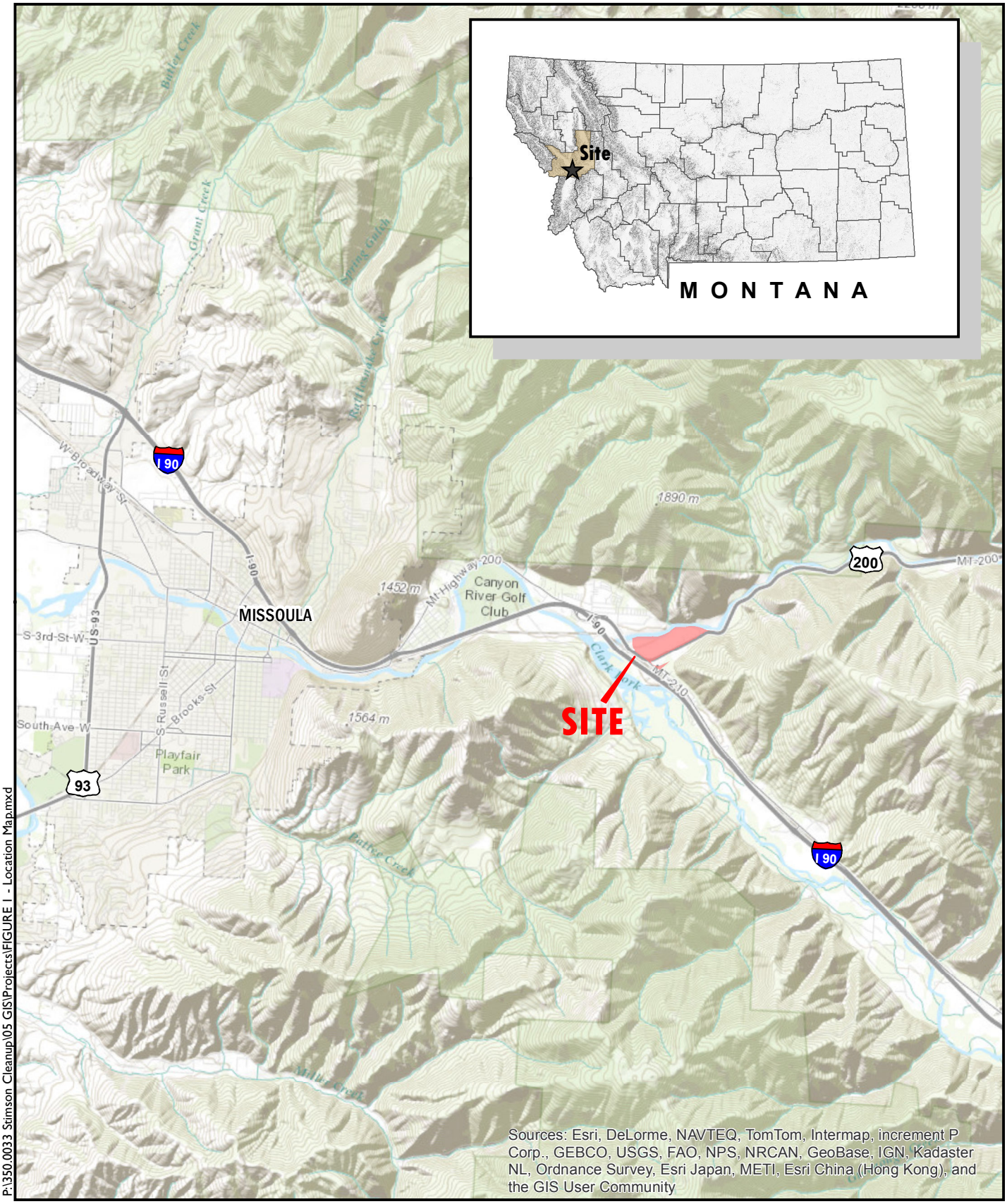
FIGURES

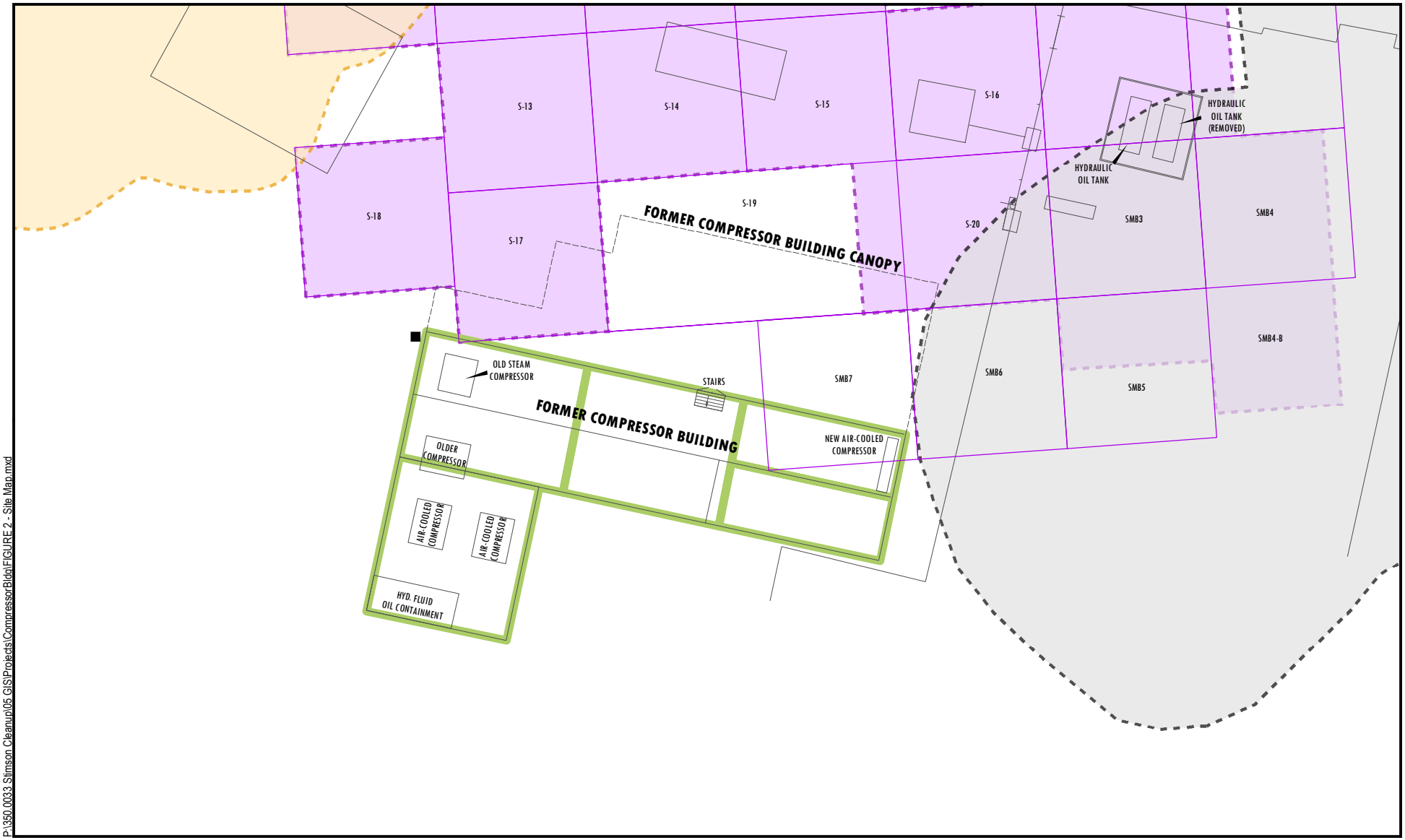


P:\350.0033 Stimson Cleanup\05 GIS\Projects\FIGURE 1 - Location Map.mxd

0 Feet 10,000

NewFields

Location Map
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 1



P:\350.0033 Stimson Cleanup\05 GIS\Projects\CompressorBldg\FIGURE 2 - Site Map.mxd

N

0 Feet 30

NewFields

Respec Sample Location

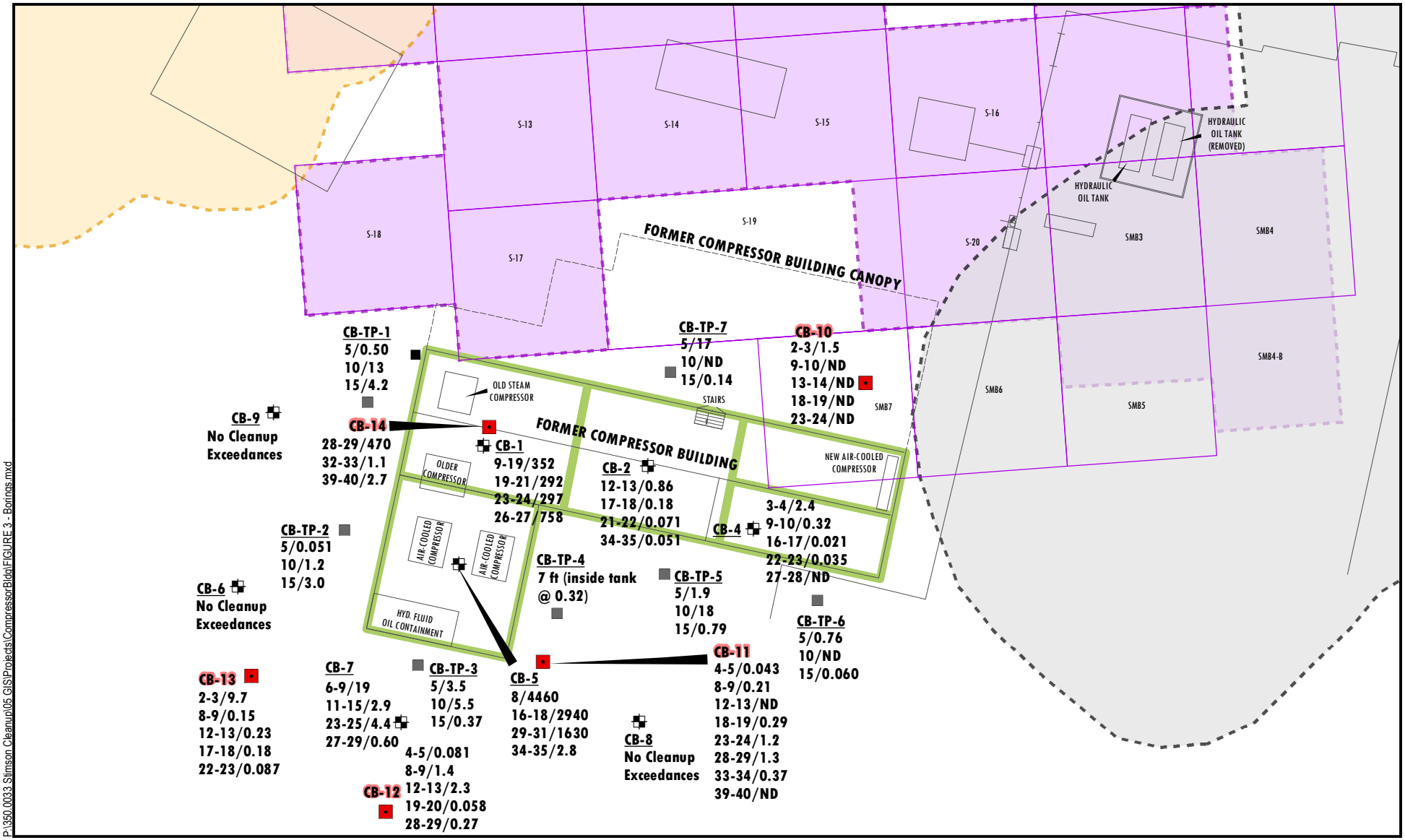
Grid

MW-13 Area Excavation

MW-15 Area Excavation Extent

Fire Pond Lagoon Excavation

Site Map
Compressor Building Assessment Report
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 2



P:\350.0033 Stimson Cleanup\05 GIS\Projects\CompressorBldg\FIGURE 3 - Borings.mxd

N

0 Feet 30

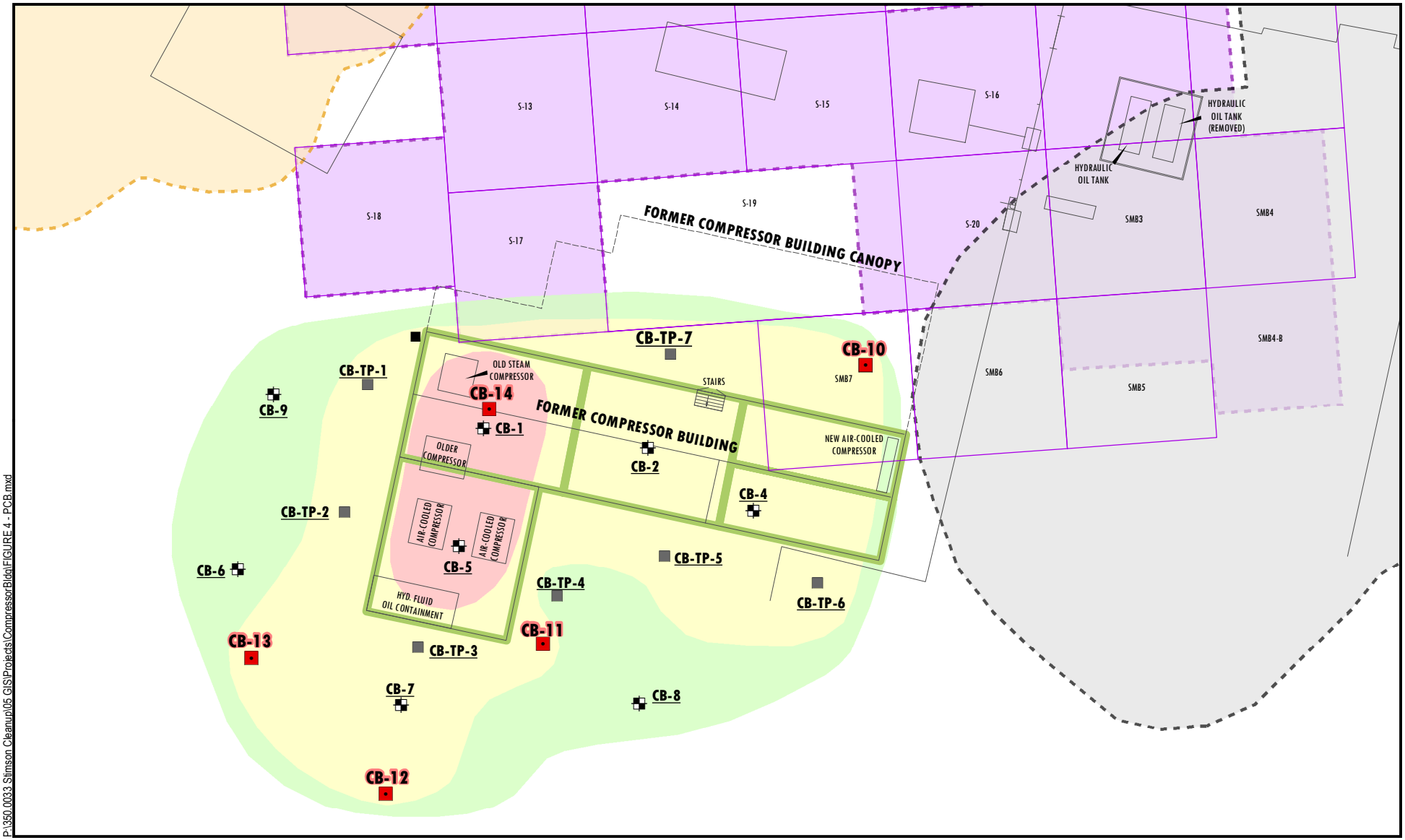
NewFields

MW-13 Area Excavation
MW-15 Area Excavation Extent
Fire Pond Lagoon Excavation
Grid

Boring Location
Respec Sample Location
Test Pit Location
Supplemental Boring Location

Sample Depth (feet bgs)/Aroclor 1254 (ppm)
ND - Not Detected

Site Assessment Results
Compressor Building Assessment Report
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 3



P:\350.0033 Stimson Cleanup\05 GIS\Projects\CompressorBldg\FIGURE 4 - PCB.mxd

N

0 Feet 30

NewFields

- Respec Sample Location
- Boring Location
- Supplemental Boring Location
- Test Pit Location
- Grid
- MW-13 Area Excavation
- MW-15 Area Excavation Extent
- Fire Pond Lagoon Excavation

PCBs (ppm)

- > 50
- 0.74 - 50
- <0.74

Approximate Aerial Extent - PCBs
Compressor Building Assessment Report
Former Stimson Bonner Millsite
Bonner, Montana
FIGURE 4

TABLES

Table 1 - Test Pit Sample Data

Test Pit ID#	Date	Sample ID	Sample Depth [ft bgs]	PetroFlag Screening [ppm]	Aroclor 1254[1] mg/kg (ppm)
TP-1	5/27/2015	TP1-1	5	ns	0.50
		TP1-2	10	ns	**13**
		TP1-3	15	110	**4.2**
TP-2	5/27/2015	TP2-1	5	ns	0.051
		TP2-2	10	ns	**1.2**
		TP2-3	15	154	**3.0**
TP-3	5/27/2015	TP3-1	5	60	**3.5**
		TP3-2	10	ns	**5.5**
		TP3-3	15	63	0.37
TP-4	5/27/2015	TP4-inside tank	7	ns	0.32
TP-5	5/27/2015	TP5-1	5	ns	**1.9**
		TP5-2	10	ns	**18**
		TP5-3	15	214	**0.79**
TP-6	5/27/2015	TP6-1	5	ns	**0.76**
		TP6-2	10	ns	ND
		TP6-3	15	40	0.060
TP-7	5/27/2015	TP7-1	5	ns	**17**
		TP7-2	10	ns	ND
		TP7-3	13	25	0.14

Notes: ns indicates no PetroFlag screen was completed on the sample

[1] no other aroclors were detected in total PCBs analysis

>50 ppm (TSCA waste cleanup disposal level)

>0.74 ppm and <50 ppm (AOC cleanup level)

Table 2 - June 2015 Rotosonic Boring Data

Boring ID#	Date	Sample ID	Sonic Interval [ft bgs]	Sample Interval [ft bgs]	PetroFlag Screening [ppm]	Aroclor 1254[1] mg/kg (ppm)
CB-1 (CB-1B)	6/4/2015	CB1B-1	9-19'	9-19'	ns	**352**
		CB1B-2		19'	>2,000	----
		CB1B-3	19-29'	19-21'	1,226	**294**
		CB1B-4		23-24'	>4,000	**297**
		CB1B-5		26-27'	>2,000	**758**
CB-2 (CB-2B)	6/9/2015	CB2B-1	8-18'	12-13'	917	**0.86**
		CB2B-2		15-16'	920	----
		CB2B-3		17-18'	925	0.18
		CB2B-4	18-28'	21-22'	941	0.071
		CB2B-5		27-28'	945	----
		CB2B-6	28-38'	34-35'	957	0.051
CB-4	6/9/2014	CB4-1	0-8'	3-4'	1,125	**2.4**
		CB4-2		4.5-6'	1,128	----
		CB4-3	8-18'	9-10'	1,145	0.32
		CB4-4		16-17'	1,150	0.021
		CB4-5	18-28'	22-23'	>2,000	0.035
		CB4-6		27-28'	101	ND
CB-5	6/4/2015	CB5-1	0-8'	1.5-2'	1,417	----
		CB5-2		4.5-5'	1,044	----
		CB5-3	8-9'	8	1,118	**4,460**
		CB5-5	9-19'	16-18'	1,518	**2,940**
		CB5-6	19-29'	21-22'	1,545	----
		CB5-7		27-28'	1,305	----
		CB5-8	29-39'	29-31'	2,668	**1,630**
		CB5-9		34-35'	63	**2.8**
CB-6	6/5/2015	CB6-1	0-9'	6-8'	299	0.62
		CB6-2	9-19'	13-14'	35	0.085
		CB6-3	19-29'	22-23'	98	0.55
		CB6-4		26-27'	42	----
		CB6-5		29-29'	41	0.69
CB-7	6/5/2015	CB7-1	0-9'	6-9'	175	**19**
		CB7-2	9-19'	11-15'	63	**2.9**
		CB7-3	19-29'	23-25'	54	**4.4**
		CB7-4		27-29'	30	0.60
CB-8	6/5/2015	CB8-1	0-8.5'	2.5-3.5'	69	0.44
		CB8-2		7.5-8.3'	26	0.030
		CB8-3	8.5-18.5'	15-18.5'	28	0.12
		CB8-4	18.5-28.5'	25-28.5'	81	0.17

Table 2 - June 2015 Rotosonic Boring Data

Boring ID#	Date	Sample ID	Sonic Interval [ft bgs]	Sample Interval [ft bgs]	PetroFlag Screening [ppm]	Aroclor 1254[1] mg/kg (ppm)
CB-9	6/9/2015	CB9-1	0-8'	5-6'	142	----
		CB9-2		7.5-8'	58	----
		CB9-3	8-18'	9-10'	101	ND
		CB9-4		16-17'	63	ND
		CB9-5	18-28'	19-20'	89	0.12
		CB9-6		27-28'	131	ND

Notes: ns indicates no PetroFlag screen was not completed on the sample

[1] no other aroclors were detected in total PCBs analysis

ND indicates that arochor 1254 was not detected above the laboratory reporting limit

---- indicates no analysis was performed on the indicated soil interval

>50 ppm (TSCA waste cleanup disposal level)

>0.74 ppm and <50 ppm (AOC cleanup level)

Table 3 - August 2015 Rotosonic Boring Data

Boring ID#	Date	Sample ID	Sonic Interval [ft bgs]	Sample Interval [ft bgs]	PetroFlag Screening [ppm]	Aroclor 1254[1] mg/kg (ppm)
CB-10	8/18/2015	CB-10-1	0-7'	2-3'	ns	**1.5**
		CB-10-2	7-13'	9-10'	ns	ND
		CB-10-3	13-17'	13-14'	ns	ND
		CB-10-4	17-27'	18-19'	ns	ND
		CB-10-5		23-24'	ns	ND
		CB-10-6	27-37'	29-30'	ns	----
		CB-10-7		33-34'	ns	----
		CB-10-8	37-40'	38-39'	ns	----
CB-11	8/18/2015	CB-11-1	0-7'	4-5'	ns	0.043
		CB-11-2	7-17'	8-9'	ns	0.21
		CB-11-3		12-13'	ns	ND
		CB-11-4	17-27'	18-19'	ns	0.29
		CB-11-5		23-24'	ns	**1.2**
		CB-11-6	27-37'	28-29'	ns	**1.3**
		CB-11-7		33-34'	ns	0.37
		CB-11-8	37-40'	39-40'	ns	ND
CB-12	8/18/2015	CB-12-1	0-7'	4-5'	ns	0.081
		CB-12-2	7-17'	8-9'	ns	**1.4**
		CB-12-3		12-13'	ns	**2.3**
		CB-12-4	17-27'	19-20'	ns	0.058
		CB-12-5	27-37'	28-29'	ns	0.27
		CB-12-6		32-33'	ns	----
		CB-12-7	37-40'	39-40'	ns	----
CB-13	8/18/2015	CB-13-1	0-7'	2-3'	ns	**9.7**
		CB-13-2	7-17'	8-9'	ns	0.15
		CB-13-3		12-13'	ns	0.23
		CB-13-4	17-27'	17-18'	ns	0.18
		CB-13-5		22-23'	ns	0.087
		CB-13-6	27-37'	28-29'	ns	----
		CB-13-7		32-33'	ns	----
		CB-13-8	37-40'	38-39'	ns	----
CB-14	8/19/15	CB-14-1	27-37'	28-29'	ns	**470**
		CB-14-2		32-33'	ns	**1.1**
		CB-14-3	37-40'	39-40'	ns	**2.7**

Notes: ns indicates no PetroFlag screen was not completed on the sample

[1] no other aroclors were detected in total PCBs analysis

ND indicates that arochor 1254 was not detected above the laboratory reporting limit

---- indicates no analysis was performed on the indicated soil interval

>50 ppm (TSCA waste cleanup disposal level)

>0.74 ppm and <50 ppm (AOC cleanup level)

APPENDIX A

Site Assessment Photographs

Photo 1. TP-1

Photo 2. TP-1, view of south wall

Photo 3. TP-3, ground surface to 3 ft bgs

Photo 4. TP-3, ground surface to 8 ft bgs

Photo 5. TP-6, ground surface to 12 ft bgs

Photo 6. TP-4, first indication of buried tank

Photo 7. TP-4, inside of tank at 7 ft bgs

Photo 8. TP-2, ground surface to 8 ft bgs

Photo 9. TP-7

Photo 10. CB-2B, 0 to 8 ft bgs

Photo 11. CB-4, 0 to 8 ft bgs

Photo 12. CB-5, 19 to 29 ft bgs

Photo 13. CB5-8, 29 to 31 ft bgs

Photo 14. CB-1B, 22 to 29 ft bgs

Photo 15. CB7-1, 6 to 9 ft bgs

APPENDIX B
Test Pit Field Notes

DAILY FIELD RECORD

NewFields
Perspective. Vision. Solutions.

Project and Task Number: 350.0053.005	Date: 5/27/2015
Project Name: Stimson	Field Activity: Test Pit Excavation
Location:	Weather: Partly Cloudy w/ chances of rain

Personnel: Name	Company	Time in	Time Out
Ty Schnechel	NewFields	7:00am	
Louise Spencer	NewFields	7:00am	
Tyler Etzel	NewFields	7:00am	
Curt ~~[illegible]~~ Wozinga	Envirocon	7:10am	
Dallas	Envirocon	7:10am	
Steven Petrin	Stimson Lumber	7:25am	3:10pm
Kieth Langer	D&A	8:44am	

PERSONAL SAFETY CHECKLIST

	Steel-toed boots		Hard Hat		Traffic Vest
	Gloves		Safety Goggles		Ear Protection

TIME	DESCRIPTION OF WORK PERFORMED
7:00am	Ty & Louise arrived on-site
7:10am	Curt & Dallas arrived on-site
7:20am	Health & Safety Meeting
7:25am	Steven arrives on-site
7:55am	Excavation of TP 1 begins
8:00am	Tyler decided to move TP 1 excavation slightly West due to concrete foundation
8:15am	TP1 excavated to 5 ft & TP1-1 5' taken
	↳ TP1:
	unconsolidated { 0-2 ft => numerous cobbles & pebbles mixed w/ soil and root systems 2-5 ft => predominantly soil w/ several pipes & pieces of concrete foundations exposed 5-10 => Predominantly soil w/ cobbles, pebbles, & boulders, as well as utility piping and pieces of construction debris (i.e. bricks). ~~[illegible]~~ ?
8:25am	TP1 excavated to 10' & TP1-2 10' taken
	unconsolidated { 10-13 ft => wood cribbing, soil, cobbles, pebbles, & boulders 13-15 ft => cobbles, boulders, & soils
	↳ Black material noted in areas throughout excavation pit - presumably burned material
8:40am	TP1 excavated to 15' & TP1-3 15' taken

DAILY FIELD RECORD

NewFields
Perspective. Vision. Solutions.

Date: 5/27/15

TIME	DESCRIPTION OF WORK PERFORMED
8:45am	Petroflag calibrated at 27.2°C
9:05am	PID for TP1-3 = 110 ppm
9:30am	TP1 filled w/ excavated soil
9:35	TP3 Excavation begins:
	0-1 ft => brown soil encountered with concrete debris
	1-2 ft => buried concrete vault encountered on north side of pit -- *moved excavation 2-3 ft SE
	unconsolidated 2-5 ft => oil staining visible in soil of test pit
	↳ predominantly soil w/ construction debris (bricks & concrete)
	↳ utility piping present in soil
	↳ concrete vault extends down north-side of excavation pit
9:40am	TP3 excavated to 5' & TP3-1 taken
	↳ oil odor & staining noted by Tyler E.
	alluvial & unconsolidated 5-10 ft => red & brown soils with boulders, cobbles, & pebbles
	↳ utility pipe end at ~ 5 ft
	↳ concrete vault ends at ~ 12 ft.
9:50am	TP3-2 sample taken at 10ft - staining + petroleum odor noted
	10-15 ft => Reddish-brown soil w/ large amount of cobbles (alluvial); unconsolidated; some organics noted
	↳ no staining or petroleum odors noted
10:10am	TP3-3 sample taken @ 15 ft - No staining or petroleum odors noted
10:30am	TP3 refilled w/ excavated soil
10:32am	TP3-1 PID = 160 ppm TP3-3 PID = 163 ppm
10:40am	TP6 excavation begins
10:48am	TP6-1 taken @ 5 ft.
	0-5 ft: construction debris (bricks, wood, & concrete) from 0-2 ft.; organic rich soil w/ some cobbles & pebbles from 3-5 ft.; one large concrete block excavated
11:00am	TP6-2 taken @ 10 ft.
	5-10 ft: reddish-brown/purple soils w/ cobbles, pebbles, and boulders (alluvial); large rock embedded in North side of pit; patch of black soil on north wall appears to be organic or burnt
11:05am	TP6-3 taken @ 15 ft.
	10-15 ft: predominantly reddish-purplish-brown soil with mostly cobbles & pebbles - some small boulders

DAILY FIELD RECORD

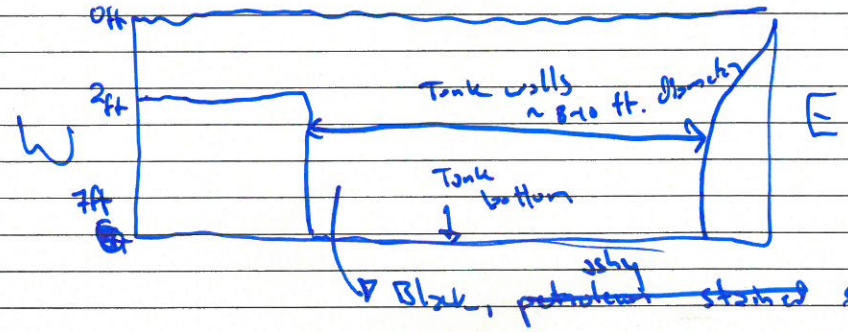
NewFields
Perspective. Vision. Solutions.

Date: 5/27/15

TIME	DESCRIPTION OF WORK PERFORMED
11:25am	TP6 re-filled w/ excavated soil
11:09am	TP6-3 PID = 40 ppm
11:37am	TP5 Excavation Begins
12:10pm	TP5-1 taken @ 5' 0-5 ft: Dark brown soil w/ pebbles & cobbles as well as root materials from 0-2 ft. Large amount of construct debris including 5x10 ft concrete block & numerous pipes; From 3-5 ft is predominantly brown soil with alluvial cobbles, pebbles, & small boulders
12:16pm	TP5-2 taken @ 10' 5-10 ft. Dark blackish-brown & reddish brown soil with pebbles, large cobbles, & small boulders; layers of concrete ~7 ft down on west wall
12:24pm	TP5-3 taken @ 15' 10-15: Reddish-brown soil w/ numerous alluvial cobbles & some ~~smaller~~ small boulders and pebbles
12:43pm	TP5 re-filled w/ excavated soil
12:45	TP5-3 PID = 214 ppm
12:50	TP4 Excavation Begins

[illegible]:
0-7 ft:
↳ 0-2 ft => light brown soil w/ cobbles & pebbles & some root system
↳ 2-7 ft => large (~8-10 ft diameter) tank with extensive ~~petroleum staining~~ ash -- soil inside tank is black from ~~petroleum~~ ash, tank walls show evidence of rusting
- Tank had no lid => open tank that was filled in?

cross section



1:09 pm	TP4 Excavation on hiatus... Excavation switches to TP2.
1:18 pm	TP4 stained soil sampled from ~~stockpile~~ spoils for petroflag
1:35 pm	TP4 spoils PID = 1567 ppm

DAILY FIELD RECORD

NewFields
Perspective. Vision. Solutions.

Date: 5/27/15

TIME	DESCRIPTION OF WORK PERFORMED
1:15 pm	TP2 Excavation Begins
1:30 pm	TP2-1 sample taken @ 5' - Excavation moved 8-10 ft South due to concrete foundation 0-5 ft: ↳ Light brown soil w/ cobbles, pebbles, & small boulders - concrete foundation on NW corner ~ 8 ft thick; looking water pipe in NW corner; construction debris - concrete foundation on East wall ~ 5-6 ft thick - dark organics in soil likely from wood debris
1:40 pm	TP2-2 sample taken @ 10' 5-10 ft: ↳ light brown soil w/ cobbles, pebbles, & small boulders ↳ dark organics in soil likely from wood debris associated w/ former operations
1:46 pm	TP2-3 sample taken @ 15' 10-15 ft: ↳ light brown soil w/ cobbles, pebbles, & small boulders ↳ dark organics in soil likely from wood debris associated w/ former operations ↳ concrete wall on west bank extends to depth of ~12 ft. from surface
2:10 pm	TP2 re-filled w/ excavated soil
2:18 pm	TP2-3 PID = 154 ppm
2:15 pm	TP7 Excavation Begins
2:22 pm	TP7-1 sample taken @ 5' 0-5 ft: · Substantial amounts of construction debris - concrete slabs along north bank & bottom of pit; bricks; ~~[illegible]~~ pipes, & support wires · soil is brown w/ cobbles, pebbles, & small boulders · dark organics in soil likely from wood debris associated w/ former operations

DAILY FIELD RECORD

NewFields
Perspective. Vision. Solutions.

Date: 5/27/15

TIME	DESCRIPTION OF WORK PERFORMED
2:31 pm	TP7-2 sample taken @ 10'
	5-10 ft:
	↳ substantial amounts of brick exposed
	↳ concrete basement room exposed on NW corner
	↳ concrete on all four walls of test pit
	↳ soil is light brown to reddish brown (from brick) with clayey texture -- contains cobbles, pebbles, & construction debris
2:38 pm	TP7-3 sample taken @ 13'
	↳ refusal due to concrete obstruction
	↳ 10-13 ft: same as from 5-10 ft
2:51 pm	TP7 re-filled w/ excavated soil
3:00 pm	TP7-3 PID = 25 ppm
3:15 pm	TP4 re-filled w/ excavated soil

APPENDIX C

June 2015 Soil Boring Logs

NewFields

PROJECT NUMBER	BORING NUMBER		
350.0033	CB1	SHEET 1	OF 1

SOIL BORING LOG

PROJECT: Stimson

LOCATION: Bonner, MT

DRILLER NAME: Ron

DRILLING CONTRACTOR: Environmental West Exploration

DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core

WATER LEVEL:

DATE START: 6/4/15

DATE FINISH: 6/4/15

LOGGER: Ty S.

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
	0-4.5 50%				- Top soil @ 0-1'	- CB1 moved 1 ft SE
					- Concrete @ [redacted] 1'	* Stopped because of concrete refusal
4.5'						
5						
10						
15						
20						
25						
30						
35						

NewFields

PROJECT NUMBER	BORING NUMBER	SHEET	OF
350.0033	CB-1B	1	1

SOIL BORING LOG

PROJECT: Stimson
LOCATION: Bonner, MT
DRILLER NAME: Ron
DRILLING CONTRACTOR: Environmental West Exploration
DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core
WATER LEVEL:
DATE START: 6/4/15
DATE FINISH: 6/4/15
LOGGER: Ty S.

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
5	0-9 40%				- Gravel fill material ~~w/ moisture~~ from building demolition w/ moisture	- CB1 moved 8' SE - moisture is from drill -
9'						
10			16:20 ↑		- Wood debris & brick @ 9'	- strong petroleum odor
15	9-19 15%	9-19	1			
19'		19	16:50 ↑ 2		- Concrete @ 19'	- Strong petroleum odor
20 22'	19-21' 40%	19-22	3 ↓ 18:50	1226	- Black stained, gravel fill material @ 19.4' - Blackish grey, ~~medium~~ fine-grained ~~sand~~ sand @ 22' -- petroleum odor	- CB1B-3 => only 5 g. sampled
25	22-29 50%	23-24 26-27	4 ↓ 18:20 5 ↓ 18:30	<4,000 <2,000	- silty clay w/ gravel @ 26' - concrete w/ gravel @ 28' -steel pipe @ 28.5'	-
29'						
30						
35						

NewFields

PROJECT NUMBER	BORING NUMBER		
350.0033	~~CB1~~ CB 3	SHEET 1	OF 1

SOIL BORING LOG

PROJECT: Stimson

LOCATION: Bonner, MT

DRILLER NAME: Ron

DRILLING CONTRACTOR: Environmental West Exploration

DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core

WATER LEVEL:

DATE START: 6/5/15

DATE FINISH: 6/5/15

LOGGER: Ty S.

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
		1.5-2	9:45 1	>2000	- Gravel fill material @ 0-1.5'	
	0-9 100%	4.5-5	9:45 ↑ 2	222	- Concrete dust @ 1.5' - Silty gravel @ 4.5'	
5						
0-9		8.5-9	9:45 ↑ 3	30	- Cleaned, washed gravel w/ sand @ 8.5'	
~~10~~	9-13 100%				- Concrete w/ gravel @ 11'	- Refusal @ 13'
15						
20						
25						
30						
35						

NewFields

PROJECT NUMBER	BORING NUMBER		
350.0033	CB5	SHEET 1	OF 1

SOIL BORING LOG

PROJECT: Stimson
LOCATION: Bonner, MT
DRILLER NAME: Ron
DRILLING CONTRACTOR: Environmental West Exploration
DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core
WATER LEVEL: —
DATE START: 6/4/5
DATE FINISH: 6/4/5
LOGGER: Ty S.

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
	0-8 100%	1.5 ft	1 - 9:30am	1417 ppm	- 0-1.5' fill material - Concrete dust @ 1.5'	- 1st core 0-8 ft - 2nd core 8-9 ft
5 ft		4.5 ft	2 - 9:40am	1044 ppm	- Concrete cobbles @ 4.5'	
		6.5 ft	X		- Gravel fill material w/ moisture @ 6.5 ft	→ Moisture is from drill
8						
9	8-9 100%	8 ft	3 - 10:10am	1118 ppm	- Gravel fill material w/ slight oily odor @ 8'	
10 ft		10-12 ft	11:30am 4	1457 ppm	- Large gravel & cobbles w/ silt @ 9'	- 40% non-recovery inferred to be large gravel & cobbles w/ silt
	9-19 60%					
15 ft		16-18 ft	11:50am 5	1518 ppm		
19					- Boulder @ 18.5'	
20 ft		21-22 ft	12:40 6	1545 ppm	- Large gravel & cobbles w/ silt @ 19'	
	19-28 ft 100%				- Concrete w/ cobbles @ 24'	
25 ft		27-28 ft	12:40 7	1305 ppm	- Native, pink gravels @ 25.5'	
29 ft						
30 ft	29-35 ft	29-31 ft	1300 8	2668 ppm	- Cobbles & large gravel w/ coarse grained sand @ 29'	- Strong petroleum odor @ 29-31' - CB5-8 only sampled 5 g
35 ft		34-35 ft	1300 9	635 ppm		

NewFields

PROJECT NUMBER	BORING NUMBER	SHEET	OF
350.0033	CB6	1	1

SOIL BORING LOG

PROJECT: Stimson
LOCATION: Bonner, MT
DRILLER NAME: Ron
DRILLING CONTRACTOR: Environmental West Exploration
DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core
WATER LEVEL:
DATE START: 6/5/15
DATE FINISH: 6/5/15
LOGGER: TJS

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
	0-9'				- Asphalt @ 0'	
					- Gravel fill material @ 4" - light brown	
5'	60%		11:40 ↑		- Sandy clay w/ pebbles & cobbles and staining @ 4' - greyish brown	
		6-8'	1		- Gravel fill material @ 6' - ~~greyish brown~~ greyish brown	
9'					- Sandy silt w/ pebbles & cobbles @ 8'	
10'			12:05 ↑		- Light green quartzite boulder @ 9'	
	9-14	13-14'	2			
	75%				- Light brown sandy silt w/ pebbles and cobbles @ 10'	
15'						
19'						
20'					- Fine-to-coarse gravel w/ ~~[illegible]~~ some silty matrix @ 19'	
		22-23	12:30 3			
	19-27				- Light brown ~~silty clay~~ sandy silt with cobbles & gravel @ 24'; native	
25'	80%		12:36 4			
		26-27	12:50		- Light brown silty sand with cobbles & gravel @ 28'	
29'		28-29	5			
30'						
35'						

NewFields

PROJECT NUMBER	BORING NUMBER		
350.0033	CB7	SHEET 1	OF 1

SOIL BORING LOG

PROJECT: Stimson
LOCATION: Bonner, MT
DRILLER NAME: Ron
DRILLING CONTRACTOR: Environmental West Exploration
DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core
WATER LEVEL:
DATE START: 6/5/15
DATE FINISH: 6/5/15
LOGGER: Ty S

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
5'	0-9' 80%	6-9	13:30 1		- Gravel fill/road base material @ 0' -- light brown - Sand & gravel loam - dark brown/greyish @ 6'	
9'						
10'					- Light brown cobbles & pebbles (gravel) with sandy silt @ 11'	
15'	9-19' 25%	11-15'	13:40 2			
19'					- Native gravels (cobbles & pebbles) w/ light brown silty sand @ 19'	
20'						
25'	19-29' 55%	23-25	14:00 3			
29'		27-29	14:05 4			
30'						
35'						

NewFields

PROJECT NUMBER	BORING NUMBER	SHEET	OF
350.0033	CB8	1	1

SOIL BORING LOG

PROJECT: Stimson
LOCATION: Bonner, MT
DRILLER NAME: Ron
DRILLING CONTRACTOR: Environmental West Exploration
DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core
WATER LEVEL:
DATE START: 6/5/15
DATE FINISH: 6/5/15
LOGGER: TyS

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
5'	0-8.5' 65%	2.5-3.5'	15:10 1		- grey gravel fill material with some loamy material @ 0'	
7.5'		7.5-8.5'	15:15 2		- Native gravels, pebbles, cobbles in silty sand; brownish-red @ 7.5'	
10'	8.5-18.5' 45%				- boulders, cobbles, & pebbles @ 10.5'	
15'		15-18.5'	3 @ 16:00		- Cobbles & pebbles in a light brown sandy silt matrix @ 15' - 27.5' w/ red quartzite cobble @ 18.5'	- Low Recovery from 8.5' - 27.5'
18.5'						
20'	18.5-28.5' 35%					
25'		25-28.5'	16:20 4			
30'						
35'						

NewFields

PROJECT NUMBER	BORING NUMBER	SHEET	OF
350.0033	CB2B	1	1

SOIL BORING LOG

PROJECT: Stimson
LOCATION: Bonner, MT
DRILLER NAME: Greg
DRILLING CONTRACTOR: Environmental West Exploration
DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core
WATER LEVEL: /
DATE START: 6/9/2015
DATE FINISH: 6/9/15
LOGGER: LS

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
0-8'	50%				wood debris + pulverized brick	
					8-12' Concrete	No odors/staining
		12-13	1	917	12-14 gravel fill	
		13-14	~~1~~		14-15 concrete	
8-18'	85%	15-16	2	920	15-18 silty gravels w/sand dark brown	
		17+18	3	925		
					18-28 native silty gravel	
		21-22	4	941		
18-28'	95%					No odors/staining
		27-28	5	945	26-28 sandy gravel	
					28-30 sandy gravel	
					30-38 silty gravel	
28-38'	100%	34-35	6	957		

Borehole terminated at 38 ft bgs

NewFields

PROJECT NUMBER	BORING NUMBER	SHEET	OF
350.0033	CB4	1	1

SOIL BORING LOG

PROJECT: Stimson
LOCATION: Bonner, MT
DRILLER NAME: Greg
DRILLING CONTRACTOR: Environmental West Exploration
DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core
WATER LEVEL: /
DATE START: 6/9/15
DATE FINISH: 6/9/15
LOGGER: LS

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
					0-3' bgs topsoil loam	
0-8ft	75%	3-4	1	1125	3-4.5' concrete	no odor
		4.5-6	2	1128	4.5-8' gravel fill material black staining from 4.5-5.5'	
		9-10	3	1145	8-12' silty gravel	
					12-18' sandy gravel w/ silt	no odor
8-18ft	75%					
		16-17	4	1150		
					18-28' sandy gravel w/ silt	no odor
18-28ft	95%	22-23	5	(over) >2000		
		27-28	6	101		
						Borehole terminated at 28ft bgs

NewFields

PROJECT NUMBER	BORING NUMBER	SHEET	OF
350.0033	CB9	1	1

SOIL BORING LOG

PROJECT: Stimson
LOCATION: Bonner, MT
DRILLER NAME: Greg
DRILLING CONTRACTOR: Environmental West Exploration
DRILLING METHOD AND EQUIPMENT: Sonic Continuous Core
WATER LEVEL: —
DATE START: 6/9/2015
DATE FINISH: 6/9/2015
LOGGER: LS

DEPETH BE(LOW SURFACE (FT)	SAMPLE: SONIC INTERVAL RECOVERY (%)	SAMPLE: SAMPLE DEPTH INTERVAL (ft bgs)	SAMPLE: INTERVAL ID #	Petro Flag (ppm)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: OBSERVATIONS (ODOR, STAINING, DRILLING RATE, DRILLING ISSUES, ETC.)
					gravel fill w/ black topsoil loam 0-5'	no odors/no staining
0-8ft	75%	5-6	1	142	5-6' gravel fill 6-7.5' cement	
		7.5-8	2	58	7.5-8' gravel fill	
		9-10	3	101	8-10' sandy gravel 10-11' silty gravel 11-13' sandy gravel	
8-18ft	85%				13-14' silty gravel 14-18' sandy gravel	
		16-17	4	63		
		19-20	5	89	18-24' silty gravel 24-25' cobble, lg boulder 25-28 silty gravel	
18-28	85%					
		27-28	6	131		Borehole terminated at 28ft bgs

APPENDIX D

August 2015 Soil Boring Logs

NewFields

PROJECT: STIMSON MILL SITE	PROJECT NO.: 350.0033	SHT 1 OF 2
LOCATION OF BORING	DRILLING METHOD: Rotu-Sonic	BORING NO. CB-10
	HAMMER WEIGHT: – DROP: –	LOGGED BY: LM, TS
	SAMPLER(S): Continuous core	DRILLING
	BACKFILL MATERIAL: HBC (Baroid 3/8-in) (9 bags 5#)	START / FINISH
	WATER LEVEL	TIME / TIME
	TIME	0805 / 0950
	DATE	DATE / DATE
DATUM _____ ELEVATION _____	CASING DEPTH	8-18-15 / 8-18-15

	SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT. PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS:
									Gravel/waste material, sparse veg.
0830	CORE	84 / 36	1 / 2-3	–	30	–	0		
							1	SM	SILTY SAND w/ GRAVEL (SM), Light brown 7.5YR 6/4, dry, abundant angular gravel, rare metal in cuttings
							2		
							3		... Increasing gravel / cobble @ ~ 5 Ft bgs, matrix is light gray silt.
							4		
							5		
							6		
0850	CORE	72 / 60	2 / 9-10	–	83	–	7		
							8		
							9	SM	@ 8.0: SILTY SAND w/ GRAVEL (SM); Light red brown, wet (from ~ 8 – 9), rounded gravel; well graded sand.
							10		@ 9 – 11.5: Lithology as above; dry, Pale red
							11		@ 11.5 – 13: Damp in places, lithology as above
							12		
							13	SC	CLAYEY SAND w/ GRAVEL + COBBLE (SC-CC), Red Brown, damp to wet, rounded gravel, sl. plastic matrix; gravel is Belt Fm material.
							14	CC	
							15		
							16		
0858	CORE	48 / 39	3 / 13-14	–		–	17		... Increasing sand from 17 – 18, wet from 17.0 – 25.0
							18		
	CORE						19		
							20		

NewFields

PROJECT:	PROJECT NO.:	SHT 2 OF 2
LOCATION OF BORING	DRILLING METHOD:	BORING NO.
	See page 1	CB-10
	HAMMER WEIGHT: / DROP:	LOGGED BY:
	SAMPLER(S):	LM, TS
		DRILLING
	BACKFILL MATERIAL:	START / FINISH
	WATER LEVEL	TIME / TIME
	TIME	
	DATE	DATE / DATE
	CASING DEPTH	

DATUM _____ ELEVATION _____

	SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS:
							20		
							21	SC-ac	
							22		
0915	CORE	120 / 88	4 / 18-19	–		–	23		
			5 / 23-24				24		
							25		@ 25, lithology as above, damp to wet
							26		
							27		@ 27: Increasing gravel (ac), clayey gravel w/ sand, light red-brown, wet, sub-rounded to rounded gravel/cobble, light red Belt rock.
0930	CORE	120 / 58	6 / 29-30				28		
							29		
							30		
							31		
			7 / 33-34				32		
							33		
							34		@ 34.5: Sandy gravel (GP), light red-brown, wet, rounded gravel.
							35		
							36		
							37		
							38		As above, wet; contains angular cobbles.
							39		
0950	CORE	36 / 25	8 / 38-39				40		End of boring @ 40 ft. bgs.

NewFields

PROJECT: Stimson Millsite	**PROJECT NO.:** 350.0033		**SHT** 1 **OF** 2
LOCATION OF BORING	DRILLING METHOD: Rota-sonic		BORING NO.
			CB-11
	HAMMER WEIGHT:	DROP:	LOGGED BY:
	SAMPLER(S):		LM, TS
			DRILLING
	BACKFILL MATERIAL: HBC - Baroid 3/8-in		START / FINISH
	WATER LEVEL	(50 lb bags)	TIME / TIME
	TIME		12:45 / 1345
	DATE		DATE / DATE
DATUM _____ ELEVATION _____	CASING DEPTH		8-18-15 / 8-18-15

	SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY
							0	
1216	WRE	84 / 48		–		–	1	
							2	
							3	
							4	
			1 / 4-5				5	
							6	
							7	
1258	CR	120 / 68	2 / 8-9	–		–	8	
							9	
							10	
							11	
							12	
			3 / 12-13				13	
							14	
							15	
							16	
							17	
1315	CORE	120 / 50		–		–	18	
			4 / 18-19				19	
							20	

SURFACE CONDITIONS:

Gravel / fill; sparse veg.

0-0.5: SANDY SILT w/ GRAVEL (ML), light brown, dry; angular gravel, contains organics + wood waste.

0.5 - 2: Organic material, black, damp [wood waste]

2- : CLAYEY SAND w/ GRAVEL (SC), Red - yellow transitioning to light brown, damp, minor dark brown zones; rounded gravel, trace weathered brick material, sl. plastic matrix, decreasing clay w/ depth...

@ ~10: thin, horizontal dark gray band (~0.1' thick)

@12: GRAVELLY SILT w/ SAND (ML), light bro., dry to damp; sub angular (fractured) gravel + cobble, non plastic.

@13.0: SANDY GRAVEL w/ CLAY (GP-GC); light-red brown, sub rounded gravel, mod. plastic matrix, rare cobbles (rounded Belt rock), damp

@ 19: Increasing sand component, lith as above, wet

NewFields

PROJECT:	PROJECT NO.:	SHT 2 OF 2
LOCATION OF BORING	DRILLING METHOD:	BORING NO.
		CB-11
	HAMMER WEIGHT: / DROP:	LOGGED BY:
	SAMPLER(S):	LM, TS
		DRILLING
	BACKFILL MATERIAL:	START / FINISH
	WATER LEVEL	TIME / TIME
	TIME	
	DATE	DATE / DATE
	CASING DEPTH	

DATUM _____ ELEVATION _____

	SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS:
							20		
							21		
							22		
							23		
			5 / 23-24				24		
							25		
							26		
							27		
							28		@ 27: Fines washed from cuttings to 29 feet bgs.
1340 (1336)	core	120 / 78	6 / 28-29	—		—	29		SANDY GRAVEL (SM), contains silt, red-brown, damp to wet, rounded gravel (Belt rock), rare rounded cobbles.
							30		
							31		Hard, slow drilling...
							32		
							33		
			7 / 33-34				34		
							35		
							36		
							37		
1343 (1342)	core	36 / 26	8 / 39-40	—		—	38		Lithology as above, wet; greater sand component.
							39		
							40		End of boring @ 40 feet bgs.

NewFields

PROJECT: Stimson Millsite	PROJECT NO.: 350.0033	SHT 1 OF 2
LOCATION OF BORING	DRILLING METHOD: Rota-sonic	BORING NO. CB-12
	HAMMER WEIGHT: / DROP:	LOGGED BY:
	SAMPLER(S):	LM, TS
	BACKFILL MATERIAL: HBC (13-50 lb bags, Baroid 3/8-in bentonite)	DRILLING START / FINISH
	WATER LEVEL	TIME / TIME
	TIME	1428
	DATE	DATE / DATE
DATUM _____ ELEVATION _____	CASING DEPTH	8-13-15

SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS:
						0		GS is concrete slab, no veg.
1445	84/13		–		–	1		Approx 3 Ft of concrete slab.
						2		
						3		@ ~3 Ft
1446		1/4-5				4		@ 3 Ft: Well Graded Sand w/ gravel (SM), Light-brown, damp, well-sorted sand, contains gravel.
						5		
						6		
						7		
1504 WRE	120/119		–		–	8		@ 8.0: SANDY GRAVEL w/ CLAY (GC), light brown, damp to wet, rounded gravel, plastic sandy matrix; rare cobble
1505		2/8-9				9		
						10		... Increasing cobbles w/ depth, rounded to sub rounded
						11		
						12		
		3/12-13				13		
						14		
						15		@ 15: SANDY GRAVEL (GM), red brown, damp to dry; contain silt, gravel is rounded to sub angular (fractured) light-red Bull rock, contains clay from 16 to 17.
						16		
						17		SANDY GRAVEL w/ CLAY (GC), light reddish-brown, abundant cobble - core recovery very low - likely cobble stuck in core barrel - contains clay, wet
WRE	120/22	4/19-20	–		–	18		
						19		
						20		

NewFields

PROJECT:	PROJECT NO.:	SHT 2 OF 2
LOCATION OF BORING	DRILLING METHOD:	BORING NO.
	See page 1	CB-12
	HAMMER WEIGHT: / DROP:	LOGGED BY:
	SAMPLER(S):	LM, TS
		DRILLING
	BACKFILL MATERIAL:	START / FINISH
	WATER LEVEL	TIME / TIME
	TIME	
	DATE	DATE / DATE
	CASING DEPTH	

DATUM _____ ELEVATION _____

	SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS:
							20		low recovery... No sample from 20 - 27 (No recovery).
							21		
							22		
							23		
							24		
							25		
							26		
							27		Note: Fines washed from gravel from 27-28' bgs.
1545	CORE	120 / 100	5 / 28-29	–		–	28		SANDY GRAVEL w CLAY (ac). Red-brown, wet, increasing clay, decreasing sand w/ depth, gravel is subrounded red + pale green Belt rock.
							29		
							30		
							31		@ 31: Increasing Sand... decreasing clay. Sand is poorly graded, medium-grained, contains cobbles.
			6 / 32-33				32		
							33		
							34		
							35		
							36		
							37		... Cobbles from 36-37' bgs, wet
1550	CORE	36 / 22		–		–	38		
			7 / 39-40				39		Poorly graded sand lense @ 39.5 Ft, wet
							40		End of boring @ 40 Ft.

NewFields

PROJECT: Stimson Millsite	PROJECT NO.: 350.0033	SHT 1 OF 2
LOCATION OF BORING	DRILLING METHOD: Rota-Sonic	BORING NO.
		CB-13
	HAMMER WEIGHT: / DROP:	LOGGED BY:
	SAMPLER(S):	LM, TS
		DRILLING
	BACKFILL MATERIAL: 13-15 lb bags HBC	START / FINISH
	WATER LEVEL (Bairoid 3/8-in bent.)	TIME / TIME
	TIME	1015 / 1137
	DATE	DATE / DATE
DATUM _____ ELEVATION _____	CASING DEPTH	8-18-15 / 8-18-15

	SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY
1020	CORE	84/54		–		–	0	
							1	
			1/2-3				2	
							3	
							4	
							5	
							6	
							7	
							8	
1030	CORE	120/72	2/6-9	–		–	9	
							10	
							11	
			3/12-13				12	
							13	
							14	
							15	
							16	
							17	
1040	CORE	120/62	4/17-18	–		–	18	
							19	
							20	

SURFACE CONDITIONS:

Gravel / fill material, sparse veg.

0-0.5: Woody, organic material, no odor, near black, damp

0.5-2.0: POORLY GRADED SAND w/ GRAVEL (SP), Red-yellow (7.5 YR 6/6), damp, angular gravel (Fill)

GRAVELLY SILT w/ SAND (ML), very dark gray, damp, sl. plastic, rounded gravel, some organics, no odor.

~~SANDY~~ SILTY SAND w/ GRAVEL (SC), dark brown to Red-brown, wet, sl. plastic, rounded gravel.

POORLY GRADED GRAVELLY SAND (SP), light brown, damp med.-grained sand.

@ 7.0: SANDY CLAY w/ GRAVEL (CL), dark brown, wet, plastic, trace organics.

@ 8.0: SANDY GRAVEL w/ CLAY (GC), light brown, wet, rounded gravel, contains rounded cobble.

@ ~12.5': Lithology as above, becomes light red, gravel is light red Belt rock, rounded, rare cobble

NewFields

PROJECT:	PROJECT NO.:	SHT 2 OF 2
LOCATION OF BORING	DRILLING METHOD: See page 1	BORING NO. CB-13
	HAMMER WEIGHT: / DROP:	LOGGED BY: LM, TS
	SAMPLER(S):	DRILLING
	BACKFILL MATERIAL:	START / FINISH
	WATER LEVEL	TIME / TIME
	TIME	
	DATE	DATE / DATE
DATUM _____ ELEVATION _____	CASING DEPTH	

	SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS:
							20		
							21		
1043			5 / 22-23				22		
							23		
							24		
							25		
							26		
							27		
1125	CORE	120 / 62	6 / 28-29	—		—	28		[Driller begin adding H_2O]
							29		Sandy GRAVEL (GP): light brown to red-brown, well graded sand, rounded gravel (Belt rock), containing rounded cobble, wet [some clean gravel @ top of run - likely same as above; fines flushed during drilling].
							30		
							31		
							32		
1130			7 / 32-33				33		
							34		
							35		
							36		from 35-36: dry.
							37		
1135	CORE	36 / 16	8 / 38-39	—		—	38		
							39		@ 39: WELL GRADED SAND w/ GRAVEL (SP): Red brown (light), med. grained sand, wet, rounded gravel.
							40		End of boring @ 40 ft bgs.

NewFields

PROJECT: Stimson Millsite	PROJECT NO.: 350.0033	SHT 1 OF 1
LOCATION OF BORING	DRILLING METHOD: Roto-Sonic	BORING NO.
		CB-14
	HAMMER WEIGHT: / DROP:	LOGGED BY:
	SAMPLER(S):	LM, TS
		DRILLING
	BACKFILL MATERIAL: 12 50lb bags HBC (Baroid	START / FINISH
	WATER LEVEL: 3/8-in Bent.)	TIME / TIME
	TIME:	0823
	DATE:	DATE / DATE
	CASING DEPTH:	8-19-15

☒ CB-1

DATUM _____ ELEVATION _____

	SAMPLER TYPE	INCHES DRIVEN / INCHES RECOVERED	SAMPLE NO. / SAMPLE DEPTH	OVM/PID/FID READING	BLOW CT PER 6"	SPT N-VALUE	DEPTH IN FEET	LITHOLOGY	SURFACE CONDITIONS:
							20		Gravel fill above former compressor bldg foundation; no samples / lith descriptions from 0-27' bgs. See CB-1 field sheets for sample / lith descriptions.
							21		
							22		
							23		No samples retained from 0-27 Ft bgs, drilling through former compressor bldg foundation, slow drilling, low returns noted. Driller using water to advance casing / core barrel.
							24		
							25		
							26		
							27		
1030	WRE	120 / 91	1 / 28-29	–		–	28		SANDY GRAVEL w/ SILT (GW-GM), light red-brown, wet, subrounded fine to coarse gravel, light red + tan Belt rock material, coarse-grained sand matrix, rare cobble, increasing sand w/ depth. Faint odor @ ~ 29.5 Ft?
							29		
							30		@ 30 Ft: GRAVELLY SAND (SW-SP), dark reddish brown, wet, fine- to med.-grained sand, containing fine rounded gravel, pred. ~~well-~~ poorly graded, faint odor?
							31		
							32		@ 31 Ft: Color change to brown, lith as above, no odor; increasing rounded gravel
			2 / 32-33				33		@ 33 Ft: CLAYEY GRAVEL w/ SAND (GC), Brown to Red-Brown (light) w/ depth; rounded to sub-rounded gravel, plastic matrix, wet
							34		
							35		
							36		...increasing sand w/ depth,
							37		
1040	WRE	36 / 36		–		–	38		...increasing rounded cobble...
			3 / 39-40				39		
							40		End boring @ 40 Ft. bgs

APPENDIX E

Test Pit Analytical Results

ANALYTICAL SUMMARY REPORT

June 02, 2015

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B15052149 Quote ID: B3097 - Stimson

Project Name: Stimson Mill #350.0033

Energy Laboratories Inc Billings MT received the following 19 samples for NewFields on 5/28/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B15052149-001	TP1-1 5 Feet	05/27/15 8:15	05/28/15	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B15052149-002	TP1-2 10 Feet	05/27/15 8:30	05/28/15	Soil	Same As Above
B15052149-003	TP1-3 15 Feet	05/27/15 8:45	05/28/15	Soil	Same As Above
B15052149-004	TP2-1 5 Feet	05/27/15 13:30	05/28/15	Soil	Same As Above
B15052149-005	TP2-2 10 Feet	05/27/15 13:35	05/28/15	Soil	Same As Above
B15052149-006	TP2-3 15 Feet	05/27/15 13:40	05/28/15	Soil	Same As Above
B15052149-007	TP3-1 5 Feet	05/27/15 9:40	05/28/15	Soil	Same As Above
B15052149-008	TP3-2 10 Feet	05/27/15 9:50	05/28/15	Soil	Same As Above
B15052149-009	TP3-3 15 Feet	05/27/15 10:10	05/28/15	Soil	Same As Above
B15052149-010	TP4-Inside Tank	05/27/15 13:45	05/28/15	Soil	Same As Above
B15052149-011	TP5-1 5 Feet	05/27/15 12:10	05/28/15	Soil	Same As Above
B15052149-012	TP5-2 10 Feet	05/27/15 12:15	05/28/15	Soil	Same As Above
B15052149-013	TP5-3 15 Feet	05/27/15 12:25	05/28/15	Soil	Same As Above
B15052149-014	TP6-1 5 Feet	05/27/15 10:45	05/28/15	Soil	Same As Above
B15052149-015	TP6-2 10 Feet	05/27/15 11:00	05/28/15	Soil	Same As Above
B15052149-016	TP6-3 15 Feet	05/27/15 11:05	05/28/15	Soil	Same As Above
B15052149-017	TP7-1 5 Feet	05/27/15 14:25	05/28/15	Soil	Same As Above
B15052149-018	TP7-2 10 Feet	05/27/15 14:30	05/28/15	Soil	Same As Above
B15052149-019	TP7-3 15 Feet	05/27/15 14:40	05/28/15	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-001
Client Sample ID: TP1-1 5 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 08:15
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	17	wt%		0.2		SW3550A	05/28/15 10:24 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	05/28/15 19:52 / jem
Aroclor 1221	ND	mg/kg-dry		0.041		SW8082	05/28/15 19:52 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	05/28/15 19:52 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	05/28/15 19:52 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	05/28/15 19:52 / jem
Aroclor 1254	0.50	mg/kg-dry		0.020		SW8082	05/28/15 19:52 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	05/28/15 19:52 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	05/28/15 19:52 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	05/28/15 19:52 / jem
Surr: Decachlorobiphenyl	94.0	%REC		50-126		SW8082	05/28/15 19:52 / jem
Surr: Tetrachloro-m-xylene	65.0	%REC		42-115		SW8082	05/28/15 19:52 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-002
Client Sample ID: TP1-2 10 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 08:30
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.2	wt%		0.2		SW3550A	05/28/15 10:32 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.37		SW8082	05/29/15 08:36 / jem
Aroclor 1221	ND	mg/kg-dry		0.74		SW8082	05/29/15 08:36 / jem
Aroclor 1232	ND	mg/kg-dry		0.37		SW8082	05/29/15 08:36 / jem
Aroclor 1242	ND	mg/kg-dry		0.37		SW8082	05/29/15 08:36 / jem
Aroclor 1248	ND	mg/kg-dry		0.37		SW8082	05/29/15 08:36 / jem
Aroclor 1254	13	mg/kg-dry		0.37		SW8082	05/29/15 08:36 / jem
Aroclor 1260	ND	mg/kg-dry		0.37		SW8082	05/29/15 08:36 / jem
Aroclor 1262	ND	mg/kg-dry		0.37		SW8082	05/29/15 08:36 / jem
Aroclor 1268	ND	mg/kg-dry		0.37		SW8082	05/29/15 08:36 / jem
Surr: Decachlorobiphenyl	126	%REC		50-126		SW8082	05/29/15 08:36 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	05/29/15 08:36 / jem

-The Reporting Limits reflect a 20 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-003
Client Sample ID: TP1-3 15 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 08:45
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.8	wt%		0.2		SW3550A	05/28/15 10:37 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.18		SW8082	05/29/15 09:04 / jem
Aroclor 1221	ND	mg/kg-dry		0.36		SW8082	05/29/15 09:04 / jem
Aroclor 1232	ND	mg/kg-dry		0.18		SW8082	05/29/15 09:04 / jem
Aroclor 1242	ND	mg/kg-dry		0.18		SW8082	05/29/15 09:04 / jem
Aroclor 1248	ND	mg/kg-dry		0.18		SW8082	05/29/15 09:04 / jem
Aroclor 1254	4.2	mg/kg-dry		0.18		SW8082	05/29/15 09:04 / jem
Aroclor 1260	ND	mg/kg-dry		0.18		SW8082	05/29/15 09:04 / jem
Aroclor 1262	ND	mg/kg-dry		0.18		SW8082	05/29/15 09:04 / jem
Aroclor 1268	ND	mg/kg-dry		0.18		SW8082	05/29/15 09:04 / jem
Surr: Decachlorobiphenyl	168	%REC	S	50-126		SW8082	05/29/15 09:04 / jem
Surr: Tetrachloro-m-xylene	65.0	%REC		42-115		SW8082	05/29/15 09:04 / jem

-The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
-The high percent recovery of Decachlorobiphenyl is attributed to co-eluting interference on primary column.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-004
Client Sample ID: TP2-1 5 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 13:30
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	21	wt%		0.2		SW3550A	05/28/15 10:46 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.022		SW8082	05/29/15 09:32 / jem
Aroclor 1221	ND	mg/kg-dry		0.043		SW8082	05/29/15 09:32 / jem
Aroclor 1232	ND	mg/kg-dry		0.022		SW8082	05/29/15 09:32 / jem
Aroclor 1242	ND	mg/kg-dry		0.022		SW8082	05/29/15 09:32 / jem
Aroclor 1248	ND	mg/kg-dry		0.022		SW8082	05/29/15 09:32 / jem
Aroclor 1254	0.051	mg/kg-dry		0.022		SW8082	05/29/15 09:32 / jem
Aroclor 1260	ND	mg/kg-dry		0.022		SW8082	05/29/15 09:32 / jem
Aroclor 1262	ND	mg/kg-dry		0.022		SW8082	05/29/15 09:32 / jem
Aroclor 1268	ND	mg/kg-dry		0.022		SW8082	05/29/15 09:32 / jem
Surr: Decachlorobiphenyl	95.0	%REC		50-126		SW8082	05/29/15 09:32 / jem
Surr: Tetrachloro-m-xylene	61.0	%REC		42-115		SW8082	05/29/15 09:32 / jem

- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-005
Client Sample ID: TP2-2 10 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 13:35
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	05/28/15 10:55 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	05/28/15 22:40 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	05/28/15 22:40 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	05/28/15 22:40 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	05/28/15 22:40 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	05/28/15 22:40 / jem
Aroclor 1254	1.2	mg/kg-dry		0.019		SW8082	05/28/15 22:40 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	05/28/15 22:40 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	05/28/15 22:40 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	05/28/15 22:40 / jem
Surr: Decachlorobiphenyl	96.0	%REC		50-126		SW8082	05/28/15 22:40 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	05/28/15 22:40 / jem

- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-006
Client Sample ID: TP2-3 15 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 13:40
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	18	wt%		0.2		SW3550A	05/28/15 11:00 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.082		SW8082	05/29/15 10:00 / jem
Aroclor 1221	ND	mg/kg-dry		0.16		SW8082	05/29/15 10:00 / jem
Aroclor 1232	ND	mg/kg-dry		0.082		SW8082	05/29/15 10:00 / jem
Aroclor 1242	ND	mg/kg-dry		0.082		SW8082	05/29/15 10:00 / jem
Aroclor 1248	ND	mg/kg-dry		0.082		SW8082	05/29/15 10:00 / jem
Aroclor 1254	3.0	mg/kg-dry		0.082		SW8082	05/29/15 10:00 / jem
Aroclor 1260	ND	mg/kg-dry		0.082		SW8082	05/29/15 10:00 / jem
Aroclor 1262	ND	mg/kg-dry		0.082		SW8082	05/29/15 10:00 / jem
Aroclor 1268	ND	mg/kg-dry		0.082		SW8082	05/29/15 10:00 / jem
Surr: Decachlorobiphenyl	101	%REC		50-126		SW8082	05/29/15 10:00 / jem
Surr: Tetrachloro-m-xylene	65.0	%REC		42-115		SW8082	05/29/15 10:00 / jem

-The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-007
Client Sample ID: TP3-1 5 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 09:40
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	15	wt%		0.2		SW3550A	05/28/15 11:12 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:28 / jem
Aroclor 1221	ND	mg/kg-dry		0.40		SW8082	05/29/15 10:28 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:28 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:28 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:28 / jem
Aroclor 1254	3.5	mg/kg-dry		0.20		SW8082	05/29/15 10:28 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:28 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:28 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:28 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	05/29/15 10:28 / jem
Surr: Tetrachloro-m-xylene	64.0	%REC		42-115		SW8082	05/29/15 10:28 / jem

-The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-008
Client Sample ID: TP3-2 10 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 09:50
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	16	wt%		0.2		SW3550A	05/28/15 11:19 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:56 / jem
Aroclor 1221	ND	mg/kg-dry		0.40		SW8082	05/29/15 10:56 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:56 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:56 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:56 / jem
Aroclor 1254	5.5	mg/kg-dry		0.20		SW8082	05/29/15 10:56 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:56 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:56 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	05/29/15 10:56 / jem
Surr: Decachlorobiphenyl	243	%REC	S	50-126		SW8082	05/29/15 10:56 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	05/29/15 10:56 / jem

-The high percent recovery of Decachlorobiphenyl is attributed to co-eluting interference on primary column.
-The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-009
Client Sample ID: TP3-3 15 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 10:10
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	22	wt%		0.2		SW3550A	05/28/15 11:25 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.022		SW8082	05/29/15 11:24 / jem
Aroclor 1221	ND	mg/kg-dry		0.043		SW8082	05/29/15 11:24 / jem
Aroclor 1232	ND	mg/kg-dry		0.022		SW8082	05/29/15 11:24 / jem
Aroclor 1242	ND	mg/kg-dry		0.022		SW8082	05/29/15 11:24 / jem
Aroclor 1248	ND	mg/kg-dry		0.022		SW8082	05/29/15 11:24 / jem
Aroclor 1254	0.37	mg/kg-dry		0.022		SW8082	05/29/15 11:24 / jem
Aroclor 1260	ND	mg/kg-dry		0.022		SW8082	05/29/15 11:24 / jem
Aroclor 1262	ND	mg/kg-dry		0.022		SW8082	05/29/15 11:24 / jem
Aroclor 1268	ND	mg/kg-dry		0.022		SW8082	05/29/15 11:24 / jem
Surr: Decachlorobiphenyl	161	%REC	S	50-126		SW8082	05/29/15 11:24 / jem
Surr: Tetrachloro-m-xylene	66.0	%REC		42-115		SW8082	05/29/15 11:24 / jem

-The high percent recovery of Decachlorobiphenyl is attributed to co-eluting interference on primary column.
- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-010
Client Sample ID: TP4-Inside Tank

Report Date: 06/02/15
Collection Date: 05/27/15 13:45
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	22	wt%		0.2		SW3550A	05/28/15 11:39 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.022		SW8082	05/29/15 01:00 / jem
Aroclor 1221	ND	mg/kg-dry		0.043		SW8082	05/29/15 01:00 / jem
Aroclor 1232	ND	mg/kg-dry		0.022		SW8082	05/29/15 01:00 / jem
Aroclor 1242	ND	mg/kg-dry		0.022		SW8082	05/29/15 01:00 / jem
Aroclor 1248	ND	mg/kg-dry		0.022		SW8082	05/29/15 01:00 / jem
Aroclor 1254	0.32	mg/kg-dry		0.022		SW8082	05/29/15 01:00 / jem
Aroclor 1260	ND	mg/kg-dry		0.022		SW8082	05/29/15 01:00 / jem
Aroclor 1262	ND	mg/kg-dry		0.022		SW8082	05/29/15 01:00 / jem
Aroclor 1268	ND	mg/kg-dry		0.022		SW8082	05/29/15 01:00 / jem
Surr: Decachlorobiphenyl	99.0	%REC		50-126		SW8082	05/29/15 01:00 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	05/29/15 01:00 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-011
Client Sample ID: TP5-1 5 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 12:10
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	05/28/15 11:45 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.038		SW8082	05/29/15 11:52 / jem
Aroclor 1221	ND	mg/kg-dry		0.075		SW8082	05/29/15 11:52 / jem
Aroclor 1232	ND	mg/kg-dry		0.038		SW8082	05/29/15 11:52 / jem
Aroclor 1242	ND	mg/kg-dry		0.038		SW8082	05/29/15 11:52 / jem
Aroclor 1248	ND	mg/kg-dry		0.038		SW8082	05/29/15 11:52 / jem
Aroclor 1254	1.9	mg/kg-dry		0.038		SW8082	05/29/15 11:52 / jem
Aroclor 1260	ND	mg/kg-dry		0.038		SW8082	05/29/15 11:52 / jem
Aroclor 1262	ND	mg/kg-dry		0.038		SW8082	05/29/15 11:52 / jem
Aroclor 1268	ND	mg/kg-dry		0.038		SW8082	05/29/15 11:52 / jem
Surr: Decachlorobiphenyl	97.0	%REC		50-126		SW8082	05/29/15 11:52 / jem
Surr: Tetrachloro-m-xylene	65.0	%REC		42-115		SW8082	05/29/15 11:52 / jem

-The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-012
Client Sample ID: TP5-2 10 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 12:15
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.4	wt%		0.2		SW3550A	05/28/15 11:58 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.37		SW8082	05/29/15 15:08 / jem
Aroclor 1221	ND	mg/kg-dry		0.75		SW8082	05/29/15 15:08 / jem
Aroclor 1232	ND	mg/kg-dry		0.37		SW8082	05/29/15 15:08 / jem
Aroclor 1242	ND	mg/kg-dry		0.37		SW8082	05/29/15 15:08 / jem
Aroclor 1248	ND	mg/kg-dry		0.37		SW8082	05/29/15 15:08 / jem
Aroclor 1254	18	mg/kg-dry		0.37		SW8082	05/29/15 15:08 / jem
Aroclor 1260	ND	mg/kg-dry		0.37		SW8082	05/29/15 15:08 / jem
Aroclor 1262	ND	mg/kg-dry		0.37		SW8082	05/29/15 15:08 / jem
Aroclor 1268	ND	mg/kg-dry		0.37		SW8082	05/29/15 15:08 / jem
Surr: Decachlorobiphenyl	96.0	%REC		50-126		SW8082	05/29/15 15:08 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	05/29/15 15:08 / jem

-The Reporting Limits reflect a 20 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-013
Client Sample ID: TP5-3 15 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 12:25
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.9	wt%		0.2		SW3550A	05/28/15 12:05 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	05/29/15 12:48 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	05/29/15 12:48 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	05/29/15 12:48 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	05/29/15 12:48 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	05/29/15 12:48 / jem
Aroclor 1254	0.79	mg/kg-dry		0.018		SW8082	05/29/15 12:48 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	05/29/15 12:48 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	05/29/15 12:48 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	05/29/15 12:48 / jem
Surr: Decachlorobiphenyl	106	%REC		50-126		SW8082	05/29/15 12:48 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	05/29/15 12:48 / jem

- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-014
Client Sample ID: TP6-1 5 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 10:45
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.3	wt%		0.2		SW3550A	05/28/15 12:11 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	05/29/15 02:51 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	05/29/15 02:51 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	05/29/15 02:51 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	05/29/15 02:51 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	05/29/15 02:51 / jem
Aroclor 1254	0.76	mg/kg-dry		0.018		SW8082	05/29/15 02:51 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	05/29/15 02:51 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	05/29/15 02:51 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	05/29/15 02:51 / jem
Surr: Decachlorobiphenyl	98.0	%REC		50-126		SW8082	05/29/15 02:51 / jem
Surr: Tetrachloro-m-xylene	68.0	%REC		42-115		SW8082	05/29/15 02:51 / jem

- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-015
Client Sample ID: TP6-2 10 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 11:00
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.7	wt%		0.2		SW3550A	05/28/15 12:18 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:19 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	05/29/15 03:19 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:19 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:19 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:19 / jem
Aroclor 1254	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:19 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:19 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:19 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:19 / jem
Surr: Decachlorobiphenyl	97.0	%REC		50-126		SW8082	05/29/15 03:19 / jem
Surr: Tetrachloro-m-xylene	65.0	%REC		42-115		SW8082	05/29/15 03:19 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-016
Client Sample ID: TP6-3 15 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 11:05
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.1	wt%		0.2		SW3550A	05/28/15 12:22 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:47 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	05/29/15 03:47 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:47 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:47 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:47 / jem
Aroclor 1254	0.060	mg/kg-dry		0.018		SW8082	05/29/15 03:47 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:47 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:47 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	05/29/15 03:47 / jem
Surr: Decachlorobiphenyl	94.0	%REC		50-126		SW8082	05/29/15 03:47 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	05/29/15 03:47 / jem

- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-017
Client Sample ID: TP7-1 5 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 14:25
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	18	wt%		0.2		SW3550A	05/28/15 12:30 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.41		SW8082	05/29/15 13:16 / jem
Aroclor 1221	ND	mg/kg-dry		0.82		SW8082	05/29/15 13:16 / jem
Aroclor 1232	ND	mg/kg-dry		0.41		SW8082	05/29/15 13:16 / jem
Aroclor 1242	ND	mg/kg-dry		0.41		SW8082	05/29/15 13:16 / jem
Aroclor 1248	ND	mg/kg-dry		0.41		SW8082	05/29/15 13:16 / jem
Aroclor 1254	17	mg/kg-dry		0.41		SW8082	05/29/15 13:16 / jem
Aroclor 1260	ND	mg/kg-dry		0.41		SW8082	05/29/15 13:16 / jem
Aroclor 1262	ND	mg/kg-dry		0.41		SW8082	05/29/15 13:16 / jem
Aroclor 1268	ND	mg/kg-dry		0.41		SW8082	05/29/15 13:16 / jem
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	05/29/15 13:16 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	05/29/15 13:16 / jem

-The Reporting Limits reflect a 20 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-018
Client Sample ID: TP7-2 10 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 14:30
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	16	wt%		0.2		SW3550A	05/28/15 12:37 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	05/29/15 04:43 / jem
Aroclor 1221	ND	mg/kg-dry		0.040		SW8082	05/29/15 04:43 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	05/29/15 04:43 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	05/29/15 04:43 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	05/29/15 04:43 / jem
Aroclor 1254	ND	mg/kg-dry		0.020		SW8082	05/29/15 04:43 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	05/29/15 04:43 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	05/29/15 04:43 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	05/29/15 04:43 / jem
Surr: Decachlorobiphenyl	98.0	%REC		50-126		SW8082	05/29/15 04:43 / jem
Surr: Tetrachloro-m-xylene	53.0	%REC		42-115		SW8082	05/29/15 04:43 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033
Lab ID: B15052149-019
Client Sample ID: TP7-3 15 Feet

Report Date: 06/02/15
Collection Date: 05/27/15 14:40
DateReceived: 05/28/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	17	wt%		0.2		SW3550A	05/28/15 12:56 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	05/29/15 05:10 / jem
Aroclor 1221	ND	mg/kg-dry		0.041		SW8082	05/29/15 05:10 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	05/29/15 05:10 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	05/29/15 05:10 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	05/29/15 05:10 / jem
Aroclor 1254	0.14	mg/kg-dry		0.020		SW8082	05/29/15 05:10 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	05/29/15 05:10 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	05/29/15 05:10 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	05/29/15 05:10 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	05/29/15 05:10 / jem
Surr: Tetrachloro-m-xylene	64.0	%REC		42-115		SW8082	05/29/15 05:10 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 06/02/15

Project: Stimson Mill #350.0033 **Work Order:** B15052149

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 89959
Lab ID: MB-89959	Method Blank				Run: AECD.I_150528A				05/28/15 13:48
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	91	50	126			
Surr: Tetrachloro-m-xylene			0.0017	58	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254A-89959	Laboratory Control Sample				Run: AECD.I_150528A				05/28/15 14:16
Aroclor 1254	0.296	mg/kg	0.017	88	62	126			
Surr: Decachlorobiphenyl			0.0017	90	50	126			
Surr: Tetrachloro-m-xylene			0.0017	53	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15052149-001AMB	Sample Matrix Spike				Run: AECD.I_150528A				05/28/15 20:20
Aroclor 1254	0.670	mg/kg-dry	0.020	43	62	126			S
Surr: Decachlorobiphenyl			0.0020	94	50	126			
Surr: Tetrachloro-m-xylene			0.0020	63	42	115			
-The low recovery for Aroclor 1254 in this matrix spike sample is attributed to a non-homogeneous sample matrix.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15052149-001ADB	Sample Matrix Spike Duplicate				Run: AECD.I_150528A				05/28/15 20:48
Aroclor 1254	0.604	mg/kg-dry	0.020	26	62	126	10	40	S
Surr: Decachlorobiphenyl			0.0020	94	50	126			
Surr: Tetrachloro-m-xylene			0.0020	62	42	115			
-The low recovery for Aroclor 1254 in this matrix spike sample is attributed to a non-homogeneous sample matrix.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15052149-001ADUP	Sample Duplicate				Run: AECD.I_150528A				05/29/15 15:36
Aroclor 1016	ND	mg/kg-dry	0.020					40	
Aroclor 1221	ND	mg/kg-dry	0.041					40	
Aroclor 1232	ND	mg/kg-dry	0.020					40	
Aroclor 1242	ND	mg/kg-dry	0.020					40	
Aroclor 1248	ND	mg/kg-dry	0.020					40	
Aroclor 1254	0.157	mg/kg-dry	0.020				100	40	R
Aroclor 1260	ND	mg/kg-dry	0.020					40	
Aroclor 1262	ND	mg/kg-dry	0.020					40	
Aroclor 1268	ND	mg/kg-dry	0.020					40	
Surr: Decachlorobiphenyl			0.0020	98	50	126			
Surr: Tetrachloro-m-xylene			0.0020	60	42	115			
- The higher than normal Relative Percent Difference (RPD) is attributed to a non-homogeneous sample matrix.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

R - RPD exceeds advisory limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Mill #350.0033

Report Date: 06/02/15
Work Order: B15052149

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 89959
Lab ID: B15052149-001AMB2	Sample Matrix Spike				Run: AECD.I_150528A				05/29/15 16:04
Aroclor 1254	0.610	mg/kg-dry	0.020	113	62	126			
Surr: Decachlorobiphenyl			0.0020	98	50	126			
Surr: Tetrachloro-m-xylene			0.0020	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15052149-001ADB2	Sample Matrix Spike Duplicate				Run: AECD.I_150528A				05/29/15 16:32
Aroclor 1254	0.636	mg/kg-dry	0.021	118	62	126	4.2	40	
Surr: Decachlorobiphenyl			0.0021	101	50	126			
Surr: Tetrachloro-m-xylene			0.0021	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B15052149

Login completed by:	Leslie S. Cadreau	Date Received:	5/28/2015
Reviewed by:	BL2000\jmueller	Received by:	dlf
Reviewed Date:	5/28/2015	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.5°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

RUSH Please

PLEASE PRINT (Provide as much information as possible.)

Company Name: Newfields	Project Name, PWS, Permit, Etc.: Stimson Mill 350.0033	Sample Origin State:	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address (Required):	Contact Name: Tyler Etzel	Phone/Fax: 406 549 8270	Cell:
☒ No Hard Copy Email: tetzel@newfields.com	Invoice Contact & Phone: Donna McCammon	Same as above	Purchase Order:
Invoice Address (Required):			Quote/Bottle Order: 91586
☒ No Hard Copy Email: dmccammon@newfields.			

Special Report/Formats:
- ☐ DW
- ☐ POTW/WWTP
- ☐ State: _____
- ☐ Other: _____
- ☐ EDD/EDT (Electronic Data) Format: _____
- ☐ LEVEL IV
- ☐ NELAC

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: Please Rush B150521149

Shipped by: Rtn UPS Grd

Cooler ID(s): TB

Receipt Temp: 2.5 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N

Intact: Y N

Signature Match: Y N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water; Number of Containers)	PCBs Method 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	LABORATORY USE ONLY
1 TP1-1 (5')	5/27/15	815	S	X			X	-001
2 TP1-2 (10')		830	S	X			X	-002
3 TP1-3 (15')		845	S	X			X	-003
4 TP2-1 (5')		1330	S	X			X	-004
5 TP2-2 (10')		1335	S	X			X	-005
6 TP2-3 (15')		1340	S	X			X	-006
7 TP3-1 (5')		940	S	X			X	-007
8 TP3-2 (10')		950	S	X			X	-008
9 TP3-3 (15')		1010	S	X			X	-009
10 TP4-Inside tank		1345	S	X			X	-010

3 day rush per Sharie L.C.

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Louise Spencer	5/27/15 1600	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: 5/28/15 0930		[signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

RUSH Please

PLEASE PRINT (Provide as much information as possible.)

Company Name: Newfields

Report Mail Address (Required):

☒ No Hard Copy Email: tetzel@newfields.com

Invoice Address (Required):

☒ No Hard Copy Email: dmccammon@newfields.com

Project Name, PWS, Permit, Etc.: Stimson 350.0033

Contact Name: Tyler Etzel

Phone/Fax: 406 549 8270

Invoice Contact & Phone: Donna McCammon same as above

Sample Origin State: MT

Cell: —

Purchase Order:

EPA/State Compliance: Yes ☐ No ☐

Sampler: (Please Print) Louise Spencer

Quote/Bottle Order: 91586

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Shipped by: Rm UPS Grd

Cooler ID(s): TB

Receipt Temp: 2.5 2 °C

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

Special Report/Formats:

☐ DW ☐ POTW/WWTP ☐ State: ____ ☐ Other: ____

☐ EDD/EDT (Electronic Data) Format: ____ ☐ LEVEL IV ☐ NELAC

Comments:

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs Method 8082									SEE ATTACHED	Standard Turnaround (TAT)	RUSH		LABORATORY USE ONLY
1	TP5-1 (5')	5/27/15	1210	S	X											X	B15052149	-011
2	TP5-2 (10')	↓	1215	S	X											X		-012
3	TP5-3 (15')		1225	S	X											X		-013
4	TP6-1 (5')		1045	S	X											X		-014
5	TP6-2 (10')		1100	S	X											X		-015
6	TP6-3 (15')		1105	S	X											X		-016
7	TP7-1 (5')		1425	S	X											X		-017
8	TP7-2 (10')		1430	S	X											X		-018
9	TP7-3 (13')		1440	S	X											X		-019
10																		

Custody Record MUST be Signed

Relinquished by (print): Louise Spencer Date/Time: 5/27/15 1600 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: 5/28/15 0930 Date/Time: Signature: [signature]

Sample Disposal: Return to Client: ____ Lab Disposal: ____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. ...energylab.com for additional information, downloadable fee schedule, forms, and links.

APPENDIX F

June 2015 Soil Boring Analytical Results

ANALYTICAL SUMMARY REPORT

June 17, 2015

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B15060856

Project Name: Stimson 350.0033.005

Energy Laboratories Inc Billings MT received the following 20 samples for NewFields on 6/9/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B15060856-001	CB1B-1	06/04/15 16:20	06/09/15	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B15060856-002	CB1B-3 at 19-22 Feet	06/04/15 16:50	06/09/15	Soil	Same As Above
B15060856-003	CB1B-4 at 23-24 Feet	06/04/15 18:30	06/09/15	Soil	Same As Above
B15060856-004	CB1B-5 at 26-27 Feet	06/04/15 18:30	06/09/15	Soil	Same As Above
B15060856-005	CB5-3 at 8 Feet	06/04/15 10:10	06/09/15	Soil	Same As Above
B15060856-006	CB5-5	06/04/15 11:30	06/09/15	Soil	Same As Above
B15060856-007	CB5-8	06/04/15 13:00	06/09/15	Soil	Same As Above
B15060856-008	CB5-9	06/04/15 13:00	06/09/15	Soil	Same As Above
B15060856-009	CB6-1	06/05/15 11:40	06/09/15	Soil	Same As Above
B15060856-010	CB6-2	06/05/15 12:05	06/09/15	Soil	Same As Above
B15060856-011	CB6-3	06/05/15 12:30	06/09/15	Soil	Same As Above
B15060856-012	CB6-5	06/05/15 12:40	06/09/15	Soil	Same As Above
B15060856-013	CB7-1	06/05/15 13:30	06/09/15	Soil	Same As Above
B15060856-014	CB7-2	06/05/15 13:40	06/09/15	Soil	Same As Above
B15060856-015	CB7-3	06/05/15 14:00	06/09/15	Soil	Same As Above
B15060856-016	CB7-4	06/05/15 14:05	06/09/15	Soil	Same As Above
B15060856-017	CB8-1	06/05/15 15:10	06/09/15	Soil	Same As Above
B15060856-018	CB8-2	06/05/15 15:15	06/09/15	Soil	Same As Above
B15060856-019	CB8-3	06/05/15 16:00	06/09/15	Soil	Same As Above
B15060856-020	CB8-4	06/05/15 16:20	06/09/15	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-001
Client Sample ID: CB1B-1

Report Date: 06/17/15
Collection Date: 06/04/15 16:20
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	45	wt%		0.2		SW3550A	06/10/15 08:13 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		31		SW8082	06/11/15 08:07 / jem
Aroclor 1221	ND	mg/kg-dry		62		SW8082	06/11/15 08:07 / jem
Aroclor 1232	ND	mg/kg-dry		31		SW8082	06/11/15 08:07 / jem
Aroclor 1242	ND	mg/kg-dry		31		SW8082	06/11/15 08:07 / jem
Aroclor 1248	ND	mg/kg-dry		31		SW8082	06/11/15 08:07 / jem
Aroclor 1254	352	mg/kg-dry		31		SW8082	06/11/15 08:07 / jem
Aroclor 1260	ND	mg/kg-dry		31		SW8082	06/11/15 08:07 / jem
Aroclor 1262	ND	mg/kg-dry		31		SW8082	06/11/15 08:07 / jem
Aroclor 1268	ND	mg/kg-dry		31		SW8082	06/11/15 08:07 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	06/11/15 08:07 / jem
Surr: Tetrachloro-m-xylene	70.0	%REC		42-115		SW8082	06/10/15 18:37 / jem

-The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-002
Client Sample ID: CB1B-3 at 19-22 Feet

Report Date: 06/17/15
Collection Date: 06/04/15 16:50
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	20	wt%		0.2		SW3550A	06/10/15 08:29 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		106		SW8082	06/11/15 16:34 / jem
Aroclor 1221	ND	mg/kg-dry		211		SW8082	06/11/15 16:34 / jem
Aroclor 1232	ND	mg/kg-dry		106		SW8082	06/11/15 16:34 / jem
Aroclor 1242	ND	mg/kg-dry		106		SW8082	06/11/15 16:34 / jem
Aroclor 1248	ND	mg/kg-dry		106		SW8082	06/11/15 16:34 / jem
Aroclor 1254	294	mg/kg-dry		106		SW8082	06/11/15 16:34 / jem
Aroclor 1260	ND	mg/kg-dry		106		SW8082	06/11/15 16:34 / jem
Aroclor 1262	ND	mg/kg-dry		106		SW8082	06/11/15 16:34 / jem
Aroclor 1268	ND	mg/kg-dry		106		SW8082	06/11/15 16:34 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	06/11/15 16:34 / jem
Surr: Tetrachloro-m-xylene	82.0	%REC		42-115		SW8082	06/10/15 23:04 / jem

-The Reporting Limits reflect a 5000 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-003
Client Sample ID: CB1B-4 at 23-24 Feet

Report Date: 06/17/15
Collection Date: 06/04/15 18:30
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	16	wt%		0.2		SW3550A	06/10/15 08:43 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		20		SW8082	06/11/15 08:34 / jem
Aroclor 1221	ND	mg/kg-dry		40		SW8082	06/11/15 08:34 / jem
Aroclor 1232	ND	mg/kg-dry		20		SW8082	06/11/15 08:34 / jem
Aroclor 1242	ND	mg/kg-dry		20		SW8082	06/11/15 08:34 / jem
Aroclor 1248	ND	mg/kg-dry		20		SW8082	06/11/15 08:34 / jem
Aroclor 1254	297	mg/kg-dry		20		SW8082	06/11/15 08:34 / jem
Aroclor 1260	ND	mg/kg-dry		20		SW8082	06/11/15 08:34 / jem
Aroclor 1262	ND	mg/kg-dry		20		SW8082	06/11/15 08:34 / jem
Aroclor 1268	ND	mg/kg-dry		20		SW8082	06/11/15 08:34 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	06/11/15 08:34 / jem
Surr: Tetrachloro-m-xylene	84.0	%REC		42-115		SW8082	06/10/15 19:04 / jem

-The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-004
Client Sample ID: CB1B-5 at 26-27 Feet

Report Date: 06/17/15
Collection Date: 06/04/15 18:30
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.7	wt%		0.2		SW3550A	06/10/15 08:48 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		19		SW8082	06/11/15 09:00 / jem
Aroclor 1221	ND	mg/kg-dry		37		SW8082	06/11/15 09:00 / jem
Aroclor 1232	ND	mg/kg-dry		19		SW8082	06/11/15 09:00 / jem
Aroclor 1242	ND	mg/kg-dry		19		SW8082	06/11/15 09:00 / jem
Aroclor 1248	ND	mg/kg-dry		19		SW8082	06/11/15 09:00 / jem
Aroclor 1254	758	mg/kg-dry		19		SW8082	06/11/15 09:00 / jem
Aroclor 1260	ND	mg/kg-dry		19		SW8082	06/11/15 09:00 / jem
Aroclor 1262	ND	mg/kg-dry		19		SW8082	06/11/15 09:00 / jem
Aroclor 1268	ND	mg/kg-dry		19		SW8082	06/11/15 09:00 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	06/11/15 09:00 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	06/10/15 19:30 / jem

-The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-005
Client Sample ID: CB5-3 at 8 Feet

Report Date: 06/17/15
Collection Date: 06/04/15 10:10
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	06/10/15 08:49 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		189		SW8082	06/11/15 13:54 / jem
Aroclor 1221	ND	mg/kg-dry		379		SW8082	06/11/15 13:54 / jem
Aroclor 1232	ND	mg/kg-dry		189		SW8082	06/11/15 13:54 / jem
Aroclor 1242	ND	mg/kg-dry		189		SW8082	06/11/15 13:54 / jem
Aroclor 1248	ND	mg/kg-dry		189		SW8082	06/11/15 13:54 / jem
Aroclor 1254	4460	mg/kg-dry		189		SW8082	06/11/15 13:54 / jem
Aroclor 1260	ND	mg/kg-dry		189		SW8082	06/11/15 13:54 / jem
Aroclor 1262	ND	mg/kg-dry		189		SW8082	06/11/15 13:54 / jem
Aroclor 1268	ND	mg/kg-dry		189		SW8082	06/11/15 13:54 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	06/11/15 13:54 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	06/10/15 19:57 / jem

-The Reporting Limits reflect a 10,000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-006
Client Sample ID: CB5-5

Report Date: 06/17/15
Collection Date: 06/04/15 11:30
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.9	wt%		0.2		SW3550A	06/10/15 09:01 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		187		SW8082	06/11/15 14:20 / jem
Aroclor 1221	ND	mg/kg-dry		374		SW8082	06/11/15 14:20 / jem
Aroclor 1232	ND	mg/kg-dry		187		SW8082	06/11/15 14:20 / jem
Aroclor 1242	ND	mg/kg-dry		187		SW8082	06/11/15 14:20 / jem
Aroclor 1248	ND	mg/kg-dry		187		SW8082	06/11/15 14:20 / jem
Aroclor 1254	2940	mg/kg-dry		187		SW8082	06/11/15 14:20 / jem
Aroclor 1260	ND	mg/kg-dry		187		SW8082	06/11/15 14:20 / jem
Aroclor 1262	ND	mg/kg-dry		187		SW8082	06/11/15 14:20 / jem
Aroclor 1268	ND	mg/kg-dry		187		SW8082	06/11/15 14:20 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	06/11/15 14:20 / jem
Surr: Tetrachloro-m-xylene	80.0	%REC		42-115		SW8082	06/10/15 20:24 / jem

-The Reporting Limits reflect a 10,000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-007
Client Sample ID: CB5-8

Report Date: 06/17/15
Collection Date: 06/04/15 13:00
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.5	wt%		0.2		SW3550A	06/10/15 09:07 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		38		SW8082	06/11/15 16:07 / jem
Aroclor 1221	ND	mg/kg-dry		75		SW8082	06/11/15 16:07 / jem
Aroclor 1232	ND	mg/kg-dry		38		SW8082	06/11/15 16:07 / jem
Aroclor 1242	ND	mg/kg-dry		38		SW8082	06/11/15 16:07 / jem
Aroclor 1248	ND	mg/kg-dry		38		SW8082	06/11/15 16:07 / jem
Aroclor 1254	1630	mg/kg-dry		38		SW8082	06/11/15 16:07 / jem
Aroclor 1260	ND	mg/kg-dry		38		SW8082	06/11/15 16:07 / jem
Aroclor 1262	ND	mg/kg-dry		38		SW8082	06/11/15 16:07 / jem
Aroclor 1268	ND	mg/kg-dry		38		SW8082	06/11/15 16:07 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	06/11/15 16:07 / jem
Surr: Tetrachloro-m-xylene	88.0	%REC		42-115		SW8082	06/10/15 20:51 / jem

-The Reporting Limits reflect a 2000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-008
Client Sample ID: CB5-9

Report Date: 06/17/15
Collection Date: 06/04/15 13:00
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.2	wt%		0.2		SW3550A	06/10/15 09:17 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.093		SW8082	06/11/15 10:47 / jem
Aroclor 1221	ND	mg/kg-dry		0.19		SW8082	06/11/15 10:47 / jem
Aroclor 1232	ND	mg/kg-dry		0.093		SW8082	06/11/15 10:47 / jem
Aroclor 1242	ND	mg/kg-dry		0.093		SW8082	06/11/15 10:47 / jem
Aroclor 1248	ND	mg/kg-dry		0.093		SW8082	06/11/15 10:47 / jem
Aroclor 1254	2.8	mg/kg-dry		0.093		SW8082	06/11/15 10:47 / jem
Aroclor 1260	ND	mg/kg-dry		0.093		SW8082	06/11/15 10:47 / jem
Aroclor 1262	ND	mg/kg-dry		0.093		SW8082	06/11/15 10:47 / jem
Aroclor 1268	ND	mg/kg-dry		0.093		SW8082	06/11/15 10:47 / jem
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	06/11/15 10:47 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	06/11/15 10:47 / jem

-The Reporting Limits reflect a 5 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-009
Client Sample ID: CB6-1

Report Date: 06/17/15
Collection Date: 06/05/15 11:40
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	17	wt%		0.2		SW3550A	06/10/15 09:21 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	06/11/15 22:22 / jem
Aroclor 1221	ND	mg/kg-dry		0.041		SW8082	06/11/15 22:22 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	06/11/15 22:22 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	06/11/15 22:22 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	06/11/15 22:22 / jem
Aroclor 1254	0.62	mg/kg-dry		0.020		SW8082	06/11/15 22:22 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	06/11/15 22:22 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	06/11/15 22:22 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	06/11/15 22:22 / jem
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	06/11/15 22:22 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	06/11/15 22:22 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-010
Client Sample ID: CB6-2

Report Date: 06/17/15
Collection Date: 06/05/15 12:05
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.0	wt%		0.2		SW3550A	06/10/15 09:28 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/11/15 22:49 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	06/11/15 22:49 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/11/15 22:49 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/11/15 22:49 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/11/15 22:49 / jem
Aroclor 1254	0.085	mg/kg-dry		0.018		SW8082	06/11/15 22:49 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/11/15 22:49 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/11/15 22:49 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/11/15 22:49 / jem
Surr: Decachlorobiphenyl	105	%REC		50-126		SW8082	06/11/15 22:49 / jem
Surr: Tetrachloro-m-xylene	66.0	%REC		42-115		SW8082	06/11/15 22:49 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-011
Client Sample ID: CB6-3

Report Date: 06/17/15
Collection Date: 06/05/15 12:30
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.2	wt%		0.2		SW3550A	06/10/15 09:33 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/11/15 23:15 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	06/11/15 23:15 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/11/15 23:15 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/11/15 23:15 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/11/15 23:15 / jem
Aroclor 1254	0.55	mg/kg-dry		0.018		SW8082	06/11/15 23:15 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/11/15 23:15 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/11/15 23:15 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/11/15 23:15 / jem
Surr: Decachlorobiphenyl	117	%REC		50-126		SW8082	06/11/15 23:15 / jem
Surr: Tetrachloro-m-xylene	70.0	%REC		42-115		SW8082	06/11/15 23:15 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-012
Client Sample ID: CB6-5

Report Date: 06/17/15
Collection Date: 06/05/15 12:40
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.7	wt%		0.2		SW3550A	06/10/15 09:40 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/11/15 01:44 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	06/11/15 01:44 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/11/15 01:44 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/11/15 01:44 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/11/15 01:44 / jem
Aroclor 1254	0.69	mg/kg-dry		0.018		SW8082	06/11/15 01:44 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/11/15 01:44 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/11/15 01:44 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/11/15 01:44 / jem
Surr: Decachlorobiphenyl	107	%REC		50-126		SW8082	06/11/15 01:44 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	06/11/15 01:44 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-013
Client Sample ID: CB7-1

Report Date: 06/17/15
Collection Date: 06/05/15 13:30
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	06/10/15 09:46 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.38		SW8082	06/11/15 12:33 / jem
Aroclor 1221	ND	mg/kg-dry		0.77		SW8082	06/11/15 12:33 / jem
Aroclor 1232	ND	mg/kg-dry		0.38		SW8082	06/11/15 12:33 / jem
Aroclor 1242	ND	mg/kg-dry		0.38		SW8082	06/11/15 12:33 / jem
Aroclor 1248	ND	mg/kg-dry		0.38		SW8082	06/11/15 12:33 / jem
Aroclor 1254	19	mg/kg-dry		0.38		SW8082	06/11/15 12:33 / jem
Aroclor 1260	ND	mg/kg-dry		0.38		SW8082	06/11/15 12:33 / jem
Aroclor 1262	ND	mg/kg-dry		0.38		SW8082	06/11/15 12:33 / jem
Aroclor 1268	ND	mg/kg-dry		0.38		SW8082	06/11/15 12:33 / jem
Surr: Decachlorobiphenyl	129	%REC	S	50-126		SW8082	06/11/15 12:33 / jem
Surr: Tetrachloro-m-xylene	89.0	%REC		42-115		SW8082	06/11/15 12:33 / jem

-The Reporting Limits reflect a 20 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-014
Client Sample ID: CB7-2

Report Date: 06/17/15
Collection Date: 06/05/15 13:40
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	06/10/15 09:55 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.093		SW8082	06/11/15 13:00 / jem
Aroclor 1221	ND	mg/kg-dry		0.19		SW8082	06/11/15 13:00 / jem
Aroclor 1232	ND	mg/kg-dry		0.093		SW8082	06/11/15 13:00 / jem
Aroclor 1242	ND	mg/kg-dry		0.093		SW8082	06/11/15 13:00 / jem
Aroclor 1248	ND	mg/kg-dry		0.093		SW8082	06/11/15 13:00 / jem
Aroclor 1254	2.9	mg/kg-dry		0.093		SW8082	06/11/15 13:00 / jem
Aroclor 1260	ND	mg/kg-dry		0.093		SW8082	06/11/15 13:00 / jem
Aroclor 1262	ND	mg/kg-dry		0.093		SW8082	06/11/15 13:00 / jem
Aroclor 1268	ND	mg/kg-dry		0.093		SW8082	06/11/15 13:00 / jem
Surr: Decachlorobiphenyl	127	%REC	S	50-126		SW8082	06/11/15 13:00 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	06/11/15 13:00 / jem

-The Reporting Limits reflect a 5 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-015
Client Sample ID: CB7-3

Report Date: 06/17/15
Collection Date: 06/05/15 14:00
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	06/10/15 10:01 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	06/11/15 13:27 / jem
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	06/11/15 13:27 / jem
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	06/11/15 13:27 / jem
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	06/11/15 13:27 / jem
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	06/11/15 13:27 / jem
Aroclor 1254	4.4	mg/kg-dry		0.19		SW8082	06/11/15 13:27 / jem
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	06/11/15 13:27 / jem
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	06/11/15 13:27 / jem
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	06/11/15 13:27 / jem
Surr: Decachlorobiphenyl	123	%REC		50-126		SW8082	06/11/15 13:27 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	06/11/15 13:27 / jem

-The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-016
Client Sample ID: CB7-4

Report Date: 06/17/15
Collection Date: 06/05/15 14:05
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	06/10/15 10:06 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	06/11/15 23:42 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	06/11/15 23:42 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	06/11/15 23:42 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	06/11/15 23:42 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	06/11/15 23:42 / jem
Aroclor 1254	0.60	mg/kg-dry		0.019		SW8082	06/11/15 23:42 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	06/11/15 23:42 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	06/11/15 23:42 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	06/11/15 23:42 / jem
Surr: Decachlorobiphenyl	115	%REC		50-126		SW8082	06/11/15 23:42 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	06/11/15 23:42 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-017
Client Sample ID: CB8-1

Report Date: 06/17/15
Collection Date: 06/05/15 15:10
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.5	wt%		0.2		SW3550A	06/10/15 10:10 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/11/15 03:58 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	06/11/15 03:58 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/11/15 03:58 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/11/15 03:58 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/11/15 03:58 / jem
Aroclor 1254	0.44	mg/kg-dry		0.018		SW8082	06/11/15 03:58 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/11/15 03:58 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/11/15 03:58 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/11/15 03:58 / jem
Surr: Decachlorobiphenyl	138	%REC	S	50-126		SW8082	06/11/15 03:58 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	06/11/15 03:58 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded. The high percent recovery of Decachlorobiphenyl is attributed to co-eluting interference.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-018
Client Sample ID: CB8-2

Report Date: 06/17/15
Collection Date: 06/05/15 15:15
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.0	wt%		0.2		SW3550A	06/10/15 10:19 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:25 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	06/11/15 04:25 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:25 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:25 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:25 / jem
Aroclor 1254	0.030	mg/kg-dry		0.018		SW8082	06/11/15 04:25 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:25 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:25 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:25 / jem
Surr: Decachlorobiphenyl	111	%REC		50-126		SW8082	06/11/15 04:25 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	06/11/15 04:25 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-019
Client Sample ID: CB8-3

Report Date: 06/17/15
Collection Date: 06/05/15 16:00
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.4	wt%		0.2		SW3550A	06/10/15 10:28 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:51 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	06/11/15 04:51 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:51 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:51 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:51 / jem
Aroclor 1254	0.12	mg/kg-dry		0.018		SW8082	06/11/15 04:51 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:51 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:51 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/11/15 04:51 / jem
Surr: Decachlorobiphenyl	112	%REC		50-126		SW8082	06/11/15 04:51 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	06/11/15 04:51 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.005
Lab ID: B15060856-020
Client Sample ID: CB8-4

Report Date: 06/17/15
Collection Date: 06/05/15 16:20
DateReceived: 06/09/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	06/10/15 10:30 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	06/11/15 05:18 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	06/11/15 05:18 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	06/11/15 05:18 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	06/11/15 05:18 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	06/11/15 05:18 / jem
Aroclor 1254	0.17	mg/kg-dry		0.019		SW8082	06/11/15 05:18 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	06/11/15 05:18 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	06/11/15 05:18 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	06/11/15 05:18 / jem
Surr: Decachlorobiphenyl	105	%REC		50-126		SW8082	06/11/15 05:18 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	06/11/15 05:18 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 06/17/15

Project: Stimson 350.0033.005 **Work Order:** B15060856

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 90317
Lab ID: MB-90317	Method Blank				Run: HECD.I_150610A				06/10/15 17:17
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	99	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-90317	Laboratory Control Sample				Run: HECD.I_150610A				06/10/15 17:44
Aroclor 1254	0.343	mg/kg	0.017	103	62	126			
Surr: Decachlorobiphenyl			0.0017	101	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15060856-002AMB	Sample Duplicate				Run: HECD.I_150610A				06/11/15 17:01
Aroclor 1016	ND	mg/kg-dry	110					40	
Aroclor 1221	ND	mg/kg-dry	210					40	
Aroclor 1232	ND	mg/kg-dry	110					40	
Aroclor 1242	ND	mg/kg-dry	110					40	
Aroclor 1248	ND	mg/kg-dry	110					40	
Aroclor 1254	289	mg/kg-dry	110				1.7	40	
Aroclor 1260	ND	mg/kg-dry	110					40	
Aroclor 1262	ND	mg/kg-dry	110					40	
Aroclor 1268	ND	mg/kg-dry	110					40	
Surr: Decachlorobiphenyl			11		50	126			O
-The Reporting Limits reflect a 5000 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15060856-002ADB	Sample Duplicate				Run: HECD.I_150610A				06/11/15 17:27
Aroclor 1016	ND	mg/kg-dry	110					40	
Aroclor 1221	ND	mg/kg-dry	210					40	
Aroclor 1232	ND	mg/kg-dry	110					40	
Aroclor 1242	ND	mg/kg-dry	110					40	
Aroclor 1248	ND	mg/kg-dry	110					40	
Aroclor 1254	262	mg/kg-dry	110				11	40	
Aroclor 1260	ND	mg/kg-dry	110					40	
Aroclor 1262	ND	mg/kg-dry	110					40	
Aroclor 1268	ND	mg/kg-dry	110					40	
Surr: Decachlorobiphenyl			11		50	126			O
- Since the amount of Aroclor 1254 found in the sample was significantly higher than the spike amount, the Matrix Spike and Matrix Spike Duplicate are calculated as Duplicate samples.									
-The Reporting Limits reflect a 5000 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

O - Diluted out.

Work Order Receipt Checklist

NewFields

B15060856

Login completed by:	Randa Nees	Date Received:	6/9/2015
Reviewed by:	BL2000\tedwards	Received by:	lg
Reviewed Date:	6/10/2015	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	3.1°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson 350.0033.005

Sample Origin State: MT

EPA/State Compliance: Yes ☑ No ☐

Report Mail Address (Required): Tyler Etzel

☑ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: tetzel@newfields.com

Sampler: (Please Print) Ty Schmeckel

Invoice Contact & Phone:

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): Donna McCommon

☑ No Hard Copy Email: dmccommon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs Method 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments:	LABORATORY USE ONLY
1 CB1B - 1	6/4/15	16:20	S	X		X			L6/5060856-001
2 CB1B - 3 @ 19-22'	6/4/15	16:50							002
3 CB1B - 4 @ 23-24'	6/4/15	18:30							003
4 CB1B - 5 @ 26-27'	6/4/15	18:30							004
5 CB5 - 3 @ 7'	6/4/15	10:10							005
6 CB5 - 5	6/4/15	11:30							006
7 CB5 - 8	6/4/15	13:00							007
8 CB5 - 9	6/4/15	15:00							008
9 CB6 - 1	6/5/15	11:40							009
10 CB6 - 2	6/5/15	12:05							010

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: RENUBERD

Cooler ID(s):

Receipt Temp 3.1 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmeckel	6/8/15 16:45				

Received by Laboratory: Date/Time: 6-9-15 9:00 Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ENERGY

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: Newfields	Project Name, PWS, Permit, Etc.: Stimson 350.033.005	Sample Origin State: MT	EPA/State Compliance: Yes ☑ No ☐
Report Mail Address: tetzel@newfields.com	Contact Name: Tyler Etzel Phone/Fax: 549 8270	Email: tetzel@newfields.com	Sampler: (Please Print) Ty Schmechel
Invoice Address: dmccammon@newfields.com	Invoice Contact & Phone: Donna McCammon	Purchase Order:	Quote/Bottle Order:

Special Report/Formats:

☐ DW ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____

☐ EDD/EDT (Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

➡ RUSH: Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: Ryan UPS GTRd

Cooler ID(s):

Receipt Temp 3.1 °C TB

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs Method 8082	SEE ATTACHED	Standard Turnaround (TAT)	LABORATORY USE ONLY
1	CB6-3	6/5/15	12:30	S	X		X	L1506052-01
2	CB6-5	6/5/15	12:40					02
3	CB7-1	6/5/15	13:30					03
4	CB7-2	6/5/15	13:40					04
5	CB7-3	6/5/15	14:00					05
6	CB7-4	6/5/15	14:05					06
7	CB8-1	6/5/15	15:10					07
8	CB8-2	6/5/15	15:15					08
9	CB8-3	6/5/15	16:00					09
10	CB8-4	6/5/15	16:20					10

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	6/8/15 1645				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	6-9-15 9:00	

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

June 18, 2015

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B15061184 Quote ID: B3097 - Stimson

Project Name: Stimson 350.0033

Energy Laboratories Inc Billings MT received the following 13 samples for NewFields on 6/11/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B15061184-001	CB2B-1	06/09/15 9:17	06/11/15	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B15061184-002	CB2B-3	06/09/15 9:25	06/11/15	Soil	Same As Above
B15061184-003	CB2B-4	06/09/15 9:41	06/11/15	Soil	Same As Above
B15061184-004	CB2B-6	06/09/15 9:57	06/11/15	Soil	Same As Above
B15061184-005	CB4-1	06/09/15 11:25	06/11/15	Soil	Same As Above
B15061184-006	CB4-3	06/09/15 11:45	06/11/15	Soil	Same As Above
B15061184-007	CB4-4	06/09/15 11:50	06/11/15	Soil	Same As Above
B15061184-008	CB4-5	06/09/15 12:30	06/11/15	Soil	Same As Above
B15061184-009	CB4-6	06/09/15 12:35	06/11/15	Soil	Same As Above
B15061184-010	CB9-3	06/09/15 14:10	06/11/15	Soil	Same As Above
B15061184-011	CB9-4	06/09/15 14:15	06/11/15	Soil	Same As Above
B15061184-012	CB9-5	06/09/15 14:30	06/11/15	Soil	Same As Above
B15061184-013	CB9-6	06/09/15 14:35	06/11/15	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-001
Client Sample ID: CB2B-1

Report Date: 06/18/15
Collection Date: 06/09/15 09:17
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	17	wt%		0.2		SW3550A	06/15/15 15:28 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	06/16/15 03:45 / jem
Aroclor 1221	ND	mg/kg-dry		0.039		SW8082	06/16/15 03:45 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	06/16/15 03:45 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	06/16/15 03:45 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	06/16/15 03:45 / jem
Aroclor 1254	0.86	mg/kg-dry		0.020		SW8082	06/16/15 03:45 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	06/16/15 03:45 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	06/16/15 03:45 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	06/16/15 03:45 / jem
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	06/16/15 03:45 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	06/16/15 03:45 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-002
Client Sample ID: CB2B-3

Report Date: 06/18/15
Collection Date: 06/09/15 09:25
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.6	wt%		0.2		SW3550A	06/15/15 15:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:11 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	06/16/15 04:11 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:11 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:11 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:11 / jem
Aroclor 1254	0.18	mg/kg-dry		0.018		SW8082	06/16/15 04:11 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:11 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:11 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:11 / jem
Surr: Decachlorobiphenyl	108	%REC		50-126		SW8082	06/16/15 04:11 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	06/16/15 04:11 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-003
Client Sample ID: CB2B-4

Report Date: 06/18/15
Collection Date: 06/09/15 09:41
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.7	wt%		0.2		SW3550A	06/15/15 15:47 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:38 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	06/16/15 04:38 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:38 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:38 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:38 / jem
Aroclor 1254	0.071	mg/kg-dry		0.018		SW8082	06/16/15 04:38 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:38 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:38 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 04:38 / jem
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	06/16/15 04:38 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	06/16/15 04:38 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-004
Client Sample ID: CB2B-6

Report Date: 06/18/15
Collection Date: 06/09/15 09:57
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.8	wt%		0.2		SW3550A	06/15/15 15:47 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:04 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	06/16/15 05:04 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:04 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:04 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:04 / jem
Aroclor 1254	0.051	mg/kg-dry		0.018		SW8082	06/16/15 05:04 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:04 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:04 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:04 / jem
Surr: Decachlorobiphenyl	108	%REC		50-126		SW8082	06/16/15 05:04 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	06/16/15 05:04 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-005
Client Sample ID: CB4-1

Report Date: 06/18/15
Collection Date: 06/09/15 11:25
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.9	wt%		0.2		SW3550A	06/15/15 15:47 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.092		SW8082	06/16/15 09:29 / jem
Aroclor 1221	ND	mg/kg-dry		0.18		SW8082	06/16/15 09:29 / jem
Aroclor 1232	ND	mg/kg-dry		0.092		SW8082	06/16/15 09:29 / jem
Aroclor 1242	ND	mg/kg-dry		0.092		SW8082	06/16/15 09:29 / jem
Aroclor 1248	ND	mg/kg-dry		0.092		SW8082	06/16/15 09:29 / jem
Aroclor 1254	2.4	mg/kg-dry		0.092		SW8082	06/16/15 09:29 / jem
Aroclor 1260	ND	mg/kg-dry		0.092		SW8082	06/16/15 09:29 / jem
Aroclor 1262	ND	mg/kg-dry		0.092		SW8082	06/16/15 09:29 / jem
Aroclor 1268	ND	mg/kg-dry		0.092		SW8082	06/16/15 09:29 / jem
Surr: Decachlorobiphenyl	127	%REC	S	50-126		SW8082	06/16/15 09:29 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	06/16/15 09:29 / jem

-The Reporting Limits reflect a 5 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-006
Client Sample ID: CB4-3

Report Date: 06/18/15
Collection Date: 06/09/15 11:45
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.2	wt%		0.2		SW3550A	06/15/15 15:47 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:57 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	06/16/15 05:57 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:57 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:57 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:57 / jem
Aroclor 1254	0.32	mg/kg-dry		0.018		SW8082	06/16/15 05:57 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:57 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:57 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 05:57 / jem
Surr: Decachlorobiphenyl	108	%REC		50-126		SW8082	06/16/15 05:57 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	06/16/15 05:57 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-007
Client Sample ID: CB4-4

Report Date: 06/18/15
Collection Date: 06/09/15 11:50
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.6	wt%		0.2		SW3550A	06/15/15 15:47 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:24 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	06/16/15 06:24 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:24 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:24 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:24 / jem
Aroclor 1254	0.021	mg/kg-dry		0.018		SW8082	06/16/15 06:24 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:24 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:24 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:24 / jem
Surr: Decachlorobiphenyl	111	%REC		50-126		SW8082	06/16/15 06:24 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	06/16/15 06:24 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-008
Client Sample ID: CB4-5

Report Date: 06/18/15
Collection Date: 06/09/15 12:30
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.8	wt%		0.2		SW3550A	06/15/15 15:48 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:50 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	06/16/15 06:50 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:50 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:50 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:50 / jem
Aroclor 1254	0.035	mg/kg-dry		0.018		SW8082	06/16/15 06:50 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:50 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:50 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 06:50 / jem
Surr: Decachlorobiphenyl	96.0	%REC		50-126		SW8082	06/16/15 06:50 / jem
Surr: Tetrachloro-m-xylene	82.0	%REC		42-115		SW8082	06/16/15 06:50 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-009
Client Sample ID: CB4-6

Report Date: 06/18/15
Collection Date: 06/09/15 12:35
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.0	wt%		0.2		SW3550A	06/15/15 15:51 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 07:17 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	06/16/15 07:17 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 07:17 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 07:17 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 07:17 / jem
Aroclor 1254	ND	mg/kg-dry		0.018		SW8082	06/16/15 07:17 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 07:17 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 07:17 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 07:17 / jem
Surr: Decachlorobiphenyl	105	%REC		50-126		SW8082	06/16/15 07:17 / jem
Surr: Tetrachloro-m-xylene	70.0	%REC		42-115		SW8082	06/16/15 07:17 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-010
Client Sample ID: CB9-3

Report Date: 06/18/15
Collection Date: 06/09/15 14:10
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.2	wt%		0.2		SW3550A	06/15/15 15:53 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	06/16/15 07:43 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	06/16/15 07:43 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	06/16/15 07:43 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	06/16/15 07:43 / jem
Aroclor 1248	ND	mg/kg-dry	D	1.4		SW8082	06/16/15 07:43 / jem
Aroclor 1254	ND	mg/kg-dry	D	0.36		SW8082	06/16/15 07:43 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	06/16/15 07:43 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	06/16/15 07:43 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	06/16/15 07:43 / jem
Surr: Decachlorobiphenyl	112	%REC		50-126		SW8082	06/16/15 07:43 / jem
Surr: Tetrachloro-m-xylene	70.0	%REC		42-115		SW8082	06/16/15 07:43 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-011
Client Sample ID: CB9-4

Report Date: 06/18/15
Collection Date: 06/09/15 14:15
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.3	wt%		0.2		SW3550A	06/15/15 15:59 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:10 / jem
Aroclor 1221	ND	mg/kg-dry		0.034		SW8082	06/16/15 08:10 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:10 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:10 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:10 / jem
Aroclor 1254	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:10 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:10 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:10 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:10 / jem
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	06/16/15 08:10 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	06/16/15 08:10 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-012
Client Sample ID: CB9-5

Report Date: 06/18/15
Collection Date: 06/09/15 14:30
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.5	wt%		0.2		SW3550A	06/15/15 16:01 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:36 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	06/16/15 08:36 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:36 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:36 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:36 / jem
Aroclor 1254	0.12	mg/kg-dry		0.018		SW8082	06/16/15 08:36 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:36 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:36 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 08:36 / jem
Surr: Decachlorobiphenyl	112	%REC		50-126		SW8082	06/16/15 08:36 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	06/16/15 08:36 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033
Lab ID: B15061184-013
Client Sample ID: CB9-6

Report Date: 06/18/15
Collection Date: 06/09/15 14:35
DateReceived: 06/11/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.2	wt%		0.2		SW3550A	06/15/15 16:02 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	06/16/15 09:03 / jem
Aroclor 1221	ND	mg/kg-dry		0.034		SW8082	06/16/15 09:03 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	06/16/15 09:03 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	06/16/15 09:03 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	06/16/15 09:03 / jem
Aroclor 1254	ND	mg/kg-dry		0.018		SW8082	06/16/15 09:03 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	06/16/15 09:03 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	06/16/15 09:03 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	06/16/15 09:03 / jem
Surr: Decachlorobiphenyl	114	%REC		50-126		SW8082	06/16/15 09:03 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	06/16/15 09:03 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033

Report Date: 06/18/15
Work Order: B15061184

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 90441
Lab ID: MB-90441	Method Blank				Run: HECD.I_150615A				06/15/15 15:19
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	92	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-90441	Laboratory Control Sample				Run: HECD.I_150615A				06/15/15 15:46
Aroclor 1254	0.332	mg/kg	0.017	101	62	126			
Surr: Decachlorobiphenyl			0.0017	93	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15061299-002AMB	Sample Matrix Spike				Run: HECD.I_150615A				06/15/15 17:06
Aroclor 1254	0.288	mg/kg	0.017	89	62	126			
Surr: Decachlorobiphenyl			0.0017	93	50	126			
Surr: Tetrachloro-m-xylene			0.0017	68	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15061299-002ADB	Sample Matrix Spike Duplicate				Run: HECD.I_150615A				06/15/15 17:32
Aroclor 1254	0.268	mg/kg	0.017	81	62	126	7.3	40	
Surr: Decachlorobiphenyl			0.0017	87	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B15061184

Login completed by: Randa Nees

Reviewed by: BL2000\jmueller

Reviewed Date: 6/12/2015

Date Received: 6/11/2015

Received by: lg

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☐	No ☑	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.3°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sample CB2B-1 was received at the laboratory with the container cracked but the sample was intact. This sample was transferred to another container and analysis continued per LaDonna Weis, Energy Laboratories Organics Co-Supervisor.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: Newfields	Project Name, PWS, Permit, Etc.: Stimson ~~350.0015~~ 350.0033	Sample Origin State: MT	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address (Required):	Contact Name: Tyler Etzel Phone/Fax: 5498270	Cell: —	Sampler: (Please Print) Louise Spencer
☒ No Hard Copy Email: tetzel@newfields.com	Invoice Contact & Phone: Donna McCammon 5498270	Purchase Order: —	Quote/Bottle Order: —
Invoice Address (Required): ☒ No Hard Copy Email: dmccammon@newfields.com			

Special Report/Formats:
☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: RPN UPS Ground
Cooler ID(s):
Receipt Temp 1.3 °C TB
On Ice: (Y) N
Custody Seal: On Bottle Y (N); On Cooler (Y) N
Intact (Y) N
Signature Match (Y) N

#	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other; DW - Drinking Water)	PCBs (Method 8082)	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	LABORATORY USE ONLY
1	CB2B-1	6/9/15	~~1115~~ 917	S	X		X		L1506184-001
2	CB2B-3		~~900~~ 925						002
3	CB2B-4		941						003
4	CB2B-6		957						004
5	CB4-1		1125						005
6	CB4-3		1145						006
7	CB4-4		1150						007
8	CB4-5		1230						008
9	CB4-6		1235						009
10	CB9-3		1410						010

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Louise Spencer	6/10/15 1630				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	6-11-15 9:00	

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: Newfields

Project Name, PWS, Permit, Etc.: Stimson 360.0033

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required):

Contact Name: Tyler Etzel Phone/Fax: 549 8270

Cell: —

Sampler: (Please Print) Louise L Spencer

☒ No Hard Copy Email: tetzel@newfields.com

Invoice Contact & Phone: D. McCammon 549 8270

Purchase Order: —

Quote/Bottle Order: —

Invoice Address (Required):

☒ No Hard Copy Email: dmccammon@newfields

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs (EPA Method 8082)	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments:	LABORATORY USE ONLY
1 CB9-4	6/9/15	1415	S	X		X			L15061184-017
2 CB9-5	↓	1430	↓	↓		↓			012
3 CB9-6		1435							013
4									
5									
6									
7									
8									
9									
10									

→ Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: Renegade

Cooler ID(s):

Receipt Temp 1.3 °C TB

On Ice: (Y) N

Custody Seal On Bottle (Y) N
On Cooler (Y) N
Intact (Y) N
Signature Match (Y) N

Custody Record MUST be Signed

Relinquished by (print): Louise Spencer Date/Time: 6/10/15 1630 Signature:

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: Date/Time: 6-11-15 9:17 Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

APPENDIX G

August 2015 Soil Boring Analytical Results

ANALYTICAL SUMMARY REPORT

August 27, 2015

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B15081868 Quote ID: B3097

Project Name: Stimson

Energy Laboratories Inc Billings MT received the following 23 samples for NewFields on 8/20/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B15081868-001	CB-10-1, 2-3 Feet	08/18/15 8:30	08/20/15	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B15081868-002	CB-10-2, 9-10 Feet	08/18/15 8:55	08/20/15	Soil	Same As Above
B15081868-003	CB-10-3, 13-14 Feet	08/18/15 9:00	08/20/15	Soil	Same As Above
B15081868-004	CB-10-4, 18-19 Feet	08/18/15 9:15	08/20/15	Soil	Same As Above
B15081868-005	CB-10-5, 23-24 Feet	08/18/15 9:20	08/20/15	Soil	Same As Above
B15081868-006	CB-11-1, 4-5 Feet	08/18/15 12:48	08/20/15	Soil	Same As Above
B15081868-007	CB-11-2, 8-9 Feet	08/18/15 12:57	08/20/15	Soil	Same As Above
B15081868-008	CB-11-3, 12-13 Feet	08/18/15 13:00	08/20/15	Soil	Same As Above
B15081868-009	CB-11-4, 18-19 Feet	08/18/15 13:17	08/20/15	Soil	Same As Above
B15081868-010	CB-11-5, 23-24 Feet	08/18/15 13:21	08/20/15	Soil	Same As Above
B15081868-011	CB-12-1, 4-5 Feet	08/18/15 14:46	08/20/15	Soil	Same As Above
B15081868-012	CB-12-2, 8-9 Feet	08/18/15 15:05	08/20/15	Soil	Same As Above
B15081868-013	CB-12-3, 12-13 Feet	08/18/15 15:08	08/20/15	Soil	Same As Above
B15081868-014	CB-12-4, 19-20 Feet	08/18/15 15:20	08/20/15	Soil	Same As Above
B15081868-015	CB-12-5, 28-29 Feet	08/18/15 15:43	08/20/15	Soil	Same As Above
B15081868-016	CB-13-1, 2-3 Feet	08/18/15 10:25	08/20/15	Soil	Same As Above
B15081868-017	CB-13-2, 8-9 Feet	08/18/15 10:30	08/20/15	Soil	Same As Above
B15081868-018	CB-13-3, 12-13 Feet	08/18/15 10:34	08/20/15	Soil	Same As Above
B15081868-019	CB-13-4, 17-18 Feet	08/18/15 10:40	08/20/15	Soil	Same As Above
B15081868-020	CB-13-5, 22-23 Feet	08/18/15 10:43	08/20/15	Soil	Same As Above
B15081868-021	CB-14-1, 28-29 Feet	08/19/15 10:36	08/20/15	Soil	Same As Above
B15081868-022	CB-14-2, 32-33 Feet	08/19/15 10:42	08/20/15	Soil	Same As Above
B15081868-023	CB-14-3, 39-40 Feet	08/19/15 10:48	08/20/15	Soil	Same As Above

ANALYTICAL SUMMARY REPORT

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-001
Client Sample ID: CB-10-1, 2-3 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 08:30
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.6	wt%		0.2		SW3550A	08/20/15 14:23 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.072		SW8082	08/26/15 02:12 / jem
Aroclor 1221	ND	mg/kg-dry		0.14		SW8082	08/26/15 02:12 / jem
Aroclor 1232	ND	mg/kg-dry		0.072		SW8082	08/26/15 02:12 / jem
Aroclor 1242	ND	mg/kg-dry		0.072		SW8082	08/26/15 02:12 / jem
Aroclor 1248	ND	mg/kg-dry		0.072		SW8082	08/26/15 02:12 / jem
Aroclor 1254	1.5	mg/kg-dry		0.072		SW8082	08/26/15 02:12 / jem
Aroclor 1260	ND	mg/kg-dry		0.072		SW8082	08/26/15 02:12 / jem
Aroclor 1262	ND	mg/kg-dry		0.072		SW8082	08/26/15 02:12 / jem
Aroclor 1268	ND	mg/kg-dry		0.072		SW8082	08/26/15 02:12 / jem
Surr: Decachlorobiphenyl	96.0	%REC		50-126		SW8082	08/26/15 02:12 / jem
Surr: Tetrachloro-m-xylene	78.0	%REC		42-115		SW8082	08/26/15 02:12 / jem

-The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-002
Client Sample ID: CB-10-2, 9-10 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 08:55
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	3.5	wt%		0.2		SW3550A	08/20/15 14:24 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	08/23/15 22:46 / jem
Aroclor 1221	ND	mg/kg-dry		0.034		SW8082	08/23/15 22:46 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	08/23/15 22:46 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	08/23/15 22:46 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	08/23/15 22:46 / jem
Aroclor 1254	ND	mg/kg-dry		0.018		SW8082	08/23/15 22:46 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	08/23/15 22:46 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	08/23/15 22:46 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	08/23/15 22:46 / jem
Surr: Decachlorobiphenyl	94.0	%REC		50-126		SW8082	08/23/15 22:46 / jem
Surr: Tetrachloro-m-xylene	78.0	%REC		42-115		SW8082	08/23/15 22:46 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-003
Client Sample ID: CB-10-3, 13-14 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 09:00
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.8	wt%		0.2		SW3550A	08/20/15 14:32 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	08/23/15 23:14 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	08/23/15 23:14 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	08/23/15 23:14 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	08/23/15 23:14 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	08/23/15 23:14 / jem
Aroclor 1254	ND	mg/kg-dry		0.018		SW8082	08/23/15 23:14 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	08/23/15 23:14 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	08/23/15 23:14 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	08/23/15 23:14 / jem
Surr: Decachlorobiphenyl	95.0	%REC		50-126		SW8082	08/23/15 23:14 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	08/23/15 23:14 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-004
Client Sample ID: CB-10-4, 18-19 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 09:15
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	08/21/15 09:24 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/23/15 23:42 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	08/23/15 23:42 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/23/15 23:42 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/23/15 23:42 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/23/15 23:42 / jem
Aroclor 1254	ND	mg/kg-dry		0.019		SW8082	08/23/15 23:42 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/23/15 23:42 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/23/15 23:42 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/23/15 23:42 / jem
Surr: Decachlorobiphenyl	93.0	%REC		50-126		SW8082	08/23/15 23:42 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	08/23/15 23:42 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-005
Client Sample ID: CB-10-5, 23-24 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 09:20
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.4	wt%		0.2		SW3550A	08/21/15 09:40 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	08/24/15 03:53 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	08/24/15 03:53 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	08/24/15 03:53 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	08/24/15 03:53 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	08/24/15 03:53 / jem
Aroclor 1254	ND	mg/kg-dry		0.018		SW8082	08/24/15 03:53 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	08/24/15 03:53 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	08/24/15 03:53 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	08/24/15 03:53 / jem
Surr: Decachlorobiphenyl	98.0	%REC		50-126		SW8082	08/24/15 03:53 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	08/24/15 03:53 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-006
Client Sample ID: CB-11-1, 4-5 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 12:48
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	08/21/15 09:40 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:20 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	08/24/15 04:20 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:20 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:20 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:20 / jem
Aroclor 1254	0.043	mg/kg-dry		0.019		SW8082	08/24/15 04:20 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:20 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:20 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:20 / jem
Surr: Decachlorobiphenyl	101	%REC		50-126		SW8082	08/24/15 04:20 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	08/24/15 04:20 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-007
Client Sample ID: CB-11-2, 8-9 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 12:57
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	08/21/15 09:40 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:48 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	08/24/15 04:48 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:48 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:48 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:48 / jem
Aroclor 1254	0.21	mg/kg-dry		0.019		SW8082	08/24/15 04:48 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:48 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:48 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/24/15 04:48 / jem
Surr: Decachlorobiphenyl	95.0	%REC		50-126		SW8082	08/24/15 04:48 / jem
Surr: Tetrachloro-m-xylene	60.0	%REC		42-115		SW8082	08/24/15 04:48 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-008
Client Sample ID: CB-11-3, 12-13 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 13:00
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.9	wt%		0.2		SW3550A	08/21/15 09:44 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:16 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	08/24/15 05:16 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:16 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:16 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:16 / jem
Aroclor 1254	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:16 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:16 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:16 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:16 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	08/24/15 05:16 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	08/24/15 05:16 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-009
Client Sample ID: CB-11-4, 18-19 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 13:17
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	08/21/15 09:48 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:44 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	08/24/15 05:44 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:44 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:44 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:44 / jem
Aroclor 1254	0.29	mg/kg-dry		0.019		SW8082	08/24/15 05:44 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:44 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:44 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/24/15 05:44 / jem
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	08/24/15 05:44 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	08/24/15 05:44 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-010
Client Sample ID: CB-11-5, 23-24 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 13:21
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.3	wt%		0.2		SW3550A	08/21/15 10:05 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.037		SW8082	08/26/15 03:36 / jem
Aroclor 1221	ND	mg/kg-dry		0.072		SW8082	08/26/15 03:36 / jem
Aroclor 1232	ND	mg/kg-dry		0.037		SW8082	08/26/15 03:36 / jem
Aroclor 1242	ND	mg/kg-dry		0.037		SW8082	08/26/15 03:36 / jem
Aroclor 1248	ND	mg/kg-dry		0.037		SW8082	08/26/15 03:36 / jem
Aroclor 1254	1.2	mg/kg-dry		0.037		SW8082	08/26/15 03:36 / jem
Aroclor 1260	ND	mg/kg-dry		0.037		SW8082	08/26/15 03:36 / jem
Aroclor 1262	ND	mg/kg-dry		0.037		SW8082	08/26/15 03:36 / jem
Aroclor 1268	ND	mg/kg-dry		0.037		SW8082	08/26/15 03:36 / jem
Surr: Decachlorobiphenyl	95.0	%REC		50-126		SW8082	08/26/15 03:36 / jem
Surr: Tetrachloro-m-xylene	79.0	%REC		42-115		SW8082	08/26/15 03:36 / jem

-The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-011
Client Sample ID: CB-12-1, 4-5 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 14:46
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	4.1	wt%		0.2		SW3550A	08/21/15 10:09 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	08/24/15 06:39 / jem
Aroclor 1221	ND	mg/kg-dry		0.034		SW8082	08/24/15 06:39 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	08/24/15 06:39 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	08/24/15 06:39 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	08/24/15 06:39 / jem
Aroclor 1254	0.081	mg/kg-dry		0.018		SW8082	08/24/15 06:39 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	08/24/15 06:39 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	08/24/15 06:39 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	08/24/15 06:39 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	08/24/15 06:39 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	08/24/15 06:39 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-012
Client Sample ID: CB-12-2, 8-9 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 15:05
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.0	wt%		0.2		SW3550A	08/21/15 10:17 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:03 / jem
Aroclor 1221	ND	mg/kg-dry		0.088		SW8082	08/26/15 04:03 / jem
Aroclor 1232	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:03 / jem
Aroclor 1242	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:03 / jem
Aroclor 1248	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:03 / jem
Aroclor 1254	1.4	mg/kg-dry		0.045		SW8082	08/26/15 04:03 / jem
Aroclor 1260	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:03 / jem
Aroclor 1262	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:03 / jem
Aroclor 1268	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:03 / jem
Surr: Decachlorobiphenyl	101	%REC		50-126		SW8082	08/26/15 04:03 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	08/26/15 04:03 / jem

-The Reporting Limits reflect a 2.5 times dilution due to the level of Aroclor 1254 detected in the sample.
- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-013
Client Sample ID: CB-12-3, 12-13 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 15:08
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.8	wt%		0.2		SW3550A	08/21/15 10:21 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:32 / jem
Aroclor 1221	ND	mg/kg-dry		0.087		SW8082	08/26/15 04:32 / jem
Aroclor 1232	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:32 / jem
Aroclor 1242	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:32 / jem
Aroclor 1248	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:32 / jem
Aroclor 1254	2.3	mg/kg-dry		0.045		SW8082	08/26/15 04:32 / jem
Aroclor 1260	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:32 / jem
Aroclor 1262	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:32 / jem
Aroclor 1268	ND	mg/kg-dry		0.045		SW8082	08/26/15 04:32 / jem
Surr: Decachlorobiphenyl	98.0	%REC		50-126		SW8082	08/26/15 04:32 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	08/26/15 04:32 / jem

-The Reporting Limits reflect a 2.5 times dilution due to the level of Aroclor 1254 detected in the sample.
- The Aroclor 1254 pattern found in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-014
Client Sample ID: CB-12-4, 19-20 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 15:20
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	08/21/15 10:25 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:02 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	08/24/15 08:02 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:02 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:02 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:02 / jem
Aroclor 1254	0.058	mg/kg-dry		0.019		SW8082	08/24/15 08:02 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:02 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:02 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:02 / jem
Surr: Decachlorobiphenyl	101	%REC		50-126		SW8082	08/24/15 08:02 / jem
Surr: Tetrachloro-m-xylene	83.0	%REC		42-115		SW8082	08/24/15 08:02 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-015
Client Sample ID: CB-12-5, 28-29 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 15:43
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	08/21/15 10:36 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:30 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	08/24/15 08:30 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:30 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:30 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:30 / jem
Aroclor 1254	0.27	mg/kg-dry		0.019		SW8082	08/24/15 08:30 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:30 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:30 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/24/15 08:30 / jem
Surr: Decachlorobiphenyl	98.0	%REC		50-126		SW8082	08/24/15 08:30 / jem
Surr: Tetrachloro-m-xylene	74.0	%REC		42-115		SW8082	08/24/15 08:30 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-016
Client Sample ID: CB-13-1, 2-3 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 10:25
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	08/21/15 10:37 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	08/26/15 04:59 / jem
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	08/26/15 04:59 / jem
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	08/26/15 04:59 / jem
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	08/26/15 04:59 / jem
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	08/26/15 04:59 / jem
Aroclor 1254	9.7	mg/kg-dry		0.19		SW8082	08/26/15 04:59 / jem
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	08/26/15 04:59 / jem
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	08/26/15 04:59 / jem
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	08/26/15 04:59 / jem
Surr: Decachlorobiphenyl	117	%REC		50-126		SW8082	08/26/15 04:59 / jem
Surr: Tetrachloro-m-xylene	86.0	%REC		42-115		SW8082	08/26/15 04:59 / jem

-The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-017
Client Sample ID: CB-13-2, 8-9 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 10:30
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	14	wt%		0.2		SW3550A	08/21/15 10:46 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	08/24/15 13:31 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	08/24/15 13:31 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	08/24/15 13:31 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	08/24/15 13:31 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	08/24/15 13:31 / jem
Aroclor 1254	0.15	mg/kg-dry		0.020		SW8082	08/24/15 13:31 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	08/24/15 13:31 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	08/24/15 13:31 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	08/24/15 13:31 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	08/24/15 13:31 / jem
Surr: Tetrachloro-m-xylene	79.0	%REC		42-115		SW8082	08/24/15 13:31 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-018
Client Sample ID: CB-13-3, 12-13 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 10:34
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	08/21/15 10:51 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/24/15 13:59 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	08/24/15 13:59 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/24/15 13:59 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/24/15 13:59 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/24/15 13:59 / jem
Aroclor 1254	0.23	mg/kg-dry		0.019		SW8082	08/24/15 13:59 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/24/15 13:59 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/24/15 13:59 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/24/15 13:59 / jem
Surr: Decachlorobiphenyl	96.0	%REC		50-126		SW8082	08/24/15 13:59 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	08/24/15 13:59 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-019
Client Sample ID: CB-13-4, 17-18 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 10:40
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.3	wt%		0.2		SW3550A	08/21/15 10:59 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:27 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	08/24/15 14:27 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:27 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:27 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:27 / jem
Aroclor 1254	0.18	mg/kg-dry		0.018		SW8082	08/24/15 14:27 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:27 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:27 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:27 / jem
Surr: Decachlorobiphenyl	94.0	%REC		50-126		SW8082	08/24/15 14:27 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	08/24/15 14:27 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-020
Client Sample ID: CB-13-5, 22-23 Feet

Report Date: 08/27/15
Collection Date: 08/18/15 10:43
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.0	wt%		0.2		SW3550A	08/21/15 11:06 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:56 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	08/24/15 14:56 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:56 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:56 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:56 / jem
Aroclor 1254	0.087	mg/kg-dry		0.018		SW8082	08/24/15 14:56 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:56 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:56 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	08/24/15 14:56 / jem
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	08/24/15 14:56 / jem
Surr: Tetrachloro-m-xylene	87.0	%REC		42-115		SW8082	08/24/15 14:56 / jem

- The Aroclor 1254 pattern detected in this sample was significantly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-021
Client Sample ID: CB-14-1, 28-29 Feet

Report Date: 08/27/15
Collection Date: 08/19/15 10:36
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.7	wt%		0.2		SW3550A	08/21/15 11:08 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		19		SW8082	08/26/15 12:08 / jem
Aroclor 1221	ND	mg/kg-dry		36		SW8082	08/26/15 12:08 / jem
Aroclor 1232	ND	mg/kg-dry		19		SW8082	08/26/15 12:08 / jem
Aroclor 1242	ND	mg/kg-dry		19		SW8082	08/26/15 12:08 / jem
Aroclor 1248	ND	mg/kg-dry		19		SW8082	08/26/15 12:08 / jem
Aroclor 1254	470	mg/kg-dry		19		SW8082	08/26/15 12:08 / jem
Aroclor 1260	ND	mg/kg-dry		19		SW8082	08/26/15 12:08 / jem
Aroclor 1262	ND	mg/kg-dry		19		SW8082	08/26/15 12:08 / jem
Aroclor 1268	ND	mg/kg-dry		19		SW8082	08/26/15 12:08 / jem
Surr: Decachlorobiphenyl	357	%REC	S	50-126		SW8082	08/24/15 15:26 / jem
Surr: Tetrachloro-m-xylene	88.0	%REC		42-115		SW8082	08/24/15 15:26 / jem

-The high percent recovery of Decachlorobiphenyl is attributed to co-eluting interference on the primary column.
-The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-022
Client Sample ID: CB-14-2, 32-33 Feet

Report Date: 08/27/15
Collection Date: 08/19/15 10:42
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.5	wt%		0.2		SW3550A	08/21/15 11:13 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	08/24/15 16:22 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	08/24/15 16:22 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	08/24/15 16:22 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	08/24/15 16:22 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	08/24/15 16:22 / jem
Aroclor 1254	1.1	mg/kg-dry		0.019		SW8082	08/24/15 16:22 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	08/24/15 16:22 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	08/24/15 16:22 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	08/24/15 16:22 / jem
Surr: Decachlorobiphenyl	95.0	%REC		50-126		SW8082	08/24/15 16:22 / jem
Surr: Tetrachloro-m-xylene	61.0	%REC		42-115		SW8082	08/24/15 16:22 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson
Lab ID: B15081868-023
Client Sample ID: CB-14-3, 39-40 Feet

Report Date: 08/27/15
Collection Date: 08/19/15 10:48
DateReceived: 08/20/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.4	wt%		0.2		SW3550A	08/21/15 11:19 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	08/26/15 13:04 / jem
Aroclor 1221	ND	mg/kg-dry		0.36		SW8082	08/26/15 13:04 / jem
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	08/26/15 13:04 / jem
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	08/26/15 13:04 / jem
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	08/26/15 13:04 / jem
Aroclor 1254	2.7	mg/kg-dry		0.19		SW8082	08/26/15 13:04 / jem
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	08/26/15 13:04 / jem
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	08/26/15 13:04 / jem
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	08/26/15 13:04 / jem
Surr: Decachlorobiphenyl	95.0	%REC		50-126		SW8082	08/26/15 13:04 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	08/26/15 13:04 / jem

-The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson

Report Date: 08/27/15
Work Order: B15081868

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 92484
Lab ID: MB-92484	Method Blank				Run: AECD.I_150823B				08/23/15 20:27
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	90	50	126			
Surr: Tetrachloro-m-xylene			0.0017	68	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-92484	Laboratory Control Sample				Run: AECD.I_150823B				08/23/15 20:54
Aroclor 1254	0.316	mg/kg	0.017	95	62	126			
Surr: Decachlorobiphenyl			0.0017	91	50	126			
Surr: Tetrachloro-m-xylene			0.0017	48	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15081868-001AMB	Sample Matrix Spike				Run: AECD.I_150823B				08/26/15 02:40
Aroclor 1254	1.78	mg/kg-dry	0.072	76	62	126			
Surr: Decachlorobiphenyl			0.0072	95	50	126			
Surr: Tetrachloro-m-xylene			0.0072	70	42	115			
-The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15081868-001ADB	Sample Matrix Spike Duplicate				Run: AECD.I_150823B				08/26/15 03:08
Aroclor 1254	1.95	mg/kg-dry	0.072	124	62	126	9.1	40	
Surr: Decachlorobiphenyl			0.0072	98	50	126			
Surr: Tetrachloro-m-xylene			0.0072	80	42	115			
-The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson

Report Date: 08/27/15
Work Order: B15081868

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 92498
Lab ID: MB-92498	Method Blank				Run: AECD.I_150823B				08/23/15 21:22
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	88	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-92498	Laboratory Control Sample				Run: AECD.I_150823B				08/23/15 21:50
Aroclor 1254	0.338	mg/kg	0.017	102	62	126			
Surr: Decachlorobiphenyl			0.0017	89	50	126			
Surr: Tetrachloro-m-xylene			0.0017	60	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15081868-004AMB	Sample Matrix Spike				Run: AECD.I_150823B				08/24/15 01:33
Aroclor 1254	0.400	mg/kg-dry	0.019	107	62	126			
Surr: Decachlorobiphenyl			0.0019	95	50	126			
Surr: Tetrachloro-m-xylene			0.0019	72	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15081868-004ADB	Sample Matrix Spike Duplicate				Run: AECD.I_150823B				08/24/15 02:01
Aroclor 1254	0.390	mg/kg-dry	0.019	104	62	126	2.5	40	
Surr: Decachlorobiphenyl			0.0019	93	50	126			
Surr: Tetrachloro-m-xylene			0.0019	72	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B15081868

Login completed by:	Randa Nees	Date Received:	8/20/2015
Reviewed by:	BL2000\raschim	Received by:	qej
Reviewed Date:	8/20/2015	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☐	No ☑	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	4.1°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sample CB-14-1 28-29 Feet was received cracked but sample was intact, analysis was continued.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name:	Project Name, PWS, Permit, Etc.	Sample Origin	EPA/State Compliance:
NewFields	Stimson	State: MT	Yes ☐ No ☐
Report Mail Address (Required):	**Contact Name:**	**Phone/Fax:**	**Cell:**
1100 Cedar Street Missoula, MT 59802 ☐ No Hard Copy Email: tetzel@newfields.com	Tyler Etzel	406-549-8270	406-240-7795
	Invoice Contact & Phone:	**Purchase Order:**	**Quote/Bottle Order:**
	Donna McCommon 406-549-8270	350.0035.005	

Invoice Address (Required): see above

☐ No Hard Copy Email:

Special Report/Formats:

☐ DW ☐ POTW/WWTP ☐ State: ☐ Other:

☒ EDD/EDT (Electronic Data) Format: ☐ LEVEL IV ☐ NELAC

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: Rtn UPS Grnd

Cooler ID(s):

Receipt Temp 4.1 °C TB

On Ice: (Y) N

Custody Seal: On Bottle (Y) N; On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	EPA Method 8082									SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 CB-10-1 (2-3')	8-18-15	08 30	S	X										X			B1508188-001
2 CB-10-2 (9-10')	8-18-15	08 55	S	X										X			002
3 CB-10-3 (13-14')	8-18-15	09 00	S	X										X			003
4 CB-10-4 (18-19')	8-18-15	09 15	S	X										X			004
5 CB-10-5 (23-24')	8-18-15	09 20	S	X										X			005
6 CB-10-6 (29-30')	8-18-15	09 30	S	X										X		HOLD Analysis	–
7 CB-10-7 (33-34')	8-18-15	09 34	S	X										X		"	–
8 CB-10-8 (38-39')	8-18-15	09 50	S	X										X		"	–
9 CB-11-1 (4-5)	8-18-15	12 48	S	X										X			006
10 CB-11-2 (8-9)	8-18-15	12 57	S	X										X			007

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	8-19-15 / 16 00	Ty Schmechel			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time:	Signature:
				8/20/15 09:30	Quincee Jones

Sample Disposal: Return to Client: Lab Disposal:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

Contact Name: Tyler Etzel

Phone/Fax: 406-549-8270

Cell: 406-240-7795

Sampler: (Please Print) Ty Schmechel

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Contact & Phone: Donna McMannon 406-549-8270

Purchase Order: 350.0052.005

Quote/Bottle Order:

Invoice Address (Required): see above

☐ No Hard Copy Email:

Special Report/Formats:
☐ DW
☐ POTW/WWTP
☐ State:
☐ Other:
☒ EDD/EDT (Electronic Data) Format:
☐ LEVEL IV
☐ NELAC

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

ANALYSIS REQUESTED

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: Rtn UPS Gnd

Cooler ID(s):

Receipt Temp 4.1 °C TB

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	EPA Method 8082									SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1	CB-11-3 (12-13')	8-18-15	1300	S	X										X			L15D81828-008
2	CB-11-4 (18-19')	8-18-15	1317	S	X										X			009
3	CB-11-5 (23-24')	8-18-15	1321	S	X										X			010
4	CB-12-1 (4-5')	8-18-15	1446	S	X										X			011
5	CB-12-2 (8-9')	8-18-15	1505	S	X										X			012
6	CB-12-3 (12-13')	8-18-15	1508	S	X										X			013
7	CB-12-4 (19-20')	8-18-15	1520	S	X										X			014
8	CB-12-5 (28-29')	8-18-15	1543	S	X										X			015
9	CB-13-1 (2-3')	8-18-15	1025	S	X										X			016
10	CB-13-2 (8-9')	8-18-15	1030	S	X										X			017

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	8-19-15/1600	Ty Schmechel			

Received by Laboratory: 8/20/15 09:30 Quince Jones

Sample Disposal: Return to Client: ____ Lab Disposal: ____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

Contact Name: Tyler Etzel Phone/Fax: 406-549-8270 Cell: 406-240-7795

Sampler: (Please Print) Ty Schmechel

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Contact & Phone: Donna McMammon 406-549-8270

Purchase Order: 350.0023.005

Quote/Bottle Order:

Invoice Address (Required): see above

☐ No Hard Copy Email:

Special Report/Formats:
☐ DW
☐ POTW/WWTP
☐ State:
☐ Other:
☒ EDD/EDT (Electronic Data) Format:
☐ LEVEL IV
☐ NELAC

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

ANALYSIS REQUESTED

SEE ATTACHED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: Rtn. UPS Grnd

Cooler ID(s):

Receipt Temp 4.1 °C TB

On Ice: (Y) N

Custody Seal On Bottle (N) On Cooler (Y) N

Intact (Y) N

Signature Match (Y) N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	EPA Method 8032										Standard TAT	RUSH	Comments	LABORATORY USE ONLY
1	CB-13-3 (12-13')	8-18-15	10 34	S	X										X			L15081828-018
2	CB-13-4 (17-18')	8-18-15	10 40	S	X										X			019
3	CB-13-5 (22-23')	8-18-15	10 43	S	X										X			020
4	CB-14-1 (28-29')	8-19-15	10 36	S	X										X			021
5	CB-14-2 (32-33')	8-19-15	10 42	S	X										X			022
6	CB-14-3 (39-40')	8-19-15	10 48	S	X										X			023
7																		
8																		
9																		
10																		

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 8-19-15/1600 Signature: Ty Schmechel

Received by (print): Date/Time: Signature:

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: 8/20/15 09:30 Quincee Jones Date/Time: Signature:

Sample Disposal: Return to Client: Lab Disposal:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

September 03, 2015

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B15090032 Quote ID: B3097 - Stimson

Project Name: Stimson Compressor Building

Energy Laboratories Inc Billings MT received the following 3 samples for NewFields on 9/1/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B15090032-001	CB-11-6@28-29 Feet	08/18/15 13:36	09/01/15	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B15090032-002	CB-11-7@33-34 Feet	08/18/15 13:39	09/01/15	Soil	Same As Above
B15090032-003	CB-11-8@39-40 Feet	08/18/15 13:42	09/01/15	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building
Lab ID: B15090032-001
Client Sample ID: CB-11-6@28-29 Feet

Report Date: 09/03/15
Collection Date: 08/18/15 13:36
DateReceived: 09/01/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.5	wt%		0.2		SW3550A	09/01/15 11:07 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.037		SW8082	09/02/15 23:02 / jem
Aroclor 1221	ND	mg/kg-dry		0.071		SW8082	09/02/15 23:02 / jem
Aroclor 1232	ND	mg/kg-dry		0.037		SW8082	09/02/15 23:02 / jem
Aroclor 1242	ND	mg/kg-dry		0.037		SW8082	09/02/15 23:02 / jem
Aroclor 1248	ND	mg/kg-dry		0.037		SW8082	09/02/15 23:02 / jem
Aroclor 1254	1.3	mg/kg-dry		0.037		SW8082	09/02/15 23:02 / jem
Aroclor 1260	ND	mg/kg-dry		0.037		SW8082	09/02/15 23:02 / jem
Aroclor 1262	ND	mg/kg-dry		0.037		SW8082	09/02/15 23:02 / jem
Aroclor 1268	ND	mg/kg-dry		0.037		SW8082	09/02/15 23:02 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	09/02/15 23:02 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	09/02/15 23:02 / jem

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.The Aroclor 1254 pattern detected in this sample was slightly degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building
Lab ID: B15090032-002
Client Sample ID: CB-11-7@33-34 Feet

Report Date: 09/03/15
Collection Date: 08/18/15 13:39
DateReceived: 09/01/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.6	wt%		0.2		SW3550A	09/01/15 11:11 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	09/01/15 15:21 / jem
Aroclor 1221	ND	mg/kg-dry		0.034		SW8082	09/01/15 15:21 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	09/01/15 15:21 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	09/01/15 15:21 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	09/01/15 15:21 / jem
Aroclor 1254	0.37	mg/kg-dry		0.018		SW8082	09/01/15 15:21 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	09/01/15 15:21 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	09/01/15 15:21 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	09/01/15 15:21 / jem
Surr: Decachlorobiphenyl	92.0	%REC		50-126		SW8082	09/01/15 15:21 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	09/01/15 15:21 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building
Lab ID: B15090032-003
Client Sample ID: CB-11-8@39-40 Feet

Report Date: 09/03/15
Collection Date: 08/18/15 13:42
DateReceived: 09/01/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.9	wt%		0.2		SW3550A	09/01/15 11:15 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	09/01/15 15:50 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	09/01/15 15:50 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	09/01/15 15:50 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	09/01/15 15:50 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	09/01/15 15:50 / jem
Aroclor 1254	ND	mg/kg-dry		0.019		SW8082	09/01/15 15:50 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	09/01/15 15:50 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	09/01/15 15:50 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	09/01/15 15:50 / jem
Surr: Decachlorobiphenyl	79.0	%REC		50-126		SW8082	09/01/15 15:50 / jem
Surr: Tetrachloro-m-xylene	55.0	%REC		42-115		SW8082	09/01/15 15:50 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 09/03/15

Project: Stimson Compressor Building **Work Order:** B15090032

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 92796
Lab ID: MB-92796	Method Blank				Run: AECD.I_150901A				09/01/15 13:57
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.034						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	84	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-92796	Laboratory Control Sample				Run: AECD.I_150901A				09/01/15 14:25
Aroclor 1254	0.324	mg/kg	0.017	97	62	126			
Surr: Decachlorobiphenyl			0.0017	88	50	126			
Surr: Tetrachloro-m-xylene			0.0017	56	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15090032-001AMB	Sample Duplicate				Run: AECD.I_150901A				09/02/15 23:30
Aroclor 1016	ND	mg/kg-dry	0.038					40	
Aroclor 1221	ND	mg/kg-dry	0.074					40	
Aroclor 1232	ND	mg/kg-dry	0.038					40	
Aroclor 1242	ND	mg/kg-dry	0.038					40	
Aroclor 1248	ND	mg/kg-dry	0.038					40	
Aroclor 1254	1.49	mg/kg-dry	0.038				12	40	
Aroclor 1260	ND	mg/kg-dry	0.038					40	
Aroclor 1262	ND	mg/kg-dry	0.038					40	
Aroclor 1268	ND	mg/kg-dry	0.038					40	
Surr: Decachlorobiphenyl			0.0038	99	50	126			
Surr: Tetrachloro-m-xylene			0.0038	69	42	115			
- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.The Aroclor 1254 pattern detected in this sample was slightly degraded.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B15090032-001ADB	Sample Duplicate				Run: AECD.I_150901A				09/02/15 23:58
Aroclor 1016	ND	mg/kg-dry	0.037					40	
Aroclor 1221	ND	mg/kg-dry	0.071					40	
Aroclor 1232	ND	mg/kg-dry	0.037					40	
Aroclor 1242	ND	mg/kg-dry	0.037					40	
Aroclor 1248	ND	mg/kg-dry	0.037					40	
Aroclor 1254	1.62	mg/kg-dry	0.037				20	40	
Aroclor 1260	ND	mg/kg-dry	0.037					40	
Aroclor 1262	ND	mg/kg-dry	0.037					40	
Aroclor 1268	ND	mg/kg-dry	0.037					40	
Surr: Decachlorobiphenyl			0.0037	98	50	126			
Surr: Tetrachloro-m-xylene			0.0037	71	42	115			
- Because the amount of Aroclor 1254 detected in the sample was significantly higher than the spike amount, the Matrix Spike and Matrix Spike Duplicate are calculated as Duplicate samples. The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.The Aroclor 1254 pattern detected in this sample was slightly degraded.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B15090032

Login completed by: Leslie S. Cadreau

Reviewed by: BL2000\jmueller

Reviewed Date: 9/1/2015

Date Received: 9/1/2015

Received by: brg

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	5.8°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Rush samples due 09/03/15 per Shari Endy, Project Manager, on 09/02/15.

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing information)

Company/Name	NewFields
Contact	Tyler Etzel
Phone	(406) 240-7795
Mailing Address	1120 Cedar Street
City, State, Zip	Missoula, MT 59802
Email	tetzel@newfields.com
Receive Invoice	☐Hard Copy ■Email
Receive Report	☐Hard Copy ■Email
Purchase Order	350.0033.005
Quote	

Report Information (if different than Account Information)

Company/Name	
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	
Receive Report	☐Hard Copy ☐Email

Special Report/Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other_____

Comments

Project Information

Project Name, PWSID, Permit, etc.	Stimson Compressor Building
Bottle Order	
Sample Origin State: Montana	EPA/State Compliance ☐ Yes ■ No
Sampler Name: Ty Schmechel	Sampler Phone: (406) 855-6884

Matrix Codes
A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Other
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	PCBs (8082)									See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	CB-11-6 @ 28'-29'	8/18/15	1:36 pm	1	S	✓											B1508032-001
2	CB-11-7 @ 33'-34'	8/18/15	1:39 pm	1	S	✓											-002
3	CB-11-8 @ 39'-40'	8/18/15	1:42 pm	1	S	✓											-003
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	[illegible]	8/28/15 @ 1450				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Brittaney Lowtz	8/28/15 9:30	[illegible]

LABORATORY USE ONLY

Sample Disposal	Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
Client Lab	RTN UPS Ground		Y N C B	Y N	5.8 °C	Y N	Y N	CC Cash Check_____	$	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

Work Plan & SAP

Appendix B

FINAL COOLING POND REMOVAL WORK PLAN

Bonner Mill Cooling Pond and Vicinity

Bonner, Montana

Submitted to:
Montana Department of Environmental Quality
1100 North Last Chance Gulch
Helena, Montana 59620

Submitted by:
Stimson Lumber Company
Box 7400
Coeur D'Alene, ID 83816

Prepared by:
Envirocon, Inc.
101 International Drive
Missoula, MT 59808

Submittal date:
January 29, 2010

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1.0 INTRODUCTION

This is a work plan for remediating three areas within Stimson Lumber Company's former Bonner Mill: 1) the cooling pond sediments and related berm structure, which contain polychlorinated biphenyls (PCBs) and extractable petroleum hydrocarbons (EPH), 2) adjacent portions of the east log track area containing EPH with some elevated levels of PCBs, and 3) the former fire pond lagoon area containing EPH, with some elevated levels of PCBs. The cooling pond is an impoundment that was most recently used to contain Bonner Mill cooling water and other process waters so that they could cool and be sampled prior to discharge to the Blackfoot River (BFR) under the facility's MPDES permit. The cooling pond berm was constructed of timber cribbing, rock and earthen fill, and was used to form the northern side of the cooling pond impoundment. The east log track area formerly contained a log moving structure that conveyed logs to the processing building; it is called the east log track to distinguish it from the west log track located ~350 feet to the west. The fire pond lagoon area includes the former fire pond lagoon and the upland area that extends ~150 feet to the south of the lagoon. The fire pond lagoon was previously excavated down to the then-existing water table. Note that the fire pond lagoon is now dry, and since the Milltown and Stimson Dams have been removed and the BFR has downcut, the river and groundwater surface elevation has lowered. These site features are depicted on Sampling and Analysis Plan (SAP) Figure 2, contained in Appendix I.

The work is being conducted on behalf of Stimson Lumber Company to comply with the requirements of an administrative order on consent with the Montana Department of Environmental Quality (MDEQ). The work involves excavation and off-site disposal of material containing more than 0.74 part per million (ppm) PCBs, excavation and on-site placement of soil containing less than 0.74 ppm PCBs, removal of the remainder of the cooling pond berm, and recontouring the streambank and streambed after the pond sediments and berm are removed. This general approach was selected by MDEQ in an Action Memorandum issued by MDEQ in October 2009 (Action Memo) following the engineering evaluation/cost analysis documented in the "Draft Final Expanded Engineering Evaluation / Cost Analysis for the Stimson Lumber Company Cooling Pond," Olympus Technical Services, Inc., September 2007 (EE/CA). In addition to the cooling pond removal and remediation, the fire pond lagoon area and portions of the east log track area adjacent to the cooling pond, along with the cooling pond, are being further investigated pursuant to a Sampling and Analysis Plan (SAP) attached to this Work Plan and approved by MDEQ, and remediated based on the results of that investigation, and the stream bank will be recontoured after the pond sediments, adjacent soils and berm are fully removed and the fire pond lagoon fully remediated.

2.0 BACKGROUND

The former Stimson Bonner Mill is a recently closed sawmill and plywood manufacturing facility located in Bonner, Montana. The cooling pond historically collected water from various sources at the mill, including stormwater runoff, boiler blow-down water, and non-contact cooling water. Since the mill was closed in 2008, the cooling pond no longer receives water from boiler blow-down or non-contact cooling water; only stormwater runoff continues to enter the cooling pond. The pond is approximately 500 feet long by 70 feet wide and encompasses approximately 35,000 square feet or ¾ acre. The pond was installed and modified by the prior site owners and has been in use since at least 1956, and potentially before 1940, first as a log-storage pond and more recently as a cooling pond. The cooling pond is oriented with its long axis parallel to the Blackfoot River (BFR); the eastern end has been partially filled in over time. The site location and the pond's location within the mill site are both depicted on Figure 1.

MDEQ has determined that cooling pond sediments, coupled with a potential cooling pond berm failure due to a high flow event, present an unacceptable risk to human health and the environment. Once completed, the remedial action (RA) described in this work plan will eliminate these potential risks.

3.0 OBJECTIVES

The objectives of the proposed work are:

1. Remediate (via excavation and off-site disposal) PCB and petroleum-impacted soil and materials within the cooling pond, berm, and surrounding areas including the former Fire Pond Lagoon area and East Log Track area;
2. Remove the remaining cooling pond berm and soils down to alluvium; and
3. Reestablish the south BFR riverbank by recontouring it in general accordance with the EE/CA and the Action Memo, near its last natural location, and reclaim the river bank and floodplain to an appropriately stable and natural appearing condition.

3.1 Scope of Work

The remedial action includes the following tasks, listed in approximate chronological order.

1. Permit applications;
2. Mobilization;
3. Health and safety;
4. Implementation of the SAP

5. Site preparation;
6. Cooling pond influent diversion;
7. Delineate excavation limits;
8. Abandon monitoring wells impacted by the removal;
9. Excavation, stockpiling, and disposition;
10. Confirmation sampling;
11. Dewatering of pond sediments;
12. Embankment removal;
13. Transport excavated material;
14. Traffic control;
15. Dust control;
16. Impacted soil disposal;
17. Disposition of soil containing less than 0.74 ppm PCBs;
18. Quality assurance/quality control;
19. Equipment decontamination;
20. Final grading of the site following removal;
21. River bank restoration following sediment and berm removal;
22. Maintenance of re-vegetation and weed control; and
23. Groundwater monitoring.

Following completion of the work, a report will be prepared and submitted to MDEQ that documents the work conducted, quantities of impacted material disposed, confirmation sampling, and other pertinent information, as provided in Paragraph 82 of the Administrative Order on Consent.

3.2 Fire Pond Lagoon

Actions in the fire pond lagoon area will include excavation and removal of all PCBs above 0.74 mg/kg (with removal of all PCBs above 0.22 mg/kg in the floodplain areas and a ten-foot buffer zone along the newly configured river bank), as well as excavation and removal of petroleum hydrocarbons above the relevant Risk-Based Screening Levels (RBSLs) in the Montana Tier 1 Risk-Based Corrective Action Guidance for Petroleum Releases (DEQ 2009). Sampling in this area will be conducted to determine preliminary excavation limits as well as the presence of PCBs and petroleum, including sampling to allow a determination of what portion of the fire pond lagoon and east log track area materials associated with Release #4161 exceed RBSLs for EPH but meet the 0.74 mg/kg cleanup level for PCBs, so that those materials can be separately handled to be disposed of as part of the continuing Petroleum Release Cleanup Fund Action (Facility ID 32-04262, Release #4161), subject to final Board approval in accordance with Sections 75-

11-301 through 321, MCA. The cooling pond and berm excavation and those materials for which action is required to meet the specified PCB levels will not be treated as part of Release #4161.

4.0 WORK PLAN

The following sections describe, in more detail, the specific tasks to be completed.

4.1 Permits

Permits necessary for executing the RA include:

- Montana Natural Streambed and Land Preservation Act – Section 310 Permit;
- Montana Floodplain and Floodway Management Act – Floodplain Development Permit;
- Federal Clean Water Act – 404 Permit;
- Short-Term Water Quality Standard for Turbidity – 318 Authorization;
- Stormwater Discharge General Permit – Permit under Montana's General Permit Montana Pollutant Discharge Elimination System (MPDES) Permit revision; and
- Toxic Substances Control Act – Risk-based Approval under 40 CFR 761.61 (c) from the Environmental Protection Agency Region 8.

The first four permits (310 Permit, Floodplain Permit, 404 Permit, and 318 authorization) will be obtained by filing a joint application, which should streamline the approval process, as compared to individual applications. A stormwater pollution prevention plan for the proposed work will be produced and submitted, together with a notice of intent (NOI). Permit application information indicates that 60 to 120 days, from the time of the application, may be required to secure those permits. In addition, EPA's TSCA review includes a 30-day public comment period. Stimson's MPDES permit may need to be revised if groundwater dewatering and discharge is required, unless DEQ chooses to allow the work without such a permit revision. Related application fees will be submitted, as required. Stimson will also obtain specific authorization from the Board of Supervisors of a Conservation District, the Directors of a Grass Conservation District, or the Board of County Commissioners to operate construction equipment in the Blackfoot River under ARM 36.2.410.

4.2 Mobilization

The initial project mobilization to implement the Sampling and Analysis Plan (SAP) (see Appendix I) will begin following MDEQ approval of the SAP. Once this activity is completed, the SAP data, along with data from previous sampling and analytical efforts, will be compiled and used to prepare the final excavation plans (see Figure 8).

After the work plan is approved by MDEQ and permits are in place, mobilization of construction equipment and personnel can begin. Workforce infrastructure will be established including small equipment storage, sanitary facilities, project office, power, surveying base station, and communications. Heavy equipment and labor will be mobilized as needed. All equipment will be inspected as it arrives on site for condition and operability.

4.3 Health and Safety

A Health and Safety Officer (HSO) will be assigned to the project. The HSO serves as the "site safety and health supervisor" as defined in the "HAZWOPER" regulations (29 CFR 1910.120/1926.65(b)). This includes authorization to administer the requirements of this plan, Stimson's and the contractors Health and Safety Program, and compliance with applicable Occupational Safety and Health Administration (OSHA) regulations on site. The HSO implements the provisions of the HASP, conducts and documents training and daily site safety inspections, and monitors compliance with requirements of the Owner, and OSHA.

A Health and Safety Plan (HASP) has been prepared for this RA and is attached as Appendix A. The HASP, Activity Hazard Analysis, and site safety procedures that address site hazards (such as weather-related hazards, electrical hazards, work near water, and heavy equipment operation) will be reviewed with all personnel working on site prior to them starting work. Training will include daily morning safety briefings where employees will review safety issues relevant to the day's activities including changes in work zones, schedules, traffic routes, etc, or review lessons learned from other projects.

A task-specific Activity Hazard Analysis (AHA) will be developed for each major activity performed during the execution of the work. An AHA addresses a specific task, breaking it down into its constituent activities and identifying the hazards and means of control to ensure safe task execution. The HSO will prepare the AHA and consult project team members as to the thoroughness of hazard identification and adequacy of controls.

The project team will conduct a pre-activity site-wide inventory of hazards, including areas that may be highly hazardous to personnel (buried and overhead utilities, work near water, excavations, and high traffic areas, etc.), property owner employees, and the public. Warning signs will be posted notifying the public of the hazards and prohibiting public access to the area. Signs will be placed at key locations to identify access control, exit locations, traffic control directions, and hospital routes. Site control will ensure that

only HAZWOPER-trained and medically qualified personnel will be permitted to enter the work site.

If site conditions or tasks change, the relevant AHAs will be revised, or additional AHAs prepared. Site security will rely primarily on the Bonner Mill perimeter fence and security personnel. The Blackfoot River immediately upstream and downstream of the cooling pond area is closed to the public until 2011 by order of the FWP Commission.

4.4 Site Preparation

Site preparation will consist of clearing and grubbing, installing silt fence and other stormwater controls, and installing safety barriers and signs. The silt fence and other controls will be installed in accordance with the DEQ approved Stormwater Pollution Prevention Plan. Safety barriers and signs will be installed to isolate excavations, haul roads, and other hazardous areas. Other site preparation tasks will include construction of on-site haul roads, lay down areas, and stockpile areas for overburden and PCB-impacted soils, and defining controlled site-access points for transport trucks. Locations of these activities will be approved by the site owner and MDEQ. Any stockpile areas for soil containing PCBs equal to or greater than 50 mg/kg will comply with 40 CFR 761.65.

4.5 Cooling Pond Influent Diversion

Prior to final approval of this work plan, Stimson intends to discontinue the discharge of fire system compressor cooling water, leaving only stormwater to enter the cooling pond. In preparation for dewatering of pond sediments and subsequent excavation, a diversion berm and silt fence will be used to divert any overland flows to nearby site depressions or to a stormwater retention pond potentially to be located along the south side of the cooling pond between the building and pond. The exact type and location of these items will be presented in the project Stormwater Pollution Prevention Plan (SWPP Plan) and will be coordinated with and approved by MDEQ's Water Protection Bureau. This diversion will be completed as soon as possible to ensure that the pond sediments are dewatered before excavation begins.

4.6 Delineate Excavation Limits

The excavated material will be classified as one of the five following types:

1. Soil and/or impacted materials with both PCB concentrations below EPA's preliminary remediation goal (PRG) for residential use (<0.22 ppm) and petroleum concentrations below the MDEQ tier one RBCA limits for extractable petroleum hydrocarbons (EPH);

2. Soil and/or impacted materials with PCB concentrations below 0.74 but with petroleum concentrations above MDEQ Tier 1 RBCA limits for extractable petroleum hydrocarbons (EPH);
3. Soil and/or impacted materials containing more than 0.22 ppm but less than 0.74 ppm PCBs, and containing less than MDEQ Tier 1 RBCA limits for extractable petroleum hydrocarbons (EPH);
4. Soil and/or impacted materials containing more than 0.74 ppm but less than 50ppm PCBs, acceptable for disposal at a municipal landfill; and
5. Any soil and/or impacted materials that may contain PCB concentrations equal to or exceeding 50 ppm will require disposal at a facility permitted to accept TSCA wastes.

Soil excavation, segregation and disposition will be based on in-situ soil analytical results. The excavation will be guided by soil boring and test pit soil sample results, relying on EE/CA data supplemented with additional soil boring/test pit sampling data to be collected as described in the sampling and analysis plan (SAP) attached to this work plan.

The EE/CA PCB sample results were used to create a pair of longitudinal pond-axis cross sections depicting the tentative location of each of the types of materiel listed above. These cross sections, together with a sequence of depth-related plan views of the tentative excavation limits, are depicted on Figures 2-6. Figures 2 and 3 depict a plan view of the general area to be excavated and two cross-sectional views of the planned excavation; Figures 4, 5, and 6 depict plan views of the tentative excavation limits at varying depths (and indicating where the tentative breaks occur between material types).

These drawings will be modified, based on further pre-excavation in-situ investigation(s), and submitted for DEQ-approval in a Design Proposal. The Design Proposal will be submitted to the DEQ for approval within 30 days of receiving the soil sample laboratory analytical reports and other related data. Once approved, the Design Proposal drawings will be used by the surveyor to stake and control the excavation limits. The area will be re-staked, as necessary, as the excavation proceeds to pre-determined depths for each of the types of materiel listed above. A final survey of the excavated area will be used to produce as-built drawings documenting the RA, and to establish the post-RA northern property boundary in the vicinity of the cooling pond.

As noted in Sections 3.0 and 4.11 and on Figure 9, the entire cooling pond and cooling pond berm will be removed to native alluvium. All wood cribbing will be removed below

the level of the alluvium until there is no remaining visible evidence of structures. The extent of the final excavation will be further guided by the results of in-situ soil confirmation sample analyses. For floodplain areas (areas within 10 feet of the post-RA riverbank) where confirmation sample results (Section 4.9) indicate that soil remains in-situ with PCB concentrations exceeding 0.22 ppm PCBs or EPH concentrations above Tier 1 RBCA limits, further excavation will be conducted and additional confirmation sampling of that area completed until the sampling results document that soil with concentrations exceeding 0.22 ppm PCBs have been removed from floodplain areas. For areas more than 10 feet from the post-RA riverbank, if confirmation sampling indicates that soil contains less than 0.74 ppm PCBs and EPH cleanup levels are met, excavation will cease and backfilling of the excavation commence.

4.7 Abandonment of Monitoring Wells

With the initial excavation area delineated, existing monitoring wells that will be demolished by the removal will be identified. Initial review indicates that existing monitoring wells M-1, MW-2, MW-3, MW-4, and MW-6 are within the footprint of the areas to be excavated and will be removed/demolished. If MW-6, the only well that is expected to be located out of the riverbed after bank reclamation, is needed for ongoing monitoring, an alternative may be to excavate around the well casing, leaving it intact until the excavation work is done, and then re-construct the well head at the new final grade. Existing monitoring wells may be employed as dewatering wells before the excavation begins and/or during the excavation work if the pond sediments and materials are saturated and if in-situ dewatering is determined to be the most practical method for dewatering the pond. If the wells are used for dewatering, the water from these wells will be tested before discharging into the Blackfoot River following the process described in Section 4.10 below.

4.8 Excavation, Stockpiling, and Disposition

Excavation of the cooling pond sediments will begin after the cooling pond, fire pond lagoon and east log track areas have been sampled and characterized and the stormwater control features, decontamination station, and support structures have been installed. As indicated in Figure 8, the proposed schedule for remediation shows a fall startup no later than September 6, 2010, with a 100 day performance period ending by January 20, 2011. This performance period was selected so the BFR and groundwater surface elevations would be relatively low (See Figure 9). Current estimates show that the proposed excavation depth of the pond sediments will be approximately 4 to 6 feet above the projected water table thus minimizing the need for active dewatering during normal flow periods.

Once the cooling pond, fire pond lagoon and east log track areas have been sampled and characterized pursuant to the SAP, the soils and sediments characterized as having PCB or petroleum concentrations exceeding site cleanup levels will be excavated using tracked excavators, dozers, a rubber-tired, front-end loader, and other heavy equipment. For work along the north side of the cooling pond and the south bank of the BFR, a long-stick excavator may be required for final removal and restoration of the stream bank.

Excavation will begin on the pond's west side in the former fire pond lagoon, using one to two hydraulic excavators, depending on reach and depth of cut. During this phase of work, the operator will attempt to blend materials of varying moisture content together to form material suitable (i.e. dry enough) for loading and off/onsite transport and disposal. Any sediments that are deemed too saturated for direct loading, will be staged within the inside edge of the excavation and allowed to dewater prior to loading into trucks. "Too saturated for direct loading" is a qualitative visual and/or tactile determination to be made in the field by the excavator operator responsible for blending materials of varying moisture content. His determination will be based on experience, particularly on Landfill acceptance or rejection of previous loads, and on verifying that no free liquids are draining from the loaded truck beds. Excavation and related confirmatory sampling will proceed from west to east until all the impacted materials have been removed.

A truck loading area will be established along the south side of the cooling pond, adjacent to the excavation zones, to minimize material handling. This loading area will be covered with a thin layer of crushed rock, plastic liner, or other materials, as needed, to minimize tracking. In between loading events, the truck loading pad will be cleaned to minimize impacted soil/sediment contact with the truck tires and other equipment. After the tarps have been secured for each truck, the trucks will be inspected and broom-swept (as necessary) prior to being released for offsite transport and disposal

As discussed in Section 4.6, the surveyor will stake the area to be excavated. Excavation will then proceed across the delineated area to its respective pre-determined depth, as defined in the Design Proposal, and the removed soil will be dealt with as follows, noting that PCB waste and PCB-impacted soils will be excavated and disposed of based upon the "as found" concentrations:

1. Soil containing less than 0.74 ppm PCBs and below DEQ Tier I RBCA limits for Extractible Petroleum Hydrocarbons (EPH) will be spread on the ground surface and compacted at the facility at upland locations to be agreed to by the property owner.

Within 30 days following approval of this work plan, likely volumes of such soil will be estimated and a figure will be submitted for DEQ approval showing these surface areas. These surface areas will be bermed and graded to deter sheet flow from these locations toward the BFR, and institutional controls, as approved by DEQ, will be placed on the areas exceeding 0.22 ppm PCBs to ensure no future residential use or development.

2. Soil containing less than 0.74 ppm PCBs, but above the DEQ Tier I RBCA limits for Extractible Petroleum Hydrocarbons (EPH) will be stockpiled for disposal at Allied's Missoula Landfill pursuant to the MDEQ petroleum tank release program. Release #4161.

3 Soil containing more than 0.74 ppm but less than 50 ppm PCBs will be loaded directly into dump trucks equipped with tarps for transportation to Allied's Missoula landfill. Allied has been provided with figures depicting the EE/CA sample locations and the tabulated sample results, and has indicated that the EE/CA sample results may be adequate for Allied's material profile/characterization. Alternatively, during the course of excavation, this material will be stockpiled and sampled per Allied's requirements, and a material profile prepared based on the results of the laboratory analysis.

4. Soil in the area where the EE/CA indicated the possibility of soils containing approximately 50 ppm PCBs (the area near EE/CA Boring B-2) will be further sampled pursuant to the SAP. Any soil containing 50 ppm PCBs or higher will be excavated, transported, and stockpiled within a secure area on a liner or impermeable surface in accordance with relevant requirements of 40 CFR 761.65. The location of this stockpile will be determined after the additional sampling has been completed and the Design Proposal has been approved, so that the limits of the overall excavation area are known. Alternatively, a rolloff(s) provided by the TSCA TSD facility may be staged on-site to receive soil containing 50 ppm PCBs or higher. The stockpile will be covered with a tarp while the material is profiled for disposal according to the requirements of the TSCA landfill and in accordance with relevant requirements of 40 CFR 761.61. Upon approval of the profile, the soil will be loaded directly into trucks and transported to the destination TSCA-permitted landfill in accordance with all applicable legal requirements, including the TSCA regulations at 40 CFR 761.65 and relevant requirements of 49 CFR 171 through 180. TSCA chemical waste landfills currently under consideration include Environmental Quality Company's Wayne Disposal, Inc.'s (WDI) landfill in Belleville Michigan, Waste Management Inc.'s CWM Kettleman Hills Landfill in Kettleman City, California, Clean Harbor Inc.'s Grassy Mountain landfill in Clive Utah, and American Ecology Corp.'s US Ecology Nevada landfill in Beatty, Nevada.

4.9 Confirmation Sampling

When the approximate limits of excavation have been reached, based on in-situ sampling as set forth in the SAP attached as Appendix I the base and sidewalls of the excavation will be sampled to determine whether in-situ soils contain PCBs at concentrations less than 0.22 ppm and petroleum concentrations less than the RBSLs. In addition, in the former fire pond lagoon area, the base and sidewalls will be sampled to determine whether remaining in-situ soils contain concentrations less than 0.22 ppm PCBs for those sections within the flood plain and 0.74 for those areas outside the floodplain and below DEQ Tier I RBCA limits for Extractible Petroleum Hydrocarbons (EPH). Confirmation samples will be collected as follows:

- Base of excavation samples – One discrete EPH screen sample collected for every 25-foot-by-25-foot area (approximately 625 square feet, or less);
- Base of excavation samples – One PCB composite sample consisting of five subsamples collected for every 25-foot-by-25-foot area (approximately 625 square feet, or less);
- Excavation sidewall samples – One discrete EPH screen sample collected from sidewalls for every 25 lineal feet of sidewall; and
- Excavation sidewall samples – One PCB composite sample consisting of five subsamples collected from sidewalls for every 25 lineal feet of sidewall.

Samples will be collected by a sampling technician wearing disposable nitrile gloves, and using a stainless-steel trowel decontaminated between samples or using a disposable device. Subsamples will be mixed in a decontaminated stainless-steel bowl or disposable plastic container to create composite samples. Samples collected from within excavations will be obtained using safe excavation-entry procedures as described in the HASP.

All sampling, sample preservation, shipping, and documentation will be conducted according to standard operating procedures included as Appendix B. Chain-of-custody forms will be completed and samples will be placed on ice in coolers for shipment to the lab. Samples will be analyzed by Energy Laboratories of Billings, Montana for PCBs by Method 8082. DEQ will be provided with confirmation sample results within 24-hours of receiving the preliminary results. Refer to the SAP, attached as Appendix I, for more details on sampling protocols, analytical methods, and quality assurance.

4.10 Pond Sediments Dewatering

As indicated in Figure 8, the proposed schedule for remediation shows a fall startup no later than September 6, 2010, with a 100 day performance period ending by January 20,

2011. This performance period was selected due to the fact that both the surface water and groundwater elevations would be at their lowest point of the season (See Figure 9 of the work plan). Current estimates show that the proposed depth of excavation of the pond sediments will be approximately 4 to 6 feet above the projected water table thus minimizing the need for active dewatering during normal flow periods.

Should dewatering of the excavation area be required, the following actions may be implemented:

- Install one or more dewatering pits or wells, possibly including one or more of the existing monitoring wells and/or excavate sumps within the cooling pond; and
- Pump extracted pond sump or dewatering well water through one or two 20,000 gallon storage/settling tanks, to drop-out solids before discharging effluent into the BFR. Waters to be discharged will be sampled for parameters listed in the Sampling and Analysis Plan, and consequent approval to discharge obtained from the DEQ, before discharging to the BFR.

Before full dewatering operations commence, a sample of porewater from the pond sediments will be collected and submitted for MPDES-required analytes (total suspended solids, and oil & grease) and for PCBs and EPH. A determination of the need for treatment, if any, will be based on the baseline porewater sample results, to ensure that the existing MPDES permit (# MT0000205) effluent limitations and DEQ-7 PCB limit are not exceeded. Note that the DEQ-7 standard for PCBs in surface water is 0.00064 ug/l (ppb); however this concentration is presently unattainable as a laboratory reporting limit. The DEQ-7 table of standards states (right-hand column) that the current achievable reporting limit is 1.0 ug/l total PCBs; however, DEQ's Remediation Division has determined that a reporting limit of 0.5 ug/l total PCBs, equivalent to the groundwater standard, is reasonably achievable here, and that level be used as the reporting limit for this action.

If treatment of the water is required prior to discharge, a separate work plan will be submitted describing the treatment method and compliance sampling proposed. If required, an addendum to this work plan and/or the SAP will be submitted for approval by DEQ.

A plan for these contingency measures is attached to this work plan as Appendix C – Pond Sediment Dewatering Plan (contingency).

4.11 Berm Removal

As previously stated, all the remediation and reclamation work is expected to be above elevation 3247' with the water table at 3243' (the equivalent of 4+ feet above the anticipated seasonal water level of the BFR). As such, no shoring, temporary berms or other structures should be required to complete removal of the sediments or the berm material. However, Stimson will comply with all DEQ direction regarding BMPs and work practices to prevent pollution to the Blackfoot River. Stimson's BMPs Contingency Plan is presented in Appendix D.

Following removal of the existing cooling pond sediments and confirmation that soil containing more than 0.22 ppm PCBs or EPH above RBSLs has been removed, the remaining berm material will be removed, including the wood cribbing.

Excavation of the remaining berm soil and materials will start at the west end of the site at the former fire pond lagoon near station 0+00 (see drawings), and progress eastward towards the terminus at station 12+75. The berm, the abandoned sewer plant with related utilities, and all wood cribbing will be removed below the level of alluvium until there is no remaining visible evidence of structures.

Soils and materials in the fire pond lagoon area and the east log track area associated with Release #4161 that meet the specified PCB cleanup levels, but are above RBSLs for EPH shall be segregated in a separate stockpile for disposal at the Allied Waste Landfill in Missoula as part of DEQ Petroleum Release # 4161.

Progressing upstream, the earthen berm, which is comprised of wood cribbing, log waste, alluvial soil, and large rocks/boulders will be excavated and the soil and materials segregated. Wood cribbing, logs, and wood waste will be removed, sampled and characterized, with the results provided to the DEQ for review and approval. Once the material has been classified, then it will either be disposed of at Allied's Missoula landfill or recycled for use on site as approved by DEQ.

4.12 Transportation Methods and Routes

Excavated material that will remain on site (soils containing less than 0.74 ppm PCBs) will be transported to the agreed-to and approved locations using articulated off-road dump trucks which will remain within the mill facility confines while handling and stockpiling these materials.

Material to be disposed at Allied Waste's Missoula landfill (soils containing more than 0.74 ppm and less than 50 ppm PCBs) will be transported using over-the-road dump

trucks with covered beds. These trucks will enter Highway 200 from the west mill entrance (to avoid driving directly by Bonner School), traveling south and west to Interstate 90, continuing on Interstate 90 to the Reserve Street exit and thence south to Grant Creek Road, Cemetery Road, Rodgers Street, Shakespeare Street, and Old Coal Mine Road to the landfill entrance. This route is depicted on Figure 1.

Any material requiring disposal at a TSCA landfill (soils and materials containing a PCB concentration equal to or greater than 50 ppm), will be manifested and shipped in accordance with applicable laws and regulations, that include relevant requirements of 49 CFR 170 through 180.

4.13 Traffic Control

DOT-approved traffic signs will be posted to alert oncoming traffic that haul trucks will be entering Highway 200 from the mill facility. A traffic control plan will be prepared and submitted to the DEQ for review and submittal to the Montana Department of Transportation (MDOT). The draft traffic control plan, presented as Figure 1, indicates where the haul trucks will enter and leave the site, as well as proposed traffic control signage and any other MDOT requirements for this project.

4.14 Dust Control

Due to the time of year this project is to be completed, dust control is not anticipated to be a major issue. In the event of dry periods, a water truck will be used to spray dirt haul roads, the excavation, and any active and uncovered impacted soil stockpiles, as needed, to prevent fugitive dust. All measures for controlling fugitive dust emissions will comply with ARM 17.24.761.

Haul roads constructed for this project will include using as much of the existing paved surfaces through the plant as possible. For those roads to be constructed onsite, these sections will be graded, compacted and a dust surfactant, (i.e.; Magnesium Chloride), applied at the beginning of the project, as necessary. Selecting the final haul route alignment will be based on picking sections that are not in low areas or where excessive mud and soft spots could be encountered. If such areas are encountered during road preparation, then these sections will be constructed using a woven geotextle fabric, in conjunction with a 4 to 6” layer of crushed surfacing placed at the proper width to allow truck traffic.

The haul roads will be inspected continually during hauling activities; if dry, the roads will be sprayed with water. The haul roads will not be sprayed excessively, which could lead to excessive mud tracked off-site as well as vehicle safety hazards. However, all

trucks leaving the site will be inspected prior to exiting the project site. A contingency Truck Decontamination Plan is attached as Appendix F, and includes periodic vehicle confirmation sampling to demonstrate that the decontamination process is sufficient.

4.15 Offsite Soil Disposal

Prior to transport and disposal of PCB impacted soils with concentrations between 0.74 and 50 ppm, formal approval will be obtained from Allied Waste Services via their standard profiling process for special waste. Allied Waste has been contacted and has indicated that the "paint filter test" (method 9095B) applies to the soil and material planned for transportation and disposal at their Missoula facility; Stimson will ensure that this standard is met (no free liquids over a 5-minute test period). Disposed quantities will be tracked using Allied Waste's standard weigh tickets that show truck identification, time of arrival, and net tonnage of material delivered to their Missoula landfill.

For any material being transported and disposed of at a TSCA facility, a uniform hazardous waste manifest will be completed for each load leaving the site. Completed manifests and load tickets or a summary invoice listing dates and quantities for material disposed off-site will be included in the RA final report. Stimson will comply with all applicable legal requirements when transporting and disposing of the waste, including the TSCA regulations at 40 CFR 761.61 and 40 CFR 761.65. TSCA chemical waste landfills currently under consideration include Environmental Quality Company's Wayne Disposal, Inc.'s (WDI) landfill in Belleville Michigan, Waste Management Inc's CWM Kettleman Hills Landfill in Kettleman City, California, Clean Harbor Inc's Grassy Mountain landfill in Clive Utah, and American Ecology Corps' US Ecology Nevada landfill in Beatty, Nevada.

4.16 Disposition of Soil Containing <0.74 ppm PCBs

All PCB-impacted soil, sediments, and earthen materials which are <0.74 ppm but >0.22 ppm PCB, will be excavated from the cooling pond, transported via end dump truck, spread and compacted at the approved surface areas agreed-to by the site owner and approved by DEQ. In addition, excavated soil, sediments, and earthen materials to be spread and compacted at the approved surface areas will meet the RBSLs for petroleum for their destination locations and elevations relative to the groundwater surface, unless a One-Time Land Farm permit is obtained to treat the material. The areas to receive the PCB-impacted soil, sediments, and earthen materials will require the placement of an institutional control restricting any future residential use in this area. Current estimates show that there are approximately 23,000 cy of this PCB-impacted material, but this estimate will be refined as a result of further in-situ sampling.

4.17 Quality Assurance/Quality Control

Excavation limits will be controlled by GPS surveying; this surveying will be supervised and checked by a Montana-licensed Professional Land Surveyor, who will also be responsible for producing the As-Built drawings. Excavation, final grading, and riverbank restoration tolerances will be +/- ½ foot.

All sampling activities will be conducted according to the SOPs included as Appendix B. Samples will be documented using a dedicated field sampling logbook; the sampling technician will complete logbook entries as to date, time, sample location(s), unique sample number, and any unusual observations. Field duplicate samples will be collected at a rate of 5% to evaluate data quality. Sample blanks and trip blanks are not considered relevant for this project. Laboratory QA/QC will comply with Energy Laboratories' standard Quality Assurance Manual.

For those areas receiving clean fill in accordance with the restoration plan, backfill material will be generated either onsite through overburden segregation, excavated from other clean areas of the mill site, or imported from offsite commercial sources. Material brought in from other parts of the site or imported will be sampled and analyzed to confirm that it is suitable for use as fill. Backfill confirmation sampling will consist of 5-pont composite samples collected for every 400 cubic yards and analyzed for site contaminants of concern (PCBs, EPH-screen, and the 8 RCRA metals (As, Ba, Cd, Cr, Pb, Se, Ag, and Hg). Samples may also be analyzed for pH, organic content and salinity, depending on the nature and proposed use of the material. The analytical results will be provided to the DEQ for review and approval. Backfilled soil will be compacted using conventional equipment including sheepsfoot roller compactors and generally placed to 90% maximum dry density per ASTM D 698 standard proctor.

4.18 Equipment Decontamination

All trucks and equipment leaving the site will be inspected prior to exiting the project site. As explained in Section 4.8, care will be taken during loading operations to minimize tire contact with sediments. Onsite haul roads will also be graded and surfaced with crushed rock or other suitable materials, as needed, to minimize tire contact with mud or other materials. All over-the-road-trucks transporting materials destined for offsite disposal will be inspected, prior to being released from the site, for any signs of visible contamination or soil materials. Dry decontamination methods, including the use of brooms, shovels and other implements, will be employed to remove any loose dirt or materials from the wheels and chassis of these trucks. A contingency Truck Decontamination Plan is attached as Appendix F to this document and includes periodic vehicle confirmation sampling to demonstrate that the decontamination process is

sufficient. This plan will be implemented in the event that site conditions, in conjunction with DEQ requirements, warrant it.

4.19 Final Site Grading

Final site grading will be to the approximate lines and grades indicated on EE/CA Figure 40 - "Conceptual Grading Plan for Cooling Pond Removal". A copy of this figure is included as Figure 7 of this work plan. Because this is a conceptual grading plan, there may be deviations due to buried items, utilities, etc. Proposed significant deviations will be conveyed to the DEQ for review and approval prior to implementation. Note that the DEQ-required Design Proposal, to be based on the results of additional sampling presented in the SAP, will be the definitive document guiding the excavation and final site grading. Deviations will be described in the Remedial Action final report and depicted on the As-Built drawings. All project areas disturbed during site activities, including areas where excavated material is deposited on-site, will be revegetated with certified weed-free seed using a standard native grass seed or pasture seed mixture. Depressions, other than those required for stormwater retention, will be eliminated, and the disturbed area blended with surrounding areas.

4.20 Bank Restoration

Backfill and Final Grading

The BFR river bank will be reconstructed to the approximate lines and grades indicated on Figures 7 and 9. Other than for river bank reconstruction, no backfilling is planned within the newly-widened portion of the river channel. However, if backfill material is required within the channel, it will be comprised of clean, rounded 6-inch alluvial material.

Soil and rocks/boulders excavated during berm removal and suitable as structural fill may, after confirmation sampling documents that the material does not contain PCBs or EPH concentrations above the river bank action levels (< 0.22 ppm PCBs), be used to reconstruct the new river bank alignment along the southern side of the cooling pond. Backfill confirmation sampling will consist of 5-point composite samples collected for every 400 cubic yards and analyzed for site contaminants of concern (PCBs, EPH-screen, and the 8 RCRA metals (As, Ba, Cd, Cr, Pb, Se, Ag, and Hg). Samples may also be analyzed for pH, organic content and salinity, depending on the nature of the material. The analytical results will be provided to the DEQ. Material proposed for structural backfill, whether salvaged or imported, will be approved by DEQ and DOJ prior to use constructing the final alignment of the river bank. Further, the proposed use of all fill material shall be approved by DEQ.

Suitable rip rap or angular rock salvaged from the berm removal may also be used to armor the embankment.. Upon completion of the restoration, the resulting ordinary high water mark of the BFR will be surveyed for purposes of demarking the northern property line of the Bonner Mill Site.

Seeding

Re-vegetation will be conducted during the first favorable planting period after disturbance and re-contouring activities have been completed. Techniques and/or devices to minimize pollution runoff into the Blackfoot river will be used where and when appropriate, including stabilizing disturbed areas through land shaping, diverting runoff, planting rapid germinating stands of temporary vegetation as well as mulching. Areas to be seeded will generally include the 3:1 slope, the upland area south of the cooling pond as well as the remaining areas impacted by construction activities.

The seedbed will be prepared, as needed, by disking or raking the soils. The seed will be planted by seed drill or by broadcasting on level areas, and by hydroseeding on slopes. After seeding, the level areas will be mulched by crimping straw into the surface; the hydroseeded areas will not require this treatment, as the hydroseeding mixture includes a tackifier. The temporary cover crop (sterile rye or barley) will be maintained until the permanent cover is established.

Rills and gullies that may develop will be stabilized, and the area reseeded and replanted if the rills and gullies are disrupting the reestablishment of the vegetative cover. The weed control / revegetation plan (attached as Appendix G) will be submitted to the Missoula County Weed District for approval by the Missoula County Weed Control Board at least 15 days before revegetation activities commence.

In preparation for seeding the newly constructed embankment - primarily those areas which have been backfilled and re-graded - topsoil will be imported and placed. A 6-inch lift of topsoil will be placed in all areas to be seeded by dumping, spreading and track walk-compacting the soil using a CAT D6 dozer (or smaller). The newly-constructed 2:1 BFR embankment slope will be seeded.

Standard commercial fertilizer, supplied separately or in mixtures containing the specified percentages of total nitrogen, available phosphoric acid, and water soluble potash, will be obtained to supplement deficiencies indicated by standard agricultural soil nutrient tests. A dry free flowing fertilizer will be used for this project and applied using a standard commercial spreader.

All areas to be seeded will be disked, harrowed, raked, or otherwise prepared to provide a smooth even seedbed. Seed mixes will be determined by the Engineer, anticipated to be a mixture of a fast-growing sterile grain and native and non-native grasses for the uplands area. Seeds will be sowed using either drill, broadcast, or other effective methods for even distribution. For this project, it is assumed that approximately 16 pounds live seed per acre will be required. The planned seed mixture is listed below; however the species and ratios may vary, depending on cost and availability.

Plant Species	Seeding Rate [PLS lbs/acre]
Slender wheatgrass	5
Sheep fescue	2
Idaho fescue	2
Mountain brome	6
Prairie junegrass	0.2
Common yarrow	0.1
Fireweed	0.05
Blue flax	1
(Sterile Barley or Rye cover crop)	(25)
TOTAL [LBS/ACRE]	**16.35 + BARLEY OR RYE**

Seeding will be accomplished between October 1 and November 30 or between March 1 and May 30.

4.21 Groundwater Monitoring

Semi-annual groundwater sampling will be conducted until two consecutive rounds of groundwater sampling (one at high water and one at low water) demonstrate that groundwater meets DEQ-7 standards for PCBs and RBSLs for petroleum. Protocols, analytes, and analytical methods are presented in the SAP, attached as Appendix I.

5.0 SCHEDULE AND RIVERBANK STABILIZATION CONTINGENCY PLAN

A project work schedule is included as Figure 8. Note that a draft riverbank stabilization contingency plan will be prepared and submitted for DEQ review and comments by March 25, 2010. The plan will be revised as required by DEQ, resubmitted and approved by DEQ no later than April 15, 2010 (prior to the anticipated 2010 Spring runoff season). The plan will consist of a riverbank stability evaluation focusing on top-of-armoring

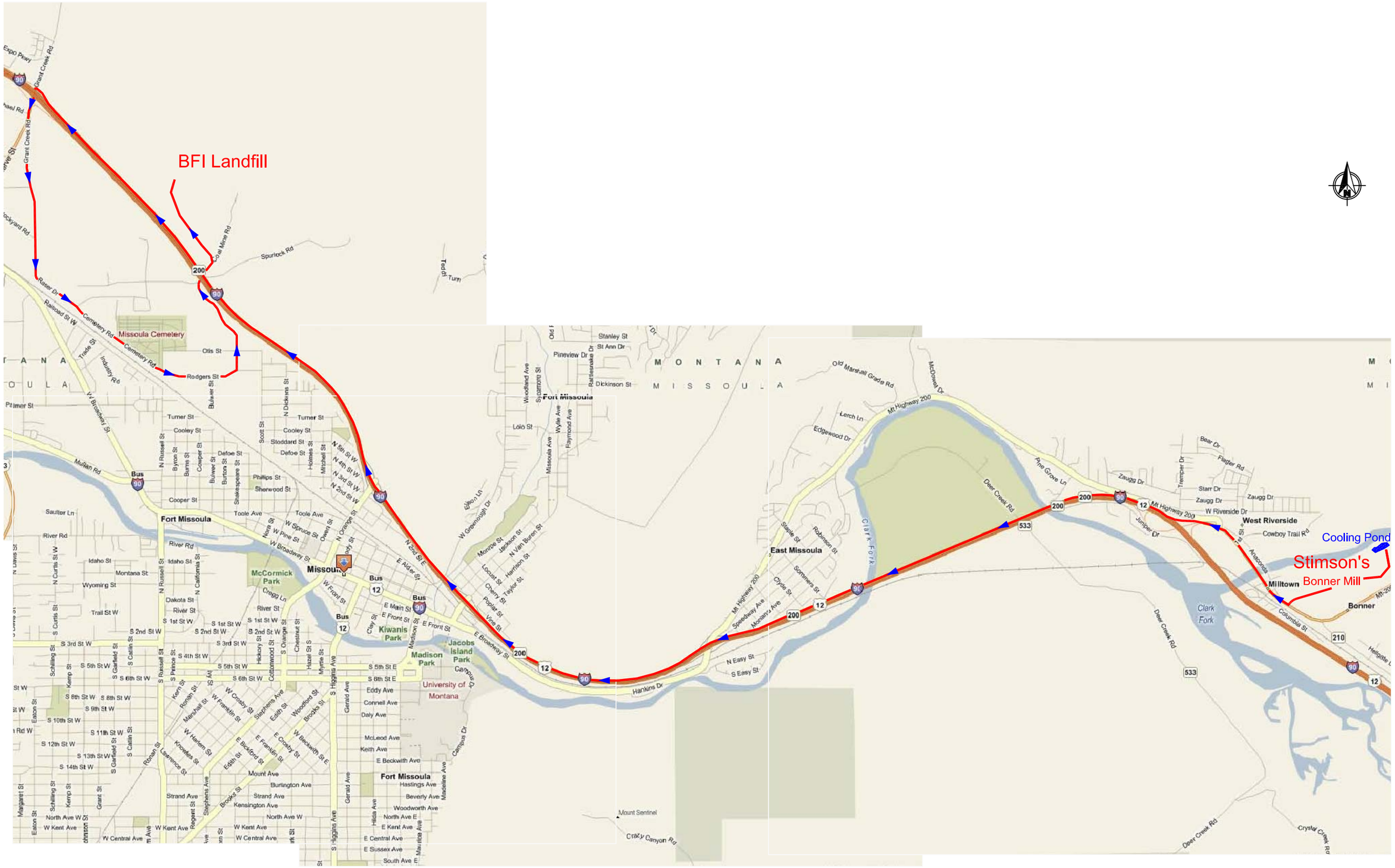
elevations with respect to the projected 10-year return flood event river flow regime and associated river surface elevations along the cooling pond riverbank/berm. If the evaluation indicates that existing armoring is inadequate to withstand a 10-year return flood event, the contingency plan will include provisions for short-notice placement of additional riprap armor along identified vulnerable sections of the cooling pond riverbank. The contingency plan will be implemented in the event that a 10-year or greater return flood event is deemed imminent, based on the National Weather Service Northwest River Forecast Center's projections.

6.0 DELIVERABLES

Stimson will submit a monthly written progress report to DEQ and DOJ concerning actions undertaken pursuant to the AOC, by the 15th day of each month after the Effective Date of the AOC. These reports shall describe all significant developments during the preceding month, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

A Remedial Action Final Report, as required by Section VIII of the AOC, will be produced and submitted within 60 days of completing all work required by the AOC. The report will include a narrative of project activities, approved deviations from this work plan (with justifications for any deviations), As-Built drawings, photographs, copies of field log notes, confirmation sample results (both tabulated results and copies of lab reports), data validation, completed transportation and disposal manifests, and a summarized tabulation of disposal weight tickets.

FIGURES

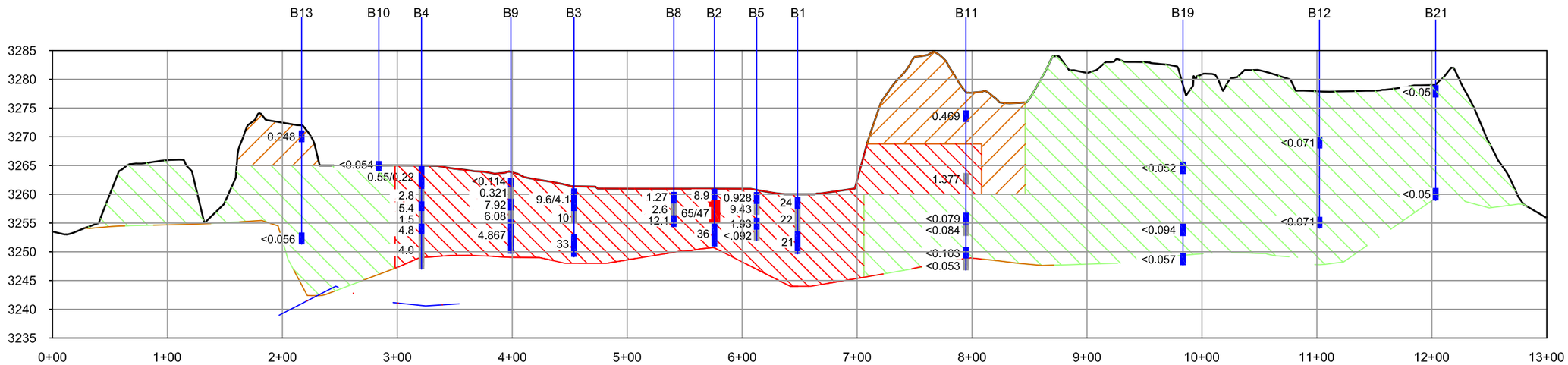


ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:
COOLING POND AND VICINITY BONNER MILL

TITLE:
Figure 1
Site Location & Haul Route
to Allied Waste Landfill

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	x
Date:	02-13-09
Dwg. No.	x



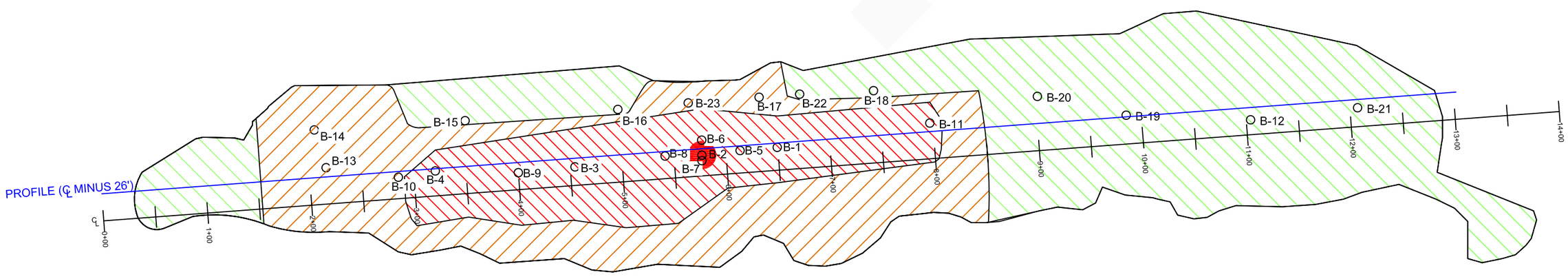
PROFILE-CENTERLINE MINUS 26'

PCB Concentrations

- 1<>50
- 0.22<>1
- ND<>0.22
- >50 ?

PCB Sample Interval & Results (ppm)

<0.114
0.321
7.92
6.08
4.867



PLAN VIEW

0 100

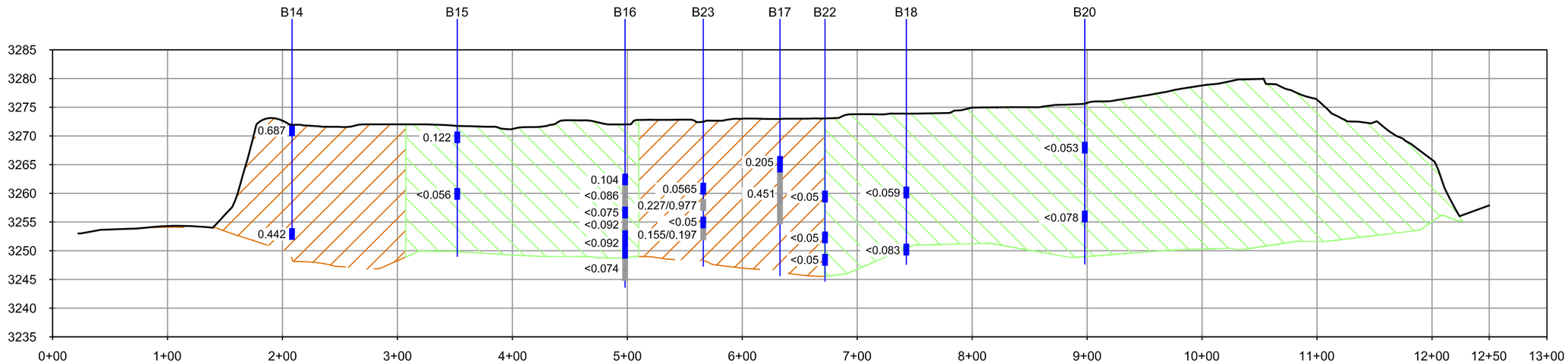
1" = 100'

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:
BONNER MILL
COOLING POND AND VICINITY

TITLE:
Figure 2
Excavation Limits By Degree Of Impact

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	x
Date:	02-13-09
Dwg. No.	x



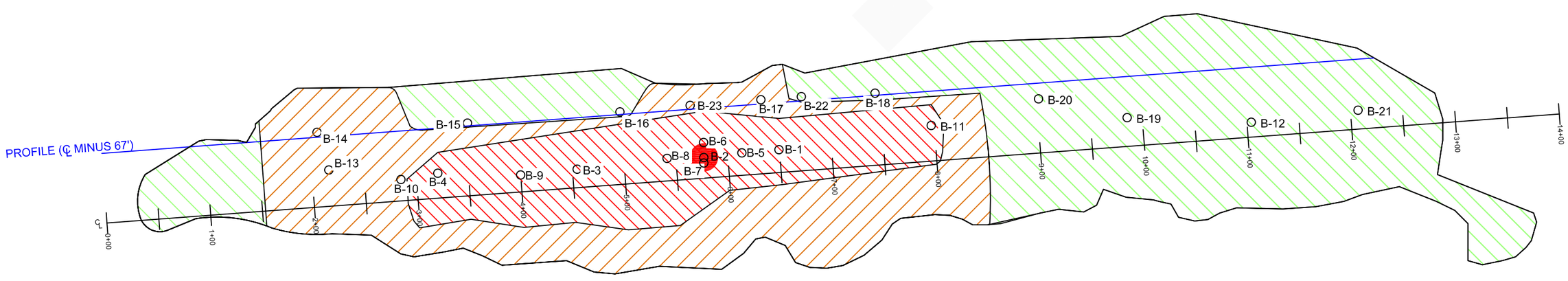
PROFILE-CENTERLINE MINUS 67'

PCB Concentrations

- 1<>50
- 0.22<>1
- ND<>0.22
- >50 ?

PCB Sample Interval & Results (ppm)

<0.114
0.321
7.92
6.08
4.867



PLAN VIEW

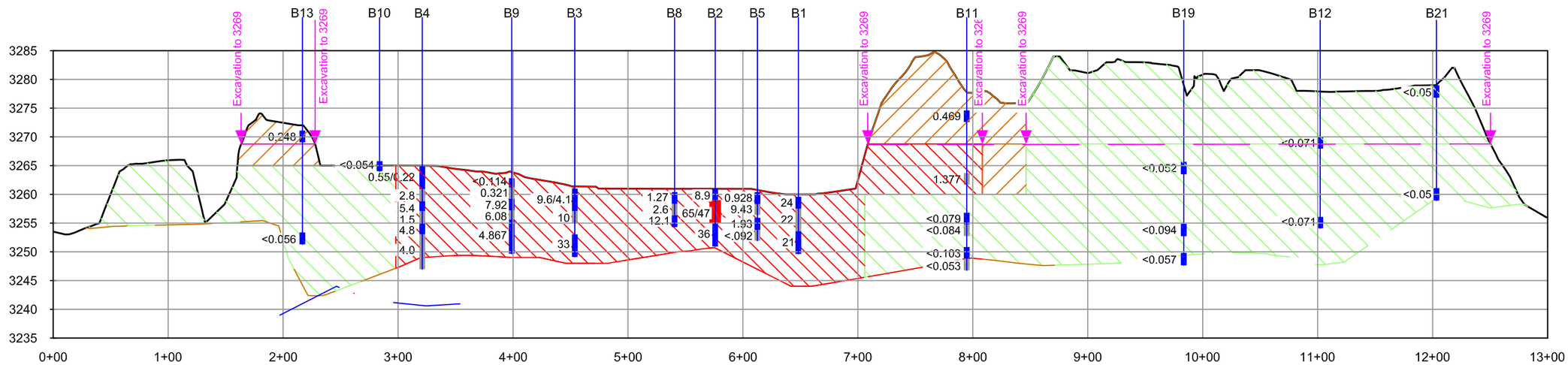
0 100
1" = 100'

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:
BONNER MILL
COOLING POND AND VICINITY

TITLE:
Figure 3
Excavation Limits By Degree Of Impact

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	x
Date:	02-13-09
Dwg. No.	x

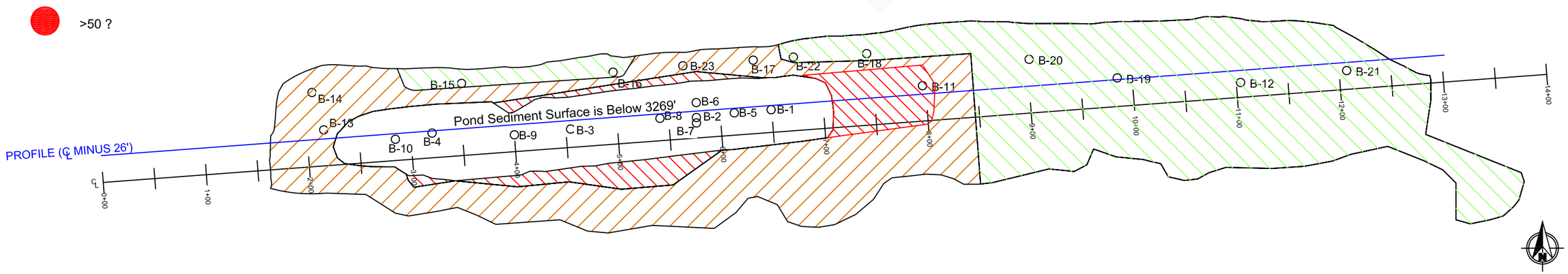


PROFILE-CENTERLINE MINUS 26'

PCB Concentrations

- 1<>50
- 0.22<>1
- ND<>0.22
- >50 ?

PCB Sample Interval & Results (ppm)



PLAN VIEW

0 100

1" = 100'

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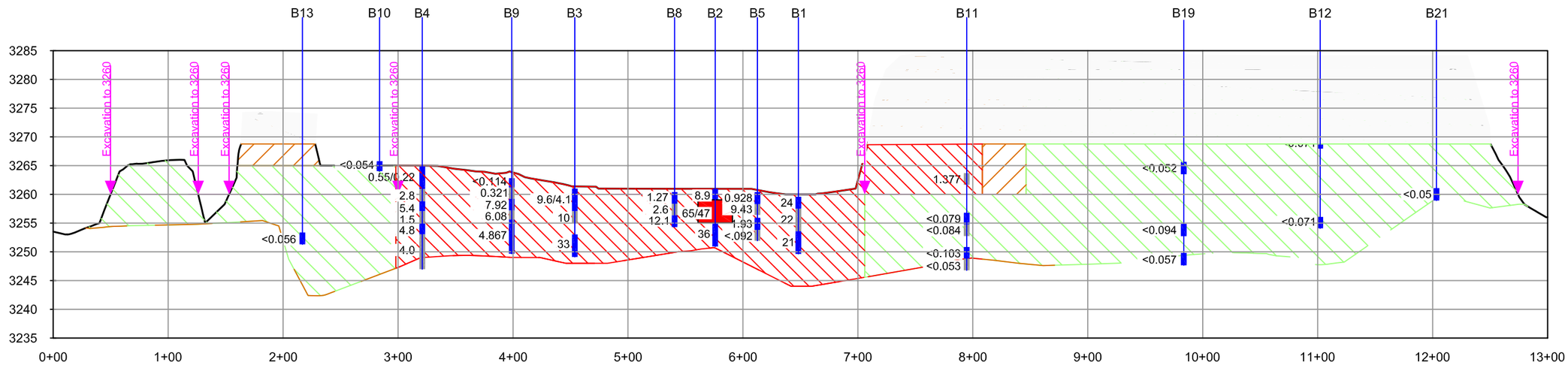
MISSOULA, MONTANA 59808

PREPARED FOR:
BONNER MILL
COOLING POND AND VICINITY

TITLE:
Figure 4
Material Types Excavation Limits from Existing Surface to El. 3269

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	x
Date:	02-13-09
Dwg. No.	x



PROFILE-CENTERLINE MINUS 26'

PCB Concentrations

1<>50

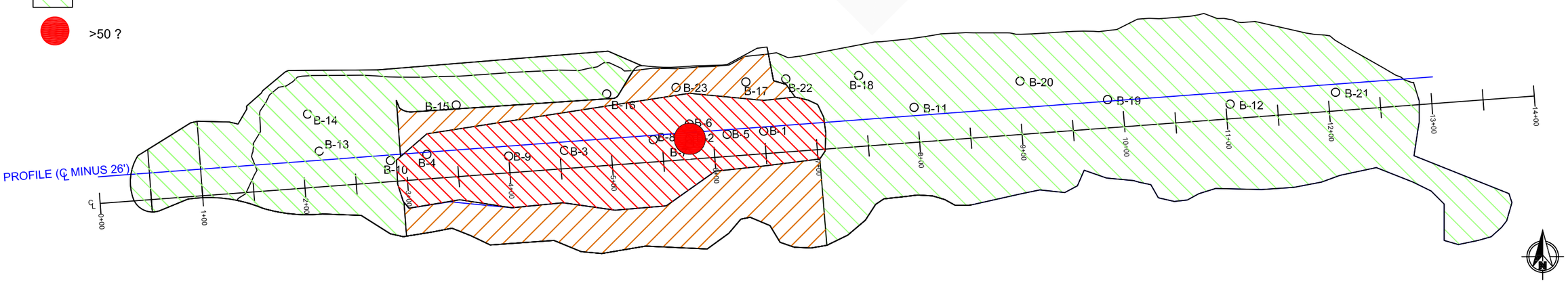
0.22<>1

ND<>0.22

>50 ?

PCB Sample Interval & Results (ppm)

<0.114
0.321
7.92
6.08
4.867



PLAN VIEW

0 100

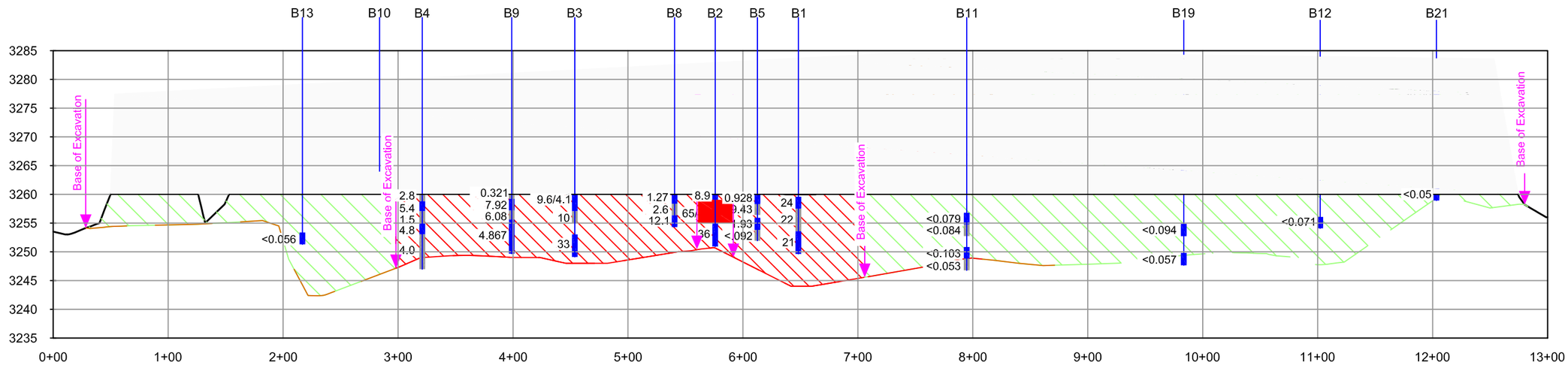
1" = 100'

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:
BONNER MILL
COOLING POND AND VICINITY

TITLE:
Figure 5
Material Types Excavation Limits from
El. 3269 to El. 3260

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	x
Date:	02-13-09
Dwg. No.	x



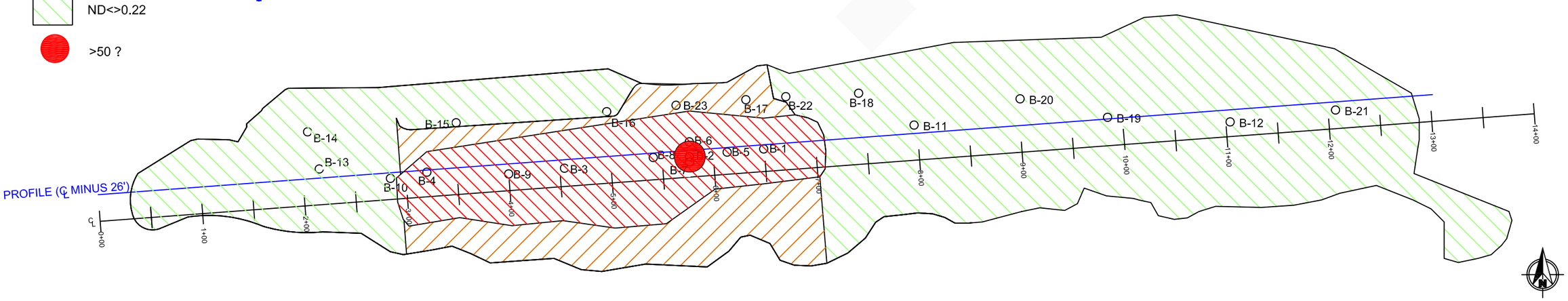
PROFILE-CENTERLINE MINUS 26'

PCB Concentrations

- 1<>50
- 0.22<>1
- ND<>0.22
- >50 ?

PCB Sample Interval & Results (ppm)

<0.114
0.321
7.92
6.08
4.867



PLAN VIEW

0 100

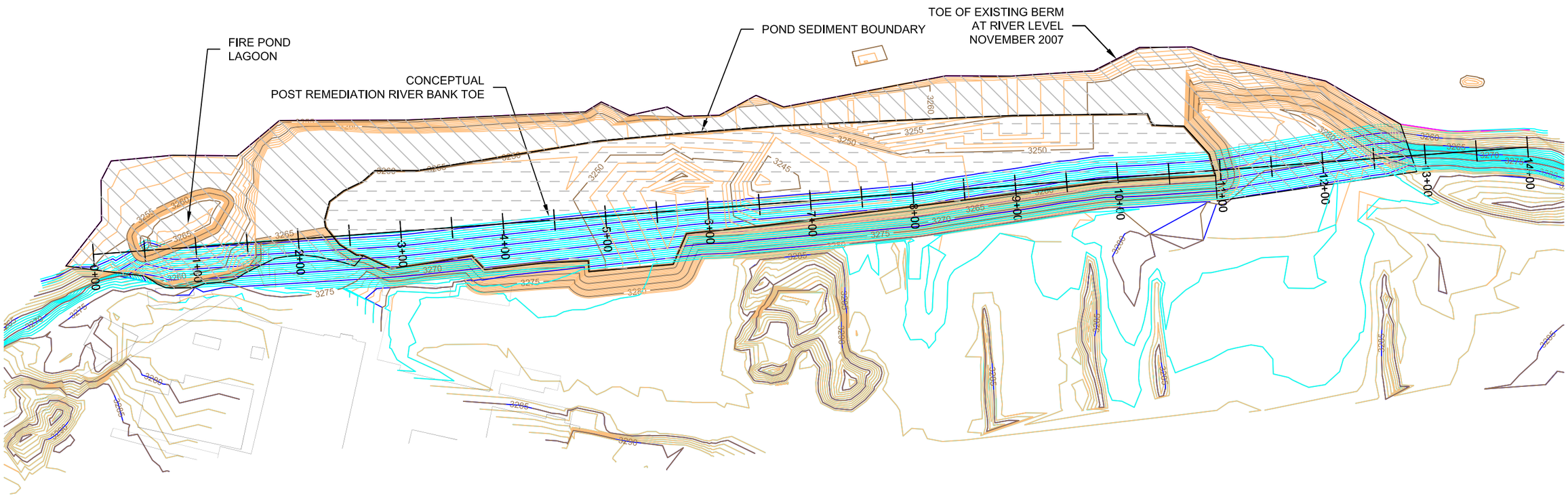
1" = 100'

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:
BONNER MILL
COOLING POND AND VICINITY

TITLE:
Figure 6
Material Types Excavation Limits from
El. 3260 to Base of Excavation

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	x
Date:	02-13-09
Dwg. No.	x



LEGEND

EXISTING CONTOURS

PROPOSED FINAL CONTOURS

0 50 100 150 200

SCALE IN FEET

CONTOUR INTERVAL = 5' MAJOR, 1' MINOR

Note: Minor-1 foot contours are not clearly visible;
Major 5-foot contours are easily seen.

ENVIROCON
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MISSOULA, MONTANA 59808

PREPARED FOR:

BONNER MILL
COOLING POND AND VICINITY

TITLE:

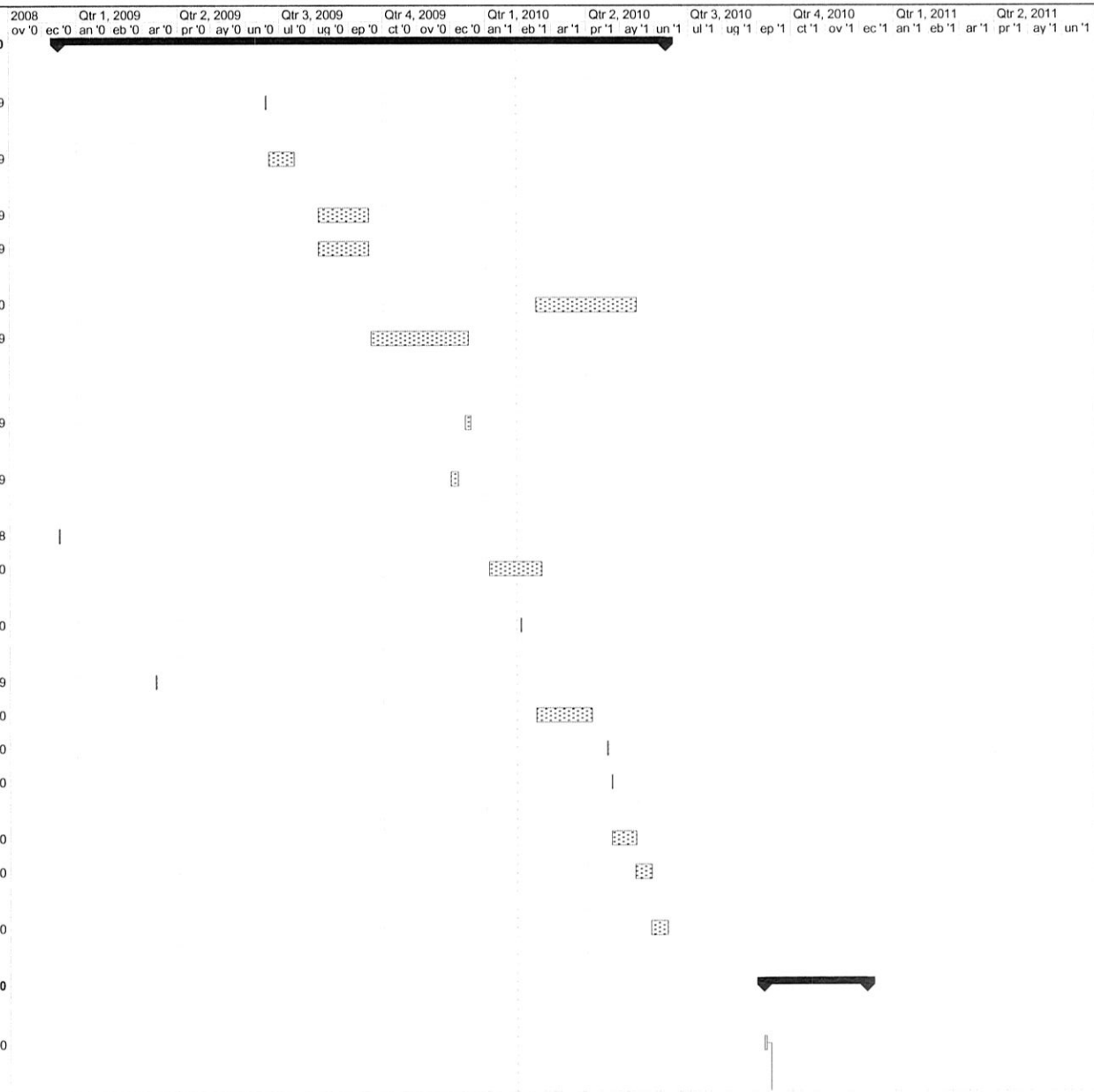
FIGURE 7
Proposed Final Regrade

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	A. Brulle
Date:	9-05-09
Dwg. No.	1476301-Rev 1

FIGURE 8

Project Schedule - Conceptual
Bonner Mill Cooling Pondand Vicinity
For
Stimson Lumber

ID	Task Name	Dur	Start	Finish
1	**Pre-Construction and Administrative Activities**	**380 d**	**12/16/08**	**6/11/10**
2	Submit 2nd Draft of Remediation Work Plan/SAP to DEQ	1 d	6/19/09	6/19/09
3	DEQ 2nd Draft Remediation Work Plan Review Period	16 d	6/22/09	7/14/09
4	Coordinate Petrofund Workplan	32 d	8/5/09	9/18/09
5	Prepare & Submit 3rd Draft of Work Plan/SAP to DEQ	32 d	8/5/09	9/18/09
6	Joint Permit Application	65 d	2/15/10	5/15/10
7	DEQ 3rd Draft Review of Remediation/ Petrofund Workplan and Initial Phase I SAP	60 d	9/21/09	12/16/09
8	Coordinate Petrofund Workplan Revisions	5 d	12/14/09	12/18/09
9	Submit Final SAP	5 d	12/1/09	12/7/09
10	EPA and DEQ Approval of SAP	1 d	12/16/08	12/16/08
11	Phase I SAP Implementation (Characterization Sampling and Analysis)	35 d	1/4/10	2/19/10
12	AOC and Work Plan Agreed to and signed by Stimson	1 d	2/1/10	2/1/10
13	SAP Data Submitted to DEQ/EPA	1 d	3/12/09	3/12/09
14	Public Comment Period	36 d	2/15/10	4/5/10
15	AOC Finalized by all parties	1 d	4/19/10	4/19/10
16	Submit 1st Draft Excavation and Restoration Plan	1 d	4/23/10	4/23/10
17	Agency Review of First Draft Complete	16 d	4/23/10	5/14/10
18	Submit 2nd Draft Excavation and Restoration Plan	11 d	5/14/10	5/28/10
19	Agency Review of Final Draft Plan Complete	11 d	5/28/10	6/11/10
20	**Mobilization, Site Preparation and Controls**	**66 d**	**9/6/10**	**12/6/10**
21	Equipment and Personnel Mobilization	2 d	9/6/10	9/7/10



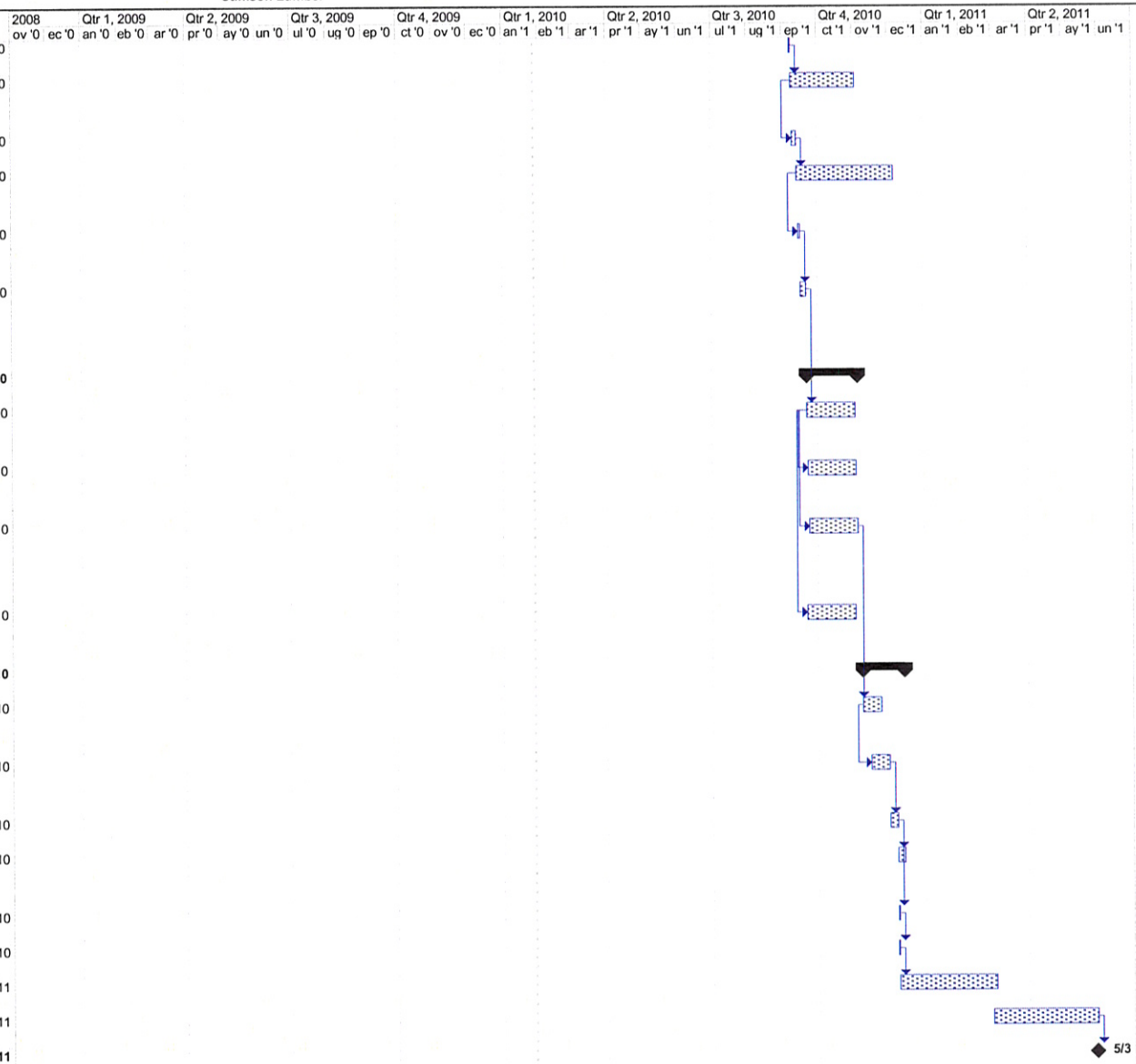
Project: baseline schedule
Date: 1/28/10

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline

FIGURE 8

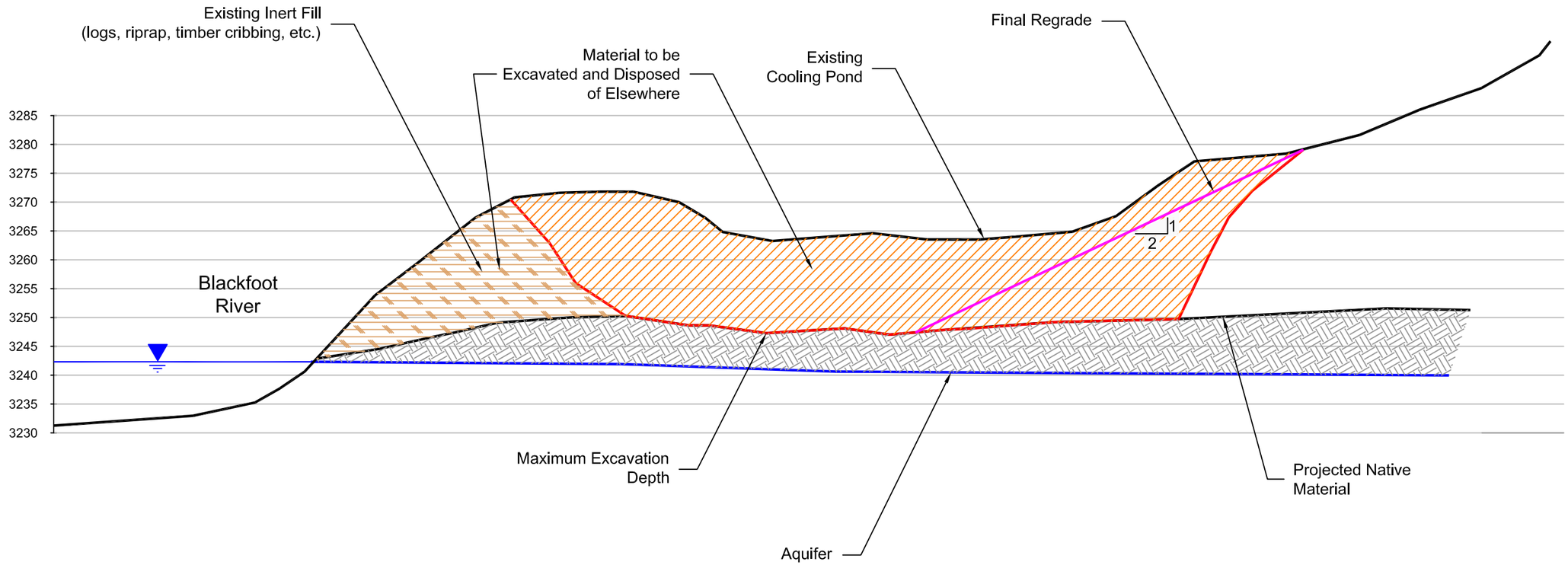
Project Schedule - Conceptual
Bonner Mill Cooling Pondand Vicinity
For
Stimson Lumber

ID	Task Name	Dur	Start	Finish
22	Establish Project Support Zone	1 d	9/8/10	9/8/10
23	Setup and Maintain Equipment Decontamination Station	40 d	9/9/10	11/3/10
24	Haul Road Construction/Grading	2 d	9/10/10	9/13/10
25	Construct and Maintain Stormwater Control and Run-on/Run-off Features	60 d	9/14/10	12/6/10
26	Cooling Pond and Stockpile Area Clearing	2 d	9/15/10	9/16/10
27	Construct/Prepare Temporary Pad for Dewatering and Stockpiling Sediments	3 d	9/17/10	9/21/10
28	**Excavation and Stockpiling**	**32 d**	**9/22/10**	**11/4/10**
29	Cooling Pond/Fire Pond/Log Track Excavation, Staging/Dewatering	30 d	9/22/10	11/2/10
30	Confirmatory Sampling and Analysis	30 d	9/23/10	11/3/10
31	Load, Transport and Disposal of Sediments to Allied Waste .74ppm to 50ppm	30 d	9/24/10	11/4/10
32	Place Sediments and Materials <.74 ppm PCB, in Designated Areas	30 d	9/22/10	11/2/10
33	**Site Restoration**	**26 d**	**11/9/10**	**12/14/10**
34	Excavate and Grade Left Bank of BFR to Restore Shoreline	12 d	11/9/10	11/24/10
35	Replace Rip Rap Salvaged from Excavation for Toe Protection	12 d	11/16/10	12/1/10
36	Place Cover soil At Embankment	5 d	12/2/10	12/8/10
37	Install Post Completion Monitoring Wells	4 d	12/9/10	12/14/10
38	Site Cleanup and Demobilization	1 d	12/9/10	12/9/10
39	Site Work Complete	1 d	12/9/10	12/9/10
40	Complete Final Report	60 d	12/10/10	3/3/11
41	Seeding	65 d	3/1/11	5/30/11
42	**Project Complete**	**1 d**	**5/30/11**	**5/30/11**



Project: baseline schedule
Date: 1/28/10

Task | Split | Progress | Milestone | Summary | Project Summary | External Tasks | External Milestone | Deadline



ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:

BONNER MILL
COOLING POND AND VICINITY

TITLE:

FIGURE 9
Typical Cross Section

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	A. Beale
Date:	8-05-09
Dwg. No.	1476301-Rev1

APPENDIX A
HEALTH AND SAFETY PLAN

SITE – SPECIFIC
HEALTH AND SAFETY PLAN

Stimson Lumber Cooling Pond Closure
Bonner, MT
Project # 1476301

Prepared For:

Stimson Lumber Company
9360 HWY 200
Bonner, MT

Prepared By:

Tim Tierney
Envirocon, Inc.
101 International Way
Missoula, MT 59808

February 2009

HEALTH AND SAFETY PLAN ACKNOWLEDGMENT SHEET

I acknowledge having received a briefing on this health and safety plan, and that I understand the requirements of this plan, including the potential for random or for-cause drug and alcohol testing. I further acknowledge that failure to follow the requirements of this plan may result in removal from this site.

Printed Name	Company	Signature	Date

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APPENDICES

Appendix A: Voluntary Emergency Data Form

Appendix B: Hospital Route and Emergency Contacts

Appendix C: Decon Report/Log for Release of Equipment

Appendix D: Contaminants Of Concern (COC)s

A. SITE INTRODUCTION

This site-specific health and safety plan (HASP) provides safety-related information and requirements specific to the task and work location(s) described. General requirements contained in the Envirocon Health and Safety Program Manual along with this site-specific HASP will be implemented except where noted.

A.1. Scope

This Health and Safety Plan applies to the removal of an approximately three-quarter acre cooling pond located on the Stimson Lumber Companies Bonner Mill located in Bonner, Montana.

A.2. Site Description

The project site is within the fenced confines of the recently closed Stimson sawmill and plywood manufacturing plant in Bonner, MT. The 500' by 70' cooling pond lies adjacent to and parallel with the Blackfoot River on the west end of the property.

A.3. Description of Work

This project involves excavation, transportation, and disposal of PCB impacted soils. Depending on the PCB concentrations in the soil it will be used on site as cover soil; placed inside a visqueen wrap and covered with clean soil; Disposed of at the Allied Missoula Landfill; or for soils above 50ppm transported to a TSCA landfill.

Following soil removal the site will be graded and the Blackfoot River bank restored.

A.4. Tasks

The scope of work associated with this project includes supervision, labor, equipment and expertise to perform the following:

- Site mobilization tasks;
- Demobilization tasks;
- Storm water control measures.
- Excavation of potentially contaminated materials;
- Loading and hauling materials.
- Maintaining and operating ancillary features.
- River bank restoration.

B. BASIS

This section will discuss the basis in regulations, standards and policies for the project. It includes OSHA regulations and Envirocon policies and procedures.

B.1. Preparation and Approval

This plan is based upon existing available information regarding the site and upon past experience at other sites. This document is also based on OSHA regulations, contractual specifications applicable to the scope of work, the client's health and safety plans and procedures, Envirocon's Health and Safety Program, and Envirocon policies and procedures. This document describes the site-specific implementation of those policies and procedures. Envirocon personnel and lower tier subcontractors are required to adhere to all of these documents during the course of this project. Some of Applicable regulations and standards are described in Table B.3:

B.1.a. Prepared For

This plan was prepared for:

- Stimson Lumber Company

B.1.b. Prepared By

This plan was prepared by:

- Tim Tierney
  Envirocon, Inc.
  101 International Way
  Missoula, MT 59808

B.1.c. Approvals and Modifications

This plan and future changes must be approved as follows:

1) After preparation and approval by Envirocon, this plan will be submitted to the client's representative in accordance with the applicable contract and specifications.

2) Envirocon's designated Project Manager is responsible for the final approval of this plan before transmittal to the client.

3) Envirocon's Corporate Director of Health and Safety or designated representative is responsible for approval of this plan and any future modifications after preparation. Note: Certified Envirocon Safety and Health Professionals (CIH or CSP) are hereby designated to approve changes to this plan.

B.2. Incident-Free Performance of Work

Incident-free performance means error-free project execution: no injuries, illnesses, property damage, community or environmental impacts, or incidents that could have resulted in these occurrences under different conditions. Incident-free performance does not happen by chance: It is achievable through the integration of safety into all

management systems, the project process, and individual efforts. We believe that all incidents are preventable.

B.3. Policies and Regulatory Basis

Table B.3 Some Important Applicable Regulations and Standards	
Latest revision	Contract Specifications applicable to the scope of work.
29 CFR 1910.20	Access to employee exposure and medical records
29 CFR 1910.38	Employee emergency plans
29 CFR 1910.95	Occupational noise exposure
29 CFR 1910.134	Respiratory protection
29 CFR 1910.120	Hazardous waste operations
29 CFR 1910.151	Medical services and first aid kit
29 CFR 1910.157	Portable fire extinguisher
29 CFR 1910.1000	Air contaminants
29 CFR 1910.1200	Hazard communication
29 CFR 1926	Construction Industry Standards

B.4. Changing Conditions and Management of Change

B.5. Management of Change (MOC)

The plan presents a realistic approach to the anticipated hazards at the site. It is expected that site conditions may vary throughout the duration of the project.

B.5.a. Changing Conditions

Changes in conditions and identification of previously unrecognized hazards are identified by the following processes:

- site inspections by supervisory and site safety personnel
- observations and suggestions by all personnel
- proper planning for each new phase of operations
- Activity Hazard Analysis (AHA) for each new phase of operations
- communicating plans and controls to all effected employees
- accident investigations and lessons learned from this and other projects
- contract modification

B.5.b. Response to Changes in Conditions

1) This plan, AHAs, and/or other plans as necessary shall be changed as necessary to reflect the risk assessment.

2) Changes in plans will be authorized by responsible individuals.

B.5.c. HASP and AHA familiarization

The information presented in this plan will be reviewed with the employees during site-specific training to be completed before working on site. These site entry briefings will focus on the specific tasks of those being briefed. A copy of this plan will be available at all times on the site for any one to review thoroughly. As the project initiates new tasks on site, the crews for those tasks will be briefed on the appropriate AHA(s). AHAs will highlight applicable controls from this plan. All assigned personnel, visitors, and regulatory personnel are therefore expected to be familiar with and comply with all aspects of this plan. If the safety requirements are unclear each individual is responsible for getting clarification from their supervisor. The qualifications required for various tasks on this project are summarized in the training and qualifications section below.

B.6. Compliance

Failure to follow the rules and procedures prescribed in this document potentially jeopardizes the working environment of other employees. For this reason, Envirocon is prepared to enforce the progressive disciplinary procedures described in the site control section of this document for those who fail to follow the established policies and procedures for this project.

C. SITE ORGANIZATION AND KEY PERSONNEL

29 CFR 1910.120 requires an effective site organization to be responsible for supervision of all work at hazardous waste sites. The purpose of this section is to describe this site's organization as it applies to this project.

C.1. Project Manager: TBD

The Project Manager is responsible for oversight and management of all aspects of the project including health and safety, quality assurance, construction, remedial design, equipment, and personnel.

- The Project Manager is responsible for project health and safety performance in accordance with Incident-free performance goals.
- Conducting periodic site inspections.
- Participating in incident investigations.
- Provides safety leadership through example and by holding all personnel assigned to this project accountable for their safety responsibilities.

C.2. Site Superintendent: TBD

The site superintendent serves as the site's general supervisor in accordance with the requirements of 29 CFR 1910.120(b)(2)(i)(A). The superintendent is responsible for coordinating activities with the project manager and site safety officer. This includes:

- enforcing the provisions of this HASP;
- preparing for new tasks in advance of field operations in accordance with the Envirocon Field Operations Manual;
- ensuring that an AHA has been completed before any new work commences; and
- briefing crew members before assigning them to the new task;
- ensuring that employee safety suggestions are fairly and respectfully evaluated, and that employees are informed of the outcome of the evaluations;
- monitoring the conduct of operations in the field to ensure safe delivery of a quality product for the client;
- supervising subcontractors in accordance with this plan; and
- ensuring that injured personnel (with or without life threatening injuries) are escorted to medical treatment by the safety officer or other supervisory personnel.

C.3. Corporate Director Health and Safety: Mr. Joseph Ocken, CIH, CSP, CHMM

Envirocon's Corporate Director of Health and Safety is responsible for the development and implementation of the Corporate Health and Safety Program. The program contains Envirocon's accident prevention plans and procedures and other related plans, policies and procedures required by OSHA standards. The Corporate Director is responsible for:

- ensuring that all health and safety issues on site are resolved;
- ensuring that employee complaints are addressed in accordance with Envirocon policies and procedures; and applicable laws;
- ensuring that all confidential employee complaints received by the director are kept confidential;
- ensuring appropriate investigation of all incident reports;
- ensuring that audit findings are corrected in accordance with Envirocon policies and procedures; and applicable laws; and
- providing professional support for the project manager's health and safety program.

C.4. Project Health and Safety Manager: Tim Tierney

The project health and safety manager is the senior health and safety professional assigned to the project for the purpose of providing technical assistance to the project manager and on-site health and safety personnel. The project health and safety manager reports to the Corporate Director of Health and Safety with regard to project health and safety issues.

The Project Health and Safety Manager is responsible for the following:

- developing and implementing the Project Manager's site-specific health and safety program and procedures;
- providing professional technical support for the Project Manager with regard to all matters of health and safety associated with the project;
- technical supervision of the health and safety officers and technicians assigned to the project;
- assisting HSOs in developing and reviewing project health and safety procedures, hazard analysis and other supporting documents;
- implementing and administers this HASP;
- conducts periodic inspections and audits of the project site for the Corporate Director;
- coordinates the activities of other health and safety department personnel supporting the project with the senior health and safety official on site and the project manager;
- coordinating all health and safety activities with the Project Manager; and
- in the event that personnel fail to adhere to established safety guidelines, recommending disciplinary and/or corrective actions to the Project Manager.

C.5. Project Health and Safety Supervisor: TBD

The Project Health and Safety Supervisor is the senior designated Health and Safety Officer (HSO) assigned to the project, and is responsible for the following:

- developing and implementing the Project Manager's site-specific health and safety program and procedures;

- providing professional technical support for the Project Manager with regard to all matters of health and safety associated with the project;
- technical supervision of the HSOs and technicians assigned to the project;
- assisting HSOs in developing and reviewing project health and safety procedures, hazard analysis and other supporting documents;
- implementing and administers this HASP;
- conducts periodic inspections and audits of the project site for the Corporate Director;
- coordinating all health and safety activities with the Project Manager; and
- in the event that personnel fail to adhere to established safety guidelines, recommending disciplinary and/or corrective actions to the Project Manager.

C.6. Site Health and Safety Officer(s): TBD

Health and Safety Officers (HSO(s)) are the employees designated as the health and safety competent persons for this project. HSO(s):

- serve as the OSHA "site safety and health supervisor" as defined in the HAZWOPER standard 29 CFR 1910.120/1926.65(b) (Note: This includes authorization to administer the requirements of this plan, the Envirocon Health and Safety Program, and applicable OSHA regulations on site);
- implements the provisions of this HASP;
- serves as a safety and health competent person (SCP);
- conducts and documents daily site safety inspections;
- maintains the site health and safety logs;
- maintains health and safety records on site;
- reports, and documents incidents and issues related to site safety;
- assists the project manager with incident investigations related to health and safety;
- supervises decontamination of personnel and equipment;
- conducts monitoring tasks on site;
- monitors the use of PPE to ensure proper usage;
- inventories and inspects PPE;
- selects PPE within the guidelines of this plan;
- ensures all personnel are qualified and "Fit for Duty;"
- inspects first aid kits/fire extinguishers and emergency response equipment;
- as needed, accompanies employees to clinics or other health care providers to ensure proper care and evaluation of injured or ill employees; and

- reports/coordinates return-to-work issues with the Corporate Director of Health and Safety.

C.7. Site Competent Persons

OSHA's general safety and health provisions from the construction industry standards (29 CFR 1926.20(b)) include accident prevention responsibilities. Such programs shall provide for frequent and regular inspections of the job sites, materials, and equipment to be made by competent persons designated by the employers. OSHA's regulations regarding scaffolding, excavation and hazardous waste operations have similar requirements. The construction safety competent person is defined in 29 CFR 1926.32 to mean "one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them."

Competent persons are designated on the form that follows this section. Each competent person is given responsibility and authority for certain aspects of safety on site. It is important for each competent person to recognize the limits of their own knowledge, training, experience and capability. It is the responsibility of each competent person to act within the limits of their own knowledge, training, experience and capabilities.

C.7.a. Site safety competent persons

The HSO(s) serve as the general site competent person (SCP) responsible for accident prevention in accordance with 29 CFR 1926.20. The competent person is responsible for, and authorized to act to ensure that personnel are not working under conditions which are unsanitary, hazardous, or dangerous to their health or safety.

1) The competent person's accident prevention responsibilities includes

   a) frequent and regular inspections of the job site,

   b) inspections of materials on site, and

   c) inspection of equipment on site.

2) The project manager may designate additional competent persons.

3) Designated persons, in accordance with 29 CFR 1926.32, must be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees.

4) Once designated, these competent persons share Envirocon's authority take prompt corrective measures to eliminate these hazards.

C.7.b. Excavation Competent Person (as designated in the table below)

This individual will have direct supervisory control over all excavation activities involving entry into excavations or trenches. All competent persons shall be authorized and acknowledge authorization in the table below.

1) Compliance standards

The excavation competent person ensures compliance with 29 CFR 1926, Subpart P (1926.650 thru 652). The scope of these regulations includes all excavations (e.g., hand digging, equipment excavation, with or without personnel entry). Additional competent persons may be designated by the Project Manager in consultation with the Corporate Director of Health and Safety. Designation will be based on experience and knowledge of these standards.

2) Specific duties include:

a) Assists supervisor with planning excavations.

b) Ensures that utilities are located and marked (underground or overhead hazards) prior to excavating. Hand dig to locate when excavating within six feet of utilities.

c) Where personnel entries are involved, classifies soils in accordance with OSHA soil classification in 29 CFR 1926 Subpart P.

d) Ensures the use of protective systems in accordance with Subpart P where personnel entries are required.

e) Monitors all excavation activities for associated hazards.

f) The competent person is authorized by Envirocon to take corrective action to eliminate hazardous or dangerous situations. This includes halting excavation operations and/or removing personnel from excavations.

g) Performs inspections of excavations prior to the start of work, as needed throughout the shift and after every rainstorm.

C.8. Lower Tier Subcontractors

Lower Tier Subcontractors are responsible for supervising their work and personnel in accordance with this plan and applicable site policies and procedures. Regardless of other requirements, lower tier subcontractors shall adhere to all federal, state and local laws and regulations. In particular this includes the requirements of 29 CFR 1910.120/1926.65 HAZWOPER Standards. Lower tier subcontractors' personnel will be supervised in accordance with the same requirements and standards as Envirocon and subcontractor personnel. Where their programs, policies and procedures exceed the requirements of this document and the applicable site policies and procedures, the lower tier subcontractor may use their own policies and procedures to implement these requirements otherwise they must adopt this document. This safety plan does not necessarily address all of the hazards specific to lower tier subcontractors' work. Lower tier shall submit either a site-specific health and safety plan for their particular operation(s) or prepare and submit appropriate Activity Hazard Analysis(ses) to append to this plan.

C.8.a. Site Access Control

Envirocon is in part responsible for controlling access to this site along with our client. Envirocon reserves the right to deny access to personnel who pose a hazard to

operations through serious, willful, or repeated violation of safety requirements; and those personnel who are not otherwise qualified to work on site.

C.9. Competent Person Designation Form

COMPETENT PERSON DESIGNATION		
The following individual(s) has been designated as the "Competent Person," meaning one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who is hereby authorized by Envirocon to take prompt corrective measures to eliminate them. The person(s) named below has knowledge of the systems, equipment, conditions and procedures in relationship to the proper use, inspection, manufacturers' recommendations and instructions, and maintenance as designated below. This person(s) has been delegated the responsibility to coordinate all activities and operations as defined by the designation(s). In carrying out these responsibilities, it shall be the duty of the competent to act within the limits of their knowledge and training.		
Competent persons added to the list must be approved by the Project Manager and HSO.		
NAME/DESIGNATION(S)	**COMPANY**	**COMPETENT PERSON**
	Envirocon	☐Excavation, ☐Site Safety, ☐Scaffolds
Project Manager's approval: _____; HSM/HSO Approval: _____ Acknowledged: _____ Date _____ Competent Person's Signature		
	Envirocon	☐Excavation, ☐Site Safety, ☐Scaffolds
Project Manager's approval: _____; HSM/HSO Approval: _____ Acknowledged: _____ Date _____ Competent Person's Signature		
	Envirocon	☐Excavation, ☐Site Safety, ☐Scaffolds
Project Manager's approval: _____; HSM/HSO Approval: _____ Acknowledged: _____ Date _____ Competent Person's Signature		

D. SITE SECURITY AND CONTROLS

This section deals with site access and general project rules, physical security of the project work areas and the controls related to waste management and access to contaminated areas to ensure qualifications of personnel.

D.1. Security

The majority of the work to be performed under this project is located within the secured area of the Bonner Mill. As such, the Contractor for this project must comply with the operating procedures and safety and security requirements of Stimson.

The security officer is responsible for controlling access to the project site and any established exclusion zones or contamination reduction zones as follows.

D.1.a. Security Officer

The Envirocon Project Manager is responsible for the security of the project site.

1) The project manager will be assisted in these duties by the health and safety supervisor who will serve as security officer.

2) The security officer's responsibilities include:

a) Ensuring that all personnel entering the site are qualified to go into the areas where they are seeking access.

b) Ensuring that authorized personnel conduct themselves in accordance with the established security and safety requirements.

c) Ensuring that personnel sign in at the beginning of each shift.

d) Establishing and maintaining appropriate exclusion zone boundaries around contaminated areas.

e) Work areas and zones shall be adequately marked and posted along access routes to give warning of restrictions to visitors.

f) Ensuring that adequate barriers and warnings are used to prevent site access by the general public or unqualified personnel.

g) Providing adequate surveillance and lock-up for:

i. Trailers and storage facilities;

ii. Fuel and hazardous materials storage;

iii. Materials of potential homeland security concern;

iv. Heavy equipment, vehicles, and related equipment;

v. small equipment and pilferable items.

h) Ensuring that heavy equipment is adequately secured after working hours to prevent theft or mischief.

D.1.b. Public Safety

The work area shall be suitably delineated (i.e., as appropriate for a construction site) in order to prevent unauthorized entry.

Visitors shall be directed to the project manager's designated representative to seek authorization when appropriate. Visitors shall be logged onto the site. Visitors that are not qualified for work in the EZ shall be escorted or otherwise prevented from accidentally entering the EZ.

All unattended equipment will be secured physically and mechanically during periods of non use. Keys shall be removed from equipment and stored in a secure location.

D.2. Project Rules

The project rules have been developed by Envirocon and our client in order to create a problem-free and rewarding work environment, one in which the employee understand what is expected of them on the project site. An employee who fails to maintain at all times the proper standards of conduct or who violates any of the following rules and regulations may be subject to disciplinary action, including but not limited to, termination of employment or denial of access.

D.2.a. Unacceptable Conduct

Unacceptable employee conduct and/or violation of a project rule or requirement may be reason for disciplinary action up to and including suspension without pay, termination of employment, or denial of access to the work area or client facilities. Examples of unacceptable employee conduct and/or rule violation are as follows:

- Possessing, when not authorized, government, project, or other person's property or services, or theft of the same.
- Altering, damaging, or mutilating government, project, or other person's property.
- Violating the Security Rules.
- Reporting or badging for other employees or other identification misrepresentation.
- Making or stating false claims or falsifying reports or records.
- Refusing to submit to a search.
- Refusing to submit to drug and alcohol screening or testing or other similar inspections.
- Possessing or using alcoholic beverages, controlled substances, or weapons on any project.
- Using or possessing keys or other devices used for lock opening without specific permission.
- Sleeping on the project.
- Improperly using, or failure to use, toilet facilities.
- Failure or refusal to perform assigned work as directed.

- Fighting.
- Negligence resulting in an infraction of health and safety or project rules or requirements.
- Taking unauthorized work breaks.
- Engaging in horseplay of any kind.
- Engaging in gambling or the sponsoring of raffles.
- Not using trash receptacles or otherwise creating unsanitary conditions.
- Smoking, using tobacco, or eating in prohibited areas.
- Unauthorized cooking on the project.
- Selling food, beverages, or other items on the project.
- Failure to display identification badge or area access credentials in the proper manner and in a conspicuous place.
- Violating health and safety or project rules or requirements.
- Sexual harassment.
- Abusing equipment, vehicles or other Envirocon property or rentals.
- Operating equipment or vehicles without authorization and proper qualification.
- Failure to operate equipment or vehicles in the manner specified by the manufacture (including proper maintenance and repairs).
- Not reporting use of prescription drugs.
- Not reporting equipment or material damage.
- Not reporting an accident or incident.
- Displaying pornographic, sexually explicit or otherwise offensive photographs, calendars, or other materials that may be objectionable to other individuals or groups.

The above is not an all-inclusive list. If you are unsure what may constitute unacceptable behavior, ask your Supervisor!

D.2.b. Prohibited Articles, Materials, Substances

The use, possession, concealment, transportation, promotion, or sale of the following items or substances is prohibited on site premises. Employees who violate this policy will be subject to disciplinary action up to and including removal from site and/or termination. Project management reserves the right to conduct drug and/or alcohol search and screening consistent with the client facility policy.

- Illegal, look-alike, designer drugs and drug paraphernalia
- Controlled substances, such as medications, when usage is abused
- Valid medications, when not kept in marked prescription bottles

- Alcoholic beverages
- Firearms, weapons, and ammunition
- Unauthorized explosives
- Stolen property or contraband
- Unauthorized cameras or photographic equipment
- Unauthorized recording devices

D.2.c. Substance Abuse

It is the policy of Envirocon to run a drug free workplace.

1) Envirocon's substance abuse policy and program description are contained in Procedure 1403.006, the detailed procedures for performing substance abuse tests are contained in the medical surveillance procedures (Procedure 1403.005M.f).

2) Personnel on site are subject to the following substance abuse testing in accordance with procedures described above:

a) Pre-employment and Pre-Project

b) Post-accident

c) Random

d) Reasonable suspicion

D.2.d. Discipline

Envirocon reserve the right to take disciplinary action at its discretion up to and including suspension or termination of employment or denial of access to the site work areas, depending on the severity of the violation.

1) At the discretion of Management, suspension with/without pay may be given in lieu of discharge.

2) Envirocon employees should refer to the Envirocon Employee Information Manual for policies and procedures related to employee conduct and disciplinary action.

3) Verbal warnings and written reprimands are forms of discipline used to document and intended to correct, undesirable actions.

4) Unacceptable conduct or failure to adhere to established policies and procedures willfully or repeatedly may be subject to removal from this project and/or termination.

D.2.e. Subcontractors

Subcontractors shall also adhere to established policies and procedures applicable to this project site.

1) Subcontractors are responsible for disciplinary actions regarding their own employees and their lower tier subcontractors.

2) Failure of subcontractor employees to adhere to policies and procedures as described in this document will result in verbal or written warnings to the responsible subcontractor.

3) Envirocon reserves the right to permanently or temporarily remove and bar subcontractor employees from the project site. Unacceptable conduct or failure to adhere to established policies and procedures willfully or repeatedly may result in such removal from the project site.

D.3. Communications

Personnel in the Exclusion Zone will remain in constant communication or within sight of the PM, or his representative. Two-way radio is the primary method of communication.

1) If radio communication and hand signals are not feasible:

a) The PM will identify the site activities that can continue without communication, if any; and

b) If necessary, one long air horn signal will be used to evacuate the site until communications have been restored.

2) Emergencies

a) One long or continuous horn blast.

b) Unless otherwise directed, all personnel will leave the Exclusion Zone.

c) The audible signals in Table D.3 using an air horn, will be used as appropriate:

Table D.3

Emergency Signals	
One long or continuous blast	Emergency including fire/explosion Evacuate unless otherwise directed
One short blast	Attention getter; stop work and assemble at CRZ
Two short blasts	All is clear

D.4. Site Access

Access to the site shall be limited to those personnel that are qualified and have an acceptable (in the judgment of the client facility's designated representatives and the Envirocon security manager) reason for being on site. Continuing access is further conditioned on adherence to the established site policies and procedures.

D.4.a. Motor Vehicles

Privately owned vehicles are subject to site rules and regulations when operated on site. Seat belts are required for all vehicle drivers and passengers when the vehicle is in motion.

D.4.b. Parking

Parking areas are provided for employee vehicles as designated by the client facility manager. Privately owned vehicles are prohibited from entering the work areas. Employees who illegally park in fire lanes, areas posted with no parking signs, handicapped parking spaces, or visitor parking spaces are subject to disciplinary action and removal of the vehicle at the workers expense.

D.4.c. Inspection

All employees are subject to search upon entering or leaving the job site.

D.4.d. Cameras/VCRs

No unauthorized cameras, videocassette recorders, or other photographic recording or playing devices will be allowed on a project.

D.5. Contamination Control Boundaries

The site safety officer is responsible for establishing and maintaining contamination control boundaries and supervising decontamination.

D.5.a. Postings

All work areas and zones shall be posted and demarcated adequately in order to communicate the following:

1) The nature of the boundary.
2) The hazards associated with the area.
3) Applicable controls, work rules or restrictions associated with the area.

D.5.b. Work Areas

The work area, for purposes of this project, is that area defined by hazardous waste and supporting operations. The work area is that area that is regulated by 29 CFR 1910.120 and/or 1926.65.

D.5.c. Exclusion Zone (EZ)

The EZ is that part of the work area where, at a given time, workers may potentially come in contact with contaminated materials. This contact is generally defined as inhalation of airborne levels exceeding site-specific action limits or 50% of established exposure limits (OSHA or ACGIH). Contact also includes any ingestion, skin contact, injection, or other contact route of exposure to materials exceeding EPA or other established levels of contamination for the site.

D.5.d. Contamination Reduction Zone (CRZ)

The CRZ is that part of the work area between the EZ and support areas where contamination from the EZ is controlled in such a way as to remove the potential for contaminating support areas.

D.5.e. Support Area

The support area is that part of the work area where supporting tasks are conducted, and where the potential for exposure to contaminants has been fully controlled (i.e., personnel are not exposed to potential contact with contaminants).

D.5.f. Boundaries

Boundaries are established by the site safety and health officer based on the definitions above as compared to actual site conditions as monitored. Boundaries are flexible and should reflect current site conditions.

1) Boundaries are to be marked with suitable barriers such as yellow banner guards, brightly colored ropes, barricades, or orange snow fence to clearly establish the specified areas and the applicable regulations for that area.

2) If rope is used, pennants should be tied to the rope to help increase the visibility to foot and vehicle traffic and to provide a suitable warning.

D.6. Decontamination

The site safety officer is responsible for establishing and supervising decontamination on site. The following procedures are intended to establish guidelines for this purpose. As work progresses control zones may be altered. It is essential that the safety officer adjust this process as necessary to ensure that:

- personnel and equipment leave the site free of contamination, and
- contamination is not spread to other areas on site.

D.6.a. Contamination Reduction Zone(s) (CRZ)

Contamination Reduction Zone(s) are those areas established for the purpose of transition between an EZ and adjoining areas. CRZs should be established for personnel and/or equipment to decontaminate during exit from an EZ into:

1) clean support areas, and/or

2) an adjoining EZ with different or lesser contamination.

D.6.b. Frequency

1) All equipment will be inspected and be adequately decontaminated to avoid cross-contamination when moving out of an EZ.

2) All equipment will be decontaminated for site release before leaving the site.

3) All personnel will be decontaminated before leaving a designated EZ.

D.6.c. Personnel Decon Procedures

1) Entering Contaminated Area through Support Zone:

   a) Pick up clean PPE and boots.

   b) All donning of clothing and equipment, taping, etc. is done here.

   c) Equipment contaminated from the preceding day is to be picked up in the contamination control area when exiting the decon area.

   d) Proceed to contamination control area.

2) CRZ:

   a) Prior to entering this area, be sure that all personnel protective equipment is in good working condition.

   b) Conduct final inspection of tape and PPE.

   c) Enter Exclusion Zone.

3) Exiting Exclusion Zone

   a) Personnel and equipment leaving the Exclusion Zone shall be thoroughly decontaminated.

   b) The following protocols shall be used for the decontamination stations according to the level of protection as follows. Where a step involves an article that is not prescribed, skip the step.

Table D.6.c: Decon Procedures

	LEVEL B	LEVEL C	LEVEL D
1		equipment drop	equipment drop
2			
3			
4		outer boot rinse	outer boot rinse
5			
6		outer boot removal	outer boot removal
7		outer glove removal	outer glove removal
8			
9		remove hard-hat	remove hard-hat
10			
11		remove respirator	
12		wash respirator	
13		rinse respirator	
14		coverall removal	coverall removal

Table D.6.c: Decon Procedures

	LEVEL B	LEVEL C	LEVEL D
15		remove inner gloves	
16		wash hands and face	wash hands and face
17			
18			
19		hand dry and bag respirator	
20		change to street clothing	change to street clothing

D.6.d. Alternate Decon Procedures

D.6.e. Emergency Decon – Evacuation to Support Areas or Mobile Victims

This procedure applies to circumstances requiring exit decontamination. Examples of the circumstances for these emergencies include the following. Emergency decon procedures are intended to be a guideline. Depending on the nature of the actual emergency, response personnel and evacuees will ultimately be responsible for weighing the risks of the emergency against the risk of incomplete decontamination.

1) EZ Evacuation to Support Zone areas.

a) In this case employees are evacuating the EZ beyond the CRZ.

b) The main objective in this case is to shed contaminated materials quickly (with the idea that discarded articles can be decontaminated later when the emergency is over).

c) Follow the normal decon procedure and skip the steps indicated below.

2) Mobile victims will be expeditiously evacuated from the area for medical treatment in support areas.

a) In these cases, immobile victims will be decontaminated (to the degree this can be safely and expeditiously accomplished).

b) EMTs and medical facilities must be advised that the employee may still have some contamination.

c)

D.6.f. Equipment Decontamination

1) Equipment decontamination for release from the site will be performed on a decon pad.

2) Prior to exiting an EZ, the equipment operator will ensure that the equipment is inspected for visible gross contamination. Visible gross contamination will be removed using shovels and hand equipment as necessary to prevent cross-contamination of the site. If necessary a low pressure water hose will be used to remove materials.

3) Before release from the site, all equipment will be thoroughly decontaminated at the decon pad using water hoses, low pressure mechanical washers as necessary to remove visible contamination.

a) Initially, equipment will be brushed free of contaminated materials with brooms. Equipment coming from exclusion zone tasks will be washed, if necessary, with high-pressure hoses. Special attention must be given to mud flaps, wheel wells, tracks, undercarriage and foot surfaces (cab floor, control pedals, or walking boards).

b) If water is used, the vehicles will be held in the area for a short time to allow for collection of drippings. Decon water will be held in a containment or tank until analytical results show the water meets discharge limits or is sent for disposal.

c) Excavators/loaders moved from one area to another will have wheels/tracks and buckets frisked and cleaned.

d) Following decontamination and prior to release the PM or a designated alternate, shall be responsible for insuring that each piece of equipment (i.e., monitoring instruments, tools, generators, etc.) has been sufficiently decontaminated.

4) If material is judged as uncleanable it will not be used outside the Contamination Zone and will be disposed of at the end of its usefulness.

D.6.g. Small equipment procedure

Surface debris and dirt will be removed from small equipment and tools with vigorous brushing.

D.6.h. Disposition of Decontamination Wastes

All equipment and solvents used for decontamination shall be decontaminated or disposed of with the established waste streams as described in the waste management plan.

D.7. Waste Management and TSCA Compliance

The purpose of this procedure is to establish site-specific practices for compliance with environmental requirements of TSCA. The scope of this procedure includes all work conducted under the project heading.

D.7.a. Training

All personnel responsible for any aspect of waste handling on site shall receive a briefing on this procedure. Training will be documented and submitted as a safety meeting record. Personnel files regarding qualifications on site will be updated accordingly and maintained by the safety officer.

D.7.b. Hazardous Waste Manager

1) The hazardous waste manager for this site will be designated by the client facility.

2) The hazardous waste manager is responsible for compliance with TSCA and associated environmental compliance standards.

3) Envirocon's superintendent or the project manager's designated representative shall serve as the QA/QC engineer responsible for hazardous waste coordination for Envirocon's activities regarding waste materials. The QA/QC engineer shall ensure that:

a) the instructions of the client's hazardous waste manager are strictly followed by Envirocon personnel; or

b) in the event of disputed procedures, Envirocon's QA/QC engineer shall immediately notify the project manager of the concern for resolution before proceeding.

D.7.c. Reporting incidents

1) All incidents must be reported in accordance with the project Health and Safety Plan (HASP) and Envirocon procedures.

2) The on-site supervisor is responsible for ensuring that the Hazardous Waste Manager is informed of any spills.

3) This includes, but is not limited to, the following:

a) accidents (with or without damages);

b) finding unusual materials or soil conditions (e.g., previously disturbed soils, materials with unusual odors, materials with unusual coloration, etc.);

c) spills of remediation waste; or

d) spills of lubricants, coolants, fuels, or any other hazardous materials.

D.7.d. Waste Stream Management

1) All waste must be segregated into the established waste streams. It is very important not to mix waste streams unless directed by the Hazardous Waste Manager.

2) The Envirocon QA/QC engineer will be responsible for field identification and sorting in accordance with the directions of the Hazardous Waste Manager.

3) If you are unclear which type of waste is which… ASK YOUR SUPERVISOR.

4) Anticipated waste streams include:

a) Simple trash

b) Recyclable Oils (including lubricants, greases and related products that the recycler will accept)

c) Non-recyclable oils (e.g., oils contaminated with heavy metals)

d) TSCA PCB waste

D.7.e. Categorization

1) Waste streams will be categorized in accordance with the directions of the Hazardous Waste Manager.

2) Employees SHALL NOT determine if a waste stream is a "hazardous waste." Only the Hazardous Waste Manager shall make this determination.

3) Waste streams will be placed in the appropriate containers designated by the Hazardous Waste Manager.

4) Waste streams will be labeled in accordance with the Hazardous Waste Manager's Instruction.

5) Waste streams SHALL NOT be labeled as "hazardous waste" unless expressly authorized by the Hazardous Waste Manager.

D.7.f. Tracking Records

1) All regulated waste streams (i.e., those identified on the Record of Decision (ROD) for the site) shall be identified and logged immediately after being contained for storage or disposal by Envirocon personnel.

2) Envirocon will track and document the movement and disposition of all regulated wastes in the waste handling log until the materials are removed from site or otherwise transferred to the responsibilities of other entities.

3) The disposition of waste streams and the tracking records shall be maintained in accordance with the site QA/QC engineer's instructions.

4) The transfer of regulated wastes shall be performed in accordance with the directions of the hazardous waste manager for the site.

D.7.g. Emissions Controls

1) Dust Controls

a) Dust levels will be monitored on site in accordance with the HASP monitoring requirements for protection of personnel. Recognized limits for this monitoring include the Department of Labor (OSHA) Permissible Exposure Limits (PEL) and/or the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV).

b) Perimeter dust levels will be monitored to avoid public nuisance.

c) Exceedance shall be controlled by a combination of the following:

i. changing control zone boundaries

ii. upgrading respiratory protection control

iii. slowing or suspending intrusive work

iv. application of water

v. application of dust control palliatives

vi. application of a foam barrier

vii. application of a latex/latex-paper emulsion barrier

D.7.h. Spill Response and Prevention

Spill prevention controls and response procedures are documented in the emergency response procedures of this Health and Safety Plan.

D.7.i. Waste Management

1) All hazardous waste streams will be managed in accordance with the established Waste Management procedures. Each waste stream is to be segregated in the field in accordance with these procedures.

2) Segregated materials will be temporarily stored and protected until they can be replaced or remediated.

D.7.j. Waste Minimization

1) Waste generated on site will be minimized by proper sampling and categorization of waste streams.

2) Waste generated on site will be minimized by protecting segregated wastes from wind, weather and runoff.

3) Waste generated on site will be minimized through the proper selection of PPE, use of launderable materials where prudent, and reuse of decontaminated materials.

D.8. Qualifications and Access Requirements

Access to project sites is conditioned upon maintaining qualifications with regard to training, medical monitoring, drug & alcohol testing, adherence to required procedures, and related requirements. Failure to maintain these qualifications may result in removal from site and/or termination of employment.

D.8.a. Training qualifications summary

Table D.8.a summarizes the training qualifications for this project.

Table D.8.a TRAINING SUMMARY

	HAZWOPER Training				site / Site Specific				
	40 hr with respirator training	24 hr	8 hr annual refresher	8 Hr Super-visor	Site HASP Briefing 2 hr ①	facility orienta-tion 2 hr ①③	arsenic, lead, ACM standard	applicable AHAs	Daily safety briefings 20 min ①

Table D.8.a TRAINING SUMMARY									
	HAZWOPER Training				site / Site Specific				
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Supervisors	X		X	X	X			A	X
Level C/B (i.e., with potential use of respirators)	X		X		X			A	X
Level D work only surveyors, engineers, mechanics		X	X		X			A	X
Work outside of EZ					X			A	X
Trailer staff					X				
Delivery personnel					E			A	

Notes: **X** = required **A** = those that are applicable. **E** = escorted
①Approximate training time.
②AHERA training certificate/license required.
Due to the nature of the tasks associated with this site, exclusion zones are not anticipated unless a change of conditions indicates exposures above action levels may occur.
③ Homeland defense security issues and plans training per 49 CFR 172.704 and 172.800.

1) All personnel performing work at the client's site area will receive a briefing on the site Health and Safety Plan. This training must be acknowledged on the sign-up sheet at the front of this plan. Personnel will also undergo briefings on task specific hazard analysis.

2) Personnel entering the exclusion zone shall have a minimum of 24 hours of HAZWOPER training in accordance with 29 CFR 1910.120 or 1926.65.

3) Personnel required to wear respiratory protection will have a minimum of 40 hours of HAZWOPER training, to include respiratory protection training.

4) Supervisors will have an additional 8 hours of supervisory training for work in the EZ.

5) Personnel required to have HAZWOPER training must be up to date on annual 8 hour refresher training.

6) Personnel performing support functions (i.e., work outside of the EZ) are not required to have HAZWOPER training but shall be briefed on this HASP and applicable hazard analysis.

7) Daily Safety Meetings. In order to maintain qualifications, it is necessary to have regular meetings in order to enhance planning efforts and to pass information from lessons learned or changes in procedures.

a) A “toolbox” or “tailgate” safety meeting will be held at least daily before starting work. Safety meetings will also be held when site conditions change, before starting new activities, and after accidents.

b) These daily meeting shall be used to keep personnel up to date on changes in plans and procedures since their initial training and also to ensure coordinated work assignments by outlining the day’s activities and job assignments.

c) Attendance is mandatory for all site personnel including lower tier subcontractors.

d) Meetings will also be used to discuss:

i. Topics of interest or concern of the crew,

ii. suspected hazards for that day’s work and what precautions are necessary to deal with these hazards.

iii. Necessary training requirements and site work rules

iv. Changes in work practices or environmental conditions

v. Precautions or safe work practices related to the day’s site activities

vi. New or modified site-wide procedures or requirements

vii. Incident alerts provided by the client

e) Documentation of daily safety meetings shall be maintained on site.

f) Daily safety meetings shall be used as a time for personnel to make safety suggestions. Suggestions shall be noted in the minutes and evaluated by supervisory and safety personnel. Actions taken on suggestions should be noted on the daily safety meeting form.

g) The daily safety meeting shall function as the project’s Environmental Health and Safety Committee. At the option of the project manager a separate committee may be established. Members shall be determined from nominations of the wage earning employees.

D.8.b. Medical Qualifications Summary

The following medical qualifications are required to perform work in certain areas.

Table D.8.b: Summary of Medical Requirements

TEST COMPONENT (1)	Level D Exclusion Zone (1)	Level C/B Exclusion Zone (1)	PCB zones (1)	Support Zone Workers (1)	Envirocon New Hires (1)(5)	Post-Accident/ exposure (1)	End of Project (1)(2)
Occupational History/update	X	X	X	(5)	X		(7)
Audiometric Exam	X	X	X		X		
Manual lifting protocol	X	X	X		X		
Drug testing(1)					(5)	(4)X	
DOT Breathalyzer Alcohol Testing						(4)X	
Fitness to return to work (after work/non-work related injuries or illness).						X	
Fitness to wear respirators (29 CFR 1910.134)		(3)	X		(3)		
Fitness for Hazardous Waste Work (29 CFR 1910.120)		X	X			(1)	(7)

NOTES:

(1) GMG WorkCare provides medical monitoring for all Envirocon employees through local health care facilities. The appropriate protocol will be scheduled by an authorized Envirocon representative and should never be scheduled by the employee (except in the case of a medical emergency). Lower tier subcontractors and guest are required to produce their own protocols equivalent to those indicated and/or in accordance with the referenced regulatory requirements. Employee may be required at any scheduled exam, examinations conducted after accidents, randomly, or as part of facility procedures to donate specimens for drug and alcohol testing. Failure to conform to medical monitoring requirements, drug & alcohol, or other related requirements may be grounds for removal from site and termination of employment.

(2) This column refers to certain site-specific protocols. It IS NOT A TERMINATION OF EMPLOYMENT EXAM requirement. All Envirocon employees should be notified of potential eligibility for termination exams when they are terminated from employment. If they request such an exam, the Director of Health and Safety will review the request and determine eligibility under the Envirocon Medical Monitoring Program in accordance with 29 CFR 1910.120.

(3) Must be completed prior to wearing respiratory protection

(4) As determined by Envirocon policy and the Director of Health and Safety accidents, incidents, injuries, or illnesses involving medical evaluations, potential OSHA recordability, potential property damages in excess of $500, involving damages or injuries to parties not affiliated with Envirocon shall be evaluated.

(5) New employees are hired provisionally based on their ability to pass the fitness for duty examination. GMG WorkCare makes the final determination regarding fitness for duty for Envirocon Employees (this includes all aspects of fitness for duty and drug testing results). New hires may begin Level-D work (i.e., this evaluation does not authorize work where exposures may exceed the action levels for chemical exposures) with the basic fitness for duty evaluation provided by the attending or examining physician. The examining or attending physician's evaluation is considered temporary (not to exceed 30 days) until final evaluation by GMG WorkCare's final evaluation.

(6) As indicated by air monitoring results. Not expected at this time.

(7) Employees that will be terminated at the end of the project and have not had a HAZWOPER physical within the last six months shall be offered a termination examination.

E. HAZARDS

An effective safety and health program includes a variety of processes for recognizing and evaluating hazards in order to plan controls. Hazard identification and evaluation must be a continuing process although the focal point is the planning phases of tasks.

E.1. Accident Prevention Program

Envirocon's Health and Safety Program Manual serves as the primary accident prevention program document in accordance with the requirements of 29 CFR 1926.20. This HASP further develops the site-specific procedures to prevent accidents at the site. Beyond these documents, the accident prevention program is an ongoing process which involves the participation of all personnel through hazard identification, hazard analysis and hazard control. Refer to Envirocon's Health and Safety Program Procedure 1403.014 "Correcting Unsafe Conditions and Work Practices."

E.1.a. Elements of the Accident Prevention Program

The accident prevention process at this site includes a number of ways to identify hazards and develop appropriate controls. They include the following programs and procedures.

1) Proper planning. There are a number of planning processes that take place prior to execution of a given task. Based on many other plans and programs, Envirocon and the client have developed a HASP for the site. The Field Operations Manual Procedure 1401.030 documents the project procedures for developing individual task plans.

2) Activity Hazard Analysis (AHA). AHAs are also referred to as Job Task Analysis (JTA) or Job Hazard Analysis (JHA). In order to avoid confusion with the JTA process described below, this HASP will refer to these as AHAs.

a) The planning and hazard assessment process continues into the individual job task through the use of AHAs. Many activities will be covered by the hazard analysis sections in this HASP. As the task planning process and lessons learned evolve during the course of this project, new activity hazard analyses shall be developed to address these changes as necessary.

b) The site health and safety officer contributes to the task planning process required by Field Operations Manual 1401.030 by preparing AHAs. The task plans should include a description of key controls from this HASP and AHAs.

c) AHAs shall be developed for all significant work tasks associated with this project. New tasks, or previously undeveloped hazards require a new AHA or redraft existing ones. AHAs are primarily a planning phase tool. As needed, this HASP may be modified in order to accommodate control requirements identified through the

AHA process. AHAs/JHAs are developed in accordance with Health and Safety Program Procedure 1403.013.

3) Job Task Assessments (JTA). The planning and hazard analysis processes come together in their final details at the employee/daily level with the JTA.

a) JTA(s) should be considered drafts because it is intended to be changed and redrafted as necessary to meet the needs of the tasks being performed.

b) These forms are prepared by each work crew and approved by their foreman/team leader. To encourage employee participation, groups must be kept as small as possible.

c) Every front line supervisor (foreman/team leader) must prepare their own JTA(s) with their crew.

d) NOTE: The JTA form includes a block for identifying the 1401.030 Task Plan that the day's work is assigned to. This forms the continuity of planning from Project Work Plan, through Task Planning, and finally down to the daily crew planning.

e) Employee participation is key to the JTA process. Everyone on the team must sign their JTA. If task assignments change during the day, personnel should review the new team's JTA and sign it.

f) At the end of the day the Foreman submits the day's JTA(s) to the appropriate Superintendent (the one responsible for the 1401.030 Task Plan listed on the form). This completes the cycle of responsibility for planning because the superintendent can ensure that 1401.030 Planning continues to address all changes in work and planning needs.

4) Work place inspections. All supervisory personnel, safety officers, and competent persons shall conduct site inspections. Site inspections are intended to ensure that established plans and procedures are followed, changes in conditions are identified, effectiveness of controls are assessed, and new hazards identified.

5) Employee involvement. The active involvement of every employee is encouraged through the JTA process, site incentives program, "time out for safety" authority, safety observer program, and daily safety briefings. Employee involvement is the cornerstone of the Incident-free performance goal. This goal will not be met (and has no real meaning) without every employee's complete focus at all times on every task. Additionally, every employee is required to look out for their coworkers when their focus falters.

6) Incident investigations. Employees are required to immediately report all incidents in order to ensure a timely investigation. Incident investigation is aggressive at site in order to capture lessons learned from minor incidents and correct controls before significant accidents occur.

E.1.b. Responsibilities

1) Responsibilities for Planning, Safety and Quality shall be specifically assigned and acknowledged. The primary means for accomplishing this is as follows:

a) Project Plans (e.g., Work Plan and HASP) are assigned to the Project Manager, Health and Safety Supervisor, QA/QC, Engineers, etc. and shall be signed by the individuals assigned responsibility for the document.

b) 1401.030 Task Plans and AHA(s) are assigned to and signed by the appropriate Superintendent (or other operations supervisor); health and safety officer; Engineer; QA/QC supervisor; and any other technical supervisors required for proper planning associated with the task. For example, tasks involving crane operations should have a lift supervisor assigned to the task plan.

c) Daily JTAs are assigned to every front line supervisor and shall be signed by the responsible supervisor and every member of the work team.

2) Supervisors, assisted by safety and health personnel are responsible for implementing effective accident prevention processes. This includes:

a) conducting required planning,

b) conducting required inspections,

c) aggressively investigating all incidents,

d) encouraging employee participation, and

e) taking a leadership role in achieving Incident-free performance.

3) Employees are responsible for:

a) following established procedures,

b) actively participating in training processes,

c) reporting all incidents immediately to their supervisors,

d) positively assisting in investigations of incidents, and

e) looking out for coworkers (i.e., “Buddies”)

F. Industrial Hygiene Program Controls

OSHA mandates programmatic controls for many hazards. This section describes the programs in place to control safety and health hazards on site.

E.2. F.1 .Site Monitoring

Table F.1.a: Air Monitoring Requirements (1)

Chemical Hazard	Instrument	Method[1]	Action level	ACTION (3)
Oxygen (O2)	Combustible Gas /O2 meter	Direct read area sample prior to confined space entry.	<19.5%, or >23.5%	• ventilate until readings can be brought to 21% +/- 1% or do not enter. • ventilate until readings can be brought to 21% +/- 1% or do not enter.
Combustible Gas /Vapors (CG)	Combustible Gas /O2 meter	Direct reading area sample prior to entering confined space	>10% LEL	clean, secure source of vapors, ventilate until readings can be brought to +/- 1% LEL or do not enter.
		• Prior to hotwork near flammables • Suspect gas leak	Any detection above background drift or fluctuation	clean, secure source of vapors, ventilate until readings indicate source has been controlled.
PCB's	personal sampling pumps, pre-weighted pvc filter cassette in breathing zone of worker	NIOSH 5503	>50% < 10x PEL or TLV	Apply engineering controls Upgrade PPE as necessary (3).
			>50X PEL or TLV	Apply engineering controls Upgrade PPE as necessary (3).
Respirable PNOC (Particulates Not Otherwise Classified)	Personal sampling pumps, pre-weighted PVC filter cassette in breathing zone of worker	NIOSH 0600 when suspect or monthly	>50% < 10x PEL or TLV	Apply engineering controls Upgrade PPE as necessary (3).
			>50X PEL or TLV	Apply engineering controls Upgrade PPE as necessary (3).
			>1000 PPM or > IDLH	Stop work, determine source of hazard and apply an engineering control

Table F.1.a: Air Monitoring Requirements (1)				
Chemical Hazard	**Instrument**	**Method[1]**	**Action level**	**ACTION (3)**

Comments or special instructions:

1. Methodology determines the analytical method used by the laboratory
2. Breathing zone is the location of the sampling media, it would be attached to the workers shoulder at approximately the same height of the workers nose and mouth.
3. For PPE upgrades refer to Table 0 for respiratory protection selection guidelines and Table 0 for other PPE items.

F.1.b Sampling and Monitoring Strategy

1) Chronic exposure risks.

a) The site respiratory hazards pose primarily a chronic exposure risk.

b) Based on the site characterization data and risk assessment presented above, the anticipated respiratory hazards are not expected to exceed action levels for respiratory protection purposes.

2) Acute exposure risks.

a) Serious acute respiratory hazards are anticipated only in the event of confined space entries, and in those cases primarily an oxygen deficiency concern.

Table 0: SAMPLING STRATEGY MATRIX				
Hazard	Risk (1) (2) (3) (4)	Monitoring strategy	Sampling Strategy	Initial Respiratory Protection
Acute hazards ☐☑ CG,	☐☑ High (2)(3)	Monitor remotely before entry Monitor before hotwork Evaluate as GO/NO-GO Monitor continuously during work with alarming devices action level not to exceed 10% LEL	N/A	Use fire resistant EE Flash Suits or Fire retardant clothing If conditions change use engineering and/or administrative controls to reduce respiratory protection requirements if possible prior to entry/re-entry
	☐☑ Med (3)(4)	Monitor continuously using alarming devices Action level is not to exceed 10% LEL	N/A	Stop hotwork and/or evacuate areas when alarms. If conditions change use engineering and/or administrative controls to reduce respiratory protection requirements if possible prior to entry/re-entry

	☐☑ Low(4)	Monitor periodically if ops or conditions change. Monitor initially using non-alarming devices as detectors Action level = ANY change (5)	N/A	Stop hotwork and evacuate area Upgrade if detected and until sampling evaluation is complete Upgrade risk assessment If conditions change use engineering and/or administrative controls to reduce respiratory protection requirements if possible prior to entry/re-entry
Chronic hazards ☐☑ Metals, ☐☑ VOCs, ☐☑ PAHs, ☐☑ PCB	☐☑ High			Wear respirator per Table 0.
	☐☑ Med(4)			If conditions change use engineering and/or administrative controls to reduce respiratory protection requirements if possible prior to entry/re-entry; or upgrade respiratory protection.
	☐☑ Low(4)	Action level = ANY change (5)		If conditions change use engineering and/or administrative controls to reduce respiratory protection requirements if possible prior to entry/re-entry; or upgrade respiratory protection.

.

F.1.c. Monitoring

1) All monitoring will be conducted in accordance with the equipment manufacturer'operating instructions.
2) Readings will generally be taken where indications exceed normal background and drift of the equipment.
3) Readings other than peak readings will generally be taken as sustained readings lasting for several seconds.

F.1.d. TWA Sampling

TWA sampling may include time weighted average sampling of personal exposures as well as specific areas (e.g., EZ boundaries, or worst case locations).

1) All TWA sampling will be conducted in accordance with NIOSH or OSHA standard methods for purposes of documenting exposure compliance. In some cases TWA sampling may be used for other purposes such as detecting exposure potential, but these samples shall not be documented as compliance samples.
2) Routine TWA sampling includes worst case breathing zone sampling. If three consecutive samples are below action levels no further testing is required unless/until conditions changes.
3) Where worst case samples indicate exposures above action levels, conduct area TWA sampling of EZ boundaries and discrete job tasks. Where three consecutive samples indicate exposures below the action levels no further testing is required unless/until there is a change in conditions.

F.1.e. Characterization and Confirmation

1) Characterize means:

a) Collect 3 worst case TWA personal exposure samples matched against 3 worst case TWA area exposure samples from the exclusion zone work areas.

i. These samples shall be taken at different times.

ii. Each sample shall reflect a full shift of activities and exposures.

iii. These samples shall be matched against applicable direct reading monitoring results.

iv. More samples may be taken to evaluate effectiveness of control modifications.

b)At such time as the three latest TWA samples indicate a consistent result the work process may be considered to be characterized if the site safety officer determines that there are no other indicates that these samples should not be considered representative. Consistent results include:

v. 3 consecutive samples below the action level;

vi. 3 consecutive samples at or below Level C half mask requirements;

vii. 3 consecutive samples at or below Level C Full face requirements; or

viii. 3 consecutive samples at or below Level B respiratory protection requirements.

c)Characterization must be repeated or confirmed whenever a change in conditions is identified. Indications of a change in condition include the following:

ix. New materials are encountered that have been determined to contain significant changes in contaminant concentrations.

x. Odors have changed significantly.

xi. Operational methods have changed in a way that could produce different exposures.

xii. Direct reading instrument results are no longer consistent with the results taken during characterization.

- For example the direct reading instrument results associated with a TWA characterization that was half of the action level are now getting close to doubling.
- A confirmatory TWA sample should be taken to ensure that the current direct readings are still indicative of TWA exposures less than the action level.
- A change in condition must be assumed and therefore controls must be upgraded (e.g., upgrade respiratory protection).

d)For wipe samples characterization means to collect pre-activity collections to document PCB contamination levels prior to beginning any PCB disturbing work in the area or adjacent areas.

Worst case surfaces are those known or highly suspected to have been in contact with contaminated materials, or, in the case of surfaces exposed to dusts, mist, or other contaminated aerosols; a horizontal surface that is unlikely to be disturbed by the activities going on at that location (e.g., the top of a door frame or locker).

Confirmation means:

e) A direct reading monitoring result or a TWA exposure sample that is consistent with the latest characterization is a confirmation sample or monitoring result.

f) 1 UP confirmation sample to upgrade/3 DOWN confirmation samples to downgrade.

xiii. At any time that a confirmatory TWA sample produces a new result which is inconsistent with the latest characterization, a change in condition must be assumed and therefore controls must be upgraded (e.g., upgrade respiratory protection).

xiv. While any single direct reading or TWA result inconsistent with a lower level of controls must indicate upgrading controls; a full set of 3 consecutive TWA results indicate a consistent characterization appropriate for downgrading controls.

xv. Similarly, 3 consecutive direct reading results must be produced to downgrade (provided the direct reading results have been previously confirmed against applicable TWA levels).

g) Routine confirmation by TWA sampling and direct reading monitoring should be performed in accordance with the directions in the table.

xvi. Routine confirmation monitoring or sampling means to perform the evaluation even if there is no other indication of a change in conditions.

xvii. Unless otherwise specified, routine confirmation sampling is conducted daily for direct reading instrument monitoring and monthly for TWA sampling.

h) Confirmation wipe samples mean to collect a sample from the same location and over the same amount of surface area as a previously characterized location.

I) Downgrading of respiratory protection shall be approved by an Envirocon CIH.

F.1.f. Documentation

See the recordkeeping section below.

1)All calibration, sampling information and results will be documented using a log or Envirocon standard forms.

2)Results collected for specific individuals will be passed directly to the applicable employee. Result briefings will be documented.

3)Results will be generically passed (without mention of specific employee names) to all personnel during morning safety meetings.

F.1.g. PCB Action Level

A review of the PCB sampling data of contamination levels in the substrate of concern indicates a max concentration of PCBs of 380 mg/kg. With this concentration of PCBs, and assuming a safety factor of 10 and that the entire concentration of PCB's is in the air borne dust , it is calculated it would take 26mg/m3 of airborne dust to produce an exposure concentration at the PEL for PCBs.

E.3. F.2 Personal Protective Equipment

F.2.a.Summary of PPE Requirements

Table F.2.a: Summary of Standard PPE					
Activity	***Head/ Face***	***Foot***	***Hands***	***Respirator***	***Clothing***
General site labor, non-intrusive support zone tasks	• Hard hat(2), • safety glasses(2)	Steel toed boots	Leather gloves as needed.	None. (1)	• Shirt w/sleeves • Long pants • high visibility vest (5)
Supervision of support zone work.	• Hard hat(2), • safety glasses(2)	Steel toed boots		None. (1)	• Shirt w/sleeves • Long pants • high visibility vest (5)
Dry equipment decon.	• Hard hat(2), • safety glasses(2) • Face shields or goggles	Steel toed PVC outer boots	Leather or PVC coated outer gloves	None. (1)	• Tyveks or launderable coveralls (3) • high visibility vest (5)
General site labor tasks in dry contaminated areas.	• Hard hat • Safety glasses • (2)	PVC outer boots w/steel toes, or Steel toed boots w/Boot covers (4)	Leather or PVC coated cotton as needed	None (1)	• Tyvek or launderable coveralls (3) • High vis vest(5)
General site labor tasks in wet contaminated areas.	• Hard hat • Safety glasses • (2)	Steel toed boots with water resistant outer boot covers (6)(8)	Nitrile or Leather or PVC coated cotton as needed	None (1)	• Water resistant outer coveralls (3)(6) • High vis vest(5)
Wet Decon	• Hard hat • Safety glasses • (2) • face shield	Steel toed boots with water resistant outer boot covers (6)(8)	Nitrile gloves in combination with Leather or PVC coated cotton gloves	None (1)	• Water resistant outer coveralls (3)(6)(7) • High vis vest(5)
Drivers	• (9)	• (9)	• (9)	•	• long pants • shirts with sleeves • (9)

Table F.2.a: Summary of Standard PPE					
Activity	***Head/ Face***	***Foot***	***Hands***	***Respirator***	***Clothing***

(1) Refer to Table F.2.b for initial respiratory protection requirement options.
Voluntary use of respirators is authorized for nuisance dusts and exposures known to be below PEL levels.
For nuisance dust use disposable N, R or P 95 or better (dispose of N or R types daily and P type weekly)
For odors use half mask with OV or OV/P95 or better (change at start of week)

(2) Hard hats and safety glasses are not required inside of enclosed cabs with windshields; or when working outside of the contaminated areas performing non-labor tasks such as walking to and from buildings/trailers, typing, or making notes.

(3) Dust resistant outer coveralls such as Tyveks with modesty garments underneath. These are not allowed for use with hazardous materials. The safety officer may remove this requirement for tasks that involve minimal risk of contact with contaminants on personal clothing or skin,

(4) Boot covers are any suitable covering capable of resisting dust penetration which would contaminate steel toed boots, and with durability appropriate for the task.

(5) High visibility vests are for use in work areas within 25 feet of vehicular or equipment traffic. For heat stress considerations, an orange/high-visibility T-Shirt, or an orange/high-visibility hard hat may be substituted for the vest.

(6) When working with wet contaminated materials, PVC or other equivalent water resistant outer boot covering will be used to prevent contamination of steel toed boots. Under conditions with launderable coveralls are penetrated by wet conditions they shall be similarly substituted or covered with a suitable outer water proof layer.

(7) For purposes of preventing heat or cold stress, decon personnel may use water proof outer coverings with holes in the backs or aprons to allow for perspiration to escape (provided inner garments do not get wet as a result.

(8) Wet work and decon may use a PVC steel-toed boot in place of a leather boot with cover.

(9) Drivers entering contaminated areas shall be prepared to put on the applicable personal protective clothing worn in that area in the event of an emergency exit.

F.2.b. Respiratory Protection Selection

Table F.2.b: Respirator Selection (1)

Hazard	Levels		Respirator Type (2)	Cartridge Type	Cartridge Change Schedule	Notes
	lower	upper				
PNOC (nuisance dust)		5 mg/m3 total dust	DFP	P100 or P99 N100 or N99 R100 or R99	WEEK for P100 or P99 SHIFT for N100 or N99 R100 or R99	Optional … Provide for voluntary use.
PCB	0.1 mg/m3	5 mg/m3	FF APR	combo: P100 + OV	each SHIFT	

Table F.2.b: Respirator Selection (1)						
Hazard	Levels		Respirator Type (2)	Cartridge Type	Cartridge Change Schedule	Notes
	lower	upper				
	5 mg/m3		AHA (3)			

Abbreviations:

DFF = disposable filtering facepiece
FF = full face
HM = half mask
(H) = hood
APR = Air Purifying Respirator
PAPR(FF) = Powered Air Purifying Respirator with tight fitting full facepiece
PAPR(H) = Powered Air Purifying Respirator with loose fitting hood
AHA = requires a shift entry permit; or a job-specific hazard analysis

EE = Emergency Egress SCBA (escape only)
SA = supplied air (airlines or SCBA)
SCBA = self contained breathing apparatus
PP = positive pressure / pressure demand mode
EEO = emergency escape only
N100 R100 P100 = NIOSH approval types (for dust filtering cartridges)
OV = organic vapor
acid = acid gas

combo = combination cartridges
SHIFT = start each shift with a new cartridge (5)
WEEK = start each week with a new cartridge (5)

Notes:

(1) This table sets the initial respiratory protection selection options. The Project Health and Safety Manager, the Corporate Director of Health and Safety, or an Envirocon CIH may approve additions or changes to this table based on a written hazard analysis. An Envirocon CIH must approve respiratory protection downgrades.

(2) This represents the minimum respiratory protection allowed. Respirators with a higher protection factor assigned by NIOSH may also be used.

(3) Activity Hazard Analysis (AHA) must be approved by the Project Health and Safety Manager, the Corporate Director of Health and Safety, or an Envirocon CIH.

(4) Ensure compliance with OSHA 29 CFR 1910.1028 benzene regulated areas, medical surveillance and training, etc.

(5) Regardless of the change schedule, chemical cartridges should always be changed if warning properties are detected. Regardless of the change schedule, filter type respirators should always be change if breathing becomes difficult.

(6) Ensure compliance with Subpart Z requirements for applicable heavy metals regulated areas.

(7) Asbestos in excess of ½ the PEL requires a task specific AHA and compliance program approved by the Project Health and Safety Manager, the Corporate Director of Health and Safety, or an Envirocon CIH.

F.2.c. PPE Rules

1) Downgrading respiratory protection must be approved by an Envirocon CIH.

2)All personnel are required to use the personal protection specified for their work. This may include, but is not limited to cartridge respirator, protective suit, gloves, boots, hard hat, hearing protection, and safety glasses.

3)All respirator use to be done in accordance with Envirocon's Respiratory Protection Program and/or site-specific procedures. Refer to Section F.3 for the site-specific respiratory protection program and procedures.

1) Safety Boots/Shoes

a) Safety steel-toed boots/shoes that meet the requirements and specifications of ANSI Z41.1 shall be worn while working in field locations.

b) Boots/shoes must be in good repair and laced or fastened. Sandals and tennis-style shoes of any type shall not be worn while working.

2) Safety / Hard Hats

a) Approved safety hats that meet requirements and specifications established in ANSI Z89.1 shall be worn at all times in the field or construction zone/yard removal locations.

b) Safety hats are not required to be worn in vehicles (passenger cars or trucks)or offices. Safety hats are not required in construction equipment with enclosed cabs. Safety hats must be worn in all construction equipment (loaders, bobcats, excavators, dump trucks, backhoes, etc.) that do not have enclosed cabs.

3) Eye Protection

a) As a minimum, ANSI-approved safety glasses with side shields will be worn at all times when working on this site.

b) ANSI-approved safety glasses must be worn by equipment operators while in cabs unless eye hazards are adequately controlled by other methods listed in the most recent eye hazards analysis for this project.

c) Proper eye protection (goggles, safety glasses, etc.) must be worn when performing work with a recognized hazard to the eyes such as wire brushing, hammering, buffing, chipping, grinding, welding, cutting wire rope, working on rust, dirty chains, cables, or handling chemicals. **If the job might result in eye injury, then eye protection is required**.

d) Special goggles must be worn while helping or working within close range of welders.

e) Goggles or transparent full-face shields must always be worn when grinding.

f) Envirocon will not provide prescription safety glasses; Envirocon will provide safety glasses capable of fitting over prescription glasses.

4) Hearing Protection

a) Approved earplugs or earmuffs must be worn in areas of high noise levels.

b) High noise level is defined as areas where noise levels exceed, or may exceed, 90 dBA.

5) Safety Vests

a) Orange safety vests are required anytime Envirocon personnel are working around operating equipment.

b) This requirement applies to equipment operators whose duties involve them leaving the cab of their equipment and working in general area.

6) Clothing

a) Sleeved shirts must be worn on the job.

b) Tank tops will not be allowed.

c) Long pants shall be worn. Pants shall cover the work boot top.

d) Shorts will only be allowed if they are worn under cotton coveralls or other protective clothing.

e) Loose or ragged clothing shall not be worn.

7) All personnel are responsible to clean and maintain the protective equipment issued to them. Any noted defects in the equipment shall immediately be reported to the Envirocon Project Manager or the site superintendent, as appropriate.

E.4. F.3 Site-specific Respiratory Protection

F.3.a Documents

Envirocon's written Respiratory Protection Program is contained in Procedure 1403.016. The use of respirators is not anticipated on this project. If Industrial Hygiene personal air monitoring indicates the need for respiratory protection a site specific respirator plan will be developed.

F.3.b Administration

1)The Respiratory Protection Program Administrator is Joe Ocken, CIH.

2)The designated site safety officer for this project will serve as assistant program administrator.

3)Medical qualification procedures are evaluated and implemented by GMG WorkCare, Dr. Greaney and Dr. Whorton.

F.3.e. Voluntary use of respirators

1)The voluntary use of respirators by employees (e.g., for control of odors or nuisance dusts) must be qualified.

2)Voluntary use of respirators is only allowed in areas characterized as not requiring respiratory protection.

3)The specific type of respirator and conditions of use must be approved by the Director of Health and Safety.

4)Voluntary use of respirators must otherwise be in accordance with this procedure.

5)Employees voluntarily using respirators must be trained in the information provided in Appendix D to Sec. 1910.134 “Information for Employees Using Respirators When Not Required Under the Standard.”

6)Voluntary use of disposable nuisance dust masks does not require medical evaluation. Voluntary use of these masks does not require a fit test.

E.5. F.5. Hazard Communication Program

The Envirocon Program, in its entirety, is located in a separate labeled notebook in the Envirocon Project Trailer. The notebook is available for review by employees at any time during normal work shift. Envirocon will be responsible for maintaining a copy of their Hazardous Communication Program and MSDSs on site.

F.5.a. Subcontractors

Subcontractors will be responsible for keeping an individual copy of their respective programs.

F.5.b. Material Safety Data Sheets (MSDSs)

MSDSs will be located in a separate labeled notebook in the Envirocon Project Trailer. MSDSs will be available to all employees for review during the work shift. Copies of all MSDSs for materials on site will be provided to Bureau of Reclamation prior to material delivery on the site.

F.5.c. Container labeling

All containers received on site will be inspected to ensure the following:

1) All containers clearly labeled;
2) Appropriate hazard warning; and
3) Name and address of the manufacturer.

F.5.d. Employee Training and Information

Prior to starting work, each employee will attend a health and safety orientation and will receive information and training on the following: An overview of the requirements contained in the Hazardous Communication Program. This training shall include at a minimum the following:

1) Hazardous chemicals brought to the site for the project;
2) The location and availability of the written Hazardous Communication Program;
3) Physical and health effects of the hazardous chemicals;
4) Methods of preventing or eliminating exposure;
5) Emergency procedures to follow if exposed;
6) How to read labels and review MSDSs to obtain information; and
7) Location of MSDS file and location of hazardous chemical list.

G. SITE SAFETY PROCEDURES

This section addresses safe work practices and site-specific safety procedures that will be used to control hazards on site.

E.6. G.1. Code of Safe Work Practices

Every employee has a responsibility to ensure that the program proceeds efficiently and safely. The following procedures constitute the basic safe work practices expected of every employee.

G.1.a. Conducting Yourself in a Responsible Manner

Safety programs are not only for your safety, but the safety of everyone on site. Your conduct potentially impacts your coworkers.

1) Perform all tasks in a safe and approved manner.

2) Do not direct an air hose at another person. Do not use compressed air to remove debris from clothes, hair, or any part of the body.

3) Honor the barricades erected by other contractors on the job site.

4) Do not stand in front of a door that opens toward you.

5) Do not work while your ability or alertness is so impaired by fatigue, illness, or other causes that they might unnecessarily expose yourself or others to injury.

6) Do not bring, keep, or use alcoholic beverages, controlled substances, or weapons on site.

7) Anyone known to be under the influence of drugs or intoxicating substance, which impair the employees ability to safely perform the assigned duties, shall not be allowed on the job while in that condition.

8) Workers shall not handle or tamper with any electric equipment in a manner not within the scope of their duties, unless they have received instructions from a qualified, licensed electrician.

9) Do not use any form of solvent, gasoline or kerosene for cleaning hands or clothing. Use soap and water or other cleansers intended for the purpose.

10) Keep hands and other part of your body out of pinch points, for example:

- DO NOT use your hands to dislodge rocks or jams in tailgates (instead raise and lower the bed to use the gate's weight to clear materials and jams);
- DO NOT get between counterweights on excavators or cranes and tracks, walls, excavation cuts etc.; and
- DO NOT reach into belts with running machinery.

1) Use handrails when climbing or descending stairs and walkways.

2) Do not run, except as necessary in an emergency.

3) Horseplay, scuffling, and other acts which tend to have an adverse influence on the safety or the well being of other employees is prohibited.

4) Do not jump from one level to another or one place to another, for example:

- Get on and off equipment using three points of contact,
- walk down stairs without jumping or skipping steps,
- use ladders or ramps provided to descend into trenches;
- do not jump out of pickup beds; and
- do not jump across trenches.

5) Always stand on an approved ladder to remove articles that may out of reach from floor level. Do not stand on chairs, boxes, or other makeshift devices.

6) Loose or frayed clothing, loose or hanging long hair, dangling ties, finger rings, etc., shall not be worn around moving machinery or other areas where they may become entangled

7) Get help lifting heavy objects from heavy equipment, lifting devices, or help from another employee, and do not lift objects greater than 50 lbs unaided.

8) Do not improperly use, mishandle, or tamper with health and safety equipment and sampling devices.

9) Personnel shall not drop or throw any articles or materials of any kind unless a specific procedure has been developed to do so safely.

10) Do not harass, feed, or photograph wildlife. If you find an injured or dead animal, contact the nearest gate attendant or the U.S. Fish and Wildlife Service.

G.1.b. Participate in Your Safety Programs

There are a number of ways for you to influence the safety on site. Don't just complain about problems, participate in your own safety.

1) Attend each day's work briefing as scheduled.

2) Attend all required safety meetings, training, or briefings.

3) Complete safety observer reports when you want to make a suggestion, observe a commendable act of safety or quality, take a "time out for safety" to correct an unsafe act or condition.

4) Approach every task with incident-free performance in mind!

5) Ask questions when you are uncertain about a procedure or equipment use.

6) Participate in the evaluation or investigation of any accident or incident when you are requested to do so.

7) If you fear reprisal use the Envirocon safety Hotline **800-224-7389.**

G.1.c. Practice Good Housekeeping

Housekeeping is the hallmark of

1) Keep your work area clean and orderly.

2) Good housekeeping practices shall be maintained continually.

3) Keep work, storage, and access areas clean of tools, equipment, and debris.

4) All means of egress shall be kept unblocked, kept clear of debris and slip or trip hazards, kept well lighted, and kept unlocked at times.

5) Immediately remove spilled liquids from the floor.

6) Clean up or otherwise remove slip/trip/fall hazards immediately.

7) Do not leave boards with protruding nails or other loose material on the floor where they may be stepped on.

8) Keep aisles and walkways clear of electrical and telephone cords.

9) Do not overload electrical outlets.

10) Electric cords shall not be exposed to potential damage from vehicles.

11) Mark or barricade slip/trip/fall hazards that can not be removed.

12) Any time work is performed overhead, barricades shall be erected.

13) Barricades shall consist of caution (yellow) or danger (red) barricade colors and appropriately worded tape or signs.

14) All barricades shall be removed when not in use.

G.1.d. Follow Standard Procedures

Hazardous waste operations involve a number of standard procedures which are particularly important. Make these procedures a habit.

1) Use the Buddy System when performing operations in hazardous areas; when working with hazardous contaminants; when physical capabilities may become stressed (heat stress); or working in proximity of operating machinery or equipment.

2) Practice contamination-avoidance techniques.

3) Enter and exit the Exclusion Zone (EZ) and the Contamination Reduction Zone (CRZ) through designated areas.

4) Complete sign-in/out logs when required.

5) Do not eat, drink, chew tobacco or gum, smoke, or engage in any other activity that may increase the possibility of hand-to mouth contact in the EZ or the CRZ. (Exceptions may be permitted by the Project Health and Safety Manager (PHSM) for other reasons, such as to allow fluid intake during heat stress conditions.)

6) Do not use lighters or matches in the EZ and CRZ.

7) Employees under a physician's care and/or taking prescribed narcotics must notify the designated site safety supervisor.

8) Lift material in a safe manner and avoid strains. Bend your knees, keep your back straight, and push upwards with your legs when lifting. The lifting of heavy and bulky

objects will normally be done by or more shop personnel. Lifting heavy/bulky objects improperly can result in needless injury.

9) Get help (mechanical help or more people) when lifting heavy or awkward materials.

10) Wear the personal protective equipment (PPE) specified in the site HASP, including hard hats, steel toed boots, and safety glasses that must be worn at all times in active work areas.

11) If you are required to wear a respirator, remove facial hair (beards, long sideburns, or mustaches) that may interfere with the satisfactory fit of the respirator mask.

12) Use safety devices provided for your protection (e.g., handrails, guards, pressure relief valves, and seat belts). Do not remove these devices while the equipment is being operated.

13) Never approach within 25 feet of the operating area of a piece of equipment without first making eye contact with the operator, signaling your intention, and receiving an acknowledgement from the operator. If you wish to approach the equipment (e.g., to speak with the operator) the operator must first lower all buckets, blades, etc. and idle the engine before you approach.

14) When ground personnel support heavy equipment, pay particular attention to pinch points (e.g., the counterweight swing radius and the tracks of an excavator). Keep out from under suspended loads.

G.1.e. Follow Safety Procedures

In addition to standard procedures, there will be many site specific procedures to learn and follow. You need to learn these from your site-specific training and follow the procedures. If you feel the procedures are incorrect or inadequate it is improper to take it upon yourself to modify procedures. Ask your supervisor, make suggestions, or raise questions during planning and training.

1) Attend, pay attention, and ask questions during procedure training and briefings.

2) Implement, adhere to, and follow established rules, guidelines, procedures, plans, etc., as specified.

3) Follow proper decontamination procedures.

4) Make sure fall protection or fall arrest systems are in place when working at elevations greater than 6 feet above the surrounding work area.

5) Follow the work-rest regimens and other practices required by the heat stress program.

6) Where appropriate, lockout procedures shall be used.

7) Employees shall not work under vehicles supported by jacks or chain hoists without protective blocking that will prevent injury if jacks or hoists should fail.

8) Obey all authorized safety signs and demarcations. Do not place or remove these items except as authorized by the Site Health and Safety Supervisor (HSS).

9) Become familiar with the on-site hazards, work zones, PPE requirements, and decontamination methods.

G.1.f. Permit Required Procedures

Many of the most important procedures dealing with the most dangerous hazards involve permit requirements to ensure that necessary precautions are taken before work begins. Pay particular attention to these procedures.

1) Do not enter a permit-required Confined Space without a permit, and follow all requirements of permits as issued. All confined space entry permits will be issued by the client.

2) Don't rely on postings to warn you of confined space hazards. When in doubt ask for a permit and testing. Manholes, underground vaults, chambers, certain confining excavations, tanks, silos or other similar spaces may have a confined space hazard.

3) Check with your Supervisor prior to starting any Hot Work operation (welding or cutting operations) and, if you are working in an area that requires a Hot Work Permit, follow the permit as issued. . All hot work permits will be issued by the client.

4) Depending on the fire hazards at your facility, hot work permits may be required for use of cigarette lighters, electrical equipment that is not intrinsically safe, flash photography, motors, engines, or spark producing metal tools.

5) The combination of hot work and confined spaces is particularly dangerous even if you don't plan to enter the space! No burning, welding, or other source of ignition shall be applied to, or near any enclosed tank or vessel, even if there are some openings, until it has first been determined that no possibility of explosion exists and authority for the work is obtained from the foreman or superintendent. **This includes small voids too!** A sealed can, doubler space, storage compartments or similar small spaces can contain flammable debris or explosive vapors.

6) Do not dig or drive objects into the ground without first:

a) ensuring that necessary permits have been obtained;

b) a competent person has been assigned;

c) a competent person has inspected the site;

d) utilities have been located prior to beginning excavation activities;

e) checking that excavations slopes are checked daily for stability and air quality.

f) Do not enter an excavation greater than 5 feet deep unless authorized by the HSS and then only after the excavation has been sloped or shored properly. Maintain safe means access and egress from all excavations.

7) Follow lockout/tagout procedures when working on equipment involving moving parts or hazardous energy sources. Install and remove locks and tags only in accordance with procedure and only when authorized.

G.1.g. Use Tools Properly

Tools, especially hand tools, are used frequently with minimal supervision. It can be all too easy to use tools improperly and create serious safety hazards.

1) Use all tools in the manner intended and/or prescribed. The operating instructions for all tools and equipment ***ARE MANDATORY.***

2) Modification of use or design must be in accordance with the written instructions or permission of the manufacturer.

3) Do not suspend tools or any other items using electrical cords.

4) In locations where the use of a portable power tool is difficult, the tool shall be supported by means of a rope or similar support of adequate strength.

5) Air hoses shall not be disconnected at compressors until the hose line has been bled.

6) Inspect safety devices before every use including but not limited to:

a) respirators,

b) personal protective equipment,

c) body harnesses,

d) lanyards,

e) monitors,

f) fire extinguishers,

g) confined space retrieval systems (not the same as fall protection harnesses), and

h) manbaskets.

7) Inspect other tools and equipment before use.

a) A competent person must inspect scaffolds and manlifts before each day's use.

b) Ladders must be in good service, placed at the proper angle, secured, and extents to the proper length (for access to heights the ladder must be 3 feet above the landing).

c) Inspect power tools, looking especially for damaged insulation or missing ground plugs on electrical cords.

d) Inspect cutting devices looking especially for properly sharpened and guarded edges.

e) Inspect hand tools look especially for chisels, hammers and punches with mushroomed heads; files without handles, and hammers with broken handles.

8) Do not use defective equipment.

a) Don't leave defective equipment in service for others to use. Remove it from service and report the problem to your supervisor.

b) At a minimum, defective equipment must be tagged out of service.

i. Use a red tag placed near starting switches or levers.

ii. Describe the reason the equipment is tagged out.

iii. Write your name and the date on the tag.

c) Alternatively, defective equipment can be taken out of service by destruction and disposal.

8) Use ground fault circuit interrupters (GFCI) for cord and plug equipment used outdoors, in damp locations, or when equipment is not plugged directly into permanent wiring.

9) Use only extension cords rated for hard service or junior hard service (e.g., SO, JSO, SOW, JSOW). A UL label on a local hardware store flat cord is probably ***NOT*** rated for this service!

10) Keep electrical cords out of walkways and accumulations of water unless protected and rated for such service.

G.1.h. Operate Equipment Safely

1) All equipment is to be operated in accordance with manufacture's written instructions and/or manuals.

2) Equipment shall not be modified or operated out of specified limits without written permission from the manufacturer and the health and safety manager for the project.

3) Only trained and authorized persons shall operate machinery or equipment.

4) Do not operate equipment unless you are properly trained and authorized to do so in a manner consistent with the owner/operators manual.

5) DO NOT use a piece of equipment, which has been tagged out of service! Do not remove red tags without authorization from the person placing the tag or the person responsible for the repairs.

6) Inspect equipment before using it.

a) Heavy equipment inspections shall be documented. Note all discrepancies and tag out equipment that may be dangerous to operate.

b) Red tags must have a description of the reason for the tag, the name of the person placing the tag, and the date the tag was applied.

7) Machinery shall not be serviced, repaired, or adjusted while in operation, nor shall oiling of moving parts be attempted, except on equipment that is designed or fitted with safeguards to protect the person performing the work.

8) Use vehicle or equipment seat belts any time the vehicle or equipment is in motion.

9) Excavating equipment shall not be operated near tops of 'cuts, banks, or cliffs if employees are working below.

10) Do not maneuver equipment into the working area of other equipment without first making eye contact with the operator working in the area and signaling your intentions to maneuver into that area.

11) Always acknowledge that you understand that other equipment or ground personnel may enter your working area.

12) Do not allow people on foot to approach without lowering hydraulically lifted or suspended components (e.g., buckets, blades, bellies) and reducing engine speed to idle.

13) Tractors, bulldozers, scrapers, and carryalls shall not operate where there is a possibility of overturning in dangerous areas such as the edges of deep fills, cut banks, and steep slopes.

14) Do not allow supporting ground personnel to work within pinch points of the equipment (e.g., the swing radius of a counterweight and the tracks on an excavator) or under suspended loads.

G.1.i. Prepare Yourself for Incidents

1) Become familiar with the emergency response plan so that you can respond properly in an emergency.

2) Become familiar with the locations and types of emergency equipment, such as fire extinguishers, emergency showers, or air horns.

3) Report all incidents to your supervisor immediately!

4) Participate fully and truthfully in incident investigations.

G.1.j. Supervisors Play a Leadership Role in Safety

As with all aspects of conducting operations, the supervisor is ultimately responsible for carrying out work in accordance with company policies and procedures, and in accordance with the specifications and applicable regulations.

1) Take a leadership role in establishing safety a safety culture on site.

2) Give employees frequent accident prevention instruction and encouragement.

3) First through encouragement and incentives, ensure that employees observe and obey all applicable Company, State or Federal regulation and order as is necessary to the safe conduct of the work. When necessary, compliance must be compelled using progressive disciplinary measures described in this document.

4) Ensure that employees are qualified for the work they are assigned.

5) No one shall knowingly be permitted or required to work while the employee's ability or alertness is so impaired by fatigue, illness, or other causes that they might unnecessarily expose the employee or others to injury.

6) Do not allow anyone to remain on site when under the influence of drugs or intoxicating substance, which impair their ability to safely perform assigned duties.

7) Daily “tailgate” safety meetings shall be held to discuss safety concerns, instruct on new procedures, and discuss lessons learned from investigations and other related safety topics.

8) Encourage and listen to the suggestions of all employees.

9) All work shall be thoroughly planned and supervised to prevent injuries in the handling of materials and in working together with equipment.

10) Inspect the site daily.

11) Investigate all incidents.

12) Ensure thorough documentation of all aspects of the safety program.

E.7. G.2. Employee Participation

This project has established a variety of procedures to encourage the participation of employee in their own safety. Employee participation includes all Envirocon, and lower tier subcontract personnel.

G.2.a. Training

Training is required for each employee before starting any new task or working in a new area. Training is considered an employee participation process. Employees are encouraged to ask questions and utilize training sessions to familiarize themselves with procedures.

G.2.b.Daily Safety Briefing

Each day's work begins with a safety briefing. These briefings shall be conducted in a manner to encourage employee participation.

1) Supervisors shall report the plan of the day for all employees. This should include other work that may occur near the project site or impact on project work. Special tasks expected for the day. Waste loads expected that will require special procedures.

2) Discuss lessons learned from incidents on this site or others.

3) Report and discuss safety observations made by employees.

4) Report and discuss times out for safety.

5) Discuss employee suggestions.

6) Recognize safety performance (good and unsatisfactory).

G.2.c. Safety Observer

This site has an established, behavior-based safety observer program. A minimum of two safety observer reports will be discussed each week. Employees will be instructed in the concept of unsafe conditions and behaviors. The primary interest is to draw attention to correcting unsafe conditions and adopting safe behaviors. Safety observations shall be documented and provided to the health and safety supervisor.

1) To encourage everyone to participate in this program, employees will take turns making the mandatory weekly reports.

2) Voluntary observations are encouraged at any time and shall be handled as a safety suggestion.

3) Positive reports are encouraged to point out laudable behaviors for recognition.

4) All lower tier subcontractors shall be included in the safety observer program.

G.2. d. "Buddy System" Plus

Envirocon's Incident-free performance objective is very demanding. This objective can only be met if every employee perform all work without incident. Since none of us is perfect, it is further necessary for each person to take responsibility not only for themselves, but the others working with you. This concept is what Envirocon refers to as an expanded buddy system concept.

1) The HAZWOPER standard requires that employees remain in contact with at least one other "buddy" in the event of an emergency or accident.

2) The "buddy system" plus challenges each employee on site to not wait for an accident to happen to our buddies. Instead, correct unsafe conditions or challenge unsafe behaviors around us.

a) Don't let it pass! If you see that someone else is about to make a mistake or hasn't recognized a hazard, take responsibility to challenge the situation.

b) It's not enough to not be at fault! Stop looking on accidents as someone's fault. Instead, look on an accident as everyone's failure to prevent the accident.

G.2.e. Stopping Work

Each employee has the right to call for work to stop when they observe a serious potential for injury. The safety officer in particular is responsible for stopping work if there is a hazardous condition. Short of stopping work, Envirocon encourages employees to get involved before things escalate to a threat of injury. Employee "time-outs" and "challenges" help to identify changes in conditions or to challenge improper procedures.

1) "Time-Out" for Safety Authority

Changes in conditions, deviations from plans, unexpected or surprise events that have not yet caused an accident, threaten the safety of an operation or job task. These are hazardous conditions that must be recognized and controlled.

The "time-out" authority is intended to challenge each employee to control these hazards by giving each member of the crew the authority to take a "time out" when they recognize such potential problems. Take a "time-out" when:

a) Conditions change, (examples might include:

i. Changes in weather

ii. Changes in soil types

iii. Changes in the equipment you are using,

iv. Changes in other work performed nearby

v. Changes in materials being used to do the work

vi. Changes in the toxicity of wastes),

b) Unexpected conditions are found,

c) Work deviates from plans,

d) An unplanned event occurs that might lead to an accident,

e) You don't understand what the plan for work is, or

f) The work plan no longer seems safe.

2) Taking a "time-out" means:

a) Identifying one of the conditions above exists,

b) communicating a concern to your supervisor or safety officer,

c) the supervisor or safety officer evaluate the concern,

d) an appropriate response is determined (i.e., this might include:

i. the plan is not being followed and the team must be regrouped to get back to the planned way of doing the work

ii. the crew must regroup and revise plans/procedures

iii.the crew must regroup and change PPE

iv. the employee must be trained in the appropriate procedures

v. the employee must be requalified for new equipment being used

vi. the employee needs to be informed of the reason for the current plans/procedures and why they are best for the task)

e) regroup the work team (when needed to revise plans, procedures, training, etc.)

f) communicate revised plans to all concerned.

3) Employee Challenges

The site safety and health program is the responsibility of all employees. Each employee is required to challenge unsafe conditions or behaviors in their work areas.

The "employee challenge" system is intended to encourage employees to take initiative in correcting unsafe conditions or behaviors. Where an unsafe condition or behavior poses an imminent threat that can be readily addresses without a change in procedure or policy, each employee is encouraged to challenge those responsible.

a) Challenge another employee that is driving in the wrong direction.

b) Challenge a visitor to the work area that might not have signed in, or is not accompanied by a qualified worker.

c) Grab a roll of barrier tape to mark a broken step on a stairway and report it to your supervisor.

d) Flag traffic around a spill until a response crew arrives.

4) When an operation is stopped due to a safety hazard challenge, notify the site supervisor immediately. The supervisor shall report the challenge to the project manager and site health and safety officer.

E.8. G.4. Intrusive Work (including excavations, drilling, driving posts)

The OSHA standards for excavation safety (29 CFR 1926, Subpart P) shall be followed at all times during excavation activities. Excavations include "any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal." This includes trenches. This standard applies regardless of the depth of the excavation although many of the requirements do not apply until personnel enter or the depth exceeds 5 feet. Utility locates should be done at any depth for example.

G.4.a. Facility Requirements

1) Determine if the client requires an intrusive work permit to be completed and improved before conducting any intrusive work.

2) This includes driving fence posts, grubbing with a dozer, manually digging a hole with a shovel, or drilling among other things.

3) A competent person shall be designated and supervise all intrusive work.

G.4.b. Excavations 5 feet or deeper that personnel will be entering

In excavations 5 feet deep or deeper, a competent person shall ensure that the following requirements are met.

Table 0 Excavation Sloping Requirements

SOIL OR ROCK TYPE	EXAMPLES	MAXIMUM ALLOWABLE SLOPES HORIZONTAL TO VERTICAL FOR EXCAVATIONS LESS THAN 20 FEET DEEP (1)
Stable Rock		Vertical (90°)
Type A Cohesive	Clay, Hardpan, Silty Clay	3/4 : 1 (53°)
Type B Cohesive/Granular	Silt, Unstable Rock, sandy Loam, Fissured type A	1 : 1 (45°)
Type C Granular	Gravel, Submerged, Loamy, Sand	1.5 : 1 (34°)

(1) Excavations greater than 20 feet deep must be designed by a PE.

1) Provide safe access and egress. This includes ladders or ramps. In trenches, a point of egress must be within 25 feet at all times while in the trench. Ramps shall be sloped so as not to require the use of hands to walk out of the excavation.

2) Employees must be protected from cave-ins.

a) In trench excavations the competent person must have all sides sloped in accordance with OSHA requirements on either side of the trench where personnel are working.

b) In excavations, at a minimum, employees within a distance equal to the depth of a cut face shall be protected. Where employees are in excavating equipment, at a minimum, the equipment shall not undercut a face in such a way that the cab is closer than the height above the cab.

2) Alternative protections, specified by OSHA include trench boxes or shoring.

3) In excavations where employees may be required to enter, excavated or other materials shall be effectively stored and retained at least 2 feet or more from the edge of the trench.

G.4.c. Water

Whenever, groundwater may be encountered; a specific classification and slope adjustment will be made on site by the Competent Person. At a minimum an additional 1/2 to 1 slope will be added if flowing conditions are encountered at the toe of the slope where personnel are working.

G.4.d. General excavation practices

1) In excavations with potential airborne vapor hazards, where employees may be required to enter shall have the atmosphere tested before each entry and as conditions change.

2) Employees exposed to vehicular traffic shall be provided with and instructed to wear warning vests made of reflective or high visibility materials.

3) All employees in trenches shall wear the appropriate PPE, e.g., hard hats, safety glasses, hard-toed boots, etc.

4) No employees will be permitted under loads.

5) Dust conditions shall be kept to a minimum in accordance with the project dust control plan.

6) Where employees or equipment are allowed to cross over excavations, all walkways and/or bridges will have guardrails.

7) Adequate barrier protection will be provided at remotely located excavations (e.g., reflective cones or sawhorse barriers).

8) Each excavation must be inspected daily. If evidence of cave-ins or slides is apparent, all work in the excavation must cease until necessary precautions have been taken to safeguard employees.

9) Where vehicles or equipment operate near excavations or trenches, the sides of the excavation must be shored or braced as required to withstand the forces exerted by the superimposed load.

G.4. d. Utility Lines

Utility lines, both above and below ground, must be addressed in any excavation activity regardless of depth.

1) Be aware and always suspect the existence of underground utilities such as electrical power, gas, petroleum, telephone, sewer and water. Underground utilities are a concern at any depth.

2) Overhead and buried utilities should be located, noted and emphasized on all excavation and work plans (regardless of depth of excavation). Post warning barricades on the ground along the line of excavation in order to alert excavating equipment approaching overhead utilities.

3) When excavating within 6 feet of buried utilities, first locate and mark the expected location. Ideally, the utility should be shut off and excavating should be done with a spotter and extra care. Due to the inaccuracies of locating, if the utility can not be shut off, hand digging (i.e., potholing) will be used to visually confirm the utility location before using heavy equipment.

4) When excavating within 6 feet of underground utilities, a spotter shall be used to assist mechanical excavating equipment in locating utilities.

5) When excavating within 6 feet of underground electrical, phone, flammable gas/liquid lines make every effort to de-energize lines.

6) The requirements above should be taken as a minimum. High volume or high pressure mains should be given a wider margin. Fiber-optical lines should be given additional margin. High pressure or high volume water lines should be approached in the same manner as “more dangerous” utilities.

7) Overhead Utilities.

When overhead electrical power lines exist at or near an excavation site, consider all wires to be alive and dangerous. Support overhead utility lines as necessary. Overhead electrical lines may induce a current without actually touching the lines. Be sure to maintain clearances from electrical lines of 50 kV or greater in accordance with 29 CFR 1926.550(a)(15). Place ground markers to indicate overhead hazards as well as those below ground.

G.4. e. Competent Person

The excavation competent persons are assigned in the organization and key personnel section earlier in this document. The excavation competent person is authorized to, and shall take prompt action to correct unsanitary, hazardous, or dangerous working conditions. Other responsibilities include (but are not limited to):

1) The competent person will supervise each intrusive work permit.

2) The competent person will directly oversee all operations and be present on site at all times while employees are in the excavation.

3) The competent person will make a daily inspection of the excavation area before each shift begins, after any changes in the excavation area or after a rainstorm.

4) The competent person will ensure that personnel in excavations will not work under suspended loads.

5) The competent person will ensure that work activities on the surface of the excavated area will be restricted to prevent working above personnel.

6) The competent person will ensure that banner guard and barriers will be placed across public access to the excavation areas at night to protect and warn personnel as necessary.

7) The competent person will ensure that personnel exposed to high traffic areas will wear high visibility vests; orange for daytime and reflective for night operations.

E.9. G.5. Falling and tripping hazards

G.5.a Falls--Housekeeping and materials storage

1) All material shall be stored in a manner that will ensure that the material is safe from unexpected movement, falling, rolling, blowing, or any other uncontrolled motion.

2) Materials and supplies shall be kept away from edges of floors, stairways and access/egress routes (36 inches minimum).

3) Forms and scrap lumber with protruding nails and all other debris shall be cleared from work areas, passageways, stairs, and in and around buildings or other structures.

4) Tripping hazards, protruding nails, oil slicks, scrap materials and other hazardous conditions occurring during the course of the job shall be eliminated as work progresses.

5) Tools and equipment shall not be strewn about where they might cause tripping or falling hazards and shall, at the end of each workday, be collected and stored or disposed of as appropriate.

6) All food waste and oily/greasy rag containers shall be equipped with tight closing lids.

7) Protruding reinforcing steel (rebar) shall be properly capped or otherwise protected to prevent a hazardous condition.

8) All non-hazardous trash, oily wastes, PPE, debris and trash of any kind shall be segregated according to the applicable waste segregation scheme; and shall be labeled accordingly.

9) Covers on all roll-offs, drums, and containers of any type shall be securely covered at the end of the day.

G.5.b. Falls--slippery surfaces, unstable surfaces, uneven terrain

1) Wet conditions on the site caused by rain and/or work activities are likely to be encountered during the project.

2) Employees will be informed of the hazards associated with walking on slippery and or uneven surfaces.

3) Mark or remove trip hazards.

4) Proper foot wear will be provided to all employees involved with work activities during these conditions.

5) When possible, pedestrian traffic will be redirected around potentially dangerous areas.

6) Everyone should keep the work area and other areas where people may walk clean and orderly.

7) Tools, debris, and other objects should not be left on the floor, decking, or other areas where they present hazards during a job or after a job is completed.

8) Oil spills and slippery spots shall be cleaned up immediately.

9) Extra precautions should be taken when walking on steel decking during wet/icy weather and/or oily conditions.

10) Never walk on piping, never take dangerous shortcuts, and avoid jumping from elevated places.

11) Avoid unnecessary trail blazing. Stick to known/safe paths.

G.5.c. Falls--Ladders

1) Personnel must visually inspect each ladder for defects before use, defective ladders shall not be used.

2) When working from a ladder, wear fall protection if work requires your body to extend past the margins of the ladder sides.

3) While ascending or descending a ladder, carry nothing which will prevent holding onto the ladder with both hands.

4) Metal ladders will not be used if there are any existing or potential electrical hazards in the work area.

5) All ladders must be securely tied off or secured by an attendant while the ladder is in use.

6) When working from ladders, work facing the ladder with both feet on the rungs.

7) Workers shall not stand with their waist above the top step of a ladder without wearing a safety belt that is securely tied off to a local structure.

8) Short ladders shall not be spliced together to make a longer ladder.

9) The base of the ladder must be set back a safe distance from the vertical; approximately one-fourth the working length of the ladder.

G.5.c. Falls--Fall Protection working from elevated surfaces

Duties involving heights greater than 6 feet above the ground include:

1) Utilize fall protection or restraint system as described in the Envirocon Fall Protection Program.

Table D-65.1 of 29 CFR 1926.65: Illumination of Work Areas	
Foot Candles	Area of Operations
5	General Site Areas
3	Excavation and waste areas, accessways, active storage areas, loading platforms, refueling, and field maintenance areas.
5	Indoors: Warehouses, corridors, hallways, and exitways.
5	Tunnels, shafts, and general underground work areas. (Exception: minimum of 10 foot-candles is required at tunnel and shaft heading during drilling, mucking, and scaling. Mine Safety and Health Administration approved cap lights shall be acceptable for use in the tunnel heading.
10	General shops (e.g., mechanical and electrical equipment rooms, active storerooms, barracks or living quarters, locker or dressing rooms, dining areas, and indoor toilets and workrooms.
30	First aid stations, infirmaries, and offices.

2) Append a task specific AHA to this plan to specify type and design of fall protection system on a case by case basis.

3) The open edges of all floors 6 feet or more above the next floor or level shall be guarded by an approved barricade secured to prevent accidental displacement.

G.5.d Illumination

Light plants or other sources of light shall be used as necessary to maintain the requirements described in Table D-65.1 of 29 CFR 1926.65.

E.10. G.6. Portable Tools

G.6.a. Deadman switches

Portable electrical power tools will be equipped with constant pressure switches or controls that will shut off power when the pressure is released.

G.6.b. Guards

All tools will be equipped with appropriate guards, the guards will be properly adjusted, and the guards will be replaced if they are damaged.

G.6.c. Field modifications

Hand/Powered tools may be used only for their intended purpose. The design or guard capacity shall not be exceeded or circumvented by unauthorized attachments or modifications.

G.6.d. Electrical

1) All portable electrical powered tools shall be double insulated or grounded.

2) Ground Fault Interrupters (GFCIs) will be used with all outdoor temporary wiring.

3) Power tools shall be hoisted or lowered by a hand line; never by the cord or hose.

G.7. Fire Prevention

G.7.b. Extinguishers

1) Extinguishers will be readily available on site. At a minimum, extinguishers will be places as follows. (Extinguishers of greater size or inclusive types may be substituted).

2) Heavy Equipment will be equipped with a 5# ABC fire extinguisher rated at 2-A:10-B:C.

3) Fuel depots and flammable liquid storage/handling areas

a) 20# ABC fire extinguishers with a rating of 2-A:40-B:C will be provided within 75 feet of, but no closer than 25 feet to, all refueling depots and flammable storage areas.

b) 10# ABC fire extinguishers with a rating of 2-A:40-B:C will be provided within 75 feet of, but no closer than 25 feet to, all mobile fueling stations, flammable liquid transfer areas, and generators.

c) Where Bureau of Reclamation requirements are applicable: a minimum of two, 40 # ABC extinguishers must be on site.

4) Trailers, buildings and work areas

a) All trailers and work areas will have at least a 5 # ABC fire extinguisher rated at 2-A:10-B:C.

b) Extinguishers in trailers will be mounted near a clear evacuation egress point (door).

c) Extinguishers on site will be located at the primary entrance to the work area.

4) Access routes to fire extinguisher shall be kept clear at all times.

5) All fire extinguishers shall be inspected monthly and serviced annually.

G.7.c. Fighting fires

1) Personnel are authorized to fight fires in the beginning stages of development and only to the extent that they judge this can be done safely. Personnel are not required to fight fires.

2) When a fire is detected, first ensure that the area is safely evacuated and the supervisor is being notified so that the fire department can be summoned.

3) Ensure your own evacuation route before attempting to extinguish a fire.

4) If more people or more extinguishers are needed, the effort should be abandoned.

5) Contact plant fire department if applicable.

G.7.d. Facility systems

1) A site-specific procedure will be developed where project work (such as demolition or excavations) potentially jeopardizes facility systems.

2) Facility managers will generally be notified when any work is done above facility systems such as fixed fire suppression systems for buildings, or where excavations encroach on facility systems such as fire hydrants or related piping.

3) When excavating or performing demolition near facility systems, the facility systems should be uniquely marked to avoid damaging these systems.

4) Demolition of fire systems will only commence after notification and approval of the facility manager or designated representative.

5) Facility fire hydrants shall not be used without notification and permission of the facility manager or designated representative.

G.7.e. Flammable Liquids, Fuels and fueling

1) Protection of depots

a) Depots will be located in such a manner as to provide clear access for fire trucks.

b) Depots will be protected from damage from vehicle or equipment damage using bollards, bails, curbs or similar devices.

2) Portable containers

a) All portable fuel cans shall be free of deformities which threaten the integrity of the container.

b) All flammable storage cans of 1 gallon capacity or greater shall have self closing lids and flame arresters (i.e. safety cans).

c) All flammable storage containers shall be labeled as to their contents, and shall include a warning regarding flammable contents.

d) Gasoline engines shall not be fueled while the engine is running.

G.7.f. Containments

1) All equipment shall be fueled through funnels or spouts that prevent spillage. All spouts and funnels must be of metal construction.

2) NFPA flammables (e.g., gasoline) will not be stored in the same containment as NFPA combustibles (diesel fuels).

3) Containers and depot tanks in excess of 5 gallons will be held or stored in containments designed to collect spillage.

4)Covered containments must be capable of containing a volume equal to:

a):the capacity of the largest tank, plus

b) the combined displaced volumes of all tanks and containers stored in the containment.

1) Uncovered containments must be capable of containing a volume equal to:

a) the capacity of the largest tank, plus

b) the combined displaced volumes of all tanks and containers stored in the containment, plus

c) 25 percent excess capacity for rain collection.

d) Uncovered containments will be kept free of standing water.

i. Water in excess of 5% containment capacity will be pumped off within a 48 hour period.

ii. Water will not be discharged onto the ground unless free of visible residues or films.

2) Bonding and grounding

a) Any transfer of a flammable liquid from one container to another requires bonding from one container to the other.

b) All flammable fuel depot tanks set up on site will be grounded.

G.7.g. Smoking, fire and hotwork

1) Hotwork permits shall be issued for all applicable hot work according to facility requirements.

2) Smoking and hot work will not be allowed within 50 feet of fuel depots or other flammable liquid storage and/or transfer areas.

3) Fuel depots or other flammable liquid storage and/or transfer areas will be posted against smoking, open flames, or hot work.

4) Oily rags

a) Oily rags, trash and other combustible scrap materials shall be placed in closed receptacles separate from other trash.

b) Oily rags shall be stored in containers approved for this purpose.

E.11. G.8. Lifting Heavy Objects

Heavy objects will be lifted using appropriate machinery or enough manpower as is required. Employees will be specifically instructed to seek assistance in lifting heavy objects.

G.8.a. Lifts Using Rigging

Lifts utilizing cranes, hoists, and other similar mechanical lifting devices shall:

1) A competent person shall conduct a lift assessment prior to the lift.

2) A written assessment and lift plan shall be developed for critical lifts (refer to Site Procedure 1403.105 Hoisting and Rigging Guidelines).

3) A critical lift is defined as follows:

a) A critical lift is any lift which meets the definition established for this site by the facility owner/manager.

b) A critical lift is any lift which:

i. involves lifting of personnel;

ii. involves loads greater than 30,000 pounds;

iii.involves loads greater than 75 percent of the crane capacity in the boom configurations potentially required;

iv.involves lifts for which the path of load travel is at any point out of the view of the crane operator;

v. involves the use of two or more cranes or lifting devices;

vi. involves non-routine or unusual rigging;

vii.involves the potential for damage that would result in unacceptable delay to schedule or significant program impact;

viii.involves the potential for a significant release of hazardous materials, radioactive materials, or other undesirable conditions;

ix. involves the potential for unacceptable risk of personnel injury or significant adverse health impact (on-site or off-site); or

x. any lift which the lifting equipment operator determines to be critical.

G.8.b. Manual Lifting

1) Before lifting:

a) Determine if the object can be moved by some other means (mechanical device).

b) Determine if the object is too bulky and would obscure vision; if so, get another person to help carry it. When handling material with others, everyone should agree on who will act as leader and give the signals. Loads should not be released until everyone is ready. Teamwork is important.

c) Determine if the object is within the lifter's capability (a preliminary "heft" will indicate this).

d) Determine if the footing around the object is solid.

1) Lifting

a) Legs should be bent at knees, back nearly vertical, body as close to the object as possible, feet apart but not further than shoulder width. Take a firm hold and straighten knees. Back is still straight and upright. Pull load close to body and lean back slightly to keep center of gravity over feet.

a) Avoid twisting the body when lifting or carrying loads.

E.12. G.9. Sanitation and Hygiene

G.9.a. Drinking Water

1) An adequate supply of potable water will be provided on site.

2) Portable water containers will be capable of being tightly closed and equipped with a tap.

3) Water shall not be dipped from containers for drinking purposes. Single service, disposable drinking cups will be provided.

4) No one shall place any objects (e.g. soda pop, ice tea, etc.) in coolers.

G.9.b. Restrooms and hygiene facilities

From Table D-65.2 of 29 CFR 1926.65	
Number of Employees	**Minimum Number of Facilities**
20 or fewer	One.
21 to 199	One toilet seat and one urinal per 40 employees
200 or more	One toilet seat and one urinal per 50 employees

Toilet facilities (sanitary sewer w/flushing toilets, chemical toilets, recirculating toilets, or combustion toilets) including hand washing stations will be provided in accordance with 29 CFR 1926.65(n) and Table D-65.2.

H. RECORDKEEPING

The health- and safety-related documents for the project will be handled in the following manner:

E.13. H.1.Training and Safety Meeting Records

Certificates of completion for all mandatory training for Envirocon and lower tier subcontractor employees will be maintained on site at this site. Minutes for safety and health meetings, including daily safety briefings, will also be maintained on site. These records are located in Envirocon's Safety Trailer office.

E.14. H.2. Injury/Illness

Copies of "Supervisor's Report of Injury or Illness" will be maintained on site. Envirocon's official OSHA 300 log is maintained at the Corporate office. See the emergency procedures below for accident reporting procedures. A first aid log will be used to document first aid cases as described below in the log keeping section.

E.15. H.3. Accident reports

Accident investigation reports will be maintained on site. All injuries will be reported to the client as well. See the emergency procedures below for accident reporting procedures.

E.16. H.4. Medical Surveillance Records

All medical records received on site will be forwarded to the corporate office after review. No medical records will be maintained on site; Fitness For Duty forms, however, will be available on site for all personnel.

E.17. H.5. Written Programs

Written programs for compliance with the OSHA standards, such as respiratory protection, hearing conservation, and certain chemical exposure are maintained at the corporate office.

E.18. H.6. Health and Safety Plans

At least one copy of the plan and any amendments will be maintained on site.

E.19. H.7. Employee Access

All employees have a right to access most of the documents related to health and safety. Medical and training records are available only to individuals requesting their own records. Employees can receive copies of their medical records or air monitoring exposure records upon written request. Medical information can only be released upon the written consent of the individual.

E.20. H.8. Health and Safety and Related Logs

The health and safety officer is responsible for maintaining logs of health and safety activities, including safety inspections.

H.8.a. Health and Safety Log

This is a bound log of daily inspections and health and safety issues kept by the project health and safety officer.

H.8.b. First Aid Log

Employees are required to report all injuries and illness regardless of how minor the incident may seem. These reports shall be documented on an injury/illness report form, or in the project first aid log where diagnosis and treatments involve only simple first aid diagnosis and/or treatments.

1) Treatment/diagnosis by 3rd party EMTs, physicians, nurses, or other medical professionals shall be reported using the injury/illness reporting procedures. Determination of OSHA recordability/first-aid shall be determined by the Corporate Director of Health and Safety in these cases.

2) This First Aid Log is a log of all reported injuries and/or illnesses reported to supervisors and/or the health and safety officer. This log shall document the report, date, name of the injured employee, nature of the injury/illness, diagnosis and the treatment given.

3) If no treatment is given the incident shall still be noted in the log. This shall include any dispensing of first aid supplies or administered by a supervisor, safety officer or other first aid trained employee.

4) Non-work related injuries/illness reports and use of prescription drugs should also be noted in this log.

5) Self-medication by employees with respect to non-prescription (i.e., Over The Counter (OTC)) pharmaceuticals unrelated for colds headaches or other non-work related ailments need not be documented.

H.8.c. Equipment Free Release Decon Log

Decontamination and release of equipment from site shall be logged. Use of the Equipment Decontamination Log, Form 1403.017.a, may be used for this purpose.

I. INCIDENT AND EMERGENCY PROCEDURES

This section documents procedures to be followed in the event of incidents and certain emergencies. Where possible these have been formatted to individual sheets for response training and ready reference when needed.

E.21. I.1. General Emergency Procedures

This subsection describes procedures which are common to a variety of incidents.

I.1.a.Responsibilities

1) The site supervisor is responsible for the overall conduct of emergency procedures. This includes maintaining an orderly succession of supervision; making necessary reports to all concerned parties; ensuring that the causes of accidents are identified and corrected; and ensuring that injured personnel (with or without life threatening injuries) are escorted to medical treatment by the site safety officer or other supervisory personnel.

2) The HSO has the responsibility for ensuring that the provisions of this HASP are adequate and implemented in the field. Changing field conditions may require decisions to be made concerning adequate protection procedures. The HSO is also responsible for conducting site inspections on a regular basis to ensure the emergency .responsible for ensuring that the appropriate procedures are followed.

I.1.b. Aid

1) First Aid Kits are located in each Envirocon pickup, trailer; and decon facility.

2) A first aid trained individual will be on site at all times.

3) Emergency eye wash and showers will be located at the decon facility.

I.1.c. Evacuation Procedures

The site safety officer shall select and maintain appropriate assembly points for evacuations. These shall be posted and employees informed of their locations. At least one primary and one secondary assembly point shall be established.

1) When an evacuation is called for, employees shall proceed in an orderly fashion to the primary or secondary evacuation assembly points.

2) Turn off equipment whenever possible. Avoid leaving hazardous conditions in the process of evacuating.

3) Evacuate in the safest direction indicated by wind, smoke, fire, or other hazards.

4) Take a head count and report to the supervisor.

5) Do not leave the assembly area without reporting to the supervisor.

E.22. I.2. Reporting and Investigating Incidents

All incidents at the site shall be reported. It is hoped that most incidents will be small and/or near misses. It is essential that these events be reported as well more serious incidents in order to learn from them and avoid the more serious accidents.

I.2.a. Project and facility requirements

1) An incident is defined as follows:

a) A work-related injury or illness

b) An exposure to a hazardous substance above the allowable exposure limit

c) Property/vehicle/equipment damage

d) A uncontrolled fire or explosion

e) An unplanned spill or release (including air releases) to the environment

f) A permit exceedence

g) Any unexpected contact or damage to aboveground or below ground utilities

h) A "near miss" or an unplanned event that has a reasonable probability in resulting in one of the outcomes described above had the circumstances been different and for which modifications to management programs will reduce the probability of occurrence or the severity of the outcome.

2) Verbal Notifications

a) In addition to immediate verbal (oral) reporting of all incidents to the client's project manager.

b) A "serious" incident includes the following:

i. Imminent danger safety violations

ii. Any incident involving the general public or visitors

iii. Discovery of potential ordnance or projectiles

iv. Confirmed Recovered Chemical Warfare Material (RCWM) detection

v. Exposure to a hazardous substance above the allowable exposure limit

vi. Work related injury requiring more than First Aid

vii. Work related illness

viii. Spills of hazardous material in excess of 1 gallon or Reportable Quantity (RQ)

ix. Any unplanned fire on the facility property

3) Incident investigations. An incident investigation shall be performed for all incidents for which a report is required. The supervisor and the designated HSS shall perform the investigation and shall include participation by others as necessary. The investigation is to be initiated as soon as possible after the incident.

I.2.b. Reporting Incidents

Report all unplanned, unexpected, events or changes in conditions. Some examples include:

1) Personnel incidents such as:

   a) injuries,

   b) illnesses,

   c) first aid cases,

   d) fights or other acts or threats of violence,

   e) fatalities, or

   f) any personnel injuries or incidents which might be the result of acts of other contractors, subcontractors, or facility personnel.

2) Accidents such as:

   a) motor vehicle accidents (with or without damages),

   b) equipment accidents (with or without damages), or

   c) property damage (including fires).

3) New, previously unknown, or unexpected potential hazards such as:

   a) buried drums, cylinders, or hazardous materials containers,

   b) possible unexploded ordinance (bullets, mines, bombs, grenades, etc.),

   c) possible chemical or biological warfare devices,

   d) unusual soil conditions (e.g., previously disturbed soils, soils with unusual odors, soils with unusual coloration),

   e) floating contaminants (e.g., oil, chemicals, or sheens on water).

4) Environmental incidents such as:

   a) oil or chemical spills,

   b) dead or injured wildlife on the site, or

   c) disturbed habitats.

5) Objects of potential cultural or historical importance such as:

   a) bones,

   b) buried coins or money,

   c) arrow heads,

   d) possible burial sites, or

   e) finding articles of any potential cultural significance.

6) Unauthorized personnel in work areas such as:

a) unauthorized workers on site,

b) unescorted public visitors,

c) media personnel, or

d) unescorted government visitors.

I.2.c. Procedures for Reporting Incidents

1) First Responder's Report

a) If your work is involved with the incident of interest, STOP WORK IMMEDIATELY!

b) Ensure the safety of the area from any imminent hazards.

c) Report to your immediate supervisor by radio or phone if at all possible.

d) If you must leave the area to make a report, find someone to help secure the area if at all possible.

2) Supervisors

a) Control imminent hazards as necessary.

b) Ensure that injuries are being taken care of, and assign someone to escort injured employees leaving the site for medical evaluation/treatment.

c) Ensure that the area is adequately secured.

d) Ensure that the scene is not further disturbed.

e) Visit the accident scene as soon as possible.

f) Interview injured workers and witnesses as soon as possible.

3) Reporting requirements

a) Report all incidents verbally to the client as soon as the area has been secured.

b) Follow up with a written report before the close of business.

c) Follow up with a written investigation report within 48 hours.

E.23. I.3. Personnel Injury

I.3.a. First Aid

1) The PM (or senior supervisor on site) and/or HSO shall ensure necessary first aid or medical attention is obtained. First aid shall be provided by qualified first aid providers or site Fire Department EMTs.

2) If personnel need medical evaluation, ensure that a safety officer or supervisor is assigned to escort the employee.

3) Do not allow injured personnel to drive themselves unless a doctor determines they are fit to do so.

4) If a doctor prescribes medication determine if that medication limits ability to drive. Do not allow employees to drive themselves if the medication impacts on driving safety. (If an employee wants to drive themselves and has been prescribed medication that will impact on driving safety the employee can wait to take the medicine at home if the doctor allows this.)

I.3.b. Hazard assessment

The PM (or senior supervisor on site) and/or HSO shall immediately investigate the nature and cause of injury in order to assess the hazard to ongoing site work. This should include consideration of working short handed if the injured person can not resume work right away. It is the senior supervisor's responsibility to stop work if necessary to make corrective changes.

E.24. I.5. Heavy weather

I.5.a. High winds

Outdoor equipment operations will be suspended as follows:

1) sustained wind speeds of 40 mph,

2) gusts exceeding 60 mph,

3) when dust control measures are no longer effective,

4) wind risk operations at 25 mph.

   a) crane operations,

   b) work with sheet materials such as liners, or

   c) work with large profile materials such as panels.

I.5.b. Lightning

Outdoor operations will be suspended when lightning is within a 5 second count of the site (i.e., the time difference between seeing a lightning strike and hearing the sound). High profile equipment operations shall be suspended when lightning is within 15 seconds of the site.

1) High profile operations include crane operations, drilling operations, or electrical wiring tasks.

2) Equipment operators shall stop their equipment and park it safely before heading for shelter.

3) No personnel will be left on the ground in an exposed location.

4) Preferred shelter is a permanent building. Personnel may also take shelter in trailers or low profile rubber tired equipment (e.g., pickups). Avoid driving pickups or any other equipment except to help evacuate personnel.

5) Work will resume after a 30 minute period without lightning.

E.25. I.7. Emergency Contacts for Site

Important / Emergency Contacts		
Fire Department		Emergency 911
Ambulance		Emergency 911
Police		Emergency 911
Hospital: St. Patricks Hospital 500 W. Broadway Missoula, MT	Directions:	Phone: (406) 543-7271
Work Comp	Montana State Comp Fund 5 South Last Chance Gulch P.O. Box 4759 Helena, MT 59604	In Montana MT State Fund (800) 332-6102 team 5 Policy: 03-193 9044
Envirocon Project Manager	TBD	
Envirocon Site Supervisor	TBD	
Envirocon Site Safety Officer	TBD	
Envirocon Corp. Dir Health & Safety	Joe Ocken	(406)-523-1194
Envirocon Loss Control/Investigations	Mel Lockridge	(406) 523-1179
Envirocon Medical Monitoring	Melissa Barkell	(406) 523-1192
WorkCare Medical Monitoring	Ana Martinez	(800) 455-6155 x118
WorkCare Early Return To Work*	Marilou Martin	(800) 455-6155 x402
Envirocon Corp Ofc. Missoula, MT		(406) 523-1150
ENVIROCON SAFETY HOTLINE:		800-224-7389
Agency for Toxic Substances and Disease Registry (ATSDR) for chemical exposures		404-639-0615 (emergency) 404-639-6360 / 6000 (non-emergency)

***NOTE: Regarding WorkCare and Incident Intervention/Early Return To Work/After-hour Emergencies/Urgent Questions - WorkCare's 24-hour, 7 days per week, case management hotline is 1(800) 455-6155. The project Safety Officer/Manager/Supervisor is authorized to call WorkCare's case management hotline to connect with a doctor or a nurse case manager. A WorkCare doctor or nurse case manager is on call to help with incident intervention, emergencies, or urgent questions and can be reached at 1(800) 455-6155 outside of WorkCare's normal business hours.**

Appendix A: Voluntary Employee's Emergency Information Data Sheet

The following information is being gathered to help us respond to an emergency. **All questions are optional.** You may answer any of the questions you like or leave any blank. The original copy is sent to the Corporate safety office, and a copy will be maintained on site. If the information provided changes, you should submit a new sheet.

Employee Name (please print clearly): _____

Emergency Contacts (name as many as you like)
In the event of an emergency who should we contact to let them know? _____

_____

What City and State do they live in? _____

What is their phone number? _____

What is their relationship to you? _____

Emergency Contact for YOU!

How can we get in touch with you for project recalls, shutdowns, emergencies etc.?

_____

Where are you staying while on site?_____

What is the phone number there? _____

Medical Conditions

Are you allergic to any medications? □yes/□no What are they?_____

Are you allergic to insect bites or stings? □yes/□no What are they?_____

Do you carry treatments or medicine(s) (e.g., insulin, sugar/candy/food, bee sting kits) that needs to be given in an emergency? □yes/□no What are they?_____

Where is it kept?_____

Are you or do you have:

- □yes/□no: Hypertension (Is it uncontrolled? □yes/□no)
- □yes/□no: Asthma (Is it uncontrolled? □yes/□no)
- □yes/□no: Diabetes (Is it uncontrolled? □yes/□no)
- □yes/□no: Hypoglycemia
- □yes/□no: Epilepsy/seizures
- □yes/□no: Fainting spells
- □yes/□no: Irregular heart beat
- □yes/□no: Narcolepsy (sleeping spells)

What company do you work for? _____

Safety Officer's Notes:

Appendix B: HOSPITAL ROUTE & EMERGENCY CONTACTS

Appendix C: Equipment Decontamination Log

Method	Decon Method Description:	
Method 1	Dry decon using shovels, brooms, etc.	Project Name:
Method 2	Wet decon using high pressure washer	Project Number:
Method 3	Wet decon using low pressure water hoses, hotsy and scrub brushes	Contaminants:

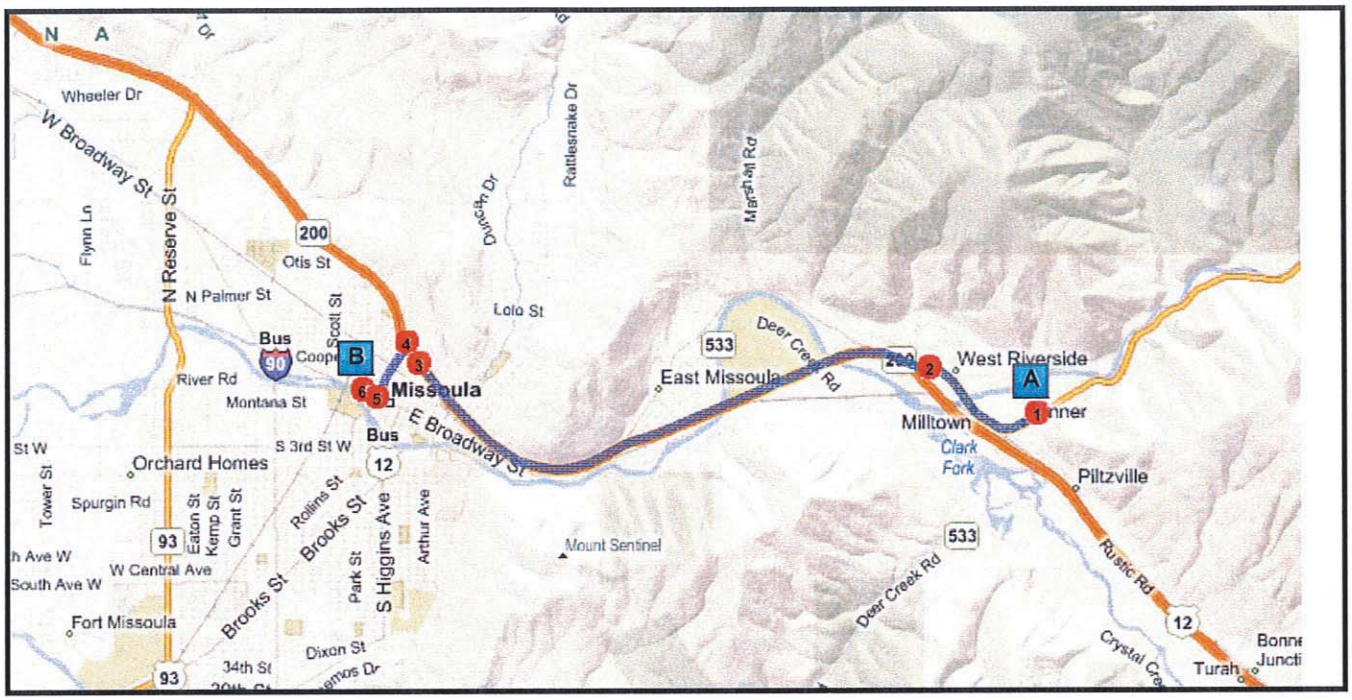
DECONTAMINATION ACTIVITIES					INSPECTION ACTIVITIES	
date & time	Equipment Description, Model, and serial number Owner			Decon Method	Decon Supervisor	Inspector	Notes
date time	Description Owner	Make serial	Model	☐ Method 1 ☐ Method 2 ☐ Method 3	name sig	name sig	☐sat ☐unsat
date time	Description Owner	Make serial	Model	☐ Method 1 ☐ Method 2 ☐ Method 3	name sig	name sig	☐sat ☐unsat
date time	Description Owner	Make serial	Model	☐ Method 1 ☐ Method 2 ☐ Method 3	name sig	name sig	☐sat ☐unsat
date time	Description Owner	Make serial	Model	☐ Method 1 ☐ Method 2 ☐ Method 3	name sig	name sig	☐sat ☐unsat
date time	Description Owner	Make serial	Model	☐ Method 1 ☐ Method 2 ☐ Method 3	name sig	name sig	☐sat ☐unsat
date time	Description Owner	Make serial	Model	☐ Method 1 ☐ Method 2 ☐ Method 3	name sig	name sig	☐sat ☐unsat

Appendix D: **Contaminants Of Concern (COC)**

contaminant	OSHA PEL	ACGIH TLV	Exposure routes	acute symptoms	Chronic symptoms	Target organ	IP	Spec. gravity	V.P. mmHg	Flash point deg F	LEL %	UEL %
				Profuse sweating,	corneal damage							
polychlorinated biphenyls PCB, Aroclor 1242 chlorodiphenyl (42% chlorine)	1 mg/m3 skin	1 mg/m3 skin	Inhalation Ingestion Contact Absorption	eye irritation, chloracne	eye irritation, chloracne, liver damage, reproductive effects	skin, eyes, liver, reproductive system	na	1.3-9	0.001	na	na	na
polychlorinated biphenyls PCB, Aroclor 1254 chlorodiphenyl (54% chlorine)	1 mg/m3 skin	0.5 mg/m3 skin	Inhalation Ingestion Contact Absorption	eye irritation, chloracne	eye irritation, chloracne, liver damage, reproductive effects	skin, eyes, liver, reproductive system	na	1.3-8	6.0 E-5	na	na	na

Print this page in a more readable format: Click **Print** next to the upper-right corner of the map.

Driving directions: SR 200, Bonner to 500 W Broadway St, Missoula



A Start: SR 200, Bonner, MT 59823

A-B: 7.5 mi, 9 min

1. Depart **SR-200** — 1.3 mi
2. Take ramp **right** for **I-90 West** toward **Missoula** — 5.4 mi
3. At exit **104**, take ramp **right** and follow signs for **Orange St** — 0.2 mi
4. Turn **left** onto **N Orange St** — 0.6 mi
5. Turn **right** onto **I-90 Bus / W Broadway St / US-93-Bus** — 0.1 mi
6. Arrive at **500 W Broadway St**
   The last intersection is Owen St
   If you reach W Front St, you've gone too far

B End: 500 W Broadway St, Missoula, MT 59802-4008

These directions are subject to the Microsoft® Live Search Terms of Use and for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2008 NAVTEQ™, AND™.

APPENDIX B
STANDARD OPERATING PROCEDURES

SOP 003
FIELD DOCUMENTATION

All information relevant to field operations must be properly documented to ensure that activities are accounted for and can be reconstructed from written records. Field documentation should include only a factual description of site-related activities and observations made. Field personnel should not include superfluous comments or speculation regarding the field activities or observations made. Several types of logbooks may be used for this purpose and should be consistently used by field crews (e.g., field logbooks, sample logbooks, field data logbooks). Logbooks will be labeled on the cover with the project name, dates of field work, and the project number. A separate bound logbook with consecutively numbered pages will be used for each field project. Each logbook for a particular project will be numbered or dated to identify the sample numbers or dates covered.

The information recorded in each logbook should be written in indelible ink. All corrections should consist of a single line cross-out, followed by the author's initials and the date. After field activities are completed, logbooks will be stored in the permanent project file. No bound logbooks should be discarded, even if they are illegible or contain inaccuracies that require a replacement document. When not in use, all logbooks will be stored in a secure location.

FIELD LOGBOOKS

The purpose of the field logbook is to document events that occur and record data measured in the field to the extent that someone not present at the site can reconstruct the activity without relying on the memory of the field crew. Each page in the field logbook will be initialed and dated by all persons making entries on that page. At the end of each day, a line will be drawn through the remainder of the page. The logbooks, at a minimum, must contain the following information:

1. A purpose and description of the field task
2. The time and date the field work began
3. The location and description of the work area, including sketches, map references, and photograph log, if appropriate
4. The names of field personnel and others present during the field work, including the times they are present
5. The name, agency, and telephone number of any field contacts
6. The general meteorological conditions for the day

7. Details of the field work performed, with a description of any deviations from the work plan, sampling and analysis plan, or standard operating procedures
8. All field measurements made (unless a specific logbook or sampling form [i.e., borehole log or groundwater sampling form] is available for this purpose), including the time of measurement
9. Any field results not appearing in the field data logbook, including station identification and location, date, and time of measurement
10. Cross-references of numbers for duplicate samples
11. References to other logbooks used to record information (e.g., station log, sample log, health and safety log)

SAMPLE COLLECTION FIELD FORMS

Appropriate sample collection field forms may be used to record the relevant sample information during a sampling event. For instructions regarding proper use of sample identifiers, sampling personnel should consult the sampling and analysis plan, where one exists.

SAMPLE LABELS

Sample labels are designed to uniquely identify each sample, and must be affixed to each sample container used. The labels should be filled out at the time the samples are collected and should consist of the following information:

1. Sample number
2. Site name
3. Date and time sample is collected
4. Preservatives used, if any

PHOTOGRAPHS

In certain instances, photographs of sampling locations may be taken. Photographs should include a measured scale in the picture, when practical. The following items should be recorded in the field logbook for each photograph taken:

1. The photographer's name, the date, the time of the photograph, and the general direction faced (orientation)
2. A brief description of the subject and the field work portrayed in the picture
3. The sequential number of the photograph.

The photographs will be placed in the project files after the film is developed. Any supporting documentation from the field logbooks will be photocopied and placed in the task files to accompany the photos.

EQUIPMENT CALIBRATION RECORDS

Equipment calibration records, including instrument type and serial number, calibration standards used, calibration method, calibration results, and date, time, and personnel performing the calibration should be recorded in the field logbook. Equipment should be calibrated in accordance with the manufacturers' recommendations.

APPENDIX C
POND SEDIMENT DEWATERING PLAN

Appendix C

Contingency Dewatering Plan

I. Overview

As part of the overall excavation and water management operations, it was determined that a contingency dewatering plan may be necessary in the event unusually high water and/or precipitation events are experienced during the Bonner Mill Cooling Pond remediation or restoration.

As indicated on Figure 8, the proposed schedule for remediation shows a fall startup no later than September 10 with a 100 day performance period. This performance period was selected so that both the Blackfoot River (BFR) and groundwater surface elevations would be relatively low (see work plan Figure 9). Current estimates show that the proposed depth of excavation of the pond sediments will end approximately 4 to 6 feet above the projected water table thus eliminating the need for active dewatering during normal flow periods.

Monthly average rainfall amounts for this area during October through January are generally +/-1-inch; however unusually heavy rainfall events could occur. Given the rapid influence of the Blackfoot River surface elevation on the adjacent project excavation areas, some form of water management might be required following unusually large precipitation events.

II. Passive Management

For most weather events, lasting a few hours or less and where a minimal amount of water has entered the excavation areas, the proposed method is to vacate the site and allow meteoric surface water to infiltrate naturally. The excavation methods described in Section 4.8 of the work plan describe the material handling procedures. In the event a short-duration precipitation event impacts the moisture content of the sediments to be removed, then either the operation would be suspended for a short period or, if sufficient volumes of drier sediments are accessible, then those materials would be mixed with the saturated portions for staging.

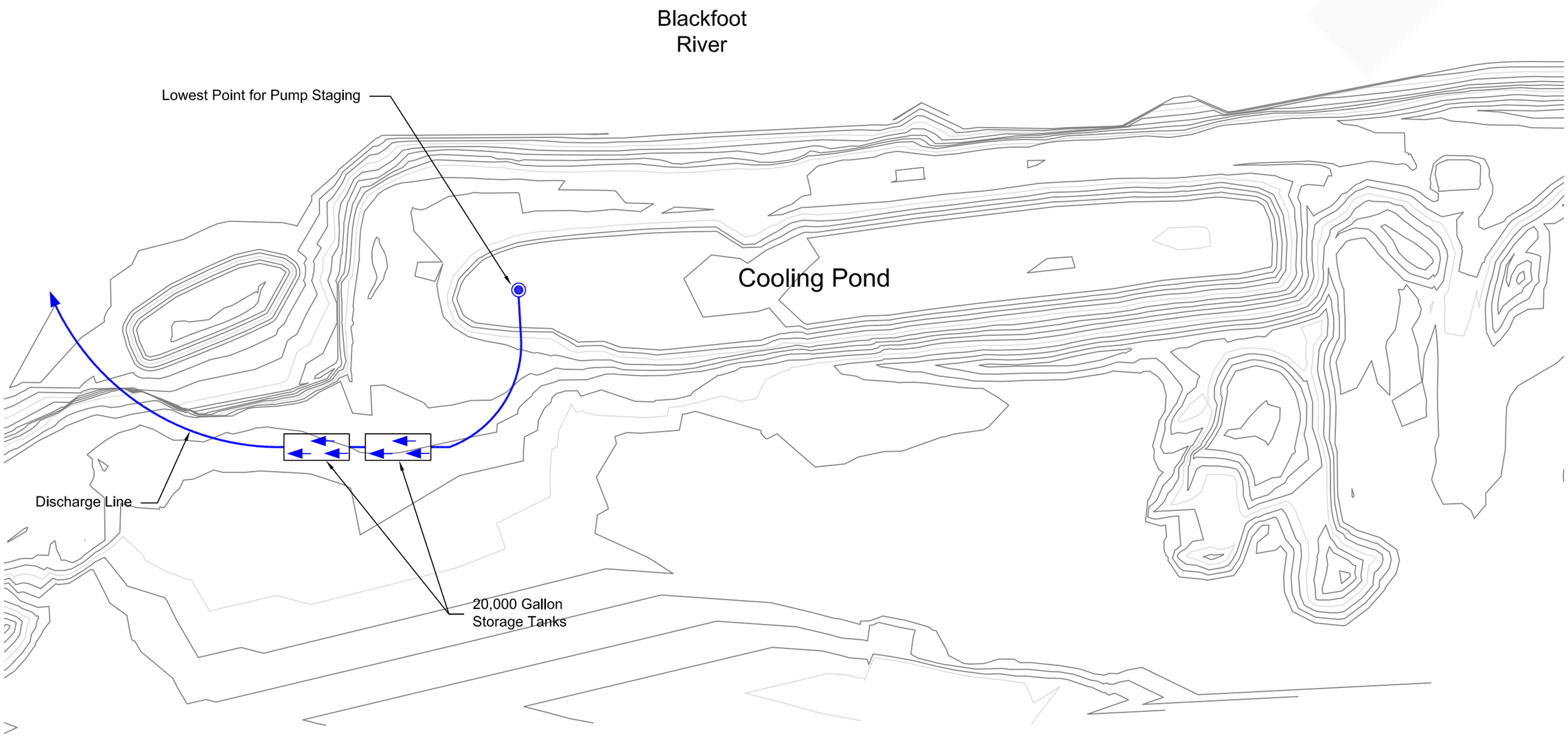
III Dewatering and Containment

During periods of excessive precipitation where ponded water has accumulated in the excavation areas, a secondary pumping and containment system may be deployed. If the water elevation in the BFR rises to a point above the base of the excavation, then operations will be suspended to allow sufficient time for the BFR surge to recede and the project area water table to drop back below the removal zones. Initiating this dewatering

procedure will only be required if it appears there is not enough time for the natural cycle to play-out.

Ponded water would be pumped from the lowest point of the active excavation areas using a 3” trash pump and conveyed into one or two 20,000 gallon portable water storage tanks (see Figure 1 of this Appendix) This tank(s) would be staged on a flat area south of the cooling pond near the log track. This tank(s) would be used as containment and settling vessel(s) whereby water would have adequate residence time to allow sediments to settle out of the turbid water. A water sample would be collected from the outlet and analyzed for PCBs using EPA Method 8082, and for turbidity, prior to discharging into the BFR. Prior to discharging any water to the BFR, approval from the Montana DEQ representative would be obtained.

The entire system will be assembled only after determining that active water management is required to maintain the scheduled milestones.



ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:
BONNER MILL
COOLING POND AND VICINITY

TITLE:
FIGURE 1
Appendix C
Dewatering and Containment Alternate 1

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	A. Brule
Date:	6-15-09
Dwg. No.	1476301-W

APPENDIX D
ADDITIONAL BMPS PLAN

BMPs from Milltown Contingency Plan

During the Removal Action (RA), surface water quality at the Stimson Bonner Mill Project could be impacted by:

1. Discharge of water generated during dewatering, excavation and/or stockpiling of sediment;
2. Storm water runoff from areas disturbed by RA construction activities;
3. Construction and removal/breaching of in-stream structures (i.e., bank armoring, etc.);
4. Restoration construction activities on the Blackfoot River (BFR) within the RA project area;
5. Restoration construction activities on the BFR outside the RA project area;
6. Other upstream construction activities which may occur during the RA;
7. Ongoing (i.e., background) loading from other upstream sources not associated with Bonner Mill cooling pond and fire pond lagoon RA; and
8. Additional loading from other new, unanticipated upstream sources.

This contingency plan directly addresses only those impacts related to the RA (i.e., items 1 through 4 above).

Numerous BMPs and other controls are to be routinely implemented during construction (i.e., to be employed even when exceedances are not threatened). These include the following BMPs.

- <u>Isolate cooling pond and fire pond lagoon sediments from flowing surface water</u> This planned BMP includes silt fencing, top-of riverbank berms, maintaining existing bank armoring to isolate sediments from surface water flows during the RA.

- <u>Sediment Dewatering and Storm Water Runoff BMPs</u> The primary planned BMP for mitigating the potential for contaminant release from sediment dewatering and storm water runoff during construction will be to contain and collect runoff from sediment excavations/stockpiles and other disturbed areas and route the runoff to constructed sedimentation swales for infiltration, rather than discharge to the BFR.

Other planned BMPs include:

- Preventing run-on to the work area (e.g., by installing run-on control berms around the RA area to be distrubed);
- Placing silt fences, hay bails or other erosion controls around construction areas or at strategic runoff concentration locations;
- Using raised roads and pads for accessing soft or wet ground areas; and

- Minimizing the extent of disturbed area exposed at any one time via grading, cover placement and revegetation.

- **In-stream Structure Construction/Removal BMPs**

The potential for contaminant release during removal and reconstruction of in-stream structures (river bank) is often mitigated by isolating work areas from flowing water via cofferdams or sheetpile walls, and by installing silt curtain in the river around work areas where flows cannot practically be diverted. These BMPs are not considered necessary for this project due to the significantly lowered river surface elevation caused by BFR headcutting associated with the Milltown Dam removal. In addition, the work schedule is designed to ensure that the river bank realignment work will be conducted during the low flow seasons (late summer, fall, and possibly early winter).

Instead, a silt fence will be installed above the water's edge, and a "surgical" approach will be used by the operator during the existing riverbank removal. The silt fence will be realigned, as necessary, to protect the BFR during the riverbank reconstruction.

Evaluation of Additional BMPs

As discussed above, cost-effective and non-schedule impacting BMPs and other controls will be routinely employed, even when exceedances are not threatened, to reduce potential impacts to resources. Additional BMPs, other controls, or treatment options will be evaluated for implementation if an exceedance of a surface water quality standard is: 1) observed at the Stimson Project, and 2) determined to be caused by RA activities.

Note that experience on the nearby Milltown Dam Removal project indicates that the RA will not result in surface water exceedances. In addition, given the BMPs already planned, the opportunity for significantly reducing downstream concentrations through implementation of additional BMPs, other controls or treatment of discharge water may be limited.

This evaluation process will compare the expected effectiveness provided by the various potential options available, to their cost and implementability. Impacts to the project schedule and the potential for adverse effects on the environment, workers or the community associated with implementing a mitigation measure will also be considered as balancing factors. The results of the evaluation and recommendations for proposed action will be provided to the DEQ for final approval in the form of a brief memo or email.

Additional BMPs to be considered as contingencies include flow diversion, silt curtains, and construction scheduling to the degree practicable to reduce in-stream construction impacts to water quality. Additional BMPs or radical construction schedule modifications are likely to be either cost-prohibitive (e.g., diverting flow around areas where bank stabilization is being installed) or counter productive (e.g. installing and

removing additional silt curtains may itself generate short term water quality impacts while slowing the rate at which the riverbank is removed and reconstructed extends the timeframe of the impact and increases the risk of experiencing high flows or other potentially deleterious conditions during construction. Therefore, the potential benefits and negative impacts of such BMP or control implementation will be evaluated by DEQ, in consultation with Stimson's representative on a case by case basis before implementation.

APPENDIX E
ERCLS

IDENTIFICATION AND DESCRIPTION OF

ENVIRONMENTAL REQUIREMENTS, CRITERIA AND LIMITATIONS

STIMSON LUMBER COMPANY BONNER MILL COOLING POND AREA

JULY 2009

LIST OF ACRONYMS

BMPs	Best Management Practices
BTCA	Best Technology Currently Available
CECRA	Comprehensive Environmental Cleanup and Responsibility Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended
DEQ	State of Montana Department of Environmental Quality
DEQ-7	Circular DEQ-7, Montana Numeric Water Quality Standards
EE/CA	Engineering Evaluation and Cost Analysis
EPA	U.S. Environmental Protection Agency
ERCL	Environmental Requirements, Criteria, and Limitations
FWP	State of Montana Department of Fish, Wildlife, and Parks
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MPDES	Montana Pollutant Discharge Elimination System
NCP	National Contingency Plan, as amended
PCB	Polychlorinated biphenyls
PLP	Potentially liable person
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
SIP	State Implementation Plan
SMCLS	Secondary Maximum Contaminant Levels
SWPP	Stormwater Pollution Prevention Plan
TSCA	Toxic Substances Control Act
USFWS	U.S. Fish and Wildlife Service

INTRODUCTION

Remedial actions undertaken pursuant to the Comprehensive Environmental Cleanup and Responsibility Act (CECRA), §§ 75-10-701, et seq., MCA, must "attain a degree of cleanup of the hazardous or deleterious substance and control of a threatened release or further release of that substance that assures protection of public health, safety, and welfare and of the environment." Section 75-10-721(1), MCA. Additionally, the Montana Department of Environmental Quality (DEQ) "shall require cleanup consistent with applicable state or federal environmental requirements, criteria, or limitations" and "may consider substantive state or federal environmental requirements, criteria, or limitations that are relevant to the site conditions." Section 75-10-721(2)(a) and (b), MCA.

A distinction exists between "applicable" requirements and those that are "relevant." "Applicable" requirements are those requirements that would legally apply at the Cooling Pond, Berm and adjacent areas addressed in the action memo for the Stimson Bonner Mill Property (Stimson Site) regardless of the CECRA action. "Relevant" requirements are those requirements that are not applicable, but address situations or problems sufficiently similar to those at the Stimson Site and, therefore, are relevant for use at the site.

Environmental requirements, criteria, and limitations (ERCLs) are grouped into three categories: contaminant-specific, location-specific, and action-specific. Contaminant-specific requirements are those that establish an allowable level or concentration of a hazardous or deleterious substance in the environment or that describe a level or method of treatment for a hazardous or deleterious substance. Location-specific requirements are those that serve as restrictions on the concentration of a hazardous or deleterious substance or the conduct of activities because they are in specific locations. Action-specific requirements are those that are relevant or applicable to implementation of a particular remedy. Action-specific requirements do not in themselves determine the remedy but rather indicate the manner in which the remedy must be implemented.

ERCLs include only "environmental requirements, criteria and limitations." Remedial designs, implementation, operation, and maintenance must, nevertheless, comply with all other applicable laws, including local, state, and federal. Many such laws, while not strictly environmental, have environmental impacts. It remains the responsibility of the persons implementing the remedy to identify and comply with all other laws.

Many requirements listed here are promulgated as identical or nearly identical requirements in both federal and state law, usually pursuant to delegated environmental programs administered by the Environmental Protection Agency (EPA) and the states, such as the requirements of the federal Clean Water Act and the Montana Water Quality Act. The preamble to the National Contingency Plan states that such a situation results in citation to the state provision as the appropriate standard, but treatment of the provision as a federal requirement. ERCLs and other laws that are unique to state law are also identified.

Within this document, DEQ has identified applicable or relevant state and federal environmental requirements for the remedial actions at the Stimson Site. The description of applicable and relevant federal and state requirements that follows includes summaries of the legal requirements

which attempt to set out the requirement in a reasonably concise fashion that is useful in evaluating compliance with the requirement. These descriptions are provided to allow the user a basic indication of the requirement without having to refer back to the statute or regulation itself. However, in the event of any inconsistency between the law itself and the summaries provided in this document, the actual requirement is ultimately the requirement as set out in the law, rather than any paraphrase of the law provided here.

Each ERCL or group of related ERCLs identified here is followed by a specific statutory or regulatory citation, a classification describing whether the ERCL is applicable or relevant, and a description which summarizes the requirements, and addresses how and when compliance with the ERCL will be measured (some ERCLs will govern the conduct of the remedial action, some will define the measure of success of the remedial action, and some will do both)[1].

The identification and description of ERCLs here is also consistent with the requirements of CERCLA, which requires that remedial actions obtain [use ARAR language out of CERCLA] at the site. Under CERCLA and the NCP, these requirements are commonly referred to as "ARARs." Under CECRA, consideration of relevant requirements is within the Department's discretion. Under CERCLA, attainment of relevant and appropriate requirements is mandatory unless there is a basis for a waiver. To meet the requirements of both statutes, DEQ has identified and is considering all the requirements that are relevant and appropriate under CERCLA. One other distinction between CECRA and CERCLA is that CECRA's definition of "hazardous and deleterious substances" expressly includes petroleum products.

Finally, this list contains a non-exhaustive list of other legal provisions or requirements which should be complied with during the implementation of the remedial action at the Stimson Site.[2]

I. CONTAMINANT SPECIFIC REQUIREMENTS

A. Ground water Standards - Safe Drinking Water Act (Relevant)

The Safe Drinking Water Act – 42 U.S.C. § 300f et seq. and the National Primary Drinking Water Standards (40 CFR Part 141), better known as maximum contaminant levels and maximum contaminant level goals (MCLs and MCLGs), are not applicable to the Stimson Site because the affected, contaminated aquifer underlying the area is not a current public water system, as defined in the Safe Drinking Water Act, 42 U.S.C. § 300f(4). The requirements were evaluated in this ERCLs analysis in conjunction with the ground water classification standards promulgated by the State of Montana. These standards are relevant standards, however, because the ground water in the area is a potential source of drinking water and was once used as a drinking water source. There are eight drinking water wells located within one mile of the

[1] 40 CFR § 300.435(b)(2); Preamble to the Proposed NCP, 53 Fed.Reg. 51440 (December 21, 1988); Preamble to the Final NCP, 55 Fed.Reg. 8755-8757 (March 8, 1990)

[2] 40 CFR § 300.400(g)(3); 40 CFR § 300.515(h)(2); Preamble to the Final NCP, 55 Fed.Reg. 8744-8746 (March 8, 1990)

Stimson Bonner Mill Property. The aquifer remains a drinking water source. In addition, the aquifer discharges to the Blackfoot River, which discharges to the Clark Fork River, which is designated as a potential source of drinking water. Since the Clark Fork River is a potential source of drinking water in the areas at and downstream of the confluence with the Blackfoot River, these standards are relevant for those surface waters as well.

Use of these standards for this action is fully supported by EPA regulations and guidance. The Preamble to the NCP clearly states that MCLs are relevant for ground water that is a current or potential source of drinking water (55 Fed.Reg. 8750, March 8, 1990), and this determination is further supported by requirements in the regulations governing conduct of the RI/FS studies found at 40 CFR § 300.430(e)(2)(i)(B). EPA's guidance on Remedial Action for Contaminated Ground Water at Superfund Sites states that "MCLs developed under the Safe Drinking Water Act generally are ARARs [the federal equivalent of ERCLs] for current or potential drinking water sources." MCLGs which are above zero are relevant under the same conditions (55 Fed.Reg. 8750-8752, March 8, 1990). See also, State of Ohio v. EPA, 997 F.2d 1520 (D.C. Cir. 1993), which upholds EPA's application of MCLs and non-zero MCLGs as ARAR standards for ground water which is a potential drinking water source.

In addition, the Secondary Maximum Contaminant Levels (SMCLS) specified in 40 CFR Part 143.3 are relevant requirements which are ultimately to be attained by the remedy for the Stimson Site. This regulation contains standards for iron, manganese, color, odor, and corrosivity that are relevant to the remedial actions.

As noted earlier, standards such as the MCL and MCLG standards are promulgated pursuant to both federal and state law. Under the Safe Drinking Water Act, EPA has granted the State of Montana primacy in implementation of the Safe Drinking Water Act. The State has promulgated its own public water supply ground water standards through the Public Water Supply Act for most contaminants of concern, primarily through incorporation by reference of the federal standard. These standards, when the same or more stringent than the federal standard, are also identified here.

Chemical	MCLG	MCL
PCB	0	.5 ug/l

For ground water in compliance with standards in and downstream of the Stimson Site, including the Missoula sole source aquifer, the State's non-degradation standard applies.

ARM 17.30.1006 (Applicable) classifies ground water into Classes I through IV based upon its specific conductance and establishes the ground water quality standards applicable with respect to each ground water classification. Ground water is to be classified according to actual quality or use, whichever places the ground water in a higher class. Class I is the highest quality class; class IV the lowest.

Based upon its specific conductance, the majority of the ground water in the Stimson Site is considered Class I ground water.

Concentrations of dissolved substances in Class I or II ground water (or Class III ground water which is used as a drinking water source) may not exceed the human health standards listed in department Circular DEQ-7. For the primary contaminants of concern these levels are listed below. Compliance with all DEQ-7 standards is required and remedial actions must meet the DEQ-7 standards for all contaminants at the facility, including any breakdown products generated during remedial actions.

Chemical	DEQ-7 Human Health Standard (2008 edition)
PCBs:	.5 ug/l

For concentrations of parameters for which human health standards are not listed in DEQ-7, ARM 17.30.1006 allows no increase of a parameter to a level that renders the waters harmful, detrimental or injurious to listed beneficial uses.

For Class I and II ground waters, ARM 17.30.1006 allows no increase of a parameter that causes a violation of the nondegradation provisions of § 75-5-303, MCA. ARM 17.30.1011 also provides that ground water whose existing quality is higher than the standard for its classification must be maintained at that high quality unless degradation may be allowed under the principles established in § 75-5-303, MCA, and the nondegradation rules at ARM 17.30.701 et seq.

An additional concern with respect to ERCLs for ground water is the impact of ground water upon the surface water. If significant loadings of contaminants from ground water sources to the Blackfoot and Clark Fork Rivers contribute to the inability of the stream to meet its water quality standards, then alternatives to alleviate such ground water loading must be evaluated and, if appropriate, implemented. Ground water in certain areas may need to be remediated to levels more stringent than the ground water classification standards in order to achieve the standards for affected surface water. See Compliance with Federal Water Quality Criteria, OSWER Publication 9234.2-09/FS (June 1990) ("Where the ground water flows naturally into the surface water, the ground water remediation should be designed so that the receiving surface-water body will be able to meet any ambient water-quality standards (such as State WQSs or FWQC) that may be ERCLs for the surface water.").

B. Surface Water Quality Standards (Applicable)

Point Source Controls: If point sources of water contamination are retained or created by any remediation activity, applicable Clean Water Act standards would apply to those discharges. The State of Montana established state standards and permit requirements in conformity with the Clean Water Act, and these standards and requirements apply to point source discharges. See ARM 17.30.1201 et seq., (standards) and ARM 17.30.1301 et seq. (permits).

Under the Montana Water Quality Act, §§ 75-5-101 et seq., MCA, the state has promulgated water quality standards to protect, maintain, and improve the quality and potability of the state's surface water for water supplies, wildlife, fish and aquatic life, agricultural, industry, recreation, and other beneficial uses. The requirements listed below are applicable water quality standards

with which any remedial action must comply. These requirements must be met upon completion of the remedial action (although operation and maintenance may continue after compliance).

ARM 17.30.607 (1)(a)-(n) (Applicable) classifies the waters of the Stimson Site as follows:

Clark Fork River downstream of the Milltown Reservoir	B-1
Blackfoot River	B-1

The B-1 classification standards are contained in ARM 17.30.623 (Applicable) of the Montana water quality regulations. This section states:

Waters classified B-1 are suitable for drinking, culinary and food processing purposes, after conventional treatment; bathing, swimming, and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl, and furbearers; and agricultural and industrial water supply.

The B-1 classification standards at ARM 17.30.623 include the following criteria: 1) dissolved oxygen concentration must not be reduced below the levels given in department circular DEQ-7; 2) the maximum allowable increase above naturally occurring turbidity is 5 nephelometric turbidity units except as permitted in § 75-5-318 , MCA.; 3) temperature increases must be kept within prescribed limits; 4) no increases above naturally occurring concentrations of sediment or suspended sediment, settleable solids, oils, floating solids, which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife are allowed; 5) true color must be kept within specified limits; and 6) induced variation of hydrogen ion concentration (pH) within the range of 6.5 to 8.5 must be less than 0.5 pH unit. Natural pH outside this range must be maintained without change. Natural pH above 7.0 must be maintained above 7.0

ARM 17.30.623 (Applicable) also provides that concentrations of carcinogenic, bioconcentrating, toxic, or harmful parameters may not exceed the applicable standards set forth in the current version of circular DEQ-7. Discharges shall conform with ARM Title 17, Chapter 30, subchapter 7 (the nondegradation rules) and may not cause receiving water concentrations to exceed the applicable standards specified in DEQ-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).

For the primary contaminants of concern, the DEQ-7 levels are listed below. DEQ-7 provides that “whenever both Aquatic Life Standards and Human Health Standards exist for the same analyte, the more restrictive of these values will be used as the numeric Surface Water Quality Standard.”

Chemical	DEQ-7 Standard (total recoverable standards)		
PCBs	Acute -	--	ug/l
	Chronic -	.014	ug/l

Human Health - 0.00064 ug/l

The human health standard for PCB will be applied to both point sources affected or created by the Stimson Site cleanup and to ambient water in the Stimson Site.

Section 75-5-308, MCA, allows DEQ to grant short-term exemptions from the water quality standards or short-term use that exceeds the water quality standards for the purpose of allowing certain emergency remediation activities. Such exemptions typically extend for a period of 30-60 days. However, any exemption must include conditions that minimize to the extent possible the magnitude of the violation and the length of time the violation occurs. In addition, the conditions must maximize the protection of state waters by ensuring the maintenance of beneficial uses immediately after termination of the exemption. Water quality and quantity monitoring and reporting may also be included as conditions. Also, pursuant to § 75-5-318, MCA, of the State Water Quality Act, a narrative standard rather than numeric standard for total suspended sediment and turbidity surface water quality standards may be authorized by the department under certain conditions, and this may apply to construction activities associated with sediment removal options.

Additional restrictions on any discharge to surface waters are included in:

ARM 17.30.637 (Applicable) which prohibits discharges containing substances that will: (a) settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines; (b) create floating debris, scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials; (c) produce odors, colors or other conditions which create a nuisance or render undesirable tastes to fish flesh or make fish inedible; (d) create concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic life; (e) create conditions which produce undesirable aquatic life.

ARM 17.30.637 also states that no waste may be discharged and no activities conducted which, either alone or in combination with other waste activities, will cause violation of surface water quality standards.

C. Air Quality Standards (Applicable)

Federal air quality standards are not currently exceeded in the Stimson Site. Limitations on air emissions resulting from cleanup activities or emissions resulting from wind erosion of exposed hazardous substances are set forth in the action specific requirements, below. Certain OSHA standards for protection of workers would be monitored for during construction activities to ensure protection of workers' health. Certain air quality standards are identified in the action-specific section of the ERCLs below.

D. Toxic Substances Control Act (Applicable)

The Toxic Substances Control Act (TSCA) and implementing regulations (15 U.S.C. §§ 2601 et seq., 40 CFR Part 761) regulate PCB manufacturing, processing, distribution in commerce, use,

remediation, and disposal. TSCA authorizes EPA to require testing of both new and existing chemical substances entering the environment, and regulate them accordingly. The form and concentration of PCB remediation waste must be determined on an "as found" basis. PCBs cannot be diluted to avoid TSCA regulation.

The PCB waste at the Stimson Site is "bulk PCB remediation waste," which includes, but is not limited to "the following non-liquid PCB remediation waste: soil, sediments, dredged materials, muds, PCB sewage sludge, and industrial sludge." 40 CFR § 761.61(a)(4)(i).

40 CFR 761.61 provides three options for cleaning up and disposing of bulk PCB remediation waste under TSCA: (1) the self-implementing regulations; (2) performance-based disposal; or (3) risk-based disposal approval. The self-implementing regulations require, among other things, specific characterization, notification to EPA and certification, and cannot be used for remediation of PCB-contaminated sediments in freshwater ecosystems.

Performance-based disposal allows materials containing less than 50 ppm of PCBs that have been dredged or excavated from waters of the United States to be managed in accordance with a permit issued under section 404 of the Clean Water Act or 33 CFR Part 320.

The risk-based approval process applies to the sampling, cleanup, or disposal of PCB remediation waste in a manner other than outlined in the above two options. The risk-based approval process can be used to cleanup remediation waste in surface water, ground water, or sediments in marine and freshwater ecosystems.

Stimson must comply with the requirements for obtaining risk-based approval, by applying in writing to the Region 8 EPA TSCA office and obtaining written approval prior to conducting any cleanup activities at the Stimson Site. The application must include the following required information:

(A) The nature of the contamination, including kinds of materials contaminated.

(B) A summary of the procedures used to sample contaminated and adjacent areas and a table or cleanup site map showing PCB concentrations measured in all pre-cleanup characterization samples. The summary must include sample collection and analysis dates. The EPA Regional Administrator may require more detailed information including, but not limited to, additional characterization sampling or all sample identification numbers from all previous characterization activities at the cleanup site.

(C) The location and extent of the identified contaminated area, including topographic maps with sample collection sites cross referenced to the sample identification numbers in the data summary from paragraph (a)(3)(i)(B) of this section.

(D) A cleanup plan for the site, including schedule, disposal technology, and approach. This plan should contain options and contingencies to be used if unanticipated higher concentrations or wider distributions of PCB remediation waste are found or other obstacles force changes in the cleanup approach.

(E) A written certification, signed by the owner of the property where the cleanup site is located and the party conducting the cleanup, that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the cleanup site, are on file at the location designated in the certificate, and are available for EPA inspection. Persons using alternate methods for chemical extraction and chemical analysis for site characterization must include in the certificate a statement that such a method will be used and that a comparison study which meets or exceeds the requirements of subpart Q of this part, and for which records are on file, has been completed prior to verification sampling.

DEQ has provided the EE/CA and certain additional documents to the EPA Region 8 TSCA office to facilitate the application and approval process.

II. LOCATION SPECIFIC REQUIREMENTS

A. Fish and Wildlife Coordination Act (Relevant)

These standards are found at 16 U.S.C. §§ 661 et seq. and 40 CFR § 6.302(g). They require that federally funded or authorized projects ensure that any modification of any stream or other water body affected by a federally funded or authorized action provide for adequate protection of fish and wildlife resources. Compliance with this ERCL necessitates consultation with the U.S. Fish and Wildlife Service (USFWS) and the State of Montana Department of Fish, Wildlife, and Parks (FWP). Consultation with these agencies will occur during cleanup implementation, and specific mitigative or other measures may be identified to achieve compliance with this ERCL as the Stimson Site action is implemented. The purpose of consultation is to develop measures to prevent, mitigate, or compensate for project-related losses to fish and wildlife. Mitigative measures must be performed by the persons who implement any selected remedy.

B. Floodplain Management Order (Applicable)

This requirement (40 CFR Part Part 35, Appendix A to Subpart H, Executive Order No. 11,988) mandates that federally funded or authorized actions within the 100 year floodplain avoid, to the maximum extent possible, adverse impacts associated with development of a floodplain. Compliance with this requirement is detailed in EPA's August 6, 1985, "Policy on Floodplains and Wetlands Assessments for CERCLA Actions." The executive order and regulations are relevant because a portion of the facility is in a floodplain; however, no federal action is anticipated at the facility. In addition, application of the Montana floodplain requirements (see below) addresses protection of the floodplain.

C. Floodplain and Floodway Management Act, Sections 76-5-401 et seq., and implementing regulations (Applicable)

The Floodplain and Floodway Management Act and regulations specify types of uses and structures that are allowed or prohibited in the designated 100-year floodway[3] and floodplain[4]. Since the Stimson Site lies almost entirely within the 100-year floodplain of the Blackfoot River, these standards are applicable to all actions contemplated for this site within the floodplain.

1. Allowed Uses. The law recognizes certain uses as allowable in the floodway and a broader range of uses as allowed in the floodplain. Residential use is among the possible allowed uses expressly recognized in both the floodway and floodplain. "Residential uses such as lawns, gardens, parking areas, and play areas," as well as certain agricultural, industrial-commercial, recreational and other uses are permissible within the designated floodway, provided they do not require structures other than portable structures, fill, or permanent storage of materials or equipment. Section 76-5-401, MCA; ARM 36.15.601. In addition, in the flood fringe (i.e., within the floodplain but outside the floodway), residential, commercial, industrial, and other structures may be permitted subject to certain conditions relating to placement of fill, roads, floodproofing, etc. § 76-5-402, MCA; ARM 36.15.701. Domestic water supply wells may be permitted, even within the floodway, provided the well casing is watertight to a depth of 25 feet and the well meets certain conditions for floodproofing, sealing, and positive drainage away from the well head. ARM 36.15.602(6).

2. Prohibited Uses Uses prohibited anywhere in either the floodway or the floodplain are:

a. solid and hazardous waste disposal; and
b. storage of toxic, flammable, hazardous, or explosive materials.

ARM 36.15.605(2) and 36.15.703.

In the floodway, additional prohibitions apply, including prohibition of:

a. a building for living purposes or place of assembly or permanent use by human beings;
b. any structure or excavation that will cause water to be diverted from the established floodway, cause erosion, obstruct the natural flow of water, or reduce the carrying capacity of the floodway; and
c. the construction or permanent storage of an object subject to flotation or movement during flood level periods.

Section 76-5-403, MCA.

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[3] The floodway is the channel of a watercourse or drainway and those portions of the floodplain adjoining the channel which are reasonably required to carry and discharge the floodwater of the water course or drainway. ARM 36.15.101(13).

[4] The floodplain is the area adjoining the water course or drainway which would be covered by the floodwater of a base (100-year) flood except for sheet flood areas that receive less than one foot of water per occurrence. The floodplain consists of the floodway and flood fringe. ARM 36.15.101.

3. Applicable considerations in use of floodplain or floodway

Applicable regulations also specify factors that must be considered in allowing diversions of the stream, changes in place of diversion of the stream, flood control works, new construction or alteration of artificial obstructions, or any other nonconforming use within the floodplain or floodway. Many of these requirements are set forth as factors that must be considered in determining whether a permit can be issued for certain obstructions or uses. While permit requirements are not directly applicable to remedial actions conducted entirely on site, the substantive criteria used to determine whether a proposed obstruction or use is permissible within the floodway or floodplain are applicable standards. Factors which must be considered in addressing any obstruction or use within the floodway or floodplain include:

1. the danger to life and property from backwater or diverted flow caused by the obstruction or use;
2. the danger that the obstruction or use will be swept downstream to the injury of others;
3. the availability of alternate locations;
4. the construction or alteration of the obstruction or use in such a manner as to lessen the danger;
5. the permanence of the obstruction or use; and
6. the anticipated development in the foreseeable future of the area which may be affected by the obstruction or use.

See § 76-5-406, MCA; ARM 36.15.216 (substantive provisions only).

Conditions or restrictions that generally apply to specific activities within the floodway or floodplain are:

1. the proposed activity, construction, or use cannot increase the upstream elevation of the 100-year flood a significant amount (one-half foot or as otherwise determined by the permit issuing authority) or significantly increase flood velocities, ARM 36.15.604 (Applicable, substantive provisions only); and

2. the proposed activity, construction, or use must be designed and constructed to minimize potential erosion from a base (100-year) flood, see ARM 36.15.603.

For the substantive conditions and restrictions applicable to specific obstructions or uses, see the following applicable regulations:

Excavation of material from pits or pools- ARM 36.15.602 (1).
Water diversions or changes in place of diversion- ARM 36.15.603.
Flood control works - ARM 36.15.606.
Roads, streets, highways and rail lines (must be designed to minimize increases in flood heights) - ARM 36.15.701(3) (c) .

Structures and facilities for liquid or solid waste treatment and disposal (must be floodproofed to ensure that no pollutants enter flood waters and may be allowed and approved only in

accordance with DEQ regulations, which include certain additional prohibitions on such disposal) - ARM 36.15.701(3)(d).

Residential structures - ARM 36.15.702(1).
Commercial or industrial structures - ARM 36.15.702(2).

The EE/CA, as supplemented by the Work Plan, is expected to improve the floodplain at the Stimson Site substantially. Adverse impacts on these floodplains are not anticipated for this project. Coordination will be required in addition to appropriate mapping of the floodplain. Any other substantive provisions of applicable federal or state floodplain management regulations will be complied with.

D. Protection of Wetlands Order (Relevant)

This requirement (40 CFR Part 35, Appendix A, Executive Order No. 11,990) mandates that federal agencies and potentially liable persons (PLPs) avoid, to the extent possible, the adverse impacts associated with the destruction or loss of wetlands and to avoid support of new construction in wetlands if a practicable alternative exists. Section 404(b)(1), 33 U.S.C. § 1344(b)(1), also prohibits the discharge of dredged or fill material into waters of the United States, without a valid permit. Together, these requirements create a "no net loss" of wetlands standard. This ERCL is not a ban on wetland destruction, but is instead a mandate for no net loss of wetlands, with a preference for avoiding wetland destruction if practicable.

Compliance with this ERCL will be achieved through consultation with the USFWS, to determine the existence and category of wetlands present at the site, and any avoidance or mitigation and replacement which may be necessary. Avoidance, mitigation, or replacement activities will be done by the persons who implement any selected remedy.

E. The Endangered Species Act (Applicable)

This statute and implementing regulations (16 U.S.C. §§ 1531 - 1544, 50 CFR Part 402, and 40 CFR 257.3-2 require that any federal activity or federally authorized activity may not jeopardize the continued existence of any threatened or endangered species known to live or to have lived in the affected environment or destroy or adversely modify a critical habitat. This ERCL requires DEQ to ensure that the selected remedy is sufficiently protective of the environment containing the threatened or endangered species, with an emphasis on reducing the risks from the contaminants of concern to the listed species to an acceptable level, with consideration given to the special status of the listed or threatened species and to ensure that the selected remedy is implemented in a manner such that effects on any existing threatened or endangered species from the active remedy implementation activities are avoided or mitigated.

F. Montana Nongame and Endangered Species Act, §§ 87-5-101 et seq. (Applicable): Endangered species should be protected in order to maintain and to the extent possible enhance their numbers. These sections list endangered species, prohibited acts and penalties. See also, § 87-5-201, MCA, (Applicable) concerning protection of wild birds, nests and eggs; and ARM 12.5.201 (Applicable) prohibiting certain activities with respect to specified endangered species.

In February 1999, in connection with studies conducted for the Milltown Reservoir Sediments Operating Unit (MRSOU), ARCO submitted a draft report titled "Wetlands and Threatened/Endangered Species Inventory with Determination of Effective Wetland Area." The MRSOU Feasibility Studies provide additional information about threatened or endangered species in the MRSOU area. These reports document the occurrence of bull trout, a threatened species, upstream, downstream and within the reservoir. The bald eagle, the peregrine falcon, and the water howellii, a listed plant, frequent or occur at the Reservoir. These same species are expected to be present on and around the Stimson Site.

DEQ will consult with the USFWS and the FWP as remedial designs are completed. Mitigation measures identified by these agencies must be implemented by persons performing the Stimson Site selected remedial action.

G. The National Historic Preservation Act (Relevant)

This statute and implementing regulations (16 U.S.C. § 470 et seq., 40 CFR § 6.301(b), 36 CFR Part 800) require federal agencies or federal projects to take into account the effect of any federally assisted undertaking or licensing on any district, site building, structure, or object that is included in, or eligible for, the Register of Historic Places. If effects cannot be avoided reasonably, measures should be implemented to minimize or mitigate the potential effect. In addition, Indian cultural and historical resources must be evaluated, and effects avoided, minimized, or mitigated. To date, no such landmarks have been identified in the area. Therefore, no further actions are required to comply with this requirement.

H. Archaeological and Historic Preservation Act (Relevant)

The statute and implementing regulations (16 U.S.C. § 469 et seq., 40 CFR § 6.301(c)) establish requirements for evaluation and preservation of historical and archaeological data, including Indian cultural and historic data, which may be destroyed through alteration of terrain as a result of federal construction projects or a federally licensed activity or program. If eligible scientific, prehistorical, or archaeological data are discovered during site activities, they must be preserved in accordance with these requirements. To date, no such features have been identified in the area; however, if any such features are identified, DEQ and Stimson will comply with the stated requirements.

I. Historic Sites, Buildings, and Antiquities Act (Relevant)

This statute and implementing regulations (16 U.S.C. § 461 et seq., 40 CFR § 6.310(a)) state that in conducting an environmental review of an EPA action, the responsible official shall consider the existence and location of natural landmarks using information provided by the National Park Service pursuant to 36 CFR § 62.6(d) to avoid undesirable impacts upon such landmarks. To date, no such features have been identified in the area; however, if any such features are identified, DEQ and Stimson will comply with the stated requirements.

J. Migratory Bird Treaty (Relevant)

This requirement (16 U.S.C.§§ 703 et seq.) establishes a federal responsibility for the protection of the international migratory bird resource and requires continued consultation with the USFWS during remedial design and remedial construction to ensure that the cleanup of the site does not unnecessarily impact migratory birds. Specific mitigative measures may be identified for compliance with this requirement as appropriate for performance by the persons who implement the remedy.

K. Bald Eagle Protection Act (Relevant)

This requirement (16 U.S.C. §§ 668 et seq.) establishes a federal responsibility for protection of bald and golden eagles, and requires continued consultation with the USFWS during remedial design and remedial construction to ensure that any cleanup of the site does not unnecessarily adversely affect the bald and golden eagle.

Specific mitigative measures may be identified for compliance with this requirement as appropriate, and will be done by the persons who implement any selected remedy.

L. Resource Conservation and Recovery Act (Relevant)

Any discrete waste units created or actively managed at the Stimson Site cleanup must comply with the siting restrictions and conditions at 40 CFR § 264.18 (a) and (b). These sections require that portions of new management units must not be located within 200 feet of a fault which has had displacement in Holocene time and management units must be designed, constructed, operated, and maintained to avoid washout, if they are within or near the current 100 year flood plain.

The remedial action is not anticipated to involve hazardous waste and no management units will be created.

M. Native American Grave Protection and Repatriation Act, 25 U.S.C. § 3001 et seq.; 43 CFR §§ 10.1 - 10.17 (Applicable or Relevant)

NAGPRA and its implementing regulations provide for the disposition of Native American remains and objects inadvertently discovered on federal or tribal lands after November, 1990. 25 U.S.C. Section 3002(d). If the response activities result in the discovery of Native American human remains or related objects, the activity must stop while the head of the federal land management agency (if federal lands are involved) and appropriate Indian tribes are notified of the discovery. After the discovery, the response activity must cease and a reasonable effort must be made to protect the Native American human remains or related objects. The response activity may later resume. 42 CFR Section 10.4. Accordingly, depending on the facts of the discovery and the location of the response action, NAGPRA could be applicable or relevant to the response action.

N. Solid Waste Management Regulations (Applicable)

Regulations promulgated under the Solid Waste Management Act, §§ 75-10-201 et seq., MCA, specify requirements that apply to the location of any solid waste management facility. Under ARM 17.50.505, a facility for the treatment, storage or disposal of solid wastes:

(a) must be located where a sufficient acreage of suitable land is available for solid waste management;
(b) where public use or year round access is contemplated, access roads and bridges must be capable of supporting loaded vehicles during all types of weather;
(c) may not be located in a 100-year floodplain;
(d) may be located only in areas which will prevent the pollution of ground and surface waters and public and private water supply systems;
(e) drainage structures must be installed where necessary to prevent surface runoff from entering waste management areas;
(f) where underlying geological formations contain rock fractures or fissures which may lead to pollution of the ground water or areas in which springs exist that are hydraulically connected to a proposed disposal facility, only Class III disposal facilities may be approved[5]; and
(g) must be located to allow for reclamation and reuse of the land.

Even Class III landfills may not be located on the banks of or in a live or intermittent stream or water saturated areas, such as marshes or deep gravel pits which contain exposed ground water. ARM 17.54.505(2)(j).

In addition, § 75-10-212 prohibits dumping or leaving any debris or refuse upon or within 200 yards of any highway, road, street, or alley of the State or other public property, or on privately owned property where hunting, fishing, or other recreation is permitted. However, the restriction relating to privately owned property does not apply to the owner, his agents, or those disposing of debris or refuse with the owner's consent.

O. Natural Streambed and Land Preservation Standards (Applicable)

Section 75-7-111, MCA, (Applicable) provides that a person planning to engage in any activity that will physically alter or modify the bed or banks of a stream must give written notice to the Board of Supervisors of a Conservation District, the Directors of a Grass Conservation District, or the Board of County Commissioners if the proposed project is not within a district, and must submit a "310 Permit" application to one of those entities.

Sections 87-5-502 and 504, MCA, (substantive provisions only) provide that a state agency or subdivision shall not construct, modify, operate, maintain or fail to maintain any construction project or hydraulic project which may or will obstruct, damage, diminish, destroy, change, modify, or vary the natural existing shape and form of any stream or its banks or tributaries in a

[5] Group III consists of primarily inert wastes, including industrial mineral wastes which are essentially inert and non-water soluble and do not contain hazardous waste constituents. ARM 17.50.503(1)(b).

manner that will adversely affect any fish or game habitat. The requirement that any such project must eliminate or diminish any adverse effect on fish or game habitat is applicable to the state in selecting or approving any remedial actions to be conducted. The Natural Streambed and Land Preservation Act of 1975, §§ 75-7-101 et seq., MCA, includes substantive requirements and is applicable to private parties as well as government agencies.

The party designing and implementing the remedial action for the Stimson Site should continue to consult with the Montana Department of Fish, Wildlife and Parks and any conservation district or board of county commissioners (or consolidated city/county government) as provided in the referenced statutes, to assist in the evaluation of factors discussed above.

ARM 36.2.410 establishes minimum standards that would be applicable if a remedial action impacts any natural perennial-flowing stream or portions thereof, including its channels, unless the stream has been designated as not having significant aquatic and riparian attributes in need of protection or preservation. Projects must be designed and constructed using methods that minimize adverse impacts to the stream and future disturbance to the stream. All disturbed areas must be managed and reclaimed to minimize erosion. Temporary structures must be designed to handle high flows and completely removed from the stream channel after construction. The area must be restored to a natural or stable condition. Channel alterations must be designed to retain original stream length or otherwise provide hydrologic stability. Streambank vegetation must be protected unless removal is necessary for the completion of the project. When removal of vegetation is necessary, it must be kept to a minimum. Riprap, rock, or other material used in a project must be of adequate size, shape, and density. This sub-chapter prohibits the following unless specifically authorized: (1) the placement of road fill or debris or other materials in a stream where it can erode or float into the stream; (2) projects that permanently prevent fish migration; (3) operation of construction equipment in a stream; and (4) excavation of streambed gravels.

P. Toxic Substances Control Act (Applicable)

TSCA facility requirements provide siting guidance and criteria for storage (761.65), incinerators (761.70), and chemical waste landfills (761.75).

III. ACTION SPECIFIC REQUIREMENTS

A. Solid Waste (Applicable), Surface Mining Control and Reclamation (Relevant), and RCRA (Relevant) Requirements[6]

[6] If any hazardous wastes as defined by RCRA or the Montana Hazardous Waste Act are encountered or generated during implementation of the remedy, substantive provisions of the Montana Hazardous Waste Act, §§ 75-10-401 et seq., MCA, and its implementing regulations at ARM 17.54.101 et seq., would be applicable to the handling, management, treatment, storage, disposal, and transportation of such wastes. All off site handling of regulated RCRA or TSCA wastes must comply with all legal requirements, including the requirements of those laws.

The contamination at the Stimson Site is primarily PCB waste. This waste is not RCRA hazardous waste. However, for any active management (i.e., treatment, storage, disposal, grading, or in-situ treatment) or removal of soils and materials contamination, the following requirements are relevant ERCLs. Debris waste which is disposed of on site must comply with applicable solid waste requirements and the identified relevant RCRA requirement.

Requirements described at 40 CFR §§ 257.3-1(a), 257.3-3, and 257.3-4, govern waste handling, storage, and disposal, including retention of the waste.

For any discrete waste units containing sediments which are created or retained and actively managed by the Stimson Site cleanup, reclamation and closure regulations found at 30 CFR Parts 816 and 784, governing coal and to a lesser extent, non-coal mining, are relevant requirements[7].

Portions of RCRA regulations found at 40 CFR §§ 264.116 and .119(a) and (b) (governing notice and deed restrictions) are relevant requirements for any waste management units created or actively managed at the Stimson Site[8].

Regulations promulgated under the Solid Waste Management Act, §§ 75-10-201 et seq., MCA, ARM 17.50.501, et seq., specify requirements that apply to the location of any solid waste management facility.

ARM 17.50.501 through -506 (Applicable) provides standards for the storage, handling, treatment, recycling, recovery, and disposal of non-hazardous solid waste.

ARM 17.50.504 (Applicable) classifies disposal facilities.

ARM 17.50.505(2) (Applicable) specifies standards for solid waste management facilities, including the requirements that:

1. Class II landfills must confine solid waste and leachate to the disposal facility, unless department approval is obtained for treatment at another facility. If there is the potential for leachate migration, it must be demonstrated that leachate will only migrate to underlying formations which have no hydraulic continuity with any state waters;

2. adequate separation of group II wastes from underlying or adjacent water must be provided; and

3. no new disposal units or lateral expansions may be located in wetlands.

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[7] The Surface Mining Control and Reclamation Act is promulgated at 30 U.S.C. §§ 1201 - 1326.

[8] As noted earlier, federal RCRA regulations are incorporated by reference into applicable State Hazardous Waste Management Act regulations. See ARM 17.53.801.

ARM 17.50.506 specifies design requirements for landfills[9]. Landfills must either be designed to ensure that MCLs are not exceeded or the landfill must contain a composite liner and leachate collection system which comply with specified criteria.

ARM 17.50.509 (Applicable) provides operational and maintenance requirements.

ARM 17.50.511 sets forth general operational and maintenance and design requirements for solid waste management systems. Specific operational and maintenance requirements specified in ARM 17.50.511[10] that are relevant are requirements for run-on and runoff control systems, requirements that sites be fenced to prevent unauthorized access, and prohibitions of point source and nonpoint source discharges which would violate Clean Water Act requirements.

ARM 17.50.523 specifies that solid waste must be transported in such a manner as to prevent its discharge, dumping, spilling or leaking from the transport vehicle.

ARM 17.50.525 (Applicable) states that DEQ may inspect at reasonable hours.

ARM 17.50.530 sets forth the closure[11] requirements for landfills. Class II landfills must meet the following criteria:

1. install a cover that is designed to minimize infiltration and erosion.

2. design and construct the final cover system to minimize infiltration through the closed unit by the use of an infiltration layer that contains a minimum 18 inches of earthen material and has a permeability less than or equal to the permeability of any bottom liner, barrier layer, or natural subsoils or a permeability no greater than 1 X 10-5 cm/sec, whichever is less;

3. minimize erosion of the final cover by the use of a seed bed layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth and protecting the infiltration layer from frost effects and rooting damage; and

4. revegetate the final cover with native plant growth within one year of placement of the final cover.

ARM 17.50.530(1)(b) allows an alternative final cover design if the infiltration layer achieves reduction in infiltration at least equivalent to the stated criteria and the erosion layer provides protection equivalent to the stated criteria.

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[9] A landfill is defined as an area of land or an excavation where wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile. ARM 17.50.502(27).

[10] ARM 17.50.511(1)(j), 17.50.511(l)(k) and 17.50.511(1)(l)

[11] Closure means the process by which the operator closes all or part of the facility.

ARM 17.50.531 sets forth post closure care requirements for Class II landfills. Post closure care must be conducted for a period sufficient to protect human health and the environment. Post closure care requires maintenance of the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the cover, maintaining and operating the leachate collection system, maintaining and operating the gas monitoring system, and complying with the ground water monitoring requirements found at ARM Title 17, chapter 50, subchapter 7.

ARM 17.36.911 et seq., (Applicable) governs onsite subsurface wastewater treatment systems. If such a system is constructed, altered or extended, these regulations apply.

B. Air Standards

Sections 75-2-101, et seq., MCA, (Applicable) provides that state emission standards are enforceable under the Montana Clean Air Act.

ARM 17.8.802 (Applicable) incorporates by reference the air regulations in certain parts of CFR Title 40 regarding quality assurance requirements for prevention of significant deterioration air monitoring; standards of performance for new stationary sources; emission standards for hazardous air pollutants, and other standards and requirements.

ARM 17.8.805 (Applicable) provides ambient air ceilings, and states that no concentrations of a pollutant shall exceed concentrations permitted under either the applicable secondary or the primary national ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

ARM 17.8.204 and .206 (Applicable) provides for ambient air monitoring and provides that, generally, all ambient air monitoring, sampling and data collection, recording, analysis and transmittal must be in compliance with the Montana Quality Assurance Manual except when DEQ determines that more stringent requirements are necessary.

These standards, promulgated pursuant to section 109 of the Clean Air Act[12], are applicable to releases into the air from any Stimson Site cleanup activities.

1. Lead: No person shall cause or contribute to concentrations of lead in the ambient air which exceed 1.5 micrograms per cubic meter (ug/m^3) of air, measured over a 90-day average. These standards are promulgated at ARM 17.8.222 as part of a federally approved State Implementation Plan (SIP), pursuant to the Clean Air Act of Montana, § 75-2-101 et seq., MCA. Corresponding federal regulations are found at 40 CFR § 50.12[13].

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[12] 42 U.S.C. §§ 7401 et seq.

[13] Ambient air standards established as part of Montana's approved State Implementation Plan in many cases provide more stringent or additional standards. The federal standards by themselves apply only to

2. Particulate matter that is 10 microns in diameter or smaller (PM-10): No person shall cause or contribute to concentrations of PM-10 in the ambient air which exceed:

-150 ug/m^3 of air, 24 hour average, no more than one expected exceedance per calendar year;

-50 ug/m^3 of air, annual average.

These regulations are promulgated at ARM 17.8.223 as part of a federally approved SIP, pursuant to the Clean Air Act of Montana, §§ 75-2-101 et seq., MCA. Corresponding federal regulations are found at 40 CFR § 50.6.

Ambient air standards under section 109 of the Clean Air Act are also promulgated for carbon monoxide, hydrogen sulfide, nitrogen dioxide, sulfur dioxide, and ozone. If emissions of these compounds were to occur at the site in connection with any cleanup action, these standards would also be applicable. See ARM 17.8.210, 17.8.211, 17.8.212, 17.8.213, and 17.8.214, and 40 CFR Part 50.

Dust suppression and control of certain substances likely to be released into the air as a result of earth moving, transportation, and similar actions related to remedial activity at the Stimson Site may be necessary to meet air quality requirements.

ARM 17.8.604 (Applicable) lists certain wastes that may not be disposed of by open burning, including oil or petroleum products, RCRA hazardous wastes, chemicals, and treated lumber and timbers. Any waste which is moved from the premises where it was generated and any trade waste (material resulting from construction or operation of any business, trade, industry, or demolition project) may be open burned only in accordance with the substantive requirements of ARM 17.8.611 or 612.

ARM 17.8.308 (Applicable) provide that no person shall cause or authorize the production, handling, transportation or storage of any material, cause or authorize the use of any street, road, or parking lot, or operate a construction site or demolition project, unless reasonable precautions to control emissions of airborne particulate matter are taken. Normally, emissions of airborne particulate matter must be controlled so that they do not "exhibit an opacity of twenty percent (20%) or greater averaged over six consecutive minutes." See also ARM 17.8.304 (Applicable).

In addition, state law provides an ambient air quality standard for settled particulate matter. Particulate matter concentrations in the ambient air shall not exceed the following 30-day average: 10 grams per square meter. ARM 17.8.220 (Applicable). Whenever this standard is exceeded, the activity resulting in such exceedance shall be suspended until such time as conditions improve.

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major sources, while the State standards are fully applicable throughout the state and are not limited to major sources. See ARM 17.8.205 and 17.8.212-223.

ARM 17.24.761 (Relevant) specifies a range of measures for controlling fugitive dust emissions during mining and reclamation activities. Some of these measures could be considered relevant to control fugitive dust emissions in connection with excavation, earth moving and transportation activities conducted as part of the remedy at the site. Such measures include, for example, paving, watering, chemically stabilizing, or frequently compacting and scraping roads, promptly removing rock, soil or other dust-forming debris from roads, restricting vehicle speeds, revegetating, mulching, or otherwise stabilizing the surface of areas adjoining roads, restricting unauthorized- vehicle travel, minimizing the area of disturbed land, and promptly revegetating regraded lands.

ARM 17.8.324 (Applicable) contains certain standards regarding hydrocarbon emissions and the treatment, storage, and handling of petroleum products.

The proposed remedy does involve handling impacted soil. However, as described in the Work Plan, remedial actions at the site will include wetting and other best management practices (BMPs) related to fugitive dust control. Remedial actions will be halted if significant dust is generated and will not resume until adequate dust control measures are in place. Dust control measures will ensure that air standards will not be exceeded during the proposed remedial action. Air monitoring is not a necessary component of the proposed remedial action. The proposed remedy will not result in emissions of the specific compounds included in these regulations. The proposed remedy does not involve the treatment, storage or handling of petroleum products other than basic refueling of construction equipment.

C. Water Well Requirements

Sections 37-43-101 to 402, MCA (Applicable) provides regulations and licensing for drillers or makers of water wells and monitoring wells.

ARM 36.21.701 through -810 (Applicable) provide requirements for licensing and construction standards for drilling or making monitoring wells.

Section 85-2-505, MCA (Applicable) precludes the wasting of ground water. Any well producing waters that contaminate other waters must be plugged or capped, and wells must be constructed and maintained so as to prevent waste, contamination, or pollution of ground water.

Section 85-2-516, MCA (Applicable) states that within 60 days after any well is completed a well log report must be filed by the driller with the Montana Bureau of Mines and Geology.

ARM 17.30.641 (Applicable) provides standards for sampling and analysis of water to determine quality.

ARM 17.30.646 (Applicable) requires that bioassay tolerance concentrations be determined in a specified manner.

ARM 36.21.670-678 and 810 (Applicable) specifies certain requirements that must be fulfilled when abandoning monitoring wells.

D. Point Source Controls - Clean Water Act (Applicable)

If point sources of water contamination are retained or created by any Stimson Site remediation activity, applicable Clean Water Act standards would apply to those discharges. The regulations are discussed in the contaminant specific ERCL section, above. Relevant regulations would include storm water runoff regulations found at 40 CFR Parts 121, 122, and 125 (general conditions and industrial activity conditions). These would also include requirements for BMPs and monitoring found at 40 CFR §§ 122.44(i) and 440.148, for point source discharges.

E. Montana Pollutant Discharge Elimination System (MPDES) - stormwater and other point sources (Applicable)

Substantive MPDES Permit Requirements, ARM 17.30.1342-1344 (Applicable): Because the State of Montana has been delegated the authority to implement the Clean Water Act, these requirements are enforced in Montana through the Montana Pollutant Discharge Elimination System (MPDES). These regulations set forth the substantive requirements applicable to all MPDES and National Pollutant Discharge Elimination System permits. The substantive requirements, including the requirement to properly operate and maintain all facilities and systems of treatment and control, are applicable requirements.

Stimson is subject to Authorization to Discharge Under the Montana Pollutant Discharge Elimination System, Permit No. MT0000205 (December 1, 2006). This permit allows Stimson to discharge three outfalls to the Blackfoot River, and contains certain effluent limitations, monitoring requirements, and reporting obligations.

ARM 17.30.1341 to 1344 (Applicable) requires a Storm Water Discharge General Permit for stormwater point sources. Generally, the permit requires the permittee to implement BMPs and to take all reasonable steps to minimize or prevent any discharge which has a reasonable likelihood of adversely affecting human health or the environment.

These requirements are addressed in Stimson's Permit No. MT0000205 and will be included in the Stormwater Pollution Prevention Plan (SWPP) that Stimson is required to submit to DEQ under its MPDES Permit MT0000205. Stimson must implement the provisions of the SWPPP as a condition of its permit. However, if there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with the activity, additional protections may be required.

ARM 17.30.1342 - .1344 set forth the substantive requirements applicable to all MPDES permits.

A related mine reclamation requirement is set out in ARM 17.24.633 (Relevant), which requires that all surface drainage from disturbed areas that have been graded, seeded or planted must be treated by the best technology currently available (BTCA) before discharge. Sediment control through BTCA practices must be maintained until the disturbed area has been reclaimed, the

revegetation requirements have been met, and the area meets state and federal requirements for the receiving stream.

F. Dredge and Fill Requirements (Applicable)

Regulations found at 40 CFR Part 230 address conditions of or prohibitions against depositing dredge and fill material into water of the United States. If remediation activities would result in an activity subject to these regulations, they would be applicable. The scope of these regulations has been altered significantly in a 1998 court decision and regulatory responses found at 66 Fed.Reg. 4549 (January 17, 2001 - effective date temporarily suspended pending further review, 66 FR 10367 [February 15, 2001]). Compliance with this requirement will be achieved at the site of dredge and fill activity within the Stimson Site during construction activities through the use of BMPs.

G. Underground Injection Control (Applicable)

Requirements found at 40 CFR Parts 144 and 146, promulgated pursuant to the Safe Drinking Water Act, allow the re-injection of treated ground water into the same formation from which it was withdrawn for aquifers such as the aquifer at the Stimson Site, and addresses injection well construction, operation, maintenance, and capping/closure. Wells are classified as Class I through V, depending on the location and the type of substance injected. For all classes, no owner may construct, operate or maintain an injection well in a manner that results in the contamination of an underground source of drinking water at levels that violate MCLs or otherwise adversely affect the health of persons. Each classification may also contain further specific standards, depending on the classification. These regulations would be applicable to any reinjection of treated ground water.

H. Transportation of Hazardous or Contaminated Waste (Relevant)

40 CFR Part 263 establishes regulations for the transportation of hazardous waste. These regulations would govern any on-site transportation of contaminated material. Any off-site transportation would be fully subject to applicable regulations and permitting.

ARM 17.53.701-708 (Applicable) adopts the equivalent to RCRA regulations at 40 CFR Part 263, establishing standards that apply to transporters of hazardous waste, with certain State exceptions and additions.

I. Underground Storage Tank Requirements (Applicable or Relevant)

There is free product at the site. Therefore, certain storage tank regulations are applicable or relevant.

40 CFR Part 280, Subpart F (Relevant) sets forth requirements for Release Response and

Corrective Action for underground storage tank systems containing petroleum or hazardous substances. These include initial response, initial abatement measures, facility characterization, free product removal, and investigations for soil and groundwater cleanup.

40 CFR 280.43 (Relevant) specifies groundwater monitoring requirements for underground storage tanks and requires that the monitoring methods used be able to detect the presence of at least 1/8 of an inch of free product on top of the groundwater in the monitoring wells.

40 CFR 280.64 (Relevant) provides that where investigations in connection with leaking underground storage tanks reveal the presence of free product, owners and operators must remove free product to the maximum extent practicable as determined by the implementing agency. This regulation also requires that the free product removal be conducted in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, state and federal regulations. This regulation also provides that abatement of free product migration is a minimum objective for the design of the free product removal system and provides that any flammable products must be handled in a safe and competent manner to prevent fires or explosions.

ARM 17.56.407(1)(f)(vi)(Relevant) specifies groundwater monitoring requirements for underground storage tanks and requires that the monitoring methods used be able to detect the presence of at least 1/8 of an inch of free product on top of the groundwater in the monitoring wells.

ARM 17.56.602(1)(c) (Relevant) requires that after a release from an underground storage tank system is identified in any manner, owners and operators must investigate to determine the possible presence of free product, begin free product removal as soon as practicable, conduct free product removal in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site, and that properly treats, discharges or disposes of recovery byproducts in compliance with applicable local, state and federal regulations. This regulation also provides that abatement of free product migration is a minimum objective for the design of the free product removal system and provides that any flammable products must be handled in a safe and competent manner to prevent fires or explosions.

ARM 17.56.607 (Relevant) specifies that all free product must be removed to the maximum extent practicable before a release may be considered resolved.

ARM 17.56.702 (Applicable) requires that all tanks and connecting piping which are taken out of service permanently must be removed from the ground. This applies if any remaining underground piping is encountered during remedial activities.

J. Water Quality Statute and Regulations (Applicable)

Causing of pollution: Section 75-5-605. MCA, of the Montana Water Quality Act prohibits the causing of pollution of any state waters. Pollution is defined under § 75-5-103(25)(a), MCA, as contamination or other alteration of physical, chemical, or biological properties of state waters which exceeds that permitted by the water quality standards, or a discharge of a solid or other substance into state water that will or is likely to "render the waters harmful, detrimental, or injurious to…wild animals, birds, fish, or other wildlife."

Placement of Wastes: Section 75-5-605, MCA, states that it is unlawful to place or cause to be placed any wastes where they will cause pollution of any state waters. Placement of waste pursuant to a permit is not prohibited if the authorization for placement contains provisions for review of the placement of materials to ensure it will not cause pollution to state waters.

Nondegradation: Section 75-5-303, MCA, states that existing uses of state waters and the level of water quality necessary to protect the uses must be maintained and protected. Section 75-5-317, MCA, and ARM 17.30.708 provide an exemption from nondegradation requirements which allows changes of existing water quality resulting from an emergency or remedial activity that is designed to protect the public health or the environment and that is approved, authorized, or required by the department. Changes determined to meet these requirements may be considered nonsignificant. In determining that remedial actions are protective of public health and the environment and in approving, authorizing, or requiring such remedial activities, no significant degradation should be approved, considering the criteria for a determination of non-significance set out in § 75-5-301(5)(c), MCA, which (i) equate significance with the potential for harm to human health, a beneficial use or the environment, (ii) consider both the quantity and strength of the pollutant, (iii) consider the length of time the degradation will occur, and (iv) consider the character of the pollutant so that greater significance is associated with carcinogens and toxins that bioaccumulate or biomagnify and lesser significance is associated with substances that are less harmful or less persistent. Under ARM 17.30.715(1)(b), concentrations of carcinogenic parameters or parameters with a bioconcentration factor greater than 300 cannot exceed the concentration in the receiving water in order for a discharge to be considered nonsignificant and thus exempt from nondegradation requirements under § 75-5-317, MCA.

ARM 17.30.705 provides that for all state waters, existing and anticipated uses and the water quality necessary to protect these uses must be maintained and protected.

ARM 17.30.1011 provides that any ground water whose existing quality is higher than the standard for its classification must be maintained at that high quality unless degradation may be allowed under the principles established in § 75-5-303, MCA, and the nondegradation rules at ARM 17.30.701 et seq.

BMPs described in the EE/CA, action memo and Work Plan are intended to meet the above requirements.

K. Solid Waste Management Regulations (Applicable)

As noted above, the Solid Waste Management Regulations are applicable to the disposal or active management of the soil and debris, construction debris, and similar wastes within the

Stimson Site. Certain of these regulations are identified in the location specific ERCLs above. Action specific solid waste regulations are discussed below:

Disposal of construction and demolition debris[14] is addressed in regulations for Class III or Class IV landfills. Requirements applicable to the design of Class IV landfills, including plans for construction quality control and construction quality assurance, are found in ARM 17.50.506. Specific operational requirements for Class III and IV facilities are found in ARM 17.50.511, and require, inter alia, that conditionally exempt small generator wastes must be removed to the greatest extent practicable and all liquid paints, solvents, glues, resins, dyes, oils, pesticides, and other household hazardous waste must be removed from buildings prior to demolition.

Section 75-10-206, MCA, allows variances to be granted from solid waste regulations if failure to comply with the rules does not result in a danger to public health or safety or compliance with specific rules would produce hardship without producing benefits to the health and safety of the public that outweigh the hardship. For example, the ground water monitoring requirements of ARM 17.50.701 et seq. can be considered and coordinated with other CERCLA or CECRA monitoring requirements.

L. Reclamation Requirements

1. Noxious Weed Control Act, Section 7-22-2101 et seq., MCA, and ARM 4.5.201 et seq. (Applicable)

Section 7-22-2101(8)(a), MCA, (Applicable) defines "noxious weeds" as any exotic plant species established or that may be introduced in the state which may render land unfit for agriculture, forestry, livestock, wildlife, or other beneficial uses or that may harm native plant communities and that is designated: (i) as a statewide noxious weed by rule of the department; or (ii) as a district noxious weed by a board, following public notice of intent and a public hearing.

Designated noxious weeds are listed in ARM 4.5.201 through 4.5.204 (Applicable) and must be managed consistent with weed management criteria developed under § 7-22-2109(2)(b), MCA (Applicable).

Section 7-22-2152, MCA, (Applicable) requires that any person proposing certain actions including but not limited to a solid waste facility, a highway or road, a commercial, industrial, or government development, or any other development that needs state or local approval and that results in the potential for noxious weed infestation within a district shall notify the district weed

[14] ARM 17-50-503 provides, "Group III wastes include wood wastes and non-water soluble solids. These wastes are characterized by their general inert nature and low potential for adverse environmental impacts. Examples include, but are not limited to... inert solid waste such as unpainted brick, dirt, rock and concrete ... clean, untreated, unglued wood materials, brush, unpainted or untreated lumber, and vehicle tires; and ... industrial mineral wastes which are essentially inert and non-water soluble and do not contain hazardous waste constituents. ...Group IV wastes include construction and demolition wastes, and asphalt, except regulated hazardous wastes."

board at least 15 days prior to the activity. The board will require that the areas be seeded, planted, or otherwise managed to reestablish a cover of beneficial plants. The person committing the action shall submit to the board a written plan specifying the methods to be used to accomplish revegetation at least 15 days prior to the activity. The plan must describe the time and method of seeding, fertilization practices, recommended plant species, use of weed-free seed, and the weed management procedures to be used. The plan is subject to approval by the board, which may require revisions to bring the revegetation plan into compliance with the district weed management plan. The activity for which notice is given may not occur until the plan is approved by the board and signed by the presiding officer of the board and by the person or a representative of the agency responsible for the action. The signed plan constitutes a binding agreement between the board and the person or agency. The plan must be approved, with revisions if necessary, within 10 days of receipt by the board.

These requirements mandate careful weed control planning for identified noxious weeds in projects such as the Stimson revegetation project.

2. The Strip and Underground Mine Reclamation Act, §§ 82-4-201 through 254, MCA, technically applies to coal and uranium mining, but that statute and the regulations promulgated under that statue and discussed in this section set out the standards that excavation activities and reclamation of excavated areas should attain. Those requirements identified here have been determined to be relevant requirements for this action. Section 82-4-231, MCA, (Relevant) requires the reclamation and revegetation of the land as rapidly, completely, and effectively as the most modern technology and the most advanced state of the art will allow. In developing a method of operation and plans of backfilling, water control, grading, topsoiling and reclamation, all measures shall be taken to eliminate damages to landowners and members of the public, their real and personal property, public roads, streams, and all other public property from soil erosion, subsidence, landslides, water pollution, and hazards dangerous to life and property. Sections 82-4-231(10)(j), and (10(k)(i), MCA, and ARM 17.24.751 (Relevant) prohibits surface or underground mining operations that are likely to jeopardize the continued existence of endangered or threatened species, or that are likely to result in the destruction or adverse modification of designated critical habitat of such species in violation of the Endangered Species Act of 1973, as amended (16 USC 1531, et seq.), or that would result in the unlawful taking of a bald or golden eagle, its nest, or any of its eggs, as a result of the mining operation. ARM 17.24.751 also requires measures to prevent degradation of fish and wildlife habitat, including endangered or threatened species, to be employed. ARM 17.24.315 sets forth standards for ponds and embankments. Section 82-4-233, MCA, requires vegetation as is necessary to establish a diverse, effective, and permanent vegetative cover of the same seasonal variety native to the area of land to be affected and capable of self-regeneration and plant succession at least equal in extent of cover to the natural vegetation of the area except that introduced species may be used in the revegetation process where desirable and necessary to achieve the approved postmining land use plan. ARM 17.24.641 (Relevant) also provides that drainage from acid forming or toxic-forming spoil into ground and surface water must be avoided by preventing water from coming into contact with such spoil. ARM 17.24.505 (Relevant) similarly provides that acid, acid forming, toxic, toxic-forming or other deleterious materials must not be buried or stored in proximity to a drainage course so as to cause or pose a threat of water pollution.

M. Reclamation Activities - Hydrology Regulations (Relevant)

The hydrology regulations promulgated under the Strip and Underground Mine Reclamation Act, §§ 82-4-201 et seq., MCA, provide detailed guidelines for addressing the hydrologic impacts of mine reclamation activities and earth-moving projects. While no mining activities are occurring at the Stimson Site, these requirements are relevant for the management and reclamation of areas disturbed by excavation, grading, or similar actions at the Stimson Site.

ARM 17.24.631 (Relevant) provides that long-term adverse changes in the hydrologic balance from mining and reclamation activities, such as changes in water quality and quantity, and location of surface water drainage channels shall be minimized. Water pollution must be minimized and, where necessary, treatment methods utilized. Diversions of drainage to avoid contamination must be used in preference to the use of water treatment facilities. Other pollution minimization devices must be used if appropriate, including stabilizing disturbed areas through land shaping, diverting runoff, planting quickly germinating and growing stands of temporary vegetation, regulating channel velocity of water, lining drainage channels with rock or vegetation, mulching, and control of acid-forming and toxic-forming waste materials.

ARM 17.24.633 (Relevant) provides water quality performance standards that may be invoked in the event that runoff from the treated areas threatens water quality or sediments in the stream, including the requirement that all surface drainage from a disturbed area must be treated by the best technology currently available (BTCA). Treatment must continue until the area is stabilized.

ARM 17.24.634 (Relevant) provides that, in reclamation of drainages, drainage design must approximate original contour, and exhibit floodplain dimensions that approximate the pre-mining (pre-disturbance) configuration and that will blend with the undisturbed drainage above and below the area to be reclaimed, and the design must accommodate the approved revegetation and postmining land use requirements. The average stream gradient must be maintained with a concave longitudinal profile. This regulation provides specific requirements for designing the reclaimed drainage to:

1. comply with the postmining topography map required by ARM 17.24.313(1)(d)(iv) and approved by the department;

2. approximate an appropriate geomorphic habit or characteristic pattern;

3. remain in dynamic equilibrium with the system without the use of artificial structural Controls unless approved by DEQ;

4. provide for floods and for long term relative stability of the landscape. The term “relative” refers to a condition comparable to an unmined landscape with similar climate, topography, vegetation, and land use; and

5. establish or restore a diversity of habitats that are consistent with the approved

postmining land use, and restore, enhance where practicable, or maintain natural riparian vegetation as necessary to comply with ARM subchapter 7.

ARM 17.24.635 through 26.4.637 (Relevant) set forth requirements for temporary and permanent diversions.

ARM 17.24.638 (Relevant) specifies sediment control measures to be implemented during operations.

ARM 17.24.639 (Relevant) sets forth requirements for temporary and permanent sedimentation ponds.

ARM 17.24.640 (Relevant) provides that discharge from sedimentation ponds, permanent and temporary impoundments, and diversions shall be controlled by energy dissipaters, riprap channels, and other devices, where necessary, to reduce erosion, prevent deepening or enlargement of stream channels, and to minimize disturbance of the hydrologic balance.

ARM 17.24.643 (Relevant) requires protection of ground water resources.

ARM 17.24.645 (Relevant) sets forth requirements for ground water monitoring.

ARM 17.24.646 (Relevant) sets forth requirements for surface water monitoring.

N. Reclamation and Revegetation Requirements (Relevant)

Certain portions of the Montana Strip and Underground Mining Reclamation Act and Montana Metal Mining Act as outlined below are relevant requirements for the selected action. While no mining activities are occurring at the facility, these requirements are relevant for the management and reclamation of areas disturbed by excavation, grading, or similar actions.

ARM 17.24.501 (Relevant) gives general backfilling and final grading requirements. Backfill must be placed so as to minimize sedimentation, erosion, and leaching of acid or toxic materials into waters, unless otherwise approved. Final grading must be to the approximate original contour of the land, and final slopes must be graded to prevent slope failure. The disturbed areas must be blended with surrounding and undisturbed ground to provide a smooth transition in topography.

ARM 17.24.519 (Relevant) provides that an operator may be required to monitor settling of regraded areas.

ARM 17.24.702(4), (5), and (6) (Relevant) requires that during the redistributing and stockpiling of soil (for reclamation):

1. regraded areas must be deep-tilled, subsoiled, or otherwise treated to eliminate any possible slippage potential, to relieve compaction, and to promote root penetration and

permeability of the underlying layer; this preparation must be done on the contour whenever possible and to a minimum depth of 12 inches;

2. redistribution must be done in a manner that achieves approximate uniform thicknesses consistent with soil resource availability and appropriate for the postmining vegetation, land uses, contours, and surface water drainage systems; and

3. redistributed soil must be reconditioned by subsoiling or other appropriate methods.

ARM 17.24.703 (Relevant) requires that when using materials other than, or along with, soil for final surfacing in reclamation, the operator must demonstrate that the material (1) is at least as capable as the soil of supporting the approved vegetation and subsequent land use, and (2) the medium must be the best available in the area to support vegetation. Such substitutes must be used in a manner consistent with the requirements for redistribution of soil in ARM 17.24.701 and 702.

ARM 17.24.711 (Relevant) requires that a diverse, effective, and permanent vegetative cover of the same seasonal variety native to the area of land to be affected shall be established except on road surfaces and below the low-water line of permanent impoundments. See also § 82-4-233, MCA (Relevant). Vegetative cover is considered of the same seasonal variety if it consists of a mixture of species of equal or superior utility when compared with the natural vegetation during each season of the year (See also ARM 17.24.716 and .719 below regarding substitution of introduced species for native species). This requirement may not be appropriate where other cover is more suitable for the particular land use or another cover is requested by the landowner.

ARM 17.24.713 (Relevant) provides that seeding and planting of disturbed areas must be conducted during the first appropriate period for favorable planting after final seedbed preparation.

ARM 17.24.714 (Relevant) requires use of a seedbed preparation, mulch, or cover crop until an adequate permanent cover can be established. This requirement may be suspended under certain conditions.

ARM 17.24.716 (Relevant) establishes the required method of revegetation.

ARM 17.24.717 (Relevant) Trees or other shrub species necessary to meet the approved postmining land use must be adapted for local site conditions and climate. Trees and shrubs must be planted in combination with herbaceous species as necessary to achieve the postmining land use and as approved by the department. If necessary to increase tree and shrub survival, seeding of the herbaceous species may be delayed providing that measures are taken to control air and water pollution and erosion.

ARM 17.24.718 (Relevant) requires the use of soil amendments and other means such as irrigation, management, fencing, or other measures, if necessary to establish a diverse and permanent vegetative cover. Reclamation land use practices including, but not limited to, grazing, haying, or chemical applications, may not be conducted in a manner or at a time that

interferes with establishment and/or persistence of seeded and planted grasses, forbs, shrubs, and trees or with other reclamation requirements.

ARM 17.24.721 (Relevant) specifies that rills or gullies in reclaimed areas must be filled, graded or otherwise stabilized and the area reseeded or replanted if the rills and gullies are disrupting the reestablishment of the vegetative cover or causing or contributing to a violation of water quality standards for a receiving stream.

ARM 17.24.723 (Relevant) sets forth requirements for vegetation, soils, wildlife, and other monitoring.

ARM 17.24.724 (Relevant) specifies that revegetation success must be measured against approved unmined reference areas or by comparison with technical standards from historic data. More than one reference area or historic record must be established for vegetation types with significant variation due to a number of factors.

ARM 17.24.726 (Relevant) sets forth vegetation production, cover, diversity, density, and utility requirements.

The excavation will be regraded to slopes appropriate for its usage. Surface water controls will be implemented during construction to prevent runoff from contaminated soil, as required by the SWPP and discussed above. Final surfacing will use appropriate soil material. Seeding and planting of disturbed areas will be conducted in the first appropriate period after the soil has been replaced. A mulch cover will be used until an adequate cover is established. The disturbed areas will be revegetated consistent with these requirements. Surface water run-on and runoff measures will be implemented to prevent the spread of contamination into areas where it could degrade fish and wildlife habitat. Dust control measures will be used during excavation and backfilling areas.

O. Montana Dam Safety Act and Implementing Regulations (Applicable or Relevant)

Section 85-15- 207, MCA, states that no person may fill or procure to be filled with water any dam or reservoir that is not so thoroughly and substantially constructed as to safely hold any water that may be turned therein.

Section 85-15- 208, MCA, states that no person may construct or cause to be constructed a dam or reservoir for the purpose of accumulating, storing, appropriating, or diverting any of the waters of this state, except in a thorough, secure, and substantial manner.

ARM 36.14.501 sets forth high hazard dam criteria. An earthfill dam must be safe and stable during all phases of construction and operation of the reservoir. To accomplish this, the following criteria must be met: (a) the embankment must be safe against overtopping during occurrence of the inflow design flood by the provision of sufficient spillway and outlet works capacity; (b) the slopes of the embankment must be stable during construction and under all conditions of reservoir operation, including rapid drawdown of the reservoir; (c) the embankment must be designed so as not to impose excessive stresses upon the foundation; (d)

seepage flow through the embankment, foundation, and abutments must be controlled so that no internal erosion or piping takes place and so there is no sloughing in the area where the seepage emerges; (e) the embankment must be safe against overtopping by wave action; (f) the upstream slope must be protected against erosion by wave action, and the crest and downstream slope must be protected against erosion due to wind and rain; (g) the design must be such that the most severe earthquake that can be reasonably anticipated will not cause catastrophic failure and loss of life; and (h) the dam and its appurtenants must be constructed utilizing proper methods and control.

Earth dams greater than 12,500 acre-feet or a total capacity of less than 25,000 acre-feet measured to the primary emergency spillway must be designed and constructed at least equivalent to the United States Bureau of Reclamation Design of Small Dams to its limit of a 50-feet dam height, and to the Corps standard beyond a 50-feet dam height. Designs for construction of high-hazard dams must conform to accepted practices and procedures of the engineering profession. Design as well as preparation of the construction plans and specifications must be prepared by or under the direction of an engineer experienced in dam design and construction.

ARM 36.14.502 sets forth the hydrologic standard for emergency and principal spillways. The regulation sets forth minimum inflow design flood and the minimum inflow design flood recurrence interval for reservoirs and spillways.

ARM 36.14.503 sets forth certain monitoring instrumentation requirements. All dams must have an adequate seepage monitoring and collection system.

ARM 36.14.504 sets forth requirements for the breach or removal of an earthen dam. The breach of an earth dam must be excavated down to the level of the natural ground and be able to pass the 100-year, 24-hour flood at a depth and velocity equivalent to the natural channel. However, the maximum width required may be the total removal of the dam. The sides of the breach must be excavated to a slope that is stable and consistent with the natural angle of repose of adjacent material abutting the dam or as determined by the engineer.

ARM 36.14.301-312 sets forth dam construction applications and permits. ARM 36.14.306 requires that repair work include specific measures to be taken to reasonably ensure the problem will not recur or the solution is the most reasonable and will not impact the safety of the dam.

ARM 36.14.309 requires notification and immediate action to correct a dangerous condition if a dangerous or emergency condition including but not limited to flood during construction, slope failure, or earthquake, develops during construction.

ARM 36.14.401-407 sets forth operation applications and permits. ARM 36.14.404 requires a safe drawdown rate for the reservoir. ARM 36.14.405 requires the removal and prevention of the accumulation of deleterious materials from upstream face of the dam and the spillway system and the maintenance of adequate and suitable vegetation to prevent the erosion of the embankment and earth spillway for the dam.

P. Toxic Substances Control Act (Applicable)

40 CFR Part 761 contains the following applicable provisions regarding PCBs:

40 CFR 761.61 identifies certain disposal options and requirements for PCB remediation waste:

1. Bulk PCB remediation waste containing less than 50 ppm PCBs may be disposed at a State of Montana permitted facility for managing municipal solid waste subject to 40 CFR part 258. 40 CFR §§ 761.61(a)(5)(i)(B)(2)(ii) & 761.61(a)(5)(v)(A)(1).

2. Bulk PCB remediation wastes with a PCB concentration equal to or greater than 50 ppm must be disposed of in a RCRA hazardous waste landfill or a PCB disposal facility approved under this part. 40 CFR § 761.61(a)(5)(iii).

3. The EPA may approve a risk-based disposal option that will not pose an unreasonable risk of injury to human health or the environment.

PCB remediation waste that is transported off-site for decontamination or disposal must be dewatered on-site or "transported off-site in containers meeting the requirements of the DOT Hazardous Materials Regulations (HMR) at 49 CFR parts 171 through 180." 40 CFR § 761.61(a)(5)(i)(B).

The transporter of the waste must provide written notice, including the quantity to be shipped and highest concentration of PCBs at least 15 days before the first shipment of bulk PCB remediation to an off-site facility where the waste is destined for an area not subject to a TSCA PCB Disposal Approval. 40 CFR § 761.61(a)(5)(iv).

40 CFR Part 761, Subpart K contains certain requirements for PCB waste disposal records and reports, including notification to EPA of PCB waste activity.

40 CFR § 761.61(a)(5)(iv) specifies the necessary sampling method to determine the PCB concentration.

40 CFR 761.65 outlines the requirements for storing for disposal PCB waste that contains 50 ppm or greater.

40 CFR 761.70 governs the incineration of PCBs.

40 CFR 761.75 applies to facilities used for land disposal of PCBs.

40 CFR 761.79 provides decontamination standards and procedures for removing PCBs that are regulated for disposal from water, organic liquids, and other materials.

Stimson must comply with the sampling requirements in 40 CFR § 761.61 to determine the "as found" concentration of PCBs. Stimson must dispose of remediation waste containing PCBs at

50 ppm or higher (if any) at a PCB disposal facility. Stimson must dispose of remediation waste containing PCBs less than 50 ppm at Allied's Missoula landfill.

Stimson must provide proper notice to the TSCA disposal facility and EPA prior to shipment. Any storage of PCB remediation waste must comply with 40 CFR 761.65. Stimson will not be incinerating or land disposing of PCB remediation waste.

OTHER LAWS (NON-EXCLUSIVE LIST)

CECRA defines as ERCLs only federal environmental and state environmental and siting laws. Remedial design, implementation, and operation and maintenance must nevertheless comply with all other applicable laws, both state and federal, if the remediation work is done by parties other than the federal government or its contractors.

The following "other laws" are included here to provide a reminder of other legally applicable requirements for actions being conducted at the Stimson Site. They do not purport to be an exhaustive list of such legal requirements, but are included because they set out related concerns that must be addressed and, in some cases, may require some advance planning. They are not included as ERCLs because they are not "environmental or facility siting laws." As applicable laws other than ERCLs, they are not subject to ERCL waiver provisions.

Other Federal Laws

Occupational Safety and Health Regulations

The federal Occupational Safety and Health Act regulations found at 29 CFR § 1910 are applicable to worker protection during conduct of all remedial activities.

Other Montana Laws

1. Occupational Health Act, §§ 50-70-101 et seq., MCA

ARM § 17.74.101 addresses occupational noise. In accordance with this section, no worker shall be exposed to noise levels in excess of the levels specified in this regulation. This regulation is applicable only to limited categories of workers, and for most workers the similar federal standard in 29 CFR 1910.95 applies.

ARM § 17.74.102 addresses occupational air contaminants. The purpose of this rule is to establish maximum threshold limit values for air contaminants under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse health effects. In accordance with this rule, no worker shall be exposed to air contaminant levels in excess of the threshold limit values listed in the regulation.

This regulation is applicable only to limited categories of workers, and for most workers the similar federal standard in 29 CFR § 1910.1000 applies.

2. Controlled Ground Water Areas

Pursuant to § 85-2-507, MCA, the Montana Department of Natural Resources and Conservation may grant either a permanent or a temporary controlled ground water area. The maximum allowable time for a temporary area is two years, with a possible two-year extension.

Pursuant to § 85-2-506, MCA, designation of a controlled ground water area may be proposed if: (i) excessive ground water withdrawals would cause contaminant migration; (ii) ground water withdrawals adversely affecting ground water quality within the ground water area are occurring or are likely to occur; or (iii) ground water quality within the ground water area is not suited for a specific beneficial use.

3. Montana Safety Act

Sections 50-71-201, 202 and 203, MCA, state that every employer must provide and maintain a safe place of employment, provide and require use of safety devices and safeguards, and ensure that operations and processes are reasonably adequate to render the place of employment safe. The employer must also do every other thing reasonably necessary to protect the life and safety of its employees. Employees are prohibited from refusing to use or interfering with the use of safety devices.

4. Employee and Community Hazardous Chemical Information

Sections 50-78-201, 202, and 204, MCA, state that each employer must post notice of employee rights, maintain at the work place a list of chemical names of each chemical in the work place, and indicate the work area where the chemical is stored or used. Employees must be informed of the chemicals at the work place and trained in the proper handling of the chemicals.

APPENDIX F
TRUCK DECONTAMINATION PLAN

Appendix F

Truck and Equipment Decontamination Contingency Plan

I. Purpose

The purpose of the equipment decontamination plan is to establish methods and procedures as well as identify resources needed to effectively decontaminate the transport vehicles as well as construction equipment. This plan was developed in the event that conventional, non-wet methods for removing soil and other materials from equipment are not adequate.

II. Equipment Decontamination Station

Once it has been determined that additional decontamination efforts are required on site, the contractor will set up and maintain a self contained, wet decontamination station for all trucks and over the road vehicles. The system proposed for this project is the Desko Environmental Solutions model Maximus II Series, fully self contained, truck and equipment decontamination station. This unit is powered by a stand alone generator or wired directly to a 220V power drop.

The temporary decontamination station will most likely be stationed at a point near the west gate of the site. The contractor will determine the location of the decontamination station in consultation with the DEQ. Depending on the time of year and haul road conditions, each truck may be inspected prior to leaving the site. Since the station is unmanned, the driver will exit his vehicle, activate the unit and proceed across the decontamination platform. Automatic sensors will activate and cycle the wash station pumps as the truck proceeds across the platform and down the ramps. At that point, the driver can inspect the truck and determine if the unit is adequately decontaminated.

The automated wash station is equipped with a solids separation system that allows the unit to be serviced and solids removed using a rubber tired backhoe. When this happens, the solids will be collected and stockpiled on a lined area, sampled with the results determining the final disposition. Water is re-circulated with make up water brought in on an as needed basis. The water will be used as dust control within the cooling pond.

More specific information can be found on the product specifications below.

System / Products Details

Portable

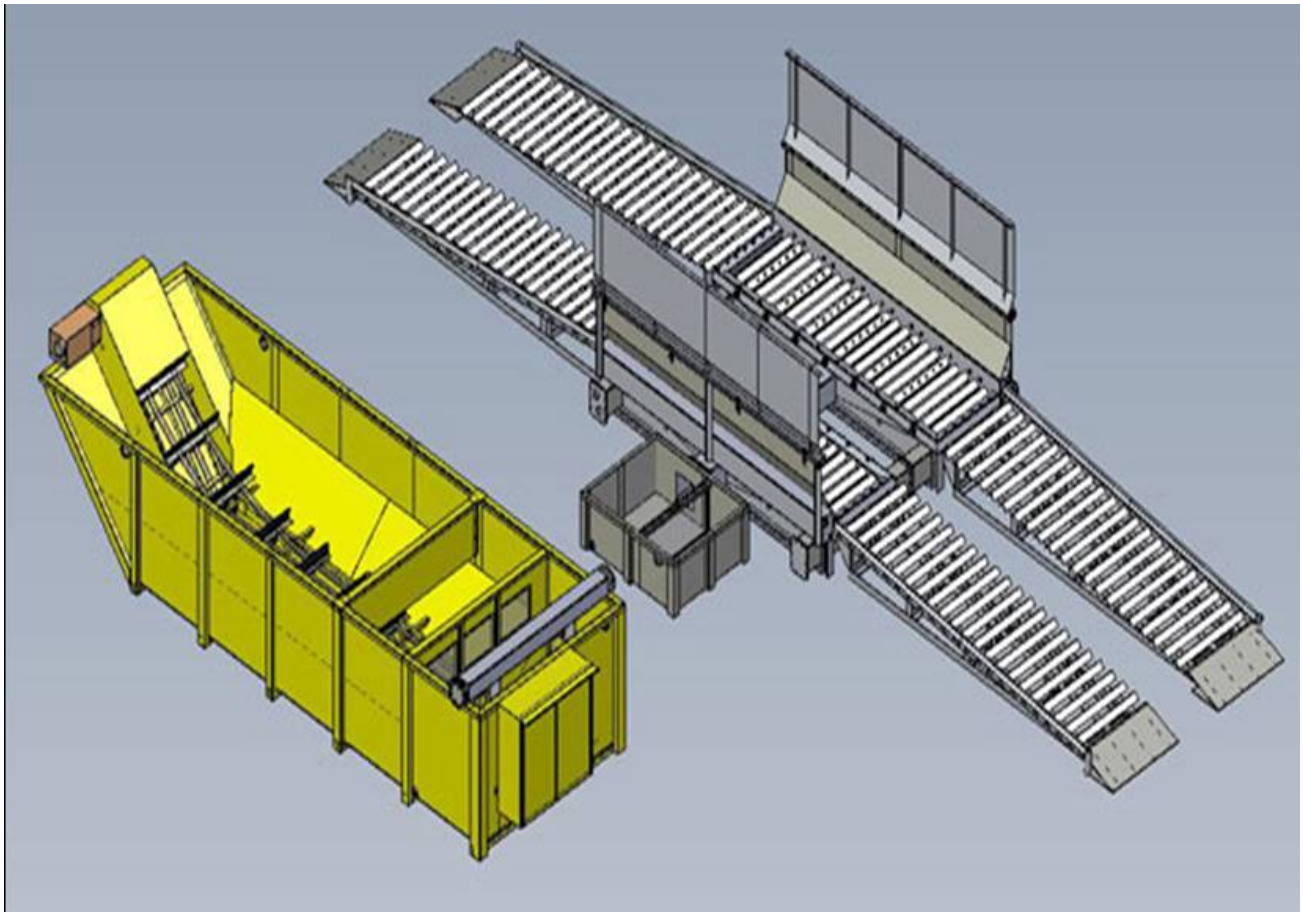
Maximus II

- 1 HOMA 7.5 hp pump with Auto Coupler
- 1 Flex Pro flocculent pump
- Control panel with automatic sensor and 50 feet of cable
- 1 water collection chamber
- 1 HOMA 3.2 hp return pump
- Includes set of ramps
- Can be configured with or with out scraper conveyer

The DES MAXIMUS II is a self contained wheel washing system that delivers two (2) full tire revolutions of cleaning power and is designed for permanent or temporary applications. The Wash Unit in the system is designed to be used either in ground or above ground as the customer chooses without requiring modification to the unit. MAXIMUS II is suitable for all commercial vehicles and trailers that have permitted use on public road

The operation of the system is simple and requires no operator. As the vehicle approaches the wheel wash system, the wash cycle is automatically activated by a Proximity Sensor. A technically engineered spray system creates an effective washing result for the complete length of the vehicle as it slowly drives through the wheel wash system at walking speed. The angled profile construction of the wash area flexes open the tire profiles and supplements the cleaning effect. The MAXIMUS II was specifically engineered using the principle of High volume and Low pressure to eliminate track out and is the ideal solution for this application.

The DES MAXIMUS II is a one (1) wash pump and one (1) return pump system which utilizes state of the art submersible water pumps that are made in the United States. The control panel will be individually configured to meet your site specific requirements in regards to timing and adjustability using readily available and easy to operate standard component parts.



DESKO
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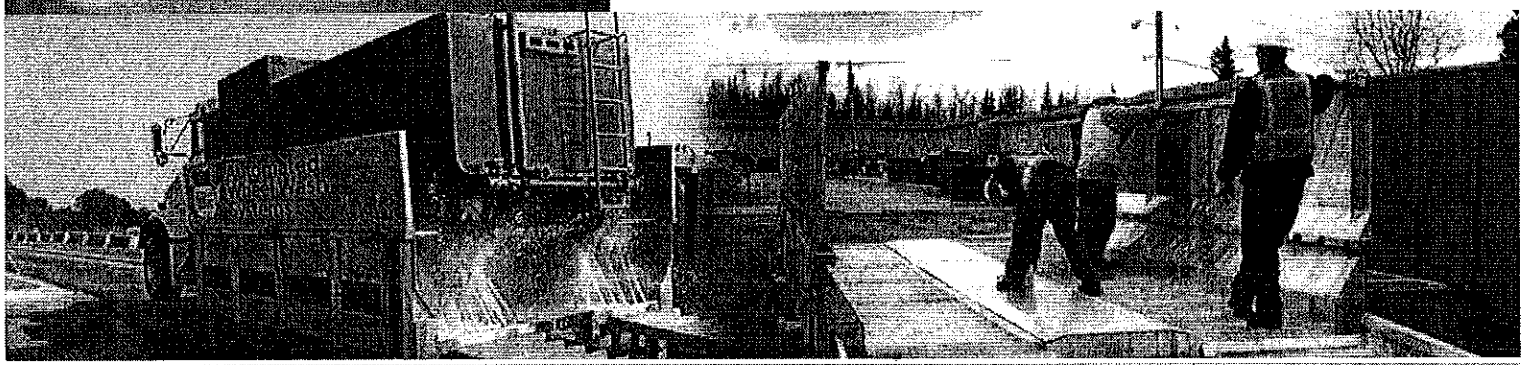


System/Products Details

Portable

Maximus II

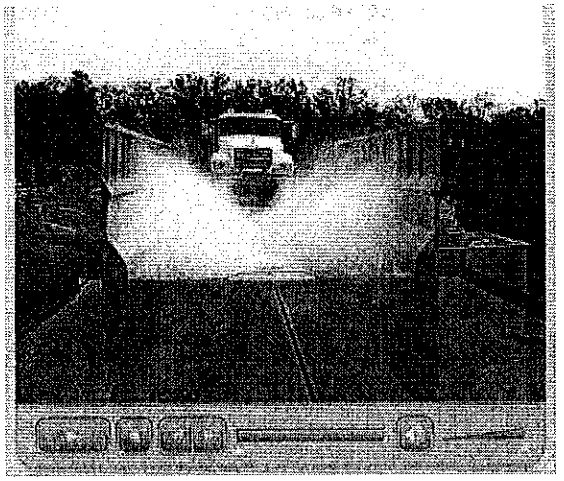
- 1 HOMA 7.5 hp pump with Auto Coupler
- 1 Flex Pro flocculent pump
- Control panel with automatic sensor and 50 feet of cable
- 1 water collection chamber
- 1 HOMA 3.2 hp return pump
- Includes set of ramps
- Can be configured with or with out scraper conveyer

The DES MAXIMUS II is a self contained wheel washing system that delivers two (2) full tire revolutions of cleaning power and is designed for permanent or temporary applications. The Wash Unit in the system is designed to be used either in ground or above ground as the customer chooses without requiring modification to the unit. MAXIMUS II is suitable for all commercial vehicles and trailers that have permitted use on public road

The operation of the system is simple and requires no operator. As the vehicle approaches the wheel wash system, the wash cycle is automatically activated by a Proximity Sensor. A technically engineered spray system creates an effective washing result for the complete length of the vehicle as it slowly drives through the wheel wash system at walking speed. The angled profile construction of the wash area flexes open the tire profiles and supplements the cleaning effect. The MAXIMUS II was specifically engineered using the principle of High volume and Low pressure to eliminate track out and is the ideal solution for this application.

The DES MAXIMUS II is a one (1) wash pump and one (1) return pump system which utilizes state of the art submersible water pumps that are made in the United States. The control panel will be individually configured to meet your site specific requirements in regards to timing and adjustability using readily available and easy to operate standard component parts.

View Video(s)



Maximus III Series

The Maximus III Series of totally portable wheel wash systems offer the ideal solution on sites where no excavation is allowed or where you need the flexibility to easily relocate your system. The Maximus Series is configured with three full tire revolutions. For more cohesive soils, the systems can be outfitted with our Turbo Wash package which includes an extra pump and additional high output nozzles that are specifically designed to target the solids that collect between the dual tires. This Turbo Wash feature, coupled with additional water recycling and solid separation capacity allows the Maximus Series to effectively deal with a wide range of soil conditions. The Maximus Series do not require an operator and are rugged and dependable.

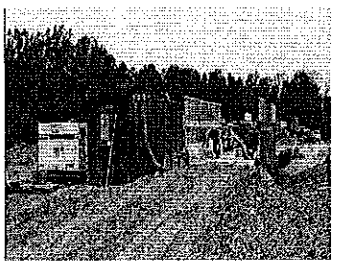
The DES MAXIMUS III is a self contained wheel washing system that delivers three (3) full tire revolutions of cleaning power and is designed for permanent or temporary applications. The Wash Unit in the system is designed to be used either in ground or above ground as the customer chooses without requiring modification to the unit. MAXIMUS III is suitable for all commercial vehicles and trailers that have permitted use on public roads.

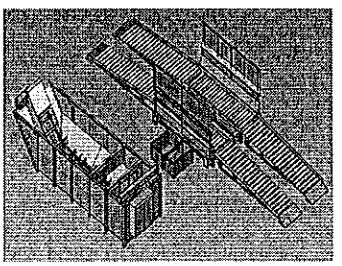
The operation of the system is simple and requires no operator. As the vehicle approaches the wheel wash system, the wash cycle is automatically activated by a Proximity Sensor. A technically engineered spray system creates an effective washing result for the complete length of the vehicle as it slowly drives through the wheel wash system at walking speed. The angled profile construction of the wash area flexes open the tire profiles and supplements the cleaning effect. MAXIMUS III will deliver three (3) full tire revolution of washing cycles to effectively clean the tires. The MAXIMUS III was specifically engineered using the principle of High volume and Low pressure to eliminate track out and is the ideal solution for this application.

The DES MAXIMUS III is a two (2) wash pump and two (2) return pump system which utilizes state of the art submersible water pumps that are made in the United States. The control panel will be individually configured to meet your site specific requirements in regards to timing and adjustability using readily available and easy to operate standard component parts.

- More Information

Additional Product Images:





Back to Product Page

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APPENDIX G
WEED CONTROL / REVEGETATION PLAN

MISSOULA COUNTY

WEED DISTRICT
2825 Santa Fe Court
MISSOULA, MT 59808

(406) 258-4218
FAX (406) 258-3916
botten@missoulaeduplace.org

REVEGETATION PLAN FOR DISTURBED SITES

Subdivision/Project Name:
Former Bonner Mill cooling pond remediation/removal

Location/Legal Description:
East end of the former Bonner Mill, along the Blackfoot River

Number of Acres, Lots or Lineal feet of Disturbance:
Approximately 3.9 acres

Type(s) of Disturbance ex. Road Construction, Sewer Installation, Approach Construction etc:
Excavation and existing south riverbank ("berm") removal, followed by re-establishing riverbank further south, thereby widening the river channel by approximately 50 ft.

A. Disturbed Area Revegetation Plan:

1. Site Preparation (topsoil management and seed bed preparation):
Before excavating, any topsoil will be stripped and stockpiled. When post-excavation recontouring has been completed, any compacted subgrade areas will be ripped and then a 6 inch layer of topsoil will be spread and lightly compacted.

2. Seed Species and Seeding Rates (lb/PLS/acre)
ALL TO BE CERTIFIED NOXIOUS-WEED-FREE

Slender Wheatgrass-5# PLS/acre	Sheep Fescue-2#
Idaho Fescue-2#	Mountain Brome-6#
Prairie Junegrass-0.2#	Common Yarrow-0.1#
Fireweed-0.05#	Blue Flax-1#

Sterile Barley or Rye (temporary cover crop)

3. Seeding method: drill, hydroseed, broadcast, or other
Level areas will be seeded by broadcast or using a seed drill. Uneven areas and the riverbed will be hydroseeded. If broadcast seeding is used, the seed bed will be roughed up before and immediately after the seed is broadcast.

4. Time of seeding
The area will be reseeded after October 15th, but before freeze up. Alternatively, depending on the project schedule, the seeding may be conducted in early Spring (March-April)

5. **Fertilization lb/acre**

Fertilization is not planned

6. **Weed Control Method(s) and timing:**

Weeds will be controlled for the first two years after planting by mowing (approximately July) and using Roundup as a follow-up, where needed.

B. Landowner or responsible party:

Stimson Lumber Company
Name

P.O. Box 7400
Address

Coeur d'Alene | MT ID | 598 83816
City | **State** | **Zip**

(503) 359-8338 | Steve Petrin (in Portland Office)
Telephone No

Signature of Landowner/Responsible Party **Date**

This signed plan constitutes a binding agreement between Missoula County and the responsible person or agency.

Comments and approval or disapproval from the Missoula County Weed Control Board:

Approved: **Date**

For Missoula County Weed Board

MAIL THIS FORM TO:

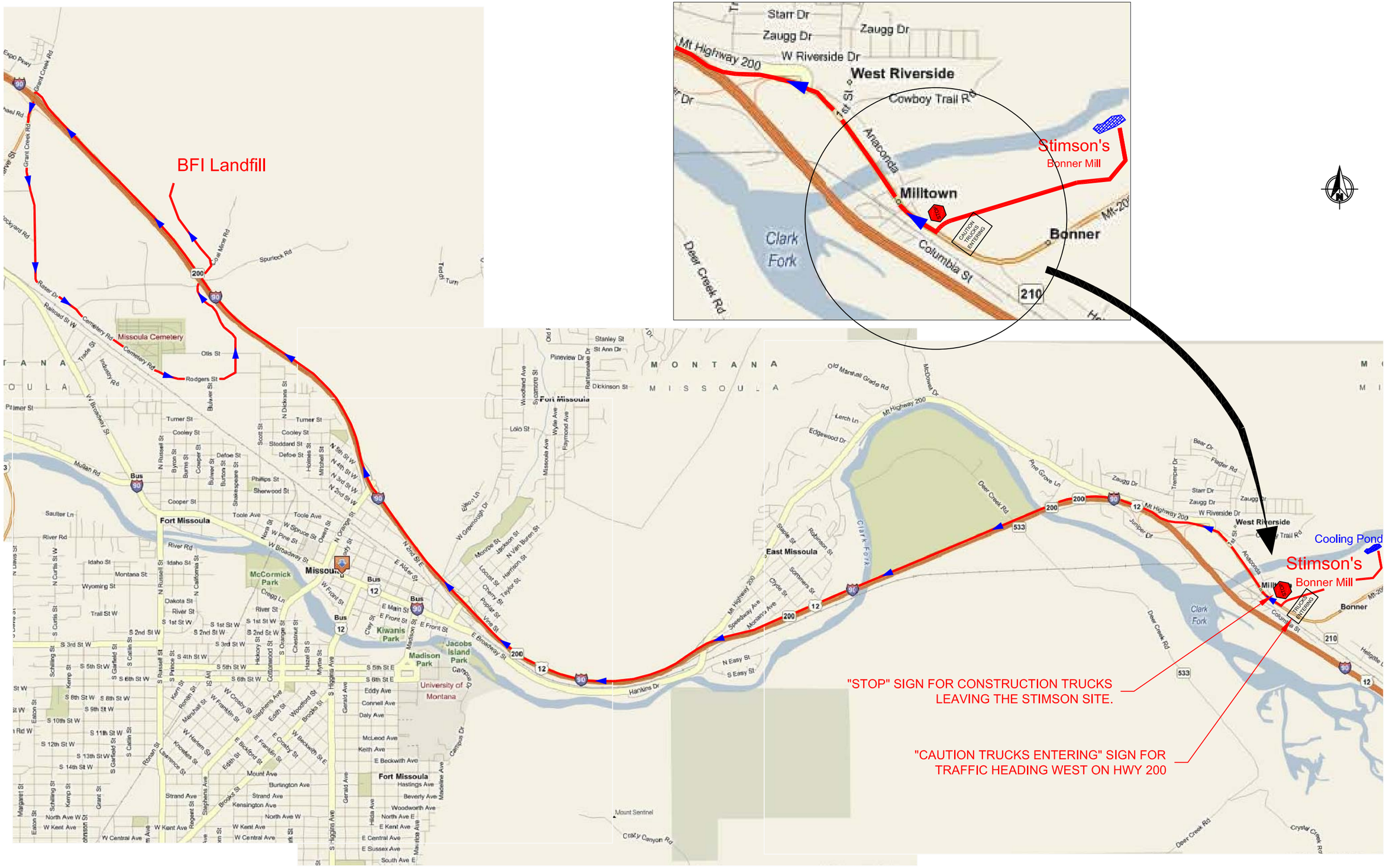
WILLIAM J. OTTEN, WEED PREVENTION COORDINATOR
MISSOULA COUNTY WEED DISTRICT
2825 Santa Fe Court
Missoula, MT 59808
Phone: 406-258-4218 Fax: 406-258-3916

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:
STIMSON LUMBER MILL SITE
Milltown, Montana

TITLE:
Figure 1
Stormwater Controls for
Cooling Pond Excavation

APPENDIX H
TRAFFIC PLAN



ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

PREPARED FOR:
STIMSON LUMBER MILL SITE
Milltown, Montana

TITLE:
Figure 1
Site Location & Haul Route with Traffic Controls to Allied Waste Landfill

Drawn:	J. Stone
Checked:	D. McCaffery
Approved:	x
Date:	02-13-09
Dwg. No.	x

APPENDIX I
SAMPLING & ANALYSIS PLAN

December 1, 2009

Keith Large
Montana Department of Environmental Quality
Remediation Division
1100 North Last Chance Gulch
Helena, Montana 59620

Subject: **Sampling and Analysis Plan for the Cooling Pond, Fire Pond Lagoon and East Log Track Area - Stimson Lumber Mill, Bonner Montana**

Dear Mr. Large:

On behalf of the Stimson Lumber Company, PBS&J and Envirocon submit this Sampling and Analysis Plan (SAP) for the Cooling Pond, Fire Pond Lagoon and East Log Track Areas of the Stimson Lumber Mill in Bonner, Montana. If you have any questions about the enclosed plan or require additional copies, please contact me at (406) 532-7249.

Sincerely,

Tyler Etzel
Sr. Scientist

Enclosure

cc: Steven Petrin, Stimson Lumber Company
Max Miller, Tonkin Torp
Dan McCaffery, Envirocon
Scott Gestring, DEQ
Bill Kirley, DEQ

COOLING POND, FIRE POND LAGOON & EAST LOG TRACK AREA
STIMSON LUMBER MILL – BONNER, MONTANA

Sampling and Analysis Plan

Submitted to:

Montana Department of Environmental Quality
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Submittal date:

December 2, 2009

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LIST OF ACRONYMS

AOC	Administrative Order on Consent
ARCO	Atlantic Richfield Corporation
ARM	Administrative Rules of Montana
BFR	Blackfoot River
CFRSSI	Clark Fork River Superfund Site Investigations
COC	Contaminant of Concern
cy	cubic yards
DEQ	Montana Department of Environmental Quality
DM/DV	data management/data validation plan
DQOs	Data Quality Objectives
DSR	Data Summary Report
DTSC	Department of Toxic Substance Control
EE/CA	Engineering Evaluation/Cost Analysis
EPA	Environmental Protection Agency
EPH	extractable petroleum hydrocarbons
GIS	Geographic Information System
GPC	Gel Permeation Chromatography
HASP	Health and Safety Plan
PCBs	Polychlorinated Biphenyls
ppm	parts per million
PRG	preliminary remediation goal
QA/QC	quality assurance/quality control
QC	quality control
RA	Remedial Action
RBSLs	Risk-Based Screening Levels
SAP	Sampling and Analysis Plan
SOPs	Standard Operating Procedures
SWPPP	Storm Water Pollution Prevention Plan
TSCA	Toxic Substances Control Act
WQB	Water Quality Bulletin

1.0 INTRODUCTION

This Sampling and Analysis Plan (SAP) identifies the soil, sediments, and materials sampling and analytical procedures that will be employed for remediating soils, sediments, materials and a berm structure containing polychlorinated biphenyls (PCBs) and extractable petroleum hydrocarbons (EPH) within Stimson Lumber Company's Bonner Mill cooling pond (including the east log track area), and the fire pond lagoon areas.

The work is being conducted on behalf of Stimson Lumber Company to comply with the requirements of a request to conduct sampling by the Montana Department of Environmental Quality (DEQ). The sampling requested by DEQ will:

1. provide additional supporting data for:
    a. excavation and disposal of PCB-impacted material (material containing more than 0.74 part per million (ppm) PCBs to be disposed of off-site; material containing PCBs between 0.22 and 0.74 ppm to be deposited in DEQ-approved locations on-site) (type 1a), and
    b. excavation and disposal off-site of EPH-impacted material above DEQ Risk-Based Screening Levels (RBSLs) (type 1b),

2. support removal of the cooling pond berm, and

3. support the re-contouring of the Blackfoot River (BFR) streambed and streambank.

This general approach regarding 1.a., 2., and 3., above was selected by DEQ during the engineering evaluation/cost analysis documented in the "Draft Final Expanded Engineering Evaluation/Cost Analysis for the Stimson Lumber Company Cooling Pond," Olympus Technical Services, Inc., September 2007 (EE/CA) and the corresponding Interim Action Memorandum issued by DEQ in October 2009. This approach has also been extensively previewed with EPA Region 8 TSCA staff. The sampling and analysis approach for EPH-impacted material has been coordinated with DEQ's Petroleum Technical Section.

2.0 PROJECT DESCRIPTION

The former Stimson Bonner Mill is a recently closed sawmill and plywood manufacturing facility located in Bonner, Montana. The cooling pond historically received water from various sources at the mill, including storm water runoff, boiler blow-down water, and non-contact cooling water. Since the mill was closed in 2008, the cooling pond no longer receives water from boiler blow-down or non-contact cooling water; only storm water runoff continues to enter the cooling pond. The pond is approximately 500 feet long by 70 feet wide and encompasses approximately 35,000 square feet or about ¾ acre. The pond was installed and modified by the prior site owners and has been in use since at least 1956, and potentially before 1940. The cooling pond was first used as a log-storage pond, and more recently as a cooling pond. The cooling pond is oriented with its long axis parallel to the Blackfoot River; it has been partially

filled in over time. The site, which includes the cooling pond and berm (including the east log track area), and the fire pond lagoon location within the mill site is depicted on **Figure 1**.

DEQ has determined that the PCBs and petroleum hydrocarbon concentrations in the cooling pond sediments (including the east log track materials) and in the fire pond lagoon areas, coupled with the potential risk that the cooling pond berm could fail due to a high flow event, may present an unacceptable risk to human health and the environment. Once completed, the remedial action (RA) will eliminate these potential risks. This SAP was requested by DEQ to develop sampling strategies for additional characterization of the extent of PCBs and petroleum hydrocarbon impacts above clean-up levels in the cooling pond (including the east log track materials) and fire pond lagoon areas, for stockpiled material disposal determination, and for PCB and petroleum-impacted material removal confirmation.

2.1 Project Objectives

The objectives of this sampling plan are to assess the PCBs contamination of cooling pond sediment (including the east log track area materials) and the fire pond lagoon area materials, and groundwater in the fire pond lagoon area. In addition to PCBs sampling, other samples in cooling pond sediment (including the east log track area) and the fire pond lagoon area will be analyzed for EPH screen.

The data will be used to: 1) characterize the extent of PCBs impacts above clean-up levels in the cooling pond (including the east log track area) and fire pond lagoon areas; 2) to characterize the two impacted areas for EPH; 3) for excavated or stockpiled material disposal determination; and 4) for PCBs-impacted and petroleum-impacted material removal confirmation.

2.2 Site Setting

2.2.1 Location and Topography

The Stimson cooling pond site (Site) is in the Blackfoot River valley at an elevation range of approximately 3,260 to 3,295 feet above mean sea level. The Site occupies relatively flat terrain along the south bank of the Blackfoot River.

2.2.2 Site Development History

The Site development and history presented in this section is taken from the Stimson Cooling Pond SAP (Olympus, 2006b). Stimson employees reported that the pond was built sometime between 1905 and 1940. They reported that the pond used to be periodically dredged, and the practice of placing logs in the pond prior to debarking continued into the early 1970s. The cooling pond north side berm was built onto the historical river bed. Timber crib structures (cribs) were constructed in the river for sawmill operations. The berm was apparently constructed over the cribs and several cribs are visible in the cooling pond berm.

2.2.3 Previous Investigations

Relevant previous investigations at this site include the *Site Characterization Report* (Olympus, 2006a), *Sampling and Analytical Plan, Cooling Pond and Berm Characterization* (Olympus, 2006b), *Expanded Engineering Evaluation/Cost Analysis* (Olympus, 2007), *Fire Pond Lagoon Hydraulic Release Investigation* (PBS&J, 2006), *Stimson Fire Pond Lagoon Additional Corrective Actions and Groundwater Monitoring Report* (PBS&J, 2007) and, *Phase II Environmental Site Assessment Report*, (WESTON, 2008)

3.0 DATA QUALITY OBJECTIVES

Data quality objectives (DQOs) are qualitative and quantitative statements that define the types and quality of information and data necessary to support decision making. DQOs for this investigation were developed consistent with the seven-step process described in *Data Quality Objectives Process for Hazardous Waste Site Investigations* (EPA, 2000). The DQO process is an iterative planning approach used to develop sampling designs to collect the right type, quantity, and quality of data to support decision making.

The seven steps of the process are as follows:

Step 1: State the problem;
Step 2: Identify the decision;
Step 3: Identify the inputs to the decision;
Step 4: Define the boundaries of the investigation;
Step 5: Develop a decision rule;
Step 6: Specify tolerable limits on decision errors; and
Step 7: Optimize the design for obtaining data.

3.1 Problem Statement

Step 1 of the DQO process is to define or describe the environmental problem to be studied so that the focus of the study will be unambiguous. To accomplish this, the following tasks need to be completed:

- Describe the problem; and
- Develop a conceptual model of the environmental hazard to be investigated.

Problem Description: Portions of the Stimson cooling pond (including the east log track materials), associated cooling pond berm, and the fire pond lagoon area potentially contain PCB levels above EPA's preliminary remediation goal (PRG) of 0.74 mg/kg (0.22 mg/kg within floodplain areas). In addition, the fire pond lagoon and east log track areas may contain petroleum hydrocarbon levels above DEQ RBSLs. The Site requires additional characterization of PCBs and EPH levels to determine excavation surfaces and disposal determination.

Conceptual Model: Based on historical sampling, elevated concentrations of PCBs are found in soils and sediment in the cooling pond area and possibly the fire pond lagoon area. The primary

source of these contaminants is believed to be from historical releases of oils, containing PCBs, at the site, and associated storm water runoff.

3.2 Decision Requirements

This step identifies the principal study questions and defines options for addressing those questions. The outputs for this step are decision statements that link the principal study questions to possible actions that will solve those questions. To accomplish this, the following tasks need to be accomplished:

- Identify the principal questions;
- Define alternative actions;
- Develop decision statements; and
- Organize multiple decisions.

The principal questions focus on determining PCBs and petroleum hydrocarbon concentrations for industrial properties planned for redevelopment to determine if material disposal is required and how material requiring disposal should be disposed of. The principal questions are:

Principal Study Questions	Decision Statements and Alternative Actions
Has PCB data adequate for the purpose of determining removal and disposal requirements been collected in the past?	If yes, prior sample collection results will be compiled and compared to the 0.22 ppm for floodplain and 0.74 ppm outside the floodplain PCBs action levels to determine if removal/disposal is required. If no, additional soil data collection will be conducted; and the results compared to the site specific action levels to determine if removal/disposal is required.
Does the material in the cooling pond (including the east log track area) and the fire pond lagoon area contain EPH levels above the DEQ screening level concentrations?	If yes, the sample will be fractionated (EPH fractions analysis) and the results will be compared to DEQ Tier I RBSLs to determine if there are exceedances and whether handling of material as petroleum-contaminated is required. If no, additional soil data collection will be conducted; and the results compared to the risk based screening level to determine whether handling of material as petroleum-contaminated is required.
Does cooling pond and fire pond lagoon dewatering water or storm water contain PCBs concentrations above DEQ-7 for surface water?	If yes, water will require treatment prior to discharging to the Blackfoot River. If no, water may be discharged to the Blackfoot River.
Does cooling pond and fire pond lagoon dewatering water or storm water contain petroleum hydrocarbon concentrations above DEQ nondegradation rules?	If yes, the discharge will be under a general permit or individual MPDES permit and satisfy the following nondegradation rules. 1. Carcinogenic parameters in the discharge will not exceed ambient in stream concentration and will be treated to less than the reporting values as outlined in DEQ-7. 2. Parameters that are not carcinogens may exceed ambient in-stream concentrations but will not exceed trigger values, as outlined in DEQ-7 outside of a mixing zone obtained in conjunction with an individual MPDES Permit, as prescribed in ARM 17.30.501 et seq. 3. Under the general discharge permit, bio-monitoring or a priority pollutant scan will be performed after treatment and before discharging, with results reported to the Water Protection Bureau. 4. Allowance of one week to process authorization under a general permit and up to 60 days to process an individual MPDES permit. If no, water may be discharged to the Blackfoot River under a general permit.

Principal Study Questions	Decision Statements and Alternative Actions
Does groundwater contain PCBs concentrations above DEQ-7 for groundwater at both the high and low groundwater condition?	If yes, groundwater monitoring will continue until two consecutive rounds (one at high water and one at low water) demonstrate that groundwater meets DEQ-7 standards for PCBs. If no, no further action required.
Does groundwater contain EPH concentrations above the screening level (1,000 µg/l)?	If yes, groundwater monitoring will continue until two consecutive rounds (one at high water and one at low water) demonstrate that groundwater meets DEQ Tier I RBSLs for petroleum hydrocarbons. If no, no further action required.

3.3 Decision Inputs

This step identifies the information required to resolve the decision statements.

- Identification of the needed information.
- Using the existing list of applicable DEQ approved soil cleanup action levels for the Stimson cooling pond site as set forth in the DEQ Interim Action Memo (Oct. 2009).
- Developing a list of information that may be important for future data use. This includes ensuring that the newly collected data/information can be merged into, or is compatible with, an existing database.
- Confirming that sampling and analytical methods exist to meet detection limit criteria and action levels.

Information Needed: If existing data are not available to address the decision statements identified in Step 2, surface and subsurface soil samples will be analyzed for PCBs and EPH Screen, and potentially other constituents. Sample collection will be completed by Stimson and/or their designee (contractors).

Action Levels: Risk-based action levels for solid media have been established for the Stimson site. PCBs and petroleum hydrocarbons are the primary contaminants of concern (COCs). The action level for PCBs in soil requiring excavation and off-site disposal is 0.74 ppm; the action level for removing PCB-impacted material from within 10 feet of the post-RA floodplain boundary is 0.22 ppm. The action levels for petroleum hydrocarbons for excavation and offsite disposal will be any exceedance of DEQ Tier I RBSLs for the following EPH fractions: C11-C22 aromatics, C9-C18 aliphatics, or C19-C36 aliphatics.

Integration of New Data: Stimson will ensure that standard practices are employed during this sampling and analysis campaign so that the analytical results will be internally consistent and comparable with other similar studies, to the extent possible.

Sampling and Analytical Methods: The media to be sampled, sampling procedures, analytical parameters, expected parameter concentrations, and laboratory methods planned for this investigation are consistent with standard guidelines and practices as described in this SAP.

3.4 Study Boundaries

This step defines the spatial areas to which decisions will apply and determines where, and when, data should be collected.

- Define the target population of interest;
- Specify the spatial boundaries that clarify what the data must represent; and
- Determine the practical constraints on collecting data.

Target Population of Interest: The target population of interest includes the cooling pond and berm (including the east log track materials) and fire pond lagoon areas.

Spatial Boundaries: The general spatial boundary is areas within the Stimson Site as defined by the cooling pond sediment boundary, cooling pond berm, fire pond lagoon soil removal boundary, and east log track soil removal boundary as seen on **Figure 1**. The PCB-specific spatial boundary is depicted on **Figure 2.1**, but may be expanded within the entire general spatial boundary, cited above, at DEQ's discretion based on the data as it becomes available. The petroleum hydrocarbon-specific spatial boundary is depicted on **Figure 2.2**, but may also be expanded within the entire general spatial boundary, cited above, at DEQ's discretion based on the data as it becomes available. **Figure 3** is an additional figure showing the detailed sampling points S-40A, S-40B, S-40C, and S-40D which will be concentrated proximal to historical sampling point B-2.

Practical Constraints on Collecting Data: Practical constraints on data collection include weather conditions with sampling typically planned for low-water conditions. Other potential constraints may be due to buildings south of the fire pond lagoon area and the log processor machinery south of the cooling pond.

3.5 Decision Rule

This step includes the following:

- Specify the parameters important to making decisions about the target populations;
- Select action levels that set the boundaries between one outcome of the decision process and another outcome; and
- Select the measurement and analytical methods capable of performing over the expected range of values and verify that the action levels are greater than the detection limits of the measurement method when practicable.

Parameters and Action Levels: The key parameters for this investigation are concentrations of PCBs and petroleum hydrocarbons found in surface and subsurface soils and materials. The industrial PRG for PCBs in solid media is 0.74 ppm (mg/kg) and will apply throughout the RA areas of interest. The residential PRG of 0.22 ppm will apply to the post-RA floodplain and for 10 feet inland of the floodplain. Material in the cooling pond, fire pond lagoon area and east log track area will also be sampled for EPH screen, when applicable. If the TEH screening level

exceeds 200 mg/kg, EPH fractions will be analyzed, where appropriate, on the sample and the results will be compared to the DEQ Tier I Risk-Based Screening Levels (RBSLs).

Sample Analysis: Samples collected during this effort will be analyzed in accordance with standard EPA and/or nationally accepted analytical procedures, or by alternative methods if approved by the EPA in consultation with DEQ. The analytical laboratories will adhere to all applicable QC requirements established by the methods approved.

Data Usability: Data generated under this sampling and analysis QA/QC work plan will be evaluated in accordance with appropriate criteria contained in the document, "Guidance on Environmental Data Verification and Data Validation" (EPA, 2002). If the data are determined to be unusable, then re-sampling may be necessary.

3.6 Acceptance Criteria

Decision makers are interested in knowing the true value of the constituent concentrations. Since analytical data are only estimates of the true values, decisions that are based on measurement data could be in error, which is referred to as decision error. There are two reasons why the decision maker may not know the true value of the constituent concentration, these are:

(1) Concentrations may vary over time and space. Limited sampling may miss some features of this inherent variation because it is usually impossible or impractical to measure every point of a population. Sampling design error occurs when the sampling design is unable to capture the complete extent of variability that exists in the true state of the environment.

(2) Analytical methods and instruments are never absolutely perfect; hence a measurement can only estimate the true value of an environmental sample. Measurement error refers to a combination of random and systematic errors that inevitably arise during the various steps to the measurement process.

The combination of sampling design and measurement error is the total study error. Since it is impossible to completely eliminate total study error, steps to reduce or control sampling and analytical error are to be employed so that decision error is minimized. These errors may lead to either over-estimating or under-estimating the concentration of contaminants in site media. Over-estimating contaminant concentrations could result in the removal of solid media that is not a risk and the wasting of resources. Under-estimating contaminant concentrations may result in leaving contaminated soil in-place. To minimize decision errors, the following steps are anticipated:

- identifying representative portions of a soil component for subsurface soil sampling;
- for composite sampling, careful compositing of subsamples following PBS&J Standard Operating Procedures (SOPs);
- for discrete sampling, careful collection following PBS&J Standard Operating Procedures (SOPs);

- the use of field quality assurance (QA) samples (duplicates, trip blanks, decontamination blanks);
- rigorous adherence to approved chain-of custody protocols;
- proper laboratory sample preparation;
- analytical determination is conducted while instrumentation is shown to be in statistical control;
- acceptable laboratory QA results; and
- data generated under this sampling and analysis plan will be evaluated in accordance with appropriate criteria contained in the document, ”Guidance on Environmental Data Verification and Data Validation” (EPA, 2002).

All the information and data gathered during this evaluation will be checked by a qualified environmental professional to ensure they are usable for their intended purposes. For the laboratory analytical data, an evaluation of analytical control limits and of the precision, accuracy, representativeness, completeness, and comparability parameters will be performed. Data results will then be discussed in the context of the risk-based action level, and it will be determined if the total study error could result in an incorrect decision. Using this approach, the probability of making an incorrect decision (i.e., either a false negative or positive) based on the information collected is considered small.

3.7 Optimize the Design

This step identifies a resource-effective data collection design for generating data that are expected to satisfy the DQOs. The data collection design (i.e., sampling program) is described further in Section 4.0 of this SAP.

4.0 SAMPLING PLAN

4.1 Sampling Types

Seven general types of sampling will be conducted under this SAP:

1. Excavation extent and disposal:
    a. PCB-driven excavation extent and disposal – Additional soil boring/test pit sampling data will be collected to supplement the existing PCB data shown in **Table 1**. This information will be used to: 1) guide the excavation; 2) guide removed material segregation based on the “as-found”/in-situ PCB concentrations; and 3) guide the disposition of the segregated materials, based on their concentration levels.

    b. Petroleum hydrocarbon (EPH)-driven excavation extent and disposal – Additional soil boring/test pit sampling data will be collected to supplement the existing petroleum hydrocarbon data shown in **Tables 2.1 – 2.3**. This information will be used to 1) guide the excavation, 2) guide removed materials segregation based on

the in-situ EPH concentrations, and 3) guide the disposition of the segregated materials, based on their concentration levels.

2. Removal confirmation:
    a. PCB-driven excavation confirmation sampling – When the approximate limits of the planned excavation have been reached, the base and sidewalls of the excavation will be sampled to determine whether remaining soils contain PCBs below their action level. Note that, depending on where the excavation base or sidewall is in relation to the post-RA floodplain, the action level may be either 0.22 ppm or 0.74 ppm.

    b. Petroleum hydrocarbon (EPH)-driven excavation confirmation sampling – When the approximate limits of the planned excavation have been reached, the base and sidewalls of the excavation will be sampled to determine whether remaining soils contain EPH constituents below their action level.

3. Wooden Cribs – Wood crib material will be sampled for PCBs to determine disposal in conjunction with sediment and soil material.

4. Surface water – Dewatering water or storm water will be sampled according to SOP 5104.10 to test for applicable MPDES permit parameters as well as PCBs and EPH concentrations. PCBs concentrations will be compared to DEQ-7 requirements prior to discharging to the BFR and EPH concentrations will be compared to **Table 3** DEQ Tier 1 RBSLs.

5. Groundwater – Groundwater monitoring will continue until two consecutive rounds (one at high water and one at low water) demonstrate that groundwater meets DEQ-7 standards for PCBs and petroleum hydrocarbons.

6. Backfill Material – Material proposed for use as backfill will be sampled to confirm that the material is acceptable prior to importation for use on site during the RA.

7. Decontamination Waste– Sampling and RA decontamination waste solids and/or liquids will be sampled prior to proper disposal of such materials.

Stimson will notify DEQ ten days in advance of significant sampling activities (ex. boring or test pit investigation, commencement of excavation confirmation sampling, surface water sampling or groundwater sampling), and DEQ will be afforded the opportunity to collect and analyze split samples.

4.1.1 Excavation Extent and Disposal Sampling

The need for excavation, and the disposition of excavated material, will depend on the level of contamination in the material. Analytical data from sampling type 1a (PCBs) will be used in conjunction with type 1b (EPH) to classify the investigated sediments, woody debris, and other

materials in order to guide the subsequent excavations and to guide disposal for the various levels of contaminated materials. The 5-material classifications are listed below.

1. Soil within 10 feet of the post-RA floodplain boundary that contains PCBs concentrations below EPA's preliminary remediation goal (PRG) for residential use (< 0.22 ppm) AND petroleum concentrations below the DEQ Tier 1 RBCA limits for EPH;

2. Soil outside (beyond) 10 feet of the post-RA floodplain boundary that contains PCBs concentrations below EPA's PRG for industrial use (< 0.74 ppm) AND petroleum concentrations below the DEQ Tier 1 RBCA limits for EPH;

3. Soil containing less than 0.74 ppm PCBs but with petroleum concentrations above DEQ Tier I RBSLs;

4. Soil containing more than 0.74 but less than 50 ppm PCBs, acceptable for disposal at a municipal landfill; and

5. Soil that may contain PCB concentrations exceeding 50 ppm, requiring disposal at a disposal facility permitted to accept Toxic Substances Control Act (TSCA) wastes.

4.1.1.1 PCB and EPH Sampling Regimes

TSCA requires that PCB-impacted solids be delineated in-situ for excavation and disposition. As many as 64 borings, including optional step-out borings, are planned for installation in the cooling pond (including the east log track area) and fire pond lagoon area to delineate the depth and boundaries of the planned excavations of PCB and EPH impacted materials. The soil boring sample results will: 1) determine the extent of materials containing PCBs with more than 0.22 part-per-million (ppm) and EPH above DEQ Risk-Based Screening Levels (RBSLs); and 2) be used to identify specific lenses of materials that fit the various 5-material classifications listed in the previous section. Boring locations and sampling depths may be changed based on field observations, as approved by DEQ. The samples will be logged in the field for physical characteristics in accordance with ASTM D 2488-00.

4.2 PCB Sampling Regime

4.2.1 Cooling Pond and East Log Track Soil Borings

The Cooling Pond EE/CA indicates that the cooling pond sediments and underlying wood debris contain varying concentrations of PCBs and EPH. The zones for PCB delineation are depicted by the orange line on **Figure 2.1**. The zones may be expanded based on the analytical results as they become available.

Initially, the sampling interval approach is based on EE/CA data indicating that the cooling pond sediment thickness ranges between approximately 8 and 16 feet, and is discontinuously underlain by wood waste with a thickness up to 8 feet. Soil borings in and around the cooling pond (S-31 through S-60, excluding S-51 through S-55) will extend 1 foot into native material. Soil borings

in the east log track area (S-21 through S-30 and S-51 through S-55) will extend 20, 25, or 30 feet as indicated on **Table 3** or deeper as may be determined in the field. The borings will produce continuous cores, assuming that a direct-push or sonic drill rig is employed. Alternative drilling methods shall be approved by DEQ and EPA.

For continuous cores, each sample will be obtained by collecting material from a 3-foot length of the core. Where sediments are 12 – 18 feet thick, three or four samples will be collected for analysis; where sediments are 8 – 12 feet thick, two or three samples will be collected; and where sediments are less than 8 feet thick, one or two samples will be collected. In addition to the sediment samples collected in the cooling pond area, a single wood waste sample from each boring will be collected for analysis where significant wood waste (>1 foot) is encountered, and a single native material sample will be collected for analysis within the first foot of the native material. The number of samples collected from each boring, depending on sediment and wood waste thickness, will be determined in the field and approved by on-site DEQ personnel.

Sediment samples, soil samples, and native material will be submitted for quantitative analysis by EPA Method 8082. All wood waste/debris samples will be submitted for quantitative analysis by EPA Method 8082. Additional samples of sediment, soil, wood waste/debris, or native material may be collected and analyzed at the DEQ and/or EPA's discretion and in consultation with the field sampling team (contractor).

4.2.2 Fire Pond Lagoon

The primary focus of the fire pond lagoon investigation is to evaluate the petroleum hydrocarbon (EPH) impacts to area soils and the extent of PCB contamination levels. The EPH investigation approach for the fire pond lagoon area is presented in **Section 4.4**-Petroleum Hydrocarbon Sampling Regime, below. PCB samples will be collected for analysis from borings drilled in the fire pond lagoon area, borings S-1 through S-16 and possibly from the optional, step-out borings S-17 through S-20. However, in the Fire Pond Lagoon area, only two PCBs samples from each boring will be submitted for laboratory analysis using EPA Method 8082. The two samples will come from the same part of the boring core as the EPH samples that are submitted for laboratory analysis, as described in the Petroleum Hydrocarbon Sampling Regime section below. If only one EPH sample is submitted from a boring then only one PCB sample will be submitted for laboratory analysis.

In situations where drill rig access is impractical, test pits will be excavated with a backhoe to native material or a practical depth taking into account worker safety and infrastructure limitations. The location of the test pits and depth of test pit excavation will be determined in the field and approved by DEQ. Samples collected from test pits will be logged in accordance with ASTM D 2488-00. The frequency of test pit samples and submittal procedures will follow those described above for the soil borings.

All PCB cores obtained during the PCB investigation will be archived for potential future needs until the RA has been completed and the final report accepted by MDEQ and EPA.

4.3 Excavation Confirmation PCB Sampling

The extent of the final excavation for PCBs contamination will be guided by excavation base and sidewall soil confirmation sample analyses. For floodplain areas (areas within 10 feet of the top of post-RA riverbank) confirmation sampling and excavation will continue until sampling results document that soil with concentrations exceeding 0.22 ppm PCBs have been removed. For areas more than 10 feet from the top of the post-RA riverbank, excavation will cease when confirmation sampling indicates that soil contains less than 0.74 ppm PCBs.

In cases where action level exceedances remain, additional material in that area will be excavated and the new base or sidewall(s) sampled until no exceedances remain in-situ. All final confirmation samples will be analyzed quantitatively (by EPA Method). Confirmation samples will be collected as follows:

- Base of excavation samples – one PCB composite sample, consisting of five subsamples, collected for every 25-foot by 25-foot area (approximately 625 square feet, or less).
- Excavation sidewall samples – one PCB composite sample, consisting of five subsamples, collected from sidewalls every 25 lineal feet.

4.4 Petroleum Hydrocarbon Sampling Regime

The soil boring petroleum hydrocarbon sample results will be compared to DEQ Tier I RBSLs to determine if handling the material as petroleum-contaminated is required. Cleanup levels (RBSLs) for EPH petroleum constituents are summarized below:

- C9-C18 Aliphatics: The risk-based screening level for commercial soils is 1,000 mg/kg for soils 0 to 2 feet below ground surface (bgs) and 2,000 mg/kg for soils greater than 2 feet bgs. Any material left or placed on the surface with contamination above the 200 mg/kg residential risk-based screening level will require an institutional control (IC) to prevent residential use.
- C19-C36 Aliphatics: The risk-based screening level for commercial surface soils and subsurface soils is 100,000 mg/kg. Any material left or placed on the surface with contamination above the 20,000 mg/kg residential screening level will require an IC.
- C11-C22 Aromatics: The surface and subsurface risk-based screening level for all areas where sample collection depth to groundwater is between 0 to 10’ (including the river area where applicable) is 400 mg/kg. Where sample collection depth to groundwater is between 10 to 20’ the screening level is 1,000 mg/kg, and where sample collection depth to groundwater is greater than 20’ the screening level is 2,000 mg/kg. Any material left or placed on the surface with contamination above the 500 mg/kg direct contact residential screening level will require an IC, noting however, that materials exceeding 400 mg/kg cannot be placed where depth to groundwater is less than 10 feet.

4.4.1 Soil Borings

Existing data indicates that intermittent portions of the cooling pond and east log track areas may be impacted by petroleum hydrocarbons, and that at least the center of the fire pond lagoon area

is impacted. The areas requiring petroleum hydrocarbon delineation are depicted on **Figure 2.2**, attached. These areas may be expanded based on the analytical results as they become available. Additional samples may be collected and analyzed at DEQ or EPA discretion.
The soil borings will produce continuous cores, assuming that a direct-push or sonic drill rig is employed. The cores from each boring will be divided into 5-foot intervals and discrete samples will be collected from these intervals based on observed matrix characteristics (sediment, wood waste, or native alluvium).

Cooling pond borings S-31 through S-50 may not be analyzed for EPH screen since soil from this portion of the cooling pond will be removed and disposed based PCB concentrations.

Fire pond lagoon soil borings S-1 through S-6 will be advanced to a minimum of 20 feet below ground surface (bgs), and will extend beyond 20 feet if visual/olfactory observations or field screening results indicate the necessity for deeper completion. Soil borings S-7 through S-16 will be advanced to a minimum of 30 feet bgs and will extend beyond 30 feet if visual/olfactory observations or field screening results indicate the necessity for deeper completion. If field screening results and visual/olfactory observations in the fire pond lagoon area indicate contamination extends outside the area described by S-1 through S-16, additional "step out" borings (ex: S-17 through S-20) may be completed to delineate the extent of impacted soil. Onsite field screening results will determine whether "step out" boring samples are screened and analyzed for both PCBs and EPH constituents, or for only one of these contaminants.

Soil borings along the south side of the cooling pond, the east log track area (S-21 through S-30 and S-51 through S-55) will extend 20, 25, or 30 feet as indicated on **Table 3** or deeper as may be determined in the field and approved by DEQ. If field screening results and visual/olfactory observations in the east log track area indicate contamination extends outside the area described by S-21 through S-30, additional "step out" borings may be completed and sampled to delineate the extent of impacted soil.

In situations where drill rig access is impractical, test pits will be excavated with a backhoe to native material or a practical depth taking into account worker safety and infrastructure limitations. The location of the test pits and depth of test pit excavation will be determined in the field and approved by DEQ. Samples collected from test pits will be logged in accordance with ASTM D 2488-00. The frequency of test pit samples and submittal procedures will follow those described above for the soil borings.

4.4.2 Immunoassay Field Screening & Laboratory Sample Submittal

Field-screening of discrete samples collected from the 5-foot intervals will utilize PetroFlag® (Petro Flag) immunoassay format test kits. The PetroFlag® immunoassay field screening will be used to identify the most elevated petroleum hydrocarbon sample from each boring for laboratory submittal. A discreet soil sample from each boring will also be submitted from the soil/groundwater interface and submitted for laboratory analysis of EPH screen.

In the event that no boring intervals indicate elevated field screening readings, a single sample from the soil/groundwater interface will be submitted for EPH screen analysis. If the EPH

screen result exceeds 200 ppm total extractible petroleum hydrocarbons, the sample will be fractionated.

4.5 Excavation Confirmation Petroleum Hydrocarbon Sampling

After the material has been excavated and disposed of, the base and sides of the excavation(s) will be sampled to document that petroleum hydrocarbon action levels have been attained. In cases where action level exceedances remain, additional material in that area will be excavated and the new base or sidewall(s) sampled until no exceedances remain in-situ. Confirmation samples will be collected as follows:

- Base of excavation EPH samples – one discrete EPH screen sample collected for every 25-foot by 25-foot area (approximately 625 square feet, or less).
- Excavation sidewall EPH samples – one discrete EPH screen sample collected from sidewalls for every 25-lineal feet of sidewall.

Soil sampling will be performed in accordance with PBS&J SOPs 5301.10, 5302.10, 5310.10 and 6220.10.

4.6 Wood Debris Characterization

In the fire pond lagoon area a minimum of four samples of the wood debris will be analyzed for EPH screen and PCBs for characterization and disposal purposes. Samples will be obtained based on visual observation of the presence/absence of hydraulic oil. At least two of the woody debris samples will be obtained within 1 to 2 feet of the wood debris/alluvium interface where hydraulic oil saturated conditions exists, and at least two woody debris samples will be collected where unsaturated conditions prevail. The samples will be homogenized by sorting out and retaining fragments up to pea size and discarding sticks and other larger debris.

4.7 Wood Crib Sampling

As part of the RA excavation, existing wood crib material below or within the cooling pond berm will be removed. For disposal determination, removed wood and wood cribbing requires sampling and testing for PCBs concentrations. For each crib sample, a 0.25 inch section of the crib should be removed and quartered to facilitate processing in the laboratory. For each replicate, one quartered specimen, randomly allocated, from each of the crib samples should be aggregated to make a composite sample. One, five-point composite sample will be analyzed for PCBs disposal determination. Sampling methods follow methods used to test treated woods for hazardous waste (DTSC, 2008).

4.8 Surface Water Sampling

The cooling pond currently collects storm water runoff from the site but the storm water source to the cooling pond will be diverted before this sampling exercise commences. Prior to discharging this surface water to the BFR, the water will be sampled and tested. The surface water shall meet requirements in DEQ-7 (DEQ, 2008) prior to discharging. Surface water

samples will be collected from collection points identified in the SWPPP developed for the RA. If dewatering is required beyond storm water collection, dewatering water will be collected and analyzed in a similar manner. Surface water sampling will be collected in accordance with the appropriate SOPs

The current achievable reporting limit for PCBs according to the DEQ-7 table is 1 ug/l. However, the DEQ groundwater standard is 0.5 ug/L, and the surface water standard is orders of magnitude below these levels. DEQ Remediation Division has determined that a reporting limit of 0.5 ug/L is reasonably achievable here and has requested that level to be used as the reporting limit for this action. In addition, surface water will be analyzed for petroleum hydrocarbon constituents and be required to satisfy the following non-degradation rules:

1. Carcinogenic parameters in the discharge may not exceed ambient in-stream concentrations or they must be treated to less than the reporting values as outlined in DEQ-7 or 0.5 ug/L for PCBs.

2. Parameters that are not carcinogens may exceed ambient in-stream concentrations but cannot exceed trigger values, as outlined in DEQ-7, outside of a mixing zone obtained in conjunction with an individual MPDES Permit, as prescribed in ARM 17.30.501 et seq.

3. Under the general discharge permit, bio-monitoring or a priority pollutant scan will be required after treatment and before discharging, with results reported to the Water Protection Bureau.

4. Allow one week to process authorization under a general permit.

4.9 Groundwater Sampling

Groundwater shall be sampled at high and low flow events and sampling will continue until two consecutive rounds demonstrate that groundwater meets DEQ-7 standards for PCBs and meets Tier I RBSLs for petroleum hydrocarbons. Groundwater samples will be collected from existing monitoring wells or new wells if existing wells are damaged or removed during the RA. Monitoring well(s) to be sampled will be selected after the RA is complete. Replacement groundwater monitoring wells may need to be installed following completion of the RA. The Groundwater sampling will be collected in accordance with PBS&J SOPs 3401.10, 3402.10, 3403.10, 4202.20, 4203.10, 4205.10, 5201.10, 5202.10, 5210.10, and 5210.20. The samples will be analyzed for PCBs and, where applicable, EPH screen. In the event that the EPH screen result exceeds 1,000 µg/l, EPH fractions will be analyzed on the sample.

4.10 Backfill Confirmation Sampling

Confirmation sampling is required to ensure backfill material is clean fill. One 5-point composite sample will be collected for every 400 cy of backfill material. The composite sample will be analyzed for PCBs, EPH screen, and the eight Resource Conservation Recovery Act (RCRA) metals (i.e. arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury). If large volumes of backfill material are needed, an alternative sample frequency may be used as

approved by DEQ. Sampling will be performed in accordance with PBS&J SOP 5310.10 for compositing soil samples.

4.11 Decontamination Confirmation Sampling

A visual inspection of all trucks leaving the site will be made to confirm that trucks are clean of any excess material or thick dusts. If necessary, excess material build up (i.e. caked soil) on equipment will be sampled by scraping or brushing the material from the equipment with a decontaminated stainless steel spoon or brush and composited. The composited sample will be tested for PCBs and, where applicable, EPH screen (fractions). As part of the decontamination plan, if necessary, decontamination sampling will be conducted to verify the decontamination of equipment used to perform the sampling and RA activities.

Any decontamination waste solids or liquids will be disposed of in the active excavation and included within the contaminated soil matrix.

4.12 Soil Sample Collection

4.12.1 Soil Sampling Depths

If material is in place, a sample will be collected based on criteria stated in relevant previous sections. The depth increment sample shall be collected from the entire interval and not biased by sample mass collected largely from the top or bottom of the increment. Decisions regarding the collection depths of samples will be made in the field by sampling personnel and approved by on-site DEQ personnel.

If material has been excavated and stockpiled, samples will be collected from the 0-18 inch depth or maximum depth achievable with the available sampling equipment.

4.12.2 Soil Sample Compositing

For all composite sampling, the composite sample will be submitted to the laboratory for analysis. During the homogenization process, large particles (greater than 0.5 inches in diameter) will be discarded. The sampler will record the soil properties, such as surface conditions, presence and average diameter of rock, and presence of roots.

Samples will be collected by a sampling technician wearing disposable nitrile gloves, and using a stainless-steel trowel decontaminated between samples or using a disposable sampling device. Subsamples will be mixed in a decontaminated stainless-steel bowl or disposable plastic container. Samples collected from within excavations will be obtained using safe excavation-entry procedures as described in the Health and Safety Plan (HASP).

4.13 Maps

Using available Geographic Information System (GIS) data, where available, a template of each soil unit to be sampled will be created to document individual soil components, sample locations,

etc. for in place sampling. All subsample locations shall be shown on this map. Locations of all borings or test pits will be recorded with global positioning system (GPS) survey equipment or other available survey equipment in accordance with the site topography shown on **Figure 1**. For stockpile sampling, a sketch of the stockpile and sampling locations will be recorded in the field notebook.

4.14 Analytical Methods

The samples will be analyzed for PCBs using Gel Permeation Chromatography (GPC) methods described by EPA Method 8082 (EPA, 2005). Energy Labs is proposed to complete the lab analysis for the samples. Energy Labs reporting limits (RLs) for EPA Method 8082 are 0.5 ug/L for water and 0.017 mg/kg for soil.

Fire pond lagoon area, east log track area and applicable cooling pond samples will be analyzed for EPH using the May 2004 Massachusetts method as modified by DEQ. Energy Labs reporting limits (RLs) for May 2004 MDEP Method (EPH screen) are 0.30 mg/l for water and 20 mg/kg for soil.

4.15 Standard Operating Procedures for Sampling Activities

PBS&J standard operating procedures (SOPs) (on file with DEQ) will be used for all soil, groundwater, and surface water sample handling, collection, and shipment. The PBS&J SOPs expected to be used for this sampling effort include: 3401.10 *pH Measurements*; 3402.10 *TDS - Cond. Measurements*; 3403.10 *Dissolved O2 Measurements*; 4202.20 *Groundwater Level Measurement Form*; 4203.10 *Static Water Level Measurement*; 4203.20 *Well Completion-Above Grade Form*; 4203.21 *Well Completion-Flush Form*; 4205.10 *LNAPL Measurement*; 4303.10 *Petroflag® Hydrocarbon Analysis*; 4420.20 *Soil Description Form*; 5104.10 *Surface Water Grab Sampling*; 5104.20 *Surface Water Sampling Form*; 5201.10 *Monitoring Well Purging & Sampling*; 5202.10 *Low Flow Monitoring Well Purging & Sampling*; 5210.10 *Groundwater Sampling Procedure*; 5210.20 *Groundwater Sampling Form*; 5212.10 *Volatile Organic Compound (VOC) Sampling*; 5214.10 *Semi-Volatile Organic Compound Sampling*; 5301.10 *Surface Soil Sampling*; 5302.10 *Subsurface Soil Sampling*; 5302.20 *Boring Log Form*; 5310.10 *Compositing Soil Samples*; 6209.10 *Surface Water Equipment Decon*; 6210.10 *Groundwater Equipment Decon*; 6220.10 *Soil Sampling Equipment Decon*; 8100 *Field Logbooks/Forms;* 8105.10 *Project Field Logbook*; 8106.10 *Field Form Protocol*; 8106.20 *Daily Field Activity Log Form*; 8106.21 *Photo Log Form*; 8106.22 *Site Sketch*; 8106.23 *Sample Plan Form*; 8200 *Sample Packaging and Shipping;* 8210.10 *Groundwater and Surface Water Sample Packaging and Shipping*; 8220.10 *Soil & Waste Sample Packaging and Shipping*; *8300 Field Quality Control Samples;* 8301.10 *Sample Blanks and Duplicates*; 8401.10 *Sample Custody*; 8500.10 *Identification of Samples and Analytical Results*; 8600.10 *Data Security and Data Transfer*; and, 8601.10 *Tracking Lab Data/Reports*.

5.0 QUALITY AND ASSURANCE PLAN

5.1 Fieldwork Data Quality

5.1.1 Decontamination

Latex gloves will be worn during sampling to minimize potential cross-contamination. Used gloves will be discarded after sampling and a new pair will be worn for sampling at each sampling location. Pre-cleaned sample containers provided by the laboratory will be used for all samples. Sample containers will be filled and/or compacted, and inspected to insure there is no headspace within the container. After each sample is filled, it will promptly be placed into a cooler containing ice.

All sampling equipment will arrive at the site fully decontaminated. Equipment will be decontaminated between each sampling station, during each sampling station, after each sampling station, and prior to leaving the site. All sampling equipment will be decontaminated according to the following protocol:

- Clean with tap water and a non-phosphate laboratory detergent, using a brush to remove particulate matter and surface films.
- Triple rinse with tap water.
- Single rinse with a 75%-25% methanol-tap water blend.
- Triple rinse with tap water.
- Triple rinse with deionized water.

5.1.2 Sample Labeling

Each sample will be labeled with a unique identifier consisting of project number-sample location-sample number. Combined with the sampling date and time, this provides unique identification for database management. **Table 5-1** (Sample Nomenclature) identifies the nomenclature, sample type, and location of the samples to be collected. **Table 5-2** shows the sampling requirements and containers. **Table 5-3** (Quality Assurance and Quality Control Sampling Plan) identifies the number and type of QA/QC samples to be collected.

Table 5-1 ***Sample Nomenclature***

Sample ID# (example)	Project Number	Sample Location	Sample Depth Interval
100011001-S1-4	100011001	S	1, 2, 3, 4, 5,….

Notes: 100011001 - PBS&J project number
S # - Boring Location
SW # - Surface Water Sampling Location
MW # - Monitoring Well Sample Location

For surface water and groundwater samples, the sample depth interval will be replaced by the date that the sample was collected. Sample numbers will be documented in the field notebooks and on the chain-of-custody forms, as required by PBS&J SOP 8500.10.

5.1.3 Requirements and Containers

Table 5-2 ***Sampling Requirements and Containers***

Sampling Objective	Matrix	Parameter	EPA Method	Sample Container	Sample Preservation	Sample Holding Time
Presence and magnitude of contamination	Soil	PCBs	SW 8082	One, 4 oz. glass	4º C	14 days
Presence and magnitude of contamination	Groundwater/ Surface Water	PCBs	SW 8082	One, 1,000 ml glass	4º C	7 days
Presence and magnitude of contamination	Soil	EPH screen* EPH Fract., PAHs	May 2004 MDEP, SW 8021B or SW 8260B/8270C	One, 4 oz. glass	4º C	7 days
Presence and magnitude of contamination	Groundwater/ Surface Water	EPH screen* EPH Fract., PAHs	May 2004 MDEP, SW 8021B or SW 8260B/8270C	Two, 1,000 ml glass	sulfuric acid / 4º C	14 days
Presence and magnitude of contamination	Wood/Woody Debris	PCBs	SW 8082	8 oz. glass	4º C	14 days
Presence and magnitude of contamination	Wood/Woody Debris	EPH Screen* EPH Fract., PAHs	May 2004 MDEP, SW 8021B or SW 8260B/8270C	8 oz. glass	4º C	7 days

Note: * If the EPH screen result exceeds 200 ppm (TEH), the sample will be analyzed for EPH Fractions

5.1.4 Quality Assurance and Quality Control

Table 5-3 ***Quality Assurance and Quality Control Sampling Plan***

Sample ID (example)	Analytical Laboratory	Quality Control Sample Type	Rationale
100011001-DP #	EL	Duplicate	Provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology
100011001-EB #	EL	Equipment Blank	Provide information about potential cross contamination effects of decontamination procedures
(see Laboratory report)	EL	MS / MSD[1]	Provide information about the effect of each sample matrix on the sample preparation procedures and the measurement methodology

Notes:
- 100011001 - Project Number
- DP - Duplicate sample
- EL - Energy Laboratories, Billings Montana
- EB - Equipment Blank Sample
- MS / MSD - Laboratory performance samples[1]

The quality of analytical data collected in the field will be evaluated by the following sampling procedures.

- Equipment blanks will be collected from distilled/deionized water rinsate which are collected at the conclusion of equipment decontamination in the field. The rinsate will be submitted to the laboratory "blind" in the appropriate sample container with required preservatives. Equipment blanks should contain no parameter of interest greater than two times the method detection limit. An equipment blank exceeding this limit will trigger an investigation of contaminant sources and corrective action. Equipment blanks are generally required where non-dedicated sampling equipment is in use to insure against cross contamination. One (1) equipment blank will be collected from rinsate after completion of one day fieldwork. The equipment blank will be analyzed for PCBs and EPH screen.

- Field duplicate samples will be collected to assess combined field and laboratory precision. The field duplicate samples will be submitted to the laboratory "blind" in the appropriate sample container. Field duplicate samples will be collected by collecting a sample at a random sampling location, decontaminating the equipment, and collecting an additional sample from the identical location. Duplicates will be analyzed for PCBs and EPH screen. One field duplicate sample will be collected during each fieldwork sampling day. The field duplicate will provide a relative percent difference (RPD) measure of variability between duplicate samples. The RPD should be within 20% to meet QA objectives. Inherent variability of soil may result in exceedance of this objective, in which case laboratory data will be qualified. General field duplicate sampling protocols are described in PBS&J SOP 8301.10.

5.1.5 Fieldwork and Sample Documentation

All sample documents will be completed legibly, in ink in a bound logbook. Any corrections or revisions will be made by lining through the incorrect entry and initialing the error. The following sample documentation will be maintained: field logbook, sample labels, chain-of-custody record, and custody seals. Specific procedures for sample documentation are discussed in Sections 5.2 and 5.3.

5.1.6 Field Logbook

The field logbook is a descriptive notebook detailing site activities and observations so that an accurate account of field procedures can be reconstructed in the writer's absence. All entries will be dated and signed by the individual making the entries and should include (at a minimum) the following information:

- Site name and project number
- Names of personnel on site
- Dates and times of all entries (military time preferred)
- Descriptions of all site activities, including site entry and exit times
- Noteworthy events and discussions
- Site observations and Weather conditions
- Identification and description of samples and locations
- Subcontractor information and names of on-site personnel

- Date and time of sample collections, along with chain-of-custody information
- Record of photographs
- Site sketches

Optional, but pertinent, information is the sampling location. Sample labels will be securely affixed to the sample container. Tie-on labels can be used if properly secured.

5.1.7 Chain-of-Custody Record

A chain-of-custody record will be maintained from the time the sample is collected to its final deposition. Every transfer of samples and custody will be noted and signed for, and a copy must be kept by each individual who signs. When samples (or groups of samples) are not under the direct control of the individual responsible for them, they will be stored in a locked container sealed with a custody seal. The chain-of-custody record should include (at a minimum) the following:

- Sample identification number
- Sample information
- Sampling location
- Sampling date
- Names and signatures of samplers
- Signatures of any individuals with control over samples

5.1.8 Sample Handling and Shipment

Before shipping, each sample jar will be sealed, and caps will be secured with custody seals. Sample jars will be labeled as described above. Sealed containers will be placed in the appropriate transport containers, and the containers will be packed with an appropriate absorbent material. All sample documents will be affixed to the underside of each transport container lid. The lid will be sealed, and custody seals will be affixed to the transport container.

5.2 Custody Seals

Custody seals demonstrate that a sample container has not been tampered with or opened. The individual in possession of the samples will sign and date each seal, affixing it in such a manner that the container cannot be opened without breaking the seal. The name of this individual, along with a description of the sample packaging, will be noted in the field logbook.

All packaging, marking and labeling, and shipping of hazardous materials will be completed in accordance with U.S. Department of Transportation (DOT) regulations. In addition, air carriers that transport hazardous materials, in particular, Federal Express and Airborne Express, require compliance with the current edition of the International Air Transport Association (IATA) dangerous goods regulations, which apply to shipment and transport of hazardous materials by air carrier. Following current IATA regulations will ensure compliance with DOT regulations.

5.3 Quality Assurance Requirements

The following requirements apply to the respective QA objectives and parameters identified in Section 5.0. The following QA protocols for QA data are applicable to all sample matrices:

1. Provide sample documentation in the form of field logbooks and chain-of-custody records. Chain-of-custody records are optional for field screening locations.
2. Summarize and document all instrument calibration and performance check procedures and methods in the field or instrument logbook.
3. Determine and record the detection limit, along with the data, where appropriate.
4. Document sample holding times, including sample collection and analysis dates.
5. Provide initial and continuing instrument calibration data.
6. Collect performance evaluation samples, if appropriate.

Additional QA/QC procedures are described in the PBS&J SOPs 8106.23, 8200, 8210.10, 8220.10, 8401.10,8600.10, and 8601.10.

5.4 Data Validation

Definitive data validation requires that at least 10 percent of the samples in the laboratory data package be evaluated for all of the elements listed in Section 5.1.4; for the remaining samples, precision, accuracy, error determination, detection limits, and confirmed identification will be reviewed. Definitive data validation also requires review of all elements, for all samples, in each analyte category in every tenth data package received from a laboratory. Data generated under this sampling and analysis QA/QC work plan will be evaluated in accordance with appropriate criteria contained in the document, ”Guidance on Environmental Data Verification and Data Validation” (EPA, 2002). The results of 10 percent of the samples in the analytical data packages should be evaluated for all of the elements listed in Section 5.1.4. The holding times, blank contamination, and detection capability will be reviewed for all remaining samples.

6.0 REPORTING

Upon receipt of the PCBs, EPH, and potentially other parameter results, data will be submitted to DEQ and EPA for approval of excavation limits and disposal determination. Within 48 hours of receiving data, Stimson will provide DEQ with confirmation data to document that cleanup levels have been met.

7.0 REFERENCES

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EPA, 2005. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA publication SW-846.

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PBS&J, 2007. Stimson Fire Pond Lagoon Additional Corrective Actions and Groundwater Monitoring Report. March 6.

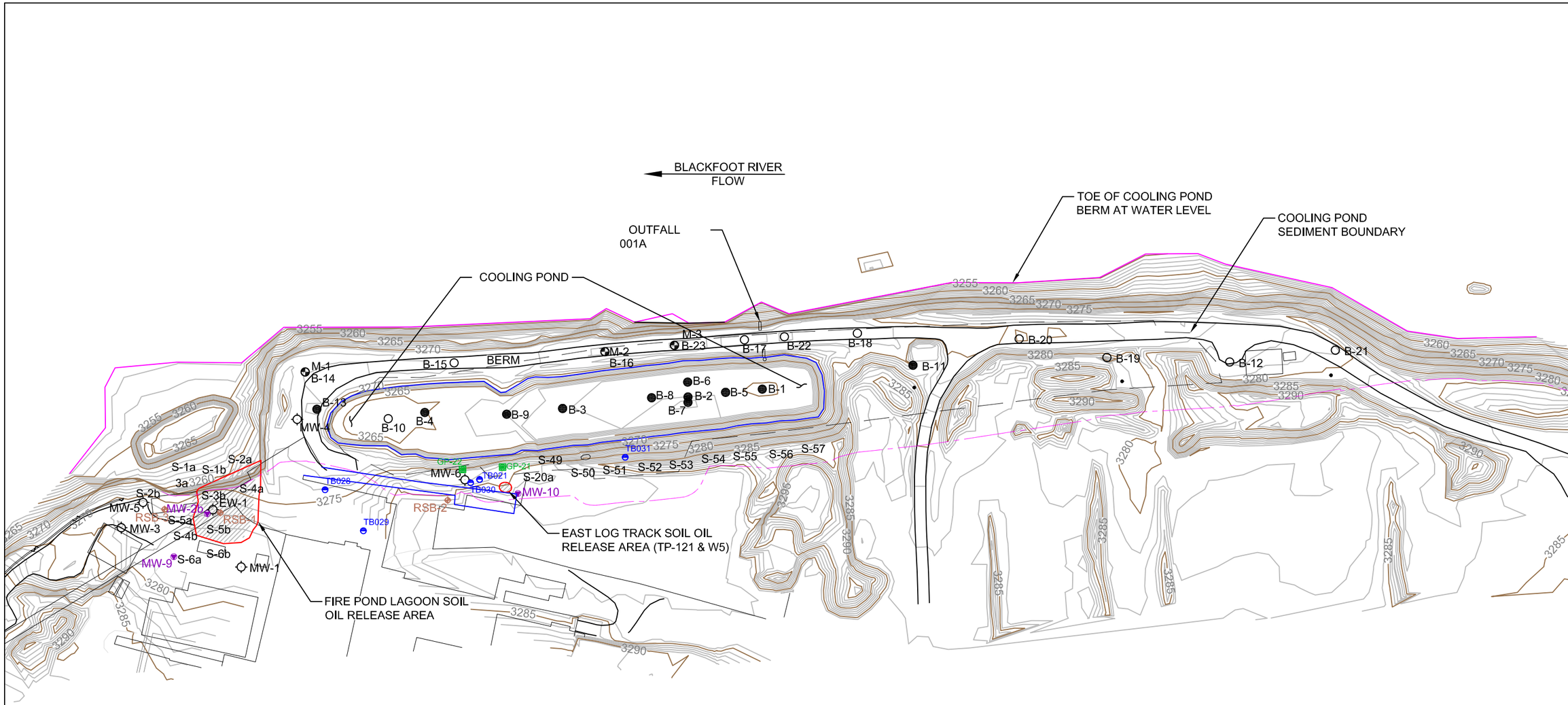
PBS&J, 2009a. Corrective Actions – September 2008, Groundwater Monitoring – November 2008, Stimson Lumber Company, Fire Pond Lagoon Investigation, Bonner, Montana. January.

PBS&J, 2009b. Stimson Bonner Millsite – Phase II data (report not yet issued)

WESTON, 2008. Phase II Environmental Site Assessment Report for the Stimson Lumber Company, 520 SW Yamhill, Suite 700, Portland, Oregon. December 2008.

APPENDIX A

FIGURES



LEGEND

M-1 B-14	SOIL BORING/MONITORING WELL
B-1	SOIL BORING WITH PCB < 0.22 PPM
B-1	SOIL BORING WITH PCB > 0.22 PPM
MW-4	STIMSON MONITORING WELL
MW-9	PBS&J INSTALLED MONITORING WELL
RSB-1	PBS&J BORING
GP-22	WESTON GEO-PROBE
TP028	WESTON TEST PIT
	HC-IMPACTED AREA EXCAVATED 10/04 by PBS&J

NOTES:

1. WESTON TEST PIT LOCATIONS ARE APPROXIMATE
2. THE TOE OF THE COOLING POND BERM (AND THE ELEVATION AS REPORTED IN THE EE/CA) WAS SURVEYED BETWEEN THE MILLTOWN DAM STAGE 1 DRAWDOWN AND MILLTOWN DAM STAGE 2 DRAWDOWN AND BEFORE THE MILLTOWN DAM STAGE 3 DRAWDOWN (MARCH 2009).

N

SCALE IN FEET

50 0 50 100 FEET

1-FT CONTOUR INTERVAL

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

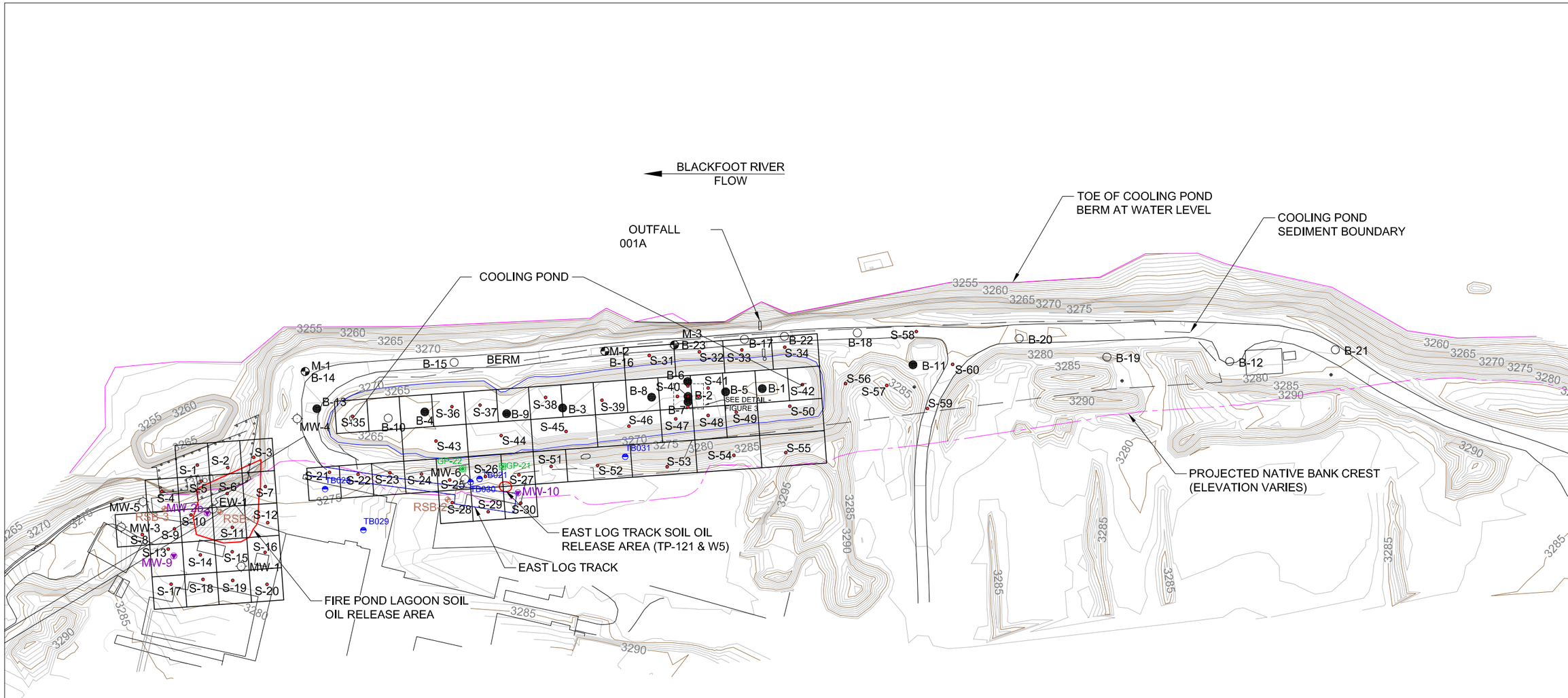
COOLING POND, FIRE POND LAGOON AND EAST LOG TRACK SITE
WITH HISTORICAL SOIL SAMPLING LOCATIONS
COOLING POND SAP - STIMSON COOLING POND SITE

FIGURE 1

Revision: 0

ISSUED FOR:
STIMSON COOLING POND EXCAVATION SAP

Drawn: CEB
Checked: DGB
Approved: DGB
Date: 05-19-09
Dwg. No. BC1202-D001



LEGEND

M-1 B-14	SOIL BORING/MONITORING WELL
B-1	SOIL BORING WITH PCB < 0.22 PPM
B-1	SOIL BORING WITH PCB > 0.22 PPM
MW-4	STIMSON MONITORING WELL
MW-9	PBS&J INSTALLED MONITORING WELL
RSB-1	PBS&J BORING
GP-22	WESTON GEO-PROBE
TP028	WESTON TEST PIT
S-1	PROPOSED SAMPLE LOCATIONS
	HC-IMPACTED AREA EXCAVATED 10/04 by PBS&J

NOTES:

1. WESTON TEST PIT LOCATIONS ARE APPROXIMATE
2. THE TOE OF THE COOLING POND BERM (AND THE ELEVATION AS REPORTED IN THE EE/CA) WAS SURVEYED BETWEEN THE MILLTOWN DAM STAGE 1 DRAWDOWN AND MILLTOWN DAM STAGE 2 DRAWDOWN AND BEFORE THE MILLTOWN DAM STAGE 3 DRAWDOWN (MARCH 2009).

N

SCALE IN FEET

50 0 50 100 FEET

1-FT CONTOUR INTERVAL

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

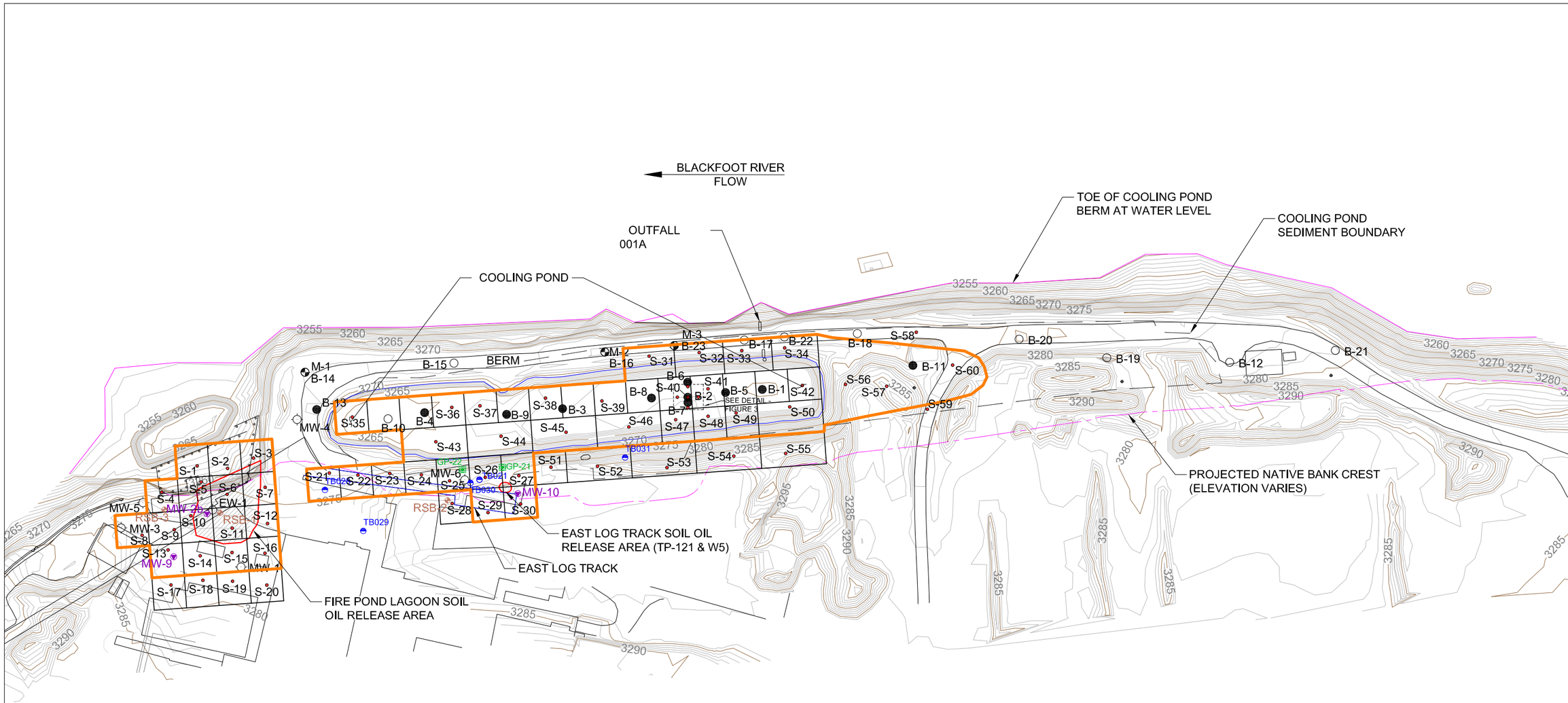
PROPOSED SAMPLING LOCATIONS
COOLING POND SAP
STIMSON COOLING POND SITE

FIGURE 2

ISSUED FOR: SAP

Revision: 0

Drawn: CEB/JR
Checked: DGB/TE
Approved: DGB/TE
Date: 10-26-2009
Dwg. No. BC1202-D001



LEGEND

	PCBs SPECIFIC SAMPLING REGIME
M-1 B-14	SOIL BORING/MONITORING WELL
B-1	SOIL BORING WITH PCB < 0.22 PPM
B-1	SOIL BORING WITH PCB > 0.22 PPM
MW-4	STIMSON MONITORING WELL
MW-9	PBS&J INSTALLED MONITORING WELL
RSB-1	PBS&J BORING
GP-22	WESTON GEO-PROBE
TP028	WESTON TEST PIT
S-1	PROPOSED SAMPLE LOCATIONS
	HC-IMPACTED AREA EXCAVATED 10/04 by PBS&J

NOTES:

1. WESTON TEST PIT LOCATIONS ARE APPROXIMATE
2. THE TOE OF THE COOLING POND BERM (AND THE ELEVATION AS REPORTED IN THE EE/CA) WAS SURVEYED BETWEEN THE MILLTOWN DAM STAGE 1 DRAWDOWN AND MILLTOWN DAM STAGE 2 DRAWDOWN AND BEFORE THE MILLTOWN DAM STAGE 3 DRAWDOWN (MARCH 2009).
3. BORINGS S-17 THROUGH S-20, S-28, S-51 THROUGH S-55, S-58 & S-59 ARE OPTIONAL STEP OUT BORINGS FOR PCBS SAMPLING.

N

SCALE IN FEET

50 0 50 100 FEET

1-FT CONTOUR INTERVAL

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

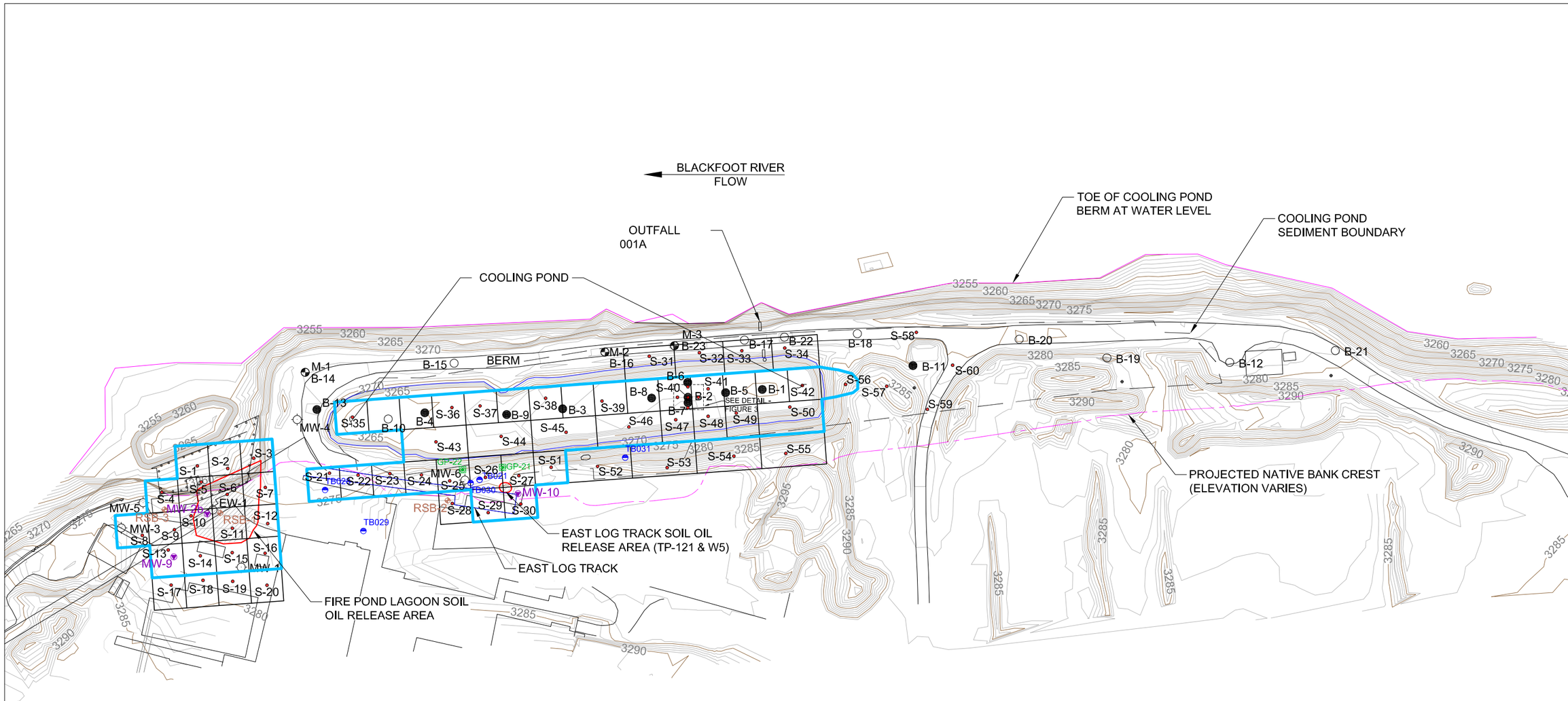
PROPOSED PCBs SPECIFIC SAMPLING REGIME
COOLING POND SAP
STIMSON COOLING POND SITE

FIGURE 2.1

Revision: 0

ISSUED FOR: SAP

Drawn: CEB/JR
Checked: DGB/TE
Approved: DGB/TE
Date: 10-26-2009
Dwg. No. BC1202-D001



LEGEND

	EPH SPECIFIC SAMPLING REGIME
M-1 B-14	SOIL BORING/MONITORING WELL
B-1	SOIL BORING WITH PCB < 0.22 PPM
B-1	SOIL BORING WITH PCB > 0.22 PPM
MW-4	STIMSON MONITORING WELL
MW-9	PBS&J INSTALLED MONITORING WELL
RSB-1	PBS&J BORING
GP-22	WESTON GEO-PROBE
TP028	WESTON TEST PIT
S-1	PROPOSED SAMPLE LOCATIONS
	HC-IMPACTED AREA EXCAVATED 10/04 by PBS&J

NOTES:

1. WESTON TEST PIT LOCATIONS ARE APPROXIMATE
2. THE TOE OF THE COOLING POND BERM (AND THE ELEVATION AS REPORTED IN THE EE/CA) WAS SURVEYED BETWEEN THE MILLTOWN DAM STAGE 1 DRAWDOWN AND MILLTOWN DAM STAGE 2 DRAWDOWN AND BEFORE THE MILLTOWN DAM STAGE 3 DRAWDOWN (MARCH 2009).
3. BORINGS S-17 THROUGH S-20, S-28, S-31 THROUGH S-34, S-52 THROUGH S-55, AND S-57 THROUGH 60 ARE OPTIONAL STEP OUT BORINGS FOR EPH SAMPLING.

N

SCALE IN FEET

50 0 50 100 FEET

1-FT CONTOUR INTERVAL

ENVIROCON
101 INTERNATIONAL WAY
MISSOULA, MONTANA 59808

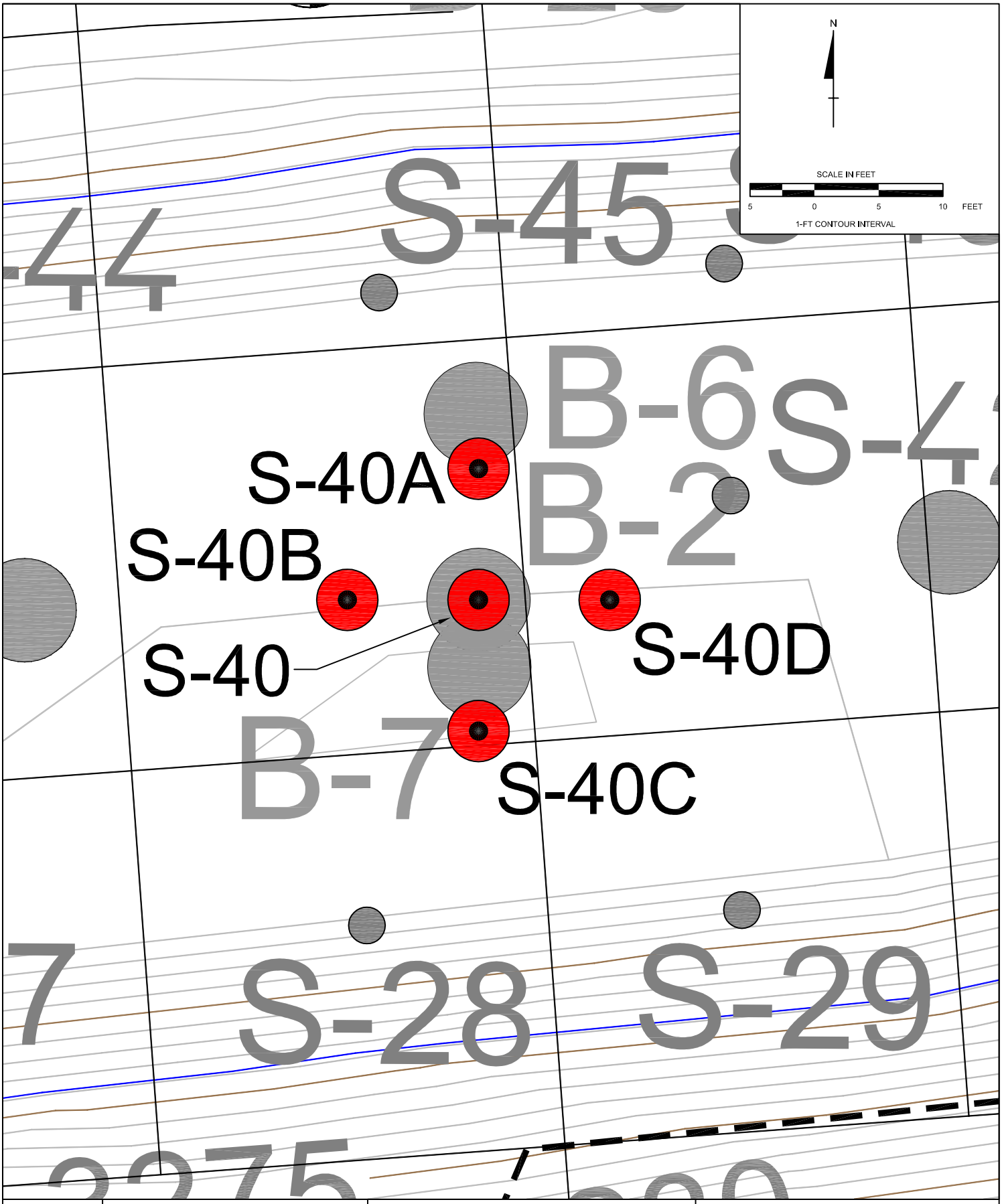
PROPOSED EPH SPECIFIC SAMPLING REGIME
COOLING POND SAP
STIMSON COOLING POND SITE

FIGURE 2.2

Revision: 0

ISSUED FOR: SAP

Drawn: CEB/JR
Checked: DGB/TE
Approved: DGB/TE
Date: 10-26-2009
Dwg. No. BC1202-D001



Drawn: JR	FIGURE 3	B-2 SAMPLE LOCATIONS COOLING POND SAP STIMSON COOLING POND SITE	ENVIROCON 101 INTERNATIONAL WAY MISSOULA, MONTANA 59808
Checked: TE			
Approved: TE			
Date: 10-05-2009	ISSUED FOR: SAP	Revision: 0	
Dwg. No. 100011001			

APPENDIX B

TABLES

TABLE 1 SUMMARY OF EXISTING PCB DATA

	Sample ID	Date	Sample Depth (ft)	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Aroclor-1262	Aroclor-1268
	Cooling Pond Soil and Pond Sediment Samples (Olympus, EE/CA), mg/kg											
1	B1-S-1	3/28/2006	9-11	<4.4	<4.4	<4.4	<4.4	<4.4	24	<4.4		
2	B1-S-2-D	3/28/2006	11-15	<3.3	<3.3	<3.3	<3.3	<3.3	22	<3.3		
3	B1-S-2/3/4	3/28/2006	11-19	<3.1	<3.1	<3.1	<3.1	<3.1	21	<3.1		
4	B2-S-1	3/29/2006	7.5-9.5	<4.3	<4.3	<4.3	<4.3	<4.3	8.9	<4.3		
5	B2-S-2	3/29/2006	9.5-13.5	<11	<11	<11	<11	<11	65	<11		
6	B2-S-2-D	3/29/2006	9.5-13.5	<3.3	<3.3	<3.3	<3.3	<3.3	47	<3.3		
7	B2-S-3/4	3/29/2006	13.5-17.5	<6.3	<6.3	<6.3	<6.3	<6.3	36	<6.3		
8	B3-S-1	3/29/2006	7.5-11.5	<2.5	<2.5	<2.5	<2.5	<2.5	9.6	<2.5		
9	B3-S-1-D	3/29/2006	7.5-11.5	<3.3	<3.3	<3.3	<3.3	<3.3	4.1	<3.3		
10	B3-S-2	3/29/2006	11.5-13.5	<2.7	<2.7	<2.7	<2.7	<2.7	10	<2.7		
11	B3-S-4/5	3/29/2006	15.5-19.5	<5	<5	<5	<5	<5	33	<5		
12	B4-S-1	3/30/2006	3.5-7.5	<0.16	<0.16	<0.16	<0.16	<0.16	0.55	<0.16		
13	B4-S-1-D	3/30/2006	3.5-7.5	<0.03	<0.03	<0.03	<0.03	<0.03	0.22	<0.03		
14	B4-S-2	3/30/2006	7.5-9.5	<4.1	<4.1	<4.1	<4.1	<4.1	2.83	<4.1		
15	B4-S-3	3/30/2006	9.5-11.5	<0.85	<0.85	<0.85	<0.85	<0.85	5.4	<0.85		
16	B4-S-4	3/30/2006	11.5-13.5	<2.2	<2.2	<2.2	<2.2	<2.2	15	<2.2		
17	B4-S-5	3/30/2006	13.5-15.5	<1.7	<1.7	<1.7	<1.7	<1.7	4.8	<1.7		
18	B4-S-6/7/8	3/30/2006	15.5-21.5	<0.74	<0.74	<0.74	<0.74	<0.74	4.0	<0.74		
19	B5-S-1	10/24/2006	4.5-6.5	<0.111	<0.111	<0.111	<0.111	<0.111	0.928	<0.111		
20	B5-S-2	10/24/2006	6.5-8.5	<0.110	<0.110	<0.110	<0.110	<0.110	9.43	<0.110		
21	B5-S-3	10/24/2006	9-11	<0.101	<0.101	<0.101	<0.101	<0.101	1.93	<0.101		
22	B5-S-4	10/24/2006	11-13	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092		
23	B6-S-1	10/24/2006	4.5-6.5	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111		
24	B6-S-2	10/24/2006	6.5-8.5	<0.129	<0.129	<0.129	<0.129	<0.129	6.02	<0.129		
25	B6-S-3	10/24/2006	8.5-9.5	<0.107	<0.107	<0.107	<0.107	<0.107	14.9	<0.107		
26	B6-S-4 (FD)	10/24/2006	4.5-6.5	<0.112	<0.112	<0.112	<0.112	<0.112	0.14	<0.112		
27	B7-S-1	10/25/2006	2.5-6	<0.074	<0.074	<0.074	<0.074	<0.074	0.9	<0.074		
28	LD (FD)	10/25/2006	2.5-6	<0.098	<0.098	<0.098	<0.098	<0.098	0.652	<0.098		
29	B7-S-2	10/25/2006	9-11	<1.384	<1.384	<1.384	<1.384	<1.384	39.9	<1.384		
30	LS (FD)	10/25/2006	9-11	<0.118	<0.118	<0.118	<0.118	<0.118	16.2	<0.118		
31	B8-S-1	10/25/2006	4.5-6.5	<0.099	<0.099	<0.099	<0.099	<0.099	1.27 J	<0.099		
32	B8-S-2	10/25/2006	6.5-8.5	<0.141	<0.141	<0.141	<0.141	<0.141	2.6 J	<0.141		
33	B8-S-3	10/25/2006	8.5-10.5	<0.175	<0.175	<0.175	<0.175	<0.175	12.1	<0.175		
34	B9-S-1	10/26/2006	2-3.5	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111	<0.111		
35	B9-S-2	10/26/2006	3.5-5.5	<0.135	<0.135	<0.135	<0.135	<0.135	0.321 J	<0.135		
36	B9-S-3	10/26/2006	5.5-7.5	<0.136	<0.136	<0.136	<0.136	<0.136	7.92	<0.136		
37	B9-S-4	10/26/2006	7.5-9	<0.211	<0.211	<0.211	<0.211	<0.211	6.08	<0.211		
38	B9-S-5	10/26/2006	9-15	<0.184	<0.184	<0.184	<0.184	<0.184	4.867 J	<0.184		
39	B10-S-1	10/25/2006	9-11	<0.110	<0.110	<0.110	<0.110	<0.110	<0.110	<0.110		
40	B11-S-1	11/6/2006	0-2	<0.059	<0.059	<0.059	<0.059	<0.059	0.469	<0.059		
41	B11-S-2	11/6/2006	11-13	<0.056	<0.056	<0.056	<0.056	<0.056	1.377	<0.056		
42	B11-S-3	11/6/2006	18-20	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079		
43	B11-S-4	11/6/2006	20-22	<0.084	<0.084	<0.084	<0.084	<0.084	<0.084	<0.084		
44	B11-S-5	11/6/2006	24-26	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103	<0.103		
45	B11-S-6	11/6/2006	26-28	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053		
46	B12-S-1	11/6/2006	8-10	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071		
47	B12-S-2	11/6/2006	11-15	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071		
48	B13-S-1	11/6/2006	0-2	<0.054	<0.054	<0.054	<0.054	<0.054	0.248	<0.054		
49	B13-S-2	11/6/2006	18-23	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056		
50	B14-S-1	11/7/2006	0-2	<0.06	<0.06	<0.06	<0.06	<0.06	0.687	<0.06		
51	B14-S-2	11/7/2006	18-20	<0.061	<0.061	<0.061	<0.061	<0.061	0.442	<0.061		
52	B15-S-1	11/7/2006	0-2	<0.06	<0.06	<0.06	<0.06	<0.06	0.122 J	<0.06		
53	B15-S-2	11/7/2006	10-12	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056	<0.056		
54	B16-S-1	11/7/2006	8-10	<0.056	<0.056	<0.056	<0.056	<0.056	0.104	<0.056		
55	B16-S-2	11/7/2006	10-14	<0.086	<0.086	<0.086	<0.086	<0.086	<0.086	<0.086		
56	B16-S-3	11/7/2006	14-16	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075		
57	B16-S-4	11/7/2006	16-18	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092		
58	B16-S-5	11/7/2006	18-23	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092		
59	B16-S-6	11/7/2006	23-27	<0.074	<0.074	<0.074	<0.074	<0.074	<0.074	<0.074		
60	B17-S-1	11/8/2006	6-8	<0.063	<0.063	<0.063	<0.063	<0.063	0.205	<0.063		
61	B17-S-2	11/8/2006	8-18	<0.062	<0.062	<0.062	<0.062	<0.062	0.451	<0.062		
62	B18-S-1	11/8/2006	12-14	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059		
63	B18-S-2	11/8/2006	22-23	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083		
64	B19-S-1	11/9/2006	10-12	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052	<0.052		
65	B19-S-2	11/9/2006	21-23	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094	<0.094		
66	B19-S-3	11/9/2006	26-28	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057	<0.057		
67	B20-S-1	11/9/2006	6-8	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053		
68	B20-S-2	11/9/2006	18-20	<0.078	<0.078	<0.078	<0.078	<0.078	<0.078	<0.078		
69	B21-S-1	11/9/2006	0-2	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J		
70	B21-S-2	11/9/2006	18-20	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J		
71	B22-S-1	11/10/2006	12-14	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J		
72	B22-S-2	11/10/2006	19-21	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J		
73	B22-S-3 (FD)	11/10/2006	19-21	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J		
74	B22-S-4	11/10/2006	23-25	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J		
75	B23-S-1	11/10/2006	10-12	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	0.0565 J	<0.050 J		
76	B23-S-2	11/10/2006	13-15	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	0.227 J	<0.050 J		
77	B23-S-3 (FD)	11/10/2006	13-15	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	0.977 J	<0.050 J		
78	B23-S-4	11/10/2006	16-18	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J		
79	B23-S-5	11/10/2006	18-20	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	0.155 J	<0.050 J		
80	B23-S-6 (FD)	11/10/2006	18-20	<0.050 J	<0.050 J	<0.050 J	<0.050 J	<0.050 J	0.197 J	<0.050 J		
	Fire Pond Lagoon Sonic Drilling Soil Analytical Results (PBS&J, Corrective Actions & Ground Water Monitoring), mg/kg											
81	MW9-2	9/25/2008	14-15	<0.019	<0.019	<0.019	<0.019	<0.019	0.13	<0.019	<0.019	<0.019
82	MW9-5	9/25/2008	31-32	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019
83	MW10-4	9/24/2008	22-23	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
84	MW10-5	9/24/2008	31-32	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019
85	RSB3-4	9/26/2008	25-26	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022	<0.022
86	RSB3-5	9/26/2008	30-31	<0.025	<0.025	<0.025	<0.025	<0.025	0.24	<0.025	<0.025	<0.025
	East Log Track base-of-Excavation (PBS&J, Hydraulic Release Investigation), mg/kg											
87	W-5	6/19/2006	9	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02		
	East Log Track Test Pit (PBS&J Phase II ESA), mg/kg											
88	TP-121		13						0.22			
	East Log Track Test Pit (Weston sampling April 2009), mg/kg											
89	TB028	4/10/2009	2 - 3	<0.00032	<0.008	<0.007	<0.0021	<0.0013	0.038	<0.003		
90	TB028	4/10/2009	6 - 7	<0.00032	<0.008	<0.007	<0.0021	<0.0013	0.017 j	<0.003		
91	TB029	4/10/2009	4 - 5	<0.00032	<0.008	<0.007	<0.0021	<0.0013	0.1	<0.003		
92	TB029	4/10/2009	8 - 9	<0.00032	<0.008	<0.007	<0.0021	<0.0013	0.012	<0.003		
93	TB030	4/10/2009	2 - 3	<0.00032	<0.008	<0.007	<0.0021	<0.0013	0.0043 j	<0.003		
94	TB030	4/10/2009	12 - 13	<0.00032	<0.008	<0.007	<0.0021	<0.0013	<0.0021	0.073		
95	TB031	4/10/2009	2 - 3	<0.00032	<0.008	<0.007	<0.0021	<0.0013	<0.0021	<0.003		
96	TB031	4/10/2009	5 - 6	<0.00032	<0.008	<0.007	<0.0021	<0.0013	0.0071 j	<0.003		

Notes:
mg/kg = Milligrams per Kilogram
- = Not measured or not analyzed
J = Estimated concentration; analyte present in the sample but qualified due to concentrations between the Method Detection Limit and the laboratory reporting limit or qualified quality control issues
< = Undetected at indicated concentration

sample Aroclor 1254 concentration greater than the EPA PRG residential soil of 0.22 mg/kg (floodplain materials)
sample Aroclor 1254 concentration greater than the EPA PRG industrial soil of 0.74 mg/kg

TABLE 2.1
SUMMARY OF EPH DATA COLLECTED FROM GEOPROBE DRILLING

ID:	GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7	GP-8
Location	Fire Pond Lagoon		Fire Pond Lagoon		Fire Pond Lagoon		Fire Pond Lagoon		Fire Pond Lagoon		Fire Pond Lagoon		FPL	FPL
Depth:	8-12' bgs	12-16' bgs	8-12' bgs	12-16' bgs	8-12' bgs	12-16' bgs	8-12' bgs	12-16' bgs	8-12' bgs	12-16' bgs	8-12' bgs	12-16' bgs	12-16' bgs	8-12' bgs
Sample Date:	6/25/2002	6/25/2002	6/25/2002	6/25/2002	6/25/2002	6/25/2002	6/25/2002	6/25/2002	6/25/2002	6/25/2002	6/25/2002	6/25/2002	8/18/2003	8/18/2003
Time:	10:15	10:20	11:10	11:15	12:55	13:00	14:34	14:40	15:40	15:45	16:45	16:50		
Extraction Date:	7/1/2002	7/1/2002	7/1/2002	7/1/2002	7/1/2002	7/1/2002	7/1/2002	7/1/2002	7/1/2002	7/1/2002	7/1/2002	7/1/2002	8/26/2003	8/26/2003
Analysis Date:	7/25/2002	7/25/2002	7/25/2002	7/25/2002	7/25/2002	7/25/2002	7/25/2002	7/25/2002	7/25/2002	7/25/2002	7/25/2002	7/25/2002	9/7/2003	9/7/2003
Lab:	northern	northern	northern	northern	northern	northern	northern	northern	northern	northern	northern	northern	northern	northern
Field & Lab ID:	GP1-3	GP1-4	GP2-3	GP2-4	GP3-3	GP3-4	GP4-3	GP4-4	GP5-3	GP5-4	GP6-3	GP6-4	GP1-4	GP2-3
Total Extractable Hydrocarbons (Screen)	<11	<11	73	<11	<11	<11	30 J	1400	98	380	<11	680	12000	3900
C9-C18 Aliphatics	----	----	<12	----	----	----	----	580	<11	120	----	220	<1800	<1400
C19-C36 Aliphatics	----	----	26	----	----	----	----	200	55	88	----	93	10000	2500
C11-C22 Aromatics	----	----	<12	----	----	----	----	190	<11	45	----	79	1800	520
Naphthalene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
2-Methylnaphthalene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Acenaphthylene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Acenaphthene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Fluorene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Phenanthrene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Anthracene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Fluoranthene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Pyrene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(a)Anthracene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Chrysene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(b&k)Fluoranthene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(a)Pyrene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Indeno-Dibenzo	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(g,h,i)Perylene	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Surrogate Recovery														
2-Fluorobiphenyl (40-140)	----	----	49%	----	----	----	----	104%	126%	121%	----	114%	(1)	(1)
2-Bromonaphthalene (40-140)	----	----	39%	----	----	----	----	79%	56%	102%	----	80%	(1)	(1)
o-Terphenyl (40-140)	----	----	48%	----	----	----	----	70%	85%	70%	----	66%	(1)	(1)
1-Chloro-octadecane (40-140)	----	----	57%	----	----	----	----	149%	121%	124%	----	107%	(1)	(1)

Notes:
All results in parts per million (ppm)
---- not analyzed for indicated parameter
< parameter not detected above indicated laboratory detection limit
J associated value is an estimated quantity
(1) surrogate recovery is estimated or not reported due to dilution or presence of interfering analytes
UJ parameter not detected above indicated sample quantitation limit; however, the reported quantitation limit is approximate and may be inaccurate or imprecise

TABLE 2.1
SUMMARY OF EPH DATA COLLECTED FROM GEOPROBE DRILLING

ID:	GP-9	GP-10	GP-11	GP-12	GP-13	GP-14	GP-15		GP-16	GP-17	GP-18	
Location	FPL	FPL	FPL	FPL	FPL	FPL	Fire Pond Lagoon		FPL	FPL	Fire Pond Lagoon	
Depth:	8-12' bgs	12-16' bgs	16-20' bgs	8-11.5' bgs	20-24' bgs	4-8' bgs	8-12' bgs	16-17' bgs	8-12' bgs	2-6' bgs	0-4' bgs	8-12' bgs
Sample Date:	8/18/2003	8/18/2003	8/18/2003	8/18/2003	8/18/2003	8/19/2003	8/19/2003	8/19/2003	8/19/2003	8/19/2003	8/19/2003	8/19/2003
Time:												
Extraction Date:	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003
Analysis Date:	9/7/2003	8/30/2003	9/4/2003	9/3/2003	9/3/2003	9/3/2003	8/30/2003	8/30/2003	8/30/2003	9/7/2003	9/7/2003	9/3/2003
Lab:	northern	northern	northern	northern	northern	northern	northern	northern	northern	northern	northern	northern
Field & Lab ID:	GP3-3	GP4-4	GP5-5	GP6-3	GP7-6	GP8-2	GP9-3	GP9-5	GP10-3	GP11-2	GP12-1	GP12-3
Total Extractable Hydrocarbons (Screen)	35000	91	90	<12	73	<12	1000	<11	89	2600	1500	29
C9-C18 Aliphatics	1400	<14	<12	----	----	----	32	----	<13	91	<110	----
C19-C36 Aliphatics	13000	48	49	----	----	----	570	----	39	790	350	----
C11-C22 Aromatics	1500	15	<12	----	----	----	98	----	<13	110	120	----
Naphthalene	----	----	----	----	----	----	----	----	----	----	----	----
2-Methylnaphthalene	----	----	----	----	----	----	----	----	----	----	----	----
Acenaphthylene	----	----	----	----	----	----	----	----	----	----	----	----
Acenaphthene	----	----	----	----	----	----	----	----	----	----	----	----
Fluorene	----	----	----	----	----	----	----	----	----	----	----	----
Phenanthrene	----	----	----	----	----	----	----	----	----	----	----	----
Anthracene	----	----	----	----	----	----	----	----	----	----	----	----
Fluoranthene	----	----	----	----	----	----	----	----	----	----	----	----
Pyrene	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(a)Anthracene	----	----	----	----	----	----	----	----	----	----	----	----
Chrysene	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(b&k)Fluoranthene	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(a)Pyrene	----	----	----	----	----	----	----	----	----	----	----	----
Indeno-Dibenzo	----	----	----	----	----	----	----	----	----	----	----	----
Benzo(g,h,i)Perylene	----	----	----	----	----	----	----	----	----	----	----	----
Surrogate Recovery												
2-Fluorobiphenyl (40-140)	(1)	56%	65%	----	----	----	44%	----	67%	66%	(1)	----
2-Bromonaphthalene (40-140)	(1)	65%	76%	----	----	----	45%	----	63%	78%	(1)	----
o-Terphenyl (40-140)	(1)	80%	91%	----	----	----	80%	----	77%	93%	81%	----
1-Chloro-octadecane (40-140)	(1)	68%	83%	----	----	----	74%	----	63%	83%	56%	----

Notes:
All results in parts per million (ppm)
---- not analyzed for indicated parameter
< parameter not detected above indicated laboratory detection limit
J associated value is an estimated quantity
(1) surrogate recovery is estimated or not reported due to dilution or presence of interfering analytes
UJ parameter not detected above indicated sample quantitation limit; however, the reported quantitation limit is approximate and may be inaccurate or imprecise

TABLE 2.1
SUMMARY OF EPH DATA COLLECTED FROM GEOPROBE DRILLING

ID:	GP-19	GP-20	GP-21	GP-22	GP-23	GP-24	GP-25
Location	FPL	FPL	East Log Track	East Log Track	FPL	FPL	FPL
Depth:	8-12' bgs	10-14' bgs	12-13' bgs	8-12' bgs	10-14' bgs	16-20' bgs	3-7' bgs
Sample Date:	8/19/2003	8/19/2003	8/20/2003	8/20/2003	8/20/2003	8/20/2003	8/27/2003
Time:							
Extraction Date:	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/26/2003	8/29/2003
Analysis Date:	9/3/2003	9/3/2003	9/7/2003	9/7/2003	9/3/2003	9/4/2003	8/29/2003
Lab:	northern	northern	northern	northern	northern	northern	northern
Field & Lab ID:	GP13-3	GP14-4	GP15-4	GP16-3	GP17-4	GP18-5	GP19-2
Total Extractable Hydrocarbons (Screen)	90	<11	1200	14000	1000	160 J	410
C9-C18 Aliphatics	<13	----	<56	<4700	41	<11 UJ	<10
C19-C36 Aliphatics	19	----	610	<1000	470	66 J	210
C11-C22 Aromatics	<13	----	60	1500	98	<11 UJ	<10
Naphthalene	----	----	----	----	----	----	----
2-Methylnaphthalene	----	----	----	----	----	----	----
Acenaphthylene	----	----	----	----	----	----	----
Acenaphthene	----	----	----	----	----	----	----
Fluorene	----	----	----	----	----	----	----
Phenanthrene	----	----	----	----	----	----	----
Anthracene	----	----	----	----	----	----	----
Fluoranthene	----	----	----	----	----	----	----
Pyrene	----	----	----	----	----	----	----
Benzo(a)Anthracene	----	----	----	----	----	----	----
Chrysene	----	----	----	----	----	----	----
Benzo(b&k)Fluoranthene	----	----	----	----	----	----	----
Benzo(a)Pyrene	----	----	----	----	----	----	----
Indeno-Dibenzo	----	----	----	----	----	----	----
Benzo(g,h,i)Perylene	----	----	----	----	----	----	----
Surrogate Recovery							
2-Fluorobiphenyl (40-140)	57%	----	(1)	(1)	45%	32%	51%
2-Bromonaphthalene (40-140)	63%	----	69%	(1)	61%	32%	52%
o-Terphenyl (40-140)	73%	----	80%	(1)	75%	64%	67%
1-Chloro-octadecane (40-140)	64%	----	59%	(1)	93%	65%	55%

Notes:
All results in parts per million (ppm)
---- not analyzed for indicated parameter
< parameter not detected above indicated laboratory detection limit
J associated value is an estimated quantity
(1) surrogate recovery is estimated or not reported due to dilution or presence of interfering analytes
UJ parameter not detected above indicated sample quantitation limit; however, the reported quantitation limit is approximate and may be inaccurate or imprecise

TABLE 2.2
SUMMARY OF EPH DATA COLLECTED IN FIRE POND LAGOON EXCAVATION

ID:	FPL-1	FPL-2	FPL-3	FPL-4	FPL-5	FPL-6	FPL-7	FPL-8
Sample Location:	wall/base	wall/base	wall/base	wall/base	wall/base	wall/base	wall/base	wall/base
Depth (ft-bgs):	12' bgs	12' bgs	12' bgs	13' bgs	14'	16'	17'	18'
Sample Date:	12/14/2004	12/14/2004	12/14/2004	12/14/2004	12/14/2004	12/14/2004	12/14/2004	12/14/2004
Time:	8:30	8:40	8:55	9:10	9:20	9:35	9:45	9:50
Extraction Date:	12/20/2004	12/20/2004	12/20/2004	12/20/2004	12/20/2004	12/20/2004	12/20/2004	12/20/2004
Analysis Date:	12/24/2004	12/24/2004	12/24/2004	12/24/2004	12/23/2004	12/24/2004	12/24/2004	12/24/2004
Lab:	northern	northern	northern	northern	northern	northern	northern	northern
Total Extractable Hydrocarbons (Screen)	2800	1800	600	27	16	120	<13	<12
C9-C18 Aliphatics	99	<83	<18	----	----	<17	----	----
C19-C36 Aliphatics	1400	1000	280	----	----	57	----	----
C11-C22 Aromatics	230	210	74	----	----	19	----	----
Acenaphthene	<2.6 UJ	<2.5	<0.5	----	----	<0.5	----	----
Anthracene	<2.6	<2.5	<0.5	----	----	<0.5	----	----
Benzo(a)Anthracene	<2.6	<2.5	<0.5			<0.5		
Benzo(a)Pyrene	<2.6	<2.5	<0.5	----	----	<0.5	----	----
Benzo(b&k)Fluoranthene	<2.6	<2.5	<0.5	----	----	<0.5	----	----
Chrysene	<2.6	<2.5	<0.5	----	----	<0.5	----	----
Dibenzo(a,h)anthracene	<2.6	<2.5	<0.5			<0.5		
Fluoranthene	<2.6	<2.5	<0.5	----	----	<0.5	----	----
Fluorene	<2.6	<2.5	<0.5	----	----	<0.5	----	----
Indeno(1,2,3-cd)Pyrene	<2.6	<2.5	<0.5	----	----	<0.5	----	----
Naphthalene	<2.6	<2.5 UJ	<0.5 UJ	----	----	<0.5 UJ	----	----
Pyrene	<2.6	<2.5	<0.5	----	----	<0.5	----	----
Surrogate Recovery								
Aliphatic surrogate recovery (40-140)	101%	69%	51%	----	----	60%	----	----
Aromatic surrogate recovery (40-140)	127%	96%	48%	----	----	71%	----	----
Fractionation Surr Recovery-FBP (40-140)	93%	92%	101%	----	----	98%	----	----
Fractionation Surr Recovery-BN (40-140)	92%	93%	90%	----	----	89%	----	----

Notes:
All results in parts per million (ppm)
---- not analyzed for indicated parameter
< parameter not detected above indicated laboratory detection limit
J associated value is an estimated quantity
(1) surrogate recovery is estimated or not reported due to dilution or presence of interfering analytes
UJ parameter not detected above indicated sample quantitation limit; however, the reported quantitation limit is approximate and may be inaccurate or imprecise

TABLE 2.2
SUMMARY OF EPH DATA COLLECTED IN FIRE POND LAGOON EXCAVATION

ID:	FPL-9	FPL-10	FPL-11	FPL-12
Sample Location:	wall/base	wall/base	wall/base	wall
Depth (ft-bgs):	18'	18'	16'	11'
Sample Date:	12/14/2004	12/14/2004	12/14/2004	12/14/2004
Time:	10:10	10:15	10:25	10:30
Extraction Date:	12/20/2004	12/20/2004	12/20/2004	12/20/2004
Analysis Date:	1/4/2005	1/4/2005	1/4/2005	1/4/2005
Lab:	northern	northern	northern	northern
Total Extractable Hydrocarbons (Screen)	2700	5800	8300	47000
C9-C18 Aliphatics	140	280	350	1600
C19-C36 Aliphatics	1300	2900	3600	11000
C11-C22 Aromatics	230	450	610	3400
Acenaphthene	<0.4	<0.4	<0.4	<4.3
Anthracene	<0.4	<0.4	<0.4	<4.3
Benzo(a)Anthracene	<0.4	<0.4	<0.4	<4.3
Benzo(a)Pyrene	<0.4	<0.4	<0.4	<4.3
Benzo(b&k)Fluoranthene	<0.4	<0.4	<0.4	<4.3
Chrysene	<0.4	<0.4	<0.4	<4.3
Dibenzo(a,h)anthracene	<0.4	<0.4	<0.4	<4.3
Fluoranthene	<0.4	<0.4	<0.4	<4.3
Fluorene	<0.4	<0.4	<0.4	<4.3
Indeno(1,2,3-cd)Pyrene	<0.4	<0.4	<0.4	<4.3
Naphthalene	<0.4 UJ	<0.4 UJ	<0.4 UJ	<4.3 UJ
Pyrene	<0.4	<0.4	<0.4	<4.3
Surrogate Recovery				
Aliphatic surrogate recovery (40-140)	(1)	(1)	(1)	(1)
Aromatic surrogate recovery (40-140)	73%	77%	112%	(1)
Fractionation Surr Recovery-FBP (40-140)	103%	105%	105%	100%
Fractionation Surr Recovery-BN (40-140)	105%	116%	129%	91%

TABLE 2.3
SUMMARY OF EPH DATA COLLECTED FROM SONIC DRILLING ACTIVITIES

ID:	EW1-2	EW1-3	EW2-2	EW2-3	EW3-1	EW3-3	EW4-1	EW4-3	EW5-1
Location:	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond
Depth (ft bgs):	9-10	22.5-23.5	13-14	22-22.5	6-7	26-27	7-8	27-28	7-8
Sample Date:	4/26/2006	4/26/2006	4/27/2006	4/27/2006	4/27/2006	4/27/2006	4/28/2006	4/28/2006	5/2/2006
Extraction Date:	5/3/2006	5/3/2006	5/5/2006	5/4/2006	5/3/2006	5/3/2006	5/4/2006	5/4/2006	5/9/2006
Analysis Date:	5/9/2006	5/9/2006	5/6/2006	5/11/2006	5/6/2006	5/9/2006	5/9/2006	5/11/2006	5/10/2006
Lab:	Northern	Northern	Northern	Northern	Northern	Northern	Northern	Northern	Northern
PetroFlag (ppm)	227	147	1458	96	>2000	426	649	48	128
EPH Screen									
Total Extractable Hydrocarbons (TEH)	110	12	1600	43	8700	110	1200	23	<12
EPH Fractions									
C9-C18 Aliphatics	<12	---	<84	---	370	<11 UJ	<18	---	---
C19-C36 Aliphatics	36	---	780	---	3200	<11 UJ	380	---	---
C11-C22 Aromatics	<12	---	120	---	**1200**	12	59	---	---
PAHs									
Acenaphthene	---	---	---	---	---	---	---	---	---
Anthracene	---	---	---	---	---	---	---	---	---
Benzo(a)Anthracene	---	---	---	---	---	---	---	---	---
Benzo(a)Pyrene	---	---	---	---	---	---	---	---	---
Benzo(b)Fluoranthene	---	---	---	---	---	---	---	---	---
Benzo(k)Fluoranthene	---	---	---	---	---	---	---	---	---
Chrysene	---	---	---	---	---	---	---	---	---
Dibenzo(a,h)anthracene	---	---	---	---	---	---	---	---	---
Fluoranthene	---	---	---	---	---	---	---	---	---
Fluorene	---	---	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pyrene	---	---	---	---	---	---	---	---	---
Naphthalene	---	---	---	---	---	---	---	---	---
Pyrene	---	---	---	---	---	---	---	---	---
Surrogate Recoveries									
Aliphatic Surrogate Recovery	59%	---	(1)	---	(1)	38% (6)	50%	---	---
Aromatic Surrogate Recovery	88%	---	101%	---	99%	56%	85%	---	---
Fractionation Surrogate Recovery (FBP)	87%	---	93%	---	90%	85%	90%	---	---
Fractionation Surrogate Recovery (BN)	94%	---	102%	---	100%	91%	102%	---	---
eph Screen Surrogate Reccovery	94%	---	102%	---	100%	91%	102%	---	---

Notes:
All results in mg/kg (ppm)
---- Sample not analyzed for indicated parameter
< Parameter below indicated detection limit
> petro Flag concetration is greater than the detection calibration
Bold sample exceeds MDEQ RBSLs
(1) - surrogate recovery is estimated
(6) - The recovery is outside stated quality control limit.
UJ - the reported quantitation limit is approximate

TABLE 2.3
SUMMARY OF EPH DATA COLLECTED FROM SONIC DRILLING ACTIVITIES

ID:	EW5-3	EW6-2	EW6-3	EW7-1	EW7-3	EW8-3	RSB1-3	RSB1-4	RSB2-1
Location:	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond	East Log Track
Depth (ft bgs):	23-24	12-13	27-28	7-8	26-27	26-27	12-13	27-28	7-8
Sample Date:	5/2/2006	5/1/2006	5/1/2006	5/1/2006	5/1/2006	5/2/2006	5/3/2006	5/3/2006	5/3/2006
Extraction Date:	5/9/2006	5/8/2006	5/8/2006	5/8/2006	5/8/2006	5/9/2006	5/11/2006	5/11/2006	5/11/2006
Analysis Date:	5/11/2006	5/11/2006	5/23/2006	5/24/2006	5/11/2006	5/23/2006	5/24/2006	5/24/2006	5/25/2006
Lab:	Northern	Northern	Northern	Northern	Northern	Northern	Northern	Northern	Northern
PetroFlag (ppm)	17	985	166	660	32	42	776	285	76
EPH Screen									
Total Extractable Hydrocarbons (TEH)	12	2000	72	110	<11	<11	500	48	<12
EPH Fractions									
C9-C18 Aliphatics	---	36	<15	<12	---	---	<13	---	---
C19-C36 Aliphatics	---	1300	<15	27	---	---	310	---	---
C11-C22 Aromatics	---	**200**	<15	<12	---	---	68	---	---
PAHs									
Acenaphthene	---	---	---	---	---	---	<0.3	---	---
Anthracene	---	---	---	---	---	---	<0.3	---	---
Benzo(a)Anthracene	---	---	---	---	---	---	<0.3	---	---
Benzo(a)Pyrene	---	---	---	---	---	---	<0.1	---	---
Benzo(b)Fluoranthene	---	---	---	---	---	---	<0.3	---	---
Benzo(k)Fluoranthene	---	---	---	---	---	---	<0.3	---	---
Chrysene	---	---	---	---	---	---	<0.3	---	---
Dibenzo(a,h)anthracene	---	---	---	---	---	---	<0.1	---	---
Fluoranthene	---	---	---	---	---	---	<0.3	---	---
Fluorene	---	---	---	---	---	---	<0.3	---	---
Indeno(1,2,3-cd)pyrene	---	---	---	---	---	---	<0.3	---	---
Naphthalene	---	---	---	---	---	---	<0.3 UJ	---	---
Pyrene	---	---	---	---	---	---	<0.3	---	---
Surrogate Recoveries									
Aliphatic Surrogate Recovery	---	53%	60%	53%	---	---	56%	---	---
Aromatic Surrogate Recovery	---	85%	79%	79%	---	---	83%	---	---
Fractionation Surrogate Recovery (FBP)	---	90%	82%	89%	---	---	89%	---	---
Fractionation Surrogate Recovery (BN)	---	103%	86%	88%	---	---	92%	---	---
eph Screen Surrogate Reccovery	---	103%	86%	88%	---	---	74%	93%	87%

Notes:
All results in mg/kg (ppm)
---- Sample not analyzed for indicated parameter
< Parameter below indicated detection limit
> petro Flag concetration is greater than the detection calibration
Bold sample exceeds MDEQ RBSLs
(1) - surrogate recovery is estimated
(6) - The recovery is outside stated quality control limit.
UJ - the reported quantitation limit is approximate

TABLE 2.3
SUMMARY OF EPH DATA COLLECTED FROM SONIC DRILLING ACTIVITIES

ID:	RSB2-3	MW6-1	MW6-2	MW7-4	MW7-5	MW8-3	MW8-6	MW9-2
Location:	East Log Track	East Log Track	East Log Track	Fire Pond	Fire Pond	Fire Pond	Fire Pond	Fire Pond
Depth (ft bgs):	27-28	1-2	15-16	23-24	35-36	17-18	47-48	14-15
Sample Date:	5/3/2006	5/4/2006	5/4/2006	5/4/2006	5/4/2006	5/5/2006	5/5/2006	9/25/2008
Extraction Date:	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	5/11/2006	9/30/2008
Analysis Date:	5/25/2006	5/26/2006	5/27/2006	5/27/2006	5/27/2006	5/24/2006	5/24/2006	10/7/2008
Lab:	Northern	Northern	Northern	Northern	Northern	Northern	Northern	Energy
PetroFlag (ppm)	39	618	370	>2000	73	382	190	955
EPH Screen								
Total Extractable Hydrocarbons (TEH)	<11	430	3000	4500	<12	190	<12	806
EPH Fractions								
C9-C18 Aliphatics	---	<13	18	75	---	<11	---	12
C19-C36 Aliphatics	---	270	2200	2700	---	110	---	449
C11-C22 Aromatics	---	22	**200**	**360**	---	16	---	76
PAHs								
Acenaphthene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Anthracene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Benzo(a)Anthracene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Benzo(a)Pyrene	---	<0.08	<0.1	<0.09	---	<0.09	---	<0.38
Benzo(b)Fluoranthene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Benzo(k)Fluoranthene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Chrysene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Dibenzo(a,h)anthracene	---	<0.08	<0.1	<0.09	---	<0.09	---	<0.38
Fluoranthene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Fluorene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Indeno(1,2,3-cd)pyrene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Naphthalene	---	<0.2 UJ	<0.2 UJ	<0.2 UJ	---	<0.2 UJ	---	<0.38
Pyrene	---	<0.2	<0.2	<0.2	---	<0.2	---	<0.38
Surrogate Recoveries								
Aliphatic Surrogate Recovery	---	69%	(1)	(1)	---	61%	---	64%
Aromatic Surrogate Recovery	---	90%	93%	83%	---	92%	---	67%
Fractionation Surrogate Recovery (FBP)	---	87%	100%	88%	---	96%	---	75%
Fractionation Surrogate Recovery (BN)	---	88%	104%	94%	---	95%	---	78%
eph Screen Surrogate Reccovery	89%	88%	105%	102%	83%	82%	78%	84%

Notes:
All results in mg/kg (ppm)
---- Sample not analyzed for indicated parameter
< Parameter below indicated detection limit
> petro Flag concetration is greater than the detection calibration
Bold sample exceeds MDEQ RBSLs
(1) - surrogate recovery is estimated
(6) - The recovery is outside stated quality control limit.
UJ - the reported quantitation limit is approximate

TABLE 2.4
SUMMARY OF EPH DATA COLLECTED FROM OLYMPUS COOLING POND SITE CHARACTERIZATION

LOCATION ID:	B-1			B-2				B-3			
SAMPLE ID:	B-1 S-1	B1-S-2-D	B1-S-2/3/4	B2-S-1	B2-S-2	B2-S-2-D	B2-S-3/4	B3-S-1	B3-S-1D	B3-S-2	B3-S-4/5
Depth (ft bgs):	9-11	11-15	11-19	7.5-9.5	9.5-13.5	9.5-13.5	13.5-17.5	7.5-11.5	7.5-11.5	11.5-13.5	15.5-19.5
Sample Date:	3/28/09	3/28/09	3/28/09	3/29/09	3/29/09	3/29/09	3/29/09	3/29/09	3/29/09	3/29/09	3/29/09
EPH Screen											
Total Extractable Hydrocarbons (TEH)	**2700**	**2525**	2000	**7400**	**4400**	2275	570	2100	**4428**	**3900**	1500
EPH Fractions											
C9-C18 Aliphatics	<140	45	----	**<680**	<170	51 J	----	<190	100	**<210**	----
C19-C36 Aliphatics	1300	1112	----	**3400**	2100	1596	----	1200	2461	2300	----
C11-C22 Aromatics	**470**	260	----	**430**	**400**	**534**	----	190	**664**	340	----

Notes:

All results in mg/kg (ppm)
---- Sample not analyzed for indicated parameter
< Parameter below indicated detection limit
Bold sample exceeds MDEQ RBSLs

TABLE 2.4
SUMMARY OF EPH DATA COLLECTED FROM OLYMPUS COOLING POND SITE CHARACTERIZATION

LOCATION ID:	B-4						
SAMPLE ID:	B4-S-1	B4-2-1-D	B4-S-2	B4-S-3	B4-S-4	B4-S-5	B4-S-6/7/8
Depth (ft bgs):	3.5-7.5	3.5-7.5	7.5-9.5	9.5-11.5	11.5-13.5	13.5-15.5	15.5-21.5
Sample Date:	3/30/09	3/30/09	3/30/09	3/30/09	3/30/09	3/30/09	3/30/09
EPH Screen							
Total Extractable Hydrocarbons (TEH)	1600	3241	1600	5900	4200	4200	950
EPH Fractions							
C9-C18 Aliphatics	<120	17.5 J	<130	**<650**	<170	**<250**	----
C19-C36 Aliphatics	780	1449	690	2100	1800	2000	----
C11-C22 Aromatics	180	376	140	**490**	**400**	370	----

Notes:

All results in mg/kg (ppm)
---- Sample not analyzed for indicated parameter
< Parameter below indicated detection limit
Bold sample exceeds MDEQ RBSLs

TABLE 3 PROPOSED SAMPLING LOCATIONS

Sample Location ID	Approx Elev. Of Existing (ft)[1]	Approx. Elev. of Native (ft)[2]	Northing (ft)	Easting (ft)	Approx. Sediment/Woody Debris Thickness (ft)	Approx. Boring Depth (ft)	Approx. Sample Depths (ft)
Fire Pond Lagoon Area							
S-1	3257.0	3254.5	17045189.92	923403.70	unk	20.0	unk, 19
S-2	3259.0	3261.0	unk	unk	unk	20.0	unk, 19
S-3	3262.5	3254.5	17045202.85	923431.06	unk	20.0	unk, 19
S-4	3274.0	3274.0	unk	unk	5.0	20.0	unk, 19
S-5	3260.0	3254.5	17045215.11	923452.89	unk	20.0	unk, 19
S-6	3275.5	3253.5	unk	unk	8.0	20.0	unk, 19
S-7	3274.0	3255.6	17045162.85	923401.82	19.0	30.0	unk, 29
S-8	3262.1	3259.5	17045176.59	923491.16	2.6	30.0	unk, 29
S-9	3278.0	3253.0	unk	unk	8.0	30.0	unk, 29
S-10	3277.0	3256.3	17045169.86	923433.08	19.0	30.0	unk, 29
S-11	3278.0	3256.0	unk	unk	5.0	30.0	unk, 29
S-12	3276.9	3276.9	17045111.62	923497.19	0.0	30.0	unk, 29
S-13	3274.3	3274.3	17045138.30	923403.38	0.0	30.0	unk, 29
S-14	3278.5	3257.5	17045173.76	923463.00	6.0	30.0	unk, 29
S-15	3278.5	3267.5	unk	unk	7.0	30.0	unk, 29
S-16	3277.8	3277.8	17045107.07	923434.72	0.0	30.0	unk, 29
S-17 (optional step-out)	3275.2	3275.2	17045133.75	923435.65	0.0	30.0	unk, 29
S-18 (optional step-out)	3275.2	3275.2	17045140.39	923464.30	0.0	30.0	unk, 29
S-19 (optional step-out)	3274.3	3274.3	17045145.85	923498.22	0.0	30.0	unk, 29
S-20 (optional step-out)	3277.5	3277.5	17045108.20	923409.62	0.0	30.0	unk, 29
East Log Track Area							
S-21	3272.8	3272.8	17045159.84	923558.61	0.0	30.0	unk, 29
S-22	3273.5	3273.5	17045154.83	923593.19	0.0	30.0	unk, 29
S-23	3278.0	3271.1	17045150.08	923624.08	6.9	25.0	unk, 25
S-24	3278.8	3276.0	17045145.33	923655.76	2.8	25.0	unk, 25
S-25	3278.7	3278.7	17045143.75	923681.10	0.0	25.0	unk, 25
S-26	3278.5	3265.0	17045154.57	923717.01	13.5	25.0	unk, 25
S-27	3280.5	3265.0	unk	unk	12.0	25.0	unk, 25
S-29	3282.2	3282.2	17045128.18	923722.02	0.0	20.0	unk, 20
S-30	3281.9	3281.9	17045128.71	923751.33	0.0	20.0	unk, 20
S-28 (optional step out)	3281.8	3281.8	17045129.24	923684.80	0.0	20.0	unk, 20
Cooling Pond Area							
S-31	3273.0	3249.6	17045256.31	923906.01	23.4	24.4	unk, 12.4
S-32	3273.0	3247.0	17045258.57	923932.85	26.0	27.0	unk, 15.5
S-33	3274.0	3245.2	17045260.07	923964.19	28.8	29.8	unk, 17.3
S-34	3274.0	3244.7	17045262.33	924005.82	29.3	30.3	unk, 17.3
S-35	3264.5	3249.0	17045222.47	923684.46	15.5	16.5	unk, 16.5
S-36[4]	3263.8	3249.0	17045223.97	923711.80	14.8	15.8	unk, 15.8
S-37[4]	3261.9	3248.5	17045231.49	923775.50	13.4	14.4	unk, 14.4
S-38[4]	3261.0	3248.3	17045228.74	923830.27	12.7	13.7	unk, 13.7
S-39[4]	3260.8	3248.5	17045240.52	923933.35	12.3	13.3	unk, 13.3
S-40[4]	3260.0	3242.0	unk	unk	10.0	15.0	unk, 15
S-40A[4]	3260.0	3242.0	unk	unk	10.0	15.0	unk, 15
S-40B[4]	3260.0	3242.0	unk	unk	10.0	15.0	unk, 15
S-40C[4]	3260.0	3242.0	unk	unk	10.0	15.0	unk, 15
S-40D[4]	3260.0	3242.0	unk	unk	10.0	15.0	unk, 15
S-41[4]	3260.7	3244.9	17045243.86	924024.92	15.8	16.8	unk, 16.8
S-42	3261.0	3249.6	17045253.05	923866.14	11.4	12.4	unk, 13.4
S-43	3263.0	3249.5	17045188.35	923651.88	13.5	14.5	unk, 16.5
S-44	3264.5	3249.5	17045191.29	923684.73	15.0	16.0	unk, 16
S-45	3264.1	3249.5	17045194.22	923716.88	14.6	15.6	unk, 15.6
S-46	3264.2	3249.3	17045195.07	923745.33	14.9	15.9	unk, 15.9
S-47	3261.0	3248.3	17045197.03	923777.90	12.7	13.7	unk, 13.7
S-48	3261.0	3248.0	17045199.96	923808.80	13.0	14.0	unk, 14
S-49	3261.0	3249.0	17045202.21	923839.63	12.0	13.0	unk, 13
S-50	3261.0	3250.2	17045204.87	923872.07	10.8	11.8	unk, 11.8
S-51[3]	3281.0	3250.2	17045204.87	923872.07	30.8	31.8	unk, 11.8
S-52 (optional step out)	3284.0	3252.0	17045206.82	923903.66	32.0	33.0	unk, 10.5
S-53 (optional step out)	3287.0	3252.0	17045208.78	923935.67	35.0	36.0	unk, 12.4
S-54 (optional step out)	3288.0	3248.8	17045212.83	923968.38	39.2	40.2	unk, 15.7
S-55 (optional step out)	3288.0	3246.9	17045217.88	923999.76	41.1	42.1	unk, 16.1
East End of Cooling Pond Area, bracketing EE/CA Boring B-11							
S-56 - PCBs only (optional EPH step-out)	3280.0	3258.0	unk	unk	8.0	30.0	unk, 30
S-57 - PCBs only	3285.0	3259.0	unk	unk	8.0	30.0	unk, 30
S-58 (optional PCB step out)	3276.0	3259.0	unk	unk	8.0	30.0	unk, 30
S-59 (optional PCB step out)	3283.0	3260.5	unk	unk	8.0	30.0	unk, 30
S-60 - PCBs only	3283.0	3259.0	unk	unk	8.0	30.0	unk, 30

Notes:
1. Existing topography shown on Figure 11 of the EE/CA
2. Projected native surface beneath cooling pond and berm shown on Figure 24 of the EE/CA
3. S-51 is an optional step out boring for PCB sampling
4. S-36 through S-41 will not be sampled for EPH since this sediment will be disposed based on PCB concentrations
unk - unknown
Note - the locations of Borings S-40A, B, C, & D are most clearly depicted on Figure 3.

APPENDIX C

STANDARD OPERATING PROCEDURES (SOPs)

STANDARD OPERATING PROCEDURES
No. 3401.10

Title: pH Measurements using the Corning Checkmate 90

Purpose: Provide guidelines for the use of the Corning Checkmate 90 meter for pH measurements in water samples

Procedures:
1. Calibrate instrument before each sampling event. Recalibrate instrument after replacing the battery. Recalibrate instrument after every ten samples during a sampling event
2. Decontaminate probe before and after use with distilled/deionized water.

pH sensor:

To calibrate:
1. Verify sensor is filled with KCL solution, within 1 inch of fill hole.
2. Turn on meter by pressing "mode".
3. Place in pH 7 solution, press "cal". Wait until calibration complete.
4. Rinse sensor in distilled water.
5. Place in pH 10 (or pH 4) buffer solution. Press "cal" a second time. Wait until endpoint reached.
6. Rinse in distilled water.
7. Discard buffer solutions. Do not reuse.

To measure:
1. Place calibrated meter in sample, press "read". Gently stir/agitate sensor periodically.
2. Take three measurements, and record average value.

Operational Checks:
Refer to M90 manual for detailed troubleshooting instructions.

References:
Corning Checkmate Operating Instructions Model M90.

Initials: PR Revision: 1994

STANDARD OPERATING PROCEDURES
No. 3402.10

Title: TDS/Conductivity Measurement using Corning Checkmate 90

Purpose: Provide guidelines for the use of the Corning Checkmate 90 meter for TDS/Conductivity measurements in water samples.

Procedures:
1. Calibrate instrument before each sampling event. Recalibrate instrument after replacing the battery. Recalibrate instrument after every ten samples during a sampling event.
2. Decontaminate probe before and after use with distilled/deionized water.
3. Make sure clear plastic shield is in place during calibration and measurement.
4. Make sure calibration or sample solution is above cell chamber rings and below vent hole.
5. Make sure no air bubbles are trapped in cell chamber.

Conductivity/TDS

To calibrate:
1. Rinse sensor with distilled/deionized water.
2. Press "mode" to turn on instrument.
3. Hold sensor in air, press "cal". Wait until calibration complete.
4. Place sensor in 1413 *u*S standard. Press "cal" a second time. Wait for calibration.
5. Rinse in distilled water, and discard standard solution.

To Measure:
1. Place sensor in sample, press "read" to measure conductivity.
2. Press "mode" to change to TDS units.
3. Repeat three times, and record average 1) conductivity and 2) TDS

Operational Checks:
Refer to M90 manual for detailed troubleshooting instructions.

References:
Corning Checkmate Operating Instructions Model M90.

Initials: PR Revision: 1994

STANDARD OPERATING PROCEDURES
No. 3403.10

Title: Dissolved Oxygen Measurement using the Corning Checkmate 90

Purpose: Provide guidelines for the use of the Corning Checkmate 90 meter for Dissolved Oxygen measurements in water samples.

Procedures:
1. Before each use, clean electrode tip with cleaning compound, rinse and fill membrane cap with DO electrolyte, and screw cap on to sensor while holding vertically to avoid air trapping bubbles. Fit sensor to meter and allow **1 hour** minimum for polarization. Sensor can maintain polarization when disconnected from the meter for up to three hours.
2. Probe must be immersed in calibration or sample solution at least 1.5 inches for measurements.
3. Allow several minutes for probe to stabilize when measuring samples of different temperatures.

Calibration:
1. Verify membrane cap is filled and no air bubbles are present.
2. Press "mode" to turn on instrument
3. Place sensor in fresh zero oxygen solution, press "cal". Wait for calibration at zero.
4. Rinse sensor in DS/DI water, hold sensor air. Press "cal" a second time. Wait for calibration at 100% saturation.
5. Rinse in distilled/DI water, and discard zero oxygen solution.
6. Re-calibrate every 10 samples, or after replacing battery.

Measurements:
1. Remove cap, place sensor in sample, press "read" to measure DO.
2. Press "mode" to change between % saturation and mg/l units.
3. Stir sample at constant speed, approximately 8 inches/second.
4. Repeat three times, and record average.
5. Decon probe with DS/DI water and replace cap.

Storage after each sampling event:
1. Remove membrane cap.
2. Rinse with distilled water.
3. Clean tip.
4. Store dry with membrane cap loosely fitted.

Troubleshooting:
(If sensor will not calibrate, becomes sluggish or erratic):

1. Silver/gold sensor tip may become tarnished with time. Clean tip and refill cap every two weeks as described above.
2. Zero oxygen solution absorbs oxygen over time; use fresh solution for accurate calibration.
3. Make sure there are no air bubbles inside membrane cap.
4. Check membrane for damage, replace if necessary.
5. Replace membrane electrolyte with fresh solution.
6. Check meter with test plug.
7. Replace battery.

References:

Corning Checkmate Operating Instructions Model M90.

Initials: _____ Revision: 1/95

Groundwater Level Measurement Form

Project: _____ PBS&J Personnel: _____ Date: _____

Project #: _____ Equipment: _____ Other Forms: _____

Location	Date/Time	Meas. Point Elevation	Depth to Water	Depth to Product	Product Thickness	Groundwater Elevation	Corrected Elevation	Comment

Sop4202.20 GW Level.doc 4-99gea
Edits: TB 10-12-09

STANDARD OPERATING PROCEDURE
No. 4203.10

Title: Well Static Water Level Measurements Using Solinst Well Probe

Purpose: Provide guidelines for measuring static water levels in groundwater wells using the Solinst well probe

Procedure:

1. Turn on the Solinst well probe and press test button to check the battery. The well sounder should "ring" each time the button is pushed.
2. Insert the probe into an opening at the top of the well case and begin to lower.
3. When the probe reaches the water level it will "ring".
4. Mark a location at the top of the casing where the measurement will be taken.
5. Raise and lower the probe slightly to determine when the Solinst probe just begins to "ring". At this point, record the date, time, and depth to water. Each measurement will be recorded using the same marked location on the well casing.
6. When all measurements are done, turn off the Solinst well probe and raise.

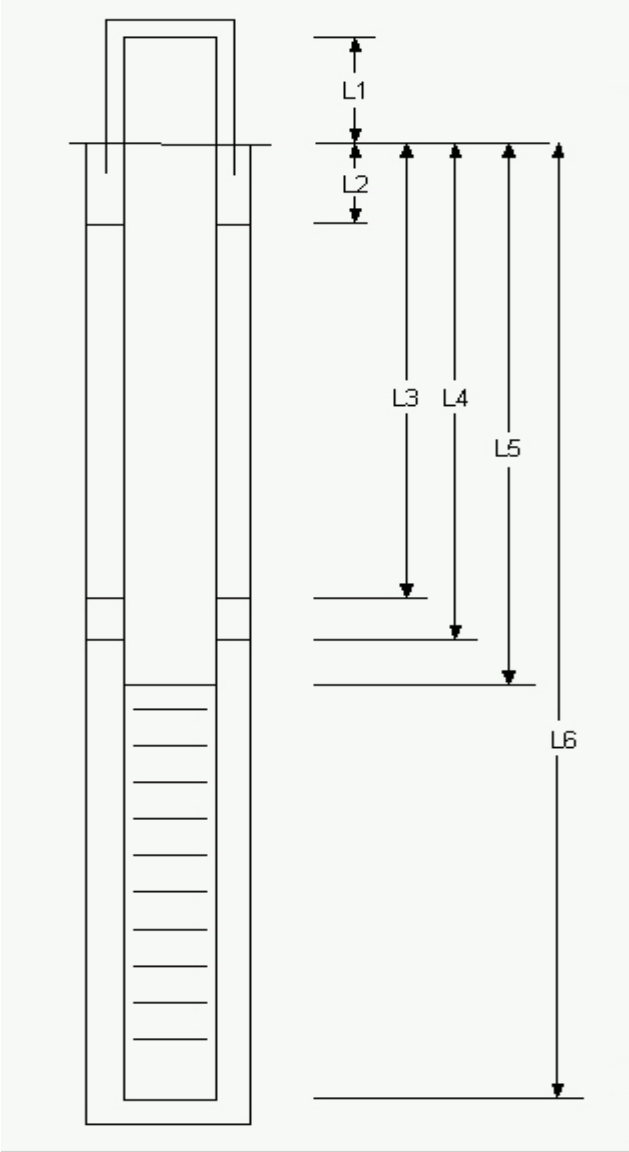
Initials: PR Revision: 1994

Well Completion-Above Grade Form

Project: _____ PBS&J Personnel: _____ Date: _____

Project #: _____ Well: _____

Surface Elev: _____ TOC Elev: _____ DTW: _____



L1: _____ L2: _____

L3: _____ L4: _____

L5: _____ L6: _____

Well Diameter/Material: _____

Screen Length/Slot Size: _____

Sand Pack: _____

Seal Material: _____

Location Sketch:

Comments: _____

_____

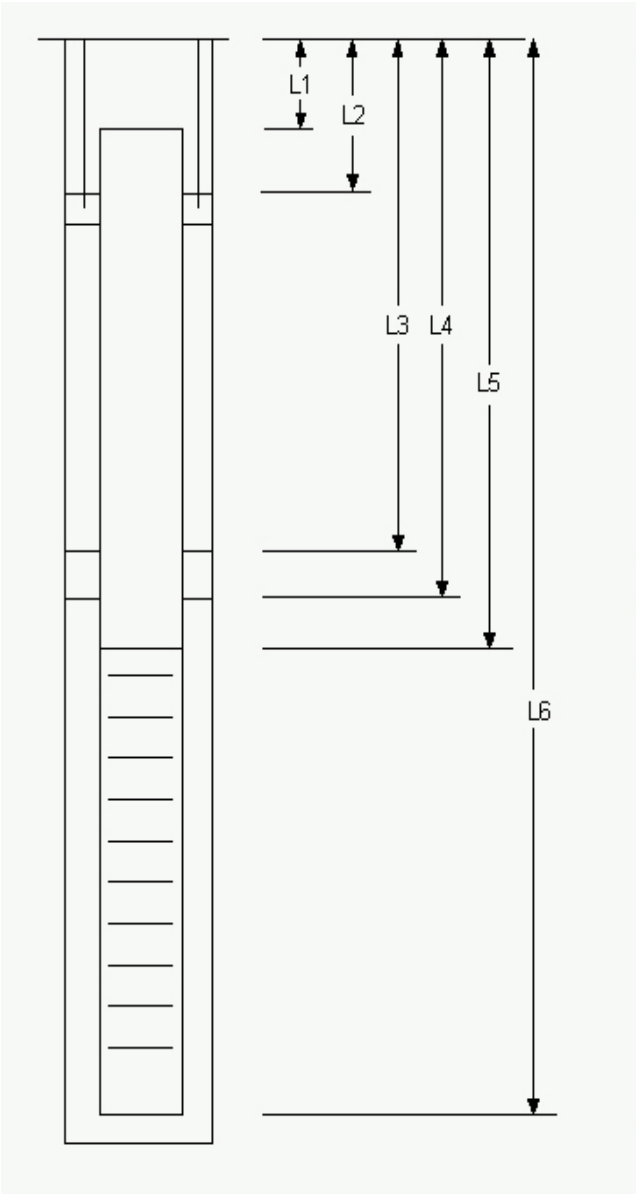
Sop4203.20 Well Compl-Above.doc 4-99
gea
Edits: TB 10-12-09

Well Completion-Flush Form

Project: _____ PBS&J Personnel: _____ Date: _____

Project #: _____ Well: _____

Surface Elev: _____ TOC Elev: _____ DTW: _____



L1: _____ L2: _____

L3: _____ L4: _____

L5: _____ L6: _____

Well Diameter/Material: _____

Screen Length/Slot Size: _____

Sand Pack: _____

Seal Material: _____

Location Sketch:

Comments: _____

_____

Sop4203.21 Well Compl-Flush.doc 4-99
gea
Edits: TB 10-12-09

STANDARD OPERATING PROCEDURE
No. 4205.10

Title: Product Measurement

Purpose: Provide guidelines for various techniques for measuring the thickness of free-phase LNAPL in monitoring wells

Procedure:

Three different procedures are described in this SOP for measuring product thickness in a monitoring well. These include using a specialized probe, using a bailer, and using product and water finding paste.

Using the Solinst Probe:

1. Turn the probe on and rotate the disc at the top of the probe head. To test the batteries, insert the probe into the holder, this should cause an steady beep to be heard.
2. Remove the probe from the holder and slowly lower the probe into the well. When the top of the product is reached, the probe should emit a steady beep. Note the depth on form #4711 (Groundwater Level Measurement) under "Depth to product".
3. Continue to lower the probe in the well. When the water column is reached the sound should change from a steady to an intermittent beep. Note the depth on the form under "Depth to Water".
4. Remove the probe and rotate the disc back to the off position and turn the meter off.
5. Product thickness can be calculated by subtracting the depth to product from the depth to water.

Using a bailer:

1. This method is less precise, but can provide a general idea of product thickness. The resulting thickness will likely be less than what is actually in the well.
2. Lower a bottom loading bailer slowly into the well. You should be able to hear when it reaches the top of the fluid column. Continue to SLOWLY lower the bailer into the well no deeper than the total length of the bailer (i.e. the top of the bailer should remain above the top of the fluid in the well.
3. Remove the bailer and measure the thickness with a tape measure.

Using paste:

1. Using a steel tape, smear water finding paste over a 3-4 foot interval of one side of the tape. Smear product finding paste (or chalk) over the other side.
2. Lower the tape into the well until the bottom of the tape is roughly 2-3 feet below the top of the fluid in the well. Note the depth of the tape on the form.

3. Remove the tape and note the reading indicated by the water finding paste or chalk, and the reading indicated by the product finding paste (both of these should be evident as a change in color, or a wet line in the case of chalk).
4. The depth to water is calculated by subtracting the water reading from the total tape depth. The depth to product is calculated by subtracting the product reading from the total tape depth. Product thickness is calculated by subtracting depth to product from the depth to water.
5. This may need to be repeated several times, especially if the depth to water is not known, or if the product thickness is greater than the depth the tape is lowered into the fluid. Previous depth to water and product thickness readings can be used as a guide.

Initials: _GEA_ Revision: _6/23/99__

STANDARD OPERATING PROCEDURES
No. 4303.10

Title: Using the PetroFlag Hydrocarbon Analysis System

Purpose: Provide guidelines for operating the PetroFlag test kit

Procedures:

Calibration:
1. The PetroFlag meter should be calibrated with each batch of 10 samples or, at least daily.
2. The extraction solvent (vial with blue polypropylene top) is used as the blank solution and the calibration standard supplied with each 10 pack (vial with white polypropylene top) is used as the standard solution.
3. A reagent calibration (rC) can be used or, if uncontaminated soil is available, a soil calibration (SC) can be used to prepare a site specific calibration.
4. Either of the two calibrations, "rC" and "SC", can be selected from the main menu of the PetroFlag analyzer, then choose an appropriate response factor.

Preparing/Reading Blanks and Standards:
1. Label two soil tubes (yellow caps) as "blank" and "standard", then pour contents of the extraction solvent into the 'blank' tube and the contents of the calibration standard into the 'standard' tube.
2. Process the blank and standard tubes exactly as the unknown soil samples are prepared (described below). Once the blank and cal standard have been read, discard them. They fade with time and cannot be reused.
3. A soil calibration is prepared in the same way, with the additional step of adding 10 grams of uncontaminated native soil to each of the labeled calibration tubes.
4. The blank is ready to be read after the response factor is chosen and the 'next' is pressed, causing the screen to prompt with "bL". Insert the blank vial and press "read".
5. After 5 seconds the display should read "0" for 2 seconds, then a prompt of "Csd" for the calibration standard is given. Insert the calibration standard and press read. When 5 seconds have passed the meter should then verify a valid calibration and display "1000".
6. If an error message is displayed, a recalibration must be completed.

Soil Testing Procedure:
1. Label the soil tubes and developer vials (black caps, half filled with liquid) with the appropriate sample ID. Label either the top or bottom of the developer vial.
2. Weigh 10 grams (±0.1 gram) of all unknown soils into labeled soil tubes.

3. Set timer for 5 minutes. Add extraction solvent to first tube, start timer and shake tube for 15 seconds making sure all soil is saturated.

4. Add extraction solvent to each of the remaining samples, allowing sufficient time intervals between samples to operate efficiently.
5. Shake all tubes intermittently for a total of 4 minutes, then let stand for the remaining 1 minute.
6. Pour free liquid from the soil tube into the barrel of a filter-syringe assembly (make sure the filter disk is firmly attached). Discard the first few drops from the filter to a waste container, then filter into the properly labeled developer vial.
7. Add extraction solvent drop-wise to developer solution until meniscus just enters the neck, shake for 10 seconds, start 10 minute timer and proceed to next sample.
8. Begin reading the developer vials with the PetroFlag analyzer when 10 minutes have elapsed. Attempt to make each 'reading' at approximately the same elapsed time, as varying time intervals will result in a higher % of error.
9. Turn meter on by pressing "read/on". Place sample vial into reader (make sure outside of vial is clean) and press "read/on", then record result.

Standard Analyzer Operation:

1. When daily calibrations are run and the ambient temperature deviates from the calibration temperature by more than 10°C, an error condition will result. The analyzer will display "err4" which can be cleared by pressing "next" and recalibrating the meter.
2. To take a standard reading, the last operation mode must have been in "read", the calibration data must be current, and the response factor last used must be valid.
3. Turn meter on by pressing "read/on". The last reading is displayed for 2 seconds, followed by the calibration curve and response factor. The meter is now ready to read your sample.
4. Insert vial and replace cap, then press "read/on". The display will show "calc" for 3 seconds, the calibration curve, response factor, and finally the result.

Operational Checks:

Refer to the PetroFlag User's Manual for more detailed operating instructions.

References:

PetroFlag Hydrocarbon Analyzer User's Manual

Initials: TE

Soil Description Form

Project No:	**Date:**
Project Name:	**PBS&J Personnel:**
Applicant:	**Legal Description: T_____R_____S_____**
General Location:	

Elevation:	**GPS Coordinates:**
Aspect:	**Soil Unit:**
Slope:	**Surficial Geology:**
Slope Position:	**Bedrock Geology:**

Profile	**Depth** (in.)	**Horizon**	**USDA Texture**	**Unified Texture**	**Rock** (%)	**Color** (Munsell)	**Other Notes** (Mottles, Gley, $CACO_3$)

Additional Comments:

Sop4420.20 Soil Desc.doc 6-99 jah
Edits: TB 10-12-09

STANDARD OPERATING PROCEDURES
No. 5104.10

Title: Surface Water Grab Sampling

Purpose: Provide guidelines for the collection of surface water samples for analytical testing for the presence of various water quality indicators.

Necessary Equipment/Supplies:

DH-48 Sampler, Subsurface Grab Sampler, Kemmerer Bottle, Submersible Pump, Beaker, Churn Splitter. Appropriate Sample Containers, Sample Container Labels, Chain of Custody, Custody Seal, Waterproof Pen.

Procedures:

Sampling Device:

1. Select the appropriate sampling device according to the surface water source being analyzed. A depth integrated sampler such as the DH-48 may be used for rivers and streams. In well mixed environments, grab samples using a plastic beaker may be adequate. In stratified environments such as lakes, ponds, or reservoirs, a sampling device which provides discrete sampling with depth may be required. Discrete subsurface samples may be obtained using a Kemmerer Vertical Bottle, Submersible Pump, or other grab sampling device.
2. The sampling device and decontamination procedures should be specified in the site specific SAP.

Sampling Technique:

1. When collecting samples care must be taken not to disturb bottom sediments.
2. Grab samples taken while wading should be taken in the upstream direction to prevent influence of bottom disturbance. Wading while sampling lakes and ponds should be avoided.
3. Care must be taken to prevent the sample container rim or cap from contacting any potentially contaminated surface, such as: fingers, rope, ground, etc.
4. The sample container or transfer vessel must be lowered and raised slowly and uniformly through the entire water column. "Overfilling" should be avoided to prevent biasing the sample to one portion of the water column.
5. Disposable latex gloves must be worn when drawing or handling a sample or sampling device, and properly discarded afterwards.
6. Fill the sample container to the top of the container so that a meniscus is formed.
7. Allow any air bubbles to rise to the surface; tap the container to dislodge any trapped air bubbles.
8. Carefully and quickly screw the cap onto the container and finger tighten.

9. The label must be completed including the following information: sample ID, date and time of collection, sampling personnel, well number, preservation, analysis requested, and job site description.
10. The sampling point and technique must be documented in the field notebook.
11. Place all samples in an ice chest containing frozen blue ice. Complete the Chain of Custody.
12. One duplicate sample must be taken per sampling day. Each duplicate must come from the same transfer bottle at the same time the original sample is taken.
13. One blank (deionized or distilled water) must be taken per sampling day. Field blanks are taken in the transfer bottle, run through the same filtering as the original sample, and prepared (bottle, label, preservative, etc.) as the original sample.

Initials: BKA Revision: 2/29/00

Surface Water Sampling and Monitoring Form

Project: | **Project #**

Date: | **Time:**

PBS&J Personnel: | **Samp. Loc.**

Sample Type: | **Discharge:** *cfs*

Sampling Equipment

Instrument	Calibration	Operational Notes:

Sampling Location Sketch:

Field Monitoring Data

Time	Temp (deg C)	pH	Eh (mV)	Conductivity (uS)	TDS (mg/L)	Turb (NTU)

Water Description:

Sampling Data

Sample Number	Sampling Parameter	Preservative	Sample Time	Bottle	Other

Laboratory:

Comments:

Standard Operating Procedures

Number	Description
3401, 3402, 3403	Corning Checkmate 90: pH, Eh, Conductivity, TDS, DO
5103	Dissolvd Solids Surface Water Sampling
5104	Surface Water Grab Sampling
5110	Field Filter Techniques
8106	Field Form Protocol
8210	Sample Packaging & Shipping for Groundwater Samples
8300, 8400, 8510	Field QA/QC, Sample Custody, Sample ID and Analytical Results

STANDARD OPERATING PROCEDURE
No. 5201.10

Title: Monitoring Well Purging and Sampling

Purpose: Provide guidelines for purging and sampling groundwater monitoring wells.

Procedures:

Well Sampling Sequence:

1. Begin with the well containing the lowest anticipated analyte concentration.
2. Successive samples will be taken from wells according to anticipated increasing concentrations.
3. If the relative degree of concentrations cannot be assumed, wells will be sampled in order of increasing proximity to the suspected analyte source, preferably from the perimeter towards the center of the site.

Well Purging And Sampling:

1. The deep monitoring wells will be purged and sampled with a Grundfos Redi-Flo 2 or Redi-Flo 4 stainless steel submersible pump. The pumping rate will be adjusted for a uniform flow rate during purging. A disposable Teflon bailer will be used if a submersible pump cannot be employed. The purge water will be handled in accordance with the site specific SAP. Where purge water is discharged directly to the ground attention must be given to avoiding direct recharge of shallow wells with the purge water. Purge water must be discharged down gradient and at an adequate distance from the well to avoid mounding and interference.
2. Monitoring wells will be purged until a minimum of three casing volumes have been removed and water quality characteristics (pH, temperature, conductivity) have stabilized. Stabilization is achieved when pH readings stabilize to within 0.1 and temperature and conductivity stabilize to within 5% over a casing volume.
3. Before purging each well, record the depth to water from the top of the well casing to the nearest 0.01 foot. Determine the saturated thickness by subtracting the total well depth from the depth to water.
4. The following equation is used to calculate well volume in gallons:

1) $V=3.14*(r^2)*d*7.48$

where V= volume (gallons)
r= well radius, feet
d= depth of water in well (feet)

5. The radius of the well pack will be used for the well radius for calculating bore volumes where appropriate. For example, a 2" PVC monitoring well installed in a 6" hole with sand filter pack would use a well radius of 3" or 0.25 feet.
6. Appropriate pumping rates determined during well development should be used to remove the calculated purge volume. The pump should generally be placed at the midpoint of the saturated thickness in the casing for purging and sampling. If the well is pumped dry during the purge, the pumping rate shall be reduced to match well yield if possible and a note made on the sampling form. If the well has not recovered sufficiently to allow purging at reduced rates and sampling after 24 hours, the well will be noted as dry during the sampling event.
7. The groundwater samples will be collected according to the appropriate methods for each analyte after 3 well volumes have been purged and water characteristics have stabilized. Additionally, turbidity should be below 5 NTU at the time of sampling. Well evacuation and sampling data will be recorded on the groundwater monitoring form. After all samples have been collected, the pump will be shut down and withdrawn from the well. The well will be capped before beginning the appropriate decontamination sequence.

Initials: BA Revision: 1/95

STANDARD OPERATING PROCEDURE
No. 5202.10

Title: Low Flow Monitoring Well Purging and Sampling

Purpose: Provide guidelines for purging and sampling groundwater monitoring wells usinf low flow methods.

Procedures:

Well Sampling Sequence:

1. Begin with the well containing the lowest anticipated analyte concentration.
2. Successive samples will be taken from wells according to anticipated increasing concentrations.
3. If the relative degree of concentrations cannot be assumed, wells will be sampled in order of increasing proximity to the suspected analyte source, preferably from the perimeter towards the center of the site.

Well Purging And Sampling:

1. The deep monitoring wells will be purged and sampled with a Grundfos Redi-Flo 2 or Redi-Flo 4 stainless steel submersible pump. The pumping rate will be adjusted for a uniform flow rate during purging. A disposable Teflon bailer will be used if a submersible pump cannot be employed. The purge water will be handled in accordance with the site specific SAP. Where purge water is discharged directly to the ground attention must be given to avoiding direct recharge of shallow wells with the purge water. Purge water must be discharged down gradient and at an adequate distance from the well to avoid mounding and interference.
2. Monitoring wells will be purged to maintain lateral flow into the well casing and until water quality characteristics (pH, temperature, conductivity) have stabilized. Stabilization is achieved when pH readings stabilize to within 0.1 and temperature and conductivity stabilize to within 5% over a casing volume.
3. Before purging each well, record the depth to water from the top of the well casing to the nearest 0.01 foot. The water level meter shall be kept in the well during purging and the water level continuously measured to ensure the depth to water does not vary by more than 0.5 feet.
4. Appropriate pumping rates will vary dependent on water level. The pump should generally be placed at the near the top of the saturated thickness in the casing for purging and sampling. If the well is pumped dry and cannot recover after 24 hours, the well will be noted as dry during the sampling event.
5. The groundwater samples will be collected according to the appropriate methods for each analyte after water characteristics have stabilized. Additionally, turbidity should be below 5 NTU at the time of sampling. Well evacuation and sampling data will be recorded on the groundwater monitoring form. After all samples have been collected, the pump will be shut down and withdrawn from the well. The well will be capped before beginning the appropriate decontamination sequence.

Initials: CV Revision: 6/02

STANDARD OPERATING PROCEDURES
No. 5214.10

Title: Semi-Volatile Analysis Sampling

Purpose: Provide guidelines for collecting and preserving groundwater and surface water samples for analysis of total petroleum hydrocarbons (TPH), diesel range organics (DRO), or extractable petroleum hydrocarbons (EPH). An option of sampling for for analysis of polynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270C (GC/MS) rather than EPH is also provided.

Procedures:

Sample Bottles:
TPH & DRO (1990 Draft DRO Method) analyses each require one liter amber glass bottle. EPH (Massachusetts Method EPH) requires two, one liter amber glass bottles.

Sample Collection:
1. Flow rates using submersible or other pumps should be low enough to avoid excessive aeration of the sample.
2. Samples taken with a bailer should be transferred to the bottle carefully in a steady stream to avoid aeration.
3. The sample bottles should be filled to just under full, leaving a small amount of headspace for temperature and pressure expansion.
4. Disposable latex gloves should be worn for sampling.

Sample Preservation:
1. Preserve with 5ml of H_2SO_4 per bottle.
2. Store bottled sample at 4°C (in cooler with ample blue ice).
3. Label bottle according to conventions of SOP 8510.10. Be precise about the required analysis.

PAH Option:
1. Sample as described above. PAH Method 8270 requires two, one liter amber glass bottles.
2. Preservation of sample is not required unless sample is chlorinated (i.e., contains residual chlorine such as in chlorinated drinking water). Add 80 mg sodium thiosulfate to chlorinated samples.
3. Store bottled sample at 4°C (in cooler with ample blue ice).
4. Label bottle according to conventions of SOP 8510.10. Be precise about the required analysis

Initials: SEM Revision: 4/10/02

STANDARD OPERATING PROCEDURES
No. 5301.10

Title: Surface Soil Sampling

Purpose: Provide guidelines for the collection of surface (< 2-inches) soils.

Procedures:
These procedures may be modified in the field based on field and site conditions after appropriate annotations have been made in the field logbook.

1. Locate the site as directed in the appropriate sampling and analysis plan.
2. Wearing disposable latex-type gloves, collect a sample by scraping the 0-2 inch interval of soil with a stainless steel spoon.
3. Place the soil in a stainless steel bowl.
4. If composite soil samples are to be collected, combine all samples in the bowl.
5. Remove all coarse fragments greater than 0.5 inches from the bowl. *If volatile organics analysis is **not** required*, mix the remaining sample in the bowl with the stainless steel spoon.
6. Transfer the soil sample directly into a glass sample jar with Teflon cap (4 or 8 ounce, depending on number of analyses required) and store in a cooler at 4 degrees Celsius or less. Retain approximately 30 grams of the sample in a ziplock plastic bag for field measurement of pH or PID screening, if required.
7. Record information about the sample collection on the appropriate forms. Complete the chain of custody and store in cooler with sample.

Initials: GEA Revision: 2/29/00

STANDARD OPERATING PROCEDURES
No. 5302.10

Title: Subsurface Soil Sampling

Purpose: Provide guidelines for the collection of subsurface (> 2-inches) soils.

Procedures:

Bucket Auger:

1. Arrive on-site equipped with stainless steel auger rod and several sizes of stainless steel bucket augers (e.g. 2-inch, 4-inch, 6-inch, etc.).
2. Bucket auger holes can be drilled as one size or in a telescoping manner if contamination between sample intervals is a concern. If a single sized, advance the bucket auger to the desired sampling interval depth and empty the contents of the auger in a stainless steel mixing bowl. For the telescoping method, advance the largest auger to a approximate depth of three feet, collecting specified depth increment samples as the auger is advanced. Install temporary decontaminated PVC casing with a diameter slightly smaller than the borehole to keep the hole open and reduce possible cross-contamination between depth intervals. Using the next size smaller bucket auger, repeat the process.
3. Select sample intervals for packaging for laboratory analysis in accordance with procedures described in the SAP.
4. Fill out appropriate paper work and bottle labels as necessary prior to leaving site.
5. Decontaminate all equipment between sample locations.

Split Spoon Sampler:

1. Arrive on-site equipped with at least two standard 1.4 inch inside diameter split spoon samplers. If geotechnical information is desired, a 140-pound drive hammer is required.
2. Install sampler into borehole and advance to the desired depth with the 140-pound drop hammer or equivalent means. Record number of blow counts to complete sampling over each 18-inch interval, as necessary. Retrieve sampler and place on worktable. Using the other sampler, repeat this sequence.
3. Record lithology and percent recovery from cores retrieved from split spoon sampler.
4. Based upon the project work plan or sampling and analysis plan, composite like core intervals by mixing in stainless steel bowl in a similar manner as described for surface sampling.
5. Decontaminate sampling equipment between each interval sampled if required by the SAP. Decontaminate sampling equipment between sampling sites.

Backhoe or Hand Dug Excavations:

1. Locate the site to be sampled and insure that equipment can safely access the site. Minimize off road travel to prevent off site damage to surrounding vegetation.

2. Orient excavation to maximize use of the angle of the sun to illuminate the pit for

photographs. Place excavated material a sufficient distance form the excavation.

3. Excavate to the prescribed depth. If the pit exceeds five feet in depth, OSHA construction standards for shoring or sloping must be observed to prevent accidental burials. Sampling personnel should enter the pit with care during and after excavation.
4. Soil profile descriptions shall be made from a hand-cleaned surface along the pit wall. Complete profile descriptions and take photographs before pit is sampled.
5. Soil samples shall be collected from depth intervals specified in the SAP. When a depth interval is sampled, an equal volume of soil should be collected from the entire interval exposed on the pit wall. Soil samples will be collected with the stainless steel trowel and mixing bowl according to methods described for surface soil sampling.
6. After sampling is completed the pit should be backfilled with excavated material in the reverse order that it was excavated so that topsoil material is returned to the tip of the pit. When backfilling is complete the area should be cleaned-up to its original condition.
7. Decontaminate sampling equipment between sampling sites. Excavation equipment should be cleaned between sites with water (where possible) or with a shovel to remove accumulated dirt and mud.

Initials: JBO Revision: 1995

Boring Log

Project Name:	PBS&J Personnel:	Dates Drilled:
Location:	Boring No:	Ground Elev:
Project No:	Total Depth:	TOC Elev:
Drilling Company/Driller:	SWL:	Loc Sketch:
Drilling Mthd:	Measuring Point:	
Sampling Mthd:	Well Type:	

DEPTH	MATERIAL DESCRIPTION	BLOWS/ % RECOVERY	SAMPLE NO/ TYPE	PID	COMMENTS

Sop5302.20 Boring Log.doc 4-99 gea

STANDARD OPERATING PROCEDURES
No. 5310.10

Title: Compositing Soil Samples

Purpose: Compositing methods will be used when it is desirable to obtain a single sample representing the mean or average characteristics of a soil interval. This technique is good for obtaining average soil contaminant values; however, it tends to mask or obscure variations within the soil column. This procedure applies to samples taken for inorganic analysis. Volatile or semi-volatile organic compounds would be lost using these methods and thus shall not be sampled in this manner.

Procedures:
The procedure applies primarily to split spoon sampling, but can be adapted to suit other sampling methods.

1. After the spoon is withdrawn from the boring and opened, and the upper several inches of potentially disturbed material is removed and discarded, the sample shall be split lengthwise with a stainless steel knife.
2. One-half of the sample is transferred to a large stainless steel mixing bowl or pan. The other lengthwise half is placed in a glass sample jar and retained as a sample split for that depth interval.
3. This procedure is repeated until the desired number of discrete split spoon samples have been collected for the composite.
4. The material in the mixing bowl or pan is then broken up and mixed thoroughly with a stainless steel spoon or trowel.
5. Careful observation of the soil will indicate when homogenization is complete.
6. The soil is then spread evenly in the bottom of the bowl or pan.
7. The soil mass is quartered, and a subsample taken from each quarter. These subsamples are placed in the sample jar to be sent to the laboratory for analysis.
8. The remainder of the homogenized soil composite is saved and archived as a split.

References:
U.S. EPA, 1983, Preparation of Sampling Protocol: Techniques and Strategies. EPA-600/4-83-020.

Initials: JBO Revision: 1995

STANDARD OPERATING PROCEDURES
No. 6209.10

Title: Surface Water Equipment Decontamination

Purpose: Provide guidelines for decontamination of surface water sampling equipment.

Procedures:
The rinseate for all decontamination procedures should be collected and/or disposed of as required by the site specific sampling and analysis plan.

General Equipment Decon:
1. Scrub down the equipment with a non-phosphate detergent (Alconox) using a bucket, tap water and nylon brush.
2. Rinse the equipment with tap water, and collect rinseate if required by site SAP.
3. Rinse the equipment with HCL (if required by SAP).
4. Rinse the equipment with distilled water and air dry.
5. Store in airtight container or plastic bag.

Grunfros Redi-Flo 2 and Redi-Flo 4 Submersible Pumps
1. Remove pump from sampling water source.
2. Move pump equipment to a location a min. of 15 feet down stream from sampling point.
3. Scrub down the external portions of the pumping equipment (hose and reel) with sequence of solutions outlined in steps 4-8 below.
4. Pump 3 hose-volumes of non-phosphate detergent (Alconox) in tap water through apparatus.
5. Repeat step 4 from second container of tap water.
6. Pump 3 hose-volumes of methanol, 0.1N HCL, or HNO3 as required by the site specific sampling and analysis plan.
7. Pump 3 hose-volumes of tap water through apparatus.
8. Pump 3 hose-volumes of distilled/deionized water through the apparatus.
9. Collect rinseate equipment blank of deionized water if required by the SAP.
10. Store equipment in airtight container or plastic bag.

References:

U.S. EPA. 1987. A compendium of Superfund field operations methods. Report No. EPA/540/P-87/001.

Initials: BA Revision: 1994

STANDARD OPERATING PROCEDURES
No. 6210.10

Title: Groundwater Equipment Decontamination

Purpose: Provide guidelines for decontamination of groundwater sampling equipment.

Procedures:
The rinseate for all decontamination procedures should be collected and/or disposed of as required by the site specific sampling and analysis plan.

General Equipment Decon:
1. Scrub down the equipment with a non-phosphate detergent (Alconox) using a bucket, tap water and nylon brush.
2. Rinse the equipment with tap water, and collect rinseate if required by site SAP.
3. Rinse the equipment with methanol (if required by SAP).
4. Rinse the equipment with distilled water and air-dry.
5. Store in airtight container or plastic bag.

Water Level Probe:
1. Wipe probe and electric tape with a paper towel saturated in methanol/water.
2. Wipe with distilled water. Rewind spool.
3. Final rinse with methanol, followed by distilled/deionized water, collect rinseate if an equipment decon blank is required.
4. Air-dry and place in clean container or plastic bag.

Grunfros Redi-Flo 2 and Redi-Flo 4 Submersible Pumps
1. Remove pump from well and cap well casing.
2. Move pump equipment to a location a minimum of 15 feet down wind and down gradient from the monitoring well.
3. Scrub down the external portions of the pumping equipment (hose and reel) with sequence of solutions outlined in steps 4-8.
4. Pump 3 hose volumes of non-phosphate detergent (Alconox) in tap water through apparatus.
5. Repeat step four from second container of tap water.
6. Pump 3 hose volumes of methanol, 0.1N HCL, or HNO3 as required by the site specific sampling and analysis plan.
7. Pump 3 hose volumes of tap water through apparatus.
8. Pump 3 hose volumes of distilled/deionized water through the apparatus.
9. Collect rinseate equipment blank of deionized water if required by the SAP.
10. Store equipment in airtight container or plastic bag.

References:

U.S. EPA. 1987. A compendium of Superfund field operations methods. Report No. EPA/540/P-87/001.

Initials: BA Revision: 1994

STANDARD OPERATING PROCEDURES
No. 6220.10

Title: Soil Sampling Equipment Decontamination

Purpose: Provide guidelines for decontamination of soil sampling equipment.

Procedures:
The rinseate for all decontamination procedures should be collected and/or disposed of as required by the site specific sampling and analysis plan.

General Equipment Decon:
1. Scrub down the equipment with a non-phosphate detergent (Alconox) using a bucket, tap water and nylon brush.
2. Rinse the equipment with tap water, and collect rinseate if required by site SAP.
3. Rinse the equipment with methanol (if required by SAP).
4. Rinse the equipment with distilled water and air dry.
5. Store in airtight container or plastic bag.

Initials: CV Revision: 1998

STANDARD OPERATING PROCEDURES
No. 8100

Title: Project Field Logbook

Purpose: Provide guidelines for proper project field logbooks.

Procedures:

Afield logbook will be kept for each project to provide a permanent accountable record of field activities. The logbook will have bound, consectutively numbered pages. Each logbook will be labeled with the logbook number, company name, project number, document custodian, and date. The fild logbook should contain a complete record of activities including any site survey notes, well installation and decelopment, sampling events, filed measuremtns, personnel, photographs, pits, excavations, borings, audits, and ancillary data. The field logbook provides a record of sample identity from sample collection, Chain of Custody, to laboratory, database storage, and final reporting. Entries will be made in indelible ink and corrections muss be line-out delections which are initialized and dated by the person making the entry. Entires must not be erased or otherwise deleted.

All smapling activities

1) Complete labels on containers using waterproof permanent marker pen.

2) Each sample container shall be labeled with the following information:

Sample ID no.
Date
Time
Sampling Personnel
Preservative
Analysis Requested

3) The sample ID No. will be coded to contain the project number, sampling point, and sample number. The project number shall be the six character PBS&J's project number which identifies the site, e.g. 293001. The sampling point will be a unique identifier up to six characters long for the well, pit, or other point on the site, e.g. MW1. The sample number will reflect the type of analysis for a sample on a given site, and may be up to six characters long. The sample number/type of analysis will be unique to a project number, and consistent between sampling events.

Example: Sample ID No. 291001-MW1-1 represents a major minerals analysis for monitoring well #1 on project 291001.

For soil samples: 294001-SCS-101 represents the first (1--) sampling event at that particular site and the first (--1) soil sample taken.

4) The sample ID number combined with the date and time of sampling will provide a unique identifier for sample results in the Database Management System.

5) The following character prefix conventions are recommended sample point labels:

Sampling Point	Label
EB	Equipment Blank
TB	Trip Blank
FB	Field Blank
MW	Monitoring Well
DW	Domestic Well
IW	Injection Well
OB	Observation Well
UST	Underground Storage Tank
VE	Vapor Extraction
AA	Ambient Air
SUMP	Sump (Water sample)
POND	Ponds
SPR	Spring
LAKE	Lake
SW	Surface Water, Stream or River
SR	Surface Runoff
TS	Excavated Trench Soil Sample
SS	Surface Soil Sample
DS	Deep Soil Sample
SC	Soil Composite Sample

6) Duplicate samples at a sampling point will add the letter "D" to the end of the sample number. Note: Do not designate duplicate samples if you wish to submit them “blind” to the laboratory to minimize lab bias.

Example: Sample ID No. 191001-MW1-1D represents a major minerals analysis duplicate for monitoring well #1 on project 191001.

7) The sampling scheme for a given site must be documented on the Groundwater Sampling Form, Field Notebook, and Chain of Custody Form.

Initials: BA Revision: 1994

STANDARD OPERATING PROCEDURES
No. 8105.10

Title: Project Field Logbook

Purpose: Provide guidelines for treatment cell field logbooks.

Procedures:

A field logbook will be kept for each treatment cell to provide a permanent accountable record of field activities. The logbook will have bound, consecutively numbered pages. Each logbook will be labeled with the logbook number, company name, treatment cell number, document custodian, and date. The field logbook should contain a complete record of activities including any site survey notes, well installation and development, sampling events, field measurements, personnel, photographs, pits, excavations, borings, audits, and ancillary data. The field logbook provides a record of sample identity from sample collection, Chain of Custody, to laboratory, database storage, and final reporting. Entries will be made in indelible ink and corrections must be line-out deletions which are initialized and dated by the person making the entry. Entries must not be erased or otherwise deleted.

All waste stream records will include the following entries in the logbook:

1. Date/Time
2. Land & Water personnel
3. Other personnel (contractor, drillers, etc.)
4. Identification letter / number tracking code
5. Material source
6. Volume
7. Contaminants
8. Initial sample concentration
9. Textural classification
10. Evaluation of load homo/heterogeneity
11. Treatment cell location
12. Application date
13. Treatment schedule and method (tillage frequency, nutrient, moisture, or organic amendment additions, etc.)
14. Sample dates
15. Field measurements
16. Lab analyses performed
17. Analytical results
18. Contact with regulatory personnel
19. Final placement, if moved.

20. Field observations including, but not limited to: weather, concurrent site activities, wellhead vandalism, changes in sampling equipment or instruments from previous sampling event(s), instrument malfunction, suspected waste or contamination sources, sampling station condition, sampling delays, destruction or loss of documents/samples, any other information deemed relevant.
21. Any deviation from or modification to the sampling and analysis plan or SOPs.
22. Record of Agency of Client Field Audits.

Field logbooks will be reviewed by the project manager to verify adherence to Standard Operating Procedures and the Sampling and Analysis Plan. Field logbooks are also subject to QA/QC audits conducted by the regulatory agency. Field logbooks will be stored in a designated secure area.

Initials: BA Revision: ___

STANDARD OPERATING PROCEDURES
No. 8106.10

Title: Field Form Protocol

Purpose: Provide guidelines for proper documentation of field work.

Procedures:

All field work will be documented on appropriate forms. Specific forms have been developed for site survey notes, well installation and development, sampling events, field measurements, photographs, and borings. In addition to these specific forms, all field activities including a chronology of events and site conditions should be noted on either a Field Activity Form, or in a field logbook. Entries will be made in indelible ink and corrections must be line-out deletions which are initialized and dated by the person making the entry. Entries must not be erased or otherwise deleted.

The Field Activity Log or Logbook is the master record of field activities. These will include a chronology of events, summary of site conditions, and notes of observations not included on other forms. There is also a space provided where other forms completed during the field activities can be listed.

The specific forms include spaces for relevant information. These should be filled out as completely as possible in the field.

Initials: GEA Revision: 2/29/00

Daily Field Activity Log

Project: _____ PBS&J Personnel: _____

Project #: _____ Date: _____

Other Forms: _____

Time	Description

Weather	
Visitors on Site	

Sop8106.20 Field Activity Form.doc

Photo Log

Project: _____ PBS&J Personnel: _____ Date: _____

Project #: _____ Other Forms: _____

Comments: _____

Roll #	Photo #	Description	Roll #	Photo #	Description

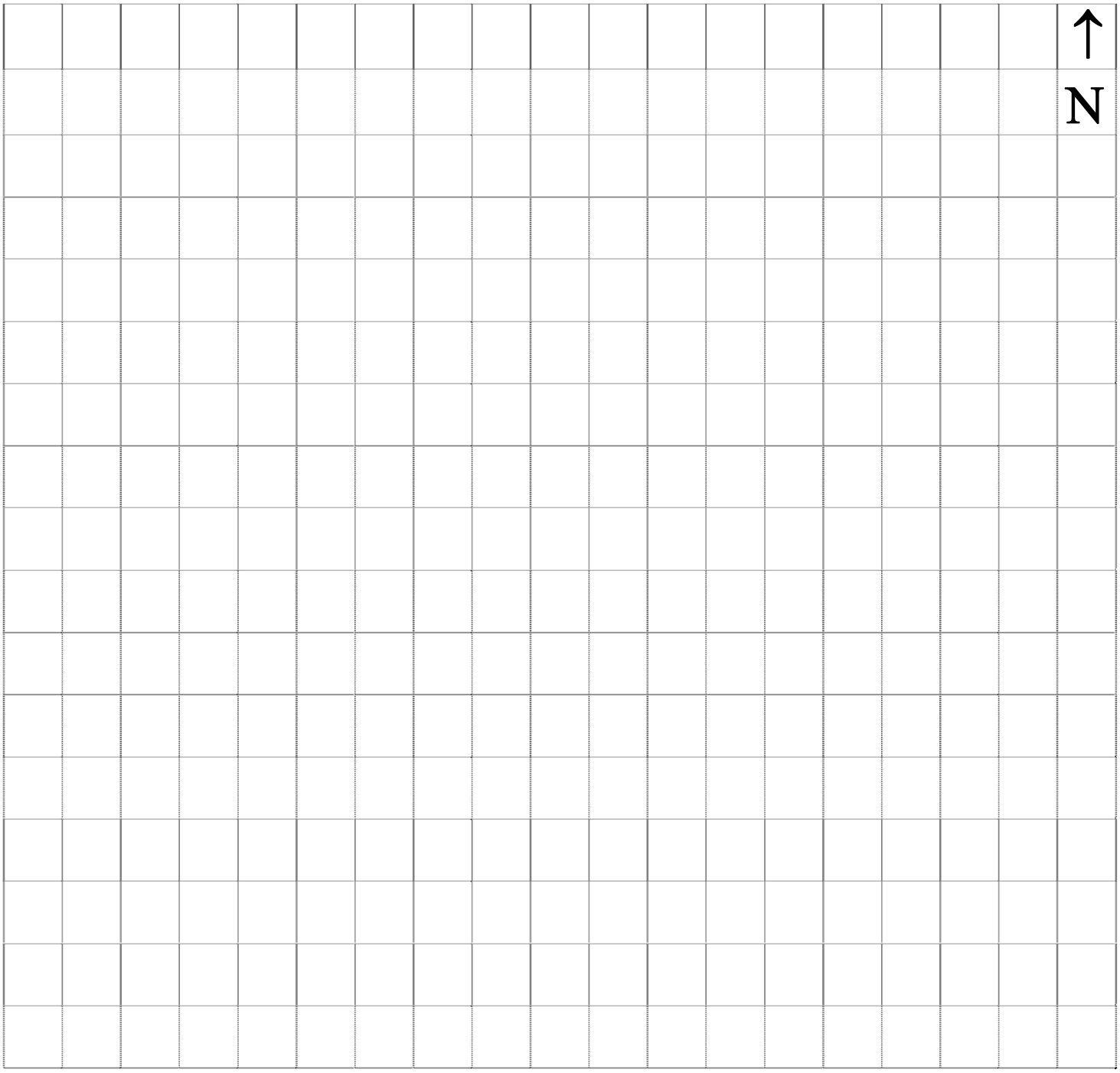
Sop8106.21 Photo Log Form.doc
Edits: TB 10-12-09

Site Sketch

Project: _____ PBS&J Personnel: _____

Project #: _____ Date: _____

Description: _____ Approx. Scale:_____



STANDARD OPERATING PROCEDURES
No. 8106.23

SAMPLING & ANALYSIS PLAN

SITE:	*PROJECT #:*
PROJECT MANAGER:	
FIELD PERSONNEL:	*DATE OF FIELDWORK:*
PROJECT LOCATION:	
PROJECT CONTACT:	*CONTACT PHONE:*

Purpose:

Preliminary Field Check List (check all that are applicable)

	contact owner/operator/client (project contact)		*order special equipment (list below)*
	contact state regulator (DEQ contact)		
	contact local regulator (health department/other)		
	order sample bottles		
	complete utility locates		
	other		

Field Work Narrative Description:

Sampling Methods

Sample Point	***Methods***	***EPA Method #***	***Bottles (type/#)***	***Preservative***
	1. 2. 3.			

Laboratory: ***Shipment Method:***

Standard Operating Procedures Checklist

	3401.10, 3402.10, 3403.10	Corning Checkmate 90: pH, Eh, Conductivity, TDS, DO
	4203.10	Well Static Water Level Measurement Using Solinst Well Probe
	5201.10	Monitoring Well Purging & Sampling
	5211.10	Major Minerals (INORGANICS) Sampling
	5212.10	Volatile Organic Analysis (VOA) Sampling
	5213.10	Bioremediation Sampling
	5214.10	Groundwater TEH-DRO Sampling
	6210.10	Groundwater Equipment Decontamination
	8210.10	Sample Packaging & Shipping for Groundwater Samples
	8300.10, 8400.10, 8510.10	Field QA/QC, Sample Custody, Sample ID and Analytical Results

STANDARD OPERATING PROCEDURES
No. 8210.10

Title: Sample Packaging and Shipping for Groundwater and Surface Water Samples

Purpose: Provide guidelines for packaging and shipping groundwater samples.

Procedures:

1. Samples must be packaged to preclude breakage or damage to sample containers, and shipped to comply with shipper, U.S. EPA, IATA, and U.S. DOT regulations. Transportation regulations for shipping of hazardous substances and dangerous goods are defined by the U.S. DOT in 49 CFR subchapter C, Part 171 (October 1, 1988); IATA and ICAO. These regulations are accepted by Federal Express and other ground and air carriers.
2. According to DOT regulations, environmental samples are classified as Other Regulated Substances (ORS). ORS are articles, samples, or materials that are suspected or known to contain contaminants and/or are capable of posing a risk to health, safety, or property when transported by ground or air.
3. Materials shipped under the classification of ORS must **not** meet any of the following definitions:

   Class 1: Explosives; Class 2: Gases- compressed, liquefied, dissolved under pressure, or deeply refrigerated; Class 3 Flammable Liquids; Class 4: Substances susceptible to spontaneous combustion; Class 5: Oxidizing substances; Class 6: Poisonous (toxic and infectious); Class 7: Radioactive materials; Class 8: Corrosives.
4. Samples, substances, or materials from sources other than drums, leachate streams, sludges, noticeably discolored soils or waters, and lagoons shall be defined as ORS or environmental samples. In addition, any samples producing PID/OVA readings slightly above background shall also be defined as ORS.

The following steps will be followed when packaging and shipping environmental samples:

1. Verify proper sample identification and complete labels on bottles.
2. Wipe exterior of sample bottle with appropriate decon solution
3. Place sample bottle(s) into sealed plastic bag, and into cooler with frozen blue ice if required.
4. Fill excess space in cooler with packing material.
5. Seal cooler and complete Chain of Custody following SOP 8400
6. Complete appropriate air bill and Shipper's Certification for Restricted Articles/Dangerous Goods.

Initials: BA Revision: 1994

STANDARD OPERATING PROCEDURES
No. 8220.10

Title: Soil & Sample Packaging and Waste Shipping

Purpose: To ensure safe and legal transportation of environmental samples.

Background: Environmental samples may fall into the category of hazardous substances. Transportation of hazardous substances and dangerous goods is regulated by the Department of Transportation (DOT) in 49 Code of Federal Regulations (CFR) Subchapter C, Part 171; the International Air Transport Association (IATA); and the International Civil Aviation Organization (IACO). A combination of IATA/ICAO shipment and packaging regulations shall be used, as these are accepted protocols for shipment of hazardous substances and dangerous goods by Federal Express and other ground or air carriers.

Environmental samples shall be classified as Other Regulated Substances (ORS). ORS are articles, samples, or materials which are suspected or known to contain contaminants and/or are capable of posing a risk to health, safety, or property when transported by ground or air. Examples of environmental samples include most ground water and soil samples.

The materials included under the proper shipping name of ORS must not meet any of the definitions for the following classes of material:

- Class 1: Explosives,
- Class 2: Gases - compressed, liquefied, dissolved under pressure, or deeply refrigerated,
- Class 3: Flammable liquids,
- Class 4: Substances susceptible to spontaneous combustion,
- Class 5: Oxidizing substances,
- Class 6: Poisonous (toxic and infectious substances),
- Class 7: Radioactive materials, or
- Class 8: Corrosives.

Procedures:

1. Collect sample as stated in appropriate stand operating procedure (SOP) and label.
2. While wearing the necessary personal protective equipment, wipe exterior of sample container with appropriate decontamination solution.
3. Place sample container in a 2-mil thick (or thicker) ziplock polyethylene bag, one sample per bag. Seal the bag.
4. Place one or more samples into a strong outside container, such as an ice chest or a DOT-approved fiberboard box.

5. Secure ice and/or blue ice in the ice chest if required by the appropriate SOP.
6. Secure containers with noncombustible, absorbent, cushioning material for stability.
7. Secure properly completed chain-of-custody form in a plastic bag to the inside of the ice chest lid. The chain-of-custody form shall list only those samples contained in the ice chest.
8. Tape ice chest closed using fiberglass (or comparable) tape and seal with chain-of-custody seals.
9. Complete the air bill and Shipper's Certification for Restricted Articles/Dangerous Goods.
10. Label and address the ice chest with the analytical laboratory's street address.

Initials: JBO Revision: 1995

STANDARD OPERATING PROCEDURES
No. 8301.10

Title: Sample Blanks and Duplicates

Purpose: Provide guidelines for Field Sampling QA/QC procedures

Procedures:

The quality of analytical data collected in the field is evaluated by a combination of the following sampling techniques as required by the site sampling and analysis plan.

EQUIPMENT BLANK - Equipment blanks are samples of distilled/deionized water rinseate which are collected at the conclusion of equipment decontamination in the field. The rinseate is submitted to the laboratory "blind" in the appropriate sample container with required preservatives. Equipment blanks should contain no parameter of interest greater than two times the method detection limit. An equipment blank exceeding this limit will trigger an investigation of contaminant sources and corrective action. Equipment blanks are generally required where non-dedicated sampling equipment is in use to insure against cross contamination. As a minimum, an equipment blank should be collected for every 10 samples, or for each day of on site sampling. More frequent sampling may be indicated where elevated concentrations of contaminants are suspected.

TRIP BLANK - Trip blanks are prepared at the laboratory by filling the VOC sample bottle with deionized water, and including this sample blank in the sampling kit. The trip blank remains in the shipping container (cooler) throughout the sampling event at the site and is returned to the laboratory for analysis along with the field collected samples. One trip blank is included for each container of samples submitted for VOC analysis. Trip blanks containing target VOC's above detection limits indicate problems VOC migration during shipping and storage, and may also suggest laboratory cross contamination.

FIELD BLANKS - Field blanks for an analyte of interest are established by filling the sample bottle with deionized water at the laboratory. The field blank bottle is left open during sample collection for the period of time required to collect the sample. Field blanks reflect contamination due to atmospheric fallout or windy conditions. Field blanks should be collected once every 20 samples, or one per sampling events unless otherwise directed by the site-specific sampling and analysis plan.

FIELD DUPLICATE SAMPLES- A field duplicate sample is collected by filling a separate sample bottle immediately following the original sample. Duplicate samples at monitoring wells may be separated by decontamination procedures. Duplicate samples assess the combined field and laboratory precision. Duplicate samples are generally collected for every group of 10 or fewer samples taken during a sampling event, or on a daily basis.

REFERENCE MATERIALS- Reference materials samples are materials of a known composition that have been prepared by and obtained from U.S. EPA approved sources, and have been subject to multiple laboratory analyses using a standard method. Reference materials standards provide a measure of analytical performance and/or analytical method bias of both the primary and referee laboratories. The analyte composition and frequency of reference materials submitted for analysis will be determined according to the site-specific sampling and analysis plan. A minimum frequency should be 1 per 50 samples, or once per sampling event for each analyte of interest unless otherwise directed by the site-specific sampling and analysis plan.

LABORATORY SPLIT- A laboratory split consists of one well-mixed and homogenized sample which is split into two samples in the field. One of the split samples is sent to the primary laboratory and the other sent to a referee laboratory, each with a unique sample ID number. Both split samples are analyzed for identical parameters, and results compared to determine inter-laboratory precision. Laboratory splits will be collected at a frequency of 1 per 20 samples, or once per sampling event, unless otherwise directed by the site-specific sampling and analysis plan.

References:

U.S. EPA. 1987. A compendium of Superfund field operations methods. Report No. EPA/540/P-87/001.

Initials: BA Revision: 1994

STANDARD OPERATING PROCEDURES
No. 8401.10

Title: Sample Custody

Purpose: Provide guidelines for sample custody.

Procedures:

The field sampler is responsible for custody of the samples at all times until they are transferred or shipped to the laboratory. The project manager will determine if proper custody procedures have been followed upon review of field activities, and audits may also be conducted by the client or appropriate regulatory agency.

1. Verify proper sample identification and complete labels on bottles (SOP 8500).
2. Place sample bottle(s) into sealed plastic bag, and into cooler with frozen blue ice. Fill excess space in cooler with packing material (SOP 8200).
3. Complete Chain of Custody. The Chain of Custody should list only samples contained within the cooler, and must be completed in the field. Requested analyses must match the requirements of the SAP.
4. Notify Analytical Laboratory of shipment, and request pick-up. If shipping by bus or other transport, notify lab of anticipated arrival time.
5. Sign Chain of Custody "Relinquisher" with date and time. Laboratory will sign up receipt of sample as "Receiver". Pink copy to Lab, White copy for report, Yellow copy for report file.
6. Place pink copy of Chain of Custody into ice chest, sealed in a zip lock bag. Seal chest with 2 signed and dated Chain of Custody Seals, secure seals and chest with strapping tape, and turn over to lab representative or shipper.
7. Retain record of shipping (bill of lading, or registered return receipt) for records.
8. Any time the sample custodian is separated from the samples, the samples should be locked in a designated secure place with custody seals on the cooler.
9. Split samples require a separate <u>sample receipt</u> indicating the party with whom the samples will be split. The individual relinquishing the samples to the facility or agency should request the representative's signature.

References:

U.S. EPA. 1986. NEIC Policies and Procedures. Report No. EPA/330/9-78-001-R.

Initials: <u>BA</u> Revision: <u>1994</u>

STANDARD OPERATING PROCEDURES
No. 8500.10

Title: Identification of Samples and Analytical Results

Purpose: Provide guidelines proper identification of field samples.

Procedures:

The sampling ID number for an individual sample must be traceable through the entire monitoring system, from sample collection, custody procedures, to analytical results, database format and final reporting.

1) Complete labels on containers using waterproof permanent marker pen.

2) Each sample container shall be labeled with the following information:

Sample ID no.
Date
Time
Sampling Personnel
Preservative
Analysis Requested

3) The sample ID No. will be coded to contain the project number, sampling point, and sample number. The project number shall be the six character Land and Water project number which identifies the site, e.g. 293001. The sampling point will be a unique identifier up to six characters long for the well, pit, or other point on the site, e.g. MW1. The sample number will reflect the type of analysis for a sample on a given site, and may be up to six characters long. The sample number/type of analysis will be unique to a project number, and consistent between sampling events.

Example: Sample ID No. 291001-MW1-1 represents a major minerals analysis for monitoring well #1 on project 291001.

For soil samples: 294001-SCS-101 represents the first (1--) sampling event at that particular site and the first (--1) soil sample taken.

4) The sample ID number combined with the date and time of sampling will provide a unique identifier for sample results in the Database Management System.

5) The following character prefix conventions are recommended sample point labels:

Sampling Point	Label
EB	Equipment Blank
TB	Trip Blank
FB	Field Blank
MW	Monitoring Well
DW	Domestic Well
IW	Injection Well
OB	Observation Well
UST	Underground Storage Tank
VE	Vapor Extraction
AA	Ambient Air
SUMP	Sump (Water sample)
POND	Ponds
SPR	Spring
LAKE	Lake
SW	Surface Water, Stream or River
SR	Surface Runoff
TS	Excavated Trench Soil Sample
SS	Surface Soil Sample
DS	Deep Soil Sample
SC	Soil Composite Sample

6) Duplicate samples at a sampling point will add the letter "D" to the end of the sample number. Note: Do not designate duplicate samples if you wish to submit them “blind” to the laboratory to minimize lab bias.

Example: Sample ID No. 191001-MW1-1D represents a major minerals analysis duplicate for monitoring well #1 on project 191001.

7) The sampling scheme for a given site must be documented on the Groundwater Sampling Form, Field Notebook, and Chain of Custody Form.

Initials: BA Revision: 1994

STANDARD OPERATING PROCEDURES
No. 8600.10

Title: Data Security and Data Transfer

Purpose: Provide guidelines for assuring Data Security and authorized Transfer of Data.

Procedures:

1. Analytical results and field measurements will be entered to the Land & Water database management system by the designated system manager, and verified for accuracy by the project manager.
2. The database system will be backed up on a weekly and monthly basis.
3. The database management system is in Dbase IV format. Database integrity at Land & Water Consulting, Inc. is assured by a combination of password, virus checking, checksum and time/date stamp procedures.
4. Complete or partial analytical results and/or field measurements will be released upon written request to interested parties upon approval of all concerned parties, including, but not limited to the Land & Water project manager, the client, and the regulatory oversight agency.
5. The integrity or distribution of digital database files released to third parties cannot be assured by Land & Water.
6. Database files for a project/site will be retained for a minimum of ten years following the conclusion of any monitoring activities by Land & Water personnel.

Initials: BA Revision 1994

STANDARD OPERATING PROCEDURES
No. 8601.10

Title: Tracking Lab Data & Reports

Purpose: Provide guidelines for management of lab data and report status.

Lab Tracking Procedures:

1. Following shipment of laboratory samples, the lab data manager will enter the following information into the Excel spreadsheet:

   - project number
   - project/facility name
   - date samples were collected
   - date samples were sent
   - lab performing analyses
   - analyses requested

2. Upon receiving the analytical reports from the lab, the following information will be entered into the Excel spreadsheet:

   - date results were received
   - hardcopy location of analytical results (PBS&J personnel)

Report Tracking Procedures:

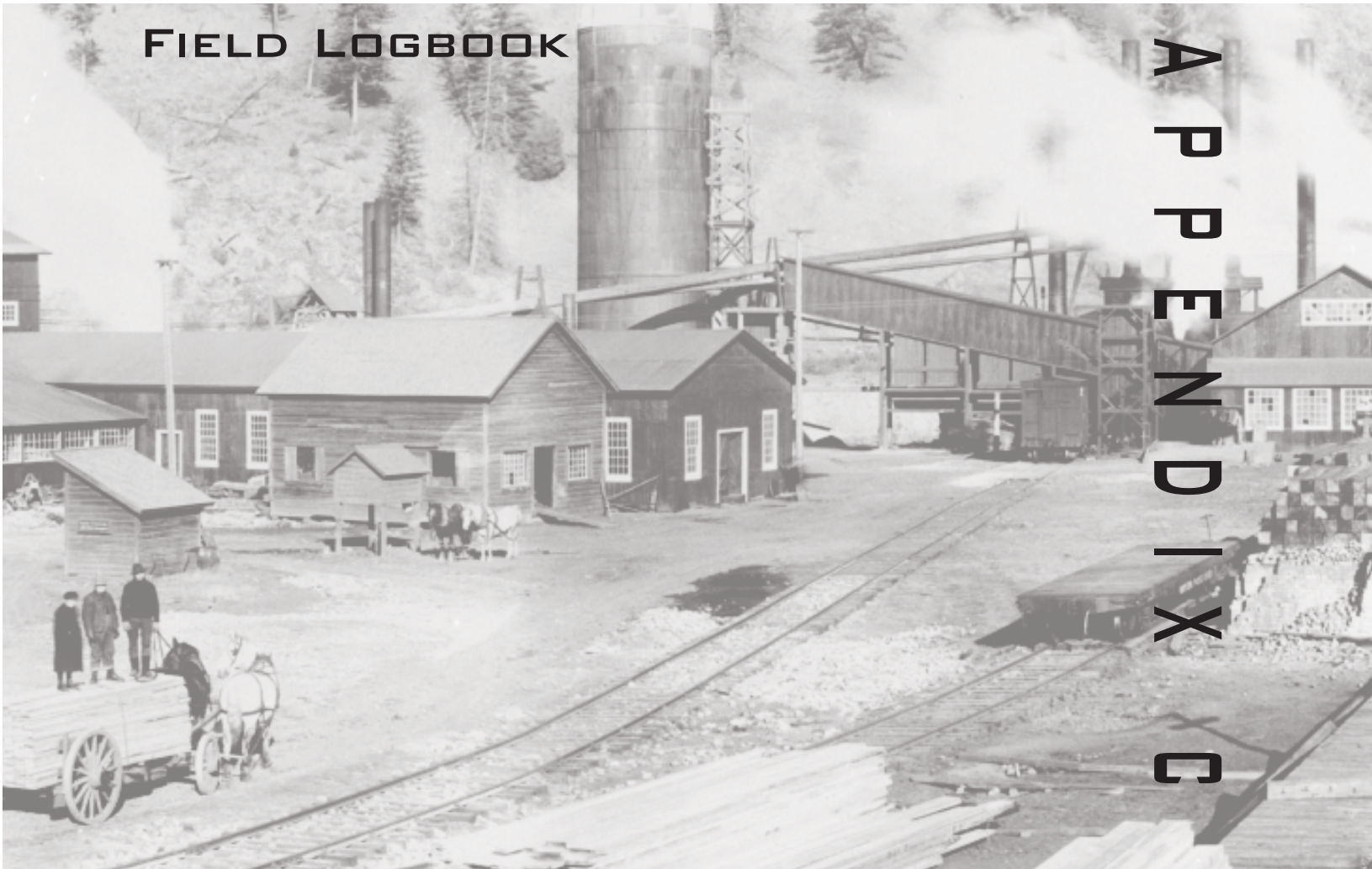
1. Following shipment of the report, the project manager will enter the following information into the Excel spreadsheet:

   - project number
   - project/facility name
   - date report was sent
   - title/purpose of report
   - hardcopy location of report

Initials: TE Revision 2000

Field Logbook

Appendix C



COMPOSITION BOOK

-Final Cooling Pond Removal-

-Compressor Building Excavation-

Stimson

Milltown, MT Jan. - 2016

Wide Rule
100 Sheets • 200 pages
9.75 in x 7.5 in/24.7 cm x 19.0 cm

TOP|FLIGHT

Wide Ruling

CLASS SCHEDULE

NAME: _____ EMAIL ADDRESS: _____

SCHOOL: _____ GRADE: _____ CELL: _____

_____ Semester/Quarter

Period	From/To	Subject	Rm #	Instructor	Days

_____ Semester/Quarter

Period	From/To	Subject	Rm #	Instructor	Days

_____ Semester/Quarter

Period	From/To	Subject	Rm #	Instructor	Days

_____ Semester/Quarter

Period	From/To	Subject	Rm #	Instructor	Days

1/12/16

8:50 am → T. Schmechel of NewFields arrives on site. Excavation has begun south of the compressor building, where two Komatsu PC 400 LC rigs, one equipped with a toothed bucket & the other with a jack hammer, are breaking up surface concrete and stockpiling it immediately south of the excavation site.

9:10 → T. Schmechel drives to White House (operation headquarters) and meets with Steven Petrin (the site manager) and Tracy Lane (Health & Safety Supervisor with Envirocon).

915 → T. Schmechel arrives at oversight trailer & begin setting-up equipment for the duration of the excavation/sampling events (~6-8 weeks). Oversight trailer is located ~ 50 yds WSW of excavation site.

955 → T. Etzel of NewFields arrives on site

1020 → T. Etzel & T. Schmechel meet with Rick ~~Roberts~~, the operator of the jackhammer equipped Komatsu PC 400 LC.

1040 → T. Etzel & T. Schmechel meet with Randy Mendoza (superintendent for Envirocon) & discuss general sampling protocol

1100 → T. Etzel departs from site. Razing of surface concrete to the south of the compressor building by the two Komatsu PC 400 LCs is still ongoing.

1130 → Excavators go on a lunch break

1230 → End of lunch break for excavation crew

1330 → Excavation has begun above (at) the site of the compressor building, where two PC-490 Komatsu hydraulic excavators, one with a toothed bucket and the other with a 10,000 lb hammer/interchangeable pulverizer are razing and removing surficial concrete.

Removed concrete is then stockpiled south of the excavation area.

1335 → Keith Large (MT DEQ) arrives on site

1/13/16	0730 → Arrive on site for safety meeting with Tracy Lane (Health & Safety Supervisor)

* During safety meeting, Rod Roberts indicated that organic staining concrete found on concrete rubble (from excavating 1/12/16) was from rotting sawdust not from PCB riddled engine oil – this per Keith Large (MT DEQ)

0750 → Drive to nearby gas station & fill 5-gallon canister w/ gasoline for trailer generator

0810 → Arrive back @ trailer, hook-up & start generator, organize equipment in trailer

0815 → Excavation resumes using two Komatsu PC 400 LCs, one equipped w/ a ~~pulverizer~~ hammer & the other with a bucket. Excavation is focusing

on breaking-up & removing concrete in the basement of the compressor building, near the areas of CB-14 & CB-2. Excavated areas are then backfilled with soil cuttings.

0910 → Randy Mendoza (site superintendant) indicates that excavated concrete rubble from the compressor building basement is being stockpiled south of the excavation site but segregated from concrete rubble excavated elsewhere on the site – this is in response to the potential for engine oil staining and PCB contamination on the compressor building concrete rubble.

0930 → T. Schmechel of NF notices organic staining on concrete from compressor building basement – potentially PCB-containing engine oil. See Photo 159-1874.

1015 → T. Etzel arrives on site & completes walk over of excavation site

1030 → T. Etzel heads to "White House" to discuss separation of petroleum stained concrete with Rod Roberts.

1050 → T. Schmechel & T. Etzel meet with Randy Mendoza (site superintendant) to explain the process for sorting petroleum stained concrete from non-petroleum stained concrete:

1) Non-petroleum stained concrete is to be stockpiled separately
2) Petroleum stained concrete w/ both visual & olfactory evidence of staining is to be stockpiled separately
3) A third pile, consisting of concrete that has either visual or olfactory evidence of staining, but not both, will be stockpiled separately. Keith Large (MT DEQ) will then determine the final destination of this concrete i.e. Republic or TSCA landfill.

↳ T. Etzel (NF) departs from site

1140 → Excavation crew goes on lunch break

1 1145 → Red/purple staining noticed in abundance on concrete rubble (see Photo 159-1884). After discussions with T. Etzel it is thought to be

↳ Rubble exhibiting red/purple staining seems predominantly isolated to the compressor building area (CB-1 & CB-2)

1240 → Crew returns from lunch break & excavation (concrete removal) continues at CB-1/2 with hammer - & bucket equipped Komatsu PC 400 LCs. T. Schmechel inspected steam pipes in compressor building basement (CB-1) following their excavation - pipes exhibit several areas of suspect petroleum staining (see Photo 159-1886).

1245 → Rod Roberts (Envirocon Project Manager) indicates that a dumpster for steel will arrive on site today (1/15/96) and that NF should delineate petroleum-stained piping prior to its arrival, as contaminated piping will be disposed of separately at the TSCA landfill.

1300 → Billy (Komatsu PC 400 LC) equipped with toothed bucket continues to excavate in CB-1. Rick (Komatsu PC 400 LC) equipped with 10,000 lb hammer is excavating in both CB-1 & CB-4.

1345 → T. Etzel (NF) & Steven Petrin (site Manager) arrive on site.

1400 → T. Etzel (NF) & Steve Petrin (site Manager) depart from site

1400 - 1700 → Excavation of concrete from the compressor building continues in CB-1, CB-2, CB-4, & CB-5

1700 → Excavation of concrete rubble appears to be mostly complete in CB-1 through CB-5 and in cells further south (CB-7 & CB-12). Additionally, all cells have been backfilled with soil cuttings removed during the concrete excavation (see

1705 → Pack-up equipment & refill generator with gasoline

1725 → Depart from site

1/14/16

0730 → Arrive on site @ "White House" for safety meeting with Billy (excavator), Rick (excavator), Randy (site superintendent), Rod (Site Project Manager), & Tracy Lane (Health & Safety - Environ).

0755 → Drive to nearby gas station and refill 5-gallon gas canister for trailer generator.

0810 → Arrive back on site; Billy (excavator with Komatsu PC 400 LC equipped with bucket) has begun digging/excavating in CB-1/CB-2. Rick (excavator with Komatsu PC 400 LC equipped with 10,000 lb hammer) is warming up nig.
→ (See Photo 160-1892)

0815 → Talk w/ T. Etzel (NF) on phone briefly.

0825 → Using orange marking paint, T. Schmechel (NF) marks excavated pipes with likely petroleum contamination -- these pipes will be set aside by excavators for sampling and Keith Large's evaluation. (See photo 160-1891)

0830 → Rick (Komatsu PC 400 LC with hammer) begins breaking-up large concrete rubble in the stockpile south of the excavation area; allows for easier management of the rubble (See photo 160-1890)

0900 → Rick (Komatsu PC 400 LC equipped with hammer) begins operating in CB-4 & CB-2.

0930 → Both Komatsu PC 400 LCs (bucket & 10,000 lb hammer) begin breaking-up concrete rubble in stockpile south of excavation area to create more manageable concrete pieces.

1030 → Billy (Komatsu PC 400 LC) begins excavation (digging) @ CB-12 in overburden soil (see Photo 160-1900).

1040 → T. Etzel (NF) arrives on site. T. Etzel & T. Schmechel observe site & label six pipes as a potentially petroleum-impacted & PCB contaminated; these six pipes are to be sampled for PCBs.

1105 → T. Schmechel samples "Pipe-1" in an 8 oz. soil jar with nitrile gloves (See Photo 160-1902)

1125 → T. Etzel (NF) departs from site to retrieve tools for sampling the six potentially petroleum-impacted pipes.

1135 → Excavation crew goes on lunch break.

1240 → Excavation crew arrives back on site from lunch break

1245 → T. Etzel arrives back on site with sampling tools

1253 → T. Schmechel samples "Pipe-2" in an 4 oz jar. (See Photo 160-1903)

1300 → T. Schmechel samples "Pipe-3" in a 4 oz. soil jar. (See Photo 160-1905)

1310 → T. Schmechel samples "Pipe-4" in a 4 oz soil jar. (see Photo 160-1906)

1313 → T. Schmechel samples "Pipe-5" in a 4 oz. soil jar. (See Photo 160-1907)

1323 → T. Schmechel samples "Pipe-6" in a 4 oz soil jar. (See Photo 160-1908)

1357 → After discussions with Randy (site superintendent), it was explained that:

- The whole excavation area will be excavated 4 ft bgs at a time, getting sequentially deeper until the deepest part of the excavation is reached
- As such, Billy & Rick (Komatsu PC 400 LC operators) will be excavating in multiple cubes throughout the day, instead of completely excavating one cube (e.g. CB-2) at a time.

• CB-13 has been excavated to its maximum depth, but has not been excavated laterally to completion.

1410 → T. Schmechel (NF) departs from site to ship samples collected from potentially petroleum-impacted (PCBs) pipe that were excavated from the compressor building.

1420 → T. Schmechel (NF) arrives back on site.

1425 → Billy (Komatsu Operator) indicates that CB-14, CB-12, CB-2x have been excavated to 4 feet bgs. CB-13 has been excavated to 5 feet bgs for confirmation sampling. (See Photo 160-1910)

1840 → Billy (Komatsu PC 400 LC operator) notifies me that all cells have been excavated to ~3280 ft. elevation (4 ft bgs). He then begins excavating CB-12 to ~3276 ft elevation.

1700 → Excavation crew ceases operations & T. Schmechel begins packing up.

1710 → T. Schmechel departs from site.

1/15/16

Site personnel	Company	time in/out	
Randy Mendonsa	Envirocon (ENV)	0730/	1700
Bill McDaniel	" "	0730/	1700
Tracy Lane	" "	0730/	1700
Rod Roberts	" "	0730/	1700
Rick Huffel	" "	0730/	1700
Dallas Connors	" "	0730/	1700
Ty Schmechel	NewFields (NF)	0730/	1710
Tyler Etzel	NF	0815/	1035

0730 → Arrive on site @ "White House" for safety meeting

0745 → Head to nearby gas station to buy gasoline for trailer generator

0805 → Arrive back on site & start up trailer generator / fill out log book

0810 → Rick Huftel (Komatsu PC 400 LC with pulverizer) crushes concrete rubble @ south end of excavation

0815 → T. Etzel (NF) arrives on site with Nathan (concrete cutter from A-Core, Inc.).

↳ Nathan will be aiding in the collection of 8" concrete cores from 10 concrete rubble pieces likely impacted by petroleum (PCBs) & hydraulic fluids - samples will be named Concrete 1 ... Concrete 10

0830 → T. Etzel & T. Schmechel begin marking concrete with #'s 1-10 for concrete core collection. Dallas Connors (Komatsu PC 400 LC) begins excavating CB-7 to ~3280 ft. bgs.

0845 → Rick Huftel (Komatsu PC 400 LC w/ pulverizer) moves identified concrete rubble for sampling to safe place away from excavation.

0930 → T. Etzel & T. Schmechel (with help from Dallas Connors (ENV)) collect confirmation samples from CB-13 in accordance with sampling procedures laid out in Section 4.7 of "Addendum 2 to Final Cooling Pond Removal Work Plan." GPS coordinates were also recorded for each sample from CB-13 and are listed below. Four samples - CB-13-Base, CB-13-Northwall, CB-13-Westwall, and CB-13-Southwall - were collected from cell-CB-13. See photo 161-1912.

	Sample	Northing	Easting	Elevation (ft)
1)	CB-13-Base	17044958.55	923355.3	3279.95
2)	CB-13-Northwall	17044971.65	923358.1	3280.9
3)	CB-13-Westwall	17044960.95	923540.7	3281.2
4)	CB-13-Southwall	17044945.0	923551.7	3282.4

1015 → CB-13-Southwall samples collected & jarred in 8 oz. soil jars - including one jar for Energy Labs, one jar for MT DEQ, & one jar for NF.

1025 → CB-13- Northwall sample collected and jarred in 8 oz soil jars.

1030 → CB-13- Base sample collected and jarred in 8 oz soil jars.

1035 → T. Etzel departs from site

1040 → CB-13- Westwall sample collected and jarred in 8 oz soil jars.

1100 → Nathan (A-core, Inc.) continues to core for concrete samples # 1-10.

1120 → Nathan (A-core, Inc.) finishes coring concrete samples # 1-10 and departs from site.

1140 → Excavation crew goes on lunch break

1240 → Excavation crew arrives back on site from lunch break.

1245 → Dallas Conners (Komatsu PC 400 LC w/ bucket) begins excavating in CB-2 &

Rick Huftel (Komatsu PC 400 LC w/ pulverizer) begin breaking-up concrete rubble south of excavation area.

1227 → Concrete-1 sample is collected
1229 → Concrete-2 sample is collected
1233 → Concrete-3 sample is collected
1235 → Concrete-4 sample is collected
1236 → Concrete-5 sample is collected
1237 → Concrete-6 sample is collected
1243 → Concrete-7 sample is collected
1245 → Concrete-8 sample is collected
1247 → Concrete-9 sample is collected
1249 → Concrete-10 sample is collected

See Photos 161-1913-1933

1335 → T. Schmechel departs from site to ship concrete samples & soil samples from Cell CB-13.

1600 → T. Schmechel arrives back on site.

1605 → D. Conners (Komatsu PC 400 LC w/ bucket) unearths UST with stained soil just to the east of CB-TP-5 -- ashy, black

stained soil is stockpiled with "republic" soil, as PCB concentrations are < 50 ppm.

1640 → D. Conners & R. Huffel (two excavator operators) begin stockpiling miscellaneous concrete from throughout the site at general stockpile to the south of the excavation

1700 → Excavation crew cleans up and departs the site.

1705 → T. Schmechel packs up, stores generator, and departs from site.

1/18/2016

site personnel	company	time in/out
Randy Mendoza	Envirocon (ENV)	0730 / 1700
Bill McDaniel	ENV	0730 / 1700
Tracy Lane	ENV	0730 / 1700
Rod Roberts	ENV	0730 / 1700
Rick Huffel	ENV	0730 / 1700
Dallas Conners	ENV	0730 / 1700
Ty Schmechel	Newfields	0730 / 1500 1600/1700
Tyler Etzel	NF	— / —

0730 → Arrive on site @ "White House" for safety meeting

0745 → Drive to nearby gas station & pick-up gasoline for trailer generator

0800 → Arrive back on site --
D. Conners (Komatsu PC 400 LC w/ bucket) is excavating in CB-TP-1. R. Huffel (Komatsu PC 400 LC with hammer) is breaking concrete foundations in the vicinity of CB-2, CB-TP-7, & CB-4.

0845 → T. Schmechel (NF) inspects excavated USTs found east of CB-TP-5.
↳ D. Conners (ENV) indicates one smaller tank was located within a bigger tank - both have been removed and stockpiled west of the excavation (See Photos 1162-1939/40)
↳ Per T. Etzel's (NF) orders ashy black soil within the tanks was stockpiled with "republic" soils, as previous sampling of tank soils had shown PCB concentrations at < 50 ppm.

0940 → D. Conners begins excavating on cell CB-12.

1110 → Excavation of cell CB-12 continues (See Photo 162-1942).

1130 → Excavation crew takes lunch break

1230 → Excavation crew returns from lunch break

See Photos 162-1942 through 162-1950

1330 → T. Schmechel (NF) begins sampling procedure for cell CB-12 - samples collected by procedure laid out in Section 4.7 of Cooling Pond Addendum

1415 → CB-12 Southwall sample collected

1420 → CB-12 Westwall sample collected

1430 → CB-12 Eastwall sample collected

1435 → CB-12 Base sample collected

Sample	Northing	Easting	Elevation (ft)
CB-12 Southwall	17044917.8	923576.9	3274.3
CB-12 Westwall	17044929.75	923563.6	3273.65
CB-12 Eastwall	17044926.15	923595.55	3277.2
CB-12 Base	-	-	-

lost data on phone.

1500 → T. Schmechel (NF) departs from site to ship CB-12 samples.

1600 → T. Schmechel (NF) arrives back on site

1630 → T. Schmechel (NF) locks keys in trailer & is forced to depart from site.

1/19/16

Site personnel	company	time in/out
Bill McDaniel	Environcon (ENV)	0730 / 1700
Tracy Lane	ENV	0730 / 1700
Rod Roberts	ENV	0730 / 1700
Rick Huffel	ENV	0730 / 1700
Dallas Conners	ENV	0730 / 1700
Ty Schmechel	Newfields (NF)	0730 / 1500
Tyler Etzel	NF	- / -

0730 → Arrive on site @ "White House" for safety meeting.

0750 → Drive to nearby gas station to pick-up gasoline for trailer generator

0800 → Arrive back on-site to both Komatsu PC 400 LC excavators warming-up

0810 → D. Conners reports that his Komatsu PC 400 LC excavator is leaking engine coolant → excavator is shut down for repairs

0830 → R. Huftel (Komatsu PC 400 LC operator) begins loading bin with excavated piping. T. Schmechel marks pipes that should be saved, pending lab results, with orange marking tape.

0845 → * On 1/18/16 @ ~ 1630, Randy Mendoza (site superintendent) indicates that following cell confirmation sampling, each cell's sidewalls will be graded to prevent wall collapse. This action is necessitated by collapsing sidewalls due to confirmation sampling. If confirmation sample results require further excavation of cells, then the corresponding cells, which will have been graded, will be reexcavated. *

1000 → R. Huftel (ENV), equipped w/ Komatsu PC 400 LC/20,000 lb hammer, begins breaking concrete foundations in the vicinity of CB-10.

1150 → Excavation crew takes lunch break

1245 → Excavation crew returns from lunch break and D. Conners' PC 400 LC Komatsu has been repaired.

1300 → D. Conners (ENV) begins excavating in CB-7. (See photo 163-1951)

1345 → D. Conners (ENV) begins excavating in CB-TP-2; B. McDaniels (ENV) is operating the haul truck; R. Huftel (ENV) continues to raze concrete in the vicinity of CB-10.

1500 → T. Schmechel Departs from site

K. th

1/20/16

Site personnel	Company	time in/out
Bill McDaniel	Envirocon (ENV)	0730/ 1700
Tracy Lane	ENV	0730/ 1700
Rod Roberts	ENV	0750/ 1700
Rick Huffel	ENV	0730/ 1700
Ty Schmechel	Newfields (NF)	0730/ 1706
Tyler Etzel	NF	1030 / 1700
Keith Large	MT DEQ	1030 / 1706
Dallas Connors	ENV	0730 / 1700

0730 → Arrive on site @ "White House" for Health & Safety Meeting.

0800 → Depart site to nearby gas station to pick up gasoline for trailer generator

815 → Arrive back on site

0820 → D. Connors (ENV) excavates in cells CB-14, CB-1, CB-5, CB-TP-2, and CB-TP-1. B. McDaniel operates haul truck = CB-1, CB-1-1, CB-5 => TSCA ; CB-TP-2 & CB-TP-1 => Republic (See photo 164-1953)

1030 → Keith Large (MT DEQ) & T. Etzel (NF) arrive on site

1045 → Kris Cook (ENV PM) arrives on site

1100 → All excavated piping will be designated TSCA - this following lab results indicating PCB concentrations as high as 20,000 ppm on stained pipes

1130 → Excavation crew takes lunch break

1210 → Excavation crew returns from lunch break & begins sorting concrete rubble into "clean" & "stained" piles, based on the presence of petroleum staining or staining by hydraulic oil, which is pinkish in color.

1345 → CB-13 southwall failed @ 11 ppm, CB-13 Northwall is non-detect, CB-13 base failed @ 2.9 ppm, CB-13 Westwall failed @ 3.7 ppm.

↳ results received from Energy Labs @ 1345

1430 → *Note: T. Schmechel (NF) had not previously indicated decontamination techniques utilized during confirmation sampling. They are documented as follows:

1) Hand shovel used to sample soil from excavator bucket is decontaminated with an alconox, methanol, & DI water rinse between each cell sampling event.
2) All other sampling equipment is disposable & thus requires no decontamination.

1440 → *Concrete rubble will be seperated as follows:

1) Concrete w/o staining of any kind will be used as backfill
2) Concrete with black staining (from petroleum and typically containing PCBs @ concentrations of 0.74 - 50 ppm) will go to the republic landfill.
3) Concrete with pink staining (from hydraulic oil and typically containing PCBs @ concentrations > 50 ppm) will go to the TSCA landfill.

1700 → Depart from site, after inspecting concrete rubble delineation

1/21/16

SITE PERSONNEL	COMPANY	IN/OUT
T. Schmechel	NewFields (NF)	0730/1536
T. Etzel	NF	-/-
Rod Roberts	Environcon (ENV)	0730/1700
Tracy Lane	ENV	0730/1700
Dallas Connors	ENV	0730/1700
Bill McDaniels	ENV	0730/1700
Rick Huffel	ENV	0730/1700

0730 → Arrive on site @ "White House" for Health & Safety Meeting

0745 → Drive to nearby gas station to pick-up gasoline for the trailer generator

0800 → Arrive back on site @ trailer

0815 → D. Connors (Komatsu PC 400 LC) and B. McDaniels (haul truck) sort concrete rubble into TSCA (>50 ppm PCBs), Republic (0.74-50 ppm PCBs), Overburden (< 0.74 ppm PCBs) based on:

1) Any concrete with pinkish staining is indicative of PCB contamination greater than 50 ppm.

2) Any concrete with black staining (petroleum) is indicative of PCB contamination @ 0.74-50 ppm.

3) Concrete with no visible staining is indicative of PCB contamination @ leves less than 0.74 ppm.

1150 → Excavation crew breaks for lunch

1250 → Excavation crew returns from lunch

1330 → T. Schmechel begins to collect samples from the CB-13 Westwall, southwall, and base. These samples are collected again because they failed after initial results from confirmation sampling showed concentrations of PCBs > 0.74 ppm. Confirmation samples were collected in accordance with sampling protocols set forth in the "Addendum 2 to Final Cooling Pond Removal Work Plan," Section 4.7. Additionally prior to the second confirmation sampling, the west- & south walls were excavated an additional 4 feet and the base was excavated an additional 2 feet.

Sample ID	Northing	Easting	Elevation
CB-13-Base-2	1704495 2.6	923352.65	3277.9
CB-13-Southwall-2	1704 4940.2	923346.40	3281.1
CB-13-Westwall-2	1704 4963.0	923334.25	3281.5

1400 → @ CB-13-Base-2 sample is collected
1415 → CB-13-Southwall-2 sample is collected
1420 → CB-13-Westwall-2 sample is collected

See photos 165-1956-59

1435 → A rinse blank "SAW-1" is collected in a 1 L amber bottle, after flushing the sampling hand shovel with methanol and DI - the hand shovel is the only non-disposable piece of sampling equipment. SAW-1 was collected by running DI water over the decontaminated hand shovel and collecting it in the 1 L. amber bottle.

1445 → A duplicate of CB-13-Base-2 was collected & named "CB-IG-1" with a fake sample time of 1130.

Rinse blanks & duplicates will be collected every 10 samples and called SAW-# and CB-IG-#, respectively.

1530 → Depart from site to ship confirmation samples

1/22/2016

Site Personnel	Company	In/Out
B. McDaniels	ENV	0730 / 1600
R. Huffel	ENV	0730 / 1600
D. Conners	ENV	0730 / 1600
T. Lane	ENV	0730 / 1600
R. Roberts	ENV	0750 / 1600
T. Schmechel	NF	0756 / 1600

0730 → Arrive on site @ "White House" for Health & Safety meeting

0750 → T. Schmechel drives to nearby gas station to pick up gasoline for the trailer generator.

0805 → T. Schmechel arrives back on site; D. Conners (PC 400 LC excavator) is excavating cell CB-4; R. Huffel (excavator) is hammering concrete in cell CB-2

0840 → T. Schmechel departs site to ship 2nd CB-13 confirmation samples.

1020 → T. Schmechel arrives back on site; D. Connors excavating in CB-4; R. Huffel's Komatsu PC400 LC is being repaired.

1130 → Excavation Crew goes to lunch

1230 → Excavation crew returns from lunch; D. Connors excavates in cells CB-4 & CB-2.

1600 → Excavation crew & T. Schmechel depart from site.

1/25/16

Site Personnel	Company	Time IN/OUT
Ty Schmechel	Newfields (NF)	0735 / 1700
D. Connors	Envirocon (ENV)	0715 / 1700
R. Huffel	ENV	0715 / 1700
B. McDonnels	ENV	0715 / 1700
T. Lane	ENV	0715 / 1700
R. Roberts	ENV	0715 / 1700

0735 → Arrive on site @ "White House" for a health & safety meeting

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0815 → Begin sampling cells CB-4, CB-TP-7, and CB-10.

*1130 → CB-TP-7-base sample collected; duplicate (CB-IG-2) collected from CB-TP-7-Base sample

1135 → CB-TP-7-Northwall sample collected

1140 → CB-TP-7-Eastwall sample collected

↳

Sample ID	Northing	Easting	Elevation (ft)
CB-TP-7-base	17045026.65	923439.65	3274.05
CB-TP-7-Northwall	17045043.45	923440.55	3276.15
CB-TP-7-Eastwall	17045031.95	923452.55	3275.7

Photo 83; 84, 87

1150 → CB-10-Base sample collected

1155 → CB-10-Northwall sample collected

1200 → CB-10-Westwall sample collected

1205 → CB-10-Eastwall sample collected

↳

Sample ID	Northing	Easting	Elevation (ft)
CB-10-Base	17045022.45	923481.6	3273.85
CB-10-Northwall	17045038.00	923481.00	3275.75
CB-10-Eastwall	17045019.95	923501.4	3276.7
CB-10-Westwall	17045030.01	923467.7	3275.55

Photos 85, 86, [illegible]

1230 → CB-4- Base sample collected
1235 → CB-4- Eastwall sample collected
1240 → CB-4 - Southwall sample collected

Sample ID	Northing	Easting	Elevation (ft)
CB-4- Base	17045001.65	923472.65	3271.9
CB-4- Eastwall	17044995.4	923498.95	3274.65
CB-4- Southwall	17044976.95	923476.80	3275.1

Photos 81, 82, & 91-92

1250 → Rinse blank collected = "SAW-2" by rinsing decontaminated sampling shovel with DI water and collecting run-off water.

1400 → CB-TP-5- Base collected
1405 → CB-TP-5- Eastwall sample collected
1410 → CB-TP-5- Southwall sample collected

Photos 93-96

Sample ID	Northing	Easting	Elevation (ft)
CB-TP-5- Base	17044982.9	923429.4	3268.15
CB-TP-5- Eastwall	17044974.3	923451.8	3271.15
CB-TP-5- Southwall	17044966.0	923437.65	3269.7

1420 → Pack samples in cooler, fill out COC, and prepare samples for shipping.

1430 → Drive to UPS & ship samples from cells CB-4, CB-10, CB-TP-5, & CB-TP-7.

1500 → Arrive back on site & begin filling out log book

1545 → CB-2 is excavated to completion

1600 → D. Connors (ENU) clears pile of petroleum stained (PCB impacted pipes) & delivers to TSCA stockpile

1630 → D. Connors begins excavation of CB-12 in compliance with sample failure:
- CB-12- Base will be excavated an additional 2 feet bgs.
- CB-12- Eastwall & Westwalls will be excavated an additional 4 feet laterally.

1700 Depart from site

1/26/16

Site Personnel	Company	Time In/Out
Ty Schmechel	NewFields (NF)	0730 / 1605
Tyler Etzel	NF	- / -
Bill McDaniels	Envirocon (ENV)	0715 / 1700
Rick Huffel	ENV	0715 / 1700
Dallas Connors	ENV	0715 / 1700
Rod Roberts	ENV	0715 / 1700
Tracy Lane	ENV	0715 / 1700
Truck Driver	#1 -	0730 / 1700
Truck Driver	#2 -	0730 / 1700

0730 → Arrive on site @ "White House" for health & safety meeting.

0750 → Drive to nearby gas station to pick up gasoline for trailer generator.

0805 → Arrive back on site

0845 → Begin sampling CB-2, which will be done without the help of the Komatsu PC 400 LC excavator as the cell (CB-12) has no sidewalls taller than ~1.5 ft.

1030 → Begin collecting samples on cell CB-12 following previous failure of CB-12-Eastwall, CB-12-Westwall, and CB-12-Base.

Photos 101-104

*1205 → Collect CB-12-Base-2 sample ↗ Duplicate "CB-IC" sample collected from CB-12-Base-2

1210 → Collect CB-12-Eastwall-2 sample

1215 → Collected CB-12-Westwall-2 sample

Sample ID	Northing	Easting	Elevation (ft)
CB-12-Base-2	17044927.0	923377.7	3275.0
CB-12-Eastwall-2	17044929.85	923379.1	3269.25
CB-12-Westwall-2	17044930.55	923360.25	3274.0

1250 → Rinse blank collected = "SAW-3" by rinsing decontaminated sampling shovel w/ DI water & collecting run-off H_2O.

1345 → Depart site for NF office to ship samples and resupply on equipment

1445
→ Arrive back on site. D. Connors (ENV) is excavating in cells CB-TP-1, CB-TP-2, CB-14, CB-1, & CB-5.

1605 → Depart from site for employee review meeting with Wilhelm Welzenbach.

1/27/16

Site Personnel	Company	Time In/OUT
Ty Schmechel	Newfields	0725 / 1700
Dallas Connors	Envirocon (ENV)	0720 / 1700
Reno Connors	ENV	0720 / 1700
Bill McDaniels	ENV	0720 / 1700
Rick Huffel	ENV	0720 / 1700
Rod Roberts	ENV	0720 / 1700
Tracy Lane	ENV	0720 / 1700

0725 → Arrive on site @ "White House" for Health & Safety meeting.

0755 → Arrive @ site trailer and prepare for sampling of cells CB-TP-1 and CB-TP-2 / catch up on log book.

D. Connors (ENV) excavates in cells CB-TP-1, CB-TP-2, & CB-14.

1005 → Collect sample from CB-14 northwall; northwall sample must be collected preemptively, as the wall needs to be excavated in order to form the excavation pit ramp. Additionally, soil excavated up to 4 feet north of the northwall (to form ramp) will be stockpiled until CB-14-Northwall sample results return. After which, a decision will be made as to where the extra 4' of stockpiled soil will be disposed (TSCA, republic, or overburden)

Photos 106-107

↳

Sample ID	Northing	Easting	Elevation (ft)
CB-14-Northwall	1704502 6.9	923408.15	3267.6

Photos 97, 98-100, & 105

1320 → CB-2-Base sample collected
1325 → CB-2-Northwall sample collected
1330 → CB-2-Eastwall sample collected
1335 → CB-2-Westwall sample collected

This occurred on 1/26/16

↳

Sample ID	Northing	Easting	Elevation (ft)
CB-2-Base	17045005.95	923429.05	3269.7
~~CB-2-Northwall~~			
~~CB-2-Eastwall~~			
~~CB-2-Westwall~~			

1040 → T. Schmechel (NF) departs from site to ship samples from CB-2 and CB-14.

1200 → T. Schmechel arrives back on site

Photos 109, 111, 112, & 113

1255 → CB-TP-1-Base sample collected
1300 → CB-TP-1-Northwall sample collected
1305 → CB-TP-1-Westwall sample collected

↳

Sample ID	Northing	Easting	Elevation
CB-TP-1-Base	17045015.15	923377.9	3268.1
CB-TP-1-Northwall	17045030.2	923377.8	3269.9
CB-TP-1-Westwall	17045020.0	923363.20	3268.1

Photos 108, 110, 114, 115

1320 → CB-TP-2-Base sample collected
1325 → CB-TP-2-Southwall sample collected
1330 → CB-TP-2-Westwall sample collected

↳

Sample ID	Northing	Easting	Elevation (ft)
CB-TP-2-Base	17044988.4	923371.9	3268.2
CB-TP-2-Southwall	17044965.8	923367.7	3272.4
CB-TP-2-Westwall	17044989.25	923361.5	3270.7

1400 → CB-13-Base-2 fails @ 0.97 mg/kg; CB-13-Westwall-2 fails @ 1.7 mg/kg; CB-13-Westwall-2 fails @ 2.7 mg/kg.

↳ CB-13-Base-2 will be excavated an additional 2 feet & resampled as CB-13-Base-3

↳ CB-13-Southwall-2 and CB-13-Westwall-2 will be excavated an additional 4 feet and resampled as CB-13-Southwall-3 & CB-13-Westwall-3, respectively.

Photo 116

1420 → Pipes w/ potential petroleum staining were observed after excavating cell CB-13 base an additional 2 feet. As such, T. Etzel (NF) decided to excavate CB-13 base 4 feet before collecting sample CB-13-Base

Photos 116, 117, 118, 119

1520 → CB-13-Base-3 sample collected; ~~dupl~~ duplicate CB-IG-4 sample collected from base of cell CB-13 after 3rd reading.

1600 → CB-13-Southwall-3 sample collected

1640 → CB-13-Westwall-3 sample collected

Sample ID	Northing	Easting	Elevation (ft)
CB-13-Base-3	17044957.3	923352.00	3273.65
CB-13-Southwall-3	17044937.6	923343.8	3278.0
CB-13-Westwall-3	17044959.75	923331.5	3277.3

* (CB-13 Base-3) (CB-IG-4)

1700 → Depart from site

1/28/16

Site Personnel	Company	Time In/out
Ty Schmechel	NewFields (NF)	0720 / 1600
Dallas Conners	Envirocon (ENV)	0715 / 1700
Tracy Lane	ENV	0715 / 1700
Bill McDaniels	ENV	0715 / 1700
Rick Huttel	ENV	0715 / 1700
Rod Roberts	ENV	0715 / 1700
Rena Conners	ENV	0715 / 1700

0730 → Arrive on site @ "White House" for Health & Safety meeting

0805 Depart site to ship confirmation samples from CB-15, CB-TP-1, and CB-TP-2.

0900 → Arrive back on site. Stimson Data Package #4 results are back:

- CB-4-Eastwall failed @ 11 mg/kg
- CB-4-Southwall failed @ 2.3 mg/kg
- CB-TP-7-Base failed @ 3.0 mg/kg
- CB-TP-7-Northwall failed @ 2.5 mg/kg
- CB-TP-7-Eastwall failed @ 1.9 mg/kg
- CB-10-Westwall failed @ 2.2 mg/kg

↳ All sidewalls will be excavated an additional 4 feet

↳ CB-TP-7-Base will be excavated an additional 2 feet

↳ Additional confirmation samples will be collected after excavation

↳ Confirmation samples will include the following:

1) CB-TP-7-Northwall-2
2) CB-TP-7-Base-2
3) CB-4-Eastwall-2
4) CB-4-Southwall-2

* CB-10-Westwall-2 & CB-TP-7-Eastwall-2 can not be collected as additional 4 feet of excavation will eliminate the shared sidewall that is CB-10-Westwall / CB-TP-7-Eastwall

* The CB-TP-7-Base-2 confirmation, composite sample will include a subsample from below the shared CB-10-Westwall/CB-TP-7-Eastwall

Photo 120, 121, 122, 123

1355 → CB-TP-7-Base-2 sample collected

1400 → CB-TP-7-Northwall-2 sample collected

↳

Sample ID	Northing	Easting	Elevation (ft)
CB-TP-7-Base-2	17045023.65	923438.4	3269.5
CB-TP-7-Northwall-2	17045041.8	923446.2	3273.0

Photo 124

1410 → CB-4-Eastwall-2 sample collected

1415 → CB-4-Southwall-2 sample collected

↳

Sample ID	Northing	Easting	Elevation (ft)
CB-4-Eastwall-2	17044992.75	923500.6	3273.5
CB-4-Southwall-2	17044972.1	923482.2	3274.1

1420 → CB-TP-5-Base fails @ 110 mg/kg; CB-TP-5-Eastwall passes @ 0.34 mg/kg; CB-TP-5-Southwall fails @ 0.84 mg/kg.

↳ Dallas Connors (ENV) excavates additional 4 feet of soil from CB-TP-5-Base and CB-TP-5-Southwall for new confirmation sampling.

Photos 125 & 126

1525 → CB-TP-5-Southwell-2 sample collected
- Northing: 17044953.1
- Easting: 923435.35
- Elevation (ft): 3278.1

1530 → Begin packing coolers to ship "Stimson Data Package #8" which includes samples from cells CB-TP-5, CB-TP-7, & CB-TP-4 (as sampled earlier on 1/28/16)

1600 → Depart from site

1/29/16

Site Personnel	Company	Time In/Out
Ty Schmechel	NewFields (NF)	0720 / 1500
Bill McDonald	Envirocon (ENV)	0720 / 1700
Tracy Lane	ENV	0720 / 1700
Dallas Connors	ENV	0720 / 1700
Rena Connors	ENV	0720 / 1700
Rod Roberts	ENV	0720 / 1700
Randy Mendosa	ENV	0720 / 1700
Rick Huffel	ENV	0720 / 1700

0720 → Arrive on site @ "White House" for Health & safety meeting

0750 → Arrive at trailer at project site

0815 → Begin constructing excel spreadsheet entitled "Stimson Data Tracker" to track confirmation samples & results

Photos 127, 128

0950 → CB-TP-5-Base-2 confirmation sample collected:
- ↳ Northing: 17044978.2
- ↳ Easting: 923430.9
- ↳ Elevation: 3265.0

1010 → Depart from site to ship CB-TP-5-Base-2 & pick-up equipment (sampling buckets)

1200 → Arrive on site @ project trailer

1500 → Depart from site

2/1/16

Site Personnel	Company	Time In/out
Ty Schmachel	Newfields (NF)	0750 / 1615
Tracy Lane	Environcon (ENV)	0720 / 1700
Rod Roberts	ENV	0720 / 1700
Randy Mendoza	ENV	0720 / 1700
Rick Huffel	ENV	0720 / 1700
Bill McDaniels	ENV	0720 / 1700
Dallas Connors	ENV	0720 / 1700
Rena Connors	ENV	0720 / 1700

0750 → Arrive on site @ "White House"

0820 → Sign manifests for USA Ecology, Inc. to haul TSCA waste, sign manifest allowing/verifying hauling of Republic waste

0900 → Depart from site to purchase engine oil for trailer generators

0920 → Arrive back on site.

1035 → Tyler Etzel (Newfields) emails and indicates that confirmation samples of the CB-2-Northwall have failed @ 3.2 mg/kg, CB-2-Eastwall have failed @ 1.4 mg/kg, & CB-2-Westwall have failed @ 456 mg/kg (TSCA). Additionally, the CB-14-Northwall confirmation sample failed @ 1.1 mg/kg.

↳ CB-2-Northwall-2 confirmation sample will not be collected, as CB-TP-7 (the cell immediately to the north) has been excavated to a point that cell CB-2 no longer has a northwall.

↳ CB-2-Westwall-2 confirmation will not be collected, as CB-14 (the cell immediately to the west) has been excavated to a point so that cell CB-2 no longer has a westwall.

↳ CB-2-Eastwall-2 confirmation sample will be collected after an additional 4' excavation from the original CB-2 eastwall

↳ CB-14-Northwall-2 Confirmation sample will be collected from side-wall of excavation ramp – the CB-14-northwall

has already been excavated 4 additional feet to allow for the construction of the excavation ramp (this soil was stockpiled pending lab results & will now be sent to Republic waste). The CB-14-Northwall-2 sample will be collected from the side profile of the excavation ramp to avoid contamination associated with the Komatsu rigs tracking contaminated soil up & down the excavation ramp.

Photos 129 & 130

1345 → CB-14-Northwall-2 confirmation sample collected
- ↳ Northing: 17045027.5
- ↳ Easting: 923407.0
- ↳ Elevation (ft): 3264.5

Photos 131 & 132

1430 → CB-2-Eastwall-2 sample collected
- ↳ Northing: 17045001.1
- ↳ Easting: 923464.0
- ↳ Elevation (ft): 3270.1

1615 → Depart from site

2/2/16

Site Personnel	Company	Time In	Out
Ty Schmechel	NewFields (NF)	0730	1530
Tracy Lane	Environcon (ENV)	0630	1700
Rod Roberts	ENV	0630	1700
Dallas Conners	ENV	0630	1700
Rena Conners	ENV	0630	1700
Rick Huttel	ENV	0630	1700
Bill McDaniels	ENV	0630	1700
Randy Meridoss	ENV	0630	1700

0730 → Arrive on site @ "White House"

0750 → Depart site to pick up equipment for confirmation sampling

0930 → Arrive on site @ project trailer

1030 → Tyler Etzel (NewFields) emails & indicates that the following confirmation samples have failed:
- CB-4-Eastwall-2 @ 5.0 mg/kg (Republic)
- CB-4-Southwall-2 @ 1.7 mg/kg (Republic)
- CB-TP-7-Northwall-2 @ 0.86 mg/kg (Republic)

T. Etzel also indicated that the following confirmation samples passed:

- CB-TP-7-Base-2 @ 0.029 mg/kg
- CB-TP-5-Southwall-2 @ 0.53 mg/kg

CB-4-Eastwall, CB-4-Southwall, and CB-TP-7-Northwall-2 will be excavated an additional 4' or until ~~[illegible]~~ excavation encounters clean fill from previous excavations. If clean fill is encountered no confirmation samples will be collected. If clean fill is not encountered, the following samples will be collected:

1) CB-4-Eastwall-3
2) CB-4-Southwall-3
3) CB-TP-7-Northwall-3

1050 → T. Etzel emails & indicates that the following confirmation samples have failed:

1) CB-TP-1-Northwall @ 1.0 mg/kg
2) CB-TP-1-Westwall @ 1.4 mg/kg
3) CB-TP-1-Base @ 6.4 mg/kg
4) CB-TP-2-Southwall @ 4.9 mg/kg
5) CB-TP-2-Westwall @ 2.9 mg/kg
6) CB-TP-2-Base @ 0.96 mg/kg

T. Etzel also indicated that the following confirmation samples have passed:

1) CB-13-Southwall-3 @ 0.26 mg/kg
2) CB-13-Base-3 @ 0.025 mg/kg
3) CB-13-Westwall-3 @ mg/kg

▷ Cells CB-TP-1 & CB-TP-2 will undergo additional excavation (4' laterally & 2' vertically) before a second round of confirmation sampling.

▷ T. Etzel (NF) has decided to excavate 4' from the CB-2-Northwall in both the south & north directions and 2' below grade. The resulting northwall (CB-2-Northwall-2) will be sampled.

Photos 133 & 134

1510 → CB-4-Southwall-3 confirmation sample collected; CB-4-Eastwall-3 sample not collected as clean fill was encountered prior to 4' of lateral excavation.

- Northing: 1704496 0.45
- Easting: 923476.4
- Elevation (ft): 3275.0

1530 → Depart from site to ship samples CB-14-Northwall-2, CB-2-Eastwall-2, & CB-4-Southwall-3.

2/3/16

Site Personnel	Company	Time In/Out
Ty Schnechel	Newfields (NF)	0730 / 1530
Tyler Etzel	NF	1340 / 1600
Kieth Large	MT DEQ	1320 / 1600
Francis	EPA	1500 / 1600
Steve Petrin	–	1430 / 1600
Bill McDonnicks	Environcon (ENV)	0630 / 1700
Tracy Lane	ENV	0630 / 1700
Renz Connors	ENV	0630 / 1700
Dallas Connors	ENV	0630 / 1700
Rick Huffel	ENV	0630 / 1700
Rod Roberts	ENV	0630 / 1700
Randy Mendoza	ENV	0630 / 1700

0730 → Arrive on site @ "White House"

0745 → Depart from site to pick-up gasoline for trailer generator

0800 → Arrive back on site @ trailer generator & fill-out log books, wait for D. Connors (ENV) to finish loading haul trucks so confirmation sampling can begin.

0835 → CB-TP-5-Base-2 confirmation sample has passed @ 0.049 mg/kg

Photos 135 & 136

1010 → CB-TP-7-Northwall-3 confirmation sample collected; duplicate (CB-IG-5) also collected from CB-TP-7-Northwall
- ↳ Northing: 17045048.6
- ↳ Easting: 923459.5
- ↳ Elevation (ft): 3262.15

→ * sample never sent to lab, as clean fill was encountered from previous excavation

Photos 137 & 138

1025 → CB-2-Northwall-2 confirmation sample collected
- ↳ Northing: 17045024.45
- ↳ Easting: 923443.9
- ↳ Elevation (ft): 3267.3

1030 → Rinse blank collected as "SAW-5" in a 1 L amber bottle, after flushing the sampling hand shovel w/ methanol & DI H_2O - the hand shovel is the only non-disposable sampling equipment. SAW-5 was collected by running DI H_2O over the decontaminated hand shovel

and collecting the run-off in the 1 L. amber bottle.

1320 → T. Lane (ENV) notifies T. Schmechel that Komatsu PC 400 LC excavator operated by D. Connors (ENV) is not operating due to a hydraulic leak. No excavation will occur until it is repaired.

1530 → Depart from site to ship samples CB-2-Northwall-2, CB-ICr-5, & SAW-5.

2/4/16

Site Personnel	Company	Time In/Out
Ty Schmechel	NewFields (NF)	0730 / 1630
Tyler Etzel	NF	? / ?
Kieth Large	MT DEQ	0740 / ?
Steve Petrin	Stimson	? / ?
Francis	EPA	? / ?
Bill McDonald	Envirocon (ENV)	0630 / 1700
Tracy Lane	ENV	0636 / 1700
Dallas Connors	ENV	0630 / 1700
Rene Connors	ENV	0630 / 1700
Rick Huftel	ENV	0630 / 1700

Site Personnel	Company	Time In/Out
Rod Roberts	ENV	0630 /
Randy Mendoza	ENV	0630 /

0730: Arrive on site

0745 → D. Connors (ENV) indicates that he will first excavate all the sidewalls of CB-TP-1 & CB-TP-2 (CB-TP-1-North-2, CB-TP-1-West-2, CB-TP-2-West-2, & CB-TP-2-South-2) for sampling; and then he will excavate the bases of CB-TP-1 & CB-TP-2 for sampling (CB-TP-1-Base-2, CB-TP-2-Base-2).

Photos 140-144

1205 → CB-TP-1-Westwall-2 (& CB-ICr-5, duplicate) collected
1210 → CB-TP-1-Northwall-2 collected
1215 → CB-TP-2-Southwall-2 collected
1220 → CB-TP-2-Westwall-2 collected

↳

Sample ID	Northing	Easting	Elevation (ft)
CB-TP-1-Westwall-2	1704502 1.65	923356.7	3271.50
CB-TP-1-Northwall-2	1704504 0.35	923379.7	3268.85
CB-TP-2-Southwall-2	1704496 3.5	923361.5	3270.8
CB-TP-2-Westwall-2	1704498 6.3	923352.6	3272.9

Photos 146 & 147

1405 → CB-TP-1-Base-2 sample collected

1415 → CB-TP-2-Base-2 sample collected

Northing	Easting	Elevation (ft)
17045015.2	923377.4	3264.4
17044988.35	923373.2	3265.65

1530 → Depart site to ship confirmation samples from cells CB-TP-1 & CB-TP-2 to me-Dig.

2/5/16

Site Personnel	Company	Time In/Out
Ty Schmachel	Newfields (NF)	0800 / 1530
Dalbs Connors	Envirocon (ENV)	0636 / 1700
Rena Connors	ENV	0636 / 1700
Rick Huffel	ENV	0636 / 1700
Bill McDaniels	ENV	0636 / 1700
Rod Roberts	ENV	0636 / 1700

0800 → Arrive on site @ "White House"

0810 → Depart site to purchase gasoline for the trailer generator

0850 → Arrive back on site. D. Connors (ENV) excavates in cells CB-11, CB-7, & CB-5.

1000 → T. Etzel (NF) indicates via email that confirmation results show that CB-2-Eastwall-2 passed @ 0.24 mg/kg, CB-14-Northwall-2 passed @ 0.028 mg/kg, & CB-4-Southwall-3 passed @ 0.42 mg/kg.

Photos 148-153

1435 → CB-11-Base confirmation sample collected

1440 → CB-11-Southwall confirmation sample collected

1445 → CB-11-Eastwall confirmation sample collected

1450 → CB-11-Northwall confirmation sample collected

SAMPLE ID	Northing	Easting	Elevation (ft)
CB-11-Base	17044962.1	923412.45	3253.75
CB-11-Southwall	17044949.2	923408.1	3258.35
CB-11-Eastwall	17044959.2	923424.7	3258.3
CB-11-Northwall	17044975.8	923417.2	3259.3

Photo 154

1525 → CB-11-Westwall confirmation sample collected

↳ Northing: 17044965.6

↳ Easting: 923400.5

↳ Elevation (ft): 3256.4

1600 → Depart from site

2/8/2016

Site Personnel	Company	Time In/Out
Ty Schmechel	Newfield (NF)	0745 / 1530
Dallas Connors	Envirocon (ENV)	0630 / 1700
Rene Connors	ENV	0630 / 1700
Rick Huffel	ENV	0630 / 1700
Bill McDaniels	ENV	0630 / 1700
Rod Roberts	ENV	0630 / 1700
Randy Mendoza	ENV	0630 / 1700

0700 → Drive to hardware store to purchase sampling buckets/lids

0745 → Arrive @ "white house" for check-in

0800 → Drive to nearby gas station & pick-up gasoline for project trailer generator

0815 → Arrive on site @ project trailer

0900 → Depart site to ship sample from cell CB-11.

1030 → Arrive back on site @ project trailer.

Photos 155-157

1115 → CB-7 Base confirmation sample collected (duplicate CB-IC-6 collected from base sample)

1120 → CB-7 - Southwall confirmation sample collected

1125 → CB-7 - Eastwall confirmation sample collected

1130 → CB-7 - Westwall confirmation sample collected

Northing	Easting	Elevation (ft)
1704459.4	923387.55	3258.0
1704436.85	923380.0	3260.5
1704442.6	923396.9	3260.85
1704462.9	923371.2	3260.6

1140 → Rinse blank collected as "SAW-6" in a 1 L. Amber bottle, after flushing the sampling hand shovel w/ methanol (10%) & DI H_2O - the hand shovel is the only non-disposable sampling equipment. SAW-6 was collected by running DI H_2O over the decontaminated hand shovel & collecting the run-off in the 1 L. bottle.

1530 → Depart from site to ship samples from cell CB-7.

2/9/16

Personnel	Company	Time In/Out
Ty Schmechel	NewFields (NF)	0736 / 1530
Dallas Conners	Environcon (ENV)	0630 / 1700
Rena Conners	ENV	0630 / 1700
Rick Hafter	ENV	0630 / 1700
Bill McDonald	ENV	0630 / 1700
Rod Roberts	ENV	0630 / 1700
Randy Mendoza	ENV	0630 / 1700

0700 → Drive to hardware store (Home Depot) to purchase more sampling buckets.

0730 → Arrive on site @ project trailer

0815 → D. Conners (ENV) excavates in cells CB-5, CB-1, & CB-14 and excavates a new & restructured excavation pit ramp.

photos 158 & 159.

0830 → Soil staining w/ a bluish & oily hue is present on the eastwalls & westwalls of CB-5 & CB-14 and may be is indicative of PCB contamination.

2/10/16

Site Personnel

photos 160-167

1355 → CB-5-Eastwall confirmation sample collected; Duplicate CB-IG-7 collected from CB-5-Eastwall

1400 → CB-14-Eastwall confirmation sample collected

1405 → CB-1-Eastwall confirmation sample collected

1415 → CB-1-Westwall confirmation sample collected

1420 → CB-14-Westwall confirmation sample collected

1425 → CB-5-Westwall confirmation sample collected

1430 → CB-5-Southwall confirmation sample collected

Sample ID	Northing	Easting	Elevation (ft)
CB-5-Eastwall	17044990.0	923410.6	3255.6
CB-14-Eastwall	17045011.0	923415.1	3258.35
CB-1-Eastwall	17044997.6	923410.7	3257.3
CB-1-Westwall	17045000.1	923385.3	3258.0
CB-14-Westwall	17045013.1	923389.9	3258.5
CB-5-Westwall	17044989.6	923388.5	3259.0
CB-5-Southwall	17044971.3	923389.5	3253.4

1530 → Depart from site to ship confirmation samples from CB-1, CB-5, & CB-14, and to re-stock on supplies (methanol, sampling jars, paper towels, etc...)

2/10/16

Site Personnel	Company	Time In/Out
Ty Schroechel	Newfields (NF)	0730 / 1540
Heather Grotbo	NF	1255 / 1400
Tyler Etzel	NF	1300 / 1515
Kieth Large	MT DEQ	1230 / 1515
Dallas Conners	ENV	0630 / 1700
Rene Conners	ENV	0630 / 1700
Rick Huftel	ENV	0630 / 1700
Bill McDaniels	ENV	0630 / 1700
~~Rod Roberts~~	~~ENV~~	~~0630 / 1700~~
Randy Mendosa	ENV	0630 / 1700

0730 → Arrive on site @ project trailer

0800 → D. Conners (ENV) is excavating new ramp for excavation pit.

0815 → R. Huftel (ENV) indicates that a monitoring well east of CB-4 ( ) was destroyed during excavation work. R. Mendosa (ENV) subsequently indicates that he has abandoned the well w/ bentonite chips.

0915 → D. Conners (ENV) begins excavation of 2nd re-digs of cells CB-TP-1 (Westwall, ~2') and CB-TP-2 (southwall - 4' and base - 2').

Photo 108

↳ The 2nd redig of the CB-TP-1 westwall will be called CB-TP-1-Westwall-3; the excavated soil will be stockpiled, while Energy Labs processes the confirmation sample.

↳ The 2nd redig of CB-TP-2's base & southwall will be called CB-TP-2-Base-3 and CB-TP-2-Southwall-3.

photo 168

→ soil from CB-TP-1-Westwall-3 will be stockpiled seperately, because Energy Labs analyzed the original sample from the 1st re-dig (CB-TP-1-Westwall-2) above the reporting limit (0.74 ppm). As such, NF is unaware whether the newly excavated soil is clean overburden material or "republic" material → CB-TP-1-Westwall-2 results will determine classification.

→ * Clarification → the confirmation sample results indicated that PCBs were ND is the sample, however, Energy Labs used used a reporting limit of 2 mg/kg instead of 0.74 mg/kg.

1220 → Depart from site to pick-up H. Grotbo (NF) for training

1255 → Arrive back on site @ project trailer

1420 → Depart site to drop H. Grotbo off @ NF office

1440 → Arrive back on site @ project trailer

Photos 169-172

1505 → CB-TP-2-Base-3 confirmation sample collected

1510 → CB-TP-2-Southwall-3 confirmation sample collected

1515 → CB-TP-1-Westwall-3 confirmation sample collected

Northing	Easting	Elevation (ft)
17044985.75	923370.5	3263.1
17044968.4	923348.2	3268.5
17045022.75	923351.9	3271.5

1530 → Depart from site to ship confirmation samples from cells CB-TP-1 & CB-TP-2.

2/12/16

Site Personnel	Company	Time In/Out
Ty Schmachel	NewFields (NF)	0730 /
Dallas Connors	Envirocon (ENV)	0630 / 1700
Reno Connors	ENV	0630 / 1700
Rick Huffel	ENV	0630 / 1700
Bill McDaniels	ENV	0630 / 1700
Randy Mendoza	ENV	0630 / 1700
Tim	ENV	0630 / 1700

0730 → Arrive on site @ project trailer & pick-up gasoline canister

0745 → Check in @ "White House" on project site

0800 → Drive to nearby gas station to purchase gasoline for project trailer generator

0815 → D. Connors (ENV) excavates in cells CB-11 & CB-7 for 1st medig of cells CB-11 & CB-7 as:

- CB-11-Base failed @ 1.2 mg/kg
- CB-11-Southwall failed @ 1.8 mg/kg
- CB-11-Northwall failed @ 73 mg/kg
- CB-11-Westwall failed at 1,730 mg/kg
- CB-7-Base failed @ 1710 mg/kg
- CB-7-Eastwall failed @ 2.4 mg/kg
- CB-7-Westwall failed @ 176 mg/kg

Photos 173-176

1050 → CB-11-Base 2 confirmation sample collected

1055 → CB-11-Southwall-2 confirmation sample collected

1100 → CB-7-Base-2 confirmation sample collected

Northing	Easting	Elevation (ft)
1704496.1.8	923412.55	3250.5
1704494.23	923409.7	3256.4
1704495.7.1	923386.4	3250.6

1130 → Lunch/Health & Safety Meeting with excavation crew.

1230 → Arrive back on site

Photo 177

1425 → CB-TP-7-Westwall-2 confirmation sample collected

↳ Northing: 1704497.1.65

↳ Easting: 923350.10

↳ Elevation(ft): 3259.90

photo 178

1530 → CB-5-Westwall-2 confirmation sample collected

↳ Northing: 1704490.0

↳ Easting: 923355.5

↳ Elevation (ft): 3258.5

1600 → T. Etzel (NF) emails & indicate that:

- CB-5-Westwall failed @ 3000 mg/kg (TSCA)
- CB-5-Southwall failed @ 609 mg/kg (TSCA)
- CB-5-Eastwall failed @ 31 mg/kg (Republic)
- CB-14-Eastwall failed @ 794 mg/kg (TSCA)
- CB-14-Westwall failed @ 500 mg/kg (TSCA)
- CB-1-Eastwall failed @ 1970 mg/kg (TSCA)
- CB-1-Westwall failed @ 1310 mg/kg (TSCA)

↳ As such:

- CB-5-Westwall was excavated to the extent of observed PCB staining & resampled as CB-5-Westwall-2 (@ 1530)
- CB-14-Eastwall, CB-1-Eastwall, & CB-5-Eastwall were excavated to extend the cells further east (overlaid by CB-TP-5 & CB-2) -- the basal areas of the extended cells will be resampled as CB-5-EBase & CB-14-EBase, as the base of the newly extended cells seems to best delineate the areas of PCB staining.
- Additionally, as CB-5-West was extended to the extent of PCB staining, this excavation also created a new basal area, which will be resampled as CB-5-WBase.
- CB-14-Westwall, CB-1-Westwall, & CB-5-Southwall will not be further excavated at this time (and thus not resampled), per orders by Steve Petrin (site manager) to halt all lateral excavation.

1630 → Depart from site.

2/15/16

Site Personnel	Company	Time In/Out
Ty Schmechel	NewFields (NF)	0800 /
Tyler Etzel	NF	1030 / 1200
Randy Mendoza	Envirocon (ENV)	0630 / 1700
Tracy Lane	ENV	0630 / 1700
Dallas Connors	ENV	0630 / 1700
Rens Connors	ENV	0630 / 1700
Rick Huffel	ENV	0630 / 1700
Bill McDaniels	ENV	0630 / 1700

0800 → Arrive on site after restocking on sampling equipment

0830 → Depart from site to ship CB-11, CB-7, & CB-5 confirmation samples

1000 → Arrive back on site @ project trailer

1030 → T. Etzel (NF) arrives on site

1200 → T. Etzel (NF) departs from site -- excavation crew goes on lunch break.

photos 179 & 180 & 184

1410 → CB-1-Base confirmation sample collected

1415 → CB-5-Base confirmation sample collected

Northing	Easting	Elevation (ft)
1704496.3	923397.5	3246.3
1704483.55	923397.3	3249.0

1530 → Depart from site to ship CB-1-Base & CB-5-Base confirmation samples

2/16/16

Site Personnel	Company	Time In/Out
Ty Schmechel	NewFields (NF)	0800 /
Tyler Etzel	(NF)	/
Randy Mendoza	Envirocon (ENV)	0630 / 1700
Tracy Lane	ENV	0630 / 1700
Dallas Connors	ENV	0630 / 1700
Rens Connors	ENV	0630 / 1700
Rick Huffel	ENV	0630 / 1700
Bill McDaniels	ENV	0630 / 1700
Rod Roberts	ENV	0630 / 1700
Kieth Large	MT DEQ	1040 /

0800 → Arrive on site @ white house

0815 → Depart site to purchase gasoline for project trailer generator

0825 → Arrive back on site @ project trailer

0845 → Begin sampling CB-14, CB-5, & CB-7 confirmation samples

1040 → CB-14-Base collected
1050 → CB-14-EBase collected
1055 → CB-5-EBase collected
1100 → CB-7-WBase collected
1105 → CB-5-WBase collected - duplicate sample "CB-IG-8" collected from CB-5-WBase
1110 → Rinse blank "SAW-8" collected as described on 2/8/2016 @ 1140

Photos 171-187

Sample ID	Northing	Easting	Elevation (ft)
CB-14-Base	17045013.35	923401.5	3243.6
CB-14-EBase	17045005.6	923433.0	3262.1
CB-5-EBase	17044987.2	923428.8	3259.75
CB-7-WBase	17044968.7	923366.5	3255.5
CB-5-WBase	17044988.35	923371.0	3255.7

1120 → D. Connors (ENV) excavates pit slopes to comply w/ Health & safety standards.

1140 → Excavation crew goes on lunch break

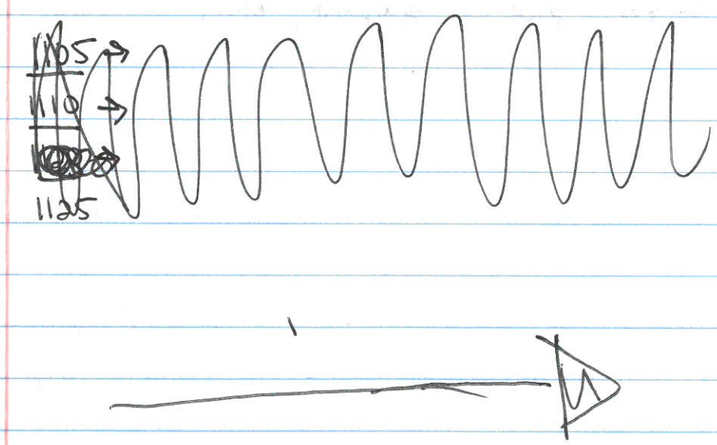
1240 → Excavation crew returns from lunch break

1510 → Depart from site

2/17/17

0745 → Arrive on site @ project trailer

0800 → Check-in @ "White house" with Rod Roberts (ENV)



1105 → Overburden - 1 sample collected
1110 → Overburden - 2 sample collected
1115 → Overburden - 3 sample collected
1120 → Overburden - 4 sample collected
1125 → Overburden - 5 sample collected

↳ "Overburden" samples were collected from 5 regions of the clean, overburden stockpile immediately west of the excavation. The 5 different regions were delineated w/ orange flags labeled 1-5.

1215 → Depart from site to ship "Overburden" samples, pick-up equipment, etc...

2/23/16 Tyler Etzel

9:30 / TE onsite to collect remaining samples:
11:00 / CB-7 - Eastwall - 2 / N: 17044964.0 / E: 923404.1 / Elev. 3248.5
11:15 / CB-5 - Westwall - 3 / N: 17044992.5 / E: 923373.35 / Elev. 3252.2
11:30 / CB-14 - Westwall - 2 / N: 17045013.15 / E: 923378.9 / Elev. 3257.2

12:00 - Environcon break for Lunch

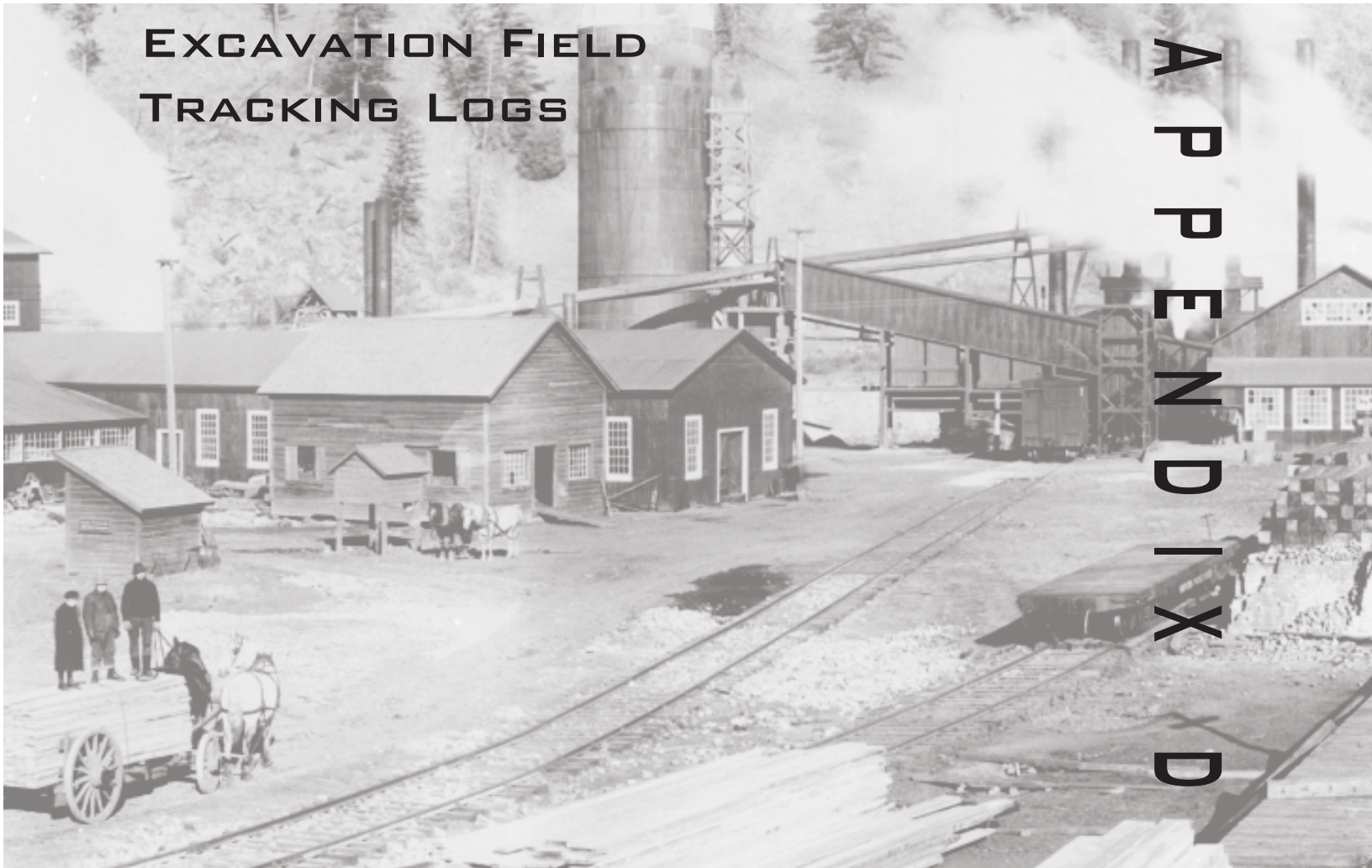
13:30 / CB-5 - Eastwall - 2 / N: 17044986.8 / E: 923420.45 / Elev. 3254.6

13:37 / CB-14 - Eastwall - 2 / N: 17045013.15 / E: 923378.9 / Elev. 3256.2
14:00 / CB-5 - WBase - 2 / N: 17044998.3 / E: 923387.8 / Elev: 3244.5

14:30 - TE offsite to ship samples

Excavation Field Tracking Logs

Appendix D



Excavate all soil and concrete debris-segregate and stockpile

Estimated Volume	13854	CY
Estimated Duration	23	Days
Estimated Daily Production	602.3478261	CY/Day
Estimated CY per Load	17	CY Soil
Weight of Soil	1.5	Ton/CY
Weight of Concrete	2	Ton/CY

Estimated Production	
35.4 Loads/Day	903.5217391 Ton/day

Weight of Material	1.55	Ton/CY
Estimated CY per Load	6	CY Concrete

TASCA
REPUBLIC
Clean OVER BURDEN

	TSCA				REPUBLIC				OVER BURDEN			Estimated Daily Production				
Material Type	Date	Daily Truck Loads	Estimated Volume (CY)	Material Type	Date	Daily Truck Loads	Estimated Volume (CY)	Material Type	Date	Daily Truck Loads	Estimated Volume (CY)	(CY) Daily Total	Estimated Tons	Estimate Completed	Comments	Re-dig CY
	14-Jan	11	187		14-Jan	15	255		14-Jan	9	153	595	892.50	4.29%		
	15-Jan	0	0		15-Jan	39	663		15-Jan	9	153	816	1,224.00	5.89%		
	18-Jan	8	136		18-Jan	23	391		18-Jan	22	374	901	1,351.50	6.50%		
	19-Jan	13	221		19-Jan	16	272		19-Jan	4	68	561	841.50	4.05%	PC 400-GPS down 4 hours with broken heater hose	
	20-Jan	7	119		20-Jan	26	442		20-Jan	7	119	680	1,020.00	4.91%		
	20-Jan	0	0		20-Jan	3	18		20-Jan	12	72	90	180.00	0.65%	Concrete loaded and hauled to stockpile	
	21-Jan	5	85		21-Jan	19	323		21-Jan	4	68	476	714.00	3.44%	**Re-dig CB 13 = 120CY (failed Conformation Sampling)**	13
	21-Jan	3	18		21-Jan	8	48		21-Jan	1	6	72	144.00	0.52%	Concrete loaded and hauled to stockpile	
	22-Jan	0	0		22-Jan	23	391		22-Jan	6	102	493	739.50	3.56%		
	22-Jan	0	0		22-Jan	9	54		22-Jan	7	42	96	192.00	0.69%	Concrete loaded and hauled to stockpile	
	25-Jan	4	68		25-Jan	19	323		25-Jan	1	17	408	612.00	2.94%	**Re-dig CB 12 = 90CY (failed Conformation Sampling)**	90
	25-Jan		0		25-Jan	3	18		25-Jan	0	0	18	36.00	0.13%	Concrete loaded and hauled to stockpile	
	26-Jan	14	238		26-Jan	27	459		26-Jan	0	0	697	1,045.50	5.03%	**Re-dig CB 12 = 128CY (failed Conformation Sampling)**	128
	26-Jan	0	0		26-Jan	1	6		26-Jan	0	0	6	12.00	0.04%	Concrete loaded and hauled to stockpile	
	27-Jan	14	238		27-Jan	22	374		27-Jan	9	153	765	1,147.50	5.52%	**Re-dig CB 13 = 350CY (failed Conformation Sampling)**	
	27-Jan	0	0		27-Jan	2	12		27-Jan	0	0	12	24.00	0.09%	Concrete loaded and hauled to stockpile	
	28-Jan	10	170		28-Jan	36	612		28-Jan	0	0	782	1,173.00	5.64%	**Re-dig CB 4, 10, TP7, TP5 = 1069.56(failed Conformation Sampling)**	1070
	28-Jan	0	0		28-Jan	4	24		28-Jan	0	0	24	48.00	0.17%	**Re-dig TP7 Concrete loaded and hauled to stockpile =24 CY**	24
	29-Jan	0	0		29-Jan	3	51		29-Jan	29	493	544	816.00	3.93%		
	29-Jan	0	0		29-Jan	1	6		29-Jan	1	6	12	24.00	0.09%	**Re-dig TP5 Concrete loaded and hauled to stockpile =6 CY**	6
	30-Jan		0		30-Jan	0	0		30-Jan	0	0	0	0.00	0.00%		
	30-Jan	0	0		30-Jan	0	0		30-Jan	0	0	0	0.00	0.00%	Concrete loaded and hauled to stockpile	
	1-Feb		0		1-Feb	12	204		1-Feb	4	68	272	408.00	1.96%	**Redig Cvw east wall 180cy, excavation wating on conformatin samples**	180
	1-Feb	0	0		1-Feb	0	0		1-Feb	0	0	0	0.00	0.00%	Concrete loaded and hauled to stockpile	
	2-Feb	0	0		2-Feb	24	408		2-Feb	0	0	408	612.00	2.94%	**Red-dig CB4, TP7, 2, TP1 Confomation sample result at 10:30 AM**	360
	2-Feb	0	0		2-Feb	0	0		2-Feb	0	0	0	0.00	0.00%		
	3-Feb	0	0		3-Feb	11	187		3-Feb	0	0	187	280.50	1.35%	**Re-dig CBTP1, TP2 North and West slope (failed Conformation Sampling)**	165
	3-Feb	0	0		3-Feb	4	24		3-Feb	0	0	24	48.00	0.17%	**Re-dig CBTP1, TP2 North and West slope (failed Conformation Sampling)**	24
	4-Feb		0		4-Feb	18	306		4-Feb	30	510	816	1,224.00	5.89%	**Re-dig CBTP1, TP2 South and West slope (failed Conformation Sampling)**	270
	4-Feb		0		4-Feb	0	0		4-Feb	0	0	0	0.00	0.00%		
	5-Feb	10	170		5-Feb	34	578		5-Feb	3	51	799	1,198.50	5.77%		
	5-Feb		0		5-Feb	1	6		5-Feb	0	0	6	12.00	0.04%		
	8-Feb	33	561		8-Feb	0	0		8-Feb	17	289	850	1,275.00	6.14%		
	8-Feb		0		8-Feb	1	6		8-Feb	0	0	6	12.00	0.04%		
	9-Feb	0	0		9-Feb	0	0		9-Feb	29	493	493	739.50	3.56%	Clean Overburden from access ramp	
	9-Feb	0	0		9-Feb	0	0		9-Feb	2	12	12	24.00	0.09%		
	10-Feb		0		10-Feb	3	51		10-Feb	13	221	272	408.00	1.96%	Excavator down with broken hose	
10-Feb	10-Feb		0		10-Feb	0	0		10-Feb		0	0	0.00	0.00%		
	11-Feb	12	204		11-Feb	18	306		11-Feb	11	187	697	1,045.50	5.03%		
	11-Feb		0		11-Feb		0		11-Feb		0	0	0.00	0.00%		
	12-Feb	20	340		12-Feb	12	204		12-Feb	10	170	714	1,071.00	5.15%		
	12-Feb		0		12-Feb	0	0		12-Feb	0	0	0	0.00	0.00%		
	15-Feb	6	102		15-Feb	21	357		15-Feb	16	272	731	1,096.50	5.28%		
	15-Feb	0	0		15-Feb	0	0		15-Feb	0	0	0	0.00	0.00%		
	23-Feb	22	374		23-Feb	7	119		23-Feb	0	0	493	739.50	3.56%		
	23-Feb	0	0		23-Feb	0	0		23-Feb	0	0	0	0.00	0.00%		
	25-Feb		0		25-Feb	4	68		25-Feb	0	0	68	102.00	0.49%	CB 5 excavation 2 Feet below water level Excavation competed.	
	25-Feb		0		25-Feb	0	0		25-Feb	0	0	0	0.00	0.00%	Verbal approval from DEQ to begin Backfill	
			0				0				0	0	0.00	0.00%		
			0				0				0	0	0.00	0.00%		
			0				0				0	0	0.00	0.00%		
			0				0				0	0	0.00	0.00%		
											0	0	0.00	0.00%		

Estimated Volume	13854	CY
Estimated Duration	23	Days
Estimated Daily Production	602.3478261	CY/Day
Estimated CY per Load	17	CY Soil
Weight of Soil	1.5	Ton/CY
Weight of Concrete	2	Ton/CY

Estimated Production	
35.4 Loads/Day	903.5217391 Ton/day

Weight of Material	1.55	Ton/CY
Estimated CY per Load	6	CY Concrete

TASCA
REPUBLIC
Clean OVER BURDEN

										0	0	0.00	0.00%		
			0				0			0	0	0.00	0.00%		
			0				0			0	0	0.00	0.00%		
			0				0			0	0	0.00	0.00%		
			0				0			0	0	0.00	0.00%		
			0				0			0	0	0.00	0.00%		
			0			0	0			0					
			0				0			0					
	Total	192	3231 CY		Total	469	7566 CY		Total	256	4099	14896	22533	107.52%	2330

4846.5 TON 11349 TON 6148.5 TON

Estimate Vloume	1748 CY	Estimate Vloume	3356 CY
Percent Complete	184.84%	Percent Complete	225.45%

Concrete To Stockpiles

TSCA				Republic				Clean				Daily Concrete Totals		
Material Type	Date	Daily Truck Loads	Estimated Volume (CY)	Material Type	Date	Daily Truck Loads	Estimated Volume (CY)	Material Type	Date	Daily Truck Loads	Estimated Volume (CY)	(CY) Daily Total	Estimated Tons	
	20-Jan	0	0		**20-Jan**	3	18		**20-Jan**	12	72	**90**	**180.00**	
	20-Jan	0	0		**20-Jan**	3	18		**20-Jan**	12	72	**90**	**180.00**	
	21-Jan	3	18		**21-Jan**	8	48		**21-Jan**	1	6	**72**	**144.00**	
	22-Jan	0	0		**21-Jan**	9	54		**21-Jan**	7	42	**96**	**192.00**	
	25-Jan	0	0		**25-Jan**	3	18		**25-Jan**	0	0	**18**	**36.00**	
	26-Jan	0	0		**26-Jan**	1	6		**26-Jan**	0	0	6	12	
	27-Jan		0		**27-Jan**	2	12		**27-Jan**	0	0	12	24	
	28-Jan		0		**28-Jan**	4	24		**28-Jan**	0	0	24	48	Re-Dig CB 4, TP7
	29-Jan		0		**29-Jan**	1	6		**29-Jan**	1	6	12	24	
	30-Jan	0	0		**30-Jan**	0	0		**30-Jan**	0	0	0	0	
	1-Feb	0	0		**1-Feb**	0	0		**1-Feb**	0	0	0	0	
	2-Feb	0	0		**2-Feb**	0	0		**2-Feb**	0	0	0	0	
	3-Feb		0		**3-Feb**	4	24		**3-Feb**	0	0	24	48	
	4-Feb	0	0		**4-Feb**	0	0		**4-Feb**	0	0	0	0	
	5-Feb	0	0		**5-Feb**	0	0		**5-Feb**	0	0	0	0	
	8-Feb		0		**8-Feb**	1	6		**8-Feb**		0	6	12	
			0				0				0	0	0	
			0				0				0	0	0	
			0				0				0	0	0	
			0				0				0	0	0	
			0				0				0	0	0	
			0				0				0	0	0	
			18 CY				234 CY							
			36 Ton				468 Ton							
	Estimaed Tons		524		Estimated Tons		600							
		Percent	6.87%			Percent	78.00%							

Contract Estimated tons 5936 Ton

Date	Ticket No.	Net Tons Concrete	Total Daily Concrete (Ton)	Ticket No.	Net Tons soil (Ton)	Total Daily Soil	Comments
26-Jan	1085668	24.81					
	1085716	24.51					
	1085752	25.45					
	1085813	25.18					
	1085837	25.54					
	1085679	24.74					
	1085721	27.38					
	1085761	24.80					
	1085808	26.59					
	1085842	24.29					
	1085666	22.96					
	1085710	23.62					
	1085741	25.08					
	1085792	26.05					
	1085829	24.06	**375.06**				
27-Jan	1085868	24.87					
	1085903	25.68					
	1085871	25.94		1085936	24.42		
	1085869	25.90	**102.39**	1085960	25.47		
				1085989	25.98		
				1086004	25.05		
				1085918	25.39		
				1085941	26.34		
				1085974	25.11		
				1085996	25.27		
				1085869	25.9		
				1085910	25.55		
				1085928	25.72		
				1085954	25.05		
				1085984	25.39		
				1086001	24.58	**355.22**	
28-Jan				1086025	25.70		
				1086072	25.48		
				1086099	25.58		
				1086152	25.41		
				1086168	26.36		
				1086024	25.86		
				1086062	25.09		
				1086090	25.38		
				1086120	25.07		
				1086148	25.20		
				1086165	25.22		
				1086023	25.95		
				1086056	25.99		
				1086086	25.62		
				1086117	25.15		
				1086144	24.97		
				1086160	25.03	**433.06**	
29-Jan	1086238	24.52		1086308	24.57		
	1086267	25.57		1086323	25.99		
	1086306	26.24		1086244	24.63		
	1086256	24.43		1086201	25.91		
	1086277	25.17	**125.93**	1086183	25.30		
				1086221	25.68		
				1086224	26.60		
				1086206	25.07		
				1086184	25.78		
				1086322	25.84		
				1086180	25.20		
				1086195	26.23		
				1086219	25.40		
				1086289	24.35		
				1086311	26.12	**382.67**	
30-Jan				108639	24.64		
				1086340	25.24		
				1086330	25.42		
				1086341	26.71		
				1086338	25.50		
				1086328	25.16	**152.67**	
1-Feb				1086463	25.15		
				1086500	25.00		
				1086516	26.61		
				1086542	26.08		
				1086562	26.56		
				1086571	26.55		
				1086568	26.84		
				1086557	26.96		
				1086512	26.29		
				1086536	26.98		
				1086495	25.60		
				1086467	27.15		
				1086567	26.08		
				1086554	25.21		
				1086532	26.03		
				1086508	24.89		
				1086487	25.96		
				1086461	25.75	**469.69**	
2-Feb				1086702	26.68		
				1086690	26.54		
				1086664	25.40		
				1086639	26.76		
				1086607	25.99		
				1086579	26.19		
				1086695	26.82		
				1086618	26.48		

Date	Ticket No.	Net Tons Concrete	Total Daily Concrete (Ton)	Ticket No.	Net Tons soil (Ton)	Total Daily Soil	Comments
				1086646	26.91		
				1086593	26.07		
				1086670	27.44		
				1086588	25.48		
				1086611	25.91		
				1086643	26.39		
				1086688	26.73		
				1086691	26.25	**422.04**	
3-Feb				1086814	26.34		
				1086800	26.77		
				1086777	26.95		
				1086754	27.12		
				1086726	26.38		
				1086710	26.36		2:30 PM Landfill roadway blockage due to truck of road
				1086712	26.46		
				1086729	26.38		
				1086756	26.83		
				1086779	27.31		
				1086803	26.77		
				1086818	26.81		
				1086711	26.11		
				1086728	26.72		
				1086757	27.39		
				1086783	27.78		
				1086805	27.02		
				1086820	27.25	**482.75**	
4-Feb	1086837	27.01		1086949	26.27		
	1086835	27.31		1086939	26.77		
			54.32	1086915	26.75		
				1086893	26.72		
				1086866	26.41		
				1086848	26.76		
				1086839	27.42		
				1086856	27.35		
				1086877	27.34		
				1086929	26.86		
				1086944	27.04		
				1086954	27.93		
				1086852	27.06		
				1086873	27.04		
				1086896	26.72		
				1086912	26.13		
				1086936	26.84		
				1086948	25.92	**483.33**	
5-Feb				1086968	27.65		
				1086990	28.02		
				1087005	27.57		
				1087027	27.75		
				1087048	27.38		
				1087070	28.38		
				1087091	27.94		
				1086965	27.02		
				1086987	27.58		
				1087002	27.39		
				1087020	27.84		
				1087043	28.22		
				1087066	27.71		
				1087090	27.60		
				1087085	27.63		
				1087062	27.35		
				1087038	26.81		
				1087015	27.22		
				1087000	27.18		
				1086983	27.22		
				1086963	26.35	**577.81**	
8-Feb				1087246	27.64		
				1087263	27.14		
				1087284	27.07		
				1087307	27.01		
				1087335	26.90		
				1087361	26.72		
				1087375	27.06		
				1087378	27.45		
				1087363	27.40		
				1087343	27.47		
				1087319	27.58		
				1087294	27.51		
				1087271	27.38		
				1087248	28.15		
				1087372	25.98		
				1087360	27.11		
				1087334	27.28		
				1087306	27.33		
				1087281	27.47		
				1087262	27.40		
				1087245	27.85	572.90	
9-Feb				1087494	27.20		
				1087465	27.68		
				10874444	26.94		
				1087418	27.45		
				1087397	26.83		
				1087484	28.20		
				1087454	27.88		
				1087401	27.17		
				1087428	27.53		
				1087514	27.42		2:15 Republic Landfill quit accepting material until waste agreement is updated with additional volume
				1087399	26.59		2 trucks were turned away and loads brought back to the project.
				1087422	27.08		
				1087445	26.76		5:30 PM Republic called to advise the agreement is updated and trucking can resume in the morning

Date	Ticket No.	Net Tons Concrete	Total Daily Concrete (Ton)	Ticket No.	Net Tons soil (Ton)	Total Daily Soil	Comments
				1087469	27.08		
				1087496	27.08	408.89	
10-Feb				1087553	26.62		
				1087577	26.99		
				1087599	26.75		
				1087616	26.95		
				1087642	26.77		
				1087665	26.74		
				1087683	26.69		
				1087682	27.42		
				1087662	26.57		
				1087635	27.21		
				1087619	27.07		
				1087602	27.33		
				1087582	27.39		
				1087552	26.84		
				1087561	27.59		
				1087586	27.40		
				1087605	27.54		
				1087623	28.07		
				1087643	27.69		
				1087667	27.63		
				1087686	27.72	570.98	
11-Feb				1087702	26.91		
				1087725	26.62		
				1087750	26.95		
				1087769	26.83		
				1087796	27.06		
				1087814	26.81		
				1087836	27.03		
				1087845	27.58		
				1087822	28.16		
				1087802	27.46		
				1087772	27.73		
				1087727	27.74		
				1087703	27.62		
				1087752	27.28		
				1087840	27.31		
				1087817	27.52		
				1087798	26.68		
				1087770	27.90		
				1087749	27.10		
				1087721	26.76		
				1087701	26.91	571.96	
12-Feb				1088007	27.78		
				1087986	27.62		
				1087912	27.54		
				1087878	27.81		
				1087859	27.23		
				1087959	27.69		
				1087999	26.75		
				1087980	26.38		
				1087955	26.71		
				1087908	26.89		
				1087874	26.67		
				1087857	26.73		
				1087858	27.32		
				1087875	27.13		
				1087909	26.84		
				1087957	27.27		
				1087983	27.29		
				1088002	27.33	488.98	
15-Feb				1088308	26.88		
				1088261	27.52		
				1088233	27.35		
				1088210	26.99		
				1088188	27.16		
				1088166	27.48		
				1088172	27.30		
				1088191	27.28		
				1088212	27.61		
				1088239	27.12		
				1088263	26.97		
				1088287	26.73		
				1088311	26.79		
				1088309	27.73		
				1088268	27.53		
				1088246	27.95		
				1088219	27.76		
				1088193	27.52		
				1088173	27.97	519.64	
16-Feb				1088526	27.43		
				1088502	26.67		
				1088466	26.99		
				1088437	26.89		
				1088410	27.26		
				1088381	26.63		
				1088344	27.29		
				1088330	27.30		
				1088331	27.04		
				1088347	27.23		
				1088383	27.28		
				1088415	27.18		
				1088444	27.05		
				1088473	27.00		
				1088506	27.12		
				1088532	27.30		
				1088515	27.60		
				1088479	28.30		

Date	Ticket No.	Net Tons Concrete	Total Daily Concrete (Ton)	Ticket No.	Net Tons soil (Ton)	Total Daily Soil	Comments
				1088447	28.16		
				1088417	28.20		
				1088390	27.88		
				1088334	27.70		
				1088354	28.26	629.76	
17-Feb				1088619	28.18		
				1088754	28.26		
				1088722	28.28		
				1088693	28.17		
				1088654	28.47		
				1088581	28.58		
				1088554	28.35		
				1088549	26.94		
				1088577	27.68		
				1088615	27.51		
				1088650	26.89		
				1088690	27.35		
				1088717	27.30		
				1088750	27.29		
				1088746	27.70		
				1088714	27.65		
				1088685	27.51		
				1088641	27.72		
				1088608	27.81		
				1088575	28.38		
				1088548	27.49	583.51	
18-Feb				1088768	27.12		
				1088784	27.43		
				1088808	27.50		Landfill asked to shut down back haul due to needed maintenance at the landfill 12PM
				1088827	27.17		
				1088849	27.14		
				1088867	27.36		
				1088887	27.51		
				1088899	26.95		
				1088895	26.85		
				1088862	27.36		
				1408865	27.38		
				1088845	27.68		
				1088824	27.42		
				1088805	27.18		
				1088780	27.28		
				1088767	26.77		
				1088903	28.39		
				1088891	28.31		
				1088769	27.31	520.11	
19-Feb				1088910	27.36		
				1088931	27.59		
				1088949	27.36		
				1088978	26.96		
				1089010	27.04		
				1089052	27.25		
				1089073	27.04		
				1089074	27.57		
				1089054	27.66		
				1089014	28.13		
				1088981	27.70		
				1088951	28.26		
				1088933	28.25		
				1088913	28.01		
				1089080	26.94		
				1089066	26.71		
				1089039	26.84		
				1089002	26.85		
				1088970	27.05		
				1088944	27.37		
				1088929	27.29		
				1088909	26.51	601.74	
22-Feb				1089293	26.86		
				1089314	26.73		
				1089341	27.40		
				10893665	26.74		
				1089399	27.46		
				1089432	27.09		
				1089452	26.78		
				1089467	26.56		
				1089464	26.77		
				1089445	25.61		
				1089415	27.56		
				1089380	27.61		
				1089326	27.65		
				1089390	26.94		
				1089359	27.20		
				1089311	27.02		
				1089339	27.41		
				1089291	27.14		
				1089454	26.86		
				1089437	26.88		
				1089468	26.29		
				1089350	27.87		
				1089300	27.86	622.29	
23-Feb				1089649	27.95		
				1089628	28.08		
				1089595	27.26		
				1089568	26.69		
				1089543	27.68		
				1089511	27.11		
				1089482	27.54		
				1089478	26.74		
				1089508	26.90		

Date	Ticket No.	Net Tons Concrete	Total Daily Concrete (Ton)	Ticket No.	Net Tons soil (Ton)	Total Daily Soil	Comments
				1089531	26.81		
				1089558	27.00		
				1089589	27.39		
				1089610	26.83		
				1089638	27.04		
				1089659	26.76		
				1089641	26.73		
				1089591	26.96		
				1089613	26.85		
				1089562	27.03		
				1089534	27.03		
				1089506	26.57		
				1089661	26.53	595.48	
2/245				1089665	26.78		
				1089680	27.19		
				1089708	27.25		
				1089734	26.99		
				1089755	26.90		
				1089784	27.06		
				1089806	26.66		
				1089808	26.54		
				1089787	26.33		
				1089757	26.66		
				1089736	26.66		
				1089711	26.88		
				1089686	26.67		
				1089666	26.68		
				1089805	27.73		
				1089733	27.77		
				1089707	27.69		
				1089678	27.39		
				1089781	28.02		
				1089752	27.58	541.43	
25-Feb				1090004	26.92		
				1089987	26.87		
				1089946	26.85		
				1089920	26.53		
				1089897	26.61		
				1089862	26.62		
				1089840	25.91		
				1089839	26.10		
				1089559	26.49		
				1089895	29.79		
				1089945	26.59		
				1089945	26.71		
				1089984	26.22		
				1090001	26.18		
				1090009	27.31		
				1089989	27.54		
				1089950	27.60		
				1089922	27.62		
				1089899	28.01		
				1089865	27.70		
				1089841	27.71	567.88	
26-Feb				1090027	26.91		
				1090039	27.02		
				1090062	26.56		
				1090096	26.74		
				1090131	26.14		
				1090166	26.69		
				1090028	27.13		
				1090197	27.18		
				1090172	27.53		
				1090136	27.35		
				1090105	27.57		
				1090068	27.34		
				1090043	28.30		
				1090029	27.55		
				1090194	26.53		
				1090168	27.09		
				1090134	26.75		
				1090102	27.05		
				1090065	27.21		
				1090040	27.37	542.01	
29-Feb				1090559	27.32		
				1090538	27.72		
				1090506	28.20		
				1090474	27.73		
				1090404	26.14		
				1090431	26.26		
				1090486	26.29		
				1090528	26.93		
				1090552	26.61		
				1090578	26.50		
				1090452	26.41		
				1090580	26.69		
				1090556	26.92		
				1090534	26.95		
				1090503	26.96		
				1090471	27.02		
				1090408	27.75		
				1090442	27.51	485.91	
1-Mar				1090745	27.44		
				1090718	28.16		
				1090683	27.56		
				1090655	27.60		
				1090627	27.93		
				1090608	27.60		
				1090603	26.65		

Date	Ticket No.	Net Tons Concrete	Total Daily Concrete (Ton)	Ticket No.	Net Tons soil (Ton)	Total Daily Soil	Comments
				1090620	26.40		
				1090675	26.85		
				1090703	26.56		
				1090731	26.48		
				1090751	26.68		
				1090737	26.52		
				1090713	26.97		
				1090690	26.31		
				1090663	27.05		
				1090639	26.64		
				1090618	26.65		
				1090600	26.67	512.72	
2-Mar	1090769	26.86		1090793	27.81		
				1090771	26.89		
				1090788	27.09		
				1090783	27.66		Republic Stockpile is complete
			26.86	1090768	27.18	136.63	
			684.56		13232.06		
8001	**Residual contamination removal from Roadway and excavatin perimeter**						
				1093311	24.25		
18-Mar				1093290	30.53		
				1093262	26.78		
				1093248	31.26		
				1093223	27.87		
				1093196	25.83		
				1093308	24.52		
				1093285	26.3		
				1093258	27.12		
				1093246	26.58		
				1093219	25.26		
				1093194	25.79	322.09	275 cy
21-Mar				1093763	26.97		
				1093751	28.54		
				1093717	27.99		
				1093695	28.25		
				1093662	28.84		
				1093631	25.81		
				1093712	23.4		
				1093688	26.48		
				1093651	27.08		
				1093624	25.05	268.41	221 cy
22-Mar				1093867	26.78		
				1093845	28.83		
				1093813	28.97		
				1093787	29.69		
				1093892	22		
				1093858	27.37		
				1093830	29.18		
				1093793	28.83	221.65	155 cy
					812.15	812.15	651 CY

TSCA Export 4750 Ton

Date	Time IN	Net Tons Concrete	Total Daily Concrete	Estimated Net Tons soil	Total Daily Soil	Weekly TON
1-Feb		0.00		27.27		
		0.00		30.51		
		0.00		35.00		
			0.00		92.78	
2-Feb				30.79		
				31.16		
				27.63		
					89.58	
3-Feb				30.49		
				31.52		
				27.03	89.04	
4-Feb				29.48		
				32.06		
				32.53		
					94.07	
5-Feb				31.31		
				26.47		
				31.36	89.14	
						454.61
8-Feb				29.65		
				32.35		
				32.43	94.43	
9-Feb				31.41		
				26.82		
				31.89	90.12	
10-Feb				26.31		
				32.67		
				32.46	91.44	
11-Feb				31.79		
				32.08		
				27.08		
				29.50		
				31.27		
				32.17	183.89	
11-Feb				31.95		
				30.53		
				30.63	93.11	552.99
15-Feb				28.68		
				31.77		
				31.95		
				29.73		
				31.19		
				32.69		
				32.57	218.58	
16-Feb				0.00		
17-Feb				31.72		
				26.80		
				32.03		
				30.85		
				29.37		
				32.20		
				32.41	215.38	
18-Feb				26.39	26.39	
2/19/2016				31.71		
				31.86	63.57	523.92
22-Feb				32.53		
				32.01	64.54	
23-Feb				26.59		
				30.74		
				31.64		
				31.63		
				31.80		
				32.28	184.68	
24-Feb				29.81		
				32.70		
				26.46	88.97	
25-Feb				31.46		
				31.75		
				30.59		

TSCA Export 4750 Ton

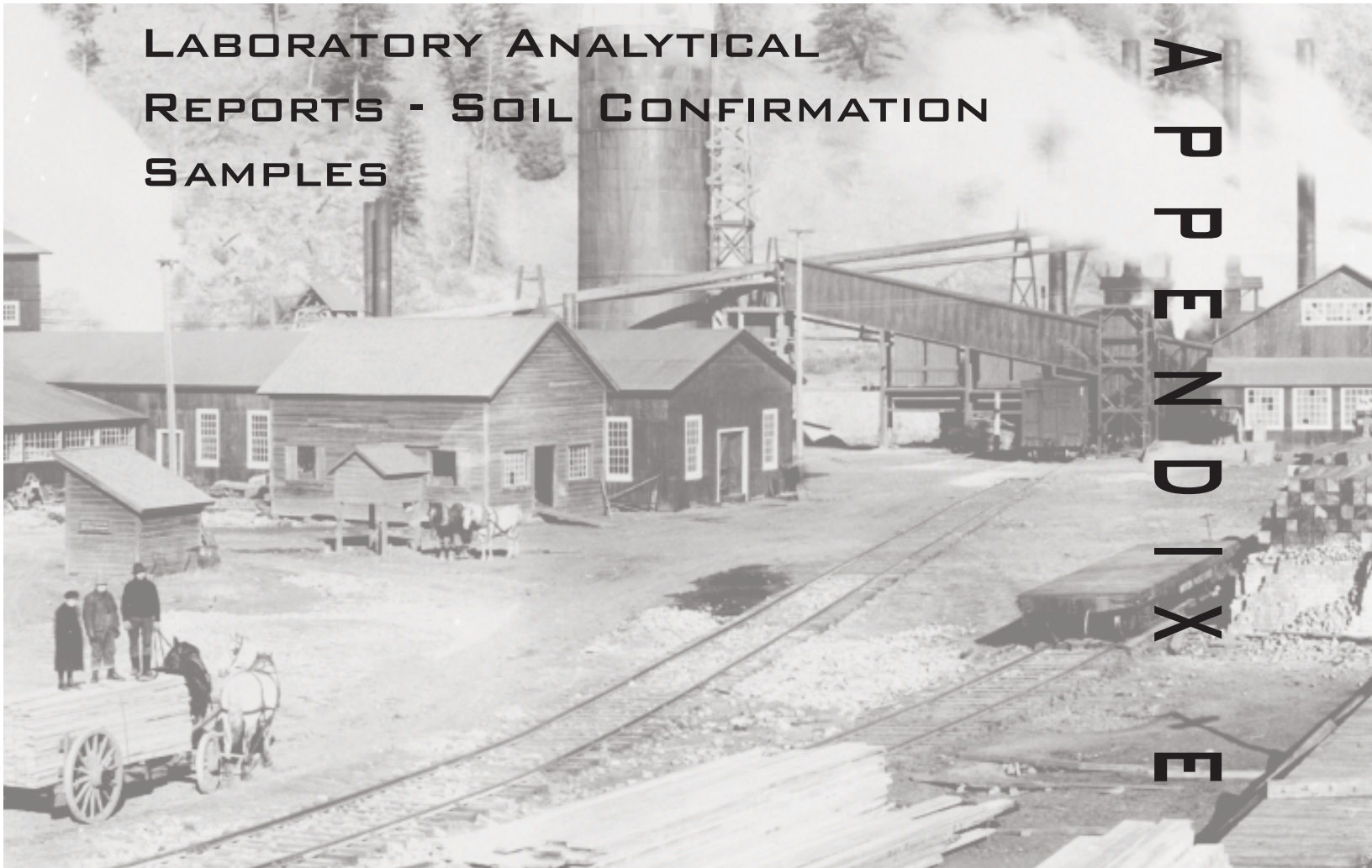
Date	Time IN	Net Tons Concrete	Total Daily Concrete	Estimated Net Tons soil	Total Daily Soil	Weekly TON
				29.20		
				30.65		
				32.32		
				32.14	218.11	
26-Feb				0.00		556.3
29-Feb				29.50		
				26.76		
				31.78		
				31.53		
				31.89		
				29.36		
				30.76		
				32.70		
				29.66	273.94	
1-Mar				32.73		
				26.58	59.31	
2-Mar				32.13		
				32.77		
				31.33		
				30.10		
				33.10		
				33.40		
				31.25		
				30.15	254.23	
3/3/2016				32.20		
				31.50		
				32.10		
				33.15	128.95	
4-Mar				0.00		716.43
7-Mar				30.10		
				33.25		
				33.35		
				30.20		
				31.10		
				31.75		
				32.25	222.00	
8-Mar				33.15		
				32.70		
				32.16		
				33.30		
		30.15		30.15		
				30.05		
				33.30		
				31.15	286.11	
9-Mar				31.59		
				32.30		
				33.10	96.99	
10-Mar		27.15		32.70		
		30.15		33.30		
				32.10		
				33.30		
				30.15		
				31.30		
				33.20	283.35	
11-Mar				0.00		888.448
14-Mar				32.20		
				32.75		
				33.13		
				26.95		
				32.20		
				33.35		
				30.10		
				33.30		
				33.05		
				30.15		
				31.35	348.53	
15-Mar				32.25		
				27.10	59.35	
16-Mar				33.20		
				32.20		
				30.00		
				33.20		
				31.20		
				32.20		

TSCA Export 4750 Ton

Date	Time IN	Net Tons Concrete	Total Daily Concrete	Estimated Net Tons soil	Total Daily Soil	Weekly TON
				30.25	222.25	
17-Mar				32.75		
				27.05		
				32.00	91.80	
18-Mar				32.25		
				32.10	64.35	786.275
21-Mar				30.00		
				33.15		
				31.20		
				30.25		
				32.20		
				27.00		
				32.20	216.00	
22-Mar				32.65		
				32.05		
				33.15		
				30.05		
				31.10		
				33.20		
				30.15	222.35	
23-Mar				31.15		
				32.10		
				27.15		
				32.10	122.50	
24-Mar				33.05		
				30.10		
				33.10		
				30.20		
				31.10	157.55	
25-Mar				0.00		718.4
28-Mar				32.30		
				32.60		
				32.00		
				32.25		
				30.00		
				30.20		
				31.25		
				31.65		
				31.10	283.35	
29-Mar				32.70		
				32.20		
				32.10	97.00	
30-Mar				32.20		
				30.10		
				31.20		
				31.70		
				31.20	156.40	
31-Mar				32.30		
				32.80		
				33.20		
				32.30	130.60	
1-Apr				0.00		667.35
4-Apr				32.70		
				32.20		
				31.50		
				30.30		
				31.35	158.05	
5-Apr				32.85		
				27.1		
				33.3		
				31.8		
				31.3		
				31.3	187.65	
6-Apr				3.4	3.4	345.7
			87.45	6126.37		6210.423

Laboratory Analytical Reports - Soil Confirmation Samples

Appendix



ANALYTICAL SUMMARY REPORT

January 20, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011099 Quote ID: B3097 - Stimson

Project Name: Stimson Collection Package #1

Energy Laboratories Inc Billings MT received the following 4 samples for NewFields on 1/18/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011099-001	CB-13-South Wall	01/15/16 10:15	01/18/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011099-002	CB-13-North Wall	01/15/16 10:25	01/18/16	Soil	Same As Above
B16011099-003	CB-13-Base	01/15/16 10:30	01/18/16	Soil	Same As Above
B16011099-004	CB-13-West Wall	01/15/16 10:40	01/18/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

Digitally signed by
Leigh Ann. Wise
Date: 2016.01.20 12:30:31 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #1
Lab ID: B16011099-001
Client Sample ID: CB-13-South Wall

Report Date: 01/20/16
Collection Date: 01/15/16 10:15
DateReceived: 01/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	01/18/16 14:14 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	01/19/16 16:56 / jem
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	01/19/16 16:56 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	01/19/16 16:56 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	01/19/16 16:56 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	01/19/16 16:56 / jem
Aroclor 1254	11	mg/kg-dry		0.20		SW8082	01/19/16 16:56 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	01/19/16 16:56 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	01/19/16 16:56 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	01/19/16 16:56 / jem
Surr: Decachlorobiphenyl	124	%REC		50-126		SW8082	01/19/16 16:56 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	01/19/16 16:56 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #1
Lab ID: B16011099-002
Client Sample ID: CB-13-North Wall

Report Date: 01/20/16
Collection Date: 01/15/16 10:25
DateReceived: 01/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	01/18/16 14:17 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	01/19/16 14:08 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	01/19/16 14:08 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	01/19/16 14:08 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	01/19/16 14:08 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	01/19/16 14:08 / jem
Aroclor 1254	ND	mg/kg-dry		0.019		SW8082	01/19/16 14:08 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	01/19/16 14:08 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	01/19/16 14:08 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	01/19/16 14:08 / jem
Surr: Decachlorobiphenyl	103	%REC		50-126		SW8082	01/19/16 14:08 / jem
Surr: Tetrachloro-m-xylene	63.0	%REC		42-115		SW8082	01/19/16 14:08 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #1
Lab ID: B16011099-003
Client Sample ID: CB-13-Base

Report Date: 01/20/16
Collection Date: 01/15/16 10:30
DateReceived: 01/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	20	wt%		0.2		SW3550A	01/18/16 14:20 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.21		SW8082	01/19/16 17:24 / jem
Aroclor 1221	ND	mg/kg-dry		0.41		SW8082	01/19/16 17:24 / jem
Aroclor 1232	ND	mg/kg-dry		0.21		SW8082	01/19/16 17:24 / jem
Aroclor 1242	ND	mg/kg-dry		0.21		SW8082	01/19/16 17:24 / jem
Aroclor 1248	ND	mg/kg-dry		0.21		SW8082	01/19/16 17:24 / jem
Aroclor 1254	2.9	mg/kg-dry		0.21		SW8082	01/19/16 17:24 / jem
Aroclor 1260	ND	mg/kg-dry		0.21		SW8082	01/19/16 17:24 / jem
Aroclor 1262	ND	mg/kg-dry		0.21		SW8082	01/19/16 17:24 / jem
Aroclor 1268	ND	mg/kg-dry		0.21		SW8082	01/19/16 17:24 / jem
Surr: Decachlorobiphenyl	108	%REC		50-126		SW8082	01/19/16 17:24 / jem
Surr: Tetrachloro-m-xylene	78.0	%REC		42-115		SW8082	01/19/16 17:24 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #1
Lab ID: B16011099-004
Client Sample ID: CB-13-West Wall

Report Date: 01/20/16
Collection Date: 01/15/16 10:40
DateReceived: 01/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	17	wt%		0.2		SW3550A	01/18/16 14:23 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	01/19/16 17:51 / jem
Aroclor 1221	ND	mg/kg-dry		0.39		SW8082	01/19/16 17:51 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	01/19/16 17:51 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	01/19/16 17:51 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	01/19/16 17:51 / jem
Aroclor 1254	3.7	mg/kg-dry		0.20		SW8082	01/19/16 17:51 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	01/19/16 17:51 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	01/19/16 17:51 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	01/19/16 17:51 / jem
Surr: Decachlorobiphenyl	116	%REC		50-126		SW8082	01/19/16 17:51 / jem
Surr: Tetrachloro-m-xylene	82.0	%REC		42-115		SW8082	01/19/16 17:51 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #1

Report Date: 01/20/16
Work Order: B16011099

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96299
Lab ID: MB-96299	Method Blank				Run: AECD.I_160119A				01/19/16 12:44
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	98	50	126			
Surr: Tetrachloro-m-xylene			0.0017	61	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96299	Laboratory Control Sample				Run: AECD.I_160119A				01/19/16 13:12
Aroclor 1254	0.310	mg/kg	0.017	94	62	126			
Surr: Decachlorobiphenyl			0.0017	98	50	126			
Surr: Tetrachloro-m-xylene			0.0017	60	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011099-002AMB	Sample Matrix Spike				Run: AECD.I_160119A				01/19/16 14:36
Aroclor 1254	0.421	mg/kg-dry	0.020	109	62	126			
Surr: Decachlorobiphenyl			0.0020	103	50	126			
Surr: Tetrachloro-m-xylene			0.0020	71	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011099-002ADB	Sample Matrix Spike Duplicate				Run: AECD.I_160119A				01/19/16 15:04
Aroclor 1254	0.407	mg/kg-dry	0.020	106	62	126	3.4	40	
Surr: Decachlorobiphenyl			0.0020	105	50	126			
Surr: Tetrachloro-m-xylene			0.0020	72	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011099

Login completed by: Leslie S. Cadreau
Reviewed by: BL2000\tedwards
Reviewed Date: 1/19/2016

Date Received: 1/18/2016
Received by: src
Carrier name: Return-UPS Ground N/C

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Container temperature for Cooler 1 was 2.5°C and Cooler 2 was 3.4°C.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, etc.: Stimson Collection Package #1

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2-day TAT

BK6011099
~~B160110 52~~

Shipped by: UPS GRD

Cooler ID(s):

Receipt Temp 2.5 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 7012	SEE ATTACHED	RUSH	Comments	LABORATORY USE ONLY
1	CB-13-Southwall	1/15/16	1015	S	X		X	2 day TAT	~~-01~~ 1001
2	CB-13-Northwall	1/15/16	1025						~~-01~~ 2002
3	CB-13-Base	1/15/16	1030						~~-01~~ Low 003
4	CB-13-Westwall	1/15/16	1040						~~-01~~ 4004
5									
6									
7									
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	1/15/16 1530	Ty Schmechel			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time: 1/18/16 9:20	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

January 21, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011110 Quote ID: B3097 - Stimson

Project Name: Stimson Collection Package #2

Energy Laboratories Inc Billings MT received the following 4 samples for NewFields on 1/19/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011110-001	CB-12 South Wall	01/18/16 14:15	01/19/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011110-002	CB-12 West Wall	01/18/16 14:20	01/19/16	Soil	Same As Above
B16011110-003	CB-12 East Wall	01/18/16 14:30	01/19/16	Soil	Same As Above
B16011110-004	CB-12 Base	01/18/16 14:35	01/19/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

Digitally signed by
Leigh Ann. Wise
Date: 2016.01.21 10:09:37 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #2
Lab ID: B16011110-001
Client Sample ID: CB-12 South Wall

Report Date: 01/21/16
Collection Date: 01/18/16 14:15
DateReceived: 01/19/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.2	wt%		0.2		SW3550A	01/19/16 11:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/20/16 04:01 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	01/20/16 04:01 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/20/16 04:01 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/20/16 04:01 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/20/16 04:01 / jem
Aroclor 1254	0.19	mg/kg-dry		0.018		SW8082	01/20/16 04:01 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/20/16 04:01 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/20/16 04:01 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/20/16 04:01 / jem
Surr: Decachlorobiphenyl	102	%REC		50-126		SW8082	01/20/16 04:01 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	01/20/16 04:01 / jem

- The Aroclor 1254 pattern detected in this sample was degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #2
Lab ID: B16011110-002
Client Sample ID: CB-12 West Wall

Report Date: 01/21/16
Collection Date: 01/18/16 14:20
DateReceived: 01/19/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	01/19/16 11:43 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	01/20/16 04:28 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	01/20/16 04:28 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	01/20/16 04:28 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	01/20/16 04:28 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	01/20/16 04:28 / jem
Aroclor 1254	0.89	mg/kg-dry		0.019		SW8082	01/20/16 04:28 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	01/20/16 04:28 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	01/20/16 04:28 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	01/20/16 04:28 / jem
Surr: Decachlorobiphenyl	107	%REC		50-126		SW8082	01/20/16 04:28 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	01/20/16 04:28 / jem

- The Aroclor 1254 pattern detected in this sample was degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #2
Lab ID: B16011110-003
Client Sample ID: CB-12 East Wall

Report Date: 01/21/16
Collection Date: 01/18/16 14:30
DateReceived: 01/19/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.3	wt%		0.2		SW3550A	01/19/16 11:50 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.075		SW8082	01/20/16 23:38 / jem
Aroclor 1221	ND	mg/kg-dry		0.15		SW8082	01/20/16 23:38 / jem
Aroclor 1232	ND	mg/kg-dry		0.075		SW8082	01/20/16 23:38 / jem
Aroclor 1242	ND	mg/kg-dry		0.075		SW8082	01/20/16 23:38 / jem
Aroclor 1248	ND	mg/kg-dry		0.075		SW8082	01/20/16 23:38 / jem
Aroclor 1254	1.4	mg/kg-dry		0.075		SW8082	01/20/16 23:38 / jem
Aroclor 1260	ND	mg/kg-dry		0.075		SW8082	01/20/16 23:38 / jem
Aroclor 1262	ND	mg/kg-dry		0.075		SW8082	01/20/16 23:38 / jem
Aroclor 1268	ND	mg/kg-dry		0.075		SW8082	01/20/16 23:38 / jem
Surr: Decachlorobiphenyl	110	%REC		50-126		SW8082	01/20/16 23:38 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	01/20/16 23:38 / jem

- The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern detected in this sample was degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Collection Package #2
Lab ID: B16011110-004
Client Sample ID: CB-12 Base

Report Date: 01/21/16
Collection Date: 01/18/16 14:35
DateReceived: 01/19/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	01/19/16 12:05 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.038		SW8082	01/20/16 23:11 / jem
Aroclor 1221	ND	mg/kg-dry		0.074		SW8082	01/20/16 23:11 / jem
Aroclor 1232	ND	mg/kg-dry		0.038		SW8082	01/20/16 23:11 / jem
Aroclor 1242	ND	mg/kg-dry		0.038		SW8082	01/20/16 23:11 / jem
Aroclor 1248	ND	mg/kg-dry		0.038		SW8082	01/20/16 23:11 / jem
Aroclor 1254	1.4	mg/kg-dry		0.038		SW8082	01/20/16 23:11 / jem
Aroclor 1260	ND	mg/kg-dry		0.038		SW8082	01/20/16 23:11 / jem
Aroclor 1262	ND	mg/kg-dry		0.038		SW8082	01/20/16 23:11 / jem
Aroclor 1268	ND	mg/kg-dry		0.038		SW8082	01/20/16 23:11 / jem
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	01/20/16 23:11 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	01/20/16 23:11 / jem

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 01/21/16

Project: Stimson Collection Package #2 **Work Order:** B16011110

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96327
Lab ID: MB-96327	Method Blank				Run: AECD.I_160119A				01/20/16 02:38
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	104	50	126			
Surr: Tetrachloro-m-xylene			0.0017	69	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96327	Laboratory Control Sample				Run: AECD.I_160119A				01/20/16 03:05
Aroclor 1254	0.332	mg/kg	0.017	101	62	126			
Surr: Decachlorobiphenyl			0.0017	102	50	126			
Surr: Tetrachloro-m-xylene			0.0017	71	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011110-003AMB	Sample Duplicate				Run: AECD.I_160120A				01/21/16 00:06
Aroclor 1016	ND	mg/kg-dry	0.074					40	
Aroclor 1221	ND	mg/kg-dry	0.14					40	
Aroclor 1232	ND	mg/kg-dry	0.074					40	
Aroclor 1242	ND	mg/kg-dry	0.074					40	
Aroclor 1248	ND	mg/kg-dry	0.074					40	
Aroclor 1254	2.33	mg/kg-dry	0.074				28	40	
Aroclor 1260	ND	mg/kg-dry	0.074					40	
Aroclor 1262	ND	mg/kg-dry	0.074					40	
Aroclor 1268	ND	mg/kg-dry	0.074					40	
Surr: Decachlorobiphenyl			0.0074	110	50	126			
Surr: Tetrachloro-m-xylene			0.0074	71	42	115			
- The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011110-003ADB	Sample Duplicate				Run: AECD.I_160120A				01/21/16 00:34
Aroclor 1016	ND	mg/kg-dry	0.074					40	
Aroclor 1221	ND	mg/kg-dry	0.14					40	
Aroclor 1232	ND	mg/kg-dry	0.074					40	
Aroclor 1242	ND	mg/kg-dry	0.074					40	
Aroclor 1248	ND	mg/kg-dry	0.074					40	
Aroclor 1254	1.85	mg/kg-dry	0.074				5.1	40	
Aroclor 1260	ND	mg/kg-dry	0.074					40	
Aroclor 1262	ND	mg/kg-dry	0.074					40	
Aroclor 1268	ND	mg/kg-dry	0.074					40	
Surr: Decachlorobiphenyl			0.0074	107	50	126			
Surr: Tetrachloro-m-xylene			0.0074	74	42	115			
- Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration.									
- The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011110

Login completed by: Leslie S. Cadreau

Reviewed by: BL2000\tedwards

Reviewed Date: 1/20/2016

Date Received: 1/19/2016

Received by: jmm

Carrier name: Return-UPS NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	3.4°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Project ID should read as Stimson Collection Package #2 instead of Stimson Collection Package #1 per Wynn Pippin, Project Manager, on 01/20/16.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: teteel@newfields.com

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:
☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Project Name, PWS, Permit, Etc.: Stimson Collection Package #1

Contact Name: Tyler Teel Phone/Fax: (406) 549-8270

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Sample Origin State: MT

Cell: (406) 240-7795

Purchase Order:

EPA/State Compliance: Yes ☐ No ☐

Sampler: (Please Print): Ty Schmechel

Quote/Bottle Order:

Shipped by: UPS NDA RS

Cooler ID(s): TB

Receipt Temp: 3.4 °C

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N

Intact (Y) N

Signature Match (Y) N

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2-day TAT

B16011110

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH		LABORATORY USE ONLY
1	CB-12 Southwall	1/18/16	1415	S	X			X	2 day TAT	-001
2	CB-12 Westwall	1/18/16	1420							-002
3	CB-12 Eastwall	1/18/16	1430							-003
4	CB-12 Base	1/18/16	1435							-004
5										
6										
7										
8										
9										
10										

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 1/18/16 1600 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: J. Mueller Date/Time: 1-19-16 Signature: 09:15

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

January 26, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011540 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package #3

Energy Laboratories Inc Billings MT received the following 5 samples for NewFields on 1/25/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011540-001	CB-13-Base-2	01/21/16 14:00	01/25/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011540-002	CB-13-Southwall-2	01/21/16 14:15	01/25/16	Soil	Same As Above
B16011540-003	CB-13-Westwall-2	01/21/16 14:20	01/25/16	Soil	Same As Above
B16011540-004	CB-IG-1	01/21/16 11:30	01/25/16	Soil	Same As Above
B16011540-005	SAW-1	01/21/16 14:35	01/25/16	Aqueous	Polychlorinated Biphenyls (PCB's) Separatory Funnel Liquid Liquid Ext.

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

Digitally signed by
Leigh Ann. Wise
Date: 2016.01.27 11:01:42 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #3
Lab ID: B16011540-001
Client Sample ID: CB-13-Base-2

Report Date: 01/27/16
Collection Date: 01/21/16 14:00
DateReceived: 01/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	01/25/16 11:09 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	01/26/16 03:49 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	01/26/16 03:49 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	01/26/16 03:49 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	01/26/16 03:49 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	01/26/16 03:49 / jem
Aroclor 1254	0.97	mg/kg-dry		0.019		SW8082	01/26/16 03:49 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	01/26/16 03:49 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	01/26/16 03:49 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	01/26/16 03:49 / jem
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	01/26/16 03:49 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	01/26/16 03:49 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #3
Lab ID: B16011540-002
Client Sample ID: CB-13-Southwall-2

Report Date: 01/27/16
Collection Date: 01/21/16 14:15
DateReceived: 01/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	19	wt%		0.2		SW3550A	01/25/16 11:10 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.21		SW8082	01/26/16 00:17 / jem
Aroclor 1221	ND	mg/kg-dry		0.41		SW8082	01/26/16 00:17 / jem
Aroclor 1232	ND	mg/kg-dry		0.21		SW8082	01/26/16 00:17 / jem
Aroclor 1242	ND	mg/kg-dry		0.21		SW8082	01/26/16 00:17 / jem
Aroclor 1248	ND	mg/kg-dry		0.21		SW8082	01/26/16 00:17 / jem
Aroclor 1254	1.7	mg/kg-dry		0.21		SW8082	01/26/16 00:17 / jem
Aroclor 1260	ND	mg/kg-dry		0.21		SW8082	01/26/16 00:17 / jem
Aroclor 1262	ND	mg/kg-dry		0.21		SW8082	01/26/16 00:17 / jem
Aroclor 1268	ND	mg/kg-dry		0.21		SW8082	01/26/16 00:17 / jem
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	01/26/16 00:17 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	01/26/16 00:17 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern detected in this sample was degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #3
Lab ID: B16011540-003
Client Sample ID: CB-13-Westwall-2

Report Date: 01/27/16
Collection Date: 01/21/16 14:20
DateReceived: 01/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	15	wt%		0.2		SW3550A	01/25/16 11:10 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	01/26/16 00:44 / jem
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	01/26/16 00:44 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	01/26/16 00:44 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	01/26/16 00:44 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	01/26/16 00:44 / jem
Aroclor 1254	2.7	mg/kg-dry		0.20		SW8082	01/26/16 00:44 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	01/26/16 00:44 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	01/26/16 00:44 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	01/26/16 00:44 / jem
Surr: Decachlorobiphenyl	117	%REC		50-126		SW8082	01/26/16 00:44 / jem
Surr: Tetrachloro-m-xylene	81.0	%REC		42-115		SW8082	01/26/16 00:44 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #3
Lab ID: B16011540-004
Client Sample ID: CB-IG-1

Report Date: 01/27/16
Collection Date: 01/21/16 11:30
DateReceived: 01/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	01/25/16 11:11 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	01/26/16 01:10 / jem
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	01/26/16 01:10 / jem
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	01/26/16 01:10 / jem
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	01/26/16 01:10 / jem
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	01/26/16 01:10 / jem
Aroclor 1254	1.2	mg/kg-dry		0.19		SW8082	01/26/16 01:10 / jem
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	01/26/16 01:10 / jem
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	01/26/16 01:10 / jem
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	01/26/16 01:10 / jem
Surr: Decachlorobiphenyl	111	%REC		50-126		SW8082	01/26/16 01:10 / jem
Surr: Tetrachloro-m-xylene	82.0	%REC		42-115		SW8082	01/26/16 01:10 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample. The Aroclor 1254 pattern detected in this sample was degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #3
Lab ID: B16011540-005
Client Sample ID: SAW-1

Report Date: 01/27/16
Collection Date: 01/21/16 14:35
DateReceived: 01/25/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Aroclor 1221	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Aroclor 1232	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Aroclor 1242	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Aroclor 1248	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Aroclor 1254	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Aroclor 1260	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Aroclor 1262	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Aroclor 1268	ND	ug/L		0.50		SW8082	01/25/16 19:52 / jem
Surr: Decachlorobiphenyl	98.0	%REC		44-130		SW8082	01/25/16 19:52 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		40-110		SW8082	01/25/16 19:52 / jem

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 01/26/16

Project: Stimson Data Package #3 **Work Order:** B16011540

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96434
Lab ID: MB-96434	Method Blank				Run: HECD.I_160125B				01/25/16 22:31
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	101	50	126			
Surr: Tetrachloro-m-xylene			0.0017	60	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96434	Laboratory Control Sample				Run: HECD.I_160125B				01/25/16 22:58
Aroclor 1254	0.313	mg/kg	0.017	92	62	126			
Surr: Decachlorobiphenyl			0.0017	103	50	126			
Surr: Tetrachloro-m-xylene			0.0017	60	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011540-004AMB	Sample Duplicate				Run: HECD.I_160125B				01/26/16 01:37
Aroclor 1016	ND	mg/kg-dry	0.19					40	
Aroclor 1221	ND	mg/kg-dry	0.37					40	
Aroclor 1232	ND	mg/kg-dry	0.19					40	
Aroclor 1242	ND	mg/kg-dry	0.19					40	
Aroclor 1248	ND	mg/kg-dry	0.19					40	
Aroclor 1254	2.02	mg/kg-dry	0.19				27	40	
Aroclor 1260	ND	mg/kg-dry	0.19					40	
Aroclor 1262	ND	mg/kg-dry	0.19					40	
Aroclor 1268	ND	mg/kg-dry	0.19					40	
Surr: Decachlorobiphenyl			0.019	118	50	126			
Surr: Tetrachloro-m-xylene			0.019	81	42	115			
- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011540-004ADB	Sample Duplicate				Run: HECD.I_160125B				01/26/16 02:03
Aroclor 1016	ND	mg/kg-dry	0.19					40	
Aroclor 1221	ND	mg/kg-dry	0.37					40	
Aroclor 1232	ND	mg/kg-dry	0.19					40	
Aroclor 1242	ND	mg/kg-dry	0.19					40	
Aroclor 1248	ND	mg/kg-dry	0.19					40	
Aroclor 1254	1.85	mg/kg-dry	0.19				19	40	
Aroclor 1260	ND	mg/kg-dry	0.19					40	
Aroclor 1262	ND	mg/kg-dry	0.19					40	
Aroclor 1268	ND	mg/kg-dry	0.19					40	
Surr: Decachlorobiphenyl			0.019	121	50	126			
Surr: Tetrachloro-m-xylene			0.019	83	42	115			
- Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration.									
- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 01/26/16

Project: Stimson Data Package #3 **Work Order:** B16011540

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96436
Lab ID: MB-96436	Method Blank				Run: HECD.I_160125A				01/25/16 18:32
Aroclor 1016	ND	ug/L	0.50						
Aroclor 1221	ND	ug/L	0.50						
Aroclor 1232	ND	ug/L	0.50						
Aroclor 1242	ND	ug/L	0.50						
Aroclor 1248	ND	ug/L	0.50						
Aroclor 1254	ND	ug/L	0.50						
Aroclor 1260	ND	ug/L	0.50						
Aroclor 1262	ND	ug/L	0.50						
Aroclor 1268	ND	ug/L	0.50						
Surr: Decachlorobiphenyl			0.050	100	44	130			
Surr: Tetrachloro-m-xylene			0.050	72	40	110			
Lab ID: AR1254-96436	Laboratory Control Sample				Run: HECD.I_160125A				01/25/16 18:59
Aroclor 1254	9.63	ug/L	0.50	96	55	132			
Surr: Decachlorobiphenyl			0.050	101	44	130			
Surr: Tetrachloro-m-xylene			0.050	70	40	110			
Lab ID: B16011540-005AMB	Sample Matrix Spike				Run: HECD.I_160125A				01/25/16 20:18
Aroclor 1254	9.24	ug/L	0.50	92	55	132			
Surr: Decachlorobiphenyl			0.050	96	44	130			
Surr: Tetrachloro-m-xylene			0.050	68	40	110			
Lab ID: B16011540-005ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160125A				01/25/16 20:45
Aroclor 1254	9.36	ug/L	0.50	94	55	132	1.3	40	
Surr: Decachlorobiphenyl			0.050	98	44	130			
Surr: Tetrachloro-m-xylene			0.050	72	40	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011540

Login completed by: Brittaney R. Garza

Reviewed by: BL2000\lcadreau

Reviewed Date: 1/25/2016

Date Received: 1/25/2016

Received by: qej

Carrier name: Return-UPS 2Day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.0°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Project Name, PWS, Permit, Etc.: Stimson Data Package #3

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Sampler: (Please Print) Ty Schmechel

Purchase Order:

Quote/Bottle Order:

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments: 2 Day TAT	LABORATORY USE ONLY
1 CB-13-Base-2	1/21/16	1400	S	X			X	2 Day TAT	B160118540
2 CB-13-Southwall-2	1/21/16	1415	S	X			X		001
3 CB-13-Westwall-2	1/21/16	1420	S	X			X		002
4 CB-IG-1	1/21/16	1130	S	X			X		003
5 SAW-1	1/21/16	1435	W	X			X		004
6									005
7									
8									
9									
10									

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Shipped by: Rtn. UPS 2nd day

Cooler ID(s):

Receipt Temp 1.0 °C TB

On Ice: (Y) N

Custody Seal: On Bottle (Y) N; On Cooler (Y) N

Intact (Y) N

Signature Match (Y) N

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 1/22/16 1030 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: Quince Jones Date/Time: 1/25/16 09:10 Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

January 27, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011575 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package #4

Energy Laboratories Inc Billings MT received the following 15 samples for NewFields on 1/26/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011575-001	CB-4-Base	01/25/16 12:30	01/26/16	Solid	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011575-002	CB-4-Eastwall	01/25/16 12:35	01/26/16	Solid	Same As Above
B16011575-003	CB-4-Southwall	01/25/16 12:40	01/26/16	Solid	Same As Above
B16011575-004	CB-TP-7-Base	01/25/16 11:30	01/26/16	Solid	Same As Above
B16011575-005	CB-TP-7-Northwall	01/25/16 11:35	01/26/16	Solid	Same As Above
B16011575-006	CB-TP-7-Eastwall	01/25/16 11:40	01/26/16	Solid	Same As Above
B16011575-007	CB-10-Base	01/25/16 11:50	01/26/16	Solid	Same As Above
B16011575-008	CB-10-Northwall	01/25/16 11:55	01/26/16	Solid	Same As Above
B16011575-009	CB-10-Eastwall	01/25/16 12:05	01/26/16	Solid	Same As Above
B16011575-010	CB-10-Westwall	01/25/16 12:00	01/26/16	Solid	Same As Above
B16011575-011	CB-IG-2	01/25/16 14:00	01/26/16	Solid	Same As Above
B16011575-012	SAW-2	01/25/16 12:50	01/26/16	Aqueous	Polychlorinated Biphenyls (PCB's) Separatory Funnel Liquid Liquid Ext.
B16011575-013	CB-TP-5-Base	01/25/16 14:00	01/26/16	Solid	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011575-014	CB-TP-5-Eastwall	01/25/16 14:05	01/26/16	Solid	Same As Above
B16011575-015	CB-TP-5-Southwall	01/25/16 14:10	01/26/16	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.01.27 16:09:33 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-001
Client Sample ID: CB-4-Base

Report Date: 01/27/16
Collection Date: 01/25/16 12:30
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	01/26/16 10:35 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	01/27/16 08:59 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	01/27/16 08:59 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	01/27/16 08:59 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	01/27/16 08:59 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	01/27/16 08:59 / jem
Aroclor 1254	0.24	mg/kg-dry		0.019		SW8082	01/27/16 08:59 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	01/27/16 08:59 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	01/27/16 08:59 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	01/27/16 08:59 / jem
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	01/27/16 08:59 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	01/27/16 08:59 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-002
Client Sample ID: CB-4-Eastwall

Report Date: 01/27/16
Collection Date: 01/25/16 12:35
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	20	wt%		0.2		SW3550A	01/26/16 10:43 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.21		SW8082	01/26/16 22:19 / jem
Aroclor 1221	ND	mg/kg-dry		0.41		SW8082	01/26/16 22:19 / jem
Aroclor 1232	ND	mg/kg-dry		0.21		SW8082	01/26/16 22:19 / jem
Aroclor 1242	ND	mg/kg-dry		0.21		SW8082	01/26/16 22:19 / jem
Aroclor 1248	ND	mg/kg-dry		0.21		SW8082	01/26/16 22:19 / jem
Aroclor 1254	11	mg/kg-dry		0.21		SW8082	01/26/16 22:19 / jem
Aroclor 1260	ND	mg/kg-dry		0.21		SW8082	01/26/16 22:19 / jem
Aroclor 1262	ND	mg/kg-dry		0.21		SW8082	01/26/16 22:19 / jem
Aroclor 1268	ND	mg/kg-dry		0.21		SW8082	01/26/16 22:19 / jem
Surr: Decachlorobiphenyl	114	%REC		50-126		SW8082	01/26/16 22:19 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	01/26/16 22:19 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-003
Client Sample ID: CB-4-Southwall

Report Date: 01/27/16
Collection Date: 01/25/16 12:40
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	01/26/16 10:52 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	01/27/16 09:26 / jem
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	01/27/16 09:26 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	01/27/16 09:26 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	01/27/16 09:26 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	01/27/16 09:26 / jem
Aroclor 1254	2.3	mg/kg-dry		0.20		SW8082	01/27/16 09:26 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	01/27/16 09:26 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	01/27/16 09:26 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	01/27/16 09:26 / jem
Surr: Decachlorobiphenyl	119	%REC		50-126		SW8082	01/27/16 09:26 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	01/27/16 09:26 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-004
Client Sample ID: CB-TP-7-Base

Report Date: 01/27/16
Collection Date: 01/25/16 11:30
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	16	wt%		0.2		SW3550A	01/26/16 11:01 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	01/26/16 22:46 / jem
Aroclor 1221	ND	mg/kg-dry		0.40		SW8082	01/26/16 22:46 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	01/26/16 22:46 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	01/26/16 22:46 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	01/26/16 22:46 / jem
Aroclor 1254	3.0	mg/kg-dry		0.20		SW8082	01/26/16 22:46 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	01/26/16 22:46 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	01/26/16 22:46 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	01/26/16 22:46 / jem
Surr: Decachlorobiphenyl	130	%REC	S	50-126		SW8082	01/26/16 22:46 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	01/26/16 22:46 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-005
Client Sample ID: CB-TP-7-Northwall

Report Date: 01/27/16
Collection Date: 01/25/16 11:35
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	22	wt%		0.2		SW3550A	01/26/16 11:07 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.22		SW8082	01/27/16 01:25 / jem
Aroclor 1221	ND	mg/kg-dry		0.42		SW8082	01/27/16 01:25 / jem
Aroclor 1232	ND	mg/kg-dry		0.22		SW8082	01/27/16 01:25 / jem
Aroclor 1242	ND	mg/kg-dry		0.22		SW8082	01/27/16 01:25 / jem
Aroclor 1248	ND	mg/kg-dry		0.22		SW8082	01/27/16 01:25 / jem
Aroclor 1254	2.5	mg/kg-dry		0.22		SW8082	01/27/16 01:25 / jem
Aroclor 1260	ND	mg/kg-dry		0.22		SW8082	01/27/16 01:25 / jem
Aroclor 1262	ND	mg/kg-dry		0.22		SW8082	01/27/16 01:25 / jem
Aroclor 1268	ND	mg/kg-dry		0.22		SW8082	01/27/16 01:25 / jem
Surr: Decachlorobiphenyl	120	%REC		50-126		SW8082	01/27/16 01:25 / jem
Surr: Tetrachloro-m-xylene	78.0	%REC		42-115		SW8082	01/27/16 01:25 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-006
Client Sample ID: CB-TP-7-Eastwall

Report Date: 01/27/16
Collection Date: 01/25/16 11:40
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	18	wt%		0.2		SW3550A	01/26/16 11:11 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.21		SW8082	01/27/16 01:51 / jem
Aroclor 1221	ND	mg/kg-dry		0.40		SW8082	01/27/16 01:51 / jem
Aroclor 1232	ND	mg/kg-dry		0.21		SW8082	01/27/16 01:51 / jem
Aroclor 1242	ND	mg/kg-dry		0.21		SW8082	01/27/16 01:51 / jem
Aroclor 1248	ND	mg/kg-dry		0.21		SW8082	01/27/16 01:51 / jem
Aroclor 1254	1.9	mg/kg-dry		0.21		SW8082	01/27/16 01:51 / jem
Aroclor 1260	ND	mg/kg-dry		0.21		SW8082	01/27/16 01:51 / jem
Aroclor 1262	ND	mg/kg-dry		0.21		SW8082	01/27/16 01:51 / jem
Aroclor 1268	ND	mg/kg-dry		0.21		SW8082	01/27/16 01:51 / jem
Surr: Decachlorobiphenyl	147	%REC	S	50-126		SW8082	01/27/16 01:51 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	01/27/16 01:51 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-007
Client Sample ID: CB-10-Base

Report Date: 01/27/16
Collection Date: 01/25/16 11:50
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	17	wt%		0.2		SW3550A	01/26/16 11:16 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	01/27/16 07:40 / jem
Aroclor 1221	ND	mg/kg-dry		0.039		SW8082	01/27/16 07:40 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	01/27/16 07:40 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	01/27/16 07:40 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	01/27/16 07:40 / jem
Aroclor 1254	0.11	mg/kg-dry		0.020		SW8082	01/27/16 07:40 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	01/27/16 07:40 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	01/27/16 07:40 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	01/27/16 07:40 / jem
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	01/27/16 07:40 / jem
Surr: Tetrachloro-m-xylene	70.0	%REC		42-115		SW8082	01/27/16 07:40 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-008
Client Sample ID: CB-10-Northwall

Report Date: 01/27/16
Collection Date: 01/25/16 11:55
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.3	wt%		0.2		SW3550A	01/26/16 11:23 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/27/16 08:06 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	01/27/16 08:06 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/27/16 08:06 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/27/16 08:06 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/27/16 08:06 / jem
Aroclor 1254	0.12	mg/kg-dry		0.018		SW8082	01/27/16 08:06 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/27/16 08:06 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/27/16 08:06 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/27/16 08:06 / jem
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	01/27/16 08:06 / jem
Surr: Tetrachloro-m-xylene	79.0	%REC		42-115		SW8082	01/27/16 08:06 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-009
Client Sample ID: CB-10-Eastwall

Report Date: 01/27/16
Collection Date: 01/25/16 12:05
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	24	wt%		0.2		SW3550A	01/26/16 11:30 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.022		SW8082	01/27/16 08:33 / jem
Aroclor 1221	ND	mg/kg-dry		0.044		SW8082	01/27/16 08:33 / jem
Aroclor 1232	ND	mg/kg-dry		0.022		SW8082	01/27/16 08:33 / jem
Aroclor 1242	ND	mg/kg-dry		0.022		SW8082	01/27/16 08:33 / jem
Aroclor 1248	ND	mg/kg-dry		0.022		SW8082	01/27/16 08:33 / jem
Aroclor 1254	0.089	mg/kg-dry		0.022		SW8082	01/27/16 08:33 / jem
Aroclor 1260	ND	mg/kg-dry		0.022		SW8082	01/27/16 08:33 / jem
Aroclor 1262	ND	mg/kg-dry		0.022		SW8082	01/27/16 08:33 / jem
Aroclor 1268	ND	mg/kg-dry		0.022		SW8082	01/27/16 08:33 / jem
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	01/27/16 08:33 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	01/27/16 08:33 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-010
Client Sample ID: CB-10-Westwall

Report Date: 01/27/16
Collection Date: 01/25/16 12:00
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	15	wt%		0.2		SW3550A	01/26/16 11:36 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	01/27/16 03:38 / jem
Aroclor 1221	ND	mg/kg-dry		0.39		SW8082	01/27/16 03:38 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	01/27/16 03:38 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	01/27/16 03:38 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	01/27/16 03:38 / jem
Aroclor 1254	2.2	mg/kg-dry		0.20		SW8082	01/27/16 03:38 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	01/27/16 03:38 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	01/27/16 03:38 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	01/27/16 03:38 / jem
Surr: Decachlorobiphenyl	115	%REC		50-126		SW8082	01/27/16 03:38 / jem
Surr: Tetrachloro-m-xylene	70.0	%REC		42-115		SW8082	01/27/16 03:38 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-011
Client Sample ID: CB-IG-2

Report Date: 01/27/16
Collection Date: 01/25/16 14:00
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	16	wt%		0.2		SW3550A	01/26/16 11:43 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	01/27/16 04:04 / jem
Aroclor 1221	ND	mg/kg-dry		0.39		SW8082	01/27/16 04:04 / jem
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	01/27/16 04:04 / jem
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	01/27/16 04:04 / jem
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	01/27/16 04:04 / jem
Aroclor 1254	2.6	mg/kg-dry		0.20		SW8082	01/27/16 04:04 / jem
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	01/27/16 04:04 / jem
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	01/27/16 04:04 / jem
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	01/27/16 04:04 / jem
Surr: Decachlorobiphenyl	125	%REC		50-126		SW8082	01/27/16 04:04 / jem
Surr: Tetrachloro-m-xylene	85.0	%REC		42-115		SW8082	01/27/16 04:04 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-012
Client Sample ID: SAW-2

Report Date: 01/27/16
Collection Date: 01/25/16 12:50
DateReceived: 01/26/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Aroclor 1221	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Aroclor 1232	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Aroclor 1242	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Aroclor 1248	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Aroclor 1254	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Aroclor 1260	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Aroclor 1262	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Aroclor 1268	ND	ug/L		0.50		SW8082	01/26/16 17:00 / jem
Surr: Decachlorobiphenyl	89.0	%REC		44-130		SW8082	01/26/16 17:00 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		40-110		SW8082	01/26/16 17:00 / jem

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-013
Client Sample ID: CB-TP-5-Base

Report Date: 01/27/16
Collection Date: 01/25/16 14:00
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.7	wt%		0.2		SW3550A	01/26/16 11:47 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		1.9		SW8082	01/27/16 04:31 / jem
Aroclor 1221	ND	mg/kg-dry		3.7		SW8082	01/27/16 04:31 / jem
Aroclor 1232	ND	mg/kg-dry		1.9		SW8082	01/27/16 04:31 / jem
Aroclor 1242	ND	mg/kg-dry		1.9		SW8082	01/27/16 04:31 / jem
Aroclor 1248	ND	mg/kg-dry		1.9		SW8082	01/27/16 04:31 / jem
Aroclor 1254	110	mg/kg-dry		1.9		SW8082	01/27/16 04:31 / jem
Aroclor 1260	ND	mg/kg-dry		1.9		SW8082	01/27/16 04:31 / jem
Aroclor 1262	ND	mg/kg-dry		1.9		SW8082	01/27/16 04:31 / jem
Aroclor 1268	ND	mg/kg-dry		1.9		SW8082	01/27/16 04:31 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	01/27/16 04:31 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	01/27/16 04:31 / jem

- The Reporting Limits reflect a 100 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-014
Client Sample ID: CB-TP-5-Eastwall

Report Date: 01/27/16
Collection Date: 01/25/16 14:05
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.6	wt%		0.2		SW3550A	01/26/16 11:53 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/27/16 09:53 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	01/27/16 09:53 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/27/16 09:53 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/27/16 09:53 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/27/16 09:53 / jem
Aroclor 1254	0.34	mg/kg-dry		0.018		SW8082	01/27/16 09:53 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/27/16 09:53 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/27/16 09:53 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/27/16 09:53 / jem
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	01/27/16 09:53 / jem
Surr: Tetrachloro-m-xylene	59.0	%REC		42-115		SW8082	01/27/16 09:53 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4
Lab ID: B16011575-015
Client Sample ID: CB-TP-5-Southwall

Report Date: 01/27/16
Collection Date: 01/25/16 14:10
DateReceived: 01/26/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.9	wt%		0.2		SW3550A	01/26/16 11:58 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	01/26/16 21:52 / jem
Aroclor 1221	ND	mg/kg-dry		0.37		SW8082	01/26/16 21:52 / jem
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	01/26/16 21:52 / jem
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	01/26/16 21:52 / jem
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	01/26/16 21:52 / jem
Aroclor 1254	0.82	mg/kg-dry		0.19		SW8082	01/26/16 21:52 / jem
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	01/26/16 21:52 / jem
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	01/26/16 21:52 / jem
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	01/26/16 21:52 / jem
Surr: Decachlorobiphenyl	120	%REC		50-126		SW8082	01/26/16 21:52 / jem
Surr: Tetrachloro-m-xylene	81.0	%REC		42-115		SW8082	01/26/16 21:52 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Report Date: 01/27/16
Project: Stimson Data Package #4
Work Order: B16011575

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96467
Lab ID: MB-96467	Method Blank				Run: HECD.I_160126A				01/26/16 20:06
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	112	50	126			
Surr: Tetrachloro-m-xylene			0.0017	73	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96467	Laboratory Control Sample				Run: HECD.I_160126A				01/26/16 20:33
Aroclor 1254	0.330	mg/kg	0.017	99	62	126			
Surr: Decachlorobiphenyl			0.0017	110	50	126			
Surr: Tetrachloro-m-xylene			0.0017	64	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011575-004AMB	Sample Matrix Spike				Run: HECD.I_160126A				01/26/16 23:12
Aroclor 1254	3.43	mg/kg-dry	0.20	116	62	126			
Surr: Decachlorobiphenyl			0.020	125	50	126			
Surr: Tetrachloro-m-xylene			0.020	78	42	115			
- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011575-004ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160126A				01/26/16 23:39
Aroclor 1254	3.40	mg/kg-dry	0.20	108	62	126	0.9	40	
Surr: Decachlorobiphenyl			0.020	136	50	126			S
Surr: Tetrachloro-m-xylene			0.020	83	42	115			
- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #4

Report Date: 01/27/16
Work Order: B16011575

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96469
Lab ID: MB-96469	Method Blank				Run: HECD.I_160126B				01/26/16 15:14
Aroclor 1016	ND	ug/L	0.50						
Aroclor 1221	ND	ug/L	0.50						
Aroclor 1232	ND	ug/L	0.50						
Aroclor 1242	ND	ug/L	0.50						
Aroclor 1248	ND	ug/L	0.50						
Aroclor 1254	ND	ug/L	0.50						
Aroclor 1260	ND	ug/L	0.50						
Aroclor 1262	ND	ug/L	0.50						
Aroclor 1268	ND	ug/L	0.50						
Surr: Decachlorobiphenyl			0.050	98	44	130			
Surr: Tetrachloro-m-xylene			0.050	68	40	110			
Lab ID: AR1254-96469	Laboratory Control Sample				Run: HECD.I_160126B				01/26/16 15:40
Aroclor 1254	9.10	ug/L	0.50	91	55	132			
Surr: Decachlorobiphenyl			0.050	100	44	130			
Surr: Tetrachloro-m-xylene			0.050	65	40	110			
Lab ID: B16011575-012AMB	Sample Matrix Spike				Run: HECD.I_160126B				01/26/16 17:53
Aroclor 1254	9.75	ug/L	0.50	98	55	132			
Surr: Decachlorobiphenyl			0.050	97	44	130			
Surr: Tetrachloro-m-xylene			0.050	77	40	110			
Lab ID: B16011575-012ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160126B				01/26/16 18:20
Aroclor 1254	9.51	ug/L	0.50	95	55	132	2.5	40	
Surr: Decachlorobiphenyl			0.050	97	44	130			
Surr: Tetrachloro-m-xylene			0.050	72	40	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011575

Login completed by:	Tabitha Edwards	Date Received:	1/26/2016
Reviewed by:	BL2000\lcadreau	Received by:	tae
Reviewed Date:	1/26/2016	Carrier name:	Return-UPS 2Day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.0°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Project Name, PWS, Permit, Etc.: Stimson Data Package #4

Contact Name: Tyler Etzel Phone/Fax: (406) 549-8270 Cell: (406) 240-7795

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Sampler: (Please Print) Ty Schmechel

Purchase Order:

Quote/Bottle Order:

Special Report/Formats:
☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SEE ATTACHED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 day TAT

Shipped by: Hand Carried

Cooler ID(s): TAE 1-26-16

Receipt Temp: 20 °C TB

On Ice: (Y) N

Custody Seal: On Bottle (Y) N; On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082													LABORATORY USE ONLY
1	CB-4-Base	1/25/16	1230	S	X											X	2 day TAT	B1601 1575-001
2	CB-4-Eastwall	1/25/16	1235	S														002
3	CB-4-Southwall	1/25/16	1240	S														003
4	CB-TP-7-Base	1/25/16	1130	S														004
5	CB-TP-7-Northwall	1/25/16	1135	S														005
6	CB-TP-7-Eastwall	1/25/16	1140	S														006
7	CB-10-Base	1/25/16	1150	S														007
8	CB-10-Northwall	1/25/16	1155	S														008
9	CB-10-Eastwall	1/25/16	1205	S														009
10	CB-10-Westwall	1/25/16	1200	S														010

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 1/25/16 1530 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: Date/Time: 1-26-16 0910 Signature: [signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. ... of this possibility. All sub-contract data will be clearly notated on your analytical report.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #4

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): see page #1

Contact Name: see page #1

Phone/Fax:

Cell:

Sampler: (Please Print) Ty Schmechel

☐ No Hard Copy Email:

Invoice Contact & Phone: See page #1

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): # See page #1

☐ No Hard Copy Email:

Special Report/Formats:

☐ DW
☐ POTW/WWTP
☐ State:
☐ Other:
☐ EDD/EDT (Electronic Data) Format:
☐ LEVEL IV
☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 CB-IG-2	1/25/16	1400	S	X			X	2 day TAT	B601575-011
2 SAW-2	1/25/16	1250	W						012
3 CB-TP-5-Base	1/25/16	1400	S						013
4 CB-TP-5-Eastwall	1/25/16	1405	S						014
5 CB-TP-5-Southwall	1/25/16	1410	S						015
6									
7									
8									
9									
10									

➡ Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 day TAT

Shipped by: Fed Ex Ground

Cooler ID(s): TAE 1-26-16

Receipt Temp: 2.0 °C TB

On Ice: (Y) N

Custody Seal: On Bottle (Y) (N); On Cooler (Y) N

Intact: (Y) N

Signature Match: (Y) N

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 1/25/16/1530 Signature:

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: Date/Time: 1-26-16 0910 Signature:

Sample Disposal: Return to Client: Lab Disposal:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

January 28, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011714 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package #5

Energy Laboratories Inc Billings MT received the following 5 samples for NewFields on 1/27/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011714-001	CB-12-Base-2	01/26/16 12:05	01/27/16	Solid	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011714-002	CB-12-Eastwall-2	01/26/16 12:10	01/27/16	Solid	Same As Above
B16011714-003	CB-12-Westwall-2	01/26/16 12:15	01/27/16	Solid	Same As Above
B16011714-004	CB-IG-3	01/26/16 9:30	01/27/16	Solid	Same As Above
B16011714-005	SAW-3	01/26/16 12:30	01/27/16	Aqueous	Polychlorinated Biphenyls (PCB's) Separatory Funnel Liquid Liquid Ext.

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.01.28 14:59:02 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #5
Lab ID: B16011714-001
Client Sample ID: CB-12-Base-2

Report Date: 01/28/16
Collection Date: 01/26/16 12:05
DateReceived: 01/27/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.8	wt%		0.2		SW3550A	01/27/16 11:50 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/27/16 18:36 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	01/27/16 18:36 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/27/16 18:36 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/27/16 18:36 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/27/16 18:36 / jem
Aroclor 1254	0.42	mg/kg-dry		0.018		SW8082	01/27/16 18:36 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/27/16 18:36 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/27/16 18:36 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/27/16 18:36 / jem
Surr: Decachlorobiphenyl	107	%REC		50-126		SW8082	01/27/16 18:36 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	01/27/16 18:36 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #5
Lab ID: B16011714-002
Client Sample ID: CB-12-Eastwall-2

Report Date: 01/28/16
Collection Date: 01/26/16 12:10
DateReceived: 01/27/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.8	wt%		0.2		SW3550A	01/27/16 11:57 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:03 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	01/27/16 19:03 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:03 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:03 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:03 / jem
Aroclor 1254	0.69	mg/kg-dry		0.018		SW8082	01/27/16 19:03 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:03 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:03 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:03 / jem
Surr: Decachlorobiphenyl	111	%REC		50-126		SW8082	01/27/16 19:03 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	01/27/16 19:03 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #5
Lab ID: B16011714-003
Client Sample ID: CB-12-Westwall-2

Report Date: 01/28/16
Collection Date: 01/26/16 12:15
DateReceived: 01/27/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	01/27/16 12:03 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	01/27/16 19:30 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	01/27/16 19:30 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	01/27/16 19:30 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	01/27/16 19:30 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	01/27/16 19:30 / jem
Aroclor 1254	0.32	mg/kg-dry		0.019		SW8082	01/27/16 19:30 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	01/27/16 19:30 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	01/27/16 19:30 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	01/27/16 19:30 / jem
Surr: Decachlorobiphenyl	105	%REC		50-126		SW8082	01/27/16 19:30 / jem
Surr: Tetrachloro-m-xylene	62.0	%REC		42-115		SW8082	01/27/16 19:30 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #5
Lab ID: B16011714-004
Client Sample ID: CB-IG-3

Report Date: 01/28/16
Collection Date: 01/26/16 09:30
DateReceived: 01/27/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.5	wt%		0.2		SW3550A	01/27/16 12:07 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:56 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	01/27/16 19:56 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:56 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:56 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:56 / jem
Aroclor 1254	0.26	mg/kg-dry		0.018		SW8082	01/27/16 19:56 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:56 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:56 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/27/16 19:56 / jem
Surr: Decachlorobiphenyl	105	%REC		50-126		SW8082	01/27/16 19:56 / jem
Surr: Tetrachloro-m-xylene	64.0	%REC		42-115		SW8082	01/27/16 19:56 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #5
Lab ID: B16011714-005
Client Sample ID: SAW-3

Report Date: 01/28/16
Collection Date: 01/26/16 12:30
DateReceived: 01/27/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Aroclor 1221	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Aroclor 1232	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Aroclor 1242	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Aroclor 1248	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Aroclor 1254	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Aroclor 1260	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Aroclor 1262	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Aroclor 1268	ND	ug/L		0.50		SW8082	01/27/16 23:56 / jem
Surr: Decachlorobiphenyl	85.0	%REC		44-130		SW8082	01/27/16 23:56 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		40-110		SW8082	01/27/16 23:56 / jem

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #5

Report Date: 01/28/16
Work Order: B16011714

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96497
Lab ID: MB-96497	Method Blank				Run: HECD.I_160127A				01/27/16 17:16
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	102	50	126			
Surr: Tetrachloro-m-xylene			0.0017	64	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96497	Laboratory Control Sample				Run: HECD.I_160127A				01/27/16 17:43
Aroclor 1254	0.316	mg/kg	0.017	94	62	126			
Surr: Decachlorobiphenyl			0.0017	103	50	126			
Surr: Tetrachloro-m-xylene			0.0017	61	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011714-004AMB	Sample Matrix Spike				Run: HECD.I_160127A				01/27/16 20:23
Aroclor 1254	0.593	mg/kg-dry	0.018	93	62	126			
Surr: Decachlorobiphenyl			0.0018	109	50	126			
Surr: Tetrachloro-m-xylene			0.0018	77	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011714-004ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160127A				01/27/16 20:50
Aroclor 1254	0.612	mg/kg-dry	0.018	99	62	126	3.2	40	
Surr: Decachlorobiphenyl			0.0018	105	50	126			
Surr: Tetrachloro-m-xylene			0.0018	66	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #5

Report Date: 01/28/16
Work Order: B16011714

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96503
Lab ID: MB-96503	Method Blank				Run: HECD.I_160127B				01/27/16 22:36
Aroclor 1016	ND	ug/L	0.50						
Aroclor 1221	ND	ug/L	0.50						
Aroclor 1232	ND	ug/L	0.50						
Aroclor 1242	ND	ug/L	0.50						
Aroclor 1248	ND	ug/L	0.50						
Aroclor 1254	ND	ug/L	0.50						
Aroclor 1260	ND	ug/L	0.50						
Aroclor 1262	ND	ug/L	0.50						
Aroclor 1268	ND	ug/L	0.50						
Surr: Decachlorobiphenyl			0.050	105	44	130			
Surr: Tetrachloro-m-xylene			0.050	69	40	110			
Lab ID: AR1254-96503	Laboratory Control Sample				Run: HECD.I_160127B				01/27/16 23:03
Aroclor 1254	10.0	ug/L	0.50	100	55	132			
Surr: Decachlorobiphenyl			0.050	107	44	130			
Surr: Tetrachloro-m-xylene			0.050	70	40	110			
Lab ID: B16011714-005AMB	Sample Matrix Spike				Run: HECD.I_160127B				01/28/16 00:23
Aroclor 1254	10.0	ug/L	0.50	100	55	132			
Surr: Decachlorobiphenyl			0.050	97	44	130			
Surr: Tetrachloro-m-xylene			0.050	76	40	110			
Lab ID: B16011714-005ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160127B				01/28/16 00:49
Aroclor 1254	9.25	ug/L	0.50	93	55	132	7.8	40	
Surr: Decachlorobiphenyl			0.050	80	44	130			
Surr: Tetrachloro-m-xylene			0.050	66	40	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011714

Login completed by: Brittaney R. Garza

Reviewed by: BL2000\lcadreau

Reviewed Date: 1/27/2016

Date Received: 1/27/2016

Received by: dlf

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☐	No ☑	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.2°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sample CB-12-Base-2 for Polychlorinated Biphenyls was received broken but still inside sample container. Per Jake Morris, Energy Laboratories analyst, ok to transfer sample to another container and proceed with analysis.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #5

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: Rtn UPS Grd

Cooler ID(s):

Receipt Temp 1.2 °C TB

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

Comments: 2-day TAT

ANALYSIS REQUESTED

Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 CB-12-Base-2	1/26/16	1205	S				X	2-day TAT	B160117-14 001
2 CB-12-Eastwall-2	1/26/16	1210	S						002
3 CB-12-Westwall-2	1/26/16	1215	S						003
4 CB-IC-3	1/26/16	0930	S						004
5 SAW-3	1/26/16	1250	W						005
6									
7									
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 1-26-16/1400 Signature: Ty Schmechel

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: 1/27/16 0910 Date/Time: Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

February 01, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011780 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 6

Energy Laboratories Inc Billings MT received the following 5 samples for NewFields on 1/28/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011780-001	CB-2-Base	01/26/16 15:20	01/28/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011780-002	CB-2-Northwall	01/26/16 15:25	01/28/16	Soil	Same As Above
B16011780-003	CB-2-Eastwall	01/26/16 15:30	01/28/16	Soil	Same As Above
B16011780-004	CB-2-Westwall	01/26/16 15:35	01/28/16	Soil	Same As Above
B16011780-005	CB-14-Northwall	01/26/16 10:05	01/28/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.01 09:59:10 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 6
Lab ID: B16011780-001
Client Sample ID: CB-2-Base

Report Date: 02/01/16
Collection Date: 01/26/16 15:20
DateReceived: 01/28/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.1	wt%		0.2		SW3550A	01/28/16 09:58 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/28/16 23:03 / ldw
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	01/28/16 23:03 / ldw
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/28/16 23:03 / ldw
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/28/16 23:03 / ldw
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/28/16 23:03 / ldw
Aroclor 1254	0.18	mg/kg-dry		0.018		SW8082	01/28/16 23:03 / ldw
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/28/16 23:03 / ldw
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/28/16 23:03 / ldw
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/28/16 23:03 / ldw
Surr: Decachlorobiphenyl	103	%REC		50-126		SW8082	01/28/16 23:03 / ldw
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	01/28/16 23:03 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 6
Lab ID: B16011780-002
Client Sample ID: CB-2-Northwall

Report Date: 02/01/16
Collection Date: 01/26/16 15:25
DateReceived: 01/28/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	01/28/16 10:10 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	01/28/16 20:49 / ldw
Aroclor 1221	ND	mg/kg-dry		0.37		SW8082	01/28/16 20:49 / ldw
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	01/28/16 20:49 / ldw
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	01/28/16 20:49 / ldw
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	01/28/16 20:49 / ldw
Aroclor 1254	3.2	mg/kg-dry		0.19		SW8082	01/28/16 20:49 / ldw
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	01/28/16 20:49 / ldw
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	01/28/16 20:49 / ldw
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	01/28/16 20:49 / ldw
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	01/28/16 20:49 / ldw
Surr: Tetrachloro-m-xylene	82.0	%REC		42-115		SW8082	01/28/16 20:49 / ldw

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 6
Lab ID: B16011780-003
Client Sample ID: CB-2-Eastwall

Report Date: 02/01/16
Collection Date: 01/26/16 15:30
DateReceived: 01/28/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.4	wt%		0.2		SW3550A	01/28/16 10:15 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	01/28/16 21:15 / ldw
Aroclor 1221	ND	mg/kg-dry		0.36		SW8082	01/28/16 21:15 / ldw
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	01/28/16 21:15 / ldw
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	01/28/16 21:15 / ldw
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	01/28/16 21:15 / ldw
Aroclor 1254	1.4	mg/kg-dry		0.19		SW8082	01/28/16 21:15 / ldw
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	01/28/16 21:15 / ldw
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	01/28/16 21:15 / ldw
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	01/28/16 21:15 / ldw
Surr: Decachlorobiphenyl	111	%REC		50-126		SW8082	01/28/16 21:15 / ldw
Surr: Tetrachloro-m-xylene	91.0	%REC		42-115		SW8082	01/28/16 21:15 / ldw

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 6
Lab ID: B16011780-004
Client Sample ID: CB-2-Westwall

Report Date: 02/01/16
Collection Date: 01/26/16 15:35
DateReceived: 01/28/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	19	wt%		0.2		SW3550A	01/28/16 10:20 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		21		SW8082	01/28/16 21:42 / ldw
Aroclor 1221	ND	mg/kg-dry		41		SW8082	01/28/16 21:42 / ldw
Aroclor 1232	ND	mg/kg-dry		21		SW8082	01/28/16 21:42 / ldw
Aroclor 1242	ND	mg/kg-dry		21		SW8082	01/28/16 21:42 / ldw
Aroclor 1248	ND	mg/kg-dry		21		SW8082	01/28/16 21:42 / ldw
Aroclor 1254	456	mg/kg-dry		21		SW8082	01/28/16 21:42 / ldw
Aroclor 1260	ND	mg/kg-dry		21		SW8082	01/28/16 21:42 / ldw
Aroclor 1262	ND	mg/kg-dry		21		SW8082	01/28/16 21:42 / ldw
Aroclor 1268	ND	mg/kg-dry		21		SW8082	01/28/16 21:42 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	01/28/16 21:42 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	01/28/16 21:42 / ldw

- The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 6
Lab ID: B16011780-005
Client Sample ID: CB-14-Northwall

Report Date: 02/01/16
Collection Date: 01/26/16 10:05
DateReceived: 01/28/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.5	wt%		0.2		SW3550A	01/28/16 10:27 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.037		SW8082	01/28/16 22:36 / ldw
Aroclor 1221	ND	mg/kg-dry		0.071		SW8082	01/28/16 22:36 / ldw
Aroclor 1232	ND	mg/kg-dry		0.037		SW8082	01/28/16 22:36 / ldw
Aroclor 1242	ND	mg/kg-dry		0.037		SW8082	01/28/16 22:36 / ldw
Aroclor 1248	ND	mg/kg-dry		0.037		SW8082	01/28/16 22:36 / ldw
Aroclor 1254	1.1	mg/kg-dry		0.037		SW8082	01/28/16 22:36 / ldw
Aroclor 1260	ND	mg/kg-dry		0.037		SW8082	01/28/16 22:36 / ldw
Aroclor 1262	ND	mg/kg-dry		0.037		SW8082	01/28/16 22:36 / ldw
Aroclor 1268	ND	mg/kg-dry		0.037		SW8082	01/28/16 22:36 / ldw
Surr: Decachlorobiphenyl	106	%REC		50-126		SW8082	01/28/16 22:36 / ldw
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	01/28/16 22:36 / ldw

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 02/01/16

Project: Stimson Data Package # 6 **Work Order:** B16011780

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96533
Lab ID: MB-96533	Method Blank				Run: HECD.I_160128A				01/28/16 19:28
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	103	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96533	Laboratory Control Sample				Run: HECD.I_160128A				01/28/16 19:55
Aroclor 1254	0.314	mg/kg	0.017	93	62	126			
Surr: Decachlorobiphenyl			0.0017	106	50	126			
Surr: Tetrachloro-m-xylene			0.0017	65	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011780-001AMB	Sample Matrix Spike				Run: HECD.I_160128A				01/28/16 23:29
Aroclor 1254	0.561	mg/kg-dry	0.018	108	62	126			
Surr: Decachlorobiphenyl			0.0018	106	50	126			
Surr: Tetrachloro-m-xylene			0.0018	77	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011780-001ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160128A				01/28/16 23:56
Aroclor 1254	0.551	mg/kg-dry	0.018	105	62	126	1.9	40	
Surr: Decachlorobiphenyl			0.0018	106	50	126			
Surr: Tetrachloro-m-xylene			0.0018	67	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 6

Report Date: 02/01/16
Work Order: B16011780

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R255763
Lab ID: 1660CK3	Continuing Calibration Verification Standard								01/28/16 18:35
Aroclor 1016	0.203	mg/kg	0.017	101	85	115			
Aroclor 1260	0.196	mg/kg	0.017	98	85	115			
Surr: Decachlorobiphenyl			0.0017	105	85	115			
Surr: Tetrachloro-m-xylene			0.0017	108	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/28/16 19:02
Aroclor 1254	2.02	mg/kg	0.017	101	85	115			
Surr: Decachlorobiphenyl			0.0017	104	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/29/16 00:49
Aroclor 1254	2.07	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	97	85	115			
Surr: Tetrachloro-m-xylene			0.0017	103	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011780

Login completed by:	Ladonna Weis	Date Received:	1/28/2016
Reviewed by:	BL2000\tedwards	Received by:	ldw
Reviewed Date:	1/29/2016	Carrier name:	Return-UPS 2Day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.6°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #6

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel Phone/Fax: (406) 549-8270 Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCommon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccommon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments: 2-day TAT
1 CB-2-Base	1/26/16	1520	S	X			X	B16011780-
2 CB-2-Northwall	1/26/16	1525	S					2 day TAT
3 CB-2-Eastwall	1/26/16	1530	S					
4 CB-2-Westwall	1/26/16	1535	S					
5 CB-14-Northwall	1/27/16	1005	S					
6								
7								
8								
9								
10								

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

LABORATORY USE ONLY

Shipped by:

Cooler ID(s): UPS 2004

Receipt Temp: 2.6 °C TB

On Ice: (Y)

Custody Seal: On Bottle Y N; On Cooler (Y) N

Intact (Y) N

Signature Match (Y) N

-001
-002
-003
-004
-005

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	1-27-16/1200	Ty Schmechel			

Received by Laboratory: [illegible] Date/Time: 1/28/16 Signature: 09:10

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

February 02, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011904 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package #7

Energy Laboratories Inc Billings MT received the following 11 samples for NewFields on 1/29/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011904-001	CB-TP-1-Base	01/27/16 12:55	01/29/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011904-002	CB-TP-1-Northwall	01/27/16 13:00	01/29/16	Soil	Same As Above
B16011904-003	CB-TP-1-Westwall	01/27/16 13:05	01/29/16	Soil	Same As Above
B16011904-004	CB-TP-2-Base	01/27/16 13:20	01/29/16	Soil	Same As Above
B16011904-005	CB-TP-2-Southwall	01/27/16 13:25	01/29/16	Soil	Same As Above
B16011904-006	CB-TP-2-Westwall	01/27/16 13:30	01/29/16	Soil	Same As Above
B16011904-007	CB-13-Base-3	01/27/16 15:20	01/29/16	Soil	Same As Above
B16011904-008	CB-13-Southwall-3	01/27/16 16:00	01/29/16	Soil	Same As Above
B16011904-009	CB-13-Westwall-3	01/27/16 16:40	01/29/16	Soil	Same As Above
B16011904-010	Saw-4	01/27/16 16:30	01/29/16	Aqueous	Polychlorinated Biphenyls (PCB's) Separatory Funnel Liquid Liquid Ext.
B16011904-011	CB-IG-4	01/27/16 10:55	01/29/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.02 10:19:06 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-001
Client Sample ID: CB-TP-1-Base

Report Date: 02/02/16
Collection Date: 01/27/16 12:55
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.7	wt%		0.2		SW3550A	01/29/16 11:02 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.36		SW8082	01/31/16 12:56 / ldw
Aroclor 1221	ND	mg/kg-dry		0.70		SW8082	01/31/16 12:56 / ldw
Aroclor 1232	ND	mg/kg-dry		0.36		SW8082	01/31/16 12:56 / ldw
Aroclor 1242	ND	mg/kg-dry		0.36		SW8082	01/31/16 12:56 / ldw
Aroclor 1248	ND	mg/kg-dry		0.36		SW8082	01/31/16 12:56 / ldw
Aroclor 1254	6.4	mg/kg-dry		0.36		SW8082	01/31/16 12:56 / ldw
Aroclor 1260	ND	mg/kg-dry		0.36		SW8082	01/31/16 12:56 / ldw
Aroclor 1262	ND	mg/kg-dry		0.36		SW8082	01/31/16 12:56 / ldw
Aroclor 1268	ND	mg/kg-dry		0.36		SW8082	01/31/16 12:56 / ldw
Surr: Decachlorobiphenyl	175	%REC	S	50-126		SW8082	01/31/16 12:56 / ldw
Surr: Tetrachloro-m-xylene	90.0	%REC		42-115		SW8082	01/31/16 12:56 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-002
Client Sample ID: CB-TP-1-Northwall

Report Date: 02/02/16
Collection Date: 01/27/16 13:00
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	01/29/16 11:08 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.038		SW8082	01/31/16 13:22 / ldw
Aroclor 1221	ND	mg/kg-dry		0.074		SW8082	01/31/16 13:22 / ldw
Aroclor 1232	ND	mg/kg-dry		0.038		SW8082	01/31/16 13:22 / ldw
Aroclor 1242	ND	mg/kg-dry		0.038		SW8082	01/31/16 13:22 / ldw
Aroclor 1248	ND	mg/kg-dry		0.038		SW8082	01/31/16 13:22 / ldw
Aroclor 1254	1.0	mg/kg-dry		0.038		SW8082	01/31/16 13:22 / ldw
Aroclor 1260	ND	mg/kg-dry		0.038		SW8082	01/31/16 13:22 / ldw
Aroclor 1262	ND	mg/kg-dry		0.038		SW8082	01/31/16 13:22 / ldw
Aroclor 1268	ND	mg/kg-dry		0.038		SW8082	01/31/16 13:22 / ldw
Surr: Decachlorobiphenyl	113	%REC		50-126		SW8082	01/31/16 13:22 / ldw
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	01/31/16 13:22 / ldw

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-003
Client Sample ID: CB-TP-1-Westwall

Report Date: 02/02/16
Collection Date: 01/27/16 13:05
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.8	wt%		0.2		SW3550A	01/29/16 11:13 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.073		SW8082	02/01/16 20:28 / ldw
Aroclor 1221	ND	mg/kg-dry		0.14		SW8082	02/01/16 20:28 / ldw
Aroclor 1232	ND	mg/kg-dry		0.073		SW8082	02/01/16 20:28 / ldw
Aroclor 1242	ND	mg/kg-dry		0.073		SW8082	02/01/16 20:28 / ldw
Aroclor 1248	ND	mg/kg-dry		0.073		SW8082	02/01/16 20:28 / ldw
Aroclor 1254	1.4	mg/kg-dry		0.073		SW8082	02/01/16 20:28 / ldw
Aroclor 1260	ND	mg/kg-dry		0.073		SW8082	02/01/16 20:28 / ldw
Aroclor 1262	ND	mg/kg-dry		0.073		SW8082	02/01/16 20:28 / ldw
Aroclor 1268	ND	mg/kg-dry		0.073		SW8082	02/01/16 20:28 / ldw
Surr: Decachlorobiphenyl	117	%REC		50-126		SW8082	02/01/16 20:28 / ldw
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	02/01/16 20:28 / ldw

- The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-004
Client Sample ID: CB-TP-2-Base

Report Date: 02/02/16
Collection Date: 01/27/16 13:20
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.7	wt%		0.2		SW3550A	01/29/16 11:21 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.037		SW8082	01/31/16 16:28 / ldw
Aroclor 1221	ND	mg/kg-dry		0.071		SW8082	01/31/16 16:28 / ldw
Aroclor 1232	ND	mg/kg-dry		0.037		SW8082	01/31/16 16:28 / ldw
Aroclor 1242	ND	mg/kg-dry		0.037		SW8082	01/31/16 16:28 / ldw
Aroclor 1248	ND	mg/kg-dry		0.037		SW8082	01/31/16 16:28 / ldw
Aroclor 1254	0.96	mg/kg-dry		0.037		SW8082	01/31/16 16:28 / ldw
Aroclor 1260	ND	mg/kg-dry		0.037		SW8082	01/31/16 16:28 / ldw
Aroclor 1262	ND	mg/kg-dry		0.037		SW8082	01/31/16 16:28 / ldw
Aroclor 1268	ND	mg/kg-dry		0.037		SW8082	01/31/16 16:28 / ldw
Surr: Decachlorobiphenyl	118	%REC		50-126		SW8082	01/31/16 16:28 / ldw
Surr: Tetrachloro-m-xylene	78.0	%REC		42-115		SW8082	01/31/16 16:28 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-005
Client Sample ID: CB-TP-2-Southwall

Report Date: 02/02/16
Collection Date: 01/27/16 13:25
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	01/29/16 11:27 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	01/29/16 21:59 / ldw
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	01/29/16 21:59 / ldw
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	01/29/16 21:59 / ldw
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	01/29/16 21:59 / ldw
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	01/29/16 21:59 / ldw
Aroclor 1254	4.9	mg/kg-dry		0.19		SW8082	01/29/16 21:59 / ldw
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	01/29/16 21:59 / ldw
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	01/29/16 21:59 / ldw
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	01/29/16 21:59 / ldw
Surr: Decachlorobiphenyl	115	%REC		50-126		SW8082	01/29/16 21:59 / ldw
Surr: Tetrachloro-m-xylene	80.0	%REC		42-115		SW8082	01/29/16 21:59 / ldw

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-006
Client Sample ID: CB-TP-2-Westwall

Report Date: 02/02/16
Collection Date: 01/27/16 13:30
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	15	wt%		0.2		SW3550A	01/29/16 11:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.10		SW8082	02/01/16 20:54 / ldw
Aroclor 1221	ND	mg/kg-dry		0.19		SW8082	02/01/16 20:54 / ldw
Aroclor 1232	ND	mg/kg-dry		0.10		SW8082	02/01/16 20:54 / ldw
Aroclor 1242	ND	mg/kg-dry		0.10		SW8082	02/01/16 20:54 / ldw
Aroclor 1248	ND	mg/kg-dry		0.10		SW8082	02/01/16 20:54 / ldw
Aroclor 1254	2.9	mg/kg-dry		0.10		SW8082	02/01/16 20:54 / ldw
Aroclor 1260	ND	mg/kg-dry		0.10		SW8082	02/01/16 20:54 / ldw
Aroclor 1262	ND	mg/kg-dry		0.10		SW8082	02/01/16 20:54 / ldw
Aroclor 1268	ND	mg/kg-dry		0.10		SW8082	02/01/16 20:54 / ldw
Surr: Decachlorobiphenyl	117	%REC		50-126		SW8082	02/01/16 20:54 / ldw
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	02/01/16 20:54 / ldw

- The Reporting Limits reflect a 5 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-007
Client Sample ID: CB-13-Base-3

Report Date: 02/02/16
Collection Date: 01/27/16 15:20
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	24	wt%		0.2		SW3550A	01/29/16 11:42 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.022		SW8082	01/31/16 14:42 / ldw
Aroclor 1221	ND	mg/kg-dry		0.042		SW8082	01/31/16 14:42 / ldw
Aroclor 1232	ND	mg/kg-dry		0.022		SW8082	01/31/16 14:42 / ldw
Aroclor 1242	ND	mg/kg-dry		0.022		SW8082	01/31/16 14:42 / ldw
Aroclor 1248	ND	mg/kg-dry		0.022		SW8082	01/31/16 14:42 / ldw
Aroclor 1254	0.025	mg/kg-dry		0.022		SW8082	01/31/16 14:42 / ldw
Aroclor 1260	ND	mg/kg-dry		0.022		SW8082	01/31/16 14:42 / ldw
Aroclor 1262	ND	mg/kg-dry		0.022		SW8082	01/31/16 14:42 / ldw
Aroclor 1268	ND	mg/kg-dry		0.022		SW8082	01/31/16 14:42 / ldw
Surr: Decachlorobiphenyl	107	%REC		50-126		SW8082	01/31/16 14:42 / ldw
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	01/31/16 14:42 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-008
Client Sample ID: CB-13-Southwall-3

Report Date: 02/02/16
Collection Date: 01/27/16 16:00
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	01/29/16 11:51 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	01/31/16 15:09 / ldw
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	01/31/16 15:09 / ldw
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	01/31/16 15:09 / ldw
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	01/31/16 15:09 / ldw
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	01/31/16 15:09 / ldw
Aroclor 1254	0.26	mg/kg-dry		0.019		SW8082	01/31/16 15:09 / ldw
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	01/31/16 15:09 / ldw
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	01/31/16 15:09 / ldw
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	01/31/16 15:09 / ldw
Surr: Decachlorobiphenyl	108	%REC		50-126		SW8082	01/31/16 15:09 / ldw
Surr: Tetrachloro-m-xylene	66.0	%REC		42-115		SW8082	01/31/16 15:09 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-009
Client Sample ID: CB-13-Westwall-3

Report Date: 02/02/16
Collection Date: 01/27/16 16:40
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.5	wt%		0.2		SW3550A	01/29/16 11:57 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/31/16 15:35 / ldw
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	01/31/16 15:35 / ldw
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/31/16 15:35 / ldw
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/31/16 15:35 / ldw
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/31/16 15:35 / ldw
Aroclor 1254	0.18	mg/kg-dry		0.018		SW8082	01/31/16 15:35 / ldw
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/31/16 15:35 / ldw
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/31/16 15:35 / ldw
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/31/16 15:35 / ldw
Surr: Decachlorobiphenyl	114	%REC		50-126		SW8082	01/31/16 15:35 / ldw
Surr: Tetrachloro-m-xylene	82.0	%REC		42-115		SW8082	01/31/16 15:35 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-010
Client Sample ID: Saw-4

Report Date: 02/02/16
Collection Date: 01/27/16 16:30
DateReceived: 01/29/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Aroclor 1221	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Aroclor 1232	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Aroclor 1242	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Aroclor 1248	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Aroclor 1254	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Aroclor 1260	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Aroclor 1262	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Aroclor 1268	ND	ug/L		0.50		SW8082	01/29/16 16:10 / ldw
Surr: Decachlorobiphenyl	69.0	%REC		44-130		SW8082	01/29/16 16:10 / ldw
Surr: Tetrachloro-m-xylene	73.0	%REC		40-110		SW8082	01/29/16 16:10 / ldw

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7
Lab ID: B16011904-011
Client Sample ID: CB-IG-4

Report Date: 02/02/16
Collection Date: 01/27/16 10:55
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	18	wt%		0.2		SW3550A	01/29/16 12:02 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.021		SW8082	01/31/16 16:02 / ldw
Aroclor 1221	ND	mg/kg-dry		0.041		SW8082	01/31/16 16:02 / ldw
Aroclor 1232	ND	mg/kg-dry		0.021		SW8082	01/31/16 16:02 / ldw
Aroclor 1242	ND	mg/kg-dry		0.021		SW8082	01/31/16 16:02 / ldw
Aroclor 1248	ND	mg/kg-dry		0.021		SW8082	01/31/16 16:02 / ldw
Aroclor 1254	0.028	mg/kg-dry		0.021		SW8082	01/31/16 16:02 / ldw
Aroclor 1260	ND	mg/kg-dry		0.021		SW8082	01/31/16 16:02 / ldw
Aroclor 1262	ND	mg/kg-dry		0.021		SW8082	01/31/16 16:02 / ldw
Aroclor 1268	ND	mg/kg-dry		0.021		SW8082	01/31/16 16:02 / ldw
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	01/31/16 16:02 / ldw
Surr: Tetrachloro-m-xylene	68.0	%REC		42-115		SW8082	01/31/16 16:02 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7

Report Date: 02/02/16
Work Order: B16011904

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96572
Lab ID: AR1254-96572	Laboratory Control Sample				Run: HECD.I_160128B				01/29/16 17:31
Aroclor 1254	0.305	mg/kg	0.017	92	62	126			
Surr: Decachlorobiphenyl			0.0017	105	50	126			
Surr: Tetrachloro-m-xylene			0.0017	69	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: MB-96572	Method Blank				Run: HECD.I_160128B				01/29/16 17:58
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	103	50	126			
Surr: Tetrachloro-m-xylene			0.0017	70	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011902-002AMB	Sample Duplicate				Run: HECD.I_160128B				01/31/16 20:00
Aroclor 1254	0.811	mg/kg-dry	0.020				20	40	
Surr: Decachlorobiphenyl			0.0020	146	50	126			S
Surr: Tetrachloro-m-xylene			0.0020	67	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011902-002ADB	Sample Duplicate				Run: HECD.I_160128B				01/31/16 20:27
Aroclor 1254	1.19	mg/kg-dry	0.020				18	40	
Surr: Decachlorobiphenyl			0.0020	161	50	126			S
Surr: Tetrachloro-m-xylene			0.0020	70	42	115			
- Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7

Report Date: 02/02/16
Work Order: B16011904

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96573
Lab ID: AR1254-96573	Laboratory Control Sample				Run: HECD.I_160201A				01/29/16 15:17
Aroclor 1254	11.2	ug/L	0.50	112	55	132			
Surr: Decachlorobiphenyl			0.050	104	44	130			
Surr: Tetrachloro-m-xylene			0.050	73	40	110			
Lab ID: MB-96573	Method Blank				Run: HECD.I_160201A				01/29/16 15:44
Aroclor 1016	ND	ug/L	0.50						
Aroclor 1221	ND	ug/L	0.50						
Aroclor 1232	ND	ug/L	0.50						
Aroclor 1242	ND	ug/L	0.50						
Aroclor 1248	ND	ug/L	0.50						
Aroclor 1254	ND	ug/L	0.50						
Aroclor 1260	ND	ug/L	0.50						
Aroclor 1262	ND	ug/L	0.50						
Aroclor 1268	ND	ug/L	0.50						
Surr: Decachlorobiphenyl			0.050	105	44	130			
Surr: Tetrachloro-m-xylene			0.050	72	40	110			
Lab ID: B16011904-010AMB	Sample Matrix Spike				Run: HECD.I_160201A				01/29/16 16:37
Aroclor 1254	10.5	ug/L	0.50	105	55	132			
Surr: Decachlorobiphenyl			0.050	77	44	130			
Surr: Tetrachloro-m-xylene			0.050	79	40	110			
Lab ID: B16011904-010ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160201A				01/29/16 17:04
Aroclor 1254	10.0	ug/L	0.50	100	55	132	4.9	40	
Surr: Decachlorobiphenyl			0.050	62	44	130			
Surr: Tetrachloro-m-xylene			0.050	71	40	110			
Method: SW8082									Analytical Run: R255804
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/29/16 14:24
Aroclor 1254	2.12	ug/L	0.50	106	85	115			
Surr: Decachlorobiphenyl			0.050	92	85	115			
Surr: Tetrachloro-m-xylene			0.050	102	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								01/29/16 14:51
Aroclor 1254	0.202	ug/L	0.50	101	85	115			
Surr: Decachlorobiphenyl			0.050	98	85	115			
Surr: Tetrachloro-m-xylene			0.050	102	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/30/16 01:06
Aroclor 1254	2.25	ug/L	0.50	113	85	115			
Surr: Decachlorobiphenyl			0.050	113	85	115			
Surr: Tetrachloro-m-xylene			0.050	110	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #7

Report Date: 02/02/16
Work Order: B16011904

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R255805
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/29/16 14:24
Aroclor 1254	2.12	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	92	85	115			
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								01/29/16 14:51
Aroclor 1254	0.202	mg/kg	0.017	101	85	115			
Surr: Decachlorobiphenyl			0.0017	98	85	115			
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/30/16 01:06
Aroclor 1254	2.25	mg/kg	0.017	113	85	115			
Surr: Decachlorobiphenyl			0.0017	113	85	115			
Surr: Tetrachloro-m-xylene			0.0017	110	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								01/31/16 11:06
Aroclor 1254	0.191	mg/kg	0.017	96	85	115			
Surr: Decachlorobiphenyl			0.0017	91	85	115			
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/31/16 11:39
Aroclor 1254	1.87	mg/kg	0.017	94	85	115			
Surr: Decachlorobiphenyl			0.0017	91	85	115			
Surr: Tetrachloro-m-xylene			0.0017	98	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/31/16 22:13
Aroclor 1254	2.07	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	109	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011904

Login completed by:	Gina McCartney	Date Received:	1/29/2016
Reviewed by:	BL2000\jmueller	Received by:	car
Reviewed Date:	1/29/2016	Carrier name:	Return-UPS Ground N/C

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Temperature Blank temperature for Cooler 1 was 1.0°C and Cooler 2 was 0.5°C.

Chain of Custody and Analytical Request Record

ENERGY LABORATORIES

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmcammon@newfields.com

Special Report/Formats:
☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Project Name, PWS, Permit, Etc.: Stimson Data Package #7

Contact Name: Tyler Etzel Phone/Fax: (406) 549-8270 Cell: (406) 240-7795

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Sampler: (Please Print) Ty Schmechel

Purchase Order:

Quote/Bottle Order:

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: UPS Grd 2S

Cooler ID(s):

Receipt Temp: 0.5 °C

On Ice: (Y) N

Custody Seal: Y N
On Bottle: Y N
On Cooler: Y N
Intact: Y N
Signature Match: Y N

Comments: 1.0 / 2 day TAT

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 8082	SEE ATTACHED	RUSH (Standard Turnaround (TAT))		LABORATORY USE ONLY
1 CB-TP-1-Base	1/27/16	1255	S	X		X	2 Day TAT	B160190400 1
2 CB-TP-1-Northwall	1/27/16	1300	S					-002
3 CB-TP-1-Westwall	1/27/16	1305	S					-003
4 CB-TP-2-Base	1/27/16	1320	S					-004
5 CB-TP-2-Southwall	1/27/16	1325	S					-005
6 CB-TP-2-Westwall	1/27/16	1330	S					-006
7 CB-13-Base-3	1/27/16	1520	S					-007
8 CB-13-Southwall-3	1/27/16	1600	S					-008
9 CB-13-Westwall-3	1/27/16	1640	S					-009
10								

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 1-28-16 / 0915 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: 1/29/16 9:15 Signature: [signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: New Fields

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmcammon@newfields.com

Special Report/Formats:
☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Project Name, PWS, Permit, Etc.: Stimson Data Package #7

Contact Name: Tyler Etzel Phone/Fax: (406) 549-8270 Cell: (406) 240-7795

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Sampler: (Please Print): Ty Schmechel

Purchase Order:

Quote/Bottle Order:

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: USGrd RS

Cooler ID(s):

Receipt Temp: 0.5 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N; Intact Y N; Signature Match Y N

Comments: 1.0 / 2 Day TAT

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 SAW-4	1/27/16	1630	W	X			X	2 Day TAT	B1601190401 0
2 CB-IG-4	1/27/16	1055	S	X			X	2 Day TAT	↓ -011
3									
4									
5									
6									
7									
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 10-28-16 0915 Signature: Ty Schmechel

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: 1/29/16 9:15 Cindy Dahle

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 02, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011902 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 8

Energy Laboratories Inc Billings MT received the following 5 samples for NewFields on 1/29/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011902-001	CB-TP-7-Base-2	01/28/16 13:55	01/29/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011902-002	CB-TP-7-Northwall-2	01/28/16 14:00	01/29/16	Soil	Same As Above
B16011902-003	CB-4-Eastwall-2	01/28/16 14:10	01/29/16	Soil	Same As Above
B16011902-004	CB-4-Southwall-2	01/28/16 14:15	01/29/16	Soil	Same As Above
B16011902-005	CB-TP-5-Southwall-2	01/28/16 15:25	01/29/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.02 10:11:08 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 8
Lab ID: B16011902-001
Client Sample ID: CB-TP-7-Base-2

Report Date: 02/02/16
Collection Date: 01/28/16 13:55
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.6	wt%		0.2		SW3550A	01/29/16 10:26 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/31/16 12:30 / ldw
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	01/31/16 12:30 / ldw
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/31/16 12:30 / ldw
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/31/16 12:30 / ldw
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/31/16 12:30 / ldw
Aroclor 1254	0.029	mg/kg-dry		0.018		SW8082	01/31/16 12:30 / ldw
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/31/16 12:30 / ldw
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/31/16 12:30 / ldw
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/31/16 12:30 / ldw
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	01/31/16 12:30 / ldw
Surr: Tetrachloro-m-xylene	79.0	%REC		42-115		SW8082	01/31/16 12:30 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 8
Lab ID: B16011902-002
Client Sample ID: CB-TP-7-Northwall-2

Report Date: 02/02/16
Collection Date: 01/28/16 14:00
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	14	wt%		0.2		SW3550A	01/29/16 10:31 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	01/31/16 19:34 / ldw
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	01/31/16 19:34 / ldw
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	01/31/16 19:34 / ldw
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	01/31/16 19:34 / ldw
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	01/31/16 19:34 / ldw
Aroclor 1254	0.86	mg/kg-dry		0.020		SW8082	01/31/16 19:34 / ldw
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	01/31/16 19:34 / ldw
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	01/31/16 19:34 / ldw
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	01/31/16 19:34 / ldw
Surr: Decachlorobiphenyl	160	%REC	S	50-126		SW8082	01/31/16 19:34 / ldw
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	01/31/16 19:34 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 8
Lab ID: B16011902-003
Client Sample ID: CB-4-Eastwall-2

Report Date: 02/02/16
Collection Date: 01/28/16 14:10
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	16	wt%		0.2		SW3550A	01/29/16 10:44 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	01/29/16 18:51 / ldw
Aroclor 1221	ND	mg/kg-dry		0.39		SW8082	01/29/16 18:51 / ldw
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	01/29/16 18:51 / ldw
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	01/29/16 18:51 / ldw
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	01/29/16 18:51 / ldw
Aroclor 1254	5.0	mg/kg-dry		0.20		SW8082	01/29/16 18:51 / ldw
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	01/29/16 18:51 / ldw
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	01/29/16 18:51 / ldw
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	01/29/16 18:51 / ldw
Surr: Decachlorobiphenyl	92.0	%REC		50-126		SW8082	01/29/16 18:51 / ldw
Surr: Tetrachloro-m-xylene	78.0	%REC		42-115		SW8082	01/29/16 18:51 / ldw

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 8
Lab ID: B16011902-004
Client Sample ID: CB-4-Southwall-2

Report Date: 02/02/16
Collection Date: 01/28/16 14:15
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.3	wt%		0.2		SW3550A	01/29/16 10:50 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	01/29/16 19:18 / ldw
Aroclor 1221	ND	mg/kg-dry		0.37		SW8082	01/29/16 19:18 / ldw
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	01/29/16 19:18 / ldw
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	01/29/16 19:18 / ldw
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	01/29/16 19:18 / ldw
Aroclor 1254	1.7	mg/kg-dry		0.19		SW8082	01/29/16 19:18 / ldw
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	01/29/16 19:18 / ldw
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	01/29/16 19:18 / ldw
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	01/29/16 19:18 / ldw
Surr: Decachlorobiphenyl	86.0	%REC		50-126		SW8082	01/29/16 19:18 / ldw
Surr: Tetrachloro-m-xylene	79.0	%REC		42-115		SW8082	01/29/16 19:18 / ldw

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 8
Lab ID: B16011902-005
Client Sample ID: CB-TP-5-Southwall-2

Report Date: 02/02/16
Collection Date: 01/28/16 15:25
DateReceived: 01/29/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.3	wt%		0.2		SW3550A	01/29/16 10:56 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/31/16 14:16 / ldw
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	01/31/16 14:16 / ldw
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/31/16 14:16 / ldw
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/31/16 14:16 / ldw
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/31/16 14:16 / ldw
Aroclor 1254	0.53	mg/kg-dry		0.018		SW8082	01/31/16 14:16 / ldw
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/31/16 14:16 / ldw
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/31/16 14:16 / ldw
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/31/16 14:16 / ldw
Surr: Decachlorobiphenyl	116	%REC		50-126		SW8082	01/31/16 14:16 / ldw
Surr: Tetrachloro-m-xylene	83.0	%REC		42-115		SW8082	01/31/16 14:16 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 02/02/16

Project: Stimson Data Package # 8 **Work Order:** B16011902

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96572
Lab ID: AR1254-96572	Laboratory Control Sample				Run: HECD.I_160128B				01/29/16 17:31
Aroclor 1254	0.305	mg/kg	0.017	92	62	126			
Surr: Decachlorobiphenyl			0.0017	105	50	126			
Surr: Tetrachloro-m-xylene			0.0017	69	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: MB-96572	Method Blank				Run: HECD.I_160128B				01/29/16 17:58
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	103	50	126			
Surr: Tetrachloro-m-xylene			0.0017	70	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011902-002AMB	Sample Duplicate				Run: HECD.I_160128B				01/31/16 20:00
Aroclor 1254	0.811	mg/kg-dry	0.020				20	40	
Surr: Decachlorobiphenyl			0.0020	146	50	126			S
Surr: Tetrachloro-m-xylene			0.0020	67	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011902-002ADB	Sample Duplicate				Run: HECD.I_160128B				01/31/16 20:27
Aroclor 1254	1.19	mg/kg-dry	0.020				18	40	
Surr: Decachlorobiphenyl			0.0020	161	50	126			S
Surr: Tetrachloro-m-xylene			0.0020	70	42	115			
- Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 8

Report Date: 02/02/16
Work Order: B16011902

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R255805
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/29/16 14:24
Aroclor 1254	2.12	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	92	85	115			
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								01/29/16 14:51
Aroclor 1254	0.202	mg/kg	0.017	101	85	115			
Surr: Decachlorobiphenyl			0.0017	98	85	115			
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/30/16 01:06
Aroclor 1254	2.25	mg/kg	0.017	113	85	115			
Surr: Decachlorobiphenyl			0.0017	113	85	115			
Surr: Tetrachloro-m-xylene			0.0017	110	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								01/31/16 11:06
Aroclor 1254	0.191	mg/kg	0.017	96	85	115			
Surr: Decachlorobiphenyl			0.0017	91	85	115			
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/31/16 11:39
Aroclor 1254	1.87	mg/kg	0.017	94	85	115			
Surr: Decachlorobiphenyl			0.0017	91	85	115			
Surr: Tetrachloro-m-xylene			0.0017	98	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								01/31/16 22:13
Aroclor 1254	2.07	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	109	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011902

Login completed by:	Gina McCartney	Date Received:	1/29/2016
Reviewed by:	BL2000\jmueller	Received by:	car
Reviewed Date:	1/29/2016	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Temperature Blank temperature for Cooler 1 was 1.0°C and Cooler 2 was 0.5°C.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #8

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCommon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccommon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 0.5/1.0 TBC; 2 Day TAT

Shipped by: UPS Ground RS

Cooler ID(s):

Receipt Temp

On Ice: (Y) N

Custody Seal: On Bottle Y N; On Cooler Y N; Intact (Y) N; Signature Match Y N

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 8082									SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 CB-TP-7-Base-2	1/28/16	1355	S	X											X	2 DAY TAT	B160119002-001
2 CB-TP-7-Northwall-2	1/28/16	1400	S	X											X		-002
3 CB-4-Eastwall-2	1/28/16	1410	S	X											X		-003
4 CB-4-Southwall-2	1/28/16	1415	S	X											X		-004
5 CB-TP-5-Southwall-2	1/28/16	1525	S	X											X		-005
6																	
7																	
8																	
9																	
10																	

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 1-28-16/1630 Signature: Ty Schmechel

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: Date/Time: 1/29/16 9:15 Signature: Cindy Johnson

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 02, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16020006 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 9

Energy Laboratories Inc Billings MT received the following 1 sample for NewFields on 2/1/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16020006-001	CB-TP-5-Base-2	01/29/16 9:50	02/01/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.02 14:08:27 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 9
Lab ID: B16020006-001
Client Sample ID: CB-TP-5-Base-2

Report Date: 02/02/16
Collection Date: 01/29/16 09:50
DateReceived: 02/01/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	02/01/16 09:58 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	02/01/16 18:42 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	02/01/16 18:42 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	02/01/16 18:42 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	02/01/16 18:42 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	02/01/16 18:42 / jem
Aroclor 1254	0.049	mg/kg-dry		0.020		SW8082	02/01/16 18:42 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	02/01/16 18:42 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	02/01/16 18:42 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	02/01/16 18:42 / jem
Surr: Decachlorobiphenyl	107	%REC		50-126		SW8082	02/01/16 18:42 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	02/01/16 18:42 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 9

Report Date: 02/02/16
Work Order: B16020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96609
Lab ID: MB-96609	Method Blank				Run: HECD.I_160201B				02/01/16 15:43
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	108	50	126			
Surr: Tetrachloro-m-xylene			0.0017	68	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254A-96609	Laboratory Control Sample				Run: HECD.I_160201B				02/01/16 16:29
Aroclor 1254	0.270	mg/kg	0.017	82	62	126			
Surr: Decachlorobiphenyl			0.0017	106	50	126			
Surr: Tetrachloro-m-xylene			0.0017	61	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020006-001AMB	Sample Matrix Spike				Run: HECD.I_160201B				02/01/16 19:08
Aroclor 1254	0.364	mg/kg-dry	0.020	81	62	126			
Surr: Decachlorobiphenyl			0.0020	105	50	126			
Surr: Tetrachloro-m-xylene			0.0020	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020006-001ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160201B				02/01/16 19:34
Aroclor 1254	0.388	mg/kg-dry	0.019	89	62	126	6.2	40	
Surr: Decachlorobiphenyl			0.0019	104	50	126			
Surr: Tetrachloro-m-xylene			0.0019	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 9

Report Date: 02/02/16
Work Order: B16020006

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082								Analytical Run: R255855	
Lab ID: 1254CK3	Continuing Calibration Verification Standard							02/01/16 14:23	
Aroclor 1254	0.201	mg/kg	0.017	100	85	115			
Surr: Decachlorobiphenyl			0.0017	109	85	115			
Surr: Tetrachloro-m-xylene			0.0017	103	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/01/16 14:50	
Aroclor 1254	2.00	mg/kg	0.017	100	85	115			
Surr: Decachlorobiphenyl			0.0017	105	85	115			
Surr: Tetrachloro-m-xylene			0.0017	100	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/01/16 22:40	
Aroclor 1254	2.10	mg/kg	0.017	105	85	115			
Surr: Decachlorobiphenyl			0.0017	110	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16020006

Login completed by: Leslie S. Cadreau

Reviewed by: BL2000\jmueller

Reviewed Date: 2/1/2016

Date Received: 2/1/2016

Received by: src

Carrier name: Return-UPS NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.4°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #9

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Tetzel Phone/Fax: (406) 549-8270 Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:
- ☐ DW
- ☐ POTW/WWTP
- ☐ State: _____
- ☐ Other: _____
- ☐ EDD/EDT (Electronic Data) Format: _____
- ☐ LEVEL IV
- ☐ NELAC

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: CB UPS RT

Cooler ID(s):

Receipt Temp 1.4 °C

On Ice: (Y) N

Custody Seal: On Bottle (Y) N; On Cooler (Y) N

Intact (Y) N

Signature Match (Y) N

Comments: B1600206006

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 7082									SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments
1 CB-TP-5-Base-2	1/29/16	0950	S	X											X	2 Day TAT
2																
3																
4																
5																
6																
7																
8																
9																
10																

LABORATORY USE ONLY -001

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 1-29-16 1200 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: [signature] Date/Time: 2/1/16 9:10am Signature: [signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 05, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16020205 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 10

Energy Laboratories Inc Billings MT received the following 3 samples for NewFields on 2/3/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16020205-001	CB-14-Northwall-2	02/01/16 13:45	02/03/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16020205-002	CB-2-Eastwall-2	02/01/16 14:30	02/03/16	Soil	Same As Above
B16020205-003	CB-4-Southwall-3	02/02/16 15:10	02/03/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.05 08:20:34 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 10
Lab ID: B16020205-001
Client Sample ID: CB-14-Northwall-2

Report Date: 02/05/16
Collection Date: 02/01/16 13:45
DateReceived: 02/03/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.3	wt%		0.2		SW3550A	02/03/16 11:04 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/04/16 10:25 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/04/16 10:25 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/04/16 10:25 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/04/16 10:25 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/04/16 10:25 / jem
Aroclor 1254	0.028	mg/kg-dry		0.019		SW8082	02/04/16 10:25 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/04/16 10:25 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/04/16 10:25 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/04/16 10:25 / jem
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	02/04/16 10:25 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	02/04/16 10:25 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 10
Lab ID: B16020205-002
Client Sample ID: CB-2-Eastwall-2

Report Date: 02/05/16
Collection Date: 02/01/16 14:30
DateReceived: 02/03/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	02/03/16 11:04 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/04/16 09:58 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/04/16 09:58 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/04/16 09:58 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/04/16 09:58 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/04/16 09:58 / jem
Aroclor 1254	0.24	mg/kg-dry		0.019		SW8082	02/04/16 09:58 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/04/16 09:58 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/04/16 09:58 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/04/16 09:58 / jem
Surr: Decachlorobiphenyl	108	%REC		50-126		SW8082	02/04/16 09:58 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	02/04/16 09:58 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 10
Lab ID: B16020205-003
Client Sample ID: CB-4-Southwall-3

Report Date: 02/05/16
Collection Date: 02/02/16 15:10
DateReceived: 02/03/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	02/03/16 11:04 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	02/04/16 08:36 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	02/04/16 08:36 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	02/04/16 08:36 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	02/04/16 08:36 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	02/04/16 08:36 / jem
Aroclor 1254	0.42	mg/kg-dry		0.020		SW8082	02/04/16 08:36 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	02/04/16 08:36 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	02/04/16 08:36 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	02/04/16 08:36 / jem
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	02/04/16 08:36 / jem
Surr: Tetrachloro-m-xylene	70.0	%REC		42-115		SW8082	02/04/16 08:36 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 10

Report Date: 02/05/16
Work Order: B16020205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96682
Lab ID: B16020205-003AMB	Sample Matrix Spike				Run: HECD.I_160204A			02/04/16 09:02	
Aroclor 1254	0.641	mg/kg-dry	0.020	57	62	126			S
Surr: Decachlorobiphenyl			0.0020	108	50	126			
Surr: Tetrachloro-m-xylene			0.0020	73	42	115			
- The low recovery for Aroclor 1254 in this matrix spike sample is attributed to a non-homogeneous sample matrix.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020205-003ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160204A			02/04/16 09:29	
Aroclor 1254	0.665	mg/kg-dry	0.019	66	62	126	3.8	40	
Surr: Decachlorobiphenyl			0.0019	111	50	126			
Surr: Tetrachloro-m-xylene			0.0019	71	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: MB-96682	Method Blank				Run: HECD.I_160204A			02/04/16 10:52	
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	104	50	126			
Surr: Tetrachloro-m-xylene			0.0017	70	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96682	Laboratory Control Sample				Run: HECD.I_160204A			02/04/16 11:18	
Aroclor 1254	0.260	mg/kg	0.017	80	62	126			
Surr: Decachlorobiphenyl			0.0017	106	50	126			
Surr: Tetrachloro-m-xylene			0.0017	58	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020205-003ADUP	Sample Duplicate				Run: HECD.I_160204A			02/04/16 11:45	
Aroclor 1016	ND	mg/kg-dry	0.020					40	
Aroclor 1221	ND	mg/kg-dry	0.038					40	
Aroclor 1232	ND	mg/kg-dry	0.020					40	
Aroclor 1242	ND	mg/kg-dry	0.020					40	
Aroclor 1248	ND	mg/kg-dry	0.020					40	
Aroclor 1254	0.114	mg/kg-dry	0.020				110	40	R
Aroclor 1260	ND	mg/kg-dry	0.020					40	
Aroclor 1262	ND	mg/kg-dry	0.020					40	
Aroclor 1268	ND	mg/kg-dry	0.020					40	
Surr: Decachlorobiphenyl			0.0020	99	50	126			
Surr: Tetrachloro-m-xylene			0.0020	58	42	115			
- The higher than normal Relative Percent Difference (RPD) is attributed non-homogeneous sample matrix.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.
R - RPD exceeds advisory limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Report Date: 02/05/16
Project: Stimson Data Package # 10
Work Order: B16020205

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96682
Lab ID: B16020205-002ADUP	Sample Duplicate				Run: HECD.I_160204A				02/04/16 12:11
Aroclor 1016	ND	mg/kg-dry	0.020					40	
Aroclor 1221	ND	mg/kg-dry	0.038					40	
Aroclor 1232	ND	mg/kg-dry	0.020					40	
Aroclor 1242	ND	mg/kg-dry	0.020					40	
Aroclor 1248	ND	mg/kg-dry	0.020					40	
Aroclor 1254	0.277	mg/kg-dry	0.020				15	40	
Aroclor 1260	ND	mg/kg-dry	0.020					40	
Aroclor 1262	ND	mg/kg-dry	0.020					40	
Aroclor 1268	ND	mg/kg-dry	0.020					40	
Surr: Decachlorobiphenyl			0.0020	105	50	126			
Surr: Tetrachloro-m-xylene			0.0020	68	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Method: SW8082									Analytical Run: R256070
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/04/16 07:43
Aroclor 1254	0.193	mg/kg	0.017	97	85	115			
Surr: Decachlorobiphenyl			0.0017	95	85	115			
Surr: Tetrachloro-m-xylene			0.0017	100	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/04/16 13:04
Aroclor 1254	1.94	mg/kg	0.017	97	85	115			
Surr: Decachlorobiphenyl			0.0017	103	85	115			
Surr: Tetrachloro-m-xylene			0.0017	100	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16020205

Login completed by: Gina McCartney
Reviewed by: BL2000\cindy
Reviewed Date: 2/3/2016

Date Received: 2/3/2016
Received by: cmb
Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.0°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Page 1 of ____

Company Name: NewFields

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccommon@newfields.com

Project Name, PWS, Permit, Etc.: Stimson Data Package #10

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Contact Name: Tyler Steel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCommon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: ____
☐ State: ____ ☐ LEVEL IV
☐ Other: ____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments: 2 Day TAT
1 CB-14-Northwall-2	2/1/16	1345	S	X			X	2 Day TAT
2 CB-2-Eastwall-2	2/1/16	1430	S	X			X	2 Day TAT
3 CB-4-Southwall-3	2/2/16	1510	S	X			X	2 Day TAT
4								
5								
6								
7								
8								
9								
10								

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

LABORATORY USE ONLY

Shipped by: Return UPS Ground

Cooler ID(s):

Receipt Temp TB 2.0 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

B160202050 01 -002 -003

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 2-2-16/1630 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: [signature] Date/Time: 2-3-16 9:15 Signature:

Sample Disposal: Return to Client: ____ Lab Disposal: ____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

February 05, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16020356 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package #11

Energy Laboratories Inc Billings MT received the following 2 samples for NewFields on 2/4/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16020356-001	SAW-5	02/03/16 10:30	02/04/16	Aqueous	Polychlorinated Biphenyls (PCB's) Separatory Funnel Liquid Liquid Ext.
B16020356-002	CB-2-Northwell-2	02/03/16 10:25	02/04/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.05 13:38:54 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #11
Lab ID: B16020356-001
Client Sample ID: SAW-5

Report Date: 02/05/16
Collection Date: 02/03/16 10:30
DateReceived: 02/04/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Aroclor 1221	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Aroclor 1232	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Aroclor 1242	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Aroclor 1248	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Aroclor 1254	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Aroclor 1260	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Aroclor 1262	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Aroclor 1268	ND	ug/L		0.50		SW8082	02/04/16 21:40 / jem
Surr: Decachlorobiphenyl	80.0	%REC		44-130		SW8082	02/04/16 21:40 / jem
Surr: Tetrachloro-m-xylene	74.0	%REC		40-110		SW8082	02/04/16 21:40 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #11
Lab ID: B16020356-002
Client Sample ID: CB-2-Northwell-2

Report Date: 02/05/16
Collection Date: 02/03/16 10:25
DateReceived: 02/04/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.0	wt%		0.2		SW3550A	02/04/16 12:21 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/04/16 16:48 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/04/16 16:48 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/04/16 16:48 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/04/16 16:48 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/04/16 16:48 / jem
Aroclor 1254	0.042	mg/kg-dry		0.019		SW8082	02/04/16 16:48 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/04/16 16:48 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/04/16 16:48 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/04/16 16:48 / jem
Surr: Decachlorobiphenyl	97.0	%REC		50-126		SW8082	02/04/16 16:48 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	02/04/16 16:48 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #11

Report Date: 02/05/16
Work Order: B16020356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96728
Lab ID: MB-96728	Method Blank				Run: HECD.I_160204B				02/04/16 15:28
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	96	50	126			
Surr: Tetrachloro-m-xylene			0.0017	67	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96728	Laboratory Control Sample				Run: HECD.I_160204B				02/04/16 15:55
Aroclor 1254	0.280	mg/kg	0.017	84	62	126			
Surr: Decachlorobiphenyl			0.0017	97	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020356-002AMB	Sample Matrix Spike				Run: HECD.I_160204B				02/04/16 17:15
Aroclor 1254	0.544	mg/kg-dry	0.019	139	62	126			S
Surr: Decachlorobiphenyl			0.0019	101	50	126			
Surr: Tetrachloro-m-xylene			0.0019	69	42	115			
- The high recovery for Aroclor 1254 in this matrix spike sample is attributed to a non-homogeneous sample matrix.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020356-002ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160204B				02/04/16 17:42
Aroclor 1254	0.329	mg/kg-dry	0.019	79	62	126	49	40	R
Surr: Decachlorobiphenyl			0.0019	97	50	126			
Surr: Tetrachloro-m-xylene			0.0019	58	42	115			
- The higher than normal Relative Percent Difference (RPD) is attributed non-homogeneous sample matrix.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
R - RPD exceeds advisory limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #11

Report Date: 02/05/16
Work Order: B16020356

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96731
Lab ID: MB-96731	Method Blank				Run: HECD.I_160204C				02/04/16 19:54
Aroclor 1016	ND	ug/L	0.50						
Aroclor 1221	ND	ug/L	0.50						
Aroclor 1232	ND	ug/L	0.50						
Aroclor 1242	ND	ug/L	0.50						
Aroclor 1248	ND	ug/L	0.50						
Aroclor 1254	ND	ug/L	0.50						
Aroclor 1260	ND	ug/L	0.50						
Aroclor 1262	ND	ug/L	0.50						
Aroclor 1268	ND	ug/L	0.50						
Surr: Decachlorobiphenyl			0.050	94	44	130			
Surr: Tetrachloro-m-xylene			0.050	75	40	110			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96731	Laboratory Control Sample				Run: HECD.I_160204C				02/04/16 20:20
Aroclor 1254	8.99	ug/L	0.50	90	55	132			
Surr: Decachlorobiphenyl			0.050	98	44	130			
Surr: Tetrachloro-m-xylene			0.050	74	40	110			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020356-001AMB	Sample Matrix Spike				Run: HECD.I_160204C				02/04/16 22:06
Aroclor 1254	9.29	ug/L	0.50	93	55	132			
Surr: Decachlorobiphenyl			0.050	89	44	130			
Surr: Tetrachloro-m-xylene			0.050	80	40	110			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020356-001ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160204C				02/04/16 22:33
Aroclor 1254	8.91	ug/L	0.50	89	55	132	4.2	40	
Surr: Decachlorobiphenyl			0.050	87	44	130			
Surr: Tetrachloro-m-xylene			0.050	75	40	110			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Method: SW8082									Analytical Run: R256086
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/04/16 15:02
Aroclor 1254	0.199	mg/kg	0.017	100	85	115			
Surr: Decachlorobiphenyl			0.0017	99	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/04/16 18:35
Aroclor 1254	1.92	mg/kg	0.017	96	85	115			
Surr: Decachlorobiphenyl			0.0017	95	85	115			
Surr: Tetrachloro-m-xylene			0.0017	100	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16020356

Login completed by: Leigh Ann. Wise
Reviewed by: BL2000\lcadreau
Reviewed Date: 2/4/2016

Date Received: 2/4/2016
Received by: cmb
Carrier name: Return-UPS NDA

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.0°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page _____ of _____

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields	Project Name, PWS, Permit, Etc.: Stimson Data Package #11	Sample Origin State: MT	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802 ☐ No Hard Copy Email: tetzel@newfields.com	Contact Name: Tyler Etzel Phone/Fax: (406) 549-8270 Cell: (406) 240-7795		Sampler: (Please Print) Ty Schmechel
	Invoice Contact & Phone: Donna McCommon (406) 549-8276	Purchase Order:	Quote/Bottle Order:
Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802 ☐ No Hard Copy Email: dmccommon@newfields.com			

Special Report/Formats:
☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Standard Turnaround (TAT) → RUSH: Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 Day TAT

Shipped by: Return UPS NAT

Cooler ID(s):

Receipt Temp 1.0 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N; Intact Y N; Signature Match Y N

#	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 8082	SEE ATTACHED	RUSH	Comments	LABORATORY USE ONLY
1	~~CB-IG-5~~	~~2/3/16~~	~~0855~~	~~S~~	~~X~~		~~X~~	~~2-Day TAT~~	B1602035
2	~~CB-TP-7-Northwell-3~~	~~2/3/16~~	~~1010~~	~~S~~	~~X~~		~~X~~	~~2-Day TAT~~	
3	SAW-5	2/3/16	1030	W	X		X	2-Day TAT	-001
4	CB-2-Northwell-2	2/3/16	1025	S	X		X	2-Day TAT	-002
5									
6									
7									
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	2-3-16/1630	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: [signature]	Date/Time: 2-4-16 9:15am	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

February 09, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16020477 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 12

Energy Laboratories Inc Billings MT received the following 7 samples for NewFields on 2/5/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16020477-001	CB-TP-1-Westwall-2	02/04/16 12:05	02/05/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16020477-002	CB-IG-5	02/04/16 9:30	02/05/16	Soil	Same As Above
B16020477-003	CB-TP-1-Northwall-2	02/04/16 12:10	02/05/16	Soil	Same As Above
B16020477-004	CB-TP-2-Southwall-2	02/04/16 12:15	02/05/16	Soil	Same As Above
B16020477-005	CB-TP-2-Westwall-2	02/04/16 12:20	02/05/16	Soil	Same As Above
B16020477-006	CB-TP-1-Base-2	02/04/16 14:05	02/05/16	Soil	Same As Above
B16020477-007	CB-TP-2-Base-2	02/04/16 14:15	02/05/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.09 09:34:46 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12
Lab ID: B16020477-001
Client Sample ID: CB-TP-1-Westwall-2

Report Date: 02/09/16
Collection Date: 02/04/16 12:05
DateReceived: 02/05/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.7	wt%		0.2		SW3550A	02/05/16 11:43 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:07 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	02/05/16 22:07 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:07 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:07 / jem
Aroclor 1248	ND	mg/kg-dry	D	0.091		SW8082	02/08/16 14:11 / jem
Aroclor 1254	ND	mg/kg-dry	D	2.0		SW8082	02/08/16 14:11 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:07 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:07 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:07 / jem
Surr: Decachlorobiphenyl	106	%REC		50-126		SW8082	02/05/16 22:07 / jem
Surr: Tetrachloro-m-xylene	74.0	%REC		42-115		SW8082	02/05/16 22:07 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.
- Individual PCB Congeners were present but there was insufficient response and/or degradation for Aroclor pattern recognition. Where appropriate, Reporting Limits (RLs) were increased.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12
Lab ID: B16020477-002
Client Sample ID: CB-IG-5

Report Date: 02/09/16
Collection Date: 02/04/16 09:30
DateReceived: 02/05/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.9	wt%		0.2		SW3550A	02/05/16 11:52 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:35 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/05/16 22:35 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:35 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:35 / jem
Aroclor 1248	ND	mg/kg-dry	D	0.092		SW8082	02/08/16 14:39 / jem
Aroclor 1254	ND	mg/kg-dry	D	2.0		SW8082	02/08/16 14:39 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:35 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:35 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/05/16 22:35 / jem
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	02/05/16 22:35 / jem
Surr: Tetrachloro-m-xylene	51.0	%REC		42-115		SW8082	02/05/16 22:35 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.
- Individual PCB Congeners were present but there was insufficient response and/or degradation for Aroclor pattern recognition. Where appropriate, Reporting Limits (RLs) were increased.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12
Lab ID: B16020477-003
Client Sample ID: CB-TP-1-Northwall-2

Report Date: 02/09/16
Collection Date: 02/04/16 12:10
DateReceived: 02/05/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.6	wt%		0.2		SW3550A	02/05/16 11:59 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/06/16 00:53 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	02/06/16 00:53 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/06/16 00:53 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/06/16 00:53 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/06/16 00:53 / jem
Aroclor 1254	0.090	mg/kg-dry		0.018		SW8082	02/06/16 00:53 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/06/16 00:53 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/06/16 00:53 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/06/16 00:53 / jem
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	02/06/16 00:53 / jem
Surr: Tetrachloro-m-xylene	66.0	%REC		42-115		SW8082	02/06/16 00:53 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12
Lab ID: B16020477-004
Client Sample ID: CB-TP-2-Southwall-2

Report Date: 02/09/16
Collection Date: 02/04/16 12:15
DateReceived: 02/05/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.4	wt%		0.2		SW3550A	02/05/16 12:09 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:02 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/05/16 23:02 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:02 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:02 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:02 / jem
Aroclor 1254	1.5	mg/kg-dry		0.019		SW8082	02/05/16 23:02 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:02 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:02 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:02 / jem
Surr: Decachlorobiphenyl	106	%REC		50-126		SW8082	02/05/16 23:02 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	02/05/16 23:02 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12
Lab ID: B16020477-005
Client Sample ID: CB-TP-2-Westwall-2

Report Date: 02/09/16
Collection Date: 02/04/16 12:20
DateReceived: 02/05/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	26	wt%		0.2		SW3550A	02/05/16 12:16 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.022		SW8082	02/05/16 23:30 / jem
Aroclor 1221	ND	mg/kg-dry		0.043		SW8082	02/05/16 23:30 / jem
Aroclor 1232	ND	mg/kg-dry		0.022		SW8082	02/05/16 23:30 / jem
Aroclor 1242	ND	mg/kg-dry		0.022		SW8082	02/05/16 23:30 / jem
Aroclor 1248	ND	mg/kg-dry		0.022		SW8082	02/05/16 23:30 / jem
Aroclor 1254	0.51	mg/kg-dry		0.022		SW8082	02/05/16 23:30 / jem
Aroclor 1260	ND	mg/kg-dry		0.022		SW8082	02/05/16 23:30 / jem
Aroclor 1262	ND	mg/kg-dry		0.022		SW8082	02/05/16 23:30 / jem
Aroclor 1268	ND	mg/kg-dry		0.022		SW8082	02/05/16 23:30 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	02/05/16 23:30 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	02/05/16 23:30 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12
Lab ID: B16020477-006
Client Sample ID: CB-TP-1-Base-2

Report Date: 02/09/16
Collection Date: 02/04/16 14:05
DateReceived: 02/05/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/05/16 12:28 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:58 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/05/16 23:58 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:58 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:58 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:58 / jem
Aroclor 1254	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:58 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:58 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:58 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/05/16 23:58 / jem
Surr: Decachlorobiphenyl	101	%REC		50-126		SW8082	02/05/16 23:58 / jem
Surr: Tetrachloro-m-xylene	74.0	%REC		42-115		SW8082	02/05/16 23:58 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12
Lab ID: B16020477-007
Client Sample ID: CB-TP-2-Base-2

Report Date: 02/09/16
Collection Date: 02/04/16 14:15
DateReceived: 02/05/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	16	wt%		0.2		SW3550A	02/05/16 12:35 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	02/06/16 00:26 / jem
Aroclor 1221	ND	mg/kg-dry		0.039		SW8082	02/06/16 00:26 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	02/06/16 00:26 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	02/06/16 00:26 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	02/06/16 00:26 / jem
Aroclor 1254	1.3	mg/kg-dry		0.020		SW8082	02/06/16 00:26 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	02/06/16 00:26 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	02/06/16 00:26 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	02/06/16 00:26 / jem
Surr: Decachlorobiphenyl	107	%REC		50-126		SW8082	02/06/16 00:26 / jem
Surr: Tetrachloro-m-xylene	65.0	%REC		42-115		SW8082	02/06/16 00:26 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12

Report Date: 02/09/16
Work Order: B16020477

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96760
Lab ID: MB-96760	Method Blank				Run: AECD.I_160205B				02/05/16 20:44
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	100	50	126			
Surr: Tetrachloro-m-xylene			0.0017	55	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96760	Laboratory Control Sample				Run: AECD.I_160205B				02/05/16 21:11
Aroclor 1254	0.297	mg/kg	0.017	89	62	126			
Surr: Decachlorobiphenyl			0.0017	102	50	126			
Surr: Tetrachloro-m-xylene			0.0017	45	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020477-003AMB	Sample Matrix Spike				Run: AECD.I_160205B				02/06/16 01:21
Aroclor 1254	0.469	mg/kg-dry	0.018	108	62	126			
Surr: Decachlorobiphenyl			0.0018	101	50	126			
Surr: Tetrachloro-m-xylene			0.0018	60	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020477-003ADB	Sample Matrix Spike Duplicate				Run: AECD.I_160205B				02/06/16 01:48
Aroclor 1254	0.439	mg/kg-dry	0.018	99	62	126	6.7	40	
Surr: Decachlorobiphenyl			0.0018	101	50	126			
Surr: Tetrachloro-m-xylene			0.0018	71	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 12

Report Date: 02/09/16
Work Order: B16020477

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256179
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/05/16 20:16
Aroclor 1254	2.24	mg/kg	0.017	112	85	115			
Surr: Decachlorobiphenyl			0.0017	99	85	115			
Surr: Tetrachloro-m-xylene			0.0017	108	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/06/16 02:44
Aroclor 1254	2.24	mg/kg	0.017	112	85	115			
Surr: Decachlorobiphenyl			0.0017	99	85	115			
Surr: Tetrachloro-m-xylene			0.0017	109	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/06/16 03:11
Aroclor 1254	0.232	mg/kg	0.017	116	85	115			S
Surr: Decachlorobiphenyl			0.0017	105	85	115			
Surr: Tetrachloro-m-xylene			0.0017	109	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/08/16 12:18
Aroclor 1254	0.185	mg/kg	0.017	93	85	115			
Surr: Decachlorobiphenyl			0.0017	89	85	115			
Surr: Tetrachloro-m-xylene			0.0017	87	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/08/16 13:14
Aroclor 1254	1.80	mg/kg	0.017	90	85	115			
Surr: Decachlorobiphenyl			0.0017	86	85	115			
Surr: Tetrachloro-m-xylene			0.0017	91	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/08/16 15:35
Aroclor 1254	1.80	mg/kg	0.017	90	85	115			
Surr: Decachlorobiphenyl			0.0017	86	85	115			
Surr: Tetrachloro-m-xylene			0.0017	89	85	115			

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

Work Order Receipt Checklist

NewFields

B16020477

Login completed by:	Gina McCartney	Date Received:	2/5/2016
Reviewed by:	BL2000\jmueller	Received by:	cmb
Reviewed Date:	2/8/2016	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.4°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package # 12

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: teteel@newfields.com

Contact Name: Tyler Eteel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print): Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: Return-up Ground

Cooler ID(s):

Receipt Temp 14 °C

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

Comments: 2 Day TAT

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Biocassay Other DW - Drinking Water)	PCBs 8082								SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 CB-TP-1-Westwall-2	2/4/16	1205	S	X										X	2 Day TAT	B1602047701
2 CB-IG-5	2/4/16	0930	S	X										X		-002
3 CB-TP-1-Northwall-2	2/4/16	1210	S	X										X		-003
4 CB-TP-2-Southwall-2	2/4/16	1215	S	X										X		-004
5 CB-TP-2-Westwall-2	2/4/16	1220	S	X										X		-005
6 CB-TP-1-Base-2	2/4/16	1405	S	X										X		-006
7 CB-TP-2-Base-2	2/4/16	1415	S	X										X		-007
8																
9																
10																

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	2-4-16 / 1630	Ty Schmechel			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time: 2-5-16 9:10	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 11, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16020643 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package #13

Energy Laboratories Inc Billings MT received the following 5 samples for NewFields on 2/9/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16020643-001	CB-11-Base	02/05/16 14:35	02/09/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16020643-002	CB-11-Southwall	02/05/16 14:40	02/09/16	Soil	Same As Above
B16020643-003	CB-11-Eastwall	02/05/16 14:45	02/09/16	Soil	Same As Above
B16020643-004	CB-11-Northwall	02/05/16 14:50	02/09/16	Soil	Same As Above
B16020643-005	CB-11-Westwall	02/05/16 15:25	02/09/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.11 10:32:43 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #13
Lab ID: B16020643-001
Client Sample ID: CB-11-Base

Report Date: 02/11/16
Collection Date: 02/05/16 14:35
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.9	wt%		0.2		SW3550A	02/09/16 11:21 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/09/16 19:09 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/09/16 19:09 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/09/16 19:09 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/09/16 19:09 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/09/16 19:09 / jem
Aroclor 1254	1.2	mg/kg-dry		0.018		SW8082	02/09/16 19:09 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/09/16 19:09 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/09/16 19:09 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/09/16 19:09 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	02/09/16 19:09 / jem
Surr: Tetrachloro-m-xylene	65.0	%REC		42-115		SW8082	02/09/16 19:09 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #13
Lab ID: B16020643-002
Client Sample ID: CB-11-Southwall

Report Date: 02/11/16
Collection Date: 02/05/16 14:40
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	32	wt%		0.2		SW3550A	02/09/16 11:21 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.025		SW8082	02/09/16 19:36 / jem
Aroclor 1221	ND	mg/kg-dry		0.049		SW8082	02/09/16 19:36 / jem
Aroclor 1232	ND	mg/kg-dry		0.025		SW8082	02/09/16 19:36 / jem
Aroclor 1242	ND	mg/kg-dry		0.025		SW8082	02/09/16 19:36 / jem
Aroclor 1248	ND	mg/kg-dry		0.025		SW8082	02/09/16 19:36 / jem
Aroclor 1254	1.8	mg/kg-dry		0.025		SW8082	02/09/16 19:36 / jem
Aroclor 1260	ND	mg/kg-dry		0.025		SW8082	02/09/16 19:36 / jem
Aroclor 1262	ND	mg/kg-dry		0.025		SW8082	02/09/16 19:36 / jem
Aroclor 1268	ND	mg/kg-dry		0.025		SW8082	02/09/16 19:36 / jem
Surr: Decachlorobiphenyl	109	%REC		50-126		SW8082	02/09/16 19:36 / jem
Surr: Tetrachloro-m-xylene	55.0	%REC		42-115		SW8082	02/09/16 19:36 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #13
Lab ID: B16020643-003
Client Sample ID: CB-11-Eastwall

Report Date: 02/11/16
Collection Date: 02/05/16 14:45
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	14	wt%		0.2		SW3550A	02/09/16 11:21 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	02/09/16 20:03 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	02/09/16 20:03 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	02/09/16 20:03 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	02/09/16 20:03 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	02/09/16 20:03 / jem
Aroclor 1254	0.44	mg/kg-dry		0.020		SW8082	02/09/16 20:03 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	02/09/16 20:03 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	02/09/16 20:03 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	02/09/16 20:03 / jem
Surr: Decachlorobiphenyl	98.0	%REC		50-126		SW8082	02/09/16 20:03 / jem
Surr: Tetrachloro-m-xylene	66.0	%REC		42-115		SW8082	02/09/16 20:03 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #13
Lab ID: B16020643-004
Client Sample ID: CB-11-Northwall

Report Date: 02/11/16
Collection Date: 02/05/16 14:50
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.8	wt%		0.2		SW3550A	02/09/16 11:21 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		1.9		SW8082	02/10/16 12:10 / jem
Aroclor 1221	ND	mg/kg-dry		3.7		SW8082	02/10/16 12:10 / jem
Aroclor 1232	ND	mg/kg-dry		1.9		SW8082	02/10/16 12:10 / jem
Aroclor 1242	ND	mg/kg-dry		1.9		SW8082	02/10/16 12:10 / jem
Aroclor 1248	ND	mg/kg-dry		1.9		SW8082	02/10/16 12:10 / jem
Aroclor 1254	73	mg/kg-dry		1.9		SW8082	02/10/16 12:10 / jem
Aroclor 1260	ND	mg/kg-dry		1.9		SW8082	02/10/16 12:10 / jem
Aroclor 1262	ND	mg/kg-dry		1.9		SW8082	02/10/16 12:10 / jem
Aroclor 1268	ND	mg/kg-dry		1.9		SW8082	02/10/16 12:10 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/10/16 12:10 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/10/16 12:10 / jem

- The Reporting Limits reflect a 100 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #13
Lab ID: B16020643-005
Client Sample ID: CB-11-Westwall

Report Date: 02/11/16
Collection Date: 02/05/16 15:25
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	15	wt%		0.2		SW3550A	02/09/16 11:21 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		199		SW8082	02/10/16 09:30 / jem
Aroclor 1221	ND	mg/kg-dry		386		SW8082	02/10/16 09:30 / jem
Aroclor 1232	ND	mg/kg-dry		199		SW8082	02/10/16 09:30 / jem
Aroclor 1242	ND	mg/kg-dry		199		SW8082	02/10/16 09:30 / jem
Aroclor 1248	ND	mg/kg-dry		199		SW8082	02/10/16 09:30 / jem
Aroclor 1254	1730	mg/kg-dry		199		SW8082	02/10/16 09:30 / jem
Aroclor 1260	ND	mg/kg-dry		199		SW8082	02/10/16 09:30 / jem
Aroclor 1262	ND	mg/kg-dry		199		SW8082	02/10/16 09:30 / jem
Aroclor 1268	ND	mg/kg-dry		199		SW8082	02/10/16 09:30 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/10/16 09:30 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/10/16 09:30 / jem

- The Reporting Limits reflect a 10000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 02/11/16

Project: Stimson Data Package #13 **Work Order:** B16020643

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96827
Lab ID: MB-96827	Method Blank				Run: HECD.I_160209A				02/09/16 17:49
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	97	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96827	Laboratory Control Sample				Run: HECD.I_160209A				02/09/16 18:16
Aroclor 1254	0.270	mg/kg	0.017	83	62	126			
Surr: Decachlorobiphenyl			0.0017	99	50	126			
Surr: Tetrachloro-m-xylene			0.0017	58	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020624-001AMB	Sample Duplicate				Run: HECD.I_160209A				02/10/16 10:50
Aroclor 1016	ND	mg/kg-dry	38					40	
Aroclor 1221	ND	mg/kg-dry	73					40	
Aroclor 1232	ND	mg/kg-dry	38					40	
Aroclor 1242	ND	mg/kg-dry	38					40	
Aroclor 1248	ND	mg/kg-dry	38					40	
Aroclor 1254	655	mg/kg-dry	38				0.2	40	
Aroclor 1260	ND	mg/kg-dry	38					40	
Aroclor 1262	ND	mg/kg-dry	38					40	
Aroclor 1268	ND	mg/kg-dry	38					40	
Surr: Decachlorobiphenyl			3.8		50	126			O
- The Reporting Limits reflect a 2000 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020624-001ADB	Sample Duplicate				Run: HECD.I_160209A				02/10/16 11:16
Aroclor 1016	ND	mg/kg-dry	38					40	
Aroclor 1221	ND	mg/kg-dry	74					40	
Aroclor 1232	ND	mg/kg-dry	38					40	
Aroclor 1242	ND	mg/kg-dry	38					40	
Aroclor 1248	ND	mg/kg-dry	38					40	
Aroclor 1254	737	mg/kg-dry	38				12	40	
Aroclor 1260	ND	mg/kg-dry	38					40	
Aroclor 1262	ND	mg/kg-dry	38					40	
Aroclor 1268	ND	mg/kg-dry	38					40	
Surr: Decachlorobiphenyl			3.8		50	126			O
- Because the amount of Aroclor 1254 detected in the sample was significantly higher than the spike amount, the Matrix Spike and Matrix Spike Duplicate samples are calculated as Duplicate samples.									
- The Reporting Limits reflect a 2000 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

O - Diluted out.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #13

Report Date: 02/11/16
Work Order: B16020643

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256378
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/09/16 17:23
Aroclor 1254	1.98	mg/kg	0.017	99	85	115			
Surr: Decachlorobiphenyl			0.0017	98	85	115			
Surr: Tetrachloro-m-xylene			0.0017	99	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/09/16 23:09
Aroclor 1254	1.94	mg/kg	0.017	97	85	115			
Surr: Decachlorobiphenyl			0.0017	121	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/09/16 23:36
Aroclor 1254	0.209	mg/kg	0.017	104	85	115			
Surr: Decachlorobiphenyl			0.0017	220	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	105	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/10/16 04:02
Aroclor 1254	2.12	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	112	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/10/16 08:11
Aroclor 1254	1.98	mg/kg	0.017	99	85	115			
Surr: Decachlorobiphenyl			0.0017	103	85	115			
Surr: Tetrachloro-m-xylene			0.0017	100	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/10/16 13:03
Aroclor 1254	2.04	mg/kg	0.017	102	85	115			
Surr: Decachlorobiphenyl			0.0017	105	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/10/16 13:30
Aroclor 1254	0.213	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	114	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/10/16 17:30
Aroclor 1254	2.09	mg/kg	0.017	104	85	115			
Surr: Decachlorobiphenyl			0.0017	110	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

Work Order Receipt Checklist

NewFields

B16020643

Login completed by: Ladonna Weis

Reviewed by: BL2000\lcadreau

Reviewed Date: 2/9/2016

Date Received: 2/9/2016

Received by: cmb

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	0.4°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sample ID CB-1-Eastwall collected 02/05/16 at 15:25 on the Chain of Custody is labeled as CB-1-Westwall on the sample container. Per phone conversation between Shari Endy, Project Manager, and Ty Schemmel on 02/09/16, sample ID should be CB-1-Westwall.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: Newfields

Project Name, PWS, Permit, Etc.: Stimson Data Package # 13

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Drive, Missoula MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments
1 CB-11-Base	2/5/16	1435	S	X			X	2 Day TAT
2 CB-11-Southwall	2/5/16	1440	S	X			X	
3 CB-11-Eastwall	2/5/16	1445	S	X			X	
4 CB-11-Northwall	2/5/16	1450	S	X			X	
5 CB-11-Eastwall	2/5/16	1525	S	X			X	
6								
7								
8								
9								
10								

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 Day TAT

B16020643 –

Shipped by: Return UPS Ground

Cooler ID(s):

Receipt Temp 0.4 °C TB

On Ice: Y N

Custody Seal On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

LABORATORY USE ONLY: 001, 002, 003, 004, 005

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	2-8-16 1050				

Received by Laboratory: Date/Time: 2-9-16 9:35 Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 11, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16020624 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 14

Energy Laboratories Inc Billings MT received the following 6 samples for NewFields on 2/9/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16020624-001	CB-IG-6	02/08/16 9:45	02/09/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16020624-002	CB-7-Base	02/08/16 11:15	02/09/16	Soil	Same As Above
B16020624-003	CB-7-Southwall	02/08/16 11:20	02/09/16	Soil	Same As Above
B16020624-004	CB-7-Eastwall	02/08/16 11:25	02/09/16	Soil	Same As Above
B16020624-005	CB-7-Westwall	02/08/16 11:30	02/09/16	Soil	Same As Above
B16020624-006	SAW-6	02/08/16 11:40	02/09/16	Aqueous	Polychlorinated Biphenyls (PCB's) Separatory Funnel Liquid Liquid Ext.

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.11 10:51:44 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14
Lab ID: B16020624-001
Client Sample ID: CB-IG-6

Report Date: 02/11/16
Collection Date: 02/08/16 09:45
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/09/16 10:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		38		SW8082	02/10/16 10:24 / jem
Aroclor 1221	ND	mg/kg-dry		74		SW8082	02/10/16 10:24 / jem
Aroclor 1232	ND	mg/kg-dry		38		SW8082	02/10/16 10:24 / jem
Aroclor 1242	ND	mg/kg-dry		38		SW8082	02/10/16 10:24 / jem
Aroclor 1248	ND	mg/kg-dry		38		SW8082	02/10/16 10:24 / jem
Aroclor 1254	656	mg/kg-dry		38		SW8082	02/10/16 10:24 / jem
Aroclor 1260	ND	mg/kg-dry		38		SW8082	02/10/16 10:24 / jem
Aroclor 1262	ND	mg/kg-dry		38		SW8082	02/10/16 10:24 / jem
Aroclor 1268	ND	mg/kg-dry		38		SW8082	02/10/16 10:24 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/10/16 10:24 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/10/16 10:24 / jem

- The Reporting Limits reflect a 2000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14
Lab ID: B16020624-002
Client Sample ID: CB-7-Base

Report Date: 02/11/16
Collection Date: 02/08/16 11:15
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/09/16 10:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		190		SW8082	02/10/16 09:04 / jem
Aroclor 1221	ND	mg/kg-dry		369		SW8082	02/10/16 09:04 / jem
Aroclor 1232	ND	mg/kg-dry		190		SW8082	02/10/16 09:04 / jem
Aroclor 1242	ND	mg/kg-dry		190		SW8082	02/10/16 09:04 / jem
Aroclor 1248	ND	mg/kg-dry		190		SW8082	02/10/16 09:04 / jem
Aroclor 1254	1710	mg/kg-dry		190		SW8082	02/10/16 09:04 / jem
Aroclor 1260	ND	mg/kg-dry		190		SW8082	02/10/16 09:04 / jem
Aroclor 1262	ND	mg/kg-dry		190		SW8082	02/10/16 09:04 / jem
Aroclor 1268	ND	mg/kg-dry		190		SW8082	02/10/16 09:04 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/10/16 09:04 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/10/16 09:04 / jem

- The Reporting Limits reflect a 10000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14
Lab ID: B16020624-003
Client Sample ID: CB-7-Southwall

Report Date: 02/11/16
Collection Date: 02/08/16 11:20
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/09/16 10:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/09/16 20:29 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/09/16 20:29 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/09/16 20:29 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/09/16 20:29 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/09/16 20:29 / jem
Aroclor 1254	0.73	mg/kg-dry		0.019		SW8082	02/09/16 20:29 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/09/16 20:29 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/09/16 20:29 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/09/16 20:29 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	02/09/16 20:29 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	02/09/16 20:29 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14
Lab ID: B16020624-004
Client Sample ID: CB-7-Eastwall

Report Date: 02/11/16
Collection Date: 02/08/16 11:25
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.5	wt%		0.2		SW3550A	02/09/16 10:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.074		SW8082	02/10/16 09:57 / jem
Aroclor 1221	ND	mg/kg-dry		0.14		SW8082	02/10/16 09:57 / jem
Aroclor 1232	ND	mg/kg-dry		0.074		SW8082	02/10/16 09:57 / jem
Aroclor 1242	ND	mg/kg-dry		0.074		SW8082	02/10/16 09:57 / jem
Aroclor 1248	ND	mg/kg-dry		0.074		SW8082	02/10/16 09:57 / jem
Aroclor 1254	2.4	mg/kg-dry		0.074		SW8082	02/10/16 09:57 / jem
Aroclor 1260	ND	mg/kg-dry		0.074		SW8082	02/10/16 09:57 / jem
Aroclor 1262	ND	mg/kg-dry		0.074		SW8082	02/10/16 09:57 / jem
Aroclor 1268	ND	mg/kg-dry		0.074		SW8082	02/10/16 09:57 / jem
Surr: Decachlorobiphenyl	117	%REC		50-126		SW8082	02/10/16 09:57 / jem
Surr: Tetrachloro-m-xylene	60.0	%REC		42-115		SW8082	02/10/16 09:57 / jem

- The Reporting Limits reflect a 4 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14
Lab ID: B16020624-005
Client Sample ID: CB-7-Westwall

Report Date: 02/11/16
Collection Date: 02/08/16 11:30
DateReceived: 02/09/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	02/09/16 10:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		9.7		SW8082	02/10/16 11:44 / jem
Aroclor 1221	ND	mg/kg-dry		19		SW8082	02/10/16 11:44 / jem
Aroclor 1232	ND	mg/kg-dry		9.7		SW8082	02/10/16 11:44 / jem
Aroclor 1242	ND	mg/kg-dry		9.7		SW8082	02/10/16 11:44 / jem
Aroclor 1248	ND	mg/kg-dry		9.7		SW8082	02/10/16 11:44 / jem
Aroclor 1254	176	mg/kg-dry		9.7		SW8082	02/10/16 11:44 / jem
Aroclor 1260	ND	mg/kg-dry		9.7		SW8082	02/10/16 11:44 / jem
Aroclor 1262	ND	mg/kg-dry		9.7		SW8082	02/10/16 11:44 / jem
Aroclor 1268	ND	mg/kg-dry		9.7		SW8082	02/10/16 11:44 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/10/16 11:44 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/10/16 11:44 / jem

- The Reporting Limits reflect a 500 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14
Lab ID: B16020624-006
Client Sample ID: SAW-6

Report Date: 02/11/16
Collection Date: 02/08/16 11:40
DateReceived: 02/09/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Aroclor 1221	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Aroclor 1232	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Aroclor 1242	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Aroclor 1248	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Aroclor 1254	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Aroclor 1260	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Aroclor 1262	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Aroclor 1268	ND	ug/L		0.50		SW8082	02/09/16 15:37 / jem
Surr: Decachlorobiphenyl	54.0	%REC		44-130		SW8082	02/09/16 15:37 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		40-110		SW8082	02/09/16 15:37 / jem

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 02/11/16

Project: Stimson Data Package # 14 **Work Order:** B16020624

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96827
Lab ID: MB-96827	Method Blank				Run: HECD.I_160209A			02/09/16 17:49	
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	97	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96827	Laboratory Control Sample				Run: HECD.I_160209A			02/09/16 18:16	
Aroclor 1254	0.270	mg/kg	0.017	83	62	126			
Surr: Decachlorobiphenyl			0.0017	99	50	126			
Surr: Tetrachloro-m-xylene			0.0017	58	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020624-001AMB	Sample Duplicate				Run: HECD.I_160209A			02/10/16 10:50	
Aroclor 1016	ND	mg/kg-dry	38					40	
Aroclor 1221	ND	mg/kg-dry	73					40	
Aroclor 1232	ND	mg/kg-dry	38					40	
Aroclor 1242	ND	mg/kg-dry	38					40	
Aroclor 1248	ND	mg/kg-dry	38					40	
Aroclor 1254	655	mg/kg-dry	38				0.2	40	
Aroclor 1260	ND	mg/kg-dry	38					40	
Aroclor 1262	ND	mg/kg-dry	38					40	
Aroclor 1268	ND	mg/kg-dry	38					40	
Surr: Decachlorobiphenyl			3.8		50	126			O
- The Reporting Limits reflect a 2000 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020624-001ADB	Sample Duplicate				Run: HECD.I_160209A			02/10/16 11:16	
Aroclor 1016	ND	mg/kg-dry	38					40	
Aroclor 1221	ND	mg/kg-dry	74					40	
Aroclor 1232	ND	mg/kg-dry	38					40	
Aroclor 1242	ND	mg/kg-dry	38					40	
Aroclor 1248	ND	mg/kg-dry	38					40	
Aroclor 1254	737	mg/kg-dry	38				12	40	
Aroclor 1260	ND	mg/kg-dry	38					40	
Aroclor 1262	ND	mg/kg-dry	38					40	
Aroclor 1268	ND	mg/kg-dry	38					40	
Surr: Decachlorobiphenyl			3.8		50	126			O
- Because the amount of Aroclor 1254 detected in the sample was significantly higher than the spike amount, the Matrix Spike and Matrix Spike Duplicate samples are calculated as Duplicate samples.									
- The Reporting Limits reflect a 2000 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

O - Diluted out.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14

Report Date: 02/11/16
Work Order: B16020624

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96828
Lab ID: MB-96828	Method Blank				Run: HECD.I_160209B				02/09/16 14:17
Aroclor 1016	ND	ug/L	0.50						
Aroclor 1221	ND	ug/L	0.50						
Aroclor 1232	ND	ug/L	0.50						
Aroclor 1242	ND	ug/L	0.50						
Aroclor 1248	ND	ug/L	0.50						
Aroclor 1254	ND	ug/L	0.50						
Aroclor 1260	ND	ug/L	0.50						
Aroclor 1262	ND	ug/L	0.50						
Aroclor 1268	ND	ug/L	0.50						
Surr: Decachlorobiphenyl			0.050	93	44	130			
Surr: Tetrachloro-m-xylene			0.050	73	40	110			
Lab ID: AR1254-96828	Laboratory Control Sample				Run: HECD.I_160209B				02/09/16 14:44
Aroclor 1254	8.42	ug/L	0.50	84	55	132			
Surr: Decachlorobiphenyl			0.050	96	44	130			
Surr: Tetrachloro-m-xylene			0.050	64	40	110			
Lab ID: B16020624-006AMB	Sample Matrix Spike				Run: HECD.I_160209B				02/09/16 16:03
Aroclor 1254	8.53	ug/L	0.50	85	55	132			
Surr: Decachlorobiphenyl			0.050	48	44	130			
Surr: Tetrachloro-m-xylene			0.050	69	40	110			
Lab ID: B16020624-006ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160209B				02/09/16 16:30
Aroclor 1254	8.12	ug/L	0.50	81	55	132	4.9	40	
Surr: Decachlorobiphenyl			0.050	49	44	130			
Surr: Tetrachloro-m-xylene			0.050	65	40	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14

Report Date: 02/11/16
Work Order: B16020624

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256378
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/09/16 17:23
Aroclor 1254	1.98	mg/kg	0.017	99	85	115			
Surr: Decachlorobiphenyl			0.0017	98	85	115			
Surr: Tetrachloro-m-xylene			0.0017	99	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/09/16 23:09
Aroclor 1254	1.94	mg/kg	0.017	97	85	115			
Surr: Decachlorobiphenyl			0.0017	121	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/09/16 23:36
Aroclor 1254	0.209	mg/kg	0.017	104	85	115			
Surr: Decachlorobiphenyl			0.0017	220	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	105	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/10/16 04:02
Aroclor 1254	2.12	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	112	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/10/16 08:11
Aroclor 1254	1.98	mg/kg	0.017	99	85	115			
Surr: Decachlorobiphenyl			0.0017	103	85	115			
Surr: Tetrachloro-m-xylene			0.0017	100	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/10/16 13:03
Aroclor 1254	2.04	mg/kg	0.017	102	85	115			
Surr: Decachlorobiphenyl			0.0017	105	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/10/16 13:30
Aroclor 1254	0.213	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	114	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/10/16 17:30
Aroclor 1254	2.09	mg/kg	0.017	104	85	115			
Surr: Decachlorobiphenyl			0.0017	110	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 14

Report Date: 02/11/16
Work Order: B16020624

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256384
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/09/16 13:50
Aroclor 1254	1.89	ug/L	0.50	95	85	115			
Surr: Decachlorobiphenyl			0.050	93	85	115			
Surr: Tetrachloro-m-xylene			0.050	98	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/09/16 17:23
Aroclor 1254	1.98	ug/L	0.50	99	85	115			
Surr: Decachlorobiphenyl			0.050	98	85	115			
Surr: Tetrachloro-m-xylene			0.050	99	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16020624

Login completed by: Ladonna Weis

Reviewed by: BL2000\lcadreau

Reviewed Date: 2/9/2016

Date Received: 2/9/2016

Received by: msk

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.7°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #14

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCommon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccommon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Standard Turnaround (TAT) ➡ RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2-Day TAT

B16020624-

Shipped by: Rtrn UPS Grnd

Cooler ID(s):

Receipt Temp TB 2.7 °C

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	7082 PCBs	SEE ATTACHED	RUSH	Comments	LABORATORY USE ONLY
1	CB-IG-6	2/8/16	0945	S	X		X	2-Day TAT	-001
2	CB-7-Base	2/8/16	1115	S	X		X		-002
3	CB-7-Southwall	2/8/16	1120	S	X		X		-003
4	CB-7-Eastwall	2/8/16	1125	S	X		X		-004
5	CB-7-Westwall	2/8/16	1130	S	X		X		-005
6	SAW-6	2/8/16	1140	W	X		X		-006
7									
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	1650 2/8/16	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: Melissa Kelsey	2/9/16	9:35

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 12, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16020743 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package 15

Energy Laboratories Inc Billings MT received the following 8 samples for NewFields on 2/10/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16020743-001	CB-IG-7	02/09/16 10:45	02/10/16	Solid	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16020743-002	CB-5-Eastwall	02/09/16 13:55	02/10/16	Solid	Same As Above
B16020743-003	CB-14-Eastwall	02/09/16 14:00	02/10/16	Solid	Same As Above
B16020743-004	CB-1-Eastwall	02/09/16 14:05	02/10/16	Solid	Same As Above
B16020743-005	CB-1-Westwall	02/09/16 14:15	02/10/16	Solid	Same As Above
B16020743-006	CB-14-Westwall	02/09/16 14:20	02/10/16	Solid	Same As Above
B16020743-007	CB-5-Southwall	02/09/16 14:30	02/10/16	Solid	Same As Above
B16020743-008	CB-5-Westwall	02/09/16 14:25	02/10/16	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.12 11:57:02 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15
Lab ID: B16020743-001
Client Sample ID: CB-IG-7

Report Date: 02/12/16
Collection Date: 02/09/16 10:45
DateReceived: 02/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/10/16 10:00 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		3.8		SW8082	02/11/16 12:55 / ldw
Aroclor 1221	ND	mg/kg-dry		7.4		SW8082	02/11/16 12:55 / ldw
Aroclor 1232	ND	mg/kg-dry		3.8		SW8082	02/11/16 12:55 / ldw
Aroclor 1242	ND	mg/kg-dry		3.8		SW8082	02/11/16 12:55 / ldw
Aroclor 1248	ND	mg/kg-dry		3.8		SW8082	02/11/16 12:55 / ldw
Aroclor 1254	59	mg/kg-dry		3.8		SW8082	02/11/16 12:55 / ldw
Aroclor 1260	ND	mg/kg-dry		3.8		SW8082	02/11/16 12:55 / ldw
Aroclor 1262	ND	mg/kg-dry		3.8		SW8082	02/11/16 12:55 / ldw
Aroclor 1268	ND	mg/kg-dry		3.8		SW8082	02/11/16 12:55 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/11/16 12:55 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/11/16 12:55 / ldw

- The Reporting Limits reflect a 200 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15
Lab ID: B16020743-002
Client Sample ID: CB-5-Eastwall

Report Date: 02/12/16
Collection Date: 02/09/16 13:55
DateReceived: 02/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	02/10/16 10:10 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		1.9		SW8082	02/11/16 11:35 / ldw
Aroclor 1221	ND	mg/kg-dry		3.7		SW8082	02/11/16 11:35 / ldw
Aroclor 1232	ND	mg/kg-dry		1.9		SW8082	02/11/16 11:35 / ldw
Aroclor 1242	ND	mg/kg-dry		1.9		SW8082	02/11/16 11:35 / ldw
Aroclor 1248	ND	mg/kg-dry		1.9		SW8082	02/11/16 11:35 / ldw
Aroclor 1254	31	mg/kg-dry		1.9		SW8082	02/11/16 11:35 / ldw
Aroclor 1260	ND	mg/kg-dry		1.9		SW8082	02/11/16 11:35 / ldw
Aroclor 1262	ND	mg/kg-dry		1.9		SW8082	02/11/16 11:35 / ldw
Aroclor 1268	ND	mg/kg-dry		1.9		SW8082	02/11/16 11:35 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/11/16 11:35 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/11/16 11:35 / ldw

- The Reporting Limits reflect a 100 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15
Lab ID: B16020743-003
Client Sample ID: CB-14-Eastwall

Report Date: 02/12/16
Collection Date: 02/09/16 14:00
DateReceived: 02/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.5	wt%		0.2		SW3550A	02/10/16 10:15 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		18		SW8082	02/11/16 15:35 / ldw
Aroclor 1221	ND	mg/kg-dry		36		SW8082	02/11/16 15:35 / ldw
Aroclor 1232	ND	mg/kg-dry		18		SW8082	02/11/16 15:35 / ldw
Aroclor 1242	ND	mg/kg-dry		18		SW8082	02/11/16 15:35 / ldw
Aroclor 1248	ND	mg/kg-dry		18		SW8082	02/11/16 15:35 / ldw
Aroclor 1254	794	mg/kg-dry		18		SW8082	02/11/16 15:35 / ldw
Aroclor 1260	ND	mg/kg-dry		18		SW8082	02/11/16 15:35 / ldw
Aroclor 1262	ND	mg/kg-dry		18		SW8082	02/11/16 15:35 / ldw
Aroclor 1268	ND	mg/kg-dry		18		SW8082	02/11/16 15:35 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/11/16 15:35 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/11/16 15:35 / ldw

- The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15
Lab ID: B16020743-004
Client Sample ID: CB-1-Eastwall

Report Date: 02/12/16
Collection Date: 02/09/16 14:05
DateReceived: 02/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.5	wt%		0.2		SW3550A	02/10/16 10:20 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		74		SW8082	02/11/16 16:01 / ldw
Aroclor 1221	ND	mg/kg-dry		144		SW8082	02/11/16 16:01 / ldw
Aroclor 1232	ND	mg/kg-dry		74		SW8082	02/11/16 16:01 / ldw
Aroclor 1242	ND	mg/kg-dry		74		SW8082	02/11/16 16:01 / ldw
Aroclor 1248	ND	mg/kg-dry		74		SW8082	02/11/16 16:01 / ldw
Aroclor 1254	1970	mg/kg-dry		74		SW8082	02/11/16 16:01 / ldw
Aroclor 1260	ND	mg/kg-dry		74		SW8082	02/11/16 16:01 / ldw
Aroclor 1262	ND	mg/kg-dry		74		SW8082	02/11/16 16:01 / ldw
Aroclor 1268	ND	mg/kg-dry		74		SW8082	02/11/16 16:01 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/11/16 16:01 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/11/16 16:01 / ldw

- The Reporting Limits reflect a 4000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15
Lab ID: B16020743-005
Client Sample ID: CB-1-Westwall

Report Date: 02/12/16
Collection Date: 02/09/16 14:15
DateReceived: 02/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.6	wt%		0.2		SW3550A	02/10/16 10:25 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		37		SW8082	02/11/16 16:27 / ldw
Aroclor 1221	ND	mg/kg-dry		72		SW8082	02/11/16 16:27 / ldw
Aroclor 1232	ND	mg/kg-dry		37		SW8082	02/11/16 16:27 / ldw
Aroclor 1242	ND	mg/kg-dry		37		SW8082	02/11/16 16:27 / ldw
Aroclor 1248	ND	mg/kg-dry		37		SW8082	02/11/16 16:27 / ldw
Aroclor 1254	1310	mg/kg-dry		37		SW8082	02/11/16 16:27 / ldw
Aroclor 1260	ND	mg/kg-dry		37		SW8082	02/11/16 16:27 / ldw
Aroclor 1262	ND	mg/kg-dry		37		SW8082	02/11/16 16:27 / ldw
Aroclor 1268	ND	mg/kg-dry		37		SW8082	02/11/16 16:27 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/11/16 16:27 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/11/16 16:27 / ldw

- The Reporting Limits reflect a 2000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15
Lab ID: B16020743-006
Client Sample ID: CB-14-Westwall

Report Date: 02/12/16
Collection Date: 02/09/16 14:20
DateReceived: 02/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.4	wt%		0.2		SW3550A	02/10/16 10:29 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		18		SW8082	02/11/16 16:54 / ldw
Aroclor 1221	ND	mg/kg-dry		36		SW8082	02/11/16 16:54 / ldw
Aroclor 1232	ND	mg/kg-dry		18		SW8082	02/11/16 16:54 / ldw
Aroclor 1242	ND	mg/kg-dry		18		SW8082	02/11/16 16:54 / ldw
Aroclor 1248	ND	mg/kg-dry		18		SW8082	02/11/16 16:54 / ldw
Aroclor 1254	500	mg/kg-dry		18		SW8082	02/11/16 16:54 / ldw
Aroclor 1260	ND	mg/kg-dry		18		SW8082	02/11/16 16:54 / ldw
Aroclor 1262	ND	mg/kg-dry		18		SW8082	02/11/16 16:54 / ldw
Aroclor 1268	ND	mg/kg-dry		18		SW8082	02/11/16 16:54 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/11/16 16:54 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/11/16 16:54 / ldw

- The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15
Lab ID: B16020743-007
Client Sample ID: CB-5-Southwall

Report Date: 02/12/16
Collection Date: 02/09/16 14:30
DateReceived: 02/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.5	wt%		0.2		SW3550A	02/10/16 10:34 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		18		SW8082	02/11/16 17:21 / ldw
Aroclor 1221	ND	mg/kg-dry		35		SW8082	02/11/16 17:21 / ldw
Aroclor 1232	ND	mg/kg-dry		18		SW8082	02/11/16 17:21 / ldw
Aroclor 1242	ND	mg/kg-dry		18		SW8082	02/11/16 17:21 / ldw
Aroclor 1248	ND	mg/kg-dry		18		SW8082	02/11/16 17:21 / ldw
Aroclor 1254	609	mg/kg-dry		18		SW8082	02/11/16 17:21 / ldw
Aroclor 1260	ND	mg/kg-dry		18		SW8082	02/11/16 17:21 / ldw
Aroclor 1262	ND	mg/kg-dry		18		SW8082	02/11/16 17:21 / ldw
Aroclor 1268	ND	mg/kg-dry		18		SW8082	02/11/16 17:21 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/11/16 17:21 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/11/16 17:21 / ldw

- The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15
Lab ID: B16020743-008
Client Sample ID: CB-5-Westwall

Report Date: 02/12/16
Collection Date: 02/09/16 14:25
DateReceived: 02/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	02/10/16 10:38 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		95		SW8082	02/11/16 17:47 / ldw
Aroclor 1221	ND	mg/kg-dry		184		SW8082	02/11/16 17:47 / ldw
Aroclor 1232	ND	mg/kg-dry		95		SW8082	02/11/16 17:47 / ldw
Aroclor 1242	ND	mg/kg-dry		95		SW8082	02/11/16 17:47 / ldw
Aroclor 1248	ND	mg/kg-dry		95		SW8082	02/11/16 17:47 / ldw
Aroclor 1254	3000	mg/kg-dry		95		SW8082	02/11/16 17:47 / ldw
Aroclor 1260	ND	mg/kg-dry		95		SW8082	02/11/16 17:47 / ldw
Aroclor 1262	ND	mg/kg-dry		95		SW8082	02/11/16 17:47 / ldw
Aroclor 1268	ND	mg/kg-dry		95		SW8082	02/11/16 17:47 / ldw
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/11/16 17:47 / ldw
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/11/16 17:47 / ldw

- The Reporting Limits reflect a 5000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15

Report Date: 02/12/16
Work Order: B16020743

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96852
Lab ID: MB-96852	Method Blank				Run: HECD.I_160211A				02/11/16 10:16
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	95	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96852	Laboratory Control Sample				Run: HECD.I_160211A				02/11/16 10:42
Aroclor 1254	0.281	mg/kg	0.017	85	62	126			
Surr: Decachlorobiphenyl			0.0017	96	50	126			
Surr: Tetrachloro-m-xylene			0.0017	56	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020743-001AMB	Sample Duplicate				Run: HECD.I_160211A				02/11/16 13:22
Aroclor 1016	ND	mg/kg-dry	3.8					40	
Aroclor 1221	ND	mg/kg-dry	7.3					40	
Aroclor 1232	ND	mg/kg-dry	3.8					40	
Aroclor 1242	ND	mg/kg-dry	3.8					40	
Aroclor 1248	ND	mg/kg-dry	3.8					40	
Aroclor 1254	65.2	mg/kg-dry	3.8				9.6	40	
Aroclor 1260	ND	mg/kg-dry	3.8					40	
Aroclor 1262	ND	mg/kg-dry	3.8					40	
Aroclor 1268	ND	mg/kg-dry	3.8					40	
Surr: Decachlorobiphenyl			0.38		50	126			O
Surr: Tetrachloro-m-xylene			0.38		42	115			O
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16020743-001ADB	Sample Duplicate				Run: HECD.I_160211A				02/11/16 13:48
Aroclor 1016	ND	mg/kg-dry	3.8					40	
Aroclor 1221	ND	mg/kg-dry	7.4					40	
Aroclor 1232	ND	mg/kg-dry	3.8					40	
Aroclor 1242	ND	mg/kg-dry	3.8					40	
Aroclor 1248	ND	mg/kg-dry	3.8					40	
Aroclor 1254	49.3	mg/kg-dry	3.8				18	40	
Aroclor 1260	ND	mg/kg-dry	3.8					40	
Aroclor 1262	ND	mg/kg-dry	3.8					40	
Aroclor 1268	ND	mg/kg-dry	3.8					40	
Surr: Decachlorobiphenyl			0.38		50	126			O
Surr: Tetrachloro-m-xylene			0.38		42	115			O
- Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration.									
- The Reporting Limits reflect a 200 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
O - Diluted out.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 15

Report Date: 02/12/16
Work Order: B16020743

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256437
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/11/16 09:22
Aroclor 1254	0.202	mg/kg	0.017	101	85	115			
Surr: Decachlorobiphenyl			0.0017	105	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/11/16 09:49
Aroclor 1254	2.04	mg/kg	0.017	102	85	115			
Surr: Decachlorobiphenyl			0.0017	101	85	115			
Surr: Tetrachloro-m-xylene			0.0017	103	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/11/16 14:41
Aroclor 1254	2.05	mg/kg	0.017	102	85	115			
Surr: Decachlorobiphenyl			0.0017	104	85	115			
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/11/16 18:40
Aroclor 1254	2.06	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	106	85	115			
Surr: Tetrachloro-m-xylene			0.0017	103	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/11/16 19:07
Aroclor 1254	0.210	mg/kg	0.017	105	85	115			
Surr: Decachlorobiphenyl			0.0017	115	85	115			
Surr: Tetrachloro-m-xylene			0.0017	105	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16020743

Login completed by:	Tabitha Edwards	Date Received:	2/10/2016
Reviewed by:	BL2000\jmueller	Received by:	src
Reviewed Date:	2/11/2016	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.5°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #15

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

Standard Turnaround (TAT)

RUSH

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments: 2 Day TAT

Shipped by: RT UPS GRD

Cooler ID(s):

Receipt Temp 2.5 °C

On Ice: Y N

Custody Seal On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	RUSH	Comments	LABORATORY USE ONLY
1	CB-IG-7	2/9/16	1045	S	X		X	2 Day TAT	B1602074 3-001
2	CB-5-Eastwall	2/9/16	1355	S	X		X		002
3	CB-14-Eastwall	2/9/16	1400	S	X		X		003
4	CB-1-Eastwall	2/9/16	1405	S	X		X		004
5	CB-1-Westwall	2/9/16	1415	S	X		X		005
6	CB-14-Westwall	2/9/16	1420	S	X		X		006
7	CB-5-Southwall	2/9/16	1430	S	X		X		007
8	CB-5-Westwall	2/9/16	1425	S	X		X		008
9		2/9/16		W	X		X		
10									

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	2-9-16/1630	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: T. Baca	Date/Time: 2-10-16	Signature: [signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

February 17, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16021022 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 16

Energy Laboratories Inc Billings MT received the following 4 samples for NewFields on 2/12/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16021022-001	CB-TP-1-Westwall-3	02/11/16 15:15	02/12/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16021022-002	CB-TP-2-Base-3	02/11/16 15:05	02/12/16	Soil	Same As Above
B16021022-003	CB-TP-2-Southwall-3	02/11/16 15:10	02/12/16	Soil	Same As Above
B16021022-004	Saw-7	02/11/16 13:25	02/12/16	Aqueous	Polychlorinated Biphenyls (PCB's) Separatory Funnel Liquid Liquid Ext.

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.17 08:44:06 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 16
Lab ID: B16021022-001
Client Sample ID: CB-TP-1-Westwall-3

Report Date: 02/17/16
Collection Date: 02/11/16 15:15
DateReceived: 02/12/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.7	wt%		0.2		SW3550A	02/12/16 10:42 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/12/16 23:49 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	02/12/16 23:49 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/12/16 23:49 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/12/16 23:49 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/12/16 23:49 / jem
Aroclor 1254	0.035	mg/kg-dry		0.018		SW8082	02/12/16 23:49 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/12/16 23:49 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/12/16 23:49 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/12/16 23:49 / jem
Surr: Decachlorobiphenyl	90.0	%REC		50-126		SW8082	02/12/16 23:49 / jem
Surr: Tetrachloro-m-xylene	68.0	%REC		42-115		SW8082	02/12/16 23:49 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 16
Lab ID: B16021022-002
Client Sample ID: CB-TP-2-Base-3

Report Date: 02/17/16
Collection Date: 02/11/16 15:05
DateReceived: 02/12/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.8	wt%		0.2		SW3550A	02/12/16 10:51 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/12/16 22:53 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/12/16 22:53 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/12/16 22:53 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/12/16 22:53 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/12/16 22:53 / jem
Aroclor 1254	0.75	mg/kg-dry		0.018		SW8082	02/12/16 22:53 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/12/16 22:53 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/12/16 22:53 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/12/16 22:53 / jem
Surr: Decachlorobiphenyl	89.0	%REC		50-126		SW8082	02/12/16 22:53 / jem
Surr: Tetrachloro-m-xylene	59.0	%REC		42-115		SW8082	02/12/16 22:53 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 16
Lab ID: B16021022-003
Client Sample ID: CB-TP-2-Southwall-3

Report Date: 02/17/16
Collection Date: 02/11/16 15:10
DateReceived: 02/12/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	02/12/16 10:57 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/12/16 23:21 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/12/16 23:21 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/12/16 23:21 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/12/16 23:21 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/12/16 23:21 / jem
Aroclor 1254	0.15	mg/kg-dry		0.019		SW8082	02/12/16 23:21 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/12/16 23:21 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/12/16 23:21 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/12/16 23:21 / jem
Surr: Decachlorobiphenyl	89.0	%REC		50-126		SW8082	02/12/16 23:21 / jem
Surr: Tetrachloro-m-xylene	60.0	%REC		42-115		SW8082	02/12/16 23:21 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 16
Lab ID: B16021022-004
Client Sample ID: Saw-7

Report Date: 02/17/16
Collection Date: 02/11/16 13:25
DateReceived: 02/12/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Aroclor 1221	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Aroclor 1232	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Aroclor 1242	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Aroclor 1248	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Aroclor 1254	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Aroclor 1260	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Aroclor 1262	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Aroclor 1268	ND	ug/L		0.50		SW8082	02/16/16 16:14 / jem
Surr: Decachlorobiphenyl	32.0	%REC	S	44-130		SW8082	02/16/16 16:14 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		40-110		SW8082	02/16/16 16:14 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 16

Report Date: 02/17/16
Work Order: B16021022

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96921
Lab ID: MB-96921	Method Blank				Run: AECD.I_160212B				02/12/16 17:46
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	86	50	126			
Surr: Tetrachloro-m-xylene			0.0017	61	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96921	Laboratory Control Sample				Run: AECD.I_160212B				02/12/16 18:14
Aroclor 1254	0.308	mg/kg	0.017	93	62	126			
Surr: Decachlorobiphenyl			0.0017	91	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021022-001AMB	Sample Matrix Spike				Run: AECD.I_160212B				02/13/16 00:17
Aroclor 1254	0.397	mg/kg-dry	0.018	100	62	126			
Surr: Decachlorobiphenyl			0.0018	88	50	126			
Surr: Tetrachloro-m-xylene			0.0018	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021022-001ADB	Sample Matrix Spike Duplicate				Run: AECD.I_160212B				02/13/16 00:44
Aroclor 1254	0.390	mg/kg-dry	0.019	97	62	126	1.9	40	
Surr: Decachlorobiphenyl			0.0019	89	50	126			
Surr: Tetrachloro-m-xylene			0.0019	57	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 16

Report Date: 02/17/16
Work Order: B16021022

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96927
Lab ID: MB-96927	Method Blank				Run: HECD.I_160216A				02/16/16 14:54
Aroclor 1016	ND	ug/L	0.50						
Aroclor 1221	ND	ug/L	0.50						
Aroclor 1232	ND	ug/L	0.50						
Aroclor 1242	ND	ug/L	0.50						
Aroclor 1248	ND	ug/L	0.50						
Aroclor 1254	ND	ug/L	0.50						
Aroclor 1260	ND	ug/L	0.50						
Aroclor 1262	ND	ug/L	0.50						
Aroclor 1268	ND	ug/L	0.50						
Surr: Decachlorobiphenyl			0.050	85	44	130			
Surr: Tetrachloro-m-xylene			0.050	71	40	110			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96927	Laboratory Control Sample				Run: HECD.I_160216A				02/16/16 15:21
Aroclor 1254	9.00	ug/L	0.50	90	55	132			
Surr: Decachlorobiphenyl			0.050	86	44	130			
Surr: Tetrachloro-m-xylene			0.050	66	40	110			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021022-004AMB	Sample Matrix Spike				Run: HECD.I_160216A				02/16/16 16:41
Aroclor 1254	10.5	ug/L	0.50	105	55	132			
Surr: Decachlorobiphenyl			0.050	40	44	130			S
Surr: Tetrachloro-m-xylene			0.050	81	40	110			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021022-004ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160216A				02/16/16 17:07
Aroclor 1254	10.5	ug/L	0.50	105	55	132	0.0	40	
Surr: Decachlorobiphenyl			0.050	34	44	130			S
Surr: Tetrachloro-m-xylene			0.050	77	40	110			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 16

Report Date: 02/17/16
Work Order: B16021022

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256546
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/12/16 21:58
Aroclor 1254	1.96	mg/kg	0.017	98	85	115			
Surr: Decachlorobiphenyl			0.0017	94	85	115			
Surr: Tetrachloro-m-xylene			0.0017	95	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/13/16 02:07
Aroclor 1254	2.00	mg/kg	0.017	100	85	115			
Surr: Decachlorobiphenyl			0.0017	94	85	115			
Surr: Tetrachloro-m-xylene			0.0017	95	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/13/16 02:34
Aroclor 1254	0.192	mg/kg	0.017	96	85	115			
Surr: Decachlorobiphenyl			0.0017	95	85	115			
Surr: Tetrachloro-m-xylene			0.0017	89	85	115			
Method: SW8082									Analytical Run: R256597
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/16/16 14:27
Aroclor 1254	2.02	ug/L	0.50	101	85	115			
Surr: Decachlorobiphenyl			0.050	91	85	115			
Surr: Tetrachloro-m-xylene			0.050	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/16/16 18:01
Aroclor 1254	2.19	ug/L	0.50	109	85	115			
Surr: Decachlorobiphenyl			0.050	102	85	115			
Surr: Tetrachloro-m-xylene			0.050	109	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16021022

Login completed by:	Gina McCartney	Date Received:	2/12/2016
Reviewed by:	BL2000\tedwards	Received by:	cmb
Reviewed Date:	2/16/2016	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.4°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

Chain of Custody and Analytical Request Record

ENERGY LABORATORIES

PLEASE PRINT (Provide as much information as possible.)

Company Name: New Fields

Project Name, PWS, Permit, Etc.: Stimson Data Package #16

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 CB-TP-1-Westwall-3	2/11/16	1515	S	X			X	2 Day TAT	B602102200
2 CB-TP-2-Base-3	2/11/16	1505	S	X			X		-002
3 CB-TP-2-Southwall-3	2/11/16	1510	S	X			X		-003
4 SAW-7	2/11/16	1325	W	X			X		-004
5									
6									
7									
8									
9									
10									

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: Retrieve VES Ground

Cooler ID(s):

Receipt Temp 1.4 °C TB

On Ice: (Y) N

Custody Seal: On Bottle (Y) N; On Cooler (Y) N

Intact (Y) N

Signature Match (Y) N

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 2-11-16 / 1630 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: [signature] Date/Time: 2-12-16 9:10 Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

February 17, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16021143 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package #17

Energy Laboratories Inc Billings MT received the following 5 samples for NewFields on 2/16/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16021143-001	CB-11-Base-2	02/12/16 10:50	02/16/16	Solid	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16021143-002	CB-11-Southwall-2	02/12/16 10:55	02/16/16	Solid	Same As Above
B16021143-003	CB-7-Base-2	02/12/16 11:00	02/16/16	Solid	Same As Above
B16021143-004	CB-7-Westwall-2	02/12/16 14:25	02/16/16	Solid	Same As Above
B16021143-005	CB-5-Westwall-2	02/12/16 15:30	02/16/16	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.17 15:17:52 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #17
Lab ID: B16021143-001
Client Sample ID: CB-11-Base-2

Report Date: 02/17/16
Collection Date: 02/12/16 10:50
DateReceived: 02/16/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	02/16/16 11:56 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:21 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/16/16 23:21 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:21 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:21 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:21 / jem
Aroclor 1254	0.22	mg/kg-dry		0.019		SW8082	02/16/16 23:21 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:21 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:21 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:21 / jem
Surr: Decachlorobiphenyl	101	%REC		50-126		SW8082	02/16/16 23:21 / jem
Surr: Tetrachloro-m-xylene	74.0	%REC		42-115		SW8082	02/16/16 23:21 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #17
Lab ID: B16021143-002
Client Sample ID: CB-11-Southwall-2

Report Date: 02/17/16
Collection Date: 02/12/16 10:55
DateReceived: 02/16/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/16/16 12:02 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:48 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/16/16 23:48 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:48 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:48 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:48 / jem
Aroclor 1254	0.66	mg/kg-dry		0.019		SW8082	02/16/16 23:48 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:48 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:48 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/16/16 23:48 / jem
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	02/16/16 23:48 / jem
Surr: Tetrachloro-m-xylene	74.0	%REC		42-115		SW8082	02/16/16 23:48 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #17
Lab ID: B16021143-003
Client Sample ID: CB-7-Base-2

Report Date: 02/17/16
Collection Date: 02/12/16 11:00
DateReceived: 02/16/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	02/16/16 12:09 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	02/17/16 11:15 / jem
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	02/17/16 11:15 / jem
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	02/17/16 11:15 / jem
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	02/17/16 11:15 / jem
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	02/17/16 11:15 / jem
Aroclor 1254	3.2	mg/kg-dry		0.19		SW8082	02/17/16 11:15 / jem
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	02/17/16 11:15 / jem
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	02/17/16 11:15 / jem
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	02/17/16 11:15 / jem
Surr: Decachlorobiphenyl	112	%REC		50-126		SW8082	02/17/16 11:15 / jem
Surr: Tetrachloro-m-xylene	85.0	%REC		42-115		SW8082	02/17/16 11:15 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #17
Lab ID: B16021143-004
Client Sample ID: CB-7-Westwall-2

Report Date: 02/17/16
Collection Date: 02/12/16 14:25
DateReceived: 02/16/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.0	wt%		0.2		SW3550A	02/16/16 12:14 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/17/16 00:42 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/17/16 00:42 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/17/16 00:42 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/17/16 00:42 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/17/16 00:42 / jem
Aroclor 1254	0.21	mg/kg-dry		0.018		SW8082	02/17/16 00:42 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/17/16 00:42 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/17/16 00:42 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/17/16 00:42 / jem
Surr: Decachlorobiphenyl	106	%REC		50-126		SW8082	02/17/16 00:42 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	02/17/16 00:42 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #17
Lab ID: B16021143-005
Client Sample ID: CB-5-Westwall-2

Report Date: 02/17/16
Collection Date: 02/12/16 15:30
DateReceived: 02/16/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.9	wt%		0.2		SW3550A	02/16/16 12:19 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/17/16 01:08 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/17/16 01:08 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/17/16 01:08 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/17/16 01:08 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/17/16 01:08 / jem
Aroclor 1254	1.6	mg/kg-dry		0.019		SW8082	02/17/16 01:08 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/17/16 01:08 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/17/16 01:08 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/17/16 01:08 / jem
Surr: Decachlorobiphenyl	107	%REC		50-126		SW8082	02/17/16 01:08 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	02/17/16 01:08 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #17

Report Date: 02/17/16
Work Order: B16021143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96954
Lab ID: MB-96954	Method Blank				Run: HECD.I_160216B				02/16/16 18:28
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	100	50	126			
Surr: Tetrachloro-m-xylene			0.0017	69	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96954	Laboratory Control Sample				Run: HECD.I_160216B				02/16/16 18:54
Aroclor 1254	0.320	mg/kg	0.017	98	62	126			
Surr: Decachlorobiphenyl			0.0017	99	50	126			
Surr: Tetrachloro-m-xylene			0.0017	64	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021122-001AMB	Sample Matrix Spike				Run: HECD.I_160216B				02/16/16 20:41
Aroclor 1254	0.390	mg/kg-dry	0.019	101	62	126			
Surr: Decachlorobiphenyl			0.0019	103	50	126			
Surr: Tetrachloro-m-xylene			0.0019	71	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021122-001ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160216B				02/16/16 21:08
Aroclor 1254	0.380	mg/kg-dry	0.019	98	62	126	2.6	40	
Surr: Decachlorobiphenyl			0.0019	100	50	126			
Surr: Tetrachloro-m-xylene			0.0019	64	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package #17

Report Date: 02/17/16
Work Order: B16021143

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256646
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/16/16 18:01
Aroclor 1254	2.19	mg/kg	0.017	109	85	115			
Surr: Decachlorobiphenyl			0.0017	102	85	115			
Surr: Tetrachloro-m-xylene			0.0017	109	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/16/16 22:01
Aroclor 1254	2.13	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	103	85	115			
Surr: Tetrachloro-m-xylene			0.0017	106	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/16/16 22:28
Aroclor 1254	0.214	mg/kg	0.017	107	85	115			
Surr: Decachlorobiphenyl			0.0017	113	85	115			
Surr: Tetrachloro-m-xylene			0.0017	109	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/17/16 02:01
Aroclor 1254	2.11	mg/kg	0.017	105	85	115			
Surr: Decachlorobiphenyl			0.0017	106	85	115			
Surr: Tetrachloro-m-xylene			0.0017	107	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/17/16 09:01
Aroclor 1254	0.207	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	108	85	115			
Surr: Tetrachloro-m-xylene			0.0017	107	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/17/16 09:28
Aroclor 1254	2.06	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	100	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/17/16 12:08
Aroclor 1254	2.13	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	104	85	115			
Surr: Tetrachloro-m-xylene			0.0017	106	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16021143

Login completed by: Tabitha Edwards
Reviewed by: BL2000\jmueller
Reviewed Date: 2/16/2016

Date Received: 2/16/2016
Received by: cmb
Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.6°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Sample CB7-Base 2 container label indicates the collection time as 12:00 however the Chain of Custody indicates 11:00. Proceeded with the collection time as indicated on the Chain of Custody.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #17

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 Day TAT

Shipped by: UPS Gnd RS

Cooler ID(s):

Receipt Temp: 2.6 T13 °C

On Ice: (Y) N

Custody Seal: On Bottle Y N; On Cooler (Y) N

Intact Y N

Signature Match Y N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	Number of Containers	SEE ATTACHED	Standard Turnaround (TAT)	RUSH		LABORATORY USE ONLY
1 CB-11-Base-2	2/12/16	1050	S	X			X	2 Day TAT	B16021143-001
2 CB-11-Southwall-2	2/12/16	1055	S	X			X		002
3 CB-7-Base-2	2/12/16	1100	S	X			X		003
4 CB-7-Westwall-2	2/12/16	1425	S	X			X		004
5 CB-5-Westwall-2	2/12/16	1550	S	X			X		005
6									
7									
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
[illegible]	[illegible]	[illegible]			
Ty Schmechel	2-15-16/1000	Ty Schmechel			

Received by (print): Date/Time: Signature:

Received by Laboratory: [illegible] Date/Time: 2-16-16 9:15 Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 17, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16021122 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 18

Energy Laboratories Inc Billings MT received the following 2 samples for NewFields on 2/16/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16021122-001	CB-1-Base	02/15/16 14:10	02/16/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16021122-002	CB-5-Base	02/15/16 14:11	02/16/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.17 15:14:25 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 18
Lab ID: B16021122-001
Client Sample ID: CB-1-Base

Report Date: 02/17/16
Collection Date: 02/15/16 14:10
DateReceived: 02/16/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/16/16 09:59 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/17/16 10:48 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/17/16 10:48 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/17/16 10:48 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/17/16 10:48 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/17/16 10:48 / jem
Aroclor 1254	0.016	mg/kg-dry	J	0.019		SW8082	02/17/16 10:48 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/17/16 10:48 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/17/16 10:48 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/17/16 10:48 / jem
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	02/17/16 10:48 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	02/17/16 10:48 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
J - Estimated value. The analyte was present but less than the reporting limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 18
Lab ID: B16021122-002
Client Sample ID: CB-5-Base

Report Date: 02/17/16
Collection Date: 02/15/16 14:11
DateReceived: 02/16/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	02/16/16 10:09 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		1.9		SW8082	02/17/16 10:21 / jem
Aroclor 1221	ND	mg/kg-dry		3.6		SW8082	02/17/16 10:21 / jem
Aroclor 1232	ND	mg/kg-dry		1.9		SW8082	02/17/16 10:21 / jem
Aroclor 1242	ND	mg/kg-dry		1.9		SW8082	02/17/16 10:21 / jem
Aroclor 1248	ND	mg/kg-dry		1.9		SW8082	02/17/16 10:21 / jem
Aroclor 1254	28	mg/kg-dry		1.9		SW8082	02/17/16 10:21 / jem
Aroclor 1260	ND	mg/kg-dry		1.9		SW8082	02/17/16 10:21 / jem
Aroclor 1262	ND	mg/kg-dry		1.9		SW8082	02/17/16 10:21 / jem
Aroclor 1268	ND	mg/kg-dry		1.9		SW8082	02/17/16 10:21 / jem
Surr: Decachlorobiphenyl	120	%REC		50-126		SW8082	02/16/16 19:48 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	02/16/16 19:48 / jem

- The Reporting Limits reflect a 100 times dilution due to the level of Aroclor 1254 detected in the sample
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 18

Report Date: 02/17/16
Work Order: B16021122

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96954
Lab ID: MB-96954	Method Blank				Run: HECD.I_160216B				02/16/16 18:28
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	100	50	126			
Surr: Tetrachloro-m-xylene			0.0017	69	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96954	Laboratory Control Sample				Run: HECD.I_160216B				02/16/16 18:54
Aroclor 1254	0.320	mg/kg	0.017	98	62	126			
Surr: Decachlorobiphenyl			0.0017	99	50	126			
Surr: Tetrachloro-m-xylene			0.0017	64	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021122-001AMB	Sample Matrix Spike				Run: HECD.I_160216B				02/16/16 20:41
Aroclor 1254	0.390	mg/kg-dry	0.019	101	62	126			
Surr: Decachlorobiphenyl			0.0019	103	50	126			
Surr: Tetrachloro-m-xylene			0.0019	71	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021122-001ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160216B				02/16/16 21:08
Aroclor 1254	0.380	mg/kg-dry	0.019	98	62	126	2.6	40	
Surr: Decachlorobiphenyl			0.0019	100	50	126			
Surr: Tetrachloro-m-xylene			0.0019	64	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 18

Report Date: 02/17/16
Work Order: B16021122

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256646
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/16/16 18:01
Aroclor 1254	2.19	mg/kg	0.017	109	85	115			
Surr: Decachlorobiphenyl			0.0017	102	85	115			
Surr: Tetrachloro-m-xylene			0.0017	109	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/16/16 22:01
Aroclor 1254	2.13	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	103	85	115			
Surr: Tetrachloro-m-xylene			0.0017	106	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/16/16 22:28
Aroclor 1254	0.214	mg/kg	0.017	107	85	115			
Surr: Decachlorobiphenyl			0.0017	113	85	115			
Surr: Tetrachloro-m-xylene			0.0017	109	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/17/16 02:01
Aroclor 1254	2.11	mg/kg	0.017	105	85	115			
Surr: Decachlorobiphenyl			0.0017	106	85	115			
Surr: Tetrachloro-m-xylene			0.0017	107	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/17/16 09:01
Aroclor 1254	0.207	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	108	85	115			
Surr: Tetrachloro-m-xylene			0.0017	107	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/17/16 09:28
Aroclor 1254	2.06	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	100	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/17/16 12:08
Aroclor 1254	2.13	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	104	85	115			
Surr: Tetrachloro-m-xylene			0.0017	106	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16021122

Login completed by:	Gina McCartney	Date Received:	2/16/2016
Reviewed by:	BL2000\jmueller	Received by:	cmb
Reviewed Date:	2/16/2016	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.0°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetreel@newfields.com

Invoice Address (Required): 1100 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmcommon@newfields.com

Project Name, PWS, Permit, Etc.: Stimson Data Package #18

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8277

Cell: (406) 240-7795

Invoice Contact & Phone: Donna McCommon (406) 549-8277

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Sampler: (Please Print) Ty Schmechel

Purchase Order:

Quote/Bottle Order:

Shipped by: UPS Ground

Cooler ID(s):

Receipt Temp: 1.0 °C

On Ice: (Y) N

Custody Seal: On Bottle (Y) (N); On Cooler (Y) N

Intact: (Y) N

Signature Match: (Y) N

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 Day TAT

Special Report/Formats:

☐ DW ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____

☐ EDD/EDT (Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH		LABORATORY USE ONLY
1	CB-1-Base	2/15/16	1410	S	X		X	2 Day TAT		1602112200 1
2	CB-5-Base	2/15/16	1411	S	X		X	2 Day TAT		-002
3										
4										
5										
6										
7										
8										
9										
10										

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 2-15-16/1430 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: [signature] Date/Time: 2-16-16 9:15 Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 19, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16021209 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 19

Energy Laboratories Inc Billings MT received the following 7 samples for NewFields on 2/17/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16021209-001	CB-14-Base	02/16/16 10:40	02/17/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16021209-002	CB-14-EBase	02/16/16 10:50	02/17/16	Soil	Same As Above
B16021209-003	CB-5-EBase	02/16/16 10:55	02/17/16	Soil	Same As Above
B16021209-004	CB-7-WBase	02/16/16 11:00	02/17/16	Soil	Same As Above
B16021209-005	CB-5-WBase	02/16/16 11:05	02/17/16	Soil	Same As Above
B16021209-006	CB-IG-8	02/16/16 14:35	02/17/16	Soil	Same As Above
B16021209-007	SAW-8	02/16/16 11:10	02/17/16	Aqueous	Polychlorinated Biphenyls (PCB's) Separatory Funnel Liquid Liquid Ext.

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.19 10:16:40 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 19
Lab ID: B16021209-001
Client Sample ID: CB-14-Base

Report Date: 02/19/16
Collection Date: 02/16/16 10:40
DateReceived: 02/17/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	02/17/16 10:48 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/17/16 20:18 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/17/16 20:18 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/17/16 20:18 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/17/16 20:18 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/17/16 20:18 / jem
Aroclor 1254	0.20	mg/kg-dry		0.019		SW8082	02/17/16 20:18 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/17/16 20:18 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/17/16 20:18 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/17/16 20:18 / jem
Surr: Decachlorobiphenyl	106	%REC		50-126		SW8082	02/17/16 20:18 / jem
Surr: Tetrachloro-m-xylene	68.0	%REC		42-115		SW8082	02/17/16 20:18 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 19
Lab ID: B16021209-002
Client Sample ID: CB-14-EBase

Report Date: 02/19/16
Collection Date: 02/16/16 10:50
DateReceived: 02/17/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.7	wt%		0.2		SW3550A	02/17/16 10:53 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/18/16 01:12 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/18/16 01:12 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/18/16 01:12 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/18/16 01:12 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/18/16 01:12 / jem
Aroclor 1254	0.29	mg/kg-dry		0.018		SW8082	02/18/16 01:12 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/18/16 01:12 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/18/16 01:12 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/18/16 01:12 / jem
Surr: Decachlorobiphenyl	92.0	%REC		50-126		SW8082	02/18/16 01:12 / jem
Surr: Tetrachloro-m-xylene	78.0	%REC		42-115		SW8082	02/18/16 01:12 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 19
Lab ID: B16021209-003
Client Sample ID: CB-5-EBase

Report Date: 02/19/16
Collection Date: 02/16/16 10:55
DateReceived: 02/17/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/17/16 10:58 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/17/16 21:11 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/17/16 21:11 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/17/16 21:11 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/17/16 21:11 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/17/16 21:11 / jem
Aroclor 1254	0.39	mg/kg-dry		0.019		SW8082	02/17/16 21:11 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/17/16 21:11 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/17/16 21:11 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/17/16 21:11 / jem
Surr: Decachlorobiphenyl	102	%REC		50-126		SW8082	02/17/16 21:11 / jem
Surr: Tetrachloro-m-xylene	74.0	%REC		42-115		SW8082	02/17/16 21:11 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 19
Lab ID: B16021209-004
Client Sample ID: CB-7-WBase

Report Date: 02/19/16
Collection Date: 02/16/16 11:00
DateReceived: 02/17/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.9	wt%		0.2		SW3550A	02/17/16 11:05 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/17/16 20:44 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/17/16 20:44 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/17/16 20:44 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/17/16 20:44 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/17/16 20:44 / jem
Aroclor 1254	0.24	mg/kg-dry		0.018		SW8082	02/17/16 20:44 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/17/16 20:44 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/17/16 20:44 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/17/16 20:44 / jem
Surr: Decachlorobiphenyl	111	%REC		50-126		SW8082	02/17/16 20:44 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	02/17/16 20:44 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 19
Lab ID: B16021209-005
Client Sample ID: CB-5-WBase

Report Date: 02/19/16
Collection Date: 02/16/16 11:05
DateReceived: 02/17/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/17/16 11:08 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		3.8		SW8082	02/18/16 11:19 / jem
Aroclor 1221	ND	mg/kg-dry		7.4		SW8082	02/18/16 11:19 / jem
Aroclor 1232	ND	mg/kg-dry		3.8		SW8082	02/18/16 11:19 / jem
Aroclor 1242	ND	mg/kg-dry		3.8		SW8082	02/18/16 11:19 / jem
Aroclor 1248	ND	mg/kg-dry		3.8		SW8082	02/18/16 11:19 / jem
Aroclor 1254	63	mg/kg-dry		3.8		SW8082	02/18/16 11:19 / jem
Aroclor 1260	ND	mg/kg-dry		3.8		SW8082	02/18/16 11:19 / jem
Aroclor 1262	ND	mg/kg-dry		3.8		SW8082	02/18/16 11:19 / jem
Aroclor 1268	ND	mg/kg-dry		3.8		SW8082	02/18/16 11:19 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/18/16 11:19 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/18/16 11:19 / jem

- The Reporting Limits reflect a 200 times dilution due to the level of Aroclor 1254 detected in the sample
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 19
Lab ID: B16021209-006
Client Sample ID: CB-IG-8

Report Date: 02/19/16
Collection Date: 02/16/16 14:35
DateReceived: 02/17/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/17/16 11:13 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		19		SW8082	02/18/16 11:46 / jem
Aroclor 1221	ND	mg/kg-dry		37		SW8082	02/18/16 11:46 / jem
Aroclor 1232	ND	mg/kg-dry		19		SW8082	02/18/16 11:46 / jem
Aroclor 1242	ND	mg/kg-dry		19		SW8082	02/18/16 11:46 / jem
Aroclor 1248	ND	mg/kg-dry		19		SW8082	02/18/16 11:46 / jem
Aroclor 1254	110	mg/kg-dry		19		SW8082	02/18/16 11:46 / jem
Aroclor 1260	ND	mg/kg-dry		19		SW8082	02/18/16 11:46 / jem
Aroclor 1262	ND	mg/kg-dry		19		SW8082	02/18/16 11:46 / jem
Aroclor 1268	ND	mg/kg-dry		19		SW8082	02/18/16 11:46 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	02/18/16 11:46 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	02/18/16 11:46 / jem

- The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 19
Lab ID: B16021209-007
Client Sample ID: SAW-8

Report Date: 02/19/16
Collection Date: 02/16/16 11:10
DateReceived: 02/17/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Aroclor 1221	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Aroclor 1232	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Aroclor 1242	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Aroclor 1248	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Aroclor 1254	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Aroclor 1260	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Aroclor 1262	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Aroclor 1268	ND	ug/L		0.50		SW8082	02/17/16 16:43 / jem
Surr: Decachlorobiphenyl	96.0	%REC		44-130		SW8082	02/17/16 16:43 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		40-110		SW8082	02/17/16 16:43 / jem

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 02/19/16

Project: Stimson Data Package # 19 **Work Order:** B16021209

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96998
Lab ID: MB-96998	Method Blank				Run: HECD.I_160216D				02/17/16 15:23
Aroclor 1016	ND	ug/L	0.50						
Aroclor 1221	ND	ug/L	0.50						
Aroclor 1232	ND	ug/L	0.50						
Aroclor 1242	ND	ug/L	0.50						
Aroclor 1248	ND	ug/L	0.50						
Aroclor 1254	ND	ug/L	0.50						
Aroclor 1260	ND	ug/L	0.50						
Aroclor 1262	ND	ug/L	0.50						
Aroclor 1268	ND	ug/L	0.50						
Surr: Decachlorobiphenyl			0.050	98	44	130			
Surr: Tetrachloro-m-xylene			0.050	74	40	110			
Lab ID: AR1254-96998	Laboratory Control Sample				Run: HECD.I_160216D				02/17/16 15:50
Aroclor 1254	10.1	ug/L	0.50	101	55	132			
Surr: Decachlorobiphenyl			0.050	101	44	130			
Surr: Tetrachloro-m-xylene			0.050	72	40	110			
Lab ID: B16021209-007AMB	Sample Matrix Spike				Run: HECD.I_160216D				02/17/16 17:10
Aroclor 1254	10.5	ug/L	0.50	105	55	132			
Surr: Decachlorobiphenyl			0.050	87	44	130			
Surr: Tetrachloro-m-xylene			0.050	78	40	110			
Lab ID: B16021209-007ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160216D				02/17/16 17:37
Aroclor 1254	9.99	ug/L	0.50	100	55	132	5.0	40	
Surr: Decachlorobiphenyl			0.050	77	44	130			
Surr: Tetrachloro-m-xylene			0.050	71	40	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 02/19/16

Project: Stimson Data Package # 19 **Work Order:** B16021209

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96999
Lab ID: MB-96999	Method Blank				Run: HECD.I_160216C			02/17/16 18:57	
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	108	50	126			
Surr: Tetrachloro-m-xylene			0.0017	66	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96999	Laboratory Control Sample				Run: HECD.I_160216C			02/17/16 19:24	
Aroclor 1254	0.332	mg/kg	0.017	100	62	126			
Surr: Decachlorobiphenyl			0.0017	107	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021209-006AMB	Sample Duplicate				Run: HECD.I_160216C			02/18/16 12:12	
Aroclor 1016	ND	mg/kg-dry	19					40	
Aroclor 1221	ND	mg/kg-dry	37					40	
Aroclor 1232	ND	mg/kg-dry	19					40	
Aroclor 1242	ND	mg/kg-dry	19					40	
Aroclor 1248	ND	mg/kg-dry	19					40	
Aroclor 1254	114	mg/kg-dry	19				3.5	40	
Aroclor 1260	ND	mg/kg-dry	19					40	
Aroclor 1262	ND	mg/kg-dry	19					40	
Aroclor 1268	ND	mg/kg-dry	19					40	
Surr: Decachlorobiphenyl			1.9		50	126			O
Surr: Tetrachloro-m-xylene			1.9		42	115			O
- The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample - Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021209-006ADB	Sample Duplicate				Run: HECD.I_160216C			02/18/16 12:39	
Aroclor 1016	ND	mg/kg-dry	19					40	
Aroclor 1221	ND	mg/kg-dry	37					40	
Aroclor 1232	ND	mg/kg-dry	19					40	
Aroclor 1242	ND	mg/kg-dry	19					40	
Aroclor 1248	ND	mg/kg-dry	19					40	
Aroclor 1254	80.5	mg/kg-dry	19				31	40	
Aroclor 1260	ND	mg/kg-dry	19					40	
Aroclor 1262	ND	mg/kg-dry	19					40	
Aroclor 1268	ND	mg/kg-dry	19					40	
Surr: Decachlorobiphenyl			1.9		50	126			O
Surr: Tetrachloro-m-xylene			1.9		42	115			O
- Because the amount of Aroclor 1254 detected in the sample was significantly higher than the spike amount, the Matrix Spike and Matrix Spike Duplicate samples are calculated as Duplicate samples. - The Reporting Limits reflect a 1000 times dilution due to the level of Aroclor 1254 detected in the sample - Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

O - Diluted out.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 02/19/16

Project: Stimson Data Package # 19 **Work Order:** B16021209

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082								Analytical Run: R256771	
Lab ID: 1254CK3	Continuing Calibration Verification Standard							02/17/16 14:30	
Aroclor 1254	0.212	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	111	85	115			
Surr: Tetrachloro-m-xylene			0.0017	108	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/17/16 18:30	
Aroclor 1254	2.22	mg/kg	0.017	111	85	115			
Surr: Decachlorobiphenyl			0.0017	111	85	115			
Surr: Tetrachloro-m-xylene			0.0017	110	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/17/16 23:51	
Aroclor 1254	2.26	mg/kg	0.017	113	85	115			
Surr: Decachlorobiphenyl			0.0017	115	85	115			
Surr: Tetrachloro-m-xylene			0.0017	109	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/18/16 02:05	
Aroclor 1254	2.20	mg/kg	0.017	110	85	115			
Surr: Decachlorobiphenyl			0.0017	114	85	115			
Surr: Tetrachloro-m-xylene			0.0017	107	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard							02/18/16 02:32	
Aroclor 1254	0.236	mg/kg	0.017	118	85	115			S
Surr: Decachlorobiphenyl			0.0017	124	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	113	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard							02/18/16 09:59	
Aroclor 1254	0.216	mg/kg	0.017	108	85	115			
Surr: Decachlorobiphenyl			0.0017	110	85	115			
Surr: Tetrachloro-m-xylene			0.0017	110	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/18/16 10:26	
Aroclor 1254	2.19	mg/kg	0.017	109	85	115			
Surr: Decachlorobiphenyl			0.0017	105	85	115			
Surr: Tetrachloro-m-xylene			0.0017	107	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/18/16 14:53	
Aroclor 1254	2.21	mg/kg	0.017	110	85	115			
Surr: Decachlorobiphenyl			0.0017	110	85	115			
Surr: Tetrachloro-m-xylene			0.0017	110	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

Work Order Receipt Checklist

NewFields

B16021209

Login completed by:	Gina McCartney	Date Received:	2/17/2016
Reviewed by:	BL2000\jmueller	Received by:	src
Reviewed Date:	2/18/2016	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.7°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: New Fields

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccommon@newfields.com

Project Name, PWS, Permit, Etc.: Stimson Date Package #19

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8277

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCommon (406) 549-8277

Purchase Order:

Quote/Bottle Order:

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids
Vegetation Bioassay Other
DW - Drinking Water

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 Day TAT

Shipped by: UPS GRD

Cooler ID(s):

Receipt Temp 1.7 °C

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	RUSH	Comments	LABORATORY USE ONLY
1	CB-14-Base	2/16/16	1040	S	X		X	2 Day TAT	B602209001
2	CB-14-EBase	2/16/16	1050	S	X		X		-002
3	CB-5-EBase	2/16/16	1055	S	X		X		-003
4	CB-7-WBase	2/16/16	1100	S	X		X		-004
5	CB-5-WBase	2/16/16	1105	S	X		X		-005
6	CB-IG-8	2/16/16	1435	S	X		X		-006
7	SAW-8	2/16/16	1110	W	X		X		-007
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	2-16-16 / 1630	Ty Schmechel			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time: 9:15am 2/17/16	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 25, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16021702 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package # 21

Energy Laboratories Inc Billings MT received the following 6 samples for NewFields on 2/24/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16021702-001	CB-7-Eastwall-2	02/23/16 11:00	02/24/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16021702-002	CB-5-Westwall-3	02/23/16 11:15	02/24/16	Soil	Same As Above
B16021702-003	CB-14-Westwall-2	02/23/16 11:30	02/24/16	Soil	Same As Above
B16021702-004	CB-5-Eastwall-2	02/23/16 13:30	02/24/16	Soil	Same As Above
B16021702-005	CB-14-Eastwall-2	02/23/16 13:37	02/24/16	Soil	Same As Above
B16021702-006	CB-5-WBase-2	02/23/16 14:00	02/24/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.25 11:09:54 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 21
Lab ID: B16021702-001
Client Sample ID: CB-7-Eastwall-2

Report Date: 02/25/16
Collection Date: 02/23/16 11:00
DateReceived: 02/24/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	14	wt%		0.2		SW3550A	02/24/16 10:24 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:28 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/24/16 17:28 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:28 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:28 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:28 / jem
Aroclor 1254	0.38	mg/kg-dry		0.019		SW8082	02/24/16 17:28 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:28 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:28 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:28 / jem
Surr: Decachlorobiphenyl	91.0	%REC		50-126		SW8082	02/24/16 17:28 / jem
Surr: Tetrachloro-m-xylene	70.0	%REC		42-115		SW8082	02/24/16 17:28 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 21
Lab ID: B16021702-002
Client Sample ID: CB-5-Westwall-3

Report Date: 02/25/16
Collection Date: 02/23/16 11:15
DateReceived: 02/24/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	02/24/16 10:30 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:54 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/24/16 17:54 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:54 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:54 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:54 / jem
Aroclor 1254	0.28	mg/kg-dry		0.019		SW8082	02/24/16 17:54 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:54 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:54 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/24/16 17:54 / jem
Surr: Decachlorobiphenyl	91.0	%REC		50-126		SW8082	02/24/16 17:54 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	02/24/16 17:54 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 21
Lab ID: B16021702-003
Client Sample ID: CB-14-Westwall-2

Report Date: 02/25/16
Collection Date: 02/23/16 11:30
DateReceived: 02/24/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.9	wt%		0.2		SW3550A	02/24/16 10:38 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/24/16 15:41 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/24/16 15:41 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/24/16 15:41 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/24/16 15:41 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/24/16 15:41 / jem
Aroclor 1254	0.38	mg/kg-dry		0.018		SW8082	02/24/16 15:41 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/24/16 15:41 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/24/16 15:41 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/24/16 15:41 / jem
Surr: Decachlorobiphenyl	91.0	%REC		50-126		SW8082	02/24/16 15:41 / jem
Surr: Tetrachloro-m-xylene	67.0	%REC		42-115		SW8082	02/24/16 15:41 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 21
Lab ID: B16021702-004
Client Sample ID: CB-5-Eastwall-2

Report Date: 02/25/16
Collection Date: 02/23/16 13:30
DateReceived: 02/24/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.6	wt%		0.2		SW3550A	02/24/16 10:42 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:08 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/24/16 16:08 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:08 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:08 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:08 / jem
Aroclor 1254	0.18	mg/kg-dry		0.019		SW8082	02/24/16 16:08 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:08 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:08 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:08 / jem
Surr: Decachlorobiphenyl	89.0	%REC		50-126		SW8082	02/24/16 16:08 / jem
Surr: Tetrachloro-m-xylene	51.0	%REC		42-115		SW8082	02/24/16 16:08 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 21
Lab ID: B16021702-005
Client Sample ID: CB-14-Eastwall-2

Report Date: 02/25/16
Collection Date: 02/23/16 13:37
DateReceived: 02/24/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	02/24/16 10:47 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:34 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	02/24/16 16:34 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:34 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:34 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:34 / jem
Aroclor 1254	0.22	mg/kg-dry		0.019		SW8082	02/24/16 16:34 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:34 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:34 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/24/16 16:34 / jem
Surr: Decachlorobiphenyl	88.0	%REC		50-126		SW8082	02/24/16 16:34 / jem
Surr: Tetrachloro-m-xylene	64.0	%REC		42-115		SW8082	02/24/16 16:34 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 21
Lab ID: B16021702-006
Client Sample ID: CB-5-WBase-2

Report Date: 02/25/16
Collection Date: 02/23/16 14:00
DateReceived: 02/24/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	9.1	wt%		0.2		SW3550A	02/24/16 10:52 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	02/24/16 17:01 / jem
Aroclor 1221	ND	mg/kg-dry		0.36		SW8082	02/24/16 17:01 / jem
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	02/24/16 17:01 / jem
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	02/24/16 17:01 / jem
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	02/24/16 17:01 / jem
Aroclor 1254	5.9	mg/kg-dry		0.19		SW8082	02/24/16 17:01 / jem
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	02/24/16 17:01 / jem
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	02/24/16 17:01 / jem
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	02/24/16 17:01 / jem
Surr: Decachlorobiphenyl	99.0	%REC		50-126		SW8082	02/24/16 17:01 / jem
Surr: Tetrachloro-m-xylene	69.0	%REC		42-115		SW8082	02/24/16 17:01 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 21

Report Date: 02/25/16
Work Order: B16021702

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 97160
Lab ID: MB-97160	Method Blank				Run: HECD.I_160224A				02/24/16 14:22
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	89	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-97160	Laboratory Control Sample				Run: HECD.I_160224A				02/24/16 14:49
Aroclor 1254	0.273	mg/kg	0.017	83	62	126			
Surr: Decachlorobiphenyl			0.0017	89	50	126			
Surr: Tetrachloro-m-xylene			0.0017	58	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021702-002AMB	Sample Matrix Spike				Run: HECD.I_160224A				02/24/16 18:21
Aroclor 1254	0.580	mg/kg-dry	0.019	82	62	126			
Surr: Decachlorobiphenyl			0.0019	92	50	126			
Surr: Tetrachloro-m-xylene			0.0019	59	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021702-002ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160224A				02/24/16 18:47
Aroclor 1254	0.554	mg/kg-dry	0.019	75	62	126	4.6	40	
Surr: Decachlorobiphenyl			0.0019	94	50	126			
Surr: Tetrachloro-m-xylene			0.0019	65	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package # 21

Report Date: 02/25/16
Work Order: B16021702

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R257052
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/24/16 13:29
Aroclor 1254	0.199	mg/kg	0.017	100	85	115			
Surr: Decachlorobiphenyl			0.0017	100	85	115			
Surr: Tetrachloro-m-xylene			0.0017	103	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/24/16 13:56
Aroclor 1254	1.98	mg/kg	0.017	99	85	115			
Surr: Decachlorobiphenyl			0.0017	93	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/24/16 19:41
Aroclor 1254	2.04	mg/kg	0.017	102	85	115			
Surr: Decachlorobiphenyl			0.0017	99	85	115			
Surr: Tetrachloro-m-xylene			0.0017	103	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/24/16 20:07
Aroclor 1254	0.209	mg/kg	0.017	104	85	115			
Surr: Decachlorobiphenyl			0.0017	107	85	115			
Surr: Tetrachloro-m-xylene			0.0017	105	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16021702

Login completed by: Brittaney R. Garza

Reviewed by: BL2000\lcadreau

Reviewed Date: 2/24/2016

Date Received: 2/24/2016

Received by: cmb

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.0°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

Chain of Custody and Analytical Request Record

ENERGY LABORATORIES

Page _____ of _____

PLEASE PRINT (Provide as much information as possible.)

Company Name: New Fields

Project Name, PWS, Permit, Etc.: Stimson Data Package #21

Sample Origin State: MT

EPA/State Compliance: Yes ☑ No ☐

Report Mail Address (Required): 1120 Cedar St. Msla, MT 59802

☑ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: 549-8270

Cell: 240-7795

Sampler: (Please Print) Tyler Etzel

Invoice Contact & Phone: Donna McCammon 549-8270

Purchase Order: 350.0033.006

Quote/Bottle Order: ——

Invoice Address (Required): SAME

☑ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____

☐ EDD/EDT (Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX		PCBs 8082	SEE ATTACHED
1 CB-7-Eastwall-2	2-23-16	11:00	1	S	X	
2 CB-5-Westwall-3	2-23-16	11:15	1	S	X	
3 CB-14-Westwall-2	"	11:30	1	S	X	
4 CB-5-Eastwall-2	"	13:30	1	S	X	
5 CB-14-Eastwall-2	"	13:37	1	S	X	
6 CB-5-WBase-2	"	14:00	1	S	X	
7						
8						
9						
10						

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 day TAT

Shipped by: UPS Ground

Cooler ID(s):

Receipt Temp 2.0 °C TB

On Ice: Y N

Custody Seal On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

LABORATORY USE ONLY: B16021762 001 002 003 004 005 006

Custody Record MUST be Signed

Relinquished by (print): Tyler Etzel Date/Time: 2-23-16 @1600 Signature:

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: Date/Time: 2-25-16 @ 9:05 2-29-16

Sample Disposal: Return to Client: ✓ Lab Disposal:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Additional information, downloadable fee schedule, forms, and links.

Republic Disposal Ticket Summary

Appendix F

Detail Customer Activity Report

January 01, 2016 to March 22, 2016

Specific Customer: 340

000340- STIMSON LUMBER COMPANY

Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
01/26/2016 I	01 1085666	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	22.96 TN	$642.88	$0.00	$642.88
01/26/2016 I	01 1085668	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	24.81 TN	$694.68	$0.00	$694.68
01/26/2016 I	01 1085679	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	24.74 TN	$692.72	$0.00	$692.72
01/26/2016 I	01 1085710	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	23.62 TN	$661.36	$0.00	$661.36
01/26/2016 I	01 1085716	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	24.54 TN	$687.12	$0.00	$687.12
01/26/2016 I	01 1085721	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.38 TN	$766.64	$0.00	$766.64
01/26/2016 I	01 1085741	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.08 TN	$702.24	$0.00	$702.24
01/26/2016 I	01 1085752	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.45 TN	$712.60	$0.00	$712.60
01/26/2016 I	01 1085761	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	24.80 TN	$694.40	$0.00	$694.40
01/26/2016 I	01 1085792	5002160678	JOE RUSSELL 61		SW-CONT SOIL W/FUEL	28.00 F	26.05 TN	$729.40	$0.00	$729.40
01/26/2016 I	01 1085808	5002160678	JOE RUSSELL 33		SW-CONT SOIL W/FUEL	28.00 F	26.59 TN	$744.52	$0.00	$744.52
01/26/2016 I	01 1085813	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.18 TN	$705.04	$0.00	$705.04
01/26/2016 I	01 1085829	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	24.06 TN	$673.68	$0.00	$673.68
01/26/2016 I	01 1085837	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.54 TN	$715.12	$0.00	$715.12
01/26/2016 I	01 1085842	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	24.29 TN	$680.12	$0.00	$680.12
01/27/2016 I	01 1085868	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	24.87 TN	$696.36	$0.00	$696.36
01/27/2016 I	01 1085869	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.90 TN	$725.20	$0.00	$725.20
01/27/2016 I	01 1085871	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.94 TN	$726.32	$0.00	$726.32
01/27/2016 I	01 1085903	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.68 TN	$719.04	$0.00	$719.04
01/27/2016 I	01 1085910	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.55 TN	$715.40	$0.00	$715.40
01/27/2016 I	01 1085918	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.39 TN	$710.92	$0.00	$710.92
01/27/2016 I	01 1085928	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.72 TN	$720.16	$0.00	$720.16
01/27/2016 I	01 1085936	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	24.42 TN	$683.76	$0.00	$683.76
01/27/2016 I	01 1085941	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	26.34 TN	$737.52	$0.00	$737.52
01/27/2016 I	01 1085954	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.05 TN	$701.40	$0.00	$701.40
01/27/2016 I	01 1085960	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.47 TN	$713.16	$0.00	$713.16
01/27/2016 I	01 1085974	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.11 TN	$703.08	$0.00	$703.08
01/27/2016 I	01 1085984	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.39 TN	$710.92	$0.00	$710.92
01/27/2016 I	01 1085989	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.98 TN	$727.44	$0.00	$727.44
01/27/2016 I	01 1085996	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.27 TN	$707.56	$0.00	$707.56
01/27/2016 I	01 1086001	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	24.58 TN	$688.24	$0.00	$688.24
01/27/2016 I	01 1086004	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.05 TN	$701.40	$0.00	$701.40
01/28/2016 I	01 1086023	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.95 TN	$726.60	$0.00	$726.60
01/28/2016 I	01 1086024	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.86 TN	$724.08	$0.00	$724.08
01/28/2016 I	01 1086025	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.70 TN	$719.60	$0.00	$719.60
01/28/2016 I	01 1086056	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.99 TN	$727.72	$0.00	$727.72
01/28/2016 I	01 1086062	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.09 TN	$702.52	$0.00	$702.52
01/28/2016 I	01 1086072	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.48 TN	$713.44	$0.00	$713.44

Detail Customer Activity Report

January 01, 2016 to March 22, 2016

Specific Customer: 340

000340- STIMSON LUMBER COMPANY

Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
01/28/2016 I	01 1086086	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.62 TN	$717.36	$0.00	$717.36
01/28/2016 I	01 1086090	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.38 TN	$710.64	$0.00	$710.64
01/28/2016 I	01 1086099	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.58 TN	$716.24	$0.00	$716.24
01/28/2016 I	01 1086117	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.15 TN	$704.20	$0.00	$704.20
01/28/2016 I	01 1086120	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.07 TN	$701.96	$0.00	$701.96
01/28/2016 I	01 1086144	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	24.97 TN	$699.16	$0.00	$699.16
01/28/2016 I	01 1086148	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.20 TN	$705.60	$0.00	$705.60
01/28/2016 I	01 1086152	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.41 TN	$711.48	$0.00	$711.48
01/28/2016 I	01 1086160	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.03 TN	$700.84	$0.00	$700.84
01/28/2016 I	01 1086165	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.22 TN	$706.16	$0.00	$706.16
01/28/2016 I	01 1086168	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	26.36 TN	$738.08	$0.00	$738.08
01/29/2016 I	01 1086180	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.20 TN	$705.60	$0.00	$705.60
01/29/2016 I	01 1086183	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.30 TN	$708.40	$0.00	$708.40
01/29/2016 I	01 1086184	5002160678	JOE RUSSELL 33		SW-CONT SOIL W/FUEL	28.00 F	25.78 TN	$721.84	$0.00	$721.84
01/29/2016 I	01 1086195	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.23 TN	$734.44	$0.00	$734.44
01/29/2016 I	01 1086201	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.91 TN	$725.48	$0.00	$725.48
01/29/2016 I	01 1086206	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.07 TN	$701.96	$0.00	$701.96
01/29/2016 I	01 1086219	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.40 TN	$711.20	$0.00	$711.20
01/29/2016 I	01 1086221	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.68 TN	$719.04	$0.00	$719.04
01/29/2016 I	01 1086224	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	26.60 TN	$744.80	$0.00	$744.80
01/29/2016 I	01 1086238	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	24.52 TN	$686.56	$0.00	$686.56
01/29/2016 I	01 1086244	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	24.63 TN	$689.64	$0.00	$689.64
01/29/2016 I	01 1086256	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	24.43 TN	$684.04	$0.00	$684.04
01/29/2016 I	01 1086267	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.57 TN	$715.96	$0.00	$715.96
01/29/2016 I	01 1086277	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.17 TN	$704.76	$0.00	$704.76
01/29/2016 I	01 1086289	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	24.35 TN	$681.80	$0.00	$681.80
01/29/2016 I	01 1086306	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	26.24 TN	$734.72	$0.00	$734.72
01/29/2016 I	01 1086308	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	24.57 TN	$687.96	$0.00	$687.96
01/29/2016 I	01 1086311	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.12 TN	$731.36	$0.00	$731.36
01/29/2016 I	01 1086322	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.84 TN	$723.52	$0.00	$723.52
01/29/2016 I	01 1086323	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.99 TN	$727.72	$0.00	$727.72
01/30/2016 I	01 1086328	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.16 TN	$704.48	$0.00	$704.48
01/30/2016 I	01 1086329	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	24.64 TN	$689.92	$0.00	$689.92
01/30/2016 I	01 1086330	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.42 TN	$711.76	$0.00	$711.76
01/30/2016 I	01 1086338	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.50 TN	$714.00	$0.00	$714.00
01/30/2016 I	01 1086340	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.24 TN	$706.72	$0.00	$706.72
01/30/2016 I	01 1086341	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	26.71 TN	$747.88	$0.00	$747.88
02/01/2016 I	01 1086461	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.75 TN	$721.00	$0.00	$721.00
02/01/2016 I	01 1086463	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	25.15 TN	$704.20	$0.00	$704.20

Detail Customer Activity Report

January 01, 2016 to March 22, 2016

Specific Customer: 340

000340- STIMSON LUMBER COMPANY

Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate		Billing Quantity		Material Total	Tax Total	Total
02/01/2016 I	01 1086467	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.15	TN	$760.20	$0.00	$760.20
02/01/2016 I	01 1086487	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	25.96	TN	$726.88	$0.00	$726.88
02/01/2016 I	01 1086495	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	25.60	TN	$716.80	$0.00	$716.80
02/01/2016 I	01 1086500	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	25.00	TN	$700.00	$0.00	$700.00
02/01/2016 I	01 1086508	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	24.89	TN	$696.92	$0.00	$696.92
02/01/2016 I	01 1086512	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.29	TN	$736.12	$0.00	$736.12
02/01/2016 I	01 1086516	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.61	TN	$745.08	$0.00	$745.08
02/01/2016 I	01 1086532	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.03	TN	$728.84	$0.00	$728.84
02/01/2016 I	01 1086536	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.98	TN	$755.44	$0.00	$755.44
02/01/2016 I	01 1086542	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.08	TN	$730.24	$0.00	$730.24
02/01/2016 I	01 1086554	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	25.21	TN	$705.88	$0.00	$705.88
02/01/2016 I	01 1086557	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.96	TN	$754.88	$0.00	$754.88
02/01/2016 I	01 1086562	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.56	TN	$743.68	$0.00	$743.68
02/01/2016 I	01 1086567	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.08	TN	$730.24	$0.00	$730.24
02/01/2016 I	01 1086568	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.84	TN	$751.52	$0.00	$751.52
02/01/2016 I	01 1086571	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.55	TN	$743.40	$0.00	$743.40
02/02/2016 I	01 1086579	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.19	TN	$733.32	$0.00	$733.32
02/02/2016 I	01 1086588	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	25.48	TN	$713.44	$0.00	$713.44
02/02/2016 I	01 1086593	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.07	TN	$729.96	$0.00	$729.96
02/02/2016 I	01 1086607	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	25.99	TN	$727.72	$0.00	$727.72
02/02/2016 I	01 1086611	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	25.91	TN	$725.48	$0.00	$725.48
02/02/2016 I	01 1086618	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.48	TN	$741.44	$0.00	$741.44
02/02/2016 I	01 1086639	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.76	TN	$749.28	$0.00	$749.28
02/02/2016 I	01 1086643	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.39	TN	$738.92	$0.00	$738.92
02/02/2016 I	01 1086646	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.91	TN	$753.48	$0.00	$753.48
02/02/2016 I	01 1086664	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	25.40	TN	$711.20	$0.00	$711.20
02/02/2016 I	01 1086668	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.73	TN	$748.44	$0.00	$748.44
02/02/2016 I	01 1086670	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.44	TN	$768.32	$0.00	$768.32
02/02/2016 I	01 1086690	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.54	TN	$743.12	$0.00	$743.12
02/02/2016 I	01 1086691	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.25	TN	$735.00	$0.00	$735.00
02/02/2016 I	01 1086695	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.82	TN	$750.96	$0.00	$750.96
02/02/2016 I	01 1086702	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.68	TN	$747.04	$0.00	$747.04
02/03/2016 I	01 1086710	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.36	TN	$738.08	$0.00	$738.08
02/03/2016 I	01 1086711	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.82	TN	$750.96	$0.00	$750.96
02/03/2016 I	01 1086712	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.46	TN	$740.88	$0.00	$740.88
02/03/2016 I	01 1086726	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.38	TN	$738.64	$0.00	$738.64
02/03/2016 I	01 1086728	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.72	TN	$748.16	$0.00	$748.16
02/03/2016 I	01 1086729	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.38	TN	$738.64	$0.00	$738.64
02/03/2016 I	01 1086754	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.12	TN	$759.36	$0.00	$759.36

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate		Billing Quantity		Material Total	Tax Total	Total
02/03/2016 I	01 1086756	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.83	TN	$751.24	$0.00	$751.24
02/03/2016 I	01 1086757	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.39	TN	$766.92	$0.00	$766.92
02/03/2016 I	01 1086777	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.95	TN	$754.60	$0.00	$754.60
02/03/2016 I	01 1086779	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.31	TN	$764.68	$0.00	$764.68
02/03/2016 I	01 1086783	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.78	TN	$777.84	$0.00	$777.84
02/03/2016 I	01 1086800	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.77	TN	$749.56	$0.00	$749.56
02/03/2016 I	01 1086803	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.77	TN	$749.56	$0.00	$749.56
02/03/2016 I	01 1086805	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.20	TN	$761.60	$0.00	$761.60
02/03/2016 I	01 1086814	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.34	TN	$737.52	$0.00	$737.52
02/03/2016 I	01 1086818	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.81	TN	$750.68	$0.00	$750.68
02/03/2016 I	01 1086820	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.25	TN	$763.00	$0.00	$763.00
02/04/2016 I	01 1086835	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.31	TN	$764.68	$0.00	$764.68
02/04/2016 I	01 1086837	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.01	TN	$756.28	$0.00	$756.28
02/04/2016 I	01 1086839	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.42	TN	$767.76	$0.00	$767.76
02/04/2016 I	01 1086848	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.76	TN	$749.28	$0.00	$749.28
02/04/2016 I	01 1086852	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.06	TN	$757.68	$0.00	$757.68
02/04/2016 I	01 1086856	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.35	TN	$765.80	$0.00	$765.80
02/04/2016 I	01 1086866	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.41	TN	$739.48	$0.00	$739.48
02/04/2016 I	01 1086873	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.04	TN	$757.12	$0.00	$757.12
02/04/2016 I	01 1086877	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.34	TN	$765.52	$0.00	$765.52
02/04/2016 I	01 1086893	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.72	TN	$748.16	$0.00	$748.16
02/04/2016 I	01 1086896	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.72	TN	$748.16	$0.00	$748.16
02/04/2016 I	01 1086912	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.13	TN	$731.64	$0.00	$731.64
02/04/2016 I	01 1086915	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.75	TN	$749.00	$0.00	$749.00
02/04/2016 I	01 1086929	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.86	TN	$752.08	$0.00	$752.08
02/04/2016 I	01 1086936	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.84	TN	$751.52	$0.00	$751.52
02/04/2016 I	01 1086939	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.77	TN	$749.56	$0.00	$749.56
02/04/2016 I	01 1086944	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.04	TN	$757.12	$0.00	$757.12
02/04/2016 I	01 1086948	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	25.92	TN	$725.76	$0.00	$725.76
02/04/2016 I	01 1086949	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.27	TN	$735.56	$0.00	$735.56
02/04/2016 I	01 1086954	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.93	TN	$782.04	$0.00	$782.04
02/05/2016 I	01 1086963	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.35	TN	$737.80	$0.00	$737.80
02/05/2016 I	01 1086965	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.02	TN	$756.56	$0.00	$756.56
02/05/2016 I	01 1086968	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.65	TN	$774.20	$0.00	$774.20
02/05/2016 I	01 1086983	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.22	TN	$762.16	$0.00	$762.16
02/05/2016 I	01 1086987	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.58	TN	$772.24	$0.00	$772.24
02/05/2016 I	01 1086990	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.02	TN	$784.56	$0.00	$784.56
02/05/2016 I	01 1087000	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.18	TN	$761.04	$0.00	$761.04
02/05/2016 I	01 1087002	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.39	TN	$766.92	$0.00	$766.92

Detail Customer Activity Report

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Specific Customer: 340

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
02/05/2016 I	01 1087005	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.57 TN	$771.96	$0.00	$771.96
02/05/2016 I	01 1087015	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.22 TN	$762.16	$0.00	$762.16
02/05/2016 I	01 1087020	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.84 TN	$779.52	$0.00	$779.52
02/05/2016 I	01 1087027	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.75 TN	$777.00	$0.00	$777.00
02/05/2016 I	01 1087038	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.81 TN	$750.68	$0.00	$750.68
02/05/2016 I	01 1087043	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	28.22 TN	$790.16	$0.00	$790.16
02/05/2016 I	01 1087048	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.38 TN	$766.64	$0.00	$766.64
02/05/2016 I	01 1087062	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.35 TN	$765.80	$0.00	$765.80
02/05/2016 I	01 1087066	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.71 TN	$775.88	$0.00	$775.88
02/05/2016 I	01 1087070	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.38 TN	$794.64	$0.00	$794.64
02/05/2016 I	01 1087085	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.63 TN	$773.64	$0.00	$773.64
02/05/2016 I	01 1087090	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.60 TN	$772.80	$0.00	$772.80
02/05/2016 I	01 1087091	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.94 TN	$782.32	$0.00	$782.32
02/08/2016 I	01 1087245	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.85 TN	$779.80	$0.00	$779.80
02/08/2016 I	01 1087246	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.64 TN	$773.92	$0.00	$773.92
02/08/2016 I	01 1087248	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.15 TN	$788.20	$0.00	$788.20
02/08/2016 I	01 1087262	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.40 TN	$767.20	$0.00	$767.20
02/08/2016 I	01 1087263	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.14 TN	$759.92	$0.00	$759.92
02/08/2016 I	01 1087271	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.38 TN	$766.64	$0.00	$766.64
02/08/2016 I	01 1087281	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.47 TN	$769.16	$0.00	$769.16
02/08/2016 I	01 1087284	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.07 TN	$757.96	$0.00	$757.96
02/08/2016 I	01 1087294	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.51 TN	$770.28	$0.00	$770.28
02/08/2016 I	01 1087306	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.33 TN	$765.24	$0.00	$765.24
02/08/2016 I	01 1087307	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.01 TN	$756.28	$0.00	$756.28
02/08/2016 I	01 1087319	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.58 TN	$772.24	$0.00	$772.24
02/08/2016 I	01 1087334	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.28 TN	$763.84	$0.00	$763.84
02/08/2016 I	01 1087335	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.90 TN	$753.20	$0.00	$753.20
02/08/2016 I	01 1087343	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.47 TN	$769.16	$0.00	$769.16
02/08/2016 I	01 1087360	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.11 TN	$759.08	$0.00	$759.08
02/08/2016 I	01 1087361	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.72 TN	$748.16	$0.00	$748.16
02/08/2016 I	01 1087363	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.40 TN	$767.20	$0.00	$767.20
02/08/2016 I	01 1087372	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.98 TN	$727.44	$0.00	$727.44
02/08/2016 I	01 1087375	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.06 TN	$757.68	$0.00	$757.68
02/08/2016 I	01 1087378	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.45 TN	$768.60	$0.00	$768.60
02/09/2016 I	01 1087397	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.83 TN	$751.24	$0.00	$751.24
02/09/2016 I	01 1087399	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.59 TN	$744.52	$0.00	$744.52
02/09/2016 I	01 1087401	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.17 TN	$760.76	$0.00	$760.76
02/09/2016 I	01 1087418	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.45 TN	$768.60	$0.00	$768.60
02/09/2016 I	01 1087422	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.08 TN	$758.24	$0.00	$758.24

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Specific Customer: 340

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
02/09/2016 I	01 1087428	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.53 TN	$770.84	$0.00	$770.84
02/09/2016 I	01 1087444	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.94 TN	$754.32	$0.00	$754.32
02/09/2016 I	01 1087445	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.76 TN	$749.28	$0.00	$749.28
02/09/2016 I	01 1087454	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.88 TN	$780.64	$0.00	$780.64
02/09/2016 I	01 1087465	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.68 TN	$775.04	$0.00	$775.04
02/09/2016 I	01 1087469	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.08 TN	$758.24	$0.00	$758.24
02/09/2016 I	01 1087484	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.20 TN	$789.60	$0.00	$789.60
02/09/2016 I	01 1087494	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.20 TN	$761.60	$0.00	$761.60
02/09/2016 I	01 1087496	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.08 TN	$758.24	$0.00	$758.24
02/09/2016 I	01 1087514	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.42 TN	$767.76	$0.00	$767.76
02/10/2016 I	01 1087552	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.84 TN	$751.52	$0.00	$751.52
02/10/2016 I	01 1087553	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.62 TN	$745.36	$0.00	$745.36
02/10/2016 I	01 1087561	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.59 TN	$772.52	$0.00	$772.52
02/10/2016 I	01 1087577	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.99 TN	$755.72	$0.00	$755.72
02/10/2016 I	01 1087582	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.39 TN	$766.92	$0.00	$766.92
02/10/2016 I	01 1087586	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.40 TN	$767.20	$0.00	$767.20
02/10/2016 I	01 1087599	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.75 TN	$749.00	$0.00	$749.00
02/10/2016 I	01 1087602	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.33 TN	$765.24	$0.00	$765.24
02/10/2016 I	01 1087605	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.54 TN	$771.12	$0.00	$771.12
02/10/2016 I	01 1087616	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.95 TN	$754.60	$0.00	$754.60
02/10/2016 I	01 1087619	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.07 TN	$757.96	$0.00	$757.96
02/10/2016 I	01 1087623	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.07 TN	$785.96	$0.00	$785.96
02/10/2016 I	01 1087635	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.21 TN	$761.88	$0.00	$761.88
02/10/2016 I	01 1087642	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.77 TN	$749.56	$0.00	$749.56
02/10/2016 I	01 1087643	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.69 TN	$775.32	$0.00	$775.32
02/10/2016 I	01 1087662	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.57 TN	$743.96	$0.00	$743.96
02/10/2016 I	01 1087665	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.74 TN	$748.72	$0.00	$748.72
02/10/2016 I	01 1087667	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.63 TN	$773.64	$0.00	$773.64
02/10/2016 I	01 1087682	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.42 TN	$767.76	$0.00	$767.76
02/10/2016 I	01 1087683	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.69 TN	$747.32	$0.00	$747.32
02/10/2016 I	01 1087686	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.72 TN	$776.16	$0.00	$776.16
02/11/2016 I	01 1087701	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.91 TN	$753.48	$0.00	$753.48
02/11/2016 I	01 1087702	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.91 TN	$753.48	$0.00	$753.48
02/11/2016 I	01 1087703	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.62 TN	$773.36	$0.00	$773.36
02/11/2016 I	01 1087721	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.76 TN	$749.28	$0.00	$749.28
02/11/2016 I	01 1087725	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.62 TN	$745.36	$0.00	$745.36
02/11/2016 I	01 1087727	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.74 TN	$776.72	$0.00	$776.72
02/11/2016 I	01 1087749	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.10 TN	$758.80	$0.00	$758.80
02/11/2016 I	01 1087750	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.95 TN	$754.60	$0.00	$754.60

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate		Billing Quantity		Material Total	Tax Total	Total
02/11/2016	I 01 1087752	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.28	TN	$763.84	$0.00	$763.84
02/11/2016	I 01 1087769	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.83	TN	$751.24	$0.00	$751.24
02/11/2016	I 01 1087770	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.90	TN	$781.20	$0.00	$781.20
02/11/2016	I 01 1087772	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.73	TN	$776.44	$0.00	$776.44
02/11/2016	I 01 1087796	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.06	TN	$757.68	$0.00	$757.68
02/11/2016	I 01 1087798	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.68	TN	$747.04	$0.00	$747.04
02/11/2016	I 01 1087802	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.46	TN	$768.88	$0.00	$768.88
02/11/2016	I 01 1087814	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.81	TN	$750.68	$0.00	$750.68
02/11/2016	I 01 1087817	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.52	TN	$770.56	$0.00	$770.56
02/11/2016	I 01 1087822	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	28.16	TN	$788.48	$0.00	$788.48
02/11/2016	I 01 1087836	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.03	TN	$756.84	$0.00	$756.84
02/11/2016	I 01 1087840	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.31	TN	$764.68	$0.00	$764.68
02/11/2016	I 01 1087845	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.58	TN	$772.24	$0.00	$772.24
02/12/2016	I 01 1087857	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.73	TN	$748.44	$0.00	$748.44
02/12/2016	I 01 1087858	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.32	TN	$764.96	$0.00	$764.96
02/12/2016	I 01 1087859	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.23	TN	$762.44	$0.00	$762.44
02/12/2016	I 01 1087874	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.67	TN	$746.76	$0.00	$746.76
02/12/2016	I 01 1087875	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.13	TN	$759.64	$0.00	$759.64
02/12/2016	I 01 1087878	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.81	TN	$778.68	$0.00	$778.68
02/12/2016	I 01 1087908	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.89	TN	$752.92	$0.00	$752.92
02/12/2016	I 01 1087909	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.84	TN	$751.52	$0.00	$751.52
02/12/2016	I 01 1087912	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.54	TN	$771.12	$0.00	$771.12
02/12/2016	I 01 1087955	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.71	TN	$747.88	$0.00	$747.88
02/12/2016	I 01 1087957	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.27	TN	$763.56	$0.00	$763.56
02/12/2016	I 01 1087959	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.69	TN	$775.32	$0.00	$775.32
02/12/2016	I 01 1087980	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.38	TN	$738.64	$0.00	$738.64
02/12/2016	I 01 1087983	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.29	TN	$764.12	$0.00	$764.12
02/12/2016	I 01 1087986	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.62	TN	$773.36	$0.00	$773.36
02/12/2016	I 01 1087999	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.75	TN	$749.00	$0.00	$749.00
02/12/2016	I 01 1088002	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.33	TN	$765.24	$0.00	$765.24
02/12/2016	I 01 1088007	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.78	TN	$777.84	$0.00	$777.84
02/15/2016	I 01 1088166	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.48	TN	$769.44	$0.00	$769.44
02/15/2016	I 01 1088172	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.30	TN	$764.40	$0.00	$764.40
02/15/2016	I 01 1088173	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.97	TN	$783.16	$0.00	$783.16
02/15/2016	I 01 1088188	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.16	TN	$760.48	$0.00	$760.48
02/15/2016	I 01 1088191	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.28	TN	$763.84	$0.00	$763.84
02/15/2016	I 01 1088193	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00	F	27.52	TN	$770.56	$0.00	$770.56
02/15/2016	I 01 1088210	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.99	TN	$755.72	$0.00	$755.72
02/15/2016	I 01 1088212	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.61	TN	$773.08	$0.00	$773.08

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
02/15/2016 I	01 1088219	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	27.76 TN	$777.28	$0.00	$777.28
02/15/2016 I	01 1088233	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.35 TN	$765.80	$0.00	$765.80
02/15/2016 I	01 1088239	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.12 TN	$759.36	$0.00	$759.36
02/15/2016 I	01 1088246	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	27.95 TN	$782.60	$0.00	$782.60
02/15/2016 I	01 1088261	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.52 TN	$770.56	$0.00	$770.56
02/15/2016 I	01 1088263	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.97 TN	$755.16	$0.00	$755.16
02/15/2016 I	01 1088268	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	27.53 TN	$770.84	$0.00	$770.84
02/15/2016 I	01 1088287	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.73 TN	$748.44	$0.00	$748.44
02/15/2016 I	01 1088308	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.88 TN	$752.64	$0.00	$752.64
02/15/2016 I	01 1088309	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	27.73 TN	$776.44	$0.00	$776.44
02/15/2016 I	01 1088311	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.79 TN	$750.12	$0.00	$750.12
02/16/2016 I	01 1088330	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.30 TN	$764.40	$0.00	$764.40
02/16/2016 I	01 1088331	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.04 TN	$757.12	$0.00	$757.12
02/16/2016 I	01 1088334	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	27.70 TN	$775.60	$0.00	$775.60
02/16/2016 I	01 1088344	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.29 TN	$764.12	$0.00	$764.12
02/16/2016 I	01 1088347	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.23 TN	$762.44	$0.00	$762.44
02/16/2016 I	01 1088354	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	28.26 TN	$791.28	$0.00	$791.28
02/16/2016 I	01 1088381	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.63 TN	$745.64	$0.00	$745.64
02/16/2016 I	01 1088383	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.28 TN	$763.84	$0.00	$763.84
02/16/2016 I	01 1088390	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	27.88 TN	$780.64	$0.00	$780.64
02/16/2016 I	01 1088410	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.26 TN	$763.28	$0.00	$763.28
02/16/2016 I	01 1088415	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.18 TN	$761.04	$0.00	$761.04
02/16/2016 I	01 1088417	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	28.20 TN	$789.60	$0.00	$789.60
02/16/2016 I	01 1088437	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.89 TN	$752.92	$0.00	$752.92
02/16/2016 I	01 1088444	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.05 TN	$757.40	$0.00	$757.40
02/16/2016 I	01 1088447	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	28.16 TN	$788.48	$0.00	$788.48
02/16/2016 I	01 1088466	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.99 TN	$755.72	$0.00	$755.72
02/16/2016 I	01 1088473	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.00 TN	$756.00	$0.00	$756.00
02/16/2016 I	01 1088479	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	28.30 TN	$792.40	$0.00	$792.40
02/16/2016 I	01 1088502	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.67 TN	$746.76	$0.00	$746.76
02/16/2016 I	01 1088506	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.12 TN	$759.36	$0.00	$759.36
02/16/2016 I	01 1088515	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	27.60 TN	$772.80	$0.00	$772.80
02/16/2016 I	01 1088526	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.43 TN	$768.04	$0.00	$768.04
02/16/2016 I	01 1088532	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.30 TN	$764.40	$0.00	$764.40
02/17/2016 I	01 1088548	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.49 TN	$769.72	$0.00	$769.72
02/17/2016 I	01 1088549	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.94 TN	$754.32	$0.00	$754.32
02/17/2016 I	01 1088554	5002160678	JOERUSSELL33/SIDI		SW-CONT SOIL W/FUEL	28.00 F	28.35 TN	$793.80	$0.00	$793.80
02/17/2016 I	01 1088575	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	28.38 TN	$794.64	$0.00	$794.64
02/17/2016 I	01 1088577	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.68 TN	$775.04	$0.00	$775.04

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate		Billing Quantity		Material Total	Tax Total	Total
02/17/2016 I	01 1088581	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.58	TN	$800.24	$0.00	$800.24
02/17/2016 I	01 1088608	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.81	TN	$778.68	$0.00	$778.68
02/17/2016 I	01 1088615	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.51	TN	$770.28	$0.00	$770.28
02/17/2016 I	01 1088619	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.18	TN	$789.04	$0.00	$789.04
02/17/2016 I	01 1088641	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.72	TN	$776.16	$0.00	$776.16
02/17/2016 I	01 1088650	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.89	TN	$752.92	$0.00	$752.92
02/17/2016 I	01 1088654	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.47	TN	$797.16	$0.00	$797.16
02/17/2016 I	01 1088685	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.51	TN	$770.28	$0.00	$770.28
02/17/2016 I	01 1088690	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.35	TN	$765.80	$0.00	$765.80
02/17/2016 I	01 1088693	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.17	TN	$788.76	$0.00	$788.76
02/17/2016 I	01 1088714	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.65	TN	$774.20	$0.00	$774.20
02/17/2016 I	01 1088717	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.30	TN	$764.40	$0.00	$764.40
02/17/2016 I	01 1088722	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.28	TN	$791.84	$0.00	$791.84
02/17/2016 I	01 1088746	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.70	TN	$775.60	$0.00	$775.60
02/17/2016 I	01 1088750	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.29	TN	$764.12	$0.00	$764.12
02/17/2016 I	01 1088754	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.26	TN	$791.28	$0.00	$791.28
02/18/2016 I	01 1088767	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.77	TN	$749.56	$0.00	$749.56
02/18/2016 I	01 1088768	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.12	TN	$759.36	$0.00	$759.36
02/18/2016 I	01 1088769	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.31	TN	$764.68	$0.00	$764.68
02/18/2016 I	01 1088780	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.28	TN	$763.84	$0.00	$763.84
02/18/2016 I	01 1088784	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.43	TN	$768.04	$0.00	$768.04
02/18/2016 I	01 1088805	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.18	TN	$761.04	$0.00	$761.04
02/18/2016 I	01 1088808	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.50	TN	$770.00	$0.00	$770.00
02/18/2016 I	01 1088824	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.42	TN	$767.76	$0.00	$767.76
02/18/2016 I	01 1088827	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.17	TN	$760.76	$0.00	$760.76
02/18/2016 I	01 1088845	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.68	TN	$775.04	$0.00	$775.04
02/18/2016 I	01 1088849	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.14	TN	$759.92	$0.00	$759.92
02/18/2016 I	01 1088865	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.38	TN	$766.64	$0.00	$766.64
02/18/2016 I	01 1088867	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.36	TN	$766.08	$0.00	$766.08
02/18/2016 I	01 1088882	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.36	TN	$766.08	$0.00	$766.08
02/18/2016 I	01 1088887	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.51	TN	$770.28	$0.00	$770.28
02/18/2016 I	01 1088891	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.31	TN	$792.68	$0.00	$792.68
02/18/2016 I	01 1088895	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.85	TN	$751.80	$0.00	$751.80
02/18/2016 I	01 1088899	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.95	TN	$754.60	$0.00	$754.60
02/18/2016 I	01 1088903	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.39	TN	$794.92	$0.00	$794.92
02/19/2016 I	01 1088909	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.51	TN	$742.28	$0.00	$742.28
02/19/2016 I	01 1088910	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.36	TN	$766.08	$0.00	$766.08
02/19/2016 I	01 1088913	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.01	TN	$784.28	$0.00	$784.28
02/19/2016 I	01 1088929	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.29	TN	$764.12	$0.00	$764.12

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate		Billing Quantity		Material Total	Tax Total	Total
02/19/2016 I	01 1088931	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.59	TN	$772.52	$0.00	$772.52
02/19/2016 I	01 1088933	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.25	TN	$791.00	$0.00	$791.00
02/19/2016 I	01 1088944	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.37	TN	$766.36	$0.00	$766.36
02/19/2016 I	01 1088949	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.36	TN	$766.08	$0.00	$766.08
02/19/2016 I	01 1088951	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.26	TN	$791.28	$0.00	$791.28
02/19/2016 I	01 1088970	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.05	TN	$757.40	$0.00	$757.40
02/19/2016 I	01 1088978	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.96	TN	$754.88	$0.00	$754.88
02/19/2016 I	01 1088981	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.70	TN	$775.60	$0.00	$775.60
02/19/2016 I	01 1089002	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.85	TN	$751.80	$0.00	$751.80
02/19/2016 I	01 1089010	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.04	TN	$757.12	$0.00	$757.12
02/19/2016 I	01 1089014	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.13	TN	$787.64	$0.00	$787.64
02/19/2016 I	01 1089039	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.84	TN	$751.52	$0.00	$751.52
02/19/2016 I	01 1089052	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.25	TN	$763.00	$0.00	$763.00
02/19/2016 I	01 1089054	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.66	TN	$774.48	$0.00	$774.48
02/19/2016 I	01 1089066	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.71	TN	$747.88	$0.00	$747.88
02/19/2016 I	01 1089073	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.04	TN	$757.12	$0.00	$757.12
02/19/2016 I	01 1089074	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.57	TN	$771.96	$0.00	$771.96
02/19/2016 I	01 1089080	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.94	TN	$754.32	$0.00	$754.32
02/22/2016 I	01 1089291	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.14	TN	$759.92	$0.00	$759.92
02/22/2016 I	01 1089293	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.86	TN	$752.08	$0.00	$752.08
02/22/2016 I	01 1089300	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.86	TN	$780.08	$0.00	$780.08
02/22/2016 I	01 1089311	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.02	TN	$756.56	$0.00	$756.56
02/22/2016 I	01 1089314	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.73	TN	$748.44	$0.00	$748.44
02/22/2016 I	01 1089326	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.65	TN	$774.20	$0.00	$774.20
02/22/2016 I	01 1089339	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.41	TN	$767.48	$0.00	$767.48
02/22/2016 I	01 1089341	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.40	TN	$767.20	$0.00	$767.20
02/22/2016 I	01 1089350	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.87	TN	$780.36	$0.00	$780.36
02/22/2016 I	01 1089359	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.20	TN	$761.60	$0.00	$761.60
02/22/2016 I	01 1089365	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.74	TN	$748.72	$0.00	$748.72
02/22/2016 I	01 1089380	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.61	TN	$773.08	$0.00	$773.08
02/22/2016 I	01 1089390	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.94	TN	$754.32	$0.00	$754.32
02/22/2016 I	01 1089399	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.46	TN	$768.88	$0.00	$768.88
02/22/2016 I	01 1089415	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.56	TN	$771.68	$0.00	$771.68
02/22/2016 I	01 1089432	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.09	TN	$758.52	$0.00	$758.52
02/22/2016 I	01 1089437	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.88	TN	$752.64	$0.00	$752.64
02/22/2016 I	01 1089445	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	25.61	TN	$717.08	$0.00	$717.08
02/22/2016 I	01 1089452	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.78	TN	$749.84	$0.00	$749.84
02/22/2016 I	01 1089454	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.86	TN	$752.08	$0.00	$752.08
02/22/2016 I	01 1089464	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.77	TN	$749.56	$0.00	$749.56

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate		Billing Quantity		Material Total	Tax Total	Total
02/22/2016 I	01 1089467	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.56	TN	$743.68	$0.00	$743.68
02/22/2016 I	01 1089468	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.29	TN	$736.12	$0.00	$736.12
02/23/2016 I	01 1089478	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.74	TN	$748.72	$0.00	$748.72
02/23/2016 I	01 1089482	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.54	TN	$771.12	$0.00	$771.12
02/23/2016 I	01 1089505	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.90	TN	$753.20	$0.00	$753.20
02/23/2016 I	01 1089506	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.57	TN	$743.96	$0.00	$743.96
02/23/2016 I	01 1089511	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.11	TN	$759.08	$0.00	$759.08
02/23/2016 I	01 1089531	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.81	TN	$750.68	$0.00	$750.68
02/23/2016 I	01 1089534	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.03	TN	$756.84	$0.00	$756.84
02/23/2016 I	01 1089543	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.68	TN	$775.04	$0.00	$775.04
02/23/2016 I	01 1089558	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.00	TN	$756.00	$0.00	$756.00
02/23/2016 I	01 1089562	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.03	TN	$756.84	$0.00	$756.84
02/23/2016 I	01 1089568	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	26.69	TN	$747.32	$0.00	$747.32
02/23/2016 I	01 1089589	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.39	TN	$766.92	$0.00	$766.92
02/23/2016 I	01 1089591	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.96	TN	$754.88	$0.00	$754.88
02/23/2016 I	01 1089595	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.26	TN	$763.28	$0.00	$763.28
02/23/2016 I	01 1089610	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.83	TN	$751.24	$0.00	$751.24
02/23/2016 I	01 1089613	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.85	TN	$751.80	$0.00	$751.80
02/23/2016 I	01 1089628	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.08	TN	$786.24	$0.00	$786.24
02/23/2016 I	01 1089638	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.04	TN	$757.12	$0.00	$757.12
02/23/2016 I	01 1089641	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.73	TN	$748.44	$0.00	$748.44
02/23/2016 I	01 1089649	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.95	TN	$782.60	$0.00	$782.60
02/23/2016 I	01 1089659	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.76	TN	$749.28	$0.00	$749.28
02/23/2016 I	01 1089661	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.53	TN	$742.84	$0.00	$742.84
02/24/2016 I	01 1089665	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.78	TN	$749.84	$0.00	$749.84
02/24/2016 I	01 1089666	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.68	TN	$747.04	$0.00	$747.04
02/24/2016 I	01 1089678	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.39	TN	$766.92	$0.00	$766.92
02/24/2016 I	01 1089680	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.19	TN	$761.32	$0.00	$761.32
02/24/2016 I	01 1089686	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.67	TN	$746.76	$0.00	$746.76
02/24/2016 I	01 1089707	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.69	TN	$775.32	$0.00	$775.32
02/24/2016 I	01 1089708	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.25	TN	$763.00	$0.00	$763.00
02/24/2016 I	01 1089711	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.88	TN	$752.64	$0.00	$752.64
02/24/2016 I	01 1089733	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.77	TN	$777.56	$0.00	$777.56
02/24/2016 I	01 1089734	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.99	TN	$755.72	$0.00	$755.72
02/24/2016 I	01 1089736	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.66	TN	$746.48	$0.00	$746.48
02/24/2016 I	01 1089752	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.58	TN	$772.24	$0.00	$772.24
02/24/2016 I	01 1089755	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.90	TN	$753.20	$0.00	$753.20
02/24/2016 I	01 1089757	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.66	TN	$746.48	$0.00	$746.48
02/24/2016 I	01 1089781	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.02	TN	$784.56	$0.00	$784.56

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate		Billing Quantity		Material Total	Tax Total	Total
02/24/2016 I	01 1089784	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.06	TN	$757.68	$0.00	$757.68
02/24/2016 I	01 1089787	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.33	TN	$737.24	$0.00	$737.24
02/24/2016 I	01 1089805	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.73	TN	$776.44	$0.00	$776.44
02/24/2016 I	01 1089806	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.66	TN	$746.48	$0.00	$746.48
02/24/2016 I	01 1089808	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.54	TN	$743.12	$0.00	$743.12
02/25/2016 I	01 1089839	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.10	TN	$730.80	$0.00	$730.80
02/25/2016 I	01 1089840	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	25.91	TN	$725.48	$0.00	$725.48
02/25/2016 I	01 1089841	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.71	TN	$775.88	$0.00	$775.88
02/25/2016 I	01 1089859	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.49	TN	$741.72	$0.00	$741.72
02/25/2016 I	01 1089862	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.62	TN	$745.36	$0.00	$745.36
02/25/2016 I	01 1089865	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.70	TN	$775.60	$0.00	$775.60
02/25/2016 I	01 1089895	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.79	TN	$750.12	$0.00	$750.12
02/25/2016 I	01 1089897	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.61	TN	$745.08	$0.00	$745.08
02/25/2016 I	01 1089899	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.01	TN	$784.28	$0.00	$784.28
02/25/2016 I	01 1089919	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.59	TN	$744.52	$0.00	$744.52
02/25/2016 I	01 1089920	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.53	TN	$742.84	$0.00	$742.84
02/25/2016 I	01 1089922	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.62	TN	$773.36	$0.00	$773.36
02/25/2016 I	01 1089945	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.71	TN	$747.88	$0.00	$747.88
02/25/2016 I	01 1089946	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.85	TN	$751.80	$0.00	$751.80
02/25/2016 I	01 1089950	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.56	TN	$771.68	$0.00	$771.68
02/25/2016 I	01 1089984	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.22	TN	$734.16	$0.00	$734.16
02/25/2016 I	01 1089987	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.87	TN	$752.36	$0.00	$752.36
02/25/2016 I	01 1089989	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.54	TN	$771.12	$0.00	$771.12
02/25/2016 I	01 1090001	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.18	TN	$733.04	$0.00	$733.04
02/25/2016 I	01 1090004	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	26.92	TN	$753.76	$0.00	$753.76
02/25/2016 I	01 1090009	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.31	TN	$764.68	$0.00	$764.68
02/26/2016 I	01 1090027	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.91	TN	$753.48	$0.00	$753.48
02/26/2016 I	01 1090028	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.12	TN	$759.36	$0.00	$759.36
02/26/2016 I	01 1090029	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.55	TN	$771.40	$0.00	$771.40
02/26/2016 I	01 1090039	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	27.02	TN	$756.56	$0.00	$756.56
02/26/2016 I	01 1090040	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.37	TN	$766.36	$0.00	$766.36
02/26/2016 I	01 1090043	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	28.01	TN	$784.28	$0.00	$784.28
02/26/2016 I	01 1090062	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.56	TN	$743.68	$0.00	$743.68
02/26/2016 I	01 1090065	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.21	TN	$761.88	$0.00	$761.88
02/26/2016 I	01 1090068	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.34	TN	$765.52	$0.00	$765.52
02/26/2016 I	01 1090096	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.74	TN	$748.72	$0.00	$748.72
02/26/2016 I	01 1090102	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00	F	27.05	TN	$757.40	$0.00	$757.40
02/26/2016 I	01 1090105	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00	F	27.57	TN	$771.96	$0.00	$771.96
02/26/2016 I	01 1090131	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00	F	26.14	TN	$731.92	$0.00	$731.92

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Specific Customer: 340

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Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
02/26/2016	I 01 1090134	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.75 TN	$749.00	$0.00	$749.00
02/26/2016	I 01 1090136	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.35 TN	$765.80	$0.00	$765.80
02/26/2016	I 01 1090166	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.69 TN	$747.32	$0.00	$747.32
02/26/2016	I 01 1090168	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.09 TN	$758.52	$0.00	$758.52
02/26/2016	I 01 1090172	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.53 TN	$770.84	$0.00	$770.84
02/26/2016	I 01 1090194	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.53 TN	$742.84	$0.00	$742.84
02/26/2016	I 01 1090197	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.18 TN	$761.04	$0.00	$761.04
02/29/2016	I 01 1090404	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.14 TN	$731.92	$0.00	$731.92
02/29/2016	I 01 1090408	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.75 TN	$777.00	$0.00	$777.00
02/29/2016	I 01 1090431	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.26 TN	$735.28	$0.00	$735.28
02/29/2016	I 01 1090442	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.51 TN	$770.28	$0.00	$770.28
02/29/2016	I 01 1090452	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.41 TN	$739.48	$0.00	$739.48
02/29/2016	I 01 1090471	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.02 TN	$756.56	$0.00	$756.56
02/29/2016	I 01 1090474	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.73 TN	$776.44	$0.00	$776.44
02/29/2016	I 01 1090486	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.29 TN	$736.12	$0.00	$736.12
02/29/2016	I 01 1090503	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.96 TN	$754.88	$0.00	$754.88
02/29/2016	I 01 1090506	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.20 TN	$789.60	$0.00	$789.60
02/29/2016	I 01 1090528	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.93 TN	$754.04	$0.00	$754.04
02/29/2016	I 01 1090534	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.95 TN	$754.60	$0.00	$754.60
02/29/2016	I 01 1090538	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.72 TN	$776.16	$0.00	$776.16
02/29/2016	I 01 1090552	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.61 TN	$745.08	$0.00	$745.08
02/29/2016	I 01 1090556	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.92 TN	$753.76	$0.00	$753.76
02/29/2016	I 01 1090559	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.32 TN	$764.96	$0.00	$764.96
02/29/2016	I 01 1090578	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.50 TN	$742.00	$0.00	$742.00
02/29/2016	I 01 1090580	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.69 TN	$747.32	$0.00	$747.32
03/01/2016	I 01 1090600	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.67 TN	$746.76	$0.00	$746.76
03/01/2016	I 01 1090603	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.65 TN	$746.20	$0.00	$746.20
03/01/2016	I 01 1090608	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.60 TN	$772.80	$0.00	$772.80
03/01/2016	I 01 1090618	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.65 TN	$746.20	$0.00	$746.20
03/01/2016	I 01 1090620	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.40 TN	$739.20	$0.00	$739.20
03/01/2016	I 01 1090627	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.93 TN	$782.04	$0.00	$782.04
03/01/2016	I 01 1090639	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.64 TN	$745.92	$0.00	$745.92
03/01/2016	I 01 1090655	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.60 TN	$772.80	$0.00	$772.80
03/01/2016	I 01 1090663	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.05 TN	$757.40	$0.00	$757.40
03/01/2016	I 01 1090675	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.85 TN	$751.80	$0.00	$751.80
03/01/2016	I 01 1090683	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.56 TN	$771.68	$0.00	$771.68
03/01/2016	I 01 1090690	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.31 TN	$736.68	$0.00	$736.68
03/01/2016	I 01 1090703	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.56 TN	$743.68	$0.00	$743.68
03/01/2016	I 01 1090713	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.97 TN	$755.16	$0.00	$755.16

Detail Customer Activity Report

January 01, 2016 to March 22, 2016

Specific Customer: 340

000340- STIMSON LUMBER COMPANY

Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
03/01/2016 I	01 1090718	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.16 TN	$788.48	$0.00	$788.48
03/01/2016 I	01 1090731	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.48 TN	$741.44	$0.00	$741.44
03/01/2016 I	01 1090737	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.52 TN	$742.56	$0.00	$742.56
03/01/2016 I	01 1090745	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.44 TN	$768.32	$0.00	$768.32
03/01/2016 I	01 1090751	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.68 TN	$747.04	$0.00	$747.04
03/02/2016 I	01 1090768	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.18 TN	$761.04	$0.00	$761.04
03/02/2016 I	01 1090769	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	26.86 TN	$752.08	$0.00	$752.08
03/02/2016 I	01 1090771	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	26.89 TN	$752.92	$0.00	$752.92
03/02/2016 I	01 1090783	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.66 TN	$774.48	$0.00	$774.48
03/02/2016 I	01 1090788	5002160678	SULLIVAN 1 RED KV		SW-CONT SOIL W/FUEL	28.00 F	27.09 TN	$758.52	$0.00	$758.52
03/02/2016 I	01 1090793	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.81 TN	$778.68	$0.00	$778.68
03/18/2016 I	01 1093194	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.79 TN	$722.12	$0.00	$722.12
03/18/2016 I	01 1093196	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.83 TN	$723.24	$0.00	$723.24
03/18/2016 I	01 1093219	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.26 TN	$707.28	$0.00	$707.28
03/18/2016 I	01 1093223	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.87 TN	$780.36	$0.00	$780.36
03/18/2016 I	01 1093246	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.58 TN	$744.24	$0.00	$744.24
03/18/2016 I	01 1093248	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	31.26 TN	$875.28	$0.00	$875.28
03/18/2016 I	01 1093258	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.12 TN	$759.36	$0.00	$759.36
03/18/2016 I	01 1093262	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	26.78 TN	$749.84	$0.00	$749.84
03/18/2016 I	01 1093285	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.30 TN	$736.40	$0.00	$736.40
03/18/2016 I	01 1093290	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	30.53 TN	$854.84	$0.00	$854.84
03/18/2016 I	01 1093308	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	24.52 TN	$686.56	$0.00	$686.56
03/18/2016 I	01 1093311	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	24.25 TN	$679.00	$0.00	$679.00
03/21/2016 I	01 1093624	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	25.05 TN	$701.40	$0.00	$701.40
03/21/2016 I	01 1093631	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	25.81 TN	$722.68	$0.00	$722.68
03/21/2016 I	01 1093651	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	27.08 TN	$758.24	$0.00	$758.24
03/21/2016 I	01 1093662	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.84 TN	$807.52	$0.00	$807.52
03/21/2016 I	01 1093688	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.48 TN	$741.44	$0.00	$741.44
03/21/2016 I	01 1093695	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.25 TN	$791.00	$0.00	$791.00
03/21/2016 I	01 1093712	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	23.40 TN	$655.20	$0.00	$655.20
03/21/2016 I	01 1093717	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.99 TN	$783.72	$0.00	$783.72
03/21/2016 I	01 1093751	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.54 TN	$799.12	$0.00	$799.12
03/21/2016 I	01 1093763	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	26.97 TN	$755.16	$0.00	$755.16
03/22/2016 I	01 1093787	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	28.69 TN	$803.32	$0.00	$803.32
03/22/2016 I	01 1093793	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	28.83 TN	$807.24	$0.00	$807.24
03/22/2016 I	01 1093813	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	28.97 TN	$811.16	$0.00	$811.16
03/22/2016 I	01 1093830	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	29.18 TN	$817.04	$0.00	$817.04
03/22/2016 I	01 1093845	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	28.83 TN	$807.24	$0.00	$807.24
03/22/2016 I	01 1093858	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	27.37 TN	$766.36	$0.00	$766.36

1008

Detail Customer Activity Report

All Ticket Types
History and Waiting

January 01, 2016 to March 22, 2016
Specific Customer: 340

All Facilities

000340- STIMSON LUMBER COMPANY

Ticket Date	Facility & Ticket Number	Contract	Truck #	Container	Material	Material Rate	Billing Quantity	Material Total	Tax Total	Total
03/22/2016 I	01 1093867	5002160678	JOE RUSSELL #61 P		SW-CONT SOIL W/FUEL	28.00 F	26.78 TN	$749.84	$0.00	$749.84
03/22/2016 I	01 1093892	5002160678	JOERUSSELL33/SID		SW-CONT SOIL W/FUEL	28.00 F	22.00 TN	$616.00	$0.00	$616.00

8001

Tickets Reported: 547 Items Reported: 547 Customer Totals: 411,584.60 $0.00 $411,584.60

Material Summary	Weight Inbound	Weight Outbound	Volume Inbound	Volume Outbound	Count Inbound	Count Outbound	Billing Quantity	Material Total	Tax Total	Total
VH - SW-CONT SOIL W,	14,699.45	0.00 TN	10,870.50	0.00 YD	0.00	0.00	14,699.45 TN	411,584.60	$0.00	11,584.60

Cash Totals:			
Invoice Totals:	$411,584.60	$0.00	$411,584.60
Report Totals:	$411,584.60	$0.00	$411,584.60

Tickets Reported: 547 Items Reported: 547

Material Summary	Weight Inbound	Weight Outbound	Volume Inbound	Volume Outbound	Count Inbound	Count Outbound	Billing Quantity	Material Total	Tax Total	Total
VH - SW-CONT SOIL W,	14,699.45	0.00 TN	10,870.50	0.00 YD	0.00	0.00	14,699.45 TN	411,584.60	$0.00	11,584.60

Detail Customer Activity Report

January 01, 2016 to March 22, 2016

Specific Customer: 340

REPORT SUMMARY

Total Tickets:	547		
Total Weight:	14,699.45	TN	In
	0.00	TN	Out
Total Volume:	10,870.50	YD	In
Total Count:			
Total Sales:	$411,584.60		

8001=812.15 Ton Final Inv. AmT=13,887.30TN

8001= 615cy Final INV AmT= 10,255.50TN

TSCA Facility Manifest Summary

Appendix G

US Ecology Inc.
PROFILE ACTIVITY REPORT

U.S. ECOLOGY IDAHO, INC., GRAND VIEW 01/01/2016 Thru 04/12/2016

Customer : 45760 **STIMSON LUMBER COMPANY**

Generator : 8941 STIMSON LUMBER CO. 40CFRPART761

Waste Stream : 38968-0 SOIL IMPACTED WITH HYDRAULIC OIL AND PCB'S

Manifest #	Work Order #	Arrived	Weight (lbs)	Weight (Tons)	Density	Cubic Yards	Gallons
006032101 FLE	16030301494	03/03/2016	64,260.00	32.13	1	24.71	0
006032102 FLE	16030301495	03/03/2016	65,540.00	32.77	1	25.21	0
006032103 FLE	16030301496	03/03/2016	62,660.00	31.33	1	24.10	0
006032104 FLE	16030401521	03/04/2016	58,560.00	29.28	1	22.52	0
006032105 FLE	16030401526	03/04/2016	64,500.00	32.25	1	24.81	0
006032106 FLE	16030401524	03/04/2016	65,200.00	32.60	1	25.08	0
006032107 FLE	16030401527	03/04/2016	61,440.00	30.72	1	23.63	0
006032108 FLE	16030401523	03/04/2016	58,380.00	29.19	1	22.45	0
006032109 FLE	16030701557	03/07/2016	63,240.00	31.62	1	24.32	0
006032110 FLE	16030701564	03/07/2016	65,640.00	32.82	1	25.25	0
006032111 FLE	16030701565	03/07/2016	62,740.00	31.37	1	24.13	0
006032112 FLE	16030701568	03/07/2016	64,860.00	32.43	1	11.31	0
006032113 FLE	16030801586	03/08/2016	65,820.00	32.91	1	25.31	0
006032114 FLE	16030801584	03/08/2016	62,220.00	31.11	1	23.93	0
006032115 FLE	16030801585	03/08/2016	59,100.00	29.55	1	22.73	0
006032116 FLE	16030801583	03/08/2016	60,300.00	30.15	1	23.19	0
006032117 FLE	16030801589	03/08/2016	66,360.00	33.18	1	25.52	0
006032118 FLE	16030901617	03/09/2016	62,640.00	31.32	1	24.09	0
006032119 FLE	16030901619	03/09/2016	63,460.00	31.73	1	24.41	0
006032120 FLE	16030901618	03/09/2016	64,620.00	32.31	1	24.85	0
006032121 FLE	16030901621	03/09/2016	65,780.00	32.89	1	25.30	0
006032122 FLE	16030901628	03/09/2016	63,760.00	31.88	1	24.52	0
006032123 FLE	16030901634	03/09/2016	65,940.00	32.97	1	11.50	0
006032124 FLE	16031001648	03/10/2016	59,760.00	29.88	1	22.98	0
006032125 FLE	16031001651	03/10/2016	65,560.00	32.78	1	25.21	0
006032126 FLE	16031001649	03/10/2016	58,980.00	29.49	1	22.68	0
006032127 FLE	16031101687	03/11/2016	62,080.00	31.04	1	23.88	0
006032129 FLE	16031101684	03/11/2016	63,280.00	31.64	1	24.34	0
006032130 FLE	16031101685	03/11/2016	64,680.00	32.34	1	24.88	0
006032131 FLE	16031701820	03/17/2016	63,060.00	31.53	1	24.25	0
006032132 FLE	16031701824	03/17/2016	52,620.00	26.31	1	20.24	0
006032133 FLE	16031701826	03/17/2016	64,840.00	32.42	1	24.94	0

Customer : 45760 **STIMSON LUMBER COMPANY**

Generator : 8941 STIMSON LUMBER CO. 40CFRPART761

Waste Stream : 38968-0 SOIL IMPACTED WITH HYDRAULIC OIL AND PCB'S

Manifest #	Work Order #	Arrived	Weight (lbs)	Weight (Tons)	Density	Cubic Yards	Gallons
006032134 FLE	16031701833	03/17/2016	63,220.00	31.61	1	24.31	0
006032135 FLE	16031801852	03/18/2016	58,040.00	29.02	1	22.32	0
006032136 FLE	16031801851	03/18/2016	61,280.00	30.64	1	23.57	0
006032137 FLE	16031801853	03/18/2016	65,740.00	32.87	1	25.28	0
006032138 FLE	16031801865	03/18/2016	59,200.00	29.60	1	22.77	0
006032139 FLE	16031801855	03/18/2016	65,140.00	32.57	1	25.05	0
006032141 FLE	16031501752	03/15/2016	62,940.00	31.47	1	24.21	0
006032142 FLE	16031101683	03/11/2016	64,700.00	32.35	1	24.88	0
006032143 FLE	16031101686	03/11/2016	54,380.00	27.19	1	20.91	0
006032144 FLE	16031101691	03/11/2016	65,900.00	32.95	1	25.35	0
006032145 FLE	16031101681	03/11/2016	63,420.00	31.71	1	24.39	0
006032146 FLE	16031401722	03/14/2016	59,020.00	29.51	1	22.70	0
006032147 FLE	16031401724	03/14/2016	58,760.00	29.38	1	22.60	0
006032148 FLE	16031401720	03/14/2016	64,380.00	32.19	1	24.76	0
006032149 FLE	16031401721	03/14/2016	60,720.00	30.36	1	23.35	0
006032150 FLE	16031401723	03/14/2016	64,880.00	32.44	1	24.95	0
006032151 FLE	16032101908	03/21/2016	64,340.00	32.17	1	24.75	0
006032152 FLE	16032101900	03/21/2016	52,820.00	26.41	1	20.31	0
006032153 FLE	16031501751	03/15/2016	64,560.00	32.28	1	24.83	0
006032154 FLE	16031501754	03/15/2016	65,060.00	32.53	1	25.02	0
006032155 FLE	16031501753	03/15/2016	52,420.00	26.21	1	20.16	0
006032156 FLE	16031501762	03/15/2016	64,780.00	32.39	1	24.91	0
006032157 FLE	16031501760	03/15/2016	62,800.00	31.40	1	24.15	0
006032158 FLE	16031601783	03/16/2016	58,740.00	29.37	1	22.59	0
006032159 FLE	16031601784	03/16/2016	65,140.00	32.57	1	25.05	0
006032160 FLE	16031601787	03/16/2016	65,040.00	32.52	1	25.01	0
006032161 FLE	16031601785	03/16/2016	61,180.00	30.59	1	23.53	0
006032162 FLE	16031601786	03/16/2016	61,700.00	30.85	1	23.73	0
006032163 FLE	16032101897	03/21/2016	62,240.00	31.12	1	23.94	0
006032164 FLE	16032101899	03/21/2016	63,160.00	31.58	1	24.29	0
006032165 FLE	16032101901	03/21/2016	63,080.00	31.54	1	24.26	0
006032166 FLE	16032201931	03/22/2016	62,200.00	31.10	1	23.92	0

Customer : 45760 **STIMSON LUMBER COMPANY**

Generator : 8941 STIMSON LUMBER CO. 40CFRPART761

Waste Stream : 38968-0 SOIL IMPACTED WITH HYDRAULIC OIL AND PCB'S

Manifest #	Work Order #	Arrived	Weight (lbs)	Weight (Tons)	Density	Cubic Yards	Gallons
006032167 FLE	16032201930	03/22/2016	60,220.00	30.11	1	23.16	0
006032168 FLE	16032201934	03/22/2016	65,880.00	32.94	1	25.34	0
006032169 FLE	16032201935	03/22/2016	58,720.00	29.36	1	22.58	0
006032170 FLE	16032301964	03/23/2016	64,020.00	32.01	1	24.62	0
006032171 FLE	16032301970	03/23/2016	63,700.00	31.85	1	24.50	0
006032172 FLE	16032201953	03/22/2016	53,540.00	26.77	1	20.59	0
006032173 FLE	16032301968	03/23/2016	63,360.00	31.68	1	24.37	0
006032174 FLE	16032301966	03/23/2016	64,340.00	32.17	1	24.75	0
006032413 FLE	16032402004	03/24/2016	65,100.00	32.55	1	25.04	0
006032414 FLE	16032402009	03/24/2016	61,220.00	30.61	1	23.55	0
006032415 FLE	16032402003	03/24/2016	59,120.00	29.56	1	22.74	0
006032416 FLE	16032402006	03/24/2016	65,340.00	32.67	1	25.13	0
006032417 FLE	16032402035	03/24/2016	62,720.00	31.36	1	10.94	0
006032418 FLE	16032402005	03/24/2016	59,060.00	29.53	1	22.71	0
006032419 FLE	16032402031	03/24/2016	60,820.00	30.41	1	23.39	0
006032420 FLE	16032402033	03/24/2016	53,080.00	26.54	1	20.41	0
006032421 FLE	16032402036	03/24/2016	62,460.00	31.23	1	10.90	0
006032422 FLE	16032802054	03/28/2016	64,900.00	32.45	1	24.96	0
006032423 FLE	16032802058	03/28/2016	65,920.00	32.96	1	25.35	0
006032424 FLE	16032802056	03/28/2016	59,700.00	29.85	1	22.96	0
006032425 FLE	16032802057	03/28/2016	59,060.00	29.53	1	22.71	0
006032426 FLE	16032802055	03/28/2016	60,800.00	30.40	1	23.38	0
006032427 FLE	16032902095	03/29/2016	63,260.00	31.63	1	24.33	0
006032428 FLE	16032902096	03/29/2016	64,300.00	32.15	1	24.73	0
006032429 FLE	16032902106	03/29/2016	63,400.00	31.70	1	24.38	0
006032430 FLE	16032902098	03/29/2016	63,640.00	31.82	1	24.48	0
006032431 FLE	16033002139	03/30/2016	59,600.00	29.80	1	22.92	0
006032432 FLE	16033002135	03/30/2016	61,700.00	30.85	1	23.73	0
006032433 FLE	16033002136	03/30/2016	58,980.00	29.49	1	22.68	0
006032434 FLE	16033002140	03/30/2016	62,240.00	31.12	1	23.94	0
006032435 FLE	16033002134	03/30/2016	60,920.00	30.46	1	23.43	0
006032436 FLE	16033102182	03/31/2016	62,700.00	31.35	1	24.11	0

Customer : 45760 **STIMSON LUMBER COMPANY**

Generator : 8941 STIMSON LUMBER CO. 40CFRPART761

Waste Stream : 38968-0 SOIL IMPACTED WITH HYDRAULIC OIL AND PCB'S

Manifest #	Work Order #	Arrived	Weight (lbs)	Weight (Tons)	Density	Cubic Yards	Gallons
006032437 FLE	16033102183	03/31/2016	63,960.00	31.98	1	24.60	0
006032438 FLE	16033102190	03/31/2016	62,440.00	31.22	1	24.01	0
006032439 FLE	16033102181	03/31/2016	61,960.00	30.98	1	23.83	0
006032440 FLE	16040102215	04/01/2016	58,340.00	29.17	1	22.44	0
006032441 FLE	16040102216	04/01/2016	60,600.00	30.30	1	23.31	0
006032442 FLE	16040102218	04/01/2016	60,860.00	30.43	1	23.41	0
006032443 FLE	16040102214	04/01/2016	61,780.00	30.89	1	23.76	0
006032444 FLE	16040402249	04/04/2016	63,380.00	31.69	1	24.38	0
006032445 FLE	16040402255	04/04/2016	62,420.00	31.21	1	24.01	0
006032446 FLE	16040402258	04/04/2016	63,900.00	31.95	1	24.58	0
006032447 FLE	16040402250	04/04/2016	64,380.00	32.19	1	24.76	0
006032448 FLE	16040602319	04/06/2016	63,600.00	31.80	1	24.46	0
006032449 FLE	16040502290	04/05/2016	59,960.00	29.98	1	23.06	0
006032450 FLE	16040502288	04/05/2016	64,080.00	32.04	1	24.65	0
006032451 FLE	16040502289	04/05/2016	65,020.00	32.51	1	25.01	0
006032452 FLE	16040502291	04/05/2016	61,120.00	30.56	1	23.51	0
006032453 FLE	16040502283	04/05/2016	61,840.00	30.92	1	23.78	0
006032454 FLE	16040502308	04/05/2016	62,980.00	31.49	1	0.27	55
006032456 FLE	16040602322	04/06/2016	64,300.00	32.15	1	24.73	0
006032457 FLE	16040602323	04/06/2016	53,360.00	26.68	1	20.52	0
006032458 FLE	16040702381	04/07/2016	6,700.00	3.35	1	2.58	0
006032464 FLE	16040702363	04/07/2016	65,680.00	32.84	1	25.26	0
006032465 FLE	16040702356	04/07/2016	61,560.00	30.78	1	23.68	0
006032466 FLE	16040702355	04/07/2016	62,120.00	31.06	1	23.89	0
006032467 FLE	16040702357	04/07/2016	62,240.00	31.12	1	23.94	0
015053518 JJK	16020200713	02/02/2016	61,020.00	30.51	1	23.47	0
015053520 JJK	16030201456	03/02/2016	58,720.00	29.36	1	22.58	0
015053522 JJK	16020200712	02/02/2016	54,540.00	27.27	1	20.98	0
015053524 JJK	16020200723	02/02/2016	70,000.00	35.00	1	26.92	0
015053527 JJK	16021501019	02/15/2016	63,900.00	31.95	1	24.58	0
015053529 JJK	16021501016	02/15/2016	59,000.00	29.50	1	22.69	0
015053531 JJK	16021200965	02/12/2016	63,580.00	31.79	1	24.45	0

Customer : 45760 **STIMSON LUMBER COMPANY**

Generator : 8941 STIMSON LUMBER CO. 40CFRPART761

Waste Stream : 38968-0 SOIL IMPACTED WITH HYDRAULIC OIL AND PCB'S

Manifest #	Work Order #	Arrived	Weight (lbs)	Weight (Tons)	Density	Cubic Yards	Gallons
015053533 JJK	16021200967	02/12/2016	54,160.00	27.08	1	20.83	0
015053535 JJK	16021200966	02/12/2016	64,160.00	32.08	1	24.68	0
015053537 JJK	16021100936	02/11/2016	65,340.00	32.67	1	25.13	0
015053539 JJK	16021100938	02/11/2016	64,920.00	32.46	1	24.97	0
015053541 JJK	16021100935	02/11/2016	58,620.00	29.31	1	22.55	0
015053543 JJK	16021000908	02/10/2016	62,820.00	31.41	1	24.16	0
015053545 JJK	16021000910	02/10/2016	53,640.00	26.82	1	20.63	0
015053548 JJK	16021000915	02/10/2016	63,780.00	31.89	1	24.53	0
015053550 JJK	16020900867	02/09/2016	59,300.00	29.65	1	22.81	0
015053552 JJK	16020900873	02/09/2016	64,860.00	32.43	1	24.95	0
015053554 JJK	16020900869	02/09/2016	64,700.00	32.35	1	24.88	0
015053556 JJK	16020800849	02/08/2016	62,720.00	31.36	1	24.12	0
015053558 JJK	16020800842	02/08/2016	62,620.00	31.31	1	24.08	0
015053560 JJK	16020800843	02/08/2016	52,940.00	26.47	1	20.36	0
015053562 JJK	16020500813	02/05/2016	58,960.00	29.48	1	22.68	0
015053564 JJK	16020500800	02/05/2016	64,120.00	32.06	1	24.66	0
015053566 JJK	16020500799	02/05/2016	65,060.00	32.53	1	25.02	0
015053568 JJK	16020400770	02/04/2016	60,980.00	30.49	1	23.45	0
015053570 JJK	16020400778	02/04/2016	63,040.00	31.52	1	24.25	0
015053572 JJK	16020400772	02/04/2016	54,060.00	27.03	1	20.79	0
015053574 JJK	16020300733	02/03/2016	62,320.00	31.16	1	23.97	0
015053576 JJK	16020300734	02/03/2016	61,580.00	30.79	1	23.68	0
015053578 JJK	16020300736	02/03/2016	55,260.00	27.63	1	21.25	0
015053580 JJK	16022401294	02/24/2016	53,180.00	26.59	1	20.45	0
015053582 JJK	16022501333	02/25/2016	59,620.00	29.81	1	22.93	0
015053584 JJK	16022401295	02/24/2016	61,480.00	30.74	1	23.65	0
015053586 JJK	16022401307	02/24/2016	63,260.00	31.63	1	24.33	0
015053588 JJK	16022201243	02/22/2016	63,720.00	31.86	1	24.51	0
015053590 JJK	16022601361	02/26/2016	62,920.00	31.46	1	24.20	0
015053592 JJK	16021901194	02/19/2016	58,740.00	29.37	1	22.59	0
015053594 JJK	16021901199	02/19/2016	64,820.00	32.41	1	24.93	0
015053596 JJK	16021901196	02/19/2016	64,400.00	32.20	1	24.77	0

Customer : 45760 **STIMSON LUMBER COMPANY**

Generator : 8941 STIMSON LUMBER CO. 40CFRPART761

Waste Stream : 38968-0 SOIL IMPACTED WITH HYDRAULIC OIL AND PCB'S

Manifest #	Work Order #	Arrived	Weight (lbs)	Weight (Tons)	Density	Cubic Yards	Gallons
015053598 JJK	16021901193	02/19/2016	61,640.00	30.82	1	23.71	0
015053600 JJK	16022201234	02/22/2016	52,780.00	26.39	1	20.30	0
015053602 JJK	16022201236	02/22/2016	63,420.00	31.71	1	24.39	0
015053609 JJK	16022601367	02/26/2016	63,500.00	31.75	1	24.42	0
015053611 JJK	16021801156	02/18/2016	64,060.00	32.03	1	24.64	0
015053613 JJK	16021801146	02/18/2016	53,600.00	26.80	1	20.61	0
015053615 JJK	16021801145	02/18/2016	63,440.00	31.72	1	24.40	0
015053617 JJK	16022301264	02/23/2016	65,060.00	32.53	1	25.02	0
015053619 JJK	16021601072	02/16/2016	63,900.00	31.95	1	24.58	0
015053621 JJK	16021601062	02/16/2016	53,360.00	26.68	1	20.52	0
015053623 JJK	16021601064	02/16/2016	63,540.00	31.77	1	24.44	0
015053625 JJK	16021701104	02/17/2016	59,460.00	29.73	1	22.87	0
015053627 JJK	16021701105	02/17/2016	62,380.00	31.19	1	23.99	0
015053629 JJK	16021701107	02/17/2016	65,140.00	32.57	1	25.05	0
015053631 JJK	16021701106	02/17/2016	65,380.00	32.69	1	25.15	0
015053633 JJK	16022501334	02/25/2016	65,400.00	32.70	1	25.15	0
015053635 JJK	16022301266	02/23/2016	64,020.00	32.01	1	24.62	0
015053637 JJK	16021501018	02/15/2016	64,340.00	32.17	1	24.75	0
015053639 JJK	16021501020	02/15/2016	61,060.00	30.53	1	23.48	0
015053641 JJK	16021501021	02/15/2016	61,260.00	30.63	1	23.56	0
015053643 JJK	16021501017	02/15/2016	62,540.00	31.27	1	24.05	0
015053645 JJK	16030101428	03/01/2016	63,060.00	31.53	1	24.25	0
015053647 JJK	16030101431	03/01/2016	63,780.00	31.89	1	24.53	0
015053649 JJK	16030101421	03/01/2016	53,520.00	26.76	1	20.58	0
015053651 JJK	16030201457	03/02/2016	61,520.00	30.76	1	23.66	0
015053653 JJK	16030301493	03/03/2016	62,520.00	31.26	1	24.05	0
015053657 JJK	16030201460	03/02/2016	59,320.00	29.66	1	22.81	0
015053659 JJK	16030201461	03/02/2016	65,460.00	32.73	1	25.18	0
015053663 JJK	16031001650	03/10/2016	60,840.00	30.42	1	23.40	0
015053669 JJK	16031001652	03/10/2016	65,540.00	32.77	1	25.21	0
015053677 JJK	16030301492	03/03/2016	53,160.00	26.58	1	20.45	0
015053691 JJK	16022501332	02/25/2016	64,560.00	32.28	1	24.83	0

Customer : 45760 **STIMSON LUMBER COMPANY**

Generator : 8941 STIMSON LUMBER CO. 40CFRPART761

Waste Stream : 38968-0 SOIL IMPACTED WITH HYDRAULIC OIL AND PCB'S

Manifest #	Work Order #	Arrived	Weight (lbs)	Weight (Tons)	Density	Cubic Yards	Gallons
015053693 JJK	16022401296	02/24/2016	63,280.00	31.64	1	24.34	0
015053695 JJK	16022401308	02/24/2016	63,600.00	31.80	1	24.46	0
015053697 JJK	16022601373	02/26/2016	63,160.00	31.58	1	24.29	0
015053699 JJK	16022601369	02/26/2016	61,180.00	30.59	1	23.53	0
015053701 JJK	16022601359	02/26/2016	52,920.00	26.46	1	20.35	0
015053703 JJK	16022901397	02/29/2016	64,820.00	32.41	1	24.93	0
015053705 JJK	16022901398	02/29/2016	59,000.00	29.50	1	22.69	0
015053707 JJK	16022901394	02/29/2016	58,400.00	29.20	1	22.46	0
015053709 JJK	16022901396	02/29/2016	64,640.00	32.32	1	24.86	0
015053711 JJK	16030201458	03/02/2016	65,400.00	32.70	1	25.15	0
015053713 JJK	16022901395	02/29/2016	61,300.00	30.65	1	23.58	0
015053715 JJK	16030101426	03/01/2016	63,560.00	31.78	1	24.45	0
		Sub Total :	**12,561,940.00**	**6,280.97**		**4,753.56**	**55.00**
		Total :	**12,561,940.00**	**6,280.97**		**4,753.56**	**55.00**

DEQ Work Plan Deviation Correspondence

Appendix H

From:	Tyler Etzel
To:	Tyler Etzel
Subject:	Fwd: 2-16-2016 conference call summary
Date:	Wednesday, June 08, 2016 4:53:48 PM
Attachments:	Dec 2015.pdf ATT00001.htm

Sent from my iPhone

Begin forwarded message:

From: "Tyler Etzel" <tetzel@newfields.com>
To: "Keith Large" <klarge@mt.gov>, "'Steven Petrin (spetrin@stimsonlumber.com)'" <spetrin@stimsonlumber.com>, "Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com)" <brent.sasser@ipaper.com>, "Kris Cook" <kCook@envirocon.com>, "Rodney Roberts (rroberts@envirocon.com)" <rroberts@envirocon.com>, "Randy Mendonsa (rmendonsa@envirocon.com)" <rmendonsa@envirocon.com>
Cc: "Ty Schmechel" <tschmechel@newfields.com>
Subject: 2-16-2016 conference call summary

All,

Rod estimates that the current total for TSCA is 2,523 cy and the current total for Republic is 6,540 cy. Rod will provide a more accurate estimate after the drone survey of the excavation and stockpiles are completed.

Steven and Brent would like an estimate from Rod on the amount of time it will take to remove overburden and chase the smear-zone impacted soil. Rod indicated he would not be able to give that estimate until we receive the sample and survey data.

Envirocon was also asked to provide a new schedule of values for the current (completed) and future work in which we will “chase” the zone of impacted soil located from approximately 30 to 37 ft bgs.

Keith Large gave verbal approval to abandon MW-15R assuming we have 4 consecutive sampling events with no detections above DEQ standards (I have attached those raw results to this email).

Keith Large also gave verbal approval to modify the composite sampling of the overburden stockpile soil.

Stimson and IP would like Keith to provide email confirmation documenting these two verbal approvals.

We agreed to schedule a conference call this Thursday, February 18 at 2 PM (MST) to discuss the sample results that we expect to receive that morning. I will send out an Outlook invite with call-in information to everyone on this email.

Tyler Etzel
Sr. Geologist
NewFields Companies, LLC
1120 Cedar Street
Missoula, Montana 59802
Office: (406) 549-8270 ext. 202
Fax: (406) 549-8277
Mobile: (406) 240-7795

tetzel@newfields.com
www.newfields.com

From: Tyler Etzel <tetzel@newfields.com>
Sent: Wednesday, June 08, 2016 4:54 PM
To: Tyler Etzel
Subject: Fwd: Recent lab results suggest excavation perimeter expansion may not be neccessary

Sent from my iPhone

Begin forwarded message:

> **From:** "Large, Keith" <klarge@mt.gov>
> **Date:** February 23, 2016 at 7:57:56 AM MST
> **To:** Tyler Etzel <tetzel@newfields.com>
> **Subject: RE: Recent lab results suggest excavation perimeter expansion may not be neccessary**
>
> When will the results from the overburden stockpile be back from the lab? Is Steven going to be on-site on Thursday? You think Thursday would be a better day for me to come over this week? I stopped by for ten minutes yesterday to show Jon (DEQ attorney) the work.
>
> Keith Large
> (406) 444 6569
>
> ---
>
> **From:** Tyler Etzel [mailto:tetzel@newfields.com]
> **Sent:** Tuesday, February 23, 2016 7:54 AM
> **To:** Large, Keith
> **Subject:** RE: Recent lab results suggest excavation perimeter expansion may not be neccessary
>
> Thanks Keith.
>
> **Tyler Etzel**
>
> ---
>
> **From:** Large, Keith [mailto:klarge@mt.gov]
> **Sent:** Tuesday, February 23, 2016 7:53 AM
> **To:** Tyler Etzel
> **Cc:** 'Steven Petrin (spetrin@stimsonlumber.com)'; Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com); Rodney Roberts (rroberts@envirocon.com); Kris Cook; Randy Mendonsa (rmendonsa@envirocon.com)
> **Subject:** RE: Recent lab results suggest excavation perimeter expansion may not be neccessary
>
> Tyler,
>
> Your request is approved and you may proceed with backfilling CB-1/14 and the east portion of CB-5 with the clean backfill from the Missoula landfill (Republic) so the site is safer to work and proceed with the last of the removals in the other areas stated below.
>
> Thanks,
>
> Keith Large
> (406) 444 6569

From: Tyler Etzel [mailto:tetzel@newfields.com]
Sent: Monday, February 22, 2016 12:03 PM
To: Large, Keith
Cc: 'Steven Petrin (spetrin@stimsonlumber.com)'; Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com); Rodney Roberts (rroberts@envirocon.com); Kris Cook; Randy Mendonsa (rmendonsa@envirocon.com)
Subject: Recent lab results suggest excavation perimeter expansion may not be neccessary

Keith,

Please review the lab results below. I've highlighted (in yellow) the most recent sample results we received on Friday. The expanded base of CB-1/14 shows clean soil below our target level and the expanded base of CB-5 shows clean soil on the eastern side of the base, but still shows impacts along the western side of the base.

These results suggest that we can proceed with east and west wall samples from CB-1/14 and CB-5. These wall samples can be collected without expansion of the perimeter of the excavation; however, Envirocon will need to place clean backfill from the Republic landfill into the bottom 10 feet of CB-1/14. This method will allow them to safely access the west base of CB-5, the east and west walls of CB-1/14 and CB-5, the south wall of CB-5, and the north wall of CB-11.

If these areas come back with clean results, we are done with active excavation at the site.

Stimson would like approval from you (Keith) to place this clean backfill into CB-1/14 and (the east portion of) CB-5.

Cell ID	Sample ID / Location	Date	Aroclor 1254 Result (mg/kg)	Pass / Fail	2nd Resample ID / Location	Date	2nd Aroclor 1254 Result (mg/kg)	Pass / Fail	3rd Resample ID / Location	Date	3rd Aroclor 1254 Result (mg/kg)	Pass / Fail
CB-13	CB-13-South Wall	1/15/2016	11	Fail	CB-13-Southwall-2	1/21/2016	1.7	Fail	CB-13-Southwall-3	1/27/2016	0.26	Pass
	CB-13-North Wall	1/15/2016	ND	Pass								
	CB-13-Base	1/15/2016	2.9	Fail	CB-13-Base-2	1/21/2016	0.97	Fail	CB-13-Base-3	1/27/2016	0.025	Pass
	CB-13-West Wall	1/15/2016	3.7	Fail	CB-13-Westwall-2	1/21/2016	2.7	Fail	CB-13-Westwall-3	1/27/2016		Pass
CB-12	CB-12 South Wall	1/18/2016	0.19	Pass								
	CB-12 West Wall	1/18/2016	0.89	Fail	CB-12-Base-2	1/26/2016	0.42	Pass				
	CB-12 East Wall	1/18/2016	1.4	Fail	CB-12-Eastwall-2	1/26/2016	0.69	Pass				
	CB-12 Base	1/18/2016	1.4	Fail	CB-12-Westwall-2	1/26/2016	0.32	Pass				
CB-4	CB-4-Base	1/25/2016	0.24	Pass								
	CB-4-Eastwall	1/25/2016	11	Fail	CB-4-Eastwall-2	1/28/2016	5.0	Fail	excavated four (4) feet to the east and encountered fill material from MW-15 excavation			
	CB-4-Southwall	1/25/2016	2.3	Fail	CB-4-Southwall-2	1/28/2016	1.7	Fail	CB-4-Southwall-3	2/2/2016	0.42	Pass
CB-TP-7	CB-TP-7-Base	1/25/2016	3.0	Fail	CB-TP-7-Base-2	1/28/2016	0.029	Pass				
	CB-TP-7-Northwall	1/25/2016	2.5	Fail	CB-TP-7-Northwall-2	1/28/2016	0.86	Fail	excavated four (4) feet to the north and encountered fill material from MW-13 excavation			
	CB-TP-7-Eastwall	1/25/2016	1.9	Fail	**CB-TP-7-Eastwall-2 could not be sampled - no sidewall left after additl 4' excavation							
CB-10	CB-10-Base	1/25/2016	0.11	Pass								
	CB-10-Northwall	1/25/2016	0.12	Pass								
	CB-10-Eastwall	1/25/2016	0.089	Pass								
	CB-10-Westwall	1/25/2016	2.2	Fail	**CB-10-Westwall-2 could not be sampled - no sidewall left after additl 4' excavation							
CB-TP-5	CB-TP-5-Base	1/25/2016	110	Fail (TSCA)	CB-TP-5-Base-2	1/29/2016	0.049	Pass				

	CB-TP-5-Eastwall	1/25/2016	0.34	Pass								
	CB-TP-5-Southwall	1/25/2016	0.82	Fail	CB-TP-5-Southwall-2	1/28/2016	0.53	Pass				
CB-2	CB-2-Base	1/26/2016	0.18	Pass								
	CB-2-Northwall	1/26/2016	3.2	Fail	CB-2-Northwall-2	2/3/2016	0.042	Pass				
	CB-2-Eastwall	1/26/2016	1.4	Fail	CB-2-Eastwall-2	2/1/2016	0.24	Pass				
	CB-2-Westwall	1/26/2016	456	Fail (TSCA)	Will not excavate further to the west here because it borders CB-14 and samples will be collected from base of CB-14							
CB-14	CB-14-Northwall	1/26/2016	1.1	Fail	CB-14-Northwall-2	2/1/2016	0.028	Pass				
CB-TP-1	CB-TP-1-Northwall	1/27/2016	1.0	Fail	CB-TP-1-Northwall-2	2/4/2016	0.090	Pass				
	CB-TP-1-Westwall	1/27/2016	1.4	Fail	CB-TP-1-Westwall-2	2/4/2016	ND	Pass	CB-TP-1-Westwall-3	2/11/2016	0.035	Pass
	CB-TP-1-Base	1/27/2016	6.4	Fail	CB-TP-1-Base-2	2/4/2016	ND	Pass				
CB-TP-2	CB-TP-2-Southwall	1/27/2016	4.9	Fail	CB-TP-2-Southwall-2	2/4/2016	1.5	Fail	CB-TP-2-Southwall-3	2/11/2016	0.15	Pass
	CB-TP-2-Westwall	1/27/2016	2.9	Fail	CB-TP-2-Westwall-2	2/4/2016	0.51	Pass				
	CB-TP-2-Base	1/27/2016	0.96	Fail	CB-TP-2-Base-2	2/4/2016	1.3	Fail	CB-TP-2-Base-3	2/11/2016	0.75	Fail
CB-11	CB-11-Base	2/5/2016	1.2	Fail	CB-11-Base-2	2/12/2016	0.22	Pass				
	CB-11-Southwall	2/5/2016	1.8	Fail	CB-11-Southwall-2	2/12/2016	0.66	Pass				
	CB-11-Eastwall	2/5/2016	0.44	Pass								
	CB-11-Northwall	2/5/2016	73	Fail (TSCA)								
	CB-11-Westwall	2/5/2016	1,730	Fail (TSCA)	CB-11-Westwall no longer exits - adjacent to CB-5							
CB-7	CB-7-Base	2/8/2016	1710	Fail (TSCA)	CB-7-Base-2	2/12/2016	3.2	Fail	CB-7-WBase	2/16/2016	0.24	Pass
	CB-7-Southwall	2/8/2016	0.73	Pass								
	CB-7-Eastwall	2/8/2016	2.4	Fail								
	CB-7-Westwall	2/8/2016	176	Fail (TSCA)	CB-7-Westwall-2	2/12/2016	0.21	Pass				
CB-5	CB-5-Eastwall	2/9/2016	31	Fail								
	CB-5-Southwall	2/9/2016	609	Fail (TSCA)								
	CB-5-Westwall	2/9/2016	3000	Fail (TSCA)	CB-5-Westwall-2	2/12/2016	1.6	Fail				
	CB-5-Base	2/15/2016	28	Fail	CB-5-EBase	2/16/2016	0.39	Pass				
					CB-5-WBase	2/16/2016	63	Fail (TSCA)				
CB-14	CB-14-Eastwall	2/9/2016	794	Fail (TSCA)								
	CB-14-Westwall	2/9/2016	500	Fail (TSCA)								
	CB-14-Base	2/16/2016	0.20	Pass								

	CB-14-EBase	2/16/2016	**0.29**	**Pass**								
CB-1	**CB-1-Eastwall**	2/9/2016	**1970**	Fail (**TSCA**)								
	CB-1-Westwall	2/9/2016	**1310**	Fail (**TSCA**)								
	CB-1-Base	2/15/2016	**0.016**	**Pass**								

Tyler Etzel
Sr. Geologist
NewFields Companies, LLC
1120 Cedar Street
Missoula, Montana 59802
Office: (406) 549-8270 ext. 202
Fax: (406) 549-8277
Mobile: (406) 240-7795

tetzel@newfields.com
www.newfields.com

From:	Tyler Etzel
To:	Tyler Etzel
Subject:	Fwd: Current status of Stimson work
Date:	Wednesday, June 08, 2016 4:56:33 PM
Attachments:	image001.png

Sent from my iPhone

Begin forwarded message:

From: "Large, Keith" <klarge@mt.gov>
To: "Tyler Etzel" <tetzel@newfields.com>
Cc: "Ty Schmechel" <tschmechel@newfields.com>, "'Steven Petrin (spetrin@stimsonlumber.com)'" <spetrin@stimsonlumber.com>, "Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com)" <brent.sasser@ipaper.com>, "Kris Cook" <kCook@envirocon.com>, "Rodney Roberts (rroberts@envirocon.com)" <rroberts@envirocon.com>, "Randy Mendonsa (rmendonsa@envirocon.com)" <rmendonsa@envirocon.com>
Subject: RE: Current status of Stimson work

Tyler,

Thanks, the map attached is just what I needed.

Please sample OB piles 1 and 2 for the 8 RCRA metals and EPH-screen. I am comfortable stating that piles 1 and 2 have passed for PCBs.

Re-sample OB piles 3, 4 and 5 for PCBs (per your request yesterday to re-sample PCBs), the 8 RCRA metals and EPH-screen. Please re-sample these three piles (3, 4 and 5) today if you can and get those samples to the lab ASAP. Also, please take lots of pictures of the sampling locations.

Also, let's make sure OB piles 1 and 2 are also meeting the spec highlighted below before any more fill goes on top of those areas or a new proposed alternative you guys might want to purpose to alter the spec, otherwise let's stick to the original plan and our discussion started in the email attached:

For those areas receiving clean fill in accordance with the restoration plan, backfill
material will be generated either onsite through overburden segregation, excavated from
other clean areas of the mill site, or imported from offsite commercial sources. Material
brought in from other parts of the site or imported will be sampled and analyzed to

confirm that it is suitable for use as fill. Backfill confirmation sampling will consist of 5-
point composite samples collected for every 400 cubic yards and analyzed for site
contaminants of concern (PCBs, EPH-screen, and the 8 RCRA metals (As, Ba, Cd, Cr,
Pb, Se, Ag, and Hg). Samples may also be analyzed for pH, organic content and salinity,
depending on the nature and proposed use of the material. The analytical results will be
provided to the DEQ for review and approval. Backfilled soil will be compacted using
conventional equipment including sheepsfoot roller compactors and generally placed to
90% maximum dry density per ASTM D 698 standard proctor.

Please feel free to call me with any questions, I don't have another meeting today until 3:30 so I'm avalable. I still plan to visit the site tomorrow.

Thanks,

Keith Large
(406) 444 6569

From: Tyler Etzel [mailto:tetzel@newfields.com]
Sent: Wednesday, February 24, 2016 9:59 AM
To: 'Steven Petrin (spetrin@stimsonlumber.com)'; Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com); Large, Keith; Kris Cook; Rodney Roberts (rroberts@envirocon.com); Randy Mendonsa (rmendonsa@envirocon.com)
Cc: Ty Schmechel
Subject: RE: Current status of Stimson work

Attached are the stockpile "sections" that were sampled on 2/17/16. Each section of stockpile was sampled via a 5-point composite subsample, from just below the surface of each pile (1 to 2 inches).

I've also included the concentrations that were detected.

Tyler Etzel

From: Tyler Etzel
Sent: Wednesday, February 24, 2016 8:39 AM
To: 'Steven Petrin (spetrin@stimsonlumber.com)'; Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com); Keith Large; Kris Cook; Rodney Roberts (rroberts@envirocon.com); Randy Mendonsa (rmendonsa@envirocon.com)

Cc: Ty Schmechel
Subject: Current status of Stimson work

All,
Please see the attached spreadsheet table and PDF for that includes the work performed yesterday. I've highlighted (in Yellow) the samples that were collected yesterday in the spreadsheet. The earliest we will see those results is late afternoon on Thursday, but more likely we will have them Friday by mid-morning.

Rod Roberts is going to send me an aerial of the overburden stockpiles that were sampled. I will place the sample locations onto this and send back to everyone.

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www.newfields.com

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Perspective. Vision. Solutions.

From:	Tyler Etzel
To:	Tyler Etzel
Subject:	Fwd: B16030854_Stimson Data Package 23
Date:	Wednesday, June 08, 2016 5:23:20 PM
Attachments:	image001.png image002.png

Sent from my iPhone

Begin forwarded message:

From: "Large, Keith" <klarge@mt.gov>
Date: March 16, 2016 at 2:03:38 PM MDT
To: Tyler Etzel <tetzel@newfields.com>, Rodney Roberts <rroberts@envirocon.com>, "'Steven Petrin (spetrin@stimsonlumber.com)'" <spetrin@stimsonlumber.com>, "Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com)" <brent.sasser@ipaper.com>, Kris Cook <kCook@envirocon.com>, Randy Mendonsa <rmendonsa@envirocon.com>
Cc: Rick Steinberg <rsteinberg@envirocon.com>
Subject: RE: B16030854_Stimson Data Package 23

Tyler,

Ok, I see what you mean now and yes that should work . And all the material will go to Missoula right?

Keith Large
(406) 444 6569

From: Tyler Etzel [mailto:tetzel@newfields.com]
Sent: Wednesday, March 16, 2016 1:33 PM
To: Large, Keith; Rodney Roberts; 'Steven Petrin (spetrin@stimsonlumber.com)'; Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com); Kris Cook; Randy Mendonsa
Cc: Rick Steinberg
Subject: RE: B16030854_Stimson Data Package 23

Keith,

Here's what I believe the data show should be done:

- Remove 6 inches from Comp2 road and Comp3 road and dispose this material at Republic (then clean backfill).
- Excavate more test pits at Comp1 area, Comp4 area, and Comp5 area. Excavate these test locations down to 18 inches (6 inches plus an additional 12 inches), then sample these three areas at 18 inches bgs to see if we have clean material at that depth. If we do, then Envirocon will need to excavate and dispose those three areas from ground surface to 18 inches bgs (then clean backfill if samples show cleanup levels have been attained).

I recommended an additional 12 inches (rather than 6 inches) to speed this process up.

Tyler Etzel

From: Large, Keith [mailto:klarge@mt.gov]
Sent: Wednesday, March 16, 2016 12:46 PM
To: Rodney Roberts; Tyler Etzel; 'Steven Petrin (spetrin@stimsonlumber.com)'; Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com); Kris Cook; Randy Mendonsa
Cc: Rick Steinberg
Subject: RE: B16030854_Stimson Data Package 23

Tyler/Rod:

After reviewing the data, I looks to me like all five haul road areas needs some work.

6 to 8 inch removal in areas 1, 4 and 5. Then scrap areas 2 and 3 two more inches, there still is some surface material above 0.74 ppm in areas 2 and 3.

I would suggest doing area 1 by itself, stand alone to do when you can and it is convenient.

But areas 4 and 5 a little different, plus 2 and 3.

I would do areas 4 and 5 first, then scrap areas 2 and 3 two inches second. Or, unless it would be easier to scrap areas 2 and 3 into area 4 and load out from over on that side of the site.

It is your guys call on how to do it. Please keep me posted on what you decide to do. I'm still planning on not visiting again until next Tuesday.

Thanks,

Keith Large
(406) 444 6569

From: Rodney Roberts [mailto:rroberts@envirocon..com]
Sent: Wednesday, March 16, 2016 12:35 PM
To: Tyler Etzel; 'Steven Petrin (spetrin@stimsonlumber.com)'; Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com); Large, Keith; Kris Cook; Randy Mendonsa
Cc: Rick Steinberg
Subject: RE: B16030854_Stimson Data Package 23

I will need to discuss the additional work in detail. The backfill will be completed today and the haul trucks need to begin this activity ASAP to avoid stand by costs. Please contact me to discuss the plan in detail. Envirocon will include this scope of work in a change order request as the details are defined.

Thanks

Thanks

Rodney Roberts
Project Manager
Envirocon
PO B0x 10032
Portland, Oregon 97296
O: 503-285-6164

C: 425-864-3265
rroberts@envirocon.com

From: Tyler Etzel [mailto:tetzel@newfields.com]
Sent: Wednesday, March 16, 2016 11:57 AM
To: 'Steven Petrin (spetrin@stimsonlumber.com)'; Brent Sasser (brent.sasser@ipaper.com) (brent.sasser@ipaper.com); Keith Large; Rodney Roberts; Kris Cook; Randy Mendonsa
Subject: FW: B16030854_Stimson Data Package 23

All,

Tabulated below and attached above are the results of the road and stockpile confirmation sampling. Based on the results, additional material needs to be removed from **three areas** (see attached map): 1) the small, unpaved stockpile area named Comp#1; 2) the road named Comp#4; and, 3) the road named Comp#5.

I suggest that up to one additional foot (12 inches) of material be removed from these areas so that we are can (optimistically) assume no additional work would be required... Steven, please confirm with me that you want us to proceed with this additional work. It will increase our costs again, so the change order I gave you would need to be updated unless you give me approval via email.

Phase IV Cleanup Confirmation Sampling (mg/kg)

Sample	Collection Date	Analysis Date	Result (mg/kg)	Description
Comp1a (surface material)	3/9/2016	3/11/2016	34	Stockpile
Comp1b (6 - 8 inches bgs)	3/9/2016	3/15/2016	0.86	Stockpile
Comp 2a (surface material)	3/9/2016	3/11/2016	1.9	Road
Comp2b (6 - 8 inches bgs)	3/9/2016	3/15/2016	0.34	Road
Comp3a (surface material)	3/9/2016	3/11/2016	2.4	Road
Comp3b (6 - 8 inches bgs)	3/9/2016	3/15/2016	0.33	Road
Comp4a (surface material)	3/9/2016	3/11/2016	2.7	Road
Comp4b (6 - 8 inches bgs)	3/9/2016	3/15/2016	2.5	Road
Comp5a (surface material)	3/9/2016	3/11/2016	3.8	Road
Comp5b (6 - 8 inches bgs)	3/9/2016	3/15/2016	1.3	Road

Tyler Etzel

From: Rebecca Aschim [mailto:raschim@energylab.com]
Sent: Wednesday, March 16, 2016 11:14 AM
To: Donna McCammon
Cc: Tyler Etzel
Subject: B16030854_Stimson Data Package 23

Good morning,
Attached you will find the complete report, CSV and invoice for Stimson Data Package 23 samples received by Energy Laboratories on 03/10/16 and assigned ELI work order number B161030854. No hard copies of the report or invoice will be mailed.
Please contact Wynn Pippin (406-869-6269) wpippin@energylab.com or Shari Endy (406-869-6253) sendy@energylab.com to answer any of your analytical questions.

Energy Laboratories, Inc. appreciates your business.
Sincerely,

Rebecca Aschim
Client Service Representative

toll free: 800.735.4489 x6464
office: 406.252.6325
fax: 406.252.6069
raschim@energylab.com

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Laboratory Analytical Reports - Concrete and Piping Samples

Appendix I

ANALYTICAL SUMMARY REPORT

January 20, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16011052 Quote ID: B3097 - Stimson

Project Name: Stimson 350.0033.006

Energy Laboratories Inc Billings MT received the following 10 samples for NewFields on 1/18/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16011052-001	Concrete-1	01/15/16 12:27	01/18/16	Solid	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16011052-002	Concrete-2	01/15/16 12:29	01/18/16	Solid	Same As Above
B16011052-003	Concrete-3	01/15/16 12:33	01/18/16	Solid	Same As Above
B16011052-004	Concrete-4	01/15/16 12:35	01/18/16	Solid	Same As Above
B16011052-005	Concrete-5	01/15/16 12:36	01/18/16	Solid	Same As Above
B16011052-006	Concrete-6	01/15/16 12:37	01/18/16	Solid	Same As Above
B16011052-007	Concrete-7	01/15/16 12:43	01/18/16	Solid	Same As Above
B16011052-008	Concrete-8	01/15/16 12:45	01/18/16	Solid	Same As Above
B16011052-009	Concrete-9	01/15/16 12:47	01/18/16	Solid	Same As Above
B16011052-010	Concrete-10	01/15/16 12:49	01/18/16	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

Digitally signed by
Leigh Ann. Wise
Date: 2016.01.20 12:26:56 -07:00

CLIENT: NewFields
Project: Stimson 350.0033.006
Work Order: B16011052

Report Date: 01/20/16

CASE NARRATIVE

Samples consisted of concrete cores that were pulverized using metal hammers. Sand to pea sized particles were used in measuring sample mass at extraction. A light red substance was visibly present in the following samples:

B16011052-002A Concrete-2

B16011052-005A Concrete-5

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-001
Client Sample ID: Concrete-1

Report Date: 01/20/16
Collection Date: 01/15/16 12:27
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.2	wt%		0.2		SW3550A	01/18/16 13:44 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.035		SW8082	01/20/16 08:14 / jem
Aroclor 1221	ND	mg/kg-dry		0.068		SW8082	01/20/16 08:14 / jem
Aroclor 1232	ND	mg/kg-dry		0.035		SW8082	01/20/16 08:14 / jem
Aroclor 1242	ND	mg/kg-dry		0.035		SW8082	01/20/16 08:14 / jem
Aroclor 1248	ND	mg/kg-dry		0.035		SW8082	01/20/16 08:14 / jem
Aroclor 1254	1.0	mg/kg-dry		0.035		SW8082	01/20/16 08:14 / jem
Aroclor 1260	ND	mg/kg-dry		0.035		SW8082	01/20/16 08:14 / jem
Aroclor 1262	ND	mg/kg-dry		0.035		SW8082	01/20/16 08:14 / jem
Aroclor 1268	ND	mg/kg-dry		0.035		SW8082	01/20/16 08:14 / jem
Surr: Decachlorobiphenyl	104	%REC		50-126		SW8082	01/20/16 08:14 / jem
Surr: Tetrachloro-m-xylene	66.0	%REC		42-115		SW8082	01/20/16 08:14 / jem

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-002
Client Sample ID: Concrete-2

Report Date: 01/20/16
Collection Date: 01/15/16 12:29
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	5.4	wt%		0.2		SW3550A	01/18/16 13:50 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		183		SW8082	01/19/16 18:47 / jem
Aroclor 1221	ND	mg/kg-dry		356		SW8082	01/19/16 18:47 / jem
Aroclor 1232	ND	mg/kg-dry		183		SW8082	01/19/16 18:47 / jem
Aroclor 1242	ND	mg/kg-dry		183		SW8082	01/19/16 18:47 / jem
Aroclor 1248	ND	mg/kg-dry		183		SW8082	01/19/16 18:47 / jem
Aroclor 1254	9560	mg/kg-dry		183		SW8082	01/19/16 18:47 / jem
Aroclor 1260	ND	mg/kg-dry		183		SW8082	01/19/16 18:47 / jem
Aroclor 1262	ND	mg/kg-dry		183		SW8082	01/19/16 18:47 / jem
Aroclor 1268	ND	mg/kg-dry		183		SW8082	01/19/16 18:47 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	01/19/16 18:47 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	01/19/16 18:47 / jem

- The Reporting Limits reflect a 10000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-003
Client Sample ID: Concrete-3

Report Date: 01/20/16
Collection Date: 01/15/16 12:33
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	01/18/16 13:54 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.96		SW8082	01/19/16 19:15 / jem
Aroclor 1221	ND	mg/kg-dry		1.9		SW8082	01/19/16 19:15 / jem
Aroclor 1232	ND	mg/kg-dry		0.96		SW8082	01/19/16 19:15 / jem
Aroclor 1242	ND	mg/kg-dry		0.96		SW8082	01/19/16 19:15 / jem
Aroclor 1248	ND	mg/kg-dry		0.96		SW8082	01/19/16 19:15 / jem
Aroclor 1254	14	mg/kg-dry		0.96		SW8082	01/19/16 19:15 / jem
Aroclor 1260	ND	mg/kg-dry		0.96		SW8082	01/19/16 19:15 / jem
Aroclor 1262	ND	mg/kg-dry		0.96		SW8082	01/19/16 19:15 / jem
Aroclor 1268	ND	mg/kg-dry		0.96		SW8082	01/19/16 19:15 / jem
Surr: Decachlorobiphenyl	70.0	%REC		50-126		SW8082	01/19/16 19:15 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	01/19/16 19:15 / jem

- The Reporting Limits reflect a 50 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-004
Client Sample ID: Concrete-4

Report Date: 01/20/16
Collection Date: 01/15/16 12:35
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	4.4	wt%		0.2		SW3550A	01/18/16 13:58 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.35		SW8082	01/19/16 19:43 / jem
Aroclor 1221	ND	mg/kg-dry		0.69		SW8082	01/19/16 19:43 / jem
Aroclor 1232	ND	mg/kg-dry		0.35		SW8082	01/19/16 19:43 / jem
Aroclor 1242	ND	mg/kg-dry		0.35		SW8082	01/19/16 19:43 / jem
Aroclor 1248	ND	mg/kg-dry		0.35		SW8082	01/19/16 19:43 / jem
Aroclor 1254	10	mg/kg-dry		0.35		SW8082	01/19/16 19:43 / jem
Aroclor 1260	ND	mg/kg-dry		0.35		SW8082	01/19/16 19:43 / jem
Aroclor 1262	ND	mg/kg-dry		0.35		SW8082	01/19/16 19:43 / jem
Aroclor 1268	ND	mg/kg-dry		0.35		SW8082	01/19/16 19:43 / jem
Surr: Decachlorobiphenyl	97.0	%REC		50-126		SW8082	01/19/16 19:43 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	01/19/16 19:43 / jem

- The Reporting Limits reflect a 20 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-005
Client Sample ID: Concrete-5

Report Date: 01/20/16
Collection Date: 01/15/16 12:36
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	4.7	wt%		0.2		SW3550A	01/18/16 13:59 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		174		SW8082	01/19/16 20:11 / jem
Aroclor 1221	ND	mg/kg-dry		339		SW8082	01/19/16 20:11 / jem
Aroclor 1232	ND	mg/kg-dry		174		SW8082	01/19/16 20:11 / jem
Aroclor 1242	ND	mg/kg-dry		174		SW8082	01/19/16 20:11 / jem
Aroclor 1248	ND	mg/kg-dry		174		SW8082	01/19/16 20:11 / jem
Aroclor 1254	8960	mg/kg-dry		174		SW8082	01/19/16 20:11 / jem
Aroclor 1260	ND	mg/kg-dry		174		SW8082	01/19/16 20:11 / jem
Aroclor 1262	ND	mg/kg-dry		174		SW8082	01/19/16 20:11 / jem
Aroclor 1268	ND	mg/kg-dry		174		SW8082	01/19/16 20:11 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	01/19/16 20:11 / jem
Surr: Tetrachloro-m-xylene	0	%REC	O	42-115		SW8082	01/19/16 20:11 / jem

- The Reporting Limits reflect a 10000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-006
Client Sample ID: Concrete-6

Report Date: 01/20/16
Collection Date: 01/15/16 12:37
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	01/18/16 14:01 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	01/19/16 20:38 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	01/19/16 20:38 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	01/19/16 20:38 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	01/19/16 20:38 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	01/19/16 20:38 / jem
Aroclor 1254	0.90	mg/kg-dry		0.019		SW8082	01/19/16 20:38 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	01/19/16 20:38 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	01/19/16 20:38 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	01/19/16 20:38 / jem
Surr: Decachlorobiphenyl	111	%REC		50-126		SW8082	01/19/16 20:38 / jem
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	01/19/16 20:38 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-007
Client Sample ID: Concrete-7

Report Date: 01/20/16
Collection Date: 01/15/16 12:43
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.9	wt%		0.2		SW3550A	01/18/16 14:03 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.36		SW8082	01/19/16 21:06 / jem
Aroclor 1221	ND	mg/kg-dry		0.71		SW8082	01/19/16 21:06 / jem
Aroclor 1232	ND	mg/kg-dry		0.36		SW8082	01/19/16 21:06 / jem
Aroclor 1242	ND	mg/kg-dry		0.36		SW8082	01/19/16 21:06 / jem
Aroclor 1248	ND	mg/kg-dry		0.36		SW8082	01/19/16 21:06 / jem
Aroclor 1254	13	mg/kg-dry		0.36		SW8082	01/19/16 21:06 / jem
Aroclor 1260	ND	mg/kg-dry		0.36		SW8082	01/19/16 21:06 / jem
Aroclor 1262	ND	mg/kg-dry		0.36		SW8082	01/19/16 21:06 / jem
Aroclor 1268	ND	mg/kg-dry		0.36		SW8082	01/19/16 21:06 / jem
Surr: Decachlorobiphenyl	108	%REC		50-126		SW8082	01/19/16 21:06 / jem
Surr: Tetrachloro-m-xylene	87.0	%REC		42-115		SW8082	01/19/16 21:06 / jem

- The Reporting Limits reflect a 20 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-008
Client Sample ID: Concrete-8

Report Date: 01/20/16
Collection Date: 01/15/16 12:45
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.6	wt%		0.2		SW3550A	01/18/16 14:05 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		3.6		SW8082	01/20/16 09:39 / jem
Aroclor 1221	ND	mg/kg-dry		7.0		SW8082	01/20/16 09:39 / jem
Aroclor 1232	ND	mg/kg-dry		3.6		SW8082	01/20/16 09:39 / jem
Aroclor 1242	ND	mg/kg-dry		3.6		SW8082	01/20/16 09:39 / jem
Aroclor 1248	ND	mg/kg-dry		3.6		SW8082	01/20/16 09:39 / jem
Aroclor 1254	105	mg/kg-dry		3.6		SW8082	01/20/16 09:39 / jem
Aroclor 1260	ND	mg/kg-dry		3.6		SW8082	01/20/16 09:39 / jem
Aroclor 1262	ND	mg/kg-dry		3.6		SW8082	01/20/16 09:39 / jem
Aroclor 1268	ND	mg/kg-dry		3.6		SW8082	01/20/16 09:39 / jem
Surr: Decachlorobiphenyl	101	%REC		50-126		SW8082	01/19/16 21:34 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	01/19/16 21:34 / jem

- The Reporting Limits reflect a 200 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-009
Client Sample ID: Concrete-9

Report Date: 01/20/16
Collection Date: 01/15/16 12:47
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.7	wt%		0.2		SW3550A	01/18/16 14:07 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	01/19/16 22:01 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	01/19/16 22:01 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	01/19/16 22:01 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	01/19/16 22:01 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	01/19/16 22:01 / jem
Aroclor 1254	0.32	mg/kg-dry		0.018		SW8082	01/19/16 22:01 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	01/19/16 22:01 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	01/19/16 22:01 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	01/19/16 22:01 / jem
Surr: Decachlorobiphenyl	93.0	%REC		50-126		SW8082	01/19/16 22:01 / jem
Surr: Tetrachloro-m-xylene	56.0	%REC		42-115		SW8082	01/19/16 22:01 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006
Lab ID: B16011052-010
Client Sample ID: Concrete-10

Report Date: 01/20/16
Collection Date: 01/15/16 12:49
DateReceived: 01/18/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.1	wt%		0.2		SW3550A	01/18/16 14:10 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.18		SW8082	01/19/16 22:29 / jem
Aroclor 1221	ND	mg/kg-dry		0.36		SW8082	01/19/16 22:29 / jem
Aroclor 1232	ND	mg/kg-dry		0.18		SW8082	01/19/16 22:29 / jem
Aroclor 1242	ND	mg/kg-dry		0.18		SW8082	01/19/16 22:29 / jem
Aroclor 1248	ND	mg/kg-dry		0.18		SW8082	01/19/16 22:29 / jem
Aroclor 1254	6.7	mg/kg-dry		0.18		SW8082	01/19/16 22:29 / jem
Aroclor 1260	ND	mg/kg-dry		0.18		SW8082	01/19/16 22:29 / jem
Aroclor 1262	ND	mg/kg-dry		0.18		SW8082	01/19/16 22:29 / jem
Aroclor 1268	ND	mg/kg-dry		0.18		SW8082	01/19/16 22:29 / jem
Surr: Decachlorobiphenyl	110	%REC		50-126		SW8082	01/19/16 22:29 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	01/19/16 22:29 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson 350.0033.006

Report Date: 01/20/16
Work Order: B16011052

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96299
Lab ID: MB-96299	Method Blank				Run: AECD.I_160119A				01/19/16 12:44
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	98	50	126			
Surr: Tetrachloro-m-xylene			0.0017	61	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96299	Laboratory Control Sample				Run: AECD.I_160119A				01/19/16 13:12
Aroclor 1254	0.310	mg/kg	0.017	94	62	126			
Surr: Decachlorobiphenyl			0.0017	98	50	126			
Surr: Tetrachloro-m-xylene			0.0017	60	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011099-002AMB	Sample Matrix Spike				Run: AECD.I_160119A				01/19/16 14:36
Aroclor 1254	0.421	mg/kg-dry	0.020	109	62	126			
Surr: Decachlorobiphenyl			0.0020	103	50	126			
Surr: Tetrachloro-m-xylene			0.0020	71	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16011099-002ADB	Sample Matrix Spike Duplicate				Run: AECD.I_160119A				01/19/16 15:04
Aroclor 1254	0.407	mg/kg-dry	0.020	106	62	126	3.4	40	
Surr: Decachlorobiphenyl			0.0020	105	50	126			
Surr: Tetrachloro-m-xylene			0.0020	72	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16011052

Login completed by: Ladonna Weis

Reviewed by: BL2000\lcadreau

Reviewed Date: 1/19/2016

Date Received: 1/18/2016

Received by: src

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Temperature Blank temperature for Cooler 1 was 2.5 C and Cooler 2 was 3.4 C.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson 350.0033.006

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data) Format: _____

☐ POTW/WWTP ☐ LEVEL IV

☐ State: _____ ☐ NELAC

☐ Other: _____

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 Concrete-1	1/15/16	1227	S	X			X	2-day TAT	-001
2 Concrete-2	1/15/16	1229							-002
3 Concrete-3	1/15/16	1233							-003
4 Concrete-4	1/15/16	1235							-004
5 Concrete-5	1/15/16	1236							-005
6 Concrete-6	1/15/16	1237							-006
7 Concrete-7	1/15/16	1243							-007
8 Concrete-8	1/15/16	1245							-008
9 Concrete-9	1/15/16	1247							-009
10 Concrete-10	1/15/16	1249							-010

➡ Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2-day TAT

B16011052

Shipped by: UPS GRD

Cooler ID(s):

Receipt Temp: 3.4 °C

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N

Intact: (Y) N

Signature Match: (Y) N

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	1/15/16 1530	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory: [signature]	Date/Time: 1/16/16 8:20am	Signature: [signature]

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

January 19, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16010966 Quote ID: B3097 - Stimson

Project Name: Stimson Compressor Building 350.0033.006

Energy Laboratories Inc Billings MT received the following 6 samples for NewFields on 1/15/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16010966-001	Pipe-1	01/14/16 0:00	01/15/16	Solid	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16010966-002	Pipe-2	01/14/16 0:00	01/15/16	Solid	Same As Above
B16010966-003	Pipe-3	01/14/16 0:00	01/15/16	Solid	Same As Above
B16010966-004	Pipe-4	01/14/16 0:00	01/15/16	Solid	Same As Above
B16010966-005	Pipe-5	01/14/16 0:00	01/15/16	Solid	Same As Above
B16010966-006	Pipe-6	01/14/16 0:00	01/15/16	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building 350.0033.006
Lab ID: B16010966-001
Client Sample ID: Pipe-1

Report Date: 01/19/16
Collection Date: 01/14/16
DateReceived: 01/15/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	55	wt%		0.2		SW3550A	01/15/16 12:32 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		1.9		SW8082	01/18/16 04:22 / jem
Aroclor 1221	ND	mg/kg-dry		3.6		SW8082	01/18/16 04:22 / jem
Aroclor 1232	ND	mg/kg-dry		1.9		SW8082	01/18/16 04:22 / jem
Aroclor 1242	ND	mg/kg-dry		1.9		SW8082	01/18/16 04:22 / jem
Aroclor 1248	ND	mg/kg-dry		1.9		SW8082	01/18/16 04:22 / jem
Aroclor 1254	89	mg/kg-dry		1.9		SW8082	01/18/16 04:22 / jem
Aroclor 1260	ND	mg/kg-dry		1.9		SW8082	01/18/16 04:22 / jem
Aroclor 1262	ND	mg/kg-dry		1.9		SW8082	01/18/16 04:22 / jem
Aroclor 1268	ND	mg/kg-dry		1.9		SW8082	01/18/16 04:22 / jem
Surr: Decachlorobiphenyl	149	%REC	S	50-126		SW8082	01/18/16 04:22 / jem
Surr: Tetrachloro-m-xylene	81.0	%REC		42-115		SW8082	01/18/16 04:22 / jem

- The Reporting Limits reflect a 50 times dilution due to the level of Aroclor 1254 detected in the sample.
- The Aroclor 1254 pattern detected in this sample was degraded. The high percent recovery of Decachlorobiphenyl is due to co-eluting interference.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building 350.0033.006
Lab ID: B16010966-002
Client Sample ID: Pipe-2

Report Date: 01/19/16
Collection Date: 01/14/16
DateReceived: 01/15/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	60	wt%		0.2		SW3550A	01/15/16 12:38 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		168		SW8082	01/17/16 16:25 / jem
Aroclor 1221	ND	mg/kg-dry		327		SW8082	01/17/16 16:25 / jem
Aroclor 1232	ND	mg/kg-dry		168		SW8082	01/17/16 16:25 / jem
Aroclor 1242	ND	mg/kg-dry		168		SW8082	01/17/16 16:25 / jem
Aroclor 1248	ND	mg/kg-dry		168		SW8082	01/17/16 16:25 / jem
Aroclor 1254	6170	mg/kg-dry		168		SW8082	01/17/16 16:25 / jem
Aroclor 1260	ND	mg/kg-dry		168		SW8082	01/17/16 16:25 / jem
Aroclor 1262	ND	mg/kg-dry		168		SW8082	01/17/16 16:25 / jem
Aroclor 1268	ND	mg/kg-dry		168		SW8082	01/17/16 16:25 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	01/17/16 16:25 / jem
Surr: Tetrachloro-m-xylene	134	%REC	S	42-115		SW8082	01/17/16 23:46 / jem

- The Reporting Limits reflect a 4000 times dilution due to the level of Aroclor 1254 detected in the sample.
- The high percent recovery of Tetrachloro-m-xylene is due to co-eluting interference.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building 350.0033.006
Lab ID: B16010966-003
Client Sample ID: Pipe-3

Report Date: 01/19/16
Collection Date: 01/14/16
DateReceived: 01/15/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	30	wt%		0.2		SW3550A	01/15/16 12:40 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		123		SW8082	01/17/16 17:20 / jem
Aroclor 1221	ND	mg/kg-dry		239		SW8082	01/17/16 17:20 / jem
Aroclor 1232	ND	mg/kg-dry		123		SW8082	01/17/16 17:20 / jem
Aroclor 1242	ND	mg/kg-dry		123		SW8082	01/17/16 17:20 / jem
Aroclor 1248	ND	mg/kg-dry		123		SW8082	01/17/16 17:20 / jem
Aroclor 1254	3940	mg/kg-dry		123		SW8082	01/17/16 17:20 / jem
Aroclor 1260	ND	mg/kg-dry		123		SW8082	01/17/16 17:20 / jem
Aroclor 1262	ND	mg/kg-dry		123		SW8082	01/17/16 17:20 / jem
Aroclor 1268	ND	mg/kg-dry		123		SW8082	01/17/16 17:20 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	01/17/16 17:20 / jem
Surr: Tetrachloro-m-xylene	106	%REC		42-115		SW8082	01/18/16 00:41 / jem

- The Reporting Limits reflect a 5000 times dilution due to the level of Aroclor 1254 detected in the sample.
- The Aroclor 1254 pattern detected in this sample was degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building 350.0033.006
Lab ID: B16010966-004
Client Sample ID: Pipe-4

Report Date: 01/19/16
Collection Date: 01/14/16
DateReceived: 01/15/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	23	wt%		0.2		SW3550A	01/15/16 12:41 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		221		SW8082	01/17/16 18:15 / jem
Aroclor 1221	ND	mg/kg-dry		430		SW8082	01/17/16 18:15 / jem
Aroclor 1232	ND	mg/kg-dry		221		SW8082	01/17/16 18:15 / jem
Aroclor 1242	ND	mg/kg-dry		221		SW8082	01/17/16 18:15 / jem
Aroclor 1248	ND	mg/kg-dry		221		SW8082	01/17/16 18:15 / jem
Aroclor 1254	4560	mg/kg-dry		221		SW8082	01/17/16 18:15 / jem
Aroclor 1260	ND	mg/kg-dry		221		SW8082	01/17/16 18:15 / jem
Aroclor 1262	ND	mg/kg-dry		221		SW8082	01/17/16 18:15 / jem
Aroclor 1268	ND	mg/kg-dry		221		SW8082	01/17/16 18:15 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	01/17/16 18:15 / jem
Surr: Tetrachloro-m-xylene	88.0	%REC		42-115		SW8082	01/18/16 01:36 / jem

- The Reporting Limits reflect a 10000 times dilution due to the level of Aroclor 1254 detected in the sample.
- The Aroclor 1254 pattern detected in this sample was degraded.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building 350.0033.006
Lab ID: B16010966-005
Client Sample ID: Pipe-5

Report Date: 01/19/16
Collection Date: 01/14/16
DateReceived: 01/15/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	41	wt%		0.2		SW3550A	01/15/16 12:43 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		570		SW8082	01/17/16 19:10 / jem
Aroclor 1221	ND	mg/kg-dry		1110		SW8082	01/17/16 19:10 / jem
Aroclor 1232	ND	mg/kg-dry		570		SW8082	01/17/16 19:10 / jem
Aroclor 1242	ND	mg/kg-dry		570		SW8082	01/17/16 19:10 / jem
Aroclor 1248	ND	mg/kg-dry		570		SW8082	01/17/16 19:10 / jem
Aroclor 1254	20500	mg/kg-dry		570		SW8082	01/17/16 19:10 / jem
Aroclor 1260	ND	mg/kg-dry		570		SW8082	01/17/16 19:10 / jem
Aroclor 1262	ND	mg/kg-dry		570		SW8082	01/17/16 19:10 / jem
Aroclor 1268	ND	mg/kg-dry		570		SW8082	01/17/16 19:10 / jem
Surr: Decachlorobiphenyl	0	%REC	O	50-126		SW8082	01/17/16 19:10 / jem
Surr: Tetrachloro-m-xylene	116	%REC	S	42-115		SW8082	01/18/16 02:31 / jem

- The Reporting Limits reflect a 20000 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
O - Diluted out.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Compressor Building 350.0033.006
Lab ID: B16010966-006
Client Sample ID: Pipe-6

Report Date: 01/19/16
Collection Date: 01/14/16
DateReceived: 01/15/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	22	wt%		0.2		SW3550A	01/15/16 12:45 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		11		SW8082	01/17/16 20:05 / jem
Aroclor 1221	ND	mg/kg-dry		22		SW8082	01/17/16 20:05 / jem
Aroclor 1232	ND	mg/kg-dry		11		SW8082	01/17/16 20:05 / jem
Aroclor 1242	ND	mg/kg-dry		11		SW8082	01/17/16 20:05 / jem
Aroclor 1248	ND	mg/kg-dry		11		SW8082	01/17/16 20:05 / jem
Aroclor 1254	265	mg/kg-dry		11		SW8082	01/17/16 20:05 / jem
Aroclor 1260	ND	mg/kg-dry		11		SW8082	01/17/16 20:05 / jem
Aroclor 1262	ND	mg/kg-dry		11		SW8082	01/17/16 20:05 / jem
Aroclor 1268	ND	mg/kg-dry		11		SW8082	01/17/16 20:05 / jem
Surr: Decachlorobiphenyl	144	%REC	S	50-126		SW8082	01/18/16 03:26 / jem
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	01/18/16 03:26 / jem

- The Reporting Limits reflect a 500 times dilution due to the level of Aroclor 1254 detected in the sample.
- The high percent recovery of Decachlorobiphenyl is due to co-eluting interference.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 01/19/16

Project: Stimson Compressor Building 350.0033.006 **Work Order:** B16010966

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 96257
Lab ID: MB-96257	Method Blank				Run: AECD.I_160117A				01/17/16 15:01
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.034						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	93	50	126			
Surr: Tetrachloro-m-xylene			0.0017	59	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-96257	Laboratory Control Sample				Run: AECD.I_160117A				01/17/16 15:29
Aroclor 1254	0.311	mg/kg	0.017	93	62	126			
Surr: Decachlorobiphenyl			0.0017	93	50	126			
Surr: Tetrachloro-m-xylene			0.0017	63	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16010966-001AMB	Sample Duplicate				Run: AECD.I_160117A				01/18/16 04:49
Aroclor 1016	ND	mg/kg-dry	1.9					40	
Aroclor 1221	ND	mg/kg-dry	3.7					40	
Aroclor 1232	ND	mg/kg-dry	1.9					40	
Aroclor 1242	ND	mg/kg-dry	1.9					40	
Aroclor 1248	ND	mg/kg-dry	1.9					40	
Aroclor 1254	91.5	mg/kg-dry	1.9				2.6	40	
Aroclor 1260	ND	mg/kg-dry	1.9					40	
Aroclor 1262	ND	mg/kg-dry	1.9					40	
Aroclor 1268	ND	mg/kg-dry	1.9					40	
Surr: Decachlorobiphenyl			0.19	77	50	126			
Surr: Tetrachloro-m-xylene			0.19	78	42	115			
- The Reporting Limits reflect a 50 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16010966-001ADB	Sample Duplicate				Run: AECD.I_160117A				01/18/16 05:17
Aroclor 1016	ND	mg/kg-dry	1.9					40	
Aroclor 1221	ND	mg/kg-dry	3.7					40	
Aroclor 1232	ND	mg/kg-dry	1.9					40	
Aroclor 1242	ND	mg/kg-dry	1.9					40	
Aroclor 1248	ND	mg/kg-dry	1.9					40	
Aroclor 1254	84.3	mg/kg-dry	1.9				5.6	40	
Aroclor 1260	ND	mg/kg-dry	1.9					40	
Aroclor 1262	ND	mg/kg-dry	1.9					40	
Aroclor 1268	ND	mg/kg-dry	1.9					40	
Surr: Decachlorobiphenyl			0.19	76	50	126			
Surr: Tetrachloro-m-xylene			0.19	76	42	115			
- Because the amount of Aroclor 1254 detected in the sample was significantly higher than the spike amount, the Matrix Spike and Matrix Spike Duplicate samples are calculated as Duplicate samples.									
- The Reporting Limits reflect a 50 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16010966

Login completed by: Tabitha Edwards

Reviewed by: BL2000\lcadreau

Reviewed Date: 1/18/2016

Date Received: 1/15/2016

Received by: qej

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	3.4°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields Companies, LLC

Project Name, PWS, Permit, Etc. 350.0053.006 Stimson Compressor Building

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Tetzel Phone/Fax: (406) 549-8270 Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other
DW - Drinking Water

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs								SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments	LABORATORY USE ONLY
1 Pipe-1	1/14/16		S	X										X	2-day TAT	B601092001
2 Pipe-2																002
3 Pipe-3																003
4 Pipe-4																004
5 Pipe-5																005
6 Pipe-6																006
7																
8																
9																
10																

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2-day TAT

Shipped by: Rtn. UPS Grnd.

Cooler ID(s):

Receipt Temp 3.4 °C JB

On Ice: (Y) N

Custody Seal On Bottle (Y) N; On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	1/14/16 1545				

Received by Laboratory: Dawnee Jones Date/Time: 1/15/16 09:15 Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

Laboratory Analytical Reports - Overburden Stockpile and Haul Road Samples

Appendix J

ANALYTICAL SUMMARY REPORT

February 22, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16021340 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package 20

Energy Laboratories Inc Billings MT received the following 5 samples for NewFields on 2/18/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16021340-001	Overburden 1	02/17/16 11:05	02/18/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16021340-002	Overburden 2	02/17/16 11:10	02/18/16	Soil	Same As Above
B16021340-003	Overburden 3	02/17/16 11:15	02/18/16	Soil	Same As Above
B16021340-004	Overburden 4	02/17/16 11:20	02/18/16	Soil	Same As Above
B16021340-005	Overburden 5	02/17/16 11:25	02/18/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.02.22 14:57:29 -07:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 20
Lab ID: B16021340-001
Client Sample ID: Overburden 1

Report Date: 02/22/16
Collection Date: 02/17/16 11:05
DateReceived: 02/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	18	wt%		0.2		SW3550A	02/18/16 12:03 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.021		SW8082	02/19/16 11:28 / ldw
Aroclor 1221	ND	mg/kg-dry		0.041		SW8082	02/19/16 11:28 / ldw
Aroclor 1232	ND	mg/kg-dry		0.021		SW8082	02/19/16 11:28 / ldw
Aroclor 1242	ND	mg/kg-dry		0.021		SW8082	02/19/16 11:28 / ldw
Aroclor 1248	ND	mg/kg-dry		0.021		SW8082	02/19/16 11:28 / ldw
Aroclor 1254	0.71	mg/kg-dry		0.021		SW8082	02/19/16 11:28 / ldw
Aroclor 1260	ND	mg/kg-dry		0.021		SW8082	02/19/16 11:28 / ldw
Aroclor 1262	ND	mg/kg-dry		0.021		SW8082	02/19/16 11:28 / ldw
Aroclor 1268	ND	mg/kg-dry		0.021		SW8082	02/19/16 11:28 / ldw
Surr: Decachlorobiphenyl	97.0	%REC		50-126		SW8082	02/19/16 11:28 / ldw
Surr: Tetrachloro-m-xylene	81.0	%REC		42-115		SW8082	02/19/16 11:28 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 20
Lab ID: B16021340-002
Client Sample ID: Overburden 2

Report Date: 02/22/16
Collection Date: 02/17/16 11:10
DateReceived: 02/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/18/16 12:03 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/19/16 11:55 / ldw
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/19/16 11:55 / ldw
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/19/16 11:55 / ldw
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/19/16 11:55 / ldw
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/19/16 11:55 / ldw
Aroclor 1254	0.66	mg/kg-dry		0.019		SW8082	02/19/16 11:55 / ldw
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/19/16 11:55 / ldw
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/19/16 11:55 / ldw
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/19/16 11:55 / ldw
Surr: Decachlorobiphenyl	103	%REC		50-126		SW8082	02/19/16 11:55 / ldw
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	02/19/16 11:55 / ldw

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 20
Lab ID: B16021340-003
Client Sample ID: Overburden 3

Report Date: 02/22/16
Collection Date: 02/17/16 11:15
DateReceived: 02/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.5	wt%		0.2		SW3550A	02/18/16 12:03 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.036		SW8082	02/19/16 12:22 / ldw
Aroclor 1221	ND	mg/kg-dry		0.071		SW8082	02/19/16 12:22 / ldw
Aroclor 1232	ND	mg/kg-dry		0.036		SW8082	02/19/16 12:22 / ldw
Aroclor 1242	ND	mg/kg-dry		0.036		SW8082	02/19/16 12:22 / ldw
Aroclor 1248	ND	mg/kg-dry		0.036		SW8082	02/19/16 12:22 / ldw
Aroclor 1254	1.8	mg/kg-dry		0.036		SW8082	02/19/16 12:22 / ldw
Aroclor 1260	ND	mg/kg-dry		0.036		SW8082	02/19/16 12:22 / ldw
Aroclor 1262	ND	mg/kg-dry		0.036		SW8082	02/19/16 12:22 / ldw
Aroclor 1268	ND	mg/kg-dry		0.036		SW8082	02/19/16 12:22 / ldw
Surr: Decachlorobiphenyl	124	%REC		50-126		SW8082	02/19/16 12:22 / ldw
Surr: Tetrachloro-m-xylene	72.0	%REC		42-115		SW8082	02/19/16 12:22 / ldw

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 20
Lab ID: B16021340-004
Client Sample ID: Overburden 4

Report Date: 02/22/16
Collection Date: 02/17/16 11:20
DateReceived: 02/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/18/16 12:03 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.099		SW8082	02/19/16 12:48 / ldw
Aroclor 1221	ND	mg/kg-dry		0.19		SW8082	02/19/16 12:48 / ldw
Aroclor 1232	ND	mg/kg-dry		0.099		SW8082	02/19/16 12:48 / ldw
Aroclor 1242	ND	mg/kg-dry		0.099		SW8082	02/19/16 12:48 / ldw
Aroclor 1248	ND	mg/kg-dry		0.099		SW8082	02/19/16 12:48 / ldw
Aroclor 1254	4.2	mg/kg-dry		0.099		SW8082	02/19/16 12:48 / ldw
Aroclor 1260	ND	mg/kg-dry		0.099		SW8082	02/19/16 12:48 / ldw
Aroclor 1262	ND	mg/kg-dry		0.099		SW8082	02/19/16 12:48 / ldw
Aroclor 1268	ND	mg/kg-dry		0.099		SW8082	02/19/16 12:48 / ldw
Surr: Decachlorobiphenyl	130	%REC	S	50-126		SW8082	02/19/16 12:48 / ldw
Surr: Tetrachloro-m-xylene	85.0	%REC		42-115		SW8082	02/19/16 12:48 / ldw

- The Reporting Limits reflect a 5 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
S - Spike recovery outside of advisory limits.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 20
Lab ID: B16021340-005
Client Sample ID: Overburden 5

Report Date: 02/22/16
Collection Date: 02/17/16 11:25
DateReceived: 02/18/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/18/16 12:03 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.038		SW8082	02/19/16 13:14 / ldw
Aroclor 1221	ND	mg/kg-dry		0.074		SW8082	02/19/16 13:14 / ldw
Aroclor 1232	ND	mg/kg-dry		0.038		SW8082	02/19/16 13:14 / ldw
Aroclor 1242	ND	mg/kg-dry		0.038		SW8082	02/19/16 13:14 / ldw
Aroclor 1248	ND	mg/kg-dry		0.038		SW8082	02/19/16 13:14 / ldw
Aroclor 1254	1.3	mg/kg-dry		0.038		SW8082	02/19/16 13:14 / ldw
Aroclor 1260	ND	mg/kg-dry		0.038		SW8082	02/19/16 13:14 / ldw
Aroclor 1262	ND	mg/kg-dry		0.038		SW8082	02/19/16 13:14 / ldw
Aroclor 1268	ND	mg/kg-dry		0.038		SW8082	02/19/16 13:14 / ldw
Surr: Decachlorobiphenyl	116	%REC		50-126		SW8082	02/19/16 13:14 / ldw
Surr: Tetrachloro-m-xylene	75.0	%REC		42-115		SW8082	02/19/16 13:14 / ldw

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 02/22/16

Project: Stimson Data Package 20 **Work Order:** B16021340

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 97037
Lab ID: MB-97037	Method Blank				Run: HECD.I_160219A				02/19/16 10:08
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	97	50	126			
Surr: Tetrachloro-m-xylene			0.0017	66	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-97037	Laboratory Control Sample				Run: HECD.I_160219A				02/19/16 10:35
Aroclor 1254	0.303	mg/kg	0.017	91	62	126			
Surr: Decachlorobiphenyl			0.0017	99	50	126			
Surr: Tetrachloro-m-xylene			0.0017	70	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021340-005AMB	Sample Duplicate				Run: HECD.I_160219A				02/19/16 13:41
Aroclor 1016	ND	mg/kg-dry	0.039					40	
Aroclor 1221	ND	mg/kg-dry	0.075					40	
Aroclor 1232	ND	mg/kg-dry	0.039					40	
Aroclor 1242	ND	mg/kg-dry	0.039					40	
Aroclor 1248	ND	mg/kg-dry	0.039					40	
Aroclor 1254	1.91	mg/kg-dry	0.039				27	40	
Aroclor 1260	ND	mg/kg-dry	0.039					40	
Aroclor 1262	ND	mg/kg-dry	0.039					40	
Aroclor 1268	ND	mg/kg-dry	0.039					40	
Surr: Decachlorobiphenyl			0.0039	114	50	126			
Surr: Tetrachloro-m-xylene			0.0039	77	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021340-005ADB	Sample Duplicate				Run: HECD.I_160219A				02/19/16 14:08
Aroclor 1016	ND	mg/kg-dry	0.039					40	
Aroclor 1221	ND	mg/kg-dry	0.076					40	
Aroclor 1232	ND	mg/kg-dry	0.039					40	
Aroclor 1242	ND	mg/kg-dry	0.039					40	
Aroclor 1248	ND	mg/kg-dry	0.039					40	
Aroclor 1254	2.10	mg/kg-dry	0.039				37	40	
Aroclor 1260	ND	mg/kg-dry	0.039					40	
Aroclor 1262	ND	mg/kg-dry	0.039					40	
Aroclor 1268	ND	mg/kg-dry	0.039					40	
Surr: Decachlorobiphenyl			0.0039	115	50	126			
Surr: Tetrachloro-m-xylene			0.0039	80	42	115			
- Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 20

Report Date: 02/22/16
Work Order: B16021340

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R256855
Lab ID: 1254CK3	Continuing Calibration Verification Standard								02/19/16 09:15
Aroclor 1254	0.209	mg/kg	0.017	104	85	115			
Surr: Decachlorobiphenyl			0.0017	106	85	115			
Surr: Tetrachloro-m-xylene			0.0017	107	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/19/16 09:41
Aroclor 1254	2.06	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	99	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								02/19/16 15:01
Aroclor 1254	2.18	mg/kg	0.017	109	85	115			
Surr: Decachlorobiphenyl			0.0017	108	85	115			
Surr: Tetrachloro-m-xylene			0.0017	105	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16021340

Login completed by:	Tabitha Edwards	Date Received:	2/18/2016
Reviewed by:	BL2000\jmueller	Received by:	car
Reviewed Date:	2/18/2016	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	2.8°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #20

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8277

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCommon (406) 549-8277

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street, Missoula, MT 59802

☐ No Hard Copy Email: dmccommon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Standard Turnaround (TAT) — RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: 2 Day TAT

Shipped by: UPS Fed RS

Cooler ID(s):

Receipt Temp: 28 TBC

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N; Intact Y N; Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 7082	SEE ATTACHED	RUSH	Comments	LABORATORY USE ONLY
1	Overburden - 1	2/17/16	1105	S	X		X	2 Day TAT	B1602 1340-001
2	Overburden - 2	2/17/16	1110	S	X		X	2 Day TAT	002
3	Overburden - 3	2/17/16	1115	S	X		X	2 Day TAT	003
4	Overburden - 4	2/17/16	1120	S	X		X	2 Day TAT	004
5	Overburden - 5	2/17/16	1125	S	X		X	2 Day TAT	005
6									
7									
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	2-17-16 / 1630	[signature]			

Received by Laboratory: Date/Time: 2-18-16 9:15 Signature: Cindy Rohr

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

February 29, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16021788 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package 22

Energy Laboratories Inc Billings MT received the following 5 samples for NewFields on 2/25/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16021788-001	Overburden-1	02/24/16 14:25	02/25/16	Soil	Metals by ICP/ICPMS, Total or Soluble EPH-Ultrasonic Extraction EPH Fractionation Hydrocarbons, Aliphatic Extractable Petroleum Hydrocarbons, Aromatic Extractable Petroleum Hydrocarbons, Extractable Petroleum-Scrn Total Mercury Moisture Moisture Prep Percent Moisture Digestion, Total Metals
B16021788-002	Overburden-2	02/24/16 14:30	02/25/16	Soil	Same As Above
B16021788-003	Overburden-3-2	02/24/16 14:35	02/25/16	Soil	Metals by ICP/ICPMS, Total or Soluble EPH-Ultrasonic Extraction Hydrocarbons, Extractable Petroleum-Scrn Total Mercury Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Digestion, Total Metals Sonication Extraction
B16021788-004	Overburden-4-2	02/24/16 14:40	02/25/16	Soil	Same As Above
B16021788-005	Overburden-5-2	02/24/16 14:45	02/25/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: Supervisor, Wet Chemistry

Digitally signed by
Keri Conter
Date: 2016.02.29 10:47:28 -07:00

CLIENT: NewFields
Project: Stimson Data Package 22
Work Order: B16021788

Report Date: 02/29/16

CASE NARRATIVE

Fractionation without PAHs was added to the following sample(s) per Chain of Custody on 2/26/16:

B16021788-001 Overburden-1

B16021788-002 Overburden-2

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22
Lab ID: B16021788-001
Client Sample ID: Overburden-1

Report Date: 02/29/16
Collection Date: 02/24/16 14:25
DateReceived: 02/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.2	wt%		0.2		SW3550A	02/25/16 10:12 / amn
METALS, TOTAL - EPA SW846							
Arsenic	6	mg/kg-dry		5		SW6010B	02/26/16 10:57 / jjw
Barium	95	mg/kg-dry		5		SW6010B	02/26/16 10:57 / jjw
Cadmium	ND	mg/kg-dry		1		SW6010B	02/26/16 10:57 / jjw
Chromium	8	mg/kg-dry		5		SW6010B	02/26/16 10:57 / jjw
Lead	17	mg/kg-dry		5		SW6010B	02/26/16 10:57 / jjw
Mercury	ND	mg/kg-dry		0.1		SW7473	02/25/16 13:18 / ser
Selenium	5	mg/kg-dry		5		SW6010B	02/26/16 10:57 / jjw
Silver	ND	mg/kg-dry		5		SW6010B	02/26/16 10:57 / jjw
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN							
Total Extractable Hydrocarbons	400	mg/kg-dry	*	11	200	SW8015M	02/25/16 23:39 / amn
Surr: o-Terphenyl	87.0	%REC		40-140		SW8015M	02/25/16 23:39 / amn
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							
EXTRACTABLE PETROLEUM HYDROCARBONS							
C9 to C18 Aliphatics	ND	mg/kg-dry		11	200	MA-EPH	02/26/16 23:21 / tmc
C19 to C36 Aliphatics	203	mg/kg-dry		11	20000	MA-EPH	02/26/16 23:21 / tmc
Surr: 1-Chloro-octadecane	89.0	%REC		40-140		MA-EPH	02/26/16 23:21 / tmc
C11 to C22 Aromatics	92	mg/kg-dry		11	400	MA-EPH	02/27/16 00:15 / tmc
Total Extractable Hydrocarbons	336	mg/kg-dry		11		MA-EPH	02/27/16 00:15 / tmc
Surr: 2-Bromonaphthalene	80.0	%REC		40-140		MA-EPH	02/27/16 00:15 / tmc
Surr: 2-Fluorobiphenyl	80.0	%REC		40-140		MA-EPH	02/27/16 00:15 / tmc
Surr: o-Terphenyl	82.0	%REC		40-140		MA-EPH	02/27/16 00:15 / tmc
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
* - The result exceeds the MCL.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22
Lab ID: B16021788-002
Client Sample ID: Overburden-2

Report Date: 02/29/16
Collection Date: 02/24/16 14:30
DateReceived: 02/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	02/25/16 10:14 / amn
METALS, TOTAL - EPA SW846							
Arsenic	5	mg/kg-dry		5		SW6010B	02/26/16 11:07 / jjw
Barium	187	mg/kg-dry		5		SW6010B	02/26/16 11:07 / jjw
Cadmium	ND	mg/kg-dry		1		SW6010B	02/26/16 11:07 / jjw
Chromium	8	mg/kg-dry		5		SW6010B	02/26/16 11:07 / jjw
Lead	13	mg/kg-dry		5		SW6010B	02/26/16 11:07 / jjw
Mercury	ND	mg/kg-dry		0.1		SW7473	02/25/16 13:19 / ser
Selenium	6	mg/kg-dry		5		SW6010B	02/26/16 11:07 / jjw
Silver	ND	mg/kg-dry		5		SW6010B	02/26/16 11:07 / jjw
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN							
Total Extractable Hydrocarbons	471	mg/kg-dry	*	11	200	SW8015M	02/26/16 00:21 / amn
Surr: o-Terphenyl	83.0	%REC		40-140		SW8015M	02/26/16 00:21 / amn
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							
EXTRACTABLE PETROLEUM HYDROCARBONS							
C9 to C18 Aliphatics	ND	mg/kg-dry		11	200	MA-EPH	02/27/16 02:03 / tmc
C19 to C36 Aliphatics	269	mg/kg-dry		11	20000	MA-EPH	02/27/16 02:03 / tmc
Surr: 1-Chloro-octadecane	95.0	%REC		40-140		MA-EPH	02/27/16 02:03 / tmc
C11 to C22 Aromatics	63	mg/kg-dry		11	400	MA-EPH	02/27/16 02:57 / tmc
Total Extractable Hydrocarbons	390	mg/kg-dry		11		MA-EPH	02/27/16 02:57 / tmc
Surr: 2-Bromonaphthalene	86.0	%REC		40-140		MA-EPH	02/27/16 02:57 / tmc
Surr: 2-Fluorobiphenyl	84.0	%REC		40-140		MA-EPH	02/27/16 02:57 / tmc
Surr: o-Terphenyl	81.0	%REC		40-140		MA-EPH	02/27/16 02:57 / tmc
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
* - The result exceeds the MCL.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22
Lab ID: B16021788-003
Client Sample ID: Overburden-3-2

Report Date: 02/29/16
Collection Date: 02/24/16 14:35
DateReceived: 02/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.4	wt%		0.2		SW3550A	02/25/16 10:26 / amn
METALS, TOTAL - EPA SW846							
Arsenic	ND	mg/kg-dry		5		SW6010B	02/26/16 11:10 / jjw
Barium	125	mg/kg-dry		5		SW6010B	02/26/16 11:10 / jjw
Cadmium	ND	mg/kg-dry		1		SW6010B	02/26/16 11:10 / jjw
Chromium	7	mg/kg-dry		5		SW6010B	02/26/16 11:10 / jjw
Lead	10	mg/kg-dry		5		SW6010B	02/26/16 11:10 / jjw
Mercury	ND	mg/kg-dry		0.1		SW7473	02/25/16 13:20 / ser
Selenium	7	mg/kg-dry		5		SW6010B	02/26/16 11:10 / jjw
Silver	ND	mg/kg-dry		5		SW6010B	02/26/16 11:10 / jjw
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN							
Total Extractable Hydrocarbons	48	mg/kg-dry		11	200	SW8015M	02/25/16 22:14 / amn
Surr: o-Terphenyl	83.0	%REC		40-140		SW8015M	02/25/16 22:14 / amn
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	02/25/16 16:59 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	02/25/16 16:59 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	02/25/16 16:59 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	02/25/16 16:59 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	02/25/16 16:59 / jem
Aroclor 1254	0.70	mg/kg-dry		0.019		SW8082	02/25/16 16:59 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	02/25/16 16:59 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	02/25/16 16:59 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	02/25/16 16:59 / jem
Surr: Decachlorobiphenyl	98.0	%REC		50-126		SW8082	02/25/16 16:59 / jem
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	02/25/16 16:59 / jem
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.							

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22
Lab ID: B16021788-004
Client Sample ID: Overburden-4-2

Report Date: 02/29/16
Collection Date: 02/24/16 14:40
DateReceived: 02/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	6.9	wt%		0.2		SW3550A	02/25/16 10:33 / amn
METALS, TOTAL - EPA SW846							
Arsenic	5	mg/kg-dry		5		SW6010B	02/26/16 11:14 / jjw
Barium	162	mg/kg-dry		5		SW6010B	02/26/16 11:14 / jjw
Cadmium	ND	mg/kg-dry		1		SW6010B	02/26/16 11:14 / jjw
Chromium	6	mg/kg-dry		5		SW6010B	02/26/16 11:14 / jjw
Lead	23	mg/kg-dry		5		SW6010B	02/26/16 11:14 / jjw
Mercury	ND	mg/kg-dry		0.1		SW7473	02/25/16 14:03 / ser
Selenium	ND	mg/kg-dry		5		SW6010B	02/26/16 11:14 / jjw
Silver	ND	mg/kg-dry		5		SW6010B	02/26/16 11:14 / jjw
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN							
Total Extractable Hydrocarbons	97	mg/kg-dry		11	200	SW8015M	02/25/16 21:31 / amn
Surr: o-Terphenyl	82.0	%REC		40-140		SW8015M	02/25/16 21:31 / amn
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	02/25/16 17:25 / jem
Aroclor 1221	ND	mg/kg-dry		0.035		SW8082	02/25/16 17:25 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	02/25/16 17:25 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	02/25/16 17:25 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	02/25/16 17:25 / jem
Aroclor 1254	0.80	mg/kg-dry		0.018		SW8082	02/25/16 17:25 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	02/25/16 17:25 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	02/25/16 17:25 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	02/25/16 17:25 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	02/25/16 17:25 / jem
Surr: Tetrachloro-m-xylene	64.0	%REC		42-115		SW8082	02/25/16 17:25 / jem
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.							

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22
Lab ID: B16021788-005
Client Sample ID: Overburden-5-2

Report Date: 02/29/16
Collection Date: 02/24/16 14:45
DateReceived: 02/25/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	14	wt%		0.2		SW3550A	02/25/16 10:38 / amn
METALS, TOTAL - EPA SW846							
Arsenic	12	mg/kg-dry		5		SW6010B	02/26/16 11:17 / jjw
Barium	117	mg/kg-dry		5		SW6010B	02/26/16 11:17 / jjw
Cadmium	ND	mg/kg-dry		1		SW6010B	02/26/16 11:17 / jjw
Chromium	6	mg/kg-dry		5		SW6010B	02/26/16 11:17 / jjw
Lead	9	mg/kg-dry		5		SW6010B	02/26/16 11:17 / jjw
Mercury	ND	mg/kg-dry		0.1		SW7473	02/25/16 14:04 / ser
Selenium	6	mg/kg-dry		5		SW6010B	02/26/16 11:17 / jjw
Silver	ND	mg/kg-dry		5		SW6010B	02/26/16 11:17 / jjw
EXTRACTABLE PETROLEUM HYDROCARBONS-SCREEN							
Total Extractable Hydrocarbons	22	mg/kg-dry		12	200	SW8015M	02/25/16 20:49 / amn
Surr: o-Terphenyl	80.0	%REC		40-140		SW8015M	02/25/16 20:49 / amn
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.							
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	02/25/16 17:52 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082	02/25/16 17:52 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	02/25/16 17:52 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	02/25/16 17:52 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	02/25/16 17:52 / jem
Aroclor 1254	0.55	mg/kg-dry		0.020		SW8082	02/25/16 17:52 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	02/25/16 17:52 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	02/25/16 17:52 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	02/25/16 17:52 / jem
Surr: Decachlorobiphenyl	100	%REC		50-126		SW8082	02/25/16 17:52 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	02/25/16 17:52 / jem
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.							

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B								Analytical Run: ICP203-B_160226A	
Lab ID: QCS	Initial Calibration Verification Standard								02/26/16 09:53
Arsenic	0.768	mg/L	0.10	96	90	110			
Barium	0.800	mg/L	0.10	100	90	110			
Cadmium	0.397	mg/L	0.010	99	90	110			
Chromium	0.777	mg/L	0.050	97	90	110			
Lead	0.749	mg/L	0.050	94	90	110			
Selenium	0.819	mg/L	0.10	102	90	110			
Silver	0.396	mg/L	0.010	99	90	110			
Lab ID: ICSA	Interference Check Sample A								02/26/16 09:56
Arsenic	-0.00961	mg/L	0.10						
Barium	-0.000890	mg/L	0.10						
Cadmium	-0.00148	mg/L	0.010						
Chromium	0.00399	mg/L	0.050						
Lead	0.0493	mg/L	0.050						
Selenium	0.0848	mg/L	0.10						
Silver	0.00795	mg/L	0.010						
Lab ID: ICSAB	Interference Check Sample AB								02/26/16 10:00
Arsenic	0.950	mg/L	0.10	95	80	120			
Barium	0.485	mg/L	0.10	97	80	120			
Cadmium	0.926	mg/L	0.010	93	80	120			
Chromium	0.446	mg/L	0.050	89	80	120			
Lead	1.02	mg/L	0.050	102	80	120			
Selenium	1.06	mg/L	0.10	106	80	120			
Silver	1.02	mg/L	0.010	102	80	120			
Method: SW6010B									Batch: 97200
Lab ID: MB-97200	Method Blank				Run: ICP203-B_160226A				02/26/16 10:50
Arsenic	ND	mg/kg	0.4						
Barium	ND	mg/kg	0.01						
Cadmium	ND	mg/kg	0.03						
Chromium	0.2	mg/kg	0.07						
Lead	ND	mg/kg	0.8						
Selenium	2	mg/kg	1						
Silver	ND	mg/kg	0.1						
Lab ID: SRM3-97200	Standard Reference Material				Run: ICP203-B_160226A				02/26/16 10:53
Arsenic	159	mg/kg	5.0	81	71	120			
Barium	164	mg/kg	5.0	88	78	120			
Cadmium	88.5	mg/kg	5.0	89	73.2	120			
Chromium	98.5	mg/kg	5.0	84	73	120			
Lead	97.3	mg/kg	5.0	93	74	120			
Selenium	187	mg/kg	5.0	91	71	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte		Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW6010B**									Batch: 97200
Lab ID:	**SRM3-97200**	Standard Reference Material				Run: ICP203-B_160226A			02/26/16 10:53	
Silver		37.9	mg/kg	5.0	90	70	120			
Lab ID:	**B16021788-005ADIL**	Serial Dilution				Run: ICP203-B_160226A			02/26/16 11:21	
Arsenic		15.4	mg/kg-dry	3.4		0	0		10	N
Barium		119	mg/kg-dry	1.0		0	0	1.4	10	
Cadmium		0.423	mg/kg-dry	1.0		0	0		10	N
Chromium		9.60	mg/kg-dry	1.0		0	0		10	N
Lead		ND	mg/kg-dry	7.9		0	0		10	
Selenium		10.0	mg/kg-dry	9.5		0	0		10	N
Silver		2.23	mg/kg-dry	1.0		0	0		10	N
Lab ID:	**B16021788-005APDS**	Post Digestion/Distillation Spike				Run: ICP203-B_160226A			02/26/16 11:24	
Arsenic		108	mg/kg-dry	1.0	100	75	125			
Barium		212	mg/kg-dry	1.0	98	75	125			
Cadmium		46.2	mg/kg-dry	1.0	96	75	125			
Chromium		95.7	mg/kg-dry	1.0	93	75	125			
Lead		103	mg/kg-dry	1.6	97	75	125			
Selenium		99.0	mg/kg-dry	2.0	96	75	125			
Silver		47.8	mg/kg-dry	1.0	99	75	125			
Lab ID:	**B16021788-005AMS3**	Sample Matrix Spike				Run: ICP203-B_160226A			02/26/16 11:28	
Arsenic		102	mg/kg-dry	1.0	95	75	125			
Barium		184	mg/kg-dry	1.0	70	75	125			S
Cadmium		45.8	mg/kg-dry	1.0	96	75	125			
Chromium		99.4	mg/kg-dry	1.0	99	75	125			
Lead		102	mg/kg-dry	1.6	99	75	125			
Selenium		100	mg/kg-dry	1.9	99	75	125			
Silver		48.5	mg/kg-dry	1.0	102	75	125			
Lab ID:	**B16021788-005AMSD3**	Sample Matrix Spike Duplicate				Run: ICP203-B_160226A			02/26/16 11:31	
Arsenic		102	mg/kg-dry	1.0	95	75	125	0.4	20	
Barium		215	mg/kg-dry	1.0	103	75	125	16	20	
Cadmium		45.5	mg/kg-dry	1.0	96	75	125	0.5	20	
Chromium		99.3	mg/kg-dry	1.0	99	75	125	0.1	20	
Lead		105	mg/kg-dry	1.6	102	75	125	2.4	20	
Selenium		99.2	mg/kg-dry	1.9	98	75	125	1.1	20	
Silver		46.7	mg/kg-dry	1.0	99	75	125	3.8	20	

Qualifiers:

RL - Analyte reporting limit.

N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte		Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**SW7473**								Analytical Run: HG-DMA1_160225A	
Lab ID:	**CCV**	Continuing Calibration Verification Standard							02/25/16 11:05	
Mercury		0.0956	mg/kg	0.10	96	90	110			
Method:	**SW7473**								Batch: HG160225A	
Lab ID:	**CCV1**	Continuing Calibration Verification Standard				Run: HG-DMA1_160225A			02/25/16 11:05	
Mercury		4.81	mg/kg	0.10	96	90	110			
Lab ID:	**MB**	Method Blank				Run: HG-DMA1_160225A			02/25/16 11:06	
Mercury		ND	mg/kg	0.006						
Lab ID:	**LCS**	Laboratory Control Sample				Run: HG-DMA1_160225A			02/25/16 11:06	
Mercury		0.973	mg/kg	0.10	97	80	120			
Lab ID:	**LCSD**	Laboratory Control Sample Duplicate				Run: HG-DMA1_160225A			02/25/16 11:07	
Mercury		0.971	mg/kg	0.10	97	80	120	0.2	20	
Lab ID:	**B16021758-001AMS**	Sample Matrix Spike				Run: HG-DMA1_160225A			02/25/16 13:14	
Mercury		0.518	mg/kg	0.10	95	80	120			
Lab ID:	**B16021758-001AMSD**	Sample Matrix Spike Duplicate				Run: HG-DMA1_160225A			02/25/16 13:14	
Mercury		0.533	mg/kg	0.10	95	80	120	2.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015M									Batch: 97199
Lab ID: LCS-97199	Laboratory Control Sample				Run: GCFID-HP2-B_160225A				02/25/16 16:30
Total Extractable Hydrocarbons	186	mg/kg	10	91	60	140			
Surr: o-Terphenyl			0.17	83	40	140			
Lab ID: MB-97199	Method Blank				Run: GCFID-HP2-B_160225A				02/25/16 17:13
Total Extractable Hydrocarbons	ND	mg/kg	10						
Surr: o-Terphenyl			0.17	82	40	140			
Lab ID: B16021758-001AMS	Sample Matrix Spike				Run: GCFID-HP2-B_160225A				02/25/16 18:40
Total Extractable Hydrocarbons	187	mg/kg-dry	11	81	60	140			
Surr: o-Terphenyl			0.19	73	40	140			
Lab ID: B16021758-001AMSD	Sample Matrix Spike Duplicate				Run: GCFID-HP2-B_160225A				02/25/16 19:23
Total Extractable Hydrocarbons	208	mg/kg-dry	11	90	60	140	10	20	
Surr: o-Terphenyl			0.19	80	40	140			
Method: SW8015M									Analytical Run: R257120
Lab ID: CCV_0225HP406r-S	Continuing Calibration Verification Standard								02/25/16 15:05
n-Nonane	6.56	mg/kg		98	75	125			
n-Decane	6.53	mg/kg		98	75	125			
n-Dodecane	6.54	mg/kg		98	75	125			
n-Tetradecane	6.46	mg/kg		97	75	125			
n-Hexadecane	6.52	mg/kg		98	75	125			
n-Octadecane	6.56	mg/kg		98	75	125			
n-Nonadecane	6.67	mg/kg		100	75	125			
n-Eicosane	6.64	mg/kg		100	75	125			
n-Docosane	6.66	mg/kg		100	75	125			
n-Tetracosane	6.68	mg/kg		100	75	125			
n-Hexacosane	6.62	mg/kg		99	75	125			
n-Octacosane	6.22	mg/kg		93	75	125			
n-Triacontane	6.79	mg/kg		102	75	125			
n-Hexatriacontane	6.87	mg/kg		103	75	125			
Surr: o-Terphenyl			0.17	95	75	125			

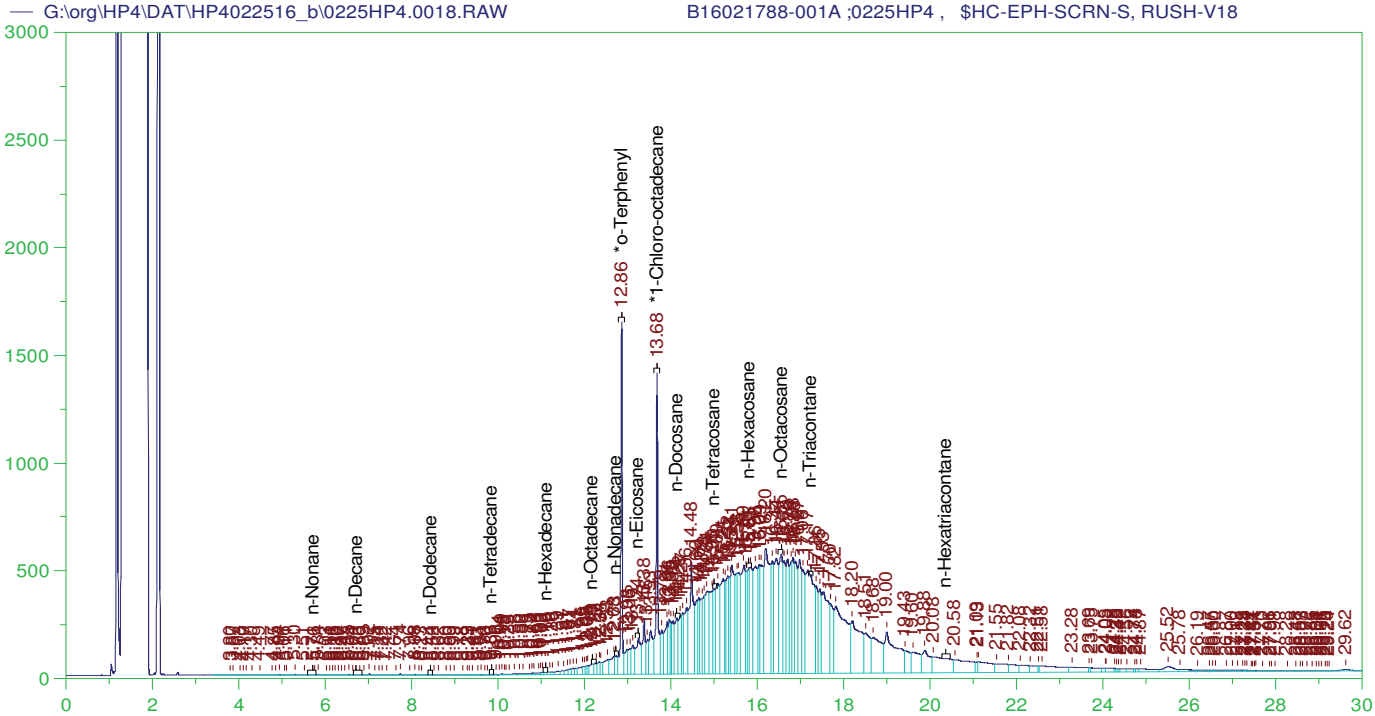
Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Overburden-1 Batch ID: 97199

— G:\org\HP4\DAT\HP4022516_b\0225HP4.0018.RAW B16021788-001A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V18



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: B16021788-001A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V18
Raw File: G:\org\HP4\DAT\HP4022516_b\0225HP4.0018.RAW
Date & Time Acquired: 2/25/2016 11:39:14 PM
Method File: g:\org\HP4\Methods\S3_SCN-GD-L%.met
Calibration File: G:\Org\HP4\Cals\SC140904GD.CAL
Sample Weight: 30.02 Dilution: 2 S.A.: 1

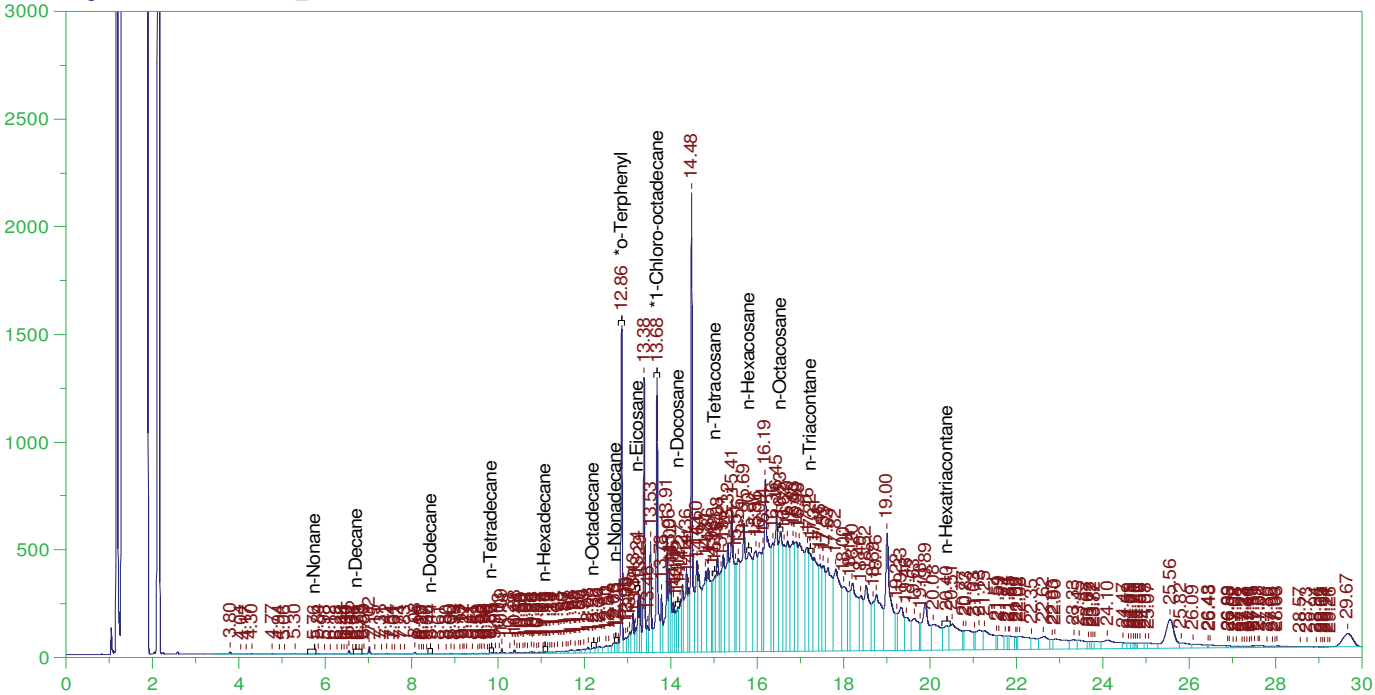
Mean RF for C9 to C18 Hydrocarbons: 25784.72
Mean RF for C19 to C36 Hydrocarbons: 26045.53
Mean RF for Total Extractable Hydrocarbons: 25915.13
Rt range for Diesel Range Organics: 6.644 to 17.29
Rt range for C9 to C18 Hydrocarbons: 5.589 to 12.79
Rt range for C19 to C36 Hydrocarbons: 12.825 to 20.47

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.857	3400266	6.662	7.376	110.72	-
*1-Chloro-octadecane	13.678	3973089	6.662	11.336	170.15	-

DRO Area:1.005927E+08 DRO Amount: 258.6023
TEH Area:1.429602E+08 TEH Amount: 367.5201
C9-C18 Area:4281214 C9-C18 Amount: 11.06175
C19-C36 Area:1.289415E+08 C19-C36 Amount: 329.8215

Overburden-2 Batch ID: 97199

G:\org\HP4\DAT\HP4022516_b\0225HP4.0019.RAW B16021788-002A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V19



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: B16021788-002A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V19
Raw File: G:\org\HP4\DAT\HP4022516_b\0225HP4.0019.RAW
Date & Time Acquired: 2/26/2016 12:21:40 AM
Method File: g:\org\HP4\Methods\S3_SCN-GD-L%.met
Calibration File: G:\Org\HP4\Cals\SC140904GD.CAL
Sample Weight: 29.99 Dilution: 2 S.A.: 1

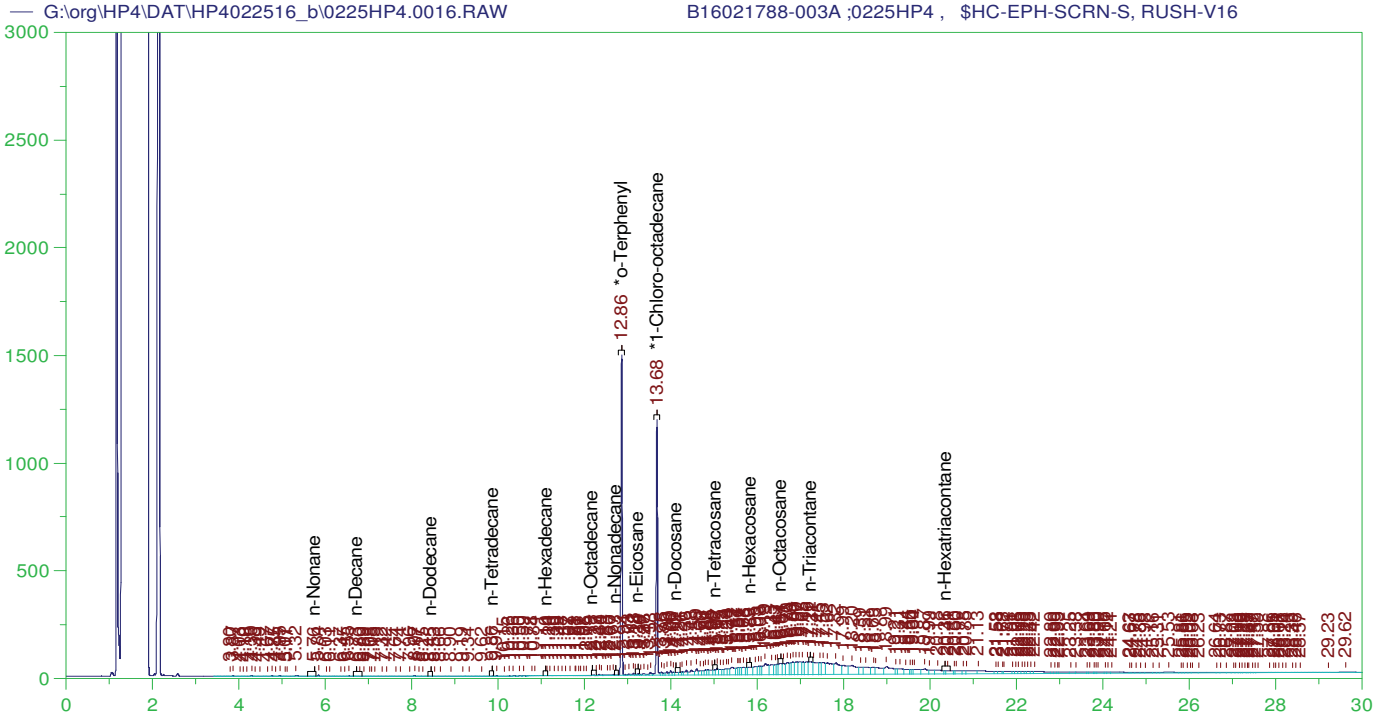
Mean RF for C9 to C18 Hydrocarbons: 25784.72
Mean RF for C19 to C36 Hydrocarbons: 26045.53
Mean RF for Total Extractable Hydrocarbons: 25915.13
Rt range for Diesel Range Organics: 6.644 to 17.29
Rt range for C9 to C18 Hydrocarbons: 5.589 to 12.79
Rt range for C19 to C36 Hydrocarbons: 12.825 to 20.47

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.857	2833065	6.669	6.152	92.25	-
*1-Chloro-octadecane	13.677	3664537	6.669	10.466	156.94	-

DRO Area:9.883502E+07 DRO Amount: 254.3379
TEH Area:1.637866E+08 TEH Amount: 421.4816
C9-C18 Area:2511793 C9-C18 Amount: 6.496432
C19-C36 Area:1.411998E+08 C19-C36 Amount: 361.5384

Overburden-3-2 Batch ID: 97199

G:\org\HP4\DAT\HP4022516_b\0225HP4.0016.RAW B16021788-003A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V16



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: B16021788-003A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V16
Raw File: G:\org\HP4\DAT\HP4022516_b\0225HP4.0016.RAW
Date & Time Acquired: 2/25/2016 10:14:14 PM
Method File: g:\org\HP4\Methods\S3_SCN-GD-L%.met
Calibration File: G:\Org\HP4\Cals\SC140904GD.CAL
Sample Weight: 29.97 Dilution: 2 S.A.: 1

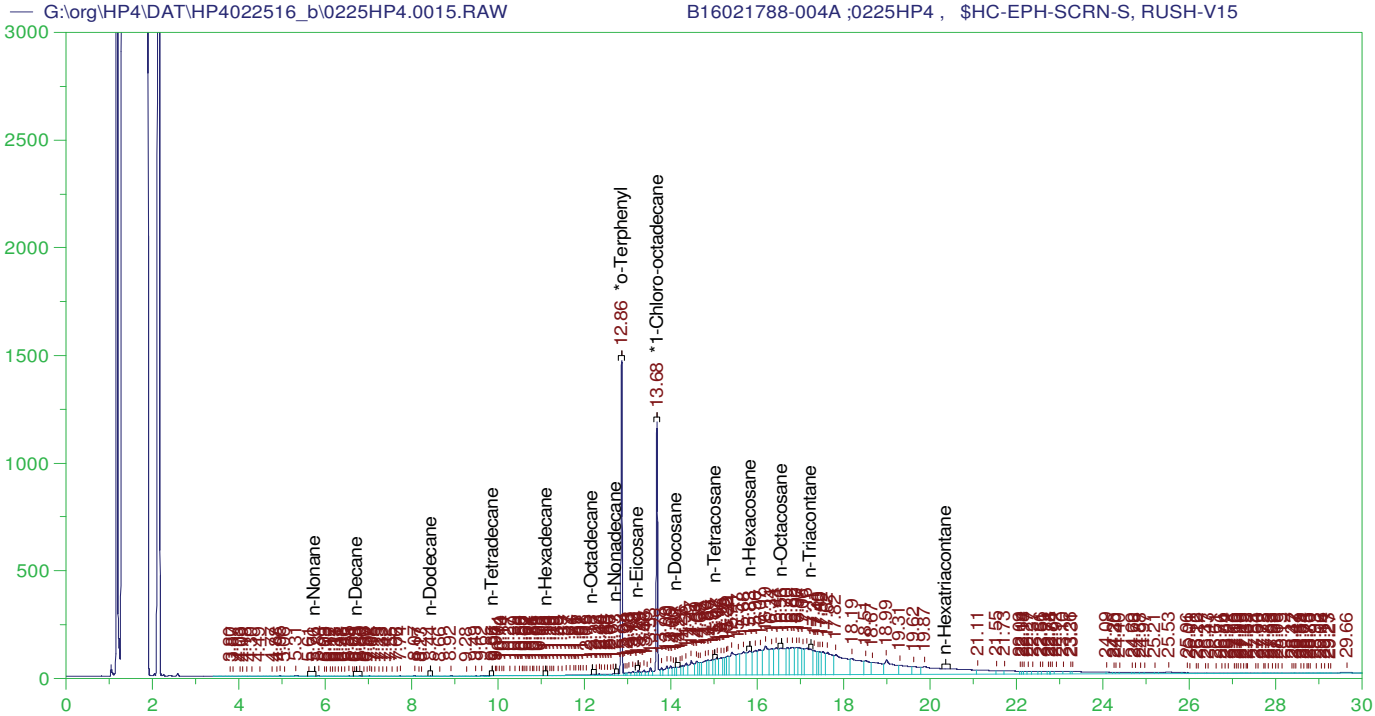
Mean RF for C9 to C18 Hydrocarbons: 25784.72
Mean RF for C19 to C36 Hydrocarbons: 26045.53
Mean RF for Total Extractable Hydrocarbons: 25915.13
Rt range for Diesel Range Organics: 6.644 to 17.29
Rt range for C9 to C18 Hydrocarbons: 5.589 to 12.79
Rt range for C19 to C36 Hydrocarbons: 12.825 to 20.47

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.857	2576072	6.673	5.598	83.88	-
*1-Chloro-octadecane	13.676	2282540	6.673	6.523	97.75	-

DRO Area:7590937 DRO Amount: 19.54723
TEH Area:1.701445E+07 TEH Amount: 43.81349
C9-C18 Area:179123.4 C9-C18 Amount: 0.4635891
C19-C36 Area:1.367951E+07C19-C36 Amount: 35.04941

Overburden-4-2 Batch ID: 97199

G:\org\HP4\DAT\HP4022516_b\0225HP4.0015.RAW B16021788-004A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V15



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: B16021788-004A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V15
Raw File: G:\org\HP4\DAT\HP4022516_b\0225HP4.0015.RAW
Date & Time Acquired: 2/25/2016 9:31:43 PM
Method File: g:\org\HP4\Methods\S3_SCN-GD-L%.met
Calibration File: G:\Org\HP4\Cals\SC140904GD.CAL
Sample Weight: 29.96 Dilution: 2 S.A.: 1

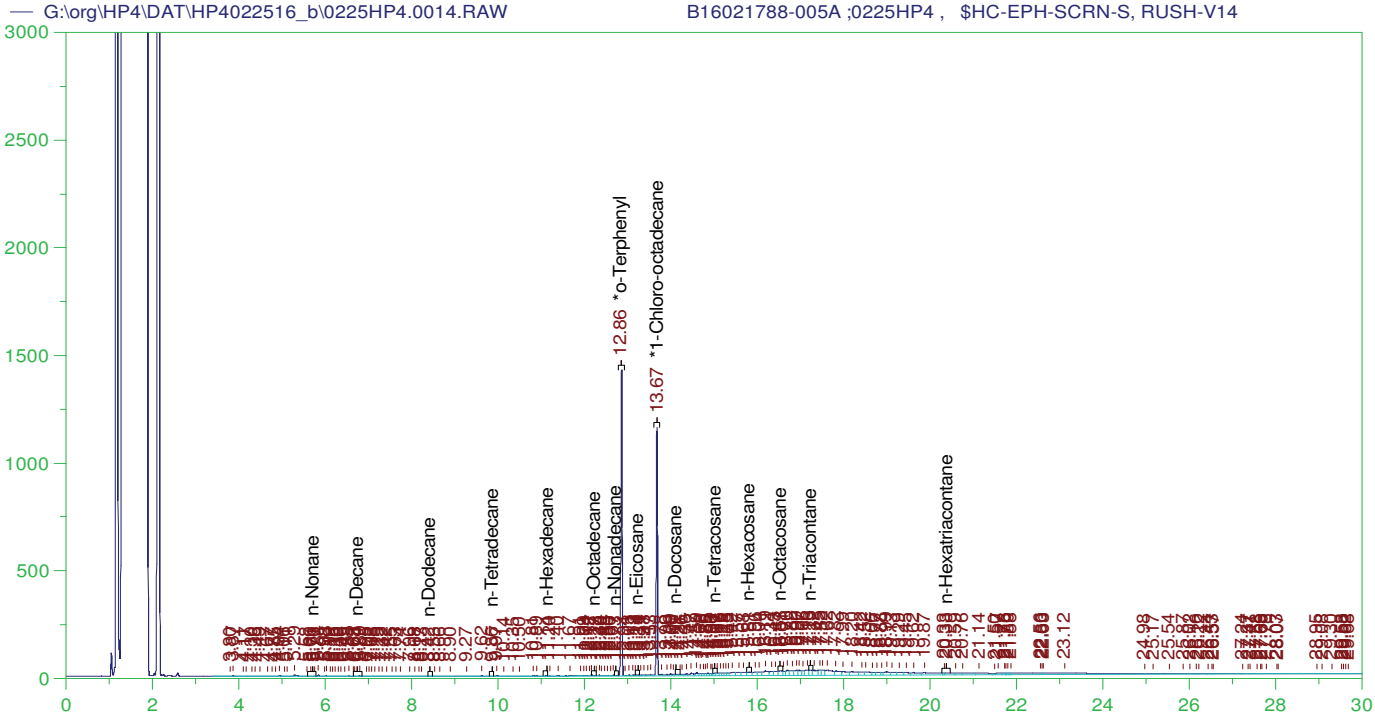
Mean RF for C9 to C18 Hydrocarbons: 25784.72
Mean RF for C19 to C36 Hydrocarbons: 26045.53
Mean RF for Total Extractable Hydrocarbons: 25915.13
Rt range for Diesel Range Organics: 6.644 to 17.29
Rt range for C9 to C18 Hydrocarbons: 5.589 to 12.79
Rt range for C19 to C36 Hydrocarbons: 12.825 to 20.47

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.856	2577433	6.676	5.603	83.93	-
*1-Chloro-octadecane	13.675	2387044	6.676	6.824	102.23	-

DRO Area:1.981867E+07 DRO Amount: 51.0516
TEH Area:3.504132E+07 TEH Amount: 90.26417
C9-C18 Area:446915.4 C9-C18 Amount: 1.157047
C19-C36 Area:3.123271E+07C19-C36 Amount: 80.05062

Overburden-5-2 Batch ID: 97199

G:\org\HP4\DAT\HP4022516_b\0225HP4.0014.RAW B16021788-005A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V14



EXTRACTABLE PETROLEUM HYDROCARBONS (EPH) SCREENING ANALYSIS CHROMATOGRAM

Sample Name: B16021788-005A ;0225HP4 , $HC-EPH-SCRN-S, RUSH-V14
Raw File: G:\org\HP4\DAT\HP4022516_b\0225HP4.0014.RAW
Date & Time Acquired: 2/25/2016 8:49:09 PM
Method File: g:\org\HP4\Methods\S3_SCN-GD-L%.met
Calibration File: G:\Org\HP4\Cals\SC140904GD.CAL
Sample Weight: 29.96 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Hydrocarbons: 25784.72
Mean RF for C19 to C36 Hydrocarbons: 26045.53
Mean RF for Total Extractable Hydrocarbons: 25915.13
Rt range for Diesel Range Organics: 6.644 to 17.29
Rt range for C9 to C18 Hydrocarbons: 5.589 to 12.79
Rt range for C19 to C36 Hydrocarbons: 12.825 to 20.47

SURROGATE COMPOUND	RT	AREA	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.856	2464012	6.676	5.356	80.23	-
*1-Chloro-octadecane	13.675	2160212	6.676	6.176	92.51	-

DRO Area:2961692 DRO Amount: 7.629125
TEH Area:7314652 TEH Amount: 18.84207
C9-C18 Area:133806.8 C9-C18 Amount: 0.3464206
C19-C36 Area:5454131 C19-C36 Amount: 13.97914

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH									Batch: 97218
Lab ID: LCS-97218-97199	Laboratory Control Sample				Run: GCFID-HP3-B_160226A				02/26/16 13:12
C9 to C18 Aliphatics	27.1	mg/kg	10	68	40	140			
C19 to C36 Aliphatics	49.1	mg/kg	10	92	40	140			
n-Nonane	2.64	mg/kg	0.17	40	30	140			
n-Decane	3.56	mg/kg	0.17	53	40	140			
n-Dodecane	4.19	mg/kg	0.17	63	40	140			
n-Tetradecane	4.69	mg/kg	0.17	70	40	140			
n-Hexadecane	5.44	mg/kg	0.17	82	40	140			
n-Octadecane	5.95	mg/kg	0.17	89	40	140			
n-Nonadecane	5.92	mg/kg	0.17	89	40	140			
n-Eicosane	5.91	mg/kg	0.17	89	40	140			
n-Docosane	6.22	mg/kg	0.17	93	40	140			
n-Tetracosane	6.33	mg/kg	0.17	95	40	140			
n-Hexacosane	6.32	mg/kg	0.17	95	40	140			
n-Octacosane	5.74	mg/kg	0.17	86	40	140			
n-Triacontane	6.40	mg/kg	0.17	96	40	140			
n-Hexatriacontane	5.93	mg/kg	0.17	89	40	140			
Surr: 1-Chloro-octadecane			0.17	88	40	140			
Lab ID: MB-97218-97199	Method Blank				Run: GCFID-HP3-B_160226A				02/26/16 14:49
C9 to C18 Aliphatics	0.000	mg/kg	10						
C19 to C36 Aliphatics	0.000	mg/kg	10						
Surr: 1-Chloro-octadecane			0.17	87	40	140			
Lab ID: B16021758-001AMS	Sample Matrix Spike				Run: GCFID-HP3-B_160226A				02/26/16 17:55
C9 to C18 Aliphatics	25.5	mg/kg-dry	11	57	40	140			
C19 to C36 Aliphatics	51.7	mg/kg-dry	11	86	40	140			
n-Nonane	2.26	mg/kg-dry	0.19	30	30	140			
n-Decane	3.17	mg/kg-dry	0.19	42	40	140			
n-Dodecane	3.83	mg/kg-dry	0.19	51	40	140			
n-Tetradecane	4.41	mg/kg-dry	0.19	59	40	140			
n-Hexadecane	5.25	mg/kg-dry	0.19	70	40	140			
n-Octadecane	5.98	mg/kg-dry	0.19	80	40	140			
n-Nonadecane	6.08	mg/kg-dry	0.19	81	40	140			
n-Eicosane	6.13	mg/kg-dry	0.19	82	40	140			
n-Docosane	6.50	mg/kg-dry	0.19	87	40	140			
n-Tetracosane	6.63	mg/kg-dry	0.19	88	40	140			
n-Hexacosane	6.62	mg/kg-dry	0.19	88	40	140			
n-Octacosane	6.02	mg/kg-dry	0.19	80	40	140			
n-Triacontane	6.71	mg/kg-dry	0.19	90	40	140			
n-Hexatriacontane	6.17	mg/kg-dry	0.19	82	40	140			
Surr: 1-Chloro-octadecane			0.19	82	40	140			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH									Batch: 97218
Lab ID: B16021758-001AMSD	Sample Matrix Spike Duplicate				Run: GCFID-HP3-B_160226A			02/26/16 19:22	
C9 to C18 Aliphatics	25.0	mg/kg-dry	11	55	40	140	2.2	20	
C19 to C36 Aliphatics	49.0	mg/kg-dry	11	81	40	140	5.4	20	
n-Nonane	2.37	mg/kg-dry	0.19	32	30	140	5.0	30	
n-Decane	3.18	mg/kg-dry	0.19	42	40	140	0.3	20	
n-Dodecane	3.78	mg/kg-dry	0.19	50	40	140	1.2	20	
n-Tetradecane	4.26	mg/kg-dry	0.19	57	40	140	3.5	20	
n-Hexadecane	4.97	mg/kg-dry	0.19	66	40	140	5.6	20	
n-Octadecane	5.68	mg/kg-dry	0.19	76	40	140	5.1	20	
n-Nonadecane	5.77	mg/kg-dry	0.19	77	40	140	5.1	20	
n-Eicosane	5.80	mg/kg-dry	0.19	77	40	140	5.6	20	
n-Docosane	6.12	mg/kg-dry	0.19	81	40	140	6.0	20	
n-Tetracosane	6.23	mg/kg-dry	0.19	83	40	140	6.1	20	
n-Hexacosane	6.22	mg/kg-dry	0.19	83	40	140	6.2	20	
n-Octacosane	5.66	mg/kg-dry	0.19	75	40	140	6.2	20	
n-Triacontane	6.30	mg/kg-dry	0.19	84	40	140	6.3	20	
n-Hexatriacontane	5.80	mg/kg-dry	0.19	77	40	140	6.1	20	
Surr: 1-Chloro-octadecane			0.19	79	40	140			
Lab ID: LCS-97218-97199	Laboratory Control Sample				Run: GCFID-HP3-B_160226A			02/26/16 13:55	
C11 to C22 Aromatics	89.6	mg/kg	10	79	40	140			
Total Extractable Hydrocarbons	166	mg/kg	10	81	40	140			
Naphthalene	3.49	mg/kg	0.17	52	40	140			
2-MethylNaphthalene	3.63	mg/kg	0.17	54	40	140			
Acenaphthylene	4.13	mg/kg	0.17	62	40	140			
Acenaphthene	4.44	mg/kg	0.17	67	40	140			
Fluorene	4.81	mg/kg	0.17	72	40	140			
Phenanthrene	5.21	mg/kg	0.17	78	40	140			
Anthracene	5.23	mg/kg	0.17	79	40	140			
Fluoranthene	5.67	mg/kg	0.17	85	40	140			
Pyrene	5.70	mg/kg	0.17	85	40	140			
Benzo(a)Anthracene	5.80	mg/kg	0.17	87	40	140			
Chrysene	5.91	mg/kg	0.17	89	40	140			
Benzo(b)Fluoranthene/Benzo(k)Fluoran	11.6	mg/kg	0.17	87	40	140			
Benzo(a)Pyrene	6.06	mg/kg	0.17	91	40	140			
Dibenz(a,h)anthracene/Indeno(1,2,3-cd	11.7	mg/kg	0.17	87	40	140			
Benzo(g,h,I)perylene	5.39	mg/kg	0.17	81	40	140			
Surr: 2-Bromonaphthalene			0.17	79	40	140			
Surr: 2-Fluorobiphenyl			0.17	78	40	140			
Surr: o-Terphenyl			0.17	78	40	140			
Lab ID: MB-97218-97199	Method Blank				Run: GCFID-HP3-B_160226A			02/26/16 15:43	
C11 to C22 Aromatics	0.000	mg/kg	10						
Total Extractable Hydrocarbons	0.000	mg/kg	10						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH									Batch: 97218
Lab ID: MB-97218-97199	Method Blank				Run: GCFID-HP3-B_160226A				02/26/16 15:43
Naphthalene	0.000	mg/kg	0.17						
2-MethylNaphthalene	0.000	mg/kg	0.17						
Acenaphthylene	0.000	mg/kg	0.17						
Acenaphthene	0.000	mg/kg	0.17						
Fluorene	0.000	mg/kg	0.17						
Phenanthrene	0.000	mg/kg	0.17						
Anthracene	0.000	mg/kg	0.17						
Fluoranthene	0.000	mg/kg	0.17						
Pyrene	0.000	mg/kg	0.17						
Benzo(a)Anthracene	0.000	mg/kg	0.17						
Chrysene	0.000	mg/kg	0.17						
Benzo(b)Fluoranthene/Benzo(k)Fluoran	0.000	mg/kg	0.17						
Benzo(a)Pyrene	0.000	mg/kg	0.17						
Dibenz(a,h)anthracene/Indeno(1,2,3-cd	0.000	mg/kg	0.17						
Benzo(g,h,I)perylene	0.000	mg/kg	0.17						
Surr: 2-Bromonaphthalene			0.17	77	40	140			
Surr: 2-Fluorobiphenyl			0.17	77	40	140			
Surr: o-Terphenyl			0.17	76	40	140			
Lab ID: B16021758-001AMS	Sample Matrix Spike				Run: GCFID-HP3-B_160226A				02/26/16 18:39
C11 to C22 Aromatics	91.6	mg/kg-dry	11	72	40	140			
Total Extractable Hydrocarbons	170	mg/kg-dry	11	73	40	140			
Naphthalene	3.21	mg/kg-dry	0.19	43	40	140			
2-MethylNaphthalene	3.38	mg/kg-dry	0.19	45	40	140			
Acenaphthylene	3.90	mg/kg-dry	0.19	52	40	140			
Acenaphthene	4.22	mg/kg-dry	0.19	56	40	140			
Fluorene	4.61	mg/kg-dry	0.19	62	40	140			
Phenanthrene	5.19	mg/kg-dry	0.19	69	40	140			
Anthracene	5.31	mg/kg-dry	0.19	71	40	140			
Fluoranthene	5.90	mg/kg-dry	0.19	79	40	140			
Pyrene	5.95	mg/kg-dry	0.19	79	40	140			
Benzo(a)Anthracene	6.10	mg/kg-dry	0.19	81	40	140			
Chrysene	6.19	mg/kg-dry	0.19	83	40	140			
Benzo(b)Fluoranthene/Benzo(k)Fluoran	12.2	mg/kg-dry	0.19	81	40	140			
Benzo(a)Pyrene	6.52	mg/kg-dry	0.19	87	40	140			
Dibenz(a,h)anthracene/Indeno(1,2,3-cd	12.2	mg/kg-dry	0.19	81	40	140			
Benzo(g,h,I)perylene	5.66	mg/kg-dry	0.19	75	40	140			
Surr: 2-Bromonaphthalene			0.19	67	40	140			
Surr: 2-Fluorobiphenyl			0.19	66	40	140			
Surr: o-Terphenyl			0.19	70	40	140			
Lab ID: B16021758-001AMSD	Sample Matrix Spike Duplicate				Run: GCFID-HP3-B_160226A				02/26/16 20:06
C11 to C22 Aromatics	96.2	mg/kg-dry	11	75	40	140	4.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH									Batch: 97218
Lab ID: B16021758-001AMSD	Sample Matrix Spike Duplicate				Run: GCFID-HP3-B_160226A			02/26/16 20:06	
Total Extractable Hydrocarbons	171	mg/kg-dry	11	73	40	140	0.8	20	
Naphthalene	3.61	mg/kg-dry	0.19	48	40	140	12	20	
2-MethylNaphthalene	3.80	mg/kg-dry	0.19	51	40	140	12	20	
Acenaphthylene	4.38	mg/kg-dry	0.19	58	40	140	12	20	
Acenaphthene	4.73	mg/kg-dry	0.19	63	40	140	11	20	
Fluorene	5.12	mg/kg-dry	0.19	68	40	140	11	20	
Phenanthrene	5.60	mg/kg-dry	0.19	74	40	140	7.6	20	
Anthracene	5.62	mg/kg-dry	0.19	75	40	140	5.7	20	
Fluoranthene	6.10	mg/kg-dry	0.19	81	40	140	3.3	20	
Pyrene	6.12	mg/kg-dry	0.19	81	40	140	2.9	20	
Benzo(a)Anthracene	6.23	mg/kg-dry	0.19	83	40	140	2.1	20	
Chrysene	6.31	mg/kg-dry	0.19	84	40	140	1.9	20	
Benzo(b)Fluoranthene/Benzo(k)Fluoran	12.4	mg/kg-dry	0.19	83	40	140	2.3	20	
Benzo(a)Pyrene	6.64	mg/kg-dry	0.19	88	40	140	1.8	20	
Dibenz(a,h)anthracene/Indeno(1,2,3-cd	12.5	mg/kg-dry	0.19	83	40	140	2.4	20	
Benzo(g,h,I)perylene	5.79	mg/kg-dry	0.19	77	40	140	2.3	20	
Surr: 2-Bromonaphthalene			0.19	80	40	140			
Surr: 2-Fluorobiphenyl			0.19	78	40	140			
Surr: o-Terphenyl			0.19	74	40	140			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: MA-EPH								Analytical Run: R257195	
Lab ID: CCV_0226HP315r-S	Continuing Calibration Verification Standard							02/26/16 20:50	
n-Nonane	6.65	mg/kg	0.17	100	75	125			
n-Decane	6.68	mg/kg	0.17	100	75	125			
n-Dodecane	6.67	mg/kg	0.17	100	75	125			
n-Tetradecane	6.52	mg/kg	0.17	98	75	125			
n-Hexadecane	6.60	mg/kg	0.17	99	75	125			
n-Octadecane	6.62	mg/kg	0.17	99	75	125			
n-Nonadecane	6.72	mg/kg	0.17	101	75	125			
n-Eicosane	6.29	mg/kg	0.17	94	75	125			
n-Docosane	6.58	mg/kg	0.17	99	75	125			
n-Tetracosane	6.61	mg/kg	0.17	99	75	125			
n-Hexacosane	6.55	mg/kg	0.17	98	75	125			
n-Octacosane	6.10	mg/kg	0.17	92	75	125			
n-Triacontane	6.56	mg/kg	0.17	98	75	125			
n-Hexatriacontane	6.53	mg/kg	0.17	98	75	125			
Surr: 1-Chloro-octadecane			0.17	100	75	125			
Lab ID: CCV_0226HP316r-S	Continuing Calibration Verification Standard							02/26/16 21:33	
Naphthalene	6.86	mg/kg	0.17	103	75	125			
2-MethylNaphthalene	6.99	mg/kg	0.17	105	75	125			
Acenaphthylene	6.78	mg/kg	0.17	102	75	125			
Acenaphthene	6.88	mg/kg	0.17	103	75	125			
Fluorene	6.86	mg/kg	0.17	103	75	125			
Phenanthrene	7.01	mg/kg	0.17	105	75	125			
Anthracene	6.83	mg/kg	0.17	102	75	125			
Fluoranthene	6.87	mg/kg	0.17	103	75	125			
Pyrene	6.84	mg/kg	0.17	103	75	125			
Benzo(a)Anthracene	6.93	mg/kg	0.17	104	75	125			
Chrysene	6.84	mg/kg	0.17	103	75	125			
Benzo(b)Fluoranthene/Benzo(k)Fluoran	13.6	mg/kg	0.17	102	75	125			
Benzo(a)Pyrene	7.30	mg/kg	0.17	110	75	125			
Dibenz(a,h)anthracene/Indeno(1,2,3-cd	13.7	mg/kg	0.17	103	75	125			
Benzo(g,h,I)perylene	6.72	mg/kg	0.17	101	75	125			
Surr: 2-Bromonaphthalene			0.17	104	75	125			
Surr: 2-Fluorobiphenyl			0.17	105	75	125			
Surr: o-Terphenyl			0.17	102	75	125			

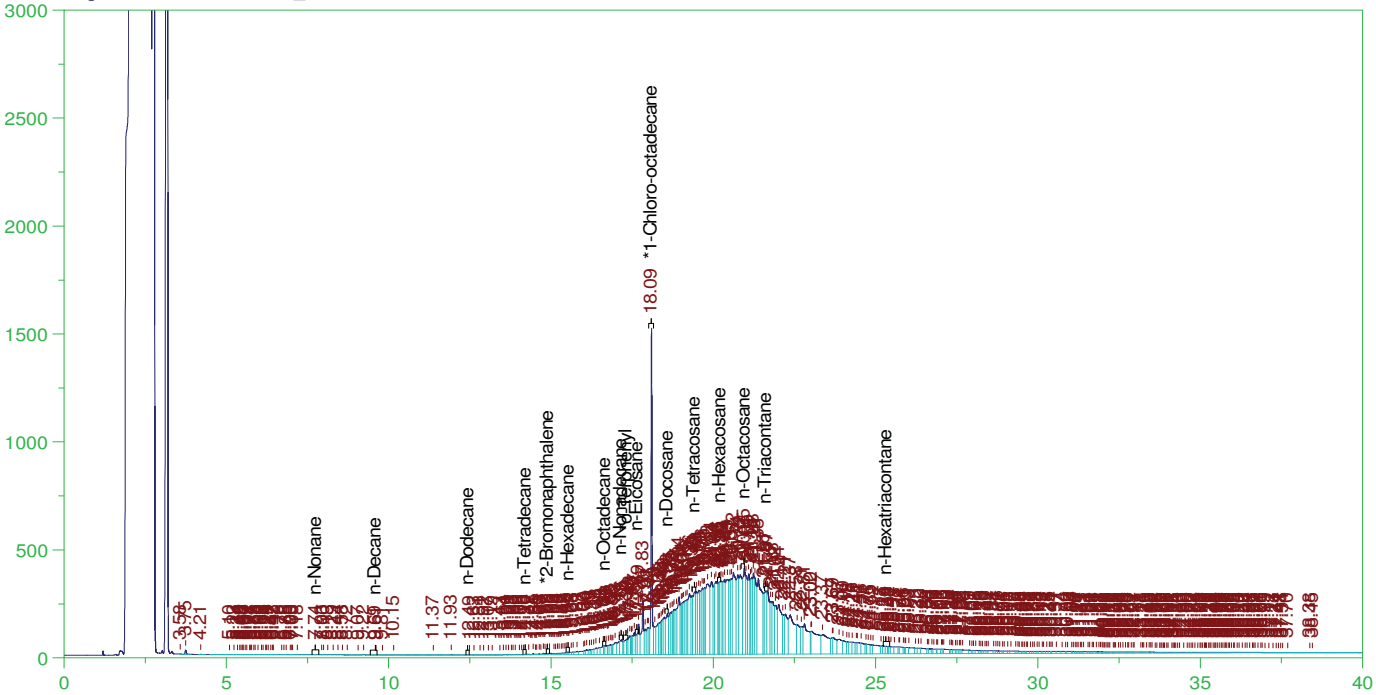
Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Overburden-1 Batch ID: 97218

G:\org\HP3\DAT\HP3022616_b\0226HP3.0018.RAW B16021788-001A ;0226HP3 , $HC-ALI-GRP-S, RUSH-V18



EPH ALIPHATICS (FID) ANALYSIS REPORT

Sample Name: B16021788-001A ;0226HP3 , $HC-ALI-GRP-S, RUSH-V18
Raw File: G:\org\HP3\DAT\HP3022616_b\0226HP3.0018.RAW
Date & Time Acquired: 2/26/2016 11:21:14 PM
Method File: g:\org\HP3\Methods\LR_EPH-022618-OD-L%.met
Calibration File: G:\Org\HP3\Cals\AL130823OD.CAL
Sample Weight: 30.02 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Aliphatic Hydrocarbons: 30415.23
Mean RF for C19 to C36 Aliphatic Hydrocarbons: 31274
Mean RF for Total Extractable Hydrocarbons: 30905.96
Rt range for Diesel Range Organics: 9.434 to 20.96
Rt range for C9 to C18 Aliphatic Hydrocarbons: 7.641 to 17.106
Rt range for C19 to C36 Aliphatic Hydrocarbons: 17.131 to 25.433

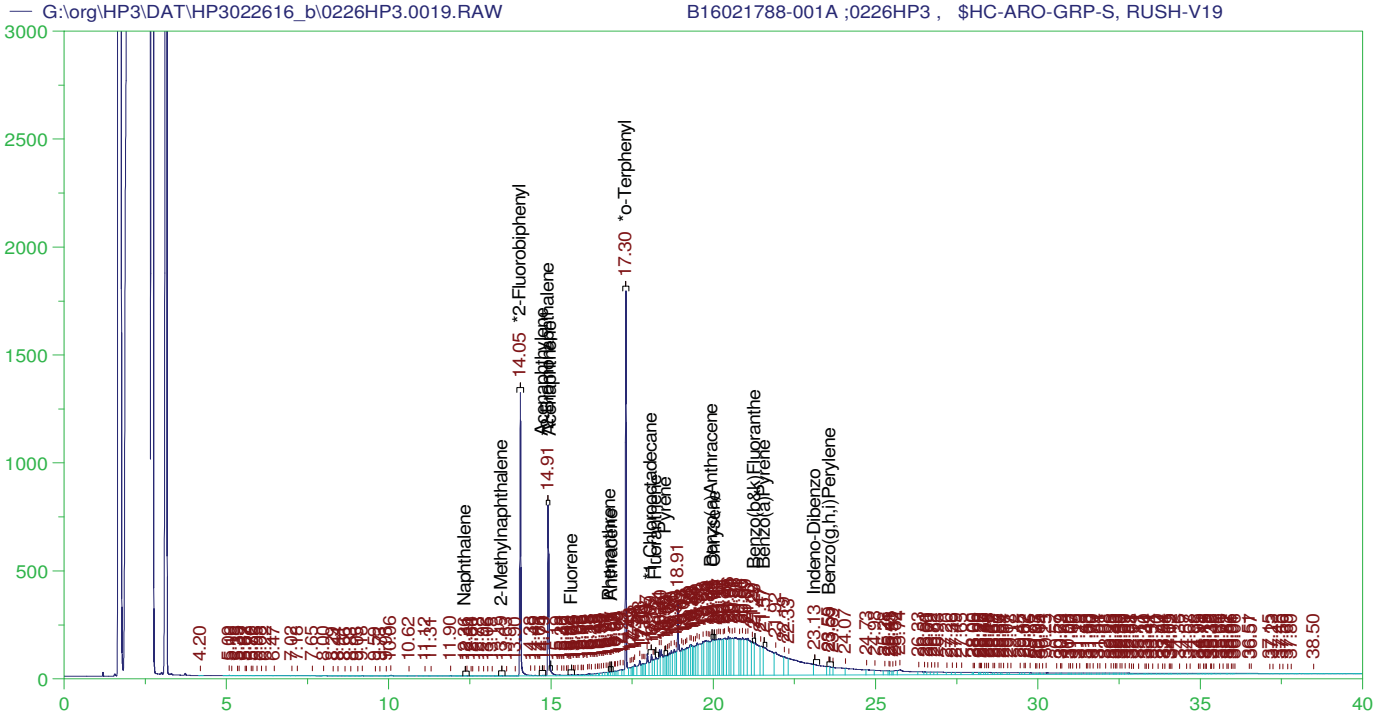
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*1-Chloro-octadecane_____	18.089	6.662	7.914	118.79	-

DRO Area:5.477732E+07 DRO Amount: 118.0804
TEH Area:9.754422E+07 TEH Amount: 210.2706

Aliphatic Hydrocarbon Areas and Amounts:
C9-C18 Area:2816844 C9-C18 Amount: 6.170082
C19-C36 Area:8.749159E+07C19-C36 Amount: 186.3813

Overburden-1 Batch ID: 97218

G:\org\HP3\DAT\HP3022616_b\0226HP3.0019.RAW B16021788-001A ;0226HP3 , $HC-ARO-GRP-S, RUSH-V19



EPH AROMATICS RANGE VALUES (FID) ANALYSIS REPORT

Sample Name: B16021788-001A ;0226HP3 , $HC-ARO-GRP-S, RUSH-V19
Raw File: G:\org\HP3\DAT\HP3022616_b\0226HP3.0019.RAW
Date & Time Acquired: 2/27/2016 12:15:12 AM
Method File: g:\org\HP3\Methods\RR_EPH-022619-OD-L%.met
Calibration File: G:\Org\HP3\Cals\AR130823OD.CAL
Sample Weight: 30.02 Dilution: 2 S.A.: 1

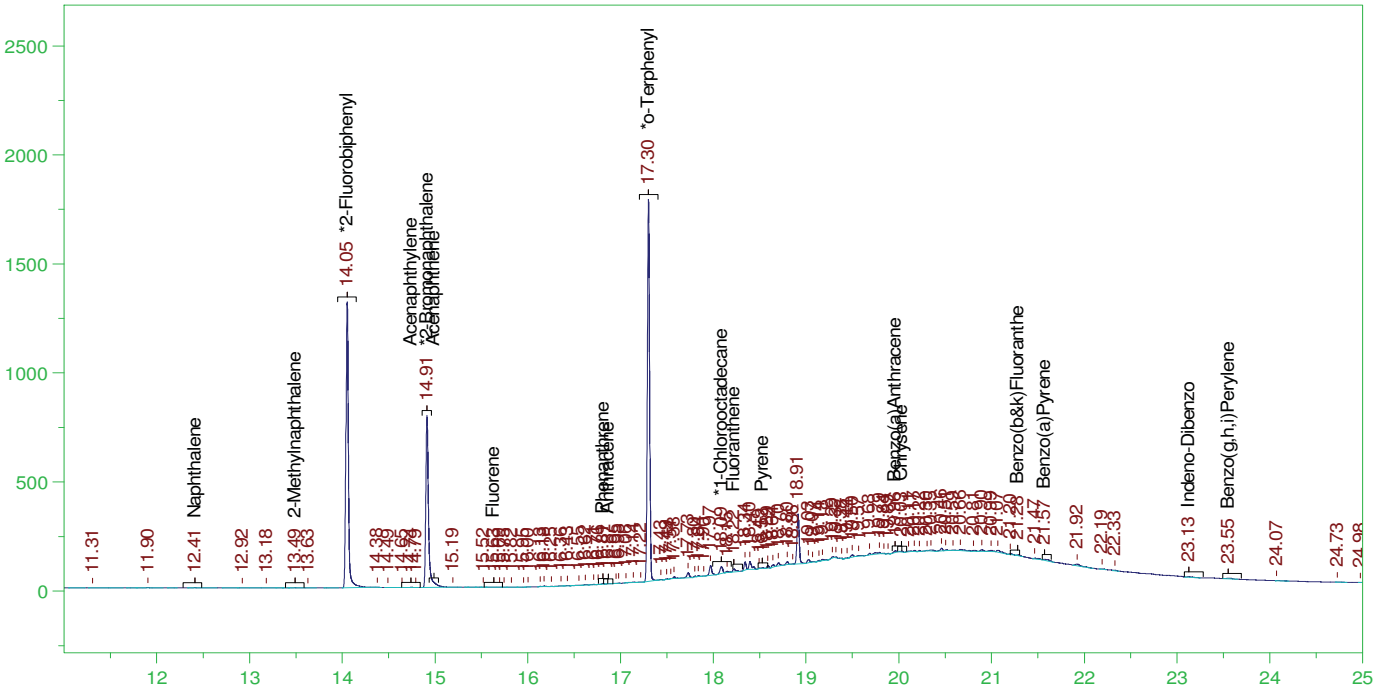
Mean RF EPH Aromatics: 32892.63
Rt range for EPH C11 to C22 Aromatics: 12.283 to 23.695

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*2-Fluorobiphenyl	14.051	6.662	5.361	80.48	-
*2-Bromonaphthalene	14.913	6.662	5.459	81.95	-
*o-Terphenyl	17.301	6.662	6.006	90.15	-
*1-Chlorooctadecane	18.087	6.662	.985	14.79	-

C11-C22 Aromatics Area:4.175885E+07 C11-C22 Aromatics Amount: 84.58029
EPH Aromatics total Area:4.839156E+07 EPH Aromatics Total Amount: 98.01449

Overburden-1 Batch ID: 97218

— G:\org\HP3\DAT\HP3022616_b\0226HP3.0019.RAW B16021788-001A ;0226HP3 , $HC-ARO-GRP-S, RUSH-V19



EPH AROMATICS TARGET VALUES (FID) ANALYSIS REPORT

Sample Name: B16021788-001A ;0226HP3 , $HC-ARO-GRP-S, RUSH-V19
Raw File: G:\org\HP3\DAT\HP3022616_b\0226HP3.0019.RAW
Date & Time Acquired: 2/27/2016 12:15:12 AM
Method File: g:\org\HP3\Methods\RS_EPH-OD-L%.met
Calibration File: G:\Org\HP3\Cals\AR130823OD.CAL
Sample Weight: 30.02 Dilution: 2 S.A.: 1

TARGET ANALYTES	RT	CAL RRT	RRT	AREA	AMOUNT	FLAG
Naphthalene	12.412	12.412	12.412	3244	.067	U
2-Methylnaphthalene	13.492	13.492	13.492	2459	.067	U
Acenaphthylene	14.742	14.742	14.742	2163	.067	U
Acenaphthene	.	.	.		.067	U
Fluorene	15.632	15.632	15.632	3178	.067	U
Phenanthrene	16.81	16.81	16.81	4039	.067	U
Anthracene	16.868	16.868	16.868	2235	.067	U
Fluoranthene	18.222	-3.352	-3.31	29163	.058	J
Pyrene	18.529	18.529	18.529	4128	.067	U
Benzo(a)Anthracene	19.961	19.961	19.961	16342	.067	U
Chrysene	20.03	20.03	20.03	8914	.067	U
Benzo(b&k)Fluoranthe	21.281	21.281	21.281	10114	.133	U
Benzo(a)Pyrene	21.57	21.57	21.57	25735	.067	U
Indeno-Dibenzo	23.126	23.126	23.126	8471	.133	U
Benzo(g,h,i)Perylene	23.555	23.555	23.555	12805	.067	U

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
*2-Fluorobiphenyl	14.051	6.662	5.303	79.6	40-140
*2-Bromonaphthalene	14.913	6.662	5.32	79.85	40-140
*o-Terphenyl	17.301	6.662	5.49	82.4	40-140
*1-Chlorooctadecane	18.087	6.662	.144	2.16	40-140

Overburden-2 Batch ID: 97218

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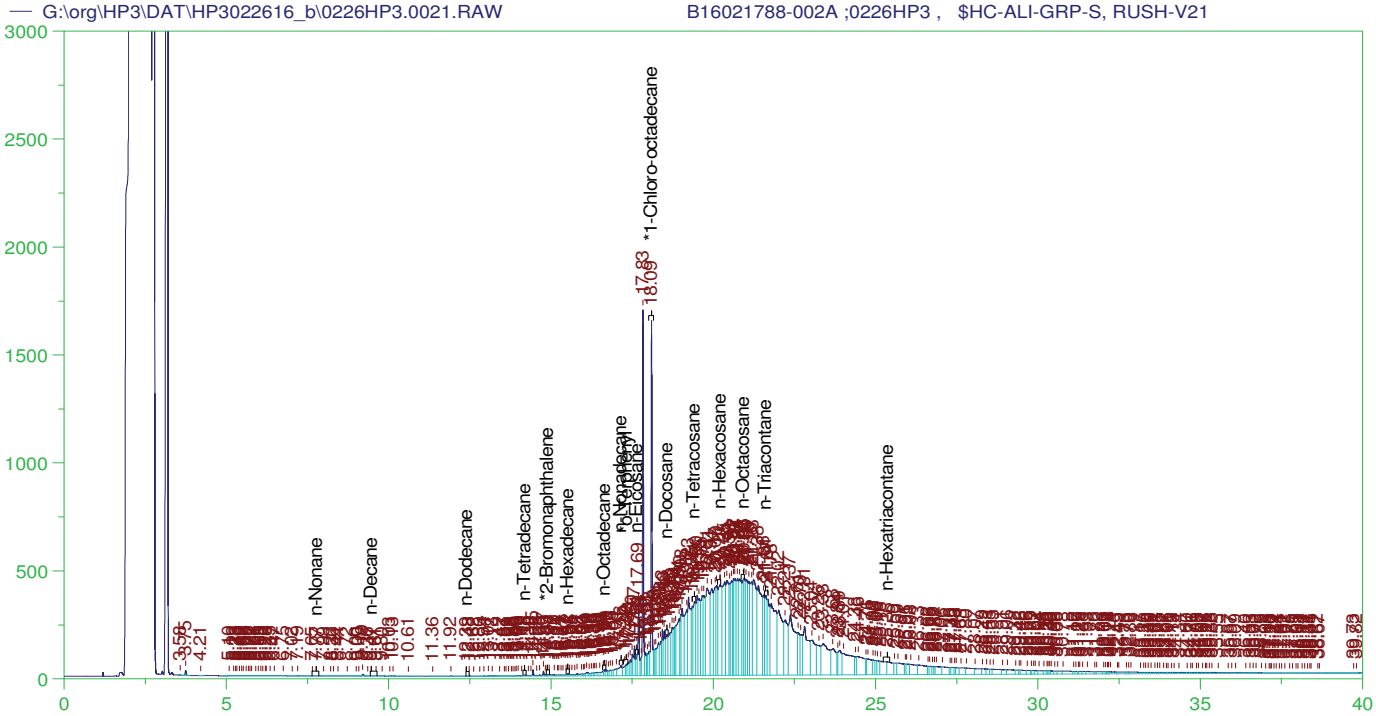


EPH ALIPHATICS (FID) ANALYSIS REPORT

Sample Name: B16021788-002A ;0226HP3 , $HC-ALI-GRP-S, RUSH-V21
Raw File: G:\org\HP3\DAT\HP3022616_b\0226HP3.0021.RAW
Date & Time Acquired: 2/27/2016 2:03:08 AM
Method File: g:\org\HP3\Methods\L3_EPH-022621-OD-L%.met
Calibration File: G:\Org\HP3\Cals\AL130823OD.CAL
Sample Weight: 29.99 Dilution: 2 S.A.: 1

Mean RF for C9 to C18 Aliphatic Hydrocarbons: 30415.23
Mean RF for C19 to C36 Aliphatic Hydrocarbons: 31274
Mean RF for Total Extractable Hydrocarbons: 30905.96
Rt range for Diesel Range Organics: 9.434 to 20.96
Rt range for C9 to C18 Aliphatic Hydrocarbons: 7.641 to 17.106
Rt range for C19 to C36 Aliphatic Hydrocarbons: 17.131 to 25.433

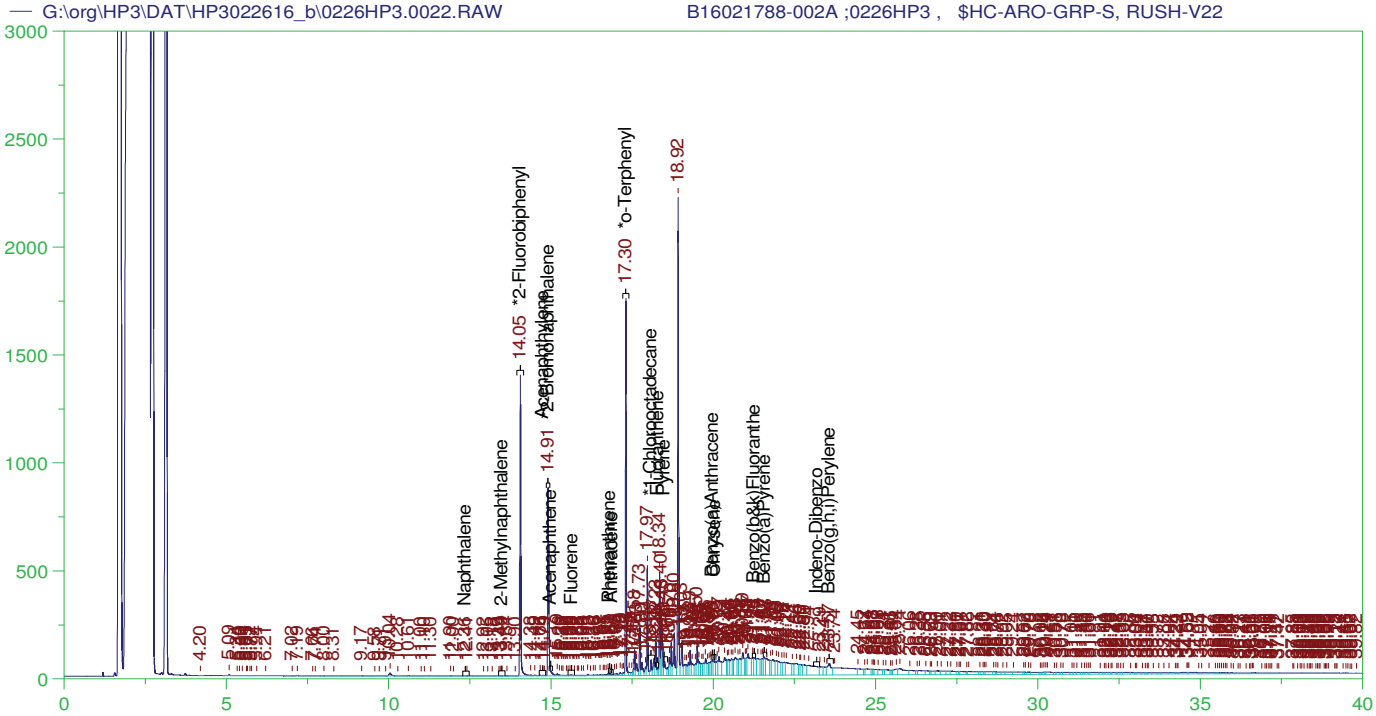
SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*1-Chloro-octadecane	18.091	6.669	8.117	121.71	-

DRO Area:6.428552E+07 DRO Amount: 138.7153
TEH Area:1.263252E+08 TEH Amount: 272.5846

Aliphatic Hydrocarbon Areas and Amounts:
C9-C18 Area:1755671 C9-C18 Amount: 3.84951
C19-C36 Area:1.127525E+08C19-C36 Amount: 240.4343

Overburden-2 Batch ID: 97218

G:\org\HP3\DAT\HP3022616_b\0226HP3.0022.RAW B16021788-002A ;0226HP3 , $HC-ARO-GRP-S, RUSH-V22



EPH AROMATICS RANGE VALUES (FID) ANALYSIS REPORT

Sample Name: B16021788-002A ;0226HP3 , $HC-ARO-GRP-S, RUSH-V22
Raw File: G:\org\HP3\DAT\HP3022616_b\0226HP3.0022.RAW
Date & Time Acquired: 2/27/2016 2:57:04 AM
Method File: g:\org\HP3\Methods\R3_EPH-022622-OD-L%.met
Calibration File: G:\Org\HP3\Cals\AR130823OD.CAL
Sample Weight: 29.99 Dilution: 2 S.A.: 1

Mean RF EPH Aromatics: 32892.63
Rt range for EPH C11 to C22 Aromatics: 12.283 to 23.695

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*2-Fluorobiphenyl_____	14.051	6.669	5.679	85.15	-
*2-Bromonaphthalene_____	14.912	6.669	5.867	87.98	-
*o-Terphenyl_____	17.302	6.669	5.538	83.04	-
*1-Chlorooctadecane_____	18.077	6.669	.5	7.5	-

C11-C22 Aromatics Area:2.790568E+07 C11-C22 Aromatics Amount: 56.57799
EPH Aromatics total Area:3.785387E+07 EPH Aromatics Total Amount: 76.74767

Overburden-2 Batch ID: 97218

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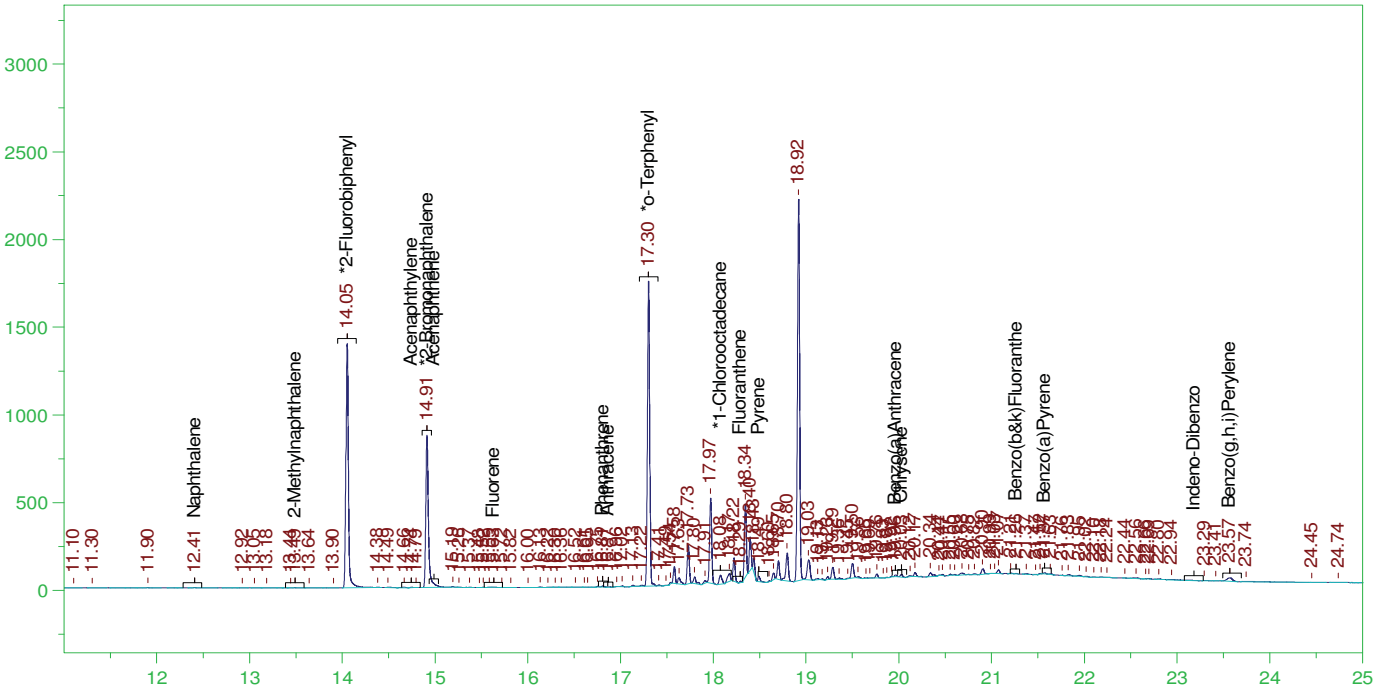

EPH AROMATICS TARGET VALUES (FID) ANALYSIS REPORT

Sample Name: B16021788-002A ;0226HP3 , $HC-ARO-GRP-S, RUSH-V22
Raw File: G:\org\HP3\DAT\HP3022616_b\0226HP3.0022.RAW
Date & Time Acquired: 2/27/2016 2:57:04 AM
Method File: g:\org\HP3\Methods\RS_EPH-OD-L%.met
Calibration File: G:\Org\HP3\Cals\AR130823OD.CAL
Sample Weight: 29.99 Dilution: 2 S.A.: 1

TARGET ANALYTES	RT	CAL RRT	RRT	AREA	AMOUNT	FLAG
Naphthalene	12.408	12.408	12.408	7160	.067	U
2-Methylnaphthalene	13.49	13.49	13.49	2377	.067	U
Acenaphthylene	14.744	14.744	14.744	3804	.067	U
Acenaphthene	.	.	.		.067	U
Fluorene	15.634	15.634	15.634	2482	.067	U
Phenanthrene	16.809	16.809	16.809	8520	.067	U
Anthracene	16.868	16.868	16.868	2713	.067	U
Fluoranthene	18.289	18.289	18.289	12827	.067	U
Pyrene	18.49	-3.623	-3.578	55262	.109	
Benzo(a)Anthracene	19.965	19.965	19.965	13907	.067	U
Chrysene	20.027	20.027	20.027	23968	.067	U
Benzo(b&k)Fluoranthe	21.263	21.263	21.263	4828	.133	U
Benzo(a)Pyrene	21.569	21.569	21.569	15242	.067	U
Indeno-Dibenzo	.	.	.		.133	U
Benzo(g,h,i)Perylene	23.567	-8.684	-8.655	75272	.148	

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	QC LIMITS
*2-Fluorobiphenyl	14.051	6.669	5.622	84.31	40-140
*2-Bromonaphthalene	14.912	6.669	5.72	85.77	40-140
*o-Terphenyl	17.302	6.669	5.381	80.68	40-140
*1-Chlorooctadecane	18.077	6.669	.252	3.78	40-140

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 97197
Lab ID: MB-97197	Method Blank				Run: GECD.I_160224A				02/25/16 13:54
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	97	50	126			
Surr: Tetrachloro-m-xylene			0.0017	65	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-97197	Laboratory Control Sample				Run: GECD.I_160224A				02/25/16 14:20
Aroclor 1254	0.288	mg/kg	0.017	87	62	126			
Surr: Decachlorobiphenyl			0.0017	100	50	126			
Surr: Tetrachloro-m-xylene			0.0017	59	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021788-005AMB	Sample Matrix Spike				Run: GECD.I_160224A				02/25/16 18:19
Aroclor 1254	1.04	mg/kg-dry	0.020	127	62	126			S
Surr: Decachlorobiphenyl			0.0020	102	50	126			
Surr: Tetrachloro-m-xylene			0.0020	72	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16021788-005ADB	Sample Matrix Spike Duplicate				Run: GECD.I_160224A				02/25/16 18:45
Aroclor 1254	1.11	mg/kg-dry	0.019	147	62	126	6.2	40	S
Surr: Decachlorobiphenyl			0.0019	103	50	126			
Surr: Tetrachloro-m-xylene			0.0019	61	42	115			
- The high percent recovery for Aroclor 1254 in the matrix spike and matrix spike duplicate samples can be attributed to a non-homogeneous sample matrix.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 22

Report Date: 02/29/16
Work Order: B16021788

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082								Analytical Run: R257119	
Lab ID: 1254CK3	Continuing Calibration Verification Standard							02/25/16 13:00	
Aroclor 1254	0.213	mg/kg	0.017	106	85	115			
Surr: Decachlorobiphenyl			0.0017	110	85	115			
Surr: Tetrachloro-m-xylene			0.0017	101	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/25/16 13:27	
Aroclor 1254	2.06	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	100	85	115			
Surr: Tetrachloro-m-xylene			0.0017	100	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard							02/25/16 19:39	
Aroclor 1254	2.18	mg/kg	0.017	109	85	115			
Surr: Decachlorobiphenyl			0.0017	106	85	115			
Surr: Tetrachloro-m-xylene			0.0017	106	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard							02/25/16 20:05	
Aroclor 1254	0.222	mg/kg	0.017	111	85	115			
Surr: Decachlorobiphenyl			0.0017	119	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	105	85	115			

Qualifiers:

RL - Analyte reporting limit.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

Work Order Receipt Checklist

NewFields

B16021788

Login completed by: Tabitha Edwards

Reviewed by: BL2000\jmueller

Reviewed Date: 2/26/2016

Date Received: 2/25/2016

Received by: cmb

Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	1.9°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Data Package #22

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1120 Cedar St. Missoula, MT 59802

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar St. Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: If EPH above 200 mg/kg, run fractionate

Shipped by: Delivery UPS Ground

Cooler ID(s):

Receipt Temp 1.9 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N

Intact Y N

Signature Match Y N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 8082	EPH Screen	RCRA 8 Metals	SEE ATTACHED	Standard Turnaround (TAT)	RUSH	LABORATORY USE ONLY
1 overburden - 1	2/24/16	1425	S		X	X			X	2 DAY TAT B602178 8-001
2 overburden - 2	2/24/16	1430	S		X	X			X	002
3 overburden - 3 - 2	2/24/16	1435	S	X	X	X			X	003
4 overburden - 4 - 2	2/24/16	1440	S	X	X	X			X	004
5 overburden - 5 - 2	2/24/16	1445	S	X	X	X			X	005
6										
7										
8										
9										
10										

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 2/24/16 1600 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: [signature] Date/Time: 2-25-16 9:15 am Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

March 16, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16030854 Quote ID: B3097 - Stimson

Project Name: Stimson Data Package 23

Energy Laboratories Inc Billings MT received the following 10 samples for NewFields on 3/10/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16030854-001	350.0033-Comp1a	03/09/16 14:00	03/10/16	Solid	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16030854-002	350.0033-Comp1b	03/09/16 14:15	03/10/16	Solid	Same As Above
B16030854-003	350.0033-Comp2a	03/09/16 12:00	03/10/16	Solid	Same As Above
B16030854-004	350.0033-Comp2b	03/09/16 12:15	03/10/16	Solid	Same As Above
B16030854-005	350.0033-Comp3a	03/09/16 13:30	03/10/16	Solid	Same As Above
B16030854-006	350.0033-Comp3b	03/09/16 13:45	03/10/16	Solid	Same As Above
B16030854-007	350.0033-Comp4a	03/09/16 12:30	03/10/16	Solid	Same As Above
B16030854-008	350.0033-Comp4b	03/09/16 12:45	03/10/16	Solid	Same As Above
B16030854-009	350.0033-Comp5a	03/09/16 13:00	03/10/16	Solid	Same As Above
B16030854-010	350.0033-Comp5b	03/09/16 13:15	03/10/16	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.03.16 11:07:39 -06:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-001
Client Sample ID: 350.0033-Comp1a

Report Date: 03/16/16
Collection Date: 03/09/16 14:00
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	03/10/16 10:46 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		1.9		SW8082	03/11/16 10:11 / ldw
Aroclor 1221	ND	mg/kg-dry		3.7		SW8082	03/11/16 10:11 / ldw
Aroclor 1232	ND	mg/kg-dry		1.9		SW8082	03/11/16 10:11 / ldw
Aroclor 1242	ND	mg/kg-dry		1.9		SW8082	03/11/16 10:11 / ldw
Aroclor 1248	ND	mg/kg-dry		1.9		SW8082	03/11/16 10:11 / ldw
Aroclor 1254	34	mg/kg-dry		1.9		SW8082	03/11/16 10:11 / ldw
Aroclor 1260	ND	mg/kg-dry		1.9		SW8082	03/11/16 10:11 / ldw
Aroclor 1262	ND	mg/kg-dry		1.9		SW8082	03/11/16 10:11 / ldw
Aroclor 1268	ND	mg/kg-dry		1.9		SW8082	03/11/16 10:11 / ldw
Surr: Decachlorobiphenyl	99.0	%REC		50-126		SW8082	03/10/16 23:17 / ldw
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	03/10/16 23:17 / ldw

- The Reporting Limits reflect a 100 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-002
Client Sample ID: 350.0033-Comp1b

Report Date: 03/16/16
Collection Date: 03/09/16 14:15
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	17	wt%		0.2		SW3550A	03/15/16 09:06 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082	03/15/16 21:51 / jem
Aroclor 1221	ND	mg/kg-dry		0.040		SW8082	03/15/16 21:51 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082	03/15/16 21:51 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082	03/15/16 21:51 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082	03/15/16 21:51 / jem
Aroclor 1254	0.86	mg/kg-dry		0.020		SW8082	03/15/16 21:51 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082	03/15/16 21:51 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082	03/15/16 21:51 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082	03/15/16 21:51 / jem
Surr: Decachlorobiphenyl	103	%REC		50-126		SW8082	03/15/16 21:51 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082	03/15/16 21:51 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-003
Client Sample ID: 350.0033-Comp2a

Report Date: 03/16/16
Collection Date: 03/09/16 12:00
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	03/10/16 10:51 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:31 / ldw
Aroclor 1221	ND	mg/kg-dry		0.072		SW8082	03/11/16 11:31 / ldw
Aroclor 1232	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:31 / ldw
Aroclor 1242	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:31 / ldw
Aroclor 1248	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:31 / ldw
Aroclor 1254	1.9	mg/kg-dry		0.037		SW8082	03/11/16 11:31 / ldw
Aroclor 1260	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:31 / ldw
Aroclor 1262	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:31 / ldw
Aroclor 1268	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:31 / ldw
Surr: Decachlorobiphenyl	118	%REC		50-126		SW8082	03/11/16 11:31 / ldw
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	03/11/16 11:31 / ldw

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-004
Client Sample ID: 350.0033-Comp2b

Report Date: 03/16/16
Collection Date: 03/09/16 12:15
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	03/15/16 09:15 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.019		SW8082	03/15/16 22:18 / jem
Aroclor 1221	ND	mg/kg-dry		0.037		SW8082	03/15/16 22:18 / jem
Aroclor 1232	ND	mg/kg-dry		0.019		SW8082	03/15/16 22:18 / jem
Aroclor 1242	ND	mg/kg-dry		0.019		SW8082	03/15/16 22:18 / jem
Aroclor 1248	ND	mg/kg-dry		0.019		SW8082	03/15/16 22:18 / jem
Aroclor 1254	0.34	mg/kg-dry		0.019		SW8082	03/15/16 22:18 / jem
Aroclor 1260	ND	mg/kg-dry		0.019		SW8082	03/15/16 22:18 / jem
Aroclor 1262	ND	mg/kg-dry		0.019		SW8082	03/15/16 22:18 / jem
Aroclor 1268	ND	mg/kg-dry		0.019		SW8082	03/15/16 22:18 / jem
Surr: Decachlorobiphenyl	108	%REC		50-126		SW8082	03/15/16 22:18 / jem
Surr: Tetrachloro-m-xylene	78.0	%REC		42-115		SW8082	03/15/16 22:18 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-005
Client Sample ID: 350.0033-Comp3a

Report Date: 03/16/16
Collection Date: 03/09/16 13:30
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	10	wt%		0.2		SW3550A	03/10/16 10:56 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:58 / ldw
Aroclor 1221	ND	mg/kg-dry		0.072		SW8082	03/11/16 11:58 / ldw
Aroclor 1232	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:58 / ldw
Aroclor 1242	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:58 / ldw
Aroclor 1248	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:58 / ldw
Aroclor 1254	2.4	mg/kg-dry		0.037		SW8082	03/11/16 11:58 / ldw
Aroclor 1260	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:58 / ldw
Aroclor 1262	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:58 / ldw
Aroclor 1268	ND	mg/kg-dry		0.037		SW8082	03/11/16 11:58 / ldw
Surr: Decachlorobiphenyl	118	%REC		50-126		SW8082	03/11/16 11:58 / ldw
Surr: Tetrachloro-m-xylene	76.0	%REC		42-115		SW8082	03/11/16 11:58 / ldw

- The Reporting Limits reflect a 2 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-006
Client Sample ID: 350.0033-Comp3b

Report Date: 03/16/16
Collection Date: 03/09/16 13:45
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	8.3	wt%		0.2		SW3550A	03/15/16 09:21 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082	03/15/16 22:44 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082	03/15/16 22:44 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082	03/15/16 22:44 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082	03/15/16 22:44 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082	03/15/16 22:44 / jem
Aroclor 1254	0.33	mg/kg-dry		0.018		SW8082	03/15/16 22:44 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082	03/15/16 22:44 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082	03/15/16 22:44 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082	03/15/16 22:44 / jem
Surr: Decachlorobiphenyl	105	%REC		50-126		SW8082	03/15/16 22:44 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082	03/15/16 22:44 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-007
Client Sample ID: 350.0033-Comp4a

Report Date: 03/16/16
Collection Date: 03/09/16 12:30
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	03/10/16 10:56 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.095		SW8082	03/11/16 12:24 / ldw
Aroclor 1221	ND	mg/kg-dry		0.19		SW8082	03/11/16 12:24 / ldw
Aroclor 1232	ND	mg/kg-dry		0.095		SW8082	03/11/16 12:24 / ldw
Aroclor 1242	ND	mg/kg-dry		0.095		SW8082	03/11/16 12:24 / ldw
Aroclor 1248	ND	mg/kg-dry		0.095		SW8082	03/11/16 12:24 / ldw
Aroclor 1254	2.7	mg/kg-dry		0.095		SW8082	03/11/16 12:24 / ldw
Aroclor 1260	ND	mg/kg-dry		0.095		SW8082	03/11/16 12:24 / ldw
Aroclor 1262	ND	mg/kg-dry		0.095		SW8082	03/11/16 12:24 / ldw
Aroclor 1268	ND	mg/kg-dry		0.095		SW8082	03/11/16 12:24 / ldw
Surr: Decachlorobiphenyl	124	%REC		50-126		SW8082	03/11/16 12:24 / ldw
Surr: Tetrachloro-m-xylene	74.0	%REC		42-115		SW8082	03/11/16 12:24 / ldw

- The Reporting Limits reflect a 5 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-008
Client Sample ID: 350.0033-Comp4b

Report Date: 03/16/16
Collection Date: 03/09/16 12:45
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	14	wt%		0.2		SW3550A	03/15/16 09:27 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.099		SW8082	03/15/16 18:44 / jem
Aroclor 1221	ND	mg/kg-dry		0.19		SW8082	03/15/16 18:44 / jem
Aroclor 1232	ND	mg/kg-dry		0.099		SW8082	03/15/16 18:44 / jem
Aroclor 1242	ND	mg/kg-dry		0.099		SW8082	03/15/16 18:44 / jem
Aroclor 1248	ND	mg/kg-dry		0.099		SW8082	03/15/16 18:44 / jem
Aroclor 1254	2.5	mg/kg-dry		0.099		SW8082	03/15/16 18:44 / jem
Aroclor 1260	ND	mg/kg-dry		0.099		SW8082	03/15/16 18:44 / jem
Aroclor 1262	ND	mg/kg-dry		0.099		SW8082	03/15/16 18:44 / jem
Aroclor 1268	ND	mg/kg-dry		0.099		SW8082	03/15/16 18:44 / jem
Surr: Decachlorobiphenyl	110	%REC		50-126		SW8082	03/15/16 18:44 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082	03/15/16 18:44 / jem

- The Reporting Limits reflect a 5 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-009
Client Sample ID: 350.0033-Comp5a

Report Date: 03/16/16
Collection Date: 03/09/16 13:00
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	03/10/16 10:56 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.20		SW8082	03/11/16 12:51 / ldw
Aroclor 1221	ND	mg/kg-dry		0.38		SW8082	03/11/16 12:51 / ldw
Aroclor 1232	ND	mg/kg-dry		0.20		SW8082	03/11/16 12:51 / ldw
Aroclor 1242	ND	mg/kg-dry		0.20		SW8082	03/11/16 12:51 / ldw
Aroclor 1248	ND	mg/kg-dry		0.20		SW8082	03/11/16 12:51 / ldw
Aroclor 1254	3.8	mg/kg-dry		0.20		SW8082	03/11/16 12:51 / ldw
Aroclor 1260	ND	mg/kg-dry		0.20		SW8082	03/11/16 12:51 / ldw
Aroclor 1262	ND	mg/kg-dry		0.20		SW8082	03/11/16 12:51 / ldw
Aroclor 1268	ND	mg/kg-dry		0.20		SW8082	03/11/16 12:51 / ldw
Surr: Decachlorobiphenyl	122	%REC		50-126		SW8082	03/11/16 12:51 / ldw
Surr: Tetrachloro-m-xylene	86.0	%REC		42-115		SW8082	03/11/16 12:51 / ldw

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Data Package 23
Lab ID: B16030854-010
Client Sample ID: 350.0033-Comp5b

Report Date: 03/16/16
Collection Date: 03/09/16 13:15
DateReceived: 03/10/16
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	11	wt%		0.2		SW3550A	03/15/16 09:36 / tmc
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.19		SW8082	03/15/16 19:11 / jem
Aroclor 1221	ND	mg/kg-dry		0.37		SW8082	03/15/16 19:11 / jem
Aroclor 1232	ND	mg/kg-dry		0.19		SW8082	03/15/16 19:11 / jem
Aroclor 1242	ND	mg/kg-dry		0.19		SW8082	03/15/16 19:11 / jem
Aroclor 1248	ND	mg/kg-dry		0.19		SW8082	03/15/16 19:11 / jem
Aroclor 1254	1.3	mg/kg-dry		0.19		SW8082	03/15/16 19:11 / jem
Aroclor 1260	ND	mg/kg-dry		0.19		SW8082	03/15/16 19:11 / jem
Aroclor 1262	ND	mg/kg-dry		0.19		SW8082	03/15/16 19:11 / jem
Aroclor 1268	ND	mg/kg-dry		0.19		SW8082	03/15/16 19:11 / jem
Surr: Decachlorobiphenyl	114	%REC		50-126		SW8082	03/15/16 19:11 / jem
Surr: Tetrachloro-m-xylene	87.0	%REC		42-115		SW8082	03/15/16 19:11 / jem

- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 03/16/16

Project: Stimson Data Package 23 **Work Order:** B16030854

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 97496
Lab ID: MB-97496	Method Blank				Run: HECD.I_160310B				03/10/16 20:09
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.034						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	116	50	126			
Surr: Tetrachloro-m-xylene			0.0017	58	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-97496	Laboratory Control Sample				Run: HECD.I_160310B				03/10/16 20:36
Aroclor 1254	0.293	mg/kg	0.017	90	62	126			
Surr: Decachlorobiphenyl			0.0017	116	50	126			
Surr: Tetrachloro-m-xylene			0.0017	60	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16030854-001AMB	Sample Duplicate				Run: HECD.I_160310B				03/11/16 10:38
Aroclor 1016	ND	mg/kg-dry	1.9					40	
Aroclor 1221	ND	mg/kg-dry	3.7					40	
Aroclor 1232	ND	mg/kg-dry	1.9					40	
Aroclor 1242	ND	mg/kg-dry	1.9					40	
Aroclor 1248	ND	mg/kg-dry	1.9					40	
Aroclor 1254	33.1	mg/kg-dry	1.9				2.0	40	
Aroclor 1260	ND	mg/kg-dry	1.9					40	
Aroclor 1262	ND	mg/kg-dry	1.9					40	
Aroclor 1268	ND	mg/kg-dry	1.9					40	
- The Reporting Limits reflect a 100 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16030854-001ADB	Sample Duplicate				Run: HECD.I_160310B				03/11/16 11:05
Aroclor 1016	ND	mg/kg-dry	1.9					40	
Aroclor 1221	ND	mg/kg-dry	3.6					40	
Aroclor 1232	ND	mg/kg-dry	1.9					40	
Aroclor 1242	ND	mg/kg-dry	1.9					40	
Aroclor 1248	ND	mg/kg-dry	1.9					40	
Aroclor 1254	34.6	mg/kg-dry	1.9				2.4	40	
Aroclor 1260	ND	mg/kg-dry	1.9					40	
Aroclor 1262	ND	mg/kg-dry	1.9					40	
Aroclor 1268	ND	mg/kg-dry	1.9					40	
- Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration.									
- The Reporting Limits reflect a 100 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 03/16/16

Project: Stimson Data Package 23 **Work Order:** B16030854

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Batch: 97592
Lab ID: MB-97592	Method Blank				Run: HECD.I_160315A			03/15/16 13:51	
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	98	50	126			
Surr: Tetrachloro-m-xylene			0.0017	61	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-97592	Laboratory Control Sample				Run: HECD.I_160315A			03/15/16 14:44	
Aroclor 1254	0.264	mg/kg	0.017	80	62	126			
Surr: Decachlorobiphenyl			0.0017	100	50	126			
Surr: Tetrachloro-m-xylene			0.0017	64	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16030854-010AMB	Sample Duplicate				Run: HECD.I_160315A			03/15/16 19:38	
Aroclor 1016	ND	mg/kg-dry	0.19					40	
Aroclor 1221	ND	mg/kg-dry	0.37					40	
Aroclor 1232	ND	mg/kg-dry	0.19					40	
Aroclor 1242	ND	mg/kg-dry	0.19					40	
Aroclor 1248	ND	mg/kg-dry	0.19					40	
Aroclor 1254	1.63	mg/kg-dry	0.19				0.0	40	
Aroclor 1260	ND	mg/kg-dry	0.19					40	
Aroclor 1262	ND	mg/kg-dry	0.19					40	
Aroclor 1268	ND	mg/kg-dry	0.19					40	
Surr: Decachlorobiphenyl			0.019	113	50	126			
Surr: Tetrachloro-m-xylene			0.019	81	42	115			
- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16030854-010ADB	Sample Duplicate				Run: HECD.I_160315A			03/15/16 20:04	
Aroclor 1016	ND	mg/kg-dry	0.19					40	
Aroclor 1221	ND	mg/kg-dry	0.37					40	
Aroclor 1232	ND	mg/kg-dry	0.19					40	
Aroclor 1242	ND	mg/kg-dry	0.19					40	
Aroclor 1248	ND	mg/kg-dry	0.19					40	
Aroclor 1254	2.36	mg/kg-dry	0.19				36	40	
Aroclor 1260	ND	mg/kg-dry	0.19					40	
Aroclor 1262	ND	mg/kg-dry	0.19					40	
Aroclor 1268	ND	mg/kg-dry	0.19					40	
Surr: Decachlorobiphenyl			0.019	114	50	126			
Surr: Tetrachloro-m-xylene			0.019	84	42	115			
- Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration.									
- The Reporting Limits reflect a 10 times dilution due to the level of Aroclor 1254 detected in the sample.									
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									

Qualifiers:

RL - Analyte reporting limit. ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 03/16/16

Project: Stimson Data Package 23 **Work Order:** B16030854

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R257847
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/10/16 19:42
Aroclor 1254	2.14	mg/kg	0.017	107	85	115			
Surr: Decachlorobiphenyl			0.0017	124	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	100	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/11/16 01:05
Aroclor 1254	2.07	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	111	85	115			
Surr: Tetrachloro-m-xylene			0.0017	99	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								03/11/16 01:32
Aroclor 1254	0.207	mg/kg	0.017	103	85	115			
Surr: Decachlorobiphenyl			0.0017	114	85	115			
Surr: Tetrachloro-m-xylene			0.0017	105	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/11/16 09:18
Aroclor 1254	1.98	mg/kg	0.017	99	85	115			
Surr: Decachlorobiphenyl			0.0017	109	85	115			
Surr: Tetrachloro-m-xylene			0.0017	93	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/11/16 13:44
Aroclor 1254	2.03	mg/kg	0.017	101	85	115			
Surr: Decachlorobiphenyl			0.0017	116	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	93	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								03/11/16 08:51
Aroclor 1254	0.170	mg/kg	0.017	85	85	115			
Surr: Decachlorobiphenyl			0.0017	101	85	115			
Surr: Tetrachloro-m-xylene			0.0017	94	85	115			
Lab ID: 1254CK3	Continuing Calibration Verification Standard								03/11/16 21:19
Aroclor 1254	0.221	mg/kg	0.017	110	85	115			
Surr: Decachlorobiphenyl			0.0017	117	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/11/16 21:46
Aroclor 1254	2.10	mg/kg	0.017	105	85	115			
Surr: Decachlorobiphenyl			0.0017	118	85	115			S
Surr: Tetrachloro-m-xylene			0.0017	95	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields **Report Date:** 03/16/16

Project: Stimson Data Package 23 **Work Order:** B16030854

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082									Analytical Run: R258017
Lab ID: 1254CK3	Continuing Calibration Verification Standard								03/15/16 12:57
Aroclor 1254	0.184	mg/kg	0.017	92	85	115			
Surr: Decachlorobiphenyl			0.0017	111	85	115			
Surr: Tetrachloro-m-xylene			0.0017	108	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/15/16 13:24
Aroclor 1254	1.88	mg/kg	0.017	94	85	115			
Surr: Decachlorobiphenyl			0.0017	102	85	115			
Surr: Tetrachloro-m-xylene			0.0017	103	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/15/16 20:58
Aroclor 1254	1.94	mg/kg	0.017	97	85	115			
Surr: Decachlorobiphenyl			0.0017	108	85	115			
Surr: Tetrachloro-m-xylene			0.0017	102	85	115			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/16/16 01:24
Aroclor 1254	1.97	mg/kg	0.017	99	85	115			
Surr: Decachlorobiphenyl			0.0017	110	85	115			
Surr: Tetrachloro-m-xylene			0.0017	104	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16030854

Login completed by: Tabitha Edwards
Reviewed by: BL2000\jmueller
Reviewed Date: 3/14/2016

Date Received: 3/10/2016
Received by: msk
Carrier name: Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	5.8°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Analyze samples 350.0033-Comp1b, 2b, 3b, 4b and 5b per email from Tyler Etzel on 03/14/16.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT (Provide as much information as possible.)

Company Name: New Fields

Project Name, PWS, Permit, Etc.: Stimson Data Package # 23

Sample Origin State: MT

EPA/State Compliance: Yes ☑ No ☐

Report Mail Address (Required): 1120 Cedar St. Missoula, MT 59802

Contact Name: Tyler Etzel

Phone/Fax: 549-8270

Cell: 240-7795

Sampler: (Please Print) Tyler Etzel

☑ No Hard Copy Email:

Invoice Contact & Phone: Donna McCammon 549-8270

Purchase Order: 350.0033.006

Quote/Bottle Order:

Invoice Address (Required): SAME

☑ No Hard Copy Email:

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format:
☐ State: ☐ LEVEL IV
☐ Other: ☐ NELAC

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

ANALYSIS REQUESTED

SEE ATTACHED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: -2 day TAT - Hold indicated samples until initial results complete

Shipped by: Return UPS Grnd

Cooler ID(s):

Receipt Temp 5.8 °C

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler (Y) N; Intact (Y) N; Signature Match (Y) N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs - 8082	RUSH	Comments	LABORATORY USE ONLY
1	350.0033-Comp # 1a	3-9-16	1400	LS	X	X		B1603085 4-001
2	" - Comp # 1b		1415				Hold @ lab	002
3	" - Comp # 2a		1200			X		003
4	" - Comp # 2b		1215				Hold @ lab	004
5	" - Comp # 3a		1330			X		005
6	" - Comp # 3b		1345				Hold @ lab	006
7	" - Comp # 4a		1230			X		007
8	" - Comp # 4b		1245				Hold @ lab	008
9	" - Comp # 5a		1300			X		009
10	" - Comp # 5b	X	1315	X	X		Hold @ lab	010

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Tyler Etzel	3-9-16 14:30	[signature]			

Received by Laboratory: Date/Time: 3/10/16 9:05 Signature: [signature]

Sample Disposal: Return to Client: ☐ Lab Disposal: ☑

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ANALYTICAL SUMMARY REPORT

March 24, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16031713 Quote ID: B3097 - Stimson

Project Name: Stimson Haul Road Sampling

Energy Laboratories Inc Billings MT received the following 2 samples for NewFields on 3/22/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16031713-001	Comp 4C	03/21/16 15:10	03/22/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction
B16031713-002	Comp 5C	03/21/16 14:55	03/22/16	Soil	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By: William T Brown
President

Digitally signed by
Bill Brown
Date: 2016.03.24 08:32:12 -06:00

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Haul Road Sampling
Lab ID: B16031713-001
Client Sample ID: Comp 4C

Report Date: 03/24/16
Collection Date: 03/21/16 15:10
DateReceived: 03/22/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	12	wt%		0.2		SW3550A	03/22/16 12:20 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082A	03/22/16 20:39 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082A	03/22/16 20:39 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082A	03/22/16 20:39 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082A	03/22/16 20:39 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082A	03/22/16 20:39 / jem
Aroclor 1254	0.35	mg/kg-dry		0.020		SW8082A	03/22/16 20:39 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082A	03/22/16 20:39 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082A	03/22/16 20:39 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082A	03/22/16 20:39 / jem
Surr: Decachlorobiphenyl	103	%REC		50-126		SW8082A	03/22/16 20:39 / jem
Surr: Tetrachloro-m-xylene	77.0	%REC		42-115		SW8082A	03/22/16 20:39 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Haul Road Sampling
Lab ID: B16031713-002
Client Sample ID: Comp 5C

Report Date: 03/24/16
Collection Date: 03/21/16 14:55
DateReceived: 03/22/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	13	wt%		0.2		SW3550A	03/22/16 12:24 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.020		SW8082A	03/22/16 21:06 / jem
Aroclor 1221	ND	mg/kg-dry		0.038		SW8082A	03/22/16 21:06 / jem
Aroclor 1232	ND	mg/kg-dry		0.020		SW8082A	03/22/16 21:06 / jem
Aroclor 1242	ND	mg/kg-dry		0.020		SW8082A	03/22/16 21:06 / jem
Aroclor 1248	ND	mg/kg-dry		0.020		SW8082A	03/22/16 21:06 / jem
Aroclor 1254	0.39	mg/kg-dry		0.020		SW8082A	03/22/16 21:06 / jem
Aroclor 1260	ND	mg/kg-dry		0.020		SW8082A	03/22/16 21:06 / jem
Aroclor 1262	ND	mg/kg-dry		0.020		SW8082A	03/22/16 21:06 / jem
Aroclor 1268	ND	mg/kg-dry		0.020		SW8082A	03/22/16 21:06 / jem
Surr: Decachlorobiphenyl	103	%REC		50-126		SW8082A	03/22/16 21:06 / jem
Surr: Tetrachloro-m-xylene	73.0	%REC		42-115		SW8082A	03/22/16 21:06 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Haul Road Sampling

Report Date: 03/24/16
Work Order: B16031713

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082A									Batch: 97803
Lab ID: MB-97803	Method Blank				Run: HECD.I_160322A				03/22/16 17:33
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	97	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-97803	Laboratory Control Sample				Run: HECD.I_160322A				03/22/16 17:59
Aroclor 1254	0.266	mg/kg	0.017	80	62	126			
Surr: Decachlorobiphenyl			0.0017	99	50	126			
Surr: Tetrachloro-m-xylene			0.0017	65	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16031713-002AMB	Sample Matrix Spike				Run: HECD.I_160322A				03/22/16 21:33
Aroclor 1254	0.634	mg/kg-dry	0.019	64	62	126			
Surr: Decachlorobiphenyl			0.0019	104	50	126			
Surr: Tetrachloro-m-xylene			0.0019	66	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16031713-002ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160322A				03/22/16 21:59
Aroclor 1254	0.783	mg/kg-dry	0.019	103	62	126	21	40	
Surr: Decachlorobiphenyl			0.0019	104	50	126			
Surr: Tetrachloro-m-xylene			0.0019	74	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Method: SW8082A									Analytical Run: R258453
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/22/16 17:06
Aroclor 1254	1.96	mg/kg	0.017	98	80	120			
Surr: Decachlorobiphenyl			0.0017	103	80	120			
Surr: Tetrachloro-m-xylene			0.0017	102	80	120			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/22/16 22:52
Aroclor 1254	1.94	mg/kg	0.017	97	80	120			
Surr: Decachlorobiphenyl			0.0017	106	80	120			
Surr: Tetrachloro-m-xylene			0.0017	101	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16031713

Login completed by:	Leslie S. Cadreau	Date Received:	3/22/2016
Reviewed by:	BL2000\jmueller	Received by:	car
Reviewed Date:	3/22/2016	Carrier name:	UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	3.0°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Haul Road Sampling

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): Tyler Etzel

☒ No Hard Copy Email: tetzel@newfields.com

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): 1120 Cedar Street Missoula, MT 59802

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Number of Containers
Sample Type: A W S V B O DW
Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water

ANALYSIS REQUESTED

Standard Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: B160317 13

Shipped by: UPS-Gnd

Cooler ID(s):

Receipt Temp: 3.0 °C

On Ice: (Y) N

Custody Seal: On Bottle Y (N); On Cooler Y N; Intact Y N; Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	PCBs 8082	SEE ATTACHED	RUSH	Comments	LABORATORY USE ONLY
1	Comp 4C	3/21/16	1510	S	X		X	2 DAY TAT	-001
2	Comp 5 C	3/21/16	1455	S	X		X	2 Day TAT	-002
3									
4									
5									
6									
7									
8									
9									
10									

Custody Record MUST be Signed

Relinquished by (print): Ty Schmechel Date/Time: 3-21-16/1630 Signature: [signature]

Relinquished by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by (print): Date/Time: Signature:

Received by Laboratory: Date/Time: 3-22-16 9:15 Signature: Cindy Rotter

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

ANALYTICAL SUMMARY REPORT

March 24, 2016

NewFields
1120 Cedar St
Missoula, MT 59802-3911

Work Order: B16031832 Quote ID: B3097 - Stimson

Project Name: Stimson Haul Roads

Energy Laboratories Inc Billings MT received the following 1 sample for NewFields on 3/23/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16031832-001	Comp 1C	03/22/16 14:15	03/23/16	Soil	Moisture Moisture Prep 8082 - Polychlorinated Biphenyls (PCB's) Percent Moisture Sonication Extraction

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Haul Roads
Lab ID: B16031832-001
Client Sample ID: Comp 1C

Report Date: 03/24/16
Collection Date: 03/22/16 14:15
DateReceived: 03/23/16
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Moisture	7.3	wt%		0.2		SW3550A	03/23/16 10:20 / amn
POLYCHLORINATED BIPHENYLS (PCBS)							
Aroclor 1016	ND	mg/kg-dry		0.018		SW8082A	03/23/16 13:27 / jem
Aroclor 1221	ND	mg/kg-dry		0.036		SW8082A	03/23/16 13:27 / jem
Aroclor 1232	ND	mg/kg-dry		0.018		SW8082A	03/23/16 13:27 / jem
Aroclor 1242	ND	mg/kg-dry		0.018		SW8082A	03/23/16 13:27 / jem
Aroclor 1248	ND	mg/kg-dry		0.018		SW8082A	03/23/16 13:27 / jem
Aroclor 1254	0.043	mg/kg-dry		0.018		SW8082A	03/23/16 13:27 / jem
Aroclor 1260	ND	mg/kg-dry		0.018		SW8082A	03/23/16 13:27 / jem
Aroclor 1262	ND	mg/kg-dry		0.018		SW8082A	03/23/16 13:27 / jem
Aroclor 1268	ND	mg/kg-dry		0.018		SW8082A	03/23/16 13:27 / jem
Surr: Decachlorobiphenyl	103	%REC		50-126		SW8082A	03/23/16 13:27 / jem
Surr: Tetrachloro-m-xylene	71.0	%REC		42-115		SW8082A	03/23/16 13:27 / jem

- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: NewFields
Project: Stimson Haul Roads

Report Date: 03/24/16
Work Order: B16031832

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8082A									Batch: 97803
Lab ID: MB-97803	Method Blank				Run: HECD.I_160322A				03/22/16 17:33
Aroclor 1016	ND	mg/kg	0.017						
Aroclor 1221	ND	mg/kg	0.033						
Aroclor 1232	ND	mg/kg	0.017						
Aroclor 1242	ND	mg/kg	0.017						
Aroclor 1248	ND	mg/kg	0.017						
Aroclor 1254	ND	mg/kg	0.017						
Aroclor 1260	ND	mg/kg	0.017						
Aroclor 1262	ND	mg/kg	0.017						
Aroclor 1268	ND	mg/kg	0.017						
Surr: Decachlorobiphenyl			0.0017	97	50	126			
Surr: Tetrachloro-m-xylene			0.0017	62	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: AR1254-97803	Laboratory Control Sample				Run: HECD.I_160322A				03/22/16 17:59
Aroclor 1254	0.266	mg/kg	0.017	80	62	126			
Surr: Decachlorobiphenyl			0.0017	99	50	126			
Surr: Tetrachloro-m-xylene			0.0017	65	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16031713-002AMB	Sample Matrix Spike				Run: HECD.I_160322A				03/22/16 21:33
Aroclor 1254	0.634	mg/kg-dry	0.019	64	62	126			
Surr: Decachlorobiphenyl			0.0019	104	50	126			
Surr: Tetrachloro-m-xylene			0.0019	66	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Lab ID: B16031713-002ADB	Sample Matrix Spike Duplicate				Run: HECD.I_160322A				03/22/16 21:59
Aroclor 1254	0.783	mg/kg-dry	0.019	103	62	126	21	40	
Surr: Decachlorobiphenyl			0.0019	104	50	126			
Surr: Tetrachloro-m-xylene			0.0019	74	42	115			
- Sample extract received a Sulfuric Acid Clean-up (EPA Method 3665) and a Sulfur Clean-up (EPA Method 3660) prior to analysis.									
Method: SW8082A									Analytical Run: R258453
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/23/16 12:34
Aroclor 1254	1.84	mg/kg	0.017	92	80	120			
Surr: Decachlorobiphenyl			0.0017	102	80	120			
Surr: Tetrachloro-m-xylene			0.0017	99	80	120			
Lab ID: 1254CK6	Continuing Calibration Verification Standard								03/23/16 14:20
Aroclor 1254	1.90	mg/kg	0.017	95	80	120			
Surr: Decachlorobiphenyl			0.0017	106	80	120			
Surr: Tetrachloro-m-xylene			0.0017	100	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

NewFields

B16031832

Login completed by:	Leslie S. Cadreau	Date Received:	3/23/2016
Reviewed by:	BL2000\jmueller	Received by:	car
Reviewed Date:	3/23/2016	Carrier name:	Return-UPS Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	3.2°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	Not Applicable ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	Not Applicable ☑

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

None

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT (Provide as much information as possible.)

Company Name: NewFields

Project Name, PWS, Permit, Etc.: Stimson Haul Roads

Sample Origin State: MT

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address (Required): 1126 Cedar Street, Missoula, MT 59802

Contact Name: Tyler Etzel

Phone/Fax: (406) 549-8270

Cell: (406) 240-7795

Sampler: (Please Print) Ty Schmechel

☐ No Hard Copy Email: tetzel@newfields.com

Invoice Contact & Phone: Donna McCammon (406) 549-8270

Purchase Order:

Quote/Bottle Order:

Invoice Address (Required): " "

☐ No Hard Copy Email: dmccammon@newfields.com

Special Report/Formats:

☐ DW ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

ANALYSIS REQUESTED

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: B16031832

Shipped by: UPS Ground

Cooler ID(s):

Receipt Temp: 3.2 °C

On Ice: Y N

Custody Seal: On Bottle Y N; On Cooler Y N; Intact Y N; Signature Match Y N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX (Number of Containers; Sample Type: A W S V B O DW; Air Water Soils/Solids Vegetation Bioassay Other DW - Drinking Water)	PCBs 8082								SEE ATTACHED	Standard Turnaround (TAT)	RUSH	Comments
1 Comp 1 C	3/22/16	1415	S	X										X	2 Day TAT
2															
3															
4															
5															
6															
7															
8															
9															
10															

LABORATORY USE ONLY -001

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Ty Schmechel	3-22-16/1630				

Received by Laboratory: Date/Time: 3-23-16 9:20 Signature: Cindy Rohrer

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

Data Validation Summary Reports

Appendix K

Data Validation Summary
Laboratory Work Order B16010966
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
  SAP: *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16010966*
- Laboratory Report Date: *January 19, 2016*
  Sample Matrix: *Soil*
  Samples: Pipe-1; Pipe-2; Pipe-3; Pipe-4; Pipe-5; Pipe-6
- Sample Start and End Dates: *January 15, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A*
- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab notes: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration". Aqueous samples did meet the requirement.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16010966-001	Pipe-1	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16010966-002	Pipe-2	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16010966-003	Pipe-3	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16010966-004	Pipe-4	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16010966-005	Pipe-5	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16010966-006	Pipe-6	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
B16010966-001	Natural Sample	Decachlorobiphenyl	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit
B16010966-002	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16010966-002	Natural Sample	Tetrachloro-m-xylene	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit
B16010966-003	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16010966-004	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated

Lab ID	Sample Type	Surrogate	Action	Comments
B16010966-005	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16010966-005	Natural Sample	Tetrachloro-m-xylene	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit
B16010966-006	Natural Sample	Decachlorobiphenyl	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit

Surrogates are used to monitor the performance of the analyses and measure the accuracy of the project's samples. Analytes associated with surrogates outside of the Laboratory Control Limits were qualified J and considered biased high if above control limits and biased low if below the control limits.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
Pipe-1	B16010966-001	Aroclor 1254	Qualified J	89 J
Pipe-2	B16010966-002	Aroclor 1254	Qualified J	6170 J
Pipe-3	B16010966-003	Aroclor 1254	Qualified J	3940 J
Pipe-4	B16010966-004	Aroclor 1254	Qualified J	4560 J
Pipe-5	B16010966-005	Aroclor 1254	Qualified J	20500 J
Pipe-6	B16010966-006	Aroclor 1254	Qualified J	265 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011052
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011052*
- Laboratory Report Date: *January 20, 2016*

  Sample Matrix: *Soil*

  Samples: Concrete-1; Concrete-2; Concrete-3; Concrete-4; Concrete-5; Concrete-6; Concrete-7; Concrete-8; Concrete-9; Concrete-10
- Sample Start and End Dates: *January 15, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates were not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16011052-001	Concrete-1	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-002	Concrete-2	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-003	Concrete-3	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-004	Concrete-4	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-005	Concrete-5	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-006	Concrete-6	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-007	Concrete-7	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-008	Concrete-8	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-009	Concrete-9	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011052-010	Concrete-10	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the tested material is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
Concrete-1	B16011052-001	Aroclor 1254	Qualified J	1 J
Concrete-2	B16011052-002	Aroclor 1254	Qualified J	9560 J
Concrete-3	B16011052-003	Aroclor 1254	Qualified J	14 J
Concrete-4	B16011052-004	Aroclor 1254	Qualified J	10 J
Concrete-5	B16011052-005	Aroclor 1254	Qualified J	8960 J
Concrete-6	B16011052-006	Aroclor 1254	Qualified J	0.9 J
Concrete-7	B16011052-007	Aroclor 1254	Qualified J	13 J
Concrete-8	B16011052-008	Aroclor 1254	Qualified J	105 J
Concrete-9	B16011052-009	Aroclor 1254	Qualified J	0.32 J
Concrete-10	B16011052-010	Aroclor 1254	Qualified J	6.7 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011099
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011099*
- Laboratory Report Date: *January 20, 2016*
  Sample Matrix: *Soil*
  Samples: CB-13-South Wall; CB-13-North Wall; CB-13-Base; CB-13-West Wall
- Sample Start and End Dates: *January 15, 2016*
- Parameters Included:
  - *Soil Samples*
    - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
    - *Percent Moisture by SW3550A*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16011099-001	CB-13-South Wall	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011099-002	CB-13-North Wall	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011099-003	CB-13-Base	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011099-004	CB-13-West Wall	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVS, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action
CB-13-Base	B16011099-003	Aroclor 1254	Qualified J
CB-13-North Wall	B16011099-002	Aroclor 1254	Qualified J
CB-13-South Wall	B16011099-001	Aroclor 1254	Qualified J
CB-13-West Wall	B16011099-004	Aroclor 1254	Qualified J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011110
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011110*
- Laboratory Report Date: *January 21, 2016*
  Sample Matrix: *Soil*
  Samples: CB-12 South Wall; CB-12 West Wall; CB-12 East Wall; CB-12 Base
- Sample Start and End Dates: *January 18, 2016*
- Parameters Included:
  - *Soil Samples*
    - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
    - *Percent Moisture by SW3550A*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Lab notes: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration."

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
RPDs were within laboratory QC limits.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
No data was qualified.

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011540
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011540*
- Laboratory Report Date: *January 26, 2016*

  Sample Matrix: *Soil*
  Samples: CB-13-Base-2; CB-13-Southwall-2; CB-13-Westwall-2; CB-IG-1
  Sample Matrix: *Aqueous*
  Samples: SAW-1
- Sample Start and End Dates: *January 21, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab notes: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration". Aqueous samples did meet the requirement.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16011540-001	CB-13-Base-2	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011540-002	CB-13-Southwall-2	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011540-003	CB-13-Westwall-2	CB-IG-1	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-13-Base-2	B16011540-001	Aroclor 1254	Qualified J	0.97 J
CB-13-Southwall-2	B16011540-002	Aroclor 1254	Qualified J	1.7 J
CB-13-Westwall-2	B16011540-003	Aroclor 1254	Qualified J	2.7 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011575
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
  SAP: *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011575*
- Laboratory Report Date: *January 27, 2016*
  Sample Matrix: *Soil*
  Samples: CB-4-Base; CB-4-Eastwall; CB-4-Southwall; CB-TP-7-Base; CB-TP-7-Northwall; CB-TP-7-Eastwall; CB-10-Base; CB-10-Northwall; CB-10-Eastwall; CB-10-Westwall; CB-IG-2; CB-TP-5-Base; CB-TP-5-Eastwall; CB-TP-5-Southwall
  Sample Matrix: *Aqueous*
  Samples: SAW-2
- Sample Start and End Dates: *January 25, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
B16011575-004ADB	MSD	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, MSD analyte (Aroclor 1254) within range, no action necessary
B16011575-004	Natural Sample	Decachlorobiphenyl	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit
B16011575-006	Natural Sample	Decachlorobiphenyl	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit
B16011575-013	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16011575-013	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated

Surrogates are used to monitor the performance of the analyses and measure the accuracy of the project's samples. Analytes associated with surrogates outside of the Laboratory Control Limits were qualified J and considered biased high if above control limits and biased low if below the control limits.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-TP-7-Base	B16011575-004	Aroclor 1254	Qualified J	3 J
CB-TP-7-Eastwall	B16011575-006	Aroclor 1254	Qualified J	1.9 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011714
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011714*
- Laboratory Report Date: *January 28, 2016*

  Sample Matrix: *Soil*
  Samples: CB-12-Base-2; CB-12-Eastwell-2; CB-12-Westwall-2; CB-IG-3
  Sample Matrix: *Aqueous*
  Samples: SAW-3
- Sample Start and End Dates: *January 26, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
Lab notes: "Sample CB-12-Base-2 for Polychlorinated Biphenyls was received broken but still inside sample container. Per Jake Morris, Energy laboratories analyst, ok to transfer sample to another and proceed with analysis." No data was qualified based off this issue.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16011714-001	CB-12-Base-2	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011714-002	CB-12-Eastwall-2	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011714-003	CB-12-Westwall-2	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-12-Base-2	B16011714-001	Aroclor 1254	Qualified J	0.42 J
CB-12-Eastwall-2	B16011714-002	Aroclor 1254	Qualified J	0.69 J
CB-12-Westwall-2	B16011714-003	Aroclor 1254	Qualified J	0.32 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011780
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011780*
- Laboratory Report Date: *February 1, 2016*

  Sample Matrix: *Soil*

  Samples: CB-2-Base; CB-2-Northwall; CB-2-Eastwall; CB-2-Westwall; CB-14-Northwall
- Sample Start and End Dates: *January 26, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batch based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16011780-005	CB-14-Northwall	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011780-001	CB-2-Base	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011780-002	CB-2-Northwall	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011780-003	CB-2-Eastwall	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16011780-004	CB-2-Westwall	CB-IG-3	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-14-Northwall	B16011780-005	Aroclor 1254	Qualified J	1.1 J
CB-2-Base	B16011780-001	Aroclor 1254	Qualified J	0.18 J
CB-2-Eastwall	B16011780-003	Aroclor 1254	Qualified J	1.4 J
CB-2-Northwall	B16011780-002	Aroclor 1254	Qualified J	3.2 J
CB-2-Westwall	B16011780-004	Aroclor 1254	Qualified J	456 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011902
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011902*
- Laboratory Report Date: *February 2, 2016*

  Sample Matrix: *Soil*

  Samples: CB-TP-Base-2; CB-TP-7-Northwall-2; CB-4-Eastwall-2; CB-4-Sothwall-2; CB-TP-5-Sothwall-2
- Sample Start and End Dates: *January 28, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	QC Sample	Surrogate	Action	Comments
B16011902-002AMB	MS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, MS analyte (Aroclor 1254) within range, no action necessary
B16011902-002ADB	MSD	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, MSD analyte (Aroclor 1254) within range, no action necessary
B16011902-002	Natural Sample	Decachlorobiphenyl	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit

Surrogates are used to monitor the performance of the analyses and measure the accuracy of the project's samples. Analytes associated with surrogates outside of the Laboratory Control Limits were qualified J and considered biased high if above control limits and biased low if below the control limits.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-TP-7-Northwall-2	B16011902-002	Aroclor 1254	Qualified J	0.86 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16011904
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16011904*
- Laboratory Report Date: *February 2, 2016*

  Sample Matrix: *Soil*
  Samples: CB-TP-1-Base; CB-TP-1-Westwall; CB-TP-2-Southwall; CB-TP-2-Westwall; CB-13-Base-3; CB-13-Southwall-3; CB-13-Westwall-3; CB-IG-4
  Sample Matrix: *Aqueous*
  Samples: SAW-4
- Sample Start and End Dates: *January 27, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab notes: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration". Aqueous samples did meet the requirement.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	QC Sample	Surrogate	Action	Comments
B16011902-002AMB	MS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, MS analyte (Aroclor 1254) within range, no action necessary
B16011902-002ADB	MSD	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, MSD analyte (Aroclor 1254) within range, no action necessary
B16011904-001	Natural Sample	Decachlorobiphenyl	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit

Surrogates are used to monitor the performance of the analyses and measure the accuracy of the project's samples. Analytes associated with surrogates outside of the Laboratory Control Limits were qualified J and considered biased high if above control limits and biased low if below the control limits.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-TP-1-Base	B16011904-001	Aroclor 1254	Qualified J	6.4 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16020006
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16020006*
- Laboratory Report Date: *February 2, 2016*
  Sample Matrix: *Soil*
  Samples: CB-TP-5-Base-2
- Sample Start and End Dates: *January 29, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
No data was qualified.

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16020205
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16020205*
- Laboratory Report Date: *February 5, 2016*
  Sample Matrix: *Soil*
  Samples: CB-14-Northwall-2; CB-2-Eastwall-2; CB-4-Southwall-3
- Sample Start and End Dates: *February1, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
No. The following actions were performed:

MS Sample	MSD Sample	Parameter	Action	Comments
B16020205-003AMB	B16020356-002ADB	Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1260, Aroclor 1262, Aroclor 1262	No Action	% Recovery below Lower Control Limit, but Sample concentration is ND, no action necessary
		Aroclor 1254	Qualified J	Spike recovery outside of advisory limits. Lab note: The low percent recovery for Aroclor 1254 in the matrix spike and matrix spike duplicate samples can be attributed to a non-homogeneous sample matrix.

A matrix spike is used to document the bias (accuracy) of a method in a given sample matrix. The qualified samples are considered biased low.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
No. The following actions were performed:

DUP ID	Parameter	Action	Comments
B16020205-003ADUP	Aroclor 1254	None	RPD exceeds 100% (lab note: the higher than normal RPD is attributed non-homogeneous sample matrix), QC sample Dup rejected and Sample Dup associated with MS and MSD used (no qualification

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-14-Northwall-2	B16020205-001	Aroclor 1254	Qualified J	0.028 J
CB-2-Eastwall-2	B16020205-002	Aroclor 1254	Qualified J	0.24 J
CB-4-Southwall-3	B16020205-003	Aroclor 1254	Qualified J	0.42 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16020356
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16020356*
- Laboratory Report Date: *February 5, 2016*

  Sample Matrix: *Soil*
  Samples: CB-2-Northwell-2
  Sample Matrix: *Aqueous*
  Samples: SAW-5
- Sample Start and End Dates: *February 3, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
No. The following actions were performed:

Associated MS Sample	Associated MSD Sample	Parameter	Action	Comments
B16020356-002AMB	B16020356-002ADB	Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1260, Aroclor 1262, Aroclor 1262	No Action	% Recovery above Upper Control Limit, but Sample concentration is ND, no action necessary
		Aroclor 1254	Qualified J	Spike recovery outside of advisory limits. Lab note: The low percent recovery for Aroclor 1254 in the matrix spike and matrix spike duplicate samples can be attributed to a non-homogeneous sample matrix.
B16020205-003AMB	B16020356-002ADB	Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, Aroclor 1262, Aroclor 1262	Qualified J	RPD exceeds advisory limit for B16020356-002

A matrix spike is used to document the bias (accuracy) of a method in a given sample matrix. The qualified samples are considered biased low.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-2-Northwell-2	B16020356-002	Aroclor 1016	Qualified J	0.019 UJ
CB-2-Northwell-2	B16020356-002	Aroclor 1221	Qualified J	0.019 UJ
CB-2-Northwell-2	B16020356-002	Aroclor 1232	Qualified J	0.019 UJ
CB-2-Northwell-2	B16020356-002	Aroclor 1242	Qualified J	0.019 UJ
CB-2-Northwell-2	B16020356-002	Aroclor 1248	Qualified J	0.019 UJ
CB-2-Northwell-2	B16020356-002	Aroclor 1254	Qualified J	0.042 J
CB-2-Northwell-2	B16020356-002	Aroclor 1260	Qualified J	0.019 UJ
CB-2-Northwell-2	B16020356-002	Aroclor 1262	Qualified J	0.019 UJ
CB-2-Northwell-2	B16020356-002	Aroclor 1268	Qualified J	0.019 UJ

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16020477
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
  S SAP: *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16020477*
- Laboratory Report Date: *February 9, 2016*
  Sample Matrix: *Soil*
  Samples: CB-TP-1-Westwall-2; CB-IG-5; CB-TP-1-Northwall-2; CB-TP-2-Sothwall-2; CB-TP-2-Westwall-2; CB-TP-1-Base-2; CB-TP-2-Base-2
- Sample Start and End Dates: *February 4, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Recovery percent was below REC Limit for Aroclor 1254 for CCVS sample 1254CK3, it appears CCVS was re-performed 2 days later. No qualification resulted from this issue.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
No data was qualified.

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16020624
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16020624*
- Laboratory Report Date: *February 11, 2016*

  Sample Matrix: *Soil*
  Samples: CB-IG-6; CB-7-Base; CB-7-Southwall; CB-7-Eastwall; CB-7-Westwall
  Sample Matrix: *Aqueous*
  Samples: SAW-6
- Sample Start and End Dates: *February 8, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab noted: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration". Aqueous samples did meet the requirement.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16020624-002	CB-7-Base	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020624-003	CB-7-Southwall	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020624-004	CB-7-Eastwall	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020624-005	CB-7-Westwall	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
1254CK3	CCVS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, CCV analyte (Aroclor 1254) within range, no action necessary
1254CK6	CCVS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, CCV analyte (Aroclor 1254) within range, no action necessary
B16020624-001ADB	DUP	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020624-001AMB	DUP	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated

Lab ID	Sample Type	Surrogate	Action	Comments
B16020624-001	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020624-001	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020624-002	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020624-002	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020624-005	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020624-005	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated

Surrogates are used to monitor the performance of the analyses and measure the accuracy of the project's samples. Analytes associated with surrogates outside of the Laboratory Control Limits were qualified J and considered biased high if above control limits and biased low if below the control limits.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-7-Base	B16020624-002	Aroclor 1254	Qualified J	1710 J
CB-7-Eastwall	B16020624-004	Aroclor 1254	Qualified J	2.4 J
CB-7-Southwall	B16020624-003	Aroclor 1254	Qualified J	0.73 J
CB-7-Westwall	B16020624-005	Aroclor 1254	Qualified J	176 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16020643
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16020643*
- Laboratory Report Date: *February 11, 2016*
  Sample Matrix: *Soil*
  Samples: CB-11-Base; CB-11-Southwall; CB-11-Eastwall; CB-11-Northwall; CB-11-Westwall
- Sample Start and End Dates: *February 5, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
Sample ID CB-1-Eastwall collected 02/05/16 at 15:25 on the Chain of Custody is labeled as CB-1-Westwall on the sample container. Per phone conversation between Shari Endy, Project Manager, and Ty Schmechel on 02/09/16, sample ID should be CB-1-Westwall.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab notes: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration".

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
Yes.

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
1254CK3	CCVS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, CCV analyte (Aroclor 1254) within range, no action necessary
1254CK6	CCVS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, CCV analyte (Aroclor 1254) within range, no action necessary
B16020624-001ADB	DUP	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020624-001AMB	DUP	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020643-004	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020643-004	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020643-005	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020643-005	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
No data was qualified.

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16020743
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16020743*
- Laboratory Report Date: *February 12, 2016*

  Sample Matrix: *Soil*

  Samples: CB-IG-7; CB-5-Eastwall; CB-14-Eastwall; CB-1-Eastwall; CB-1-Westwall; CB-14-Westwall; CB-5-Sothwall; CB-5-Westwall
- Sample Start and End Dates: *February 10, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab noted, "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration". Aqueous samples did meet the requirement.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16020743-002	CB-5-Eastwall	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020743-003	CB-14-Eastwall	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020743-004	CB-1-Eastwall	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020743-005	CB-1-Westwall	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020743-006	CB-14-Westwall	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020743-007	CB-5-Southwall	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16020743-008	CB-5-Westwall	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
B16020743-001ADB	DUP	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-001ADB	DUP	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-001AMB	DUP	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated

Lab ID	Sample Type	Surrogate	Action	Comments
B16020743-001AMB	DUP	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-001	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-001	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-002	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-002	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-003	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-003	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-004	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-004	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-005	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-005	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-006	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-006	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-007	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-007	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16020743-008	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16020743-008	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-14-Eastwall	B16020743-003	Aroclor 1254	Qualified J	794 J
CB-14-Westwall	B16020743-006	Aroclor 1254	Qualified J	500 J
CB-1-Eastwall	B16020743-004	Aroclor 1254	Qualified J	1970 J
CB-1-Westwall	B16020743-005	Aroclor 1254	Qualified J	1310 J
CB-5-Eastwall	B16020743-002	Aroclor 1254	Qualified J	31 J
CB-5-Southwall	B16020743-007	Aroclor 1254	Qualified J	609 J
CB-5-Westwall	B16020743-008	Aroclor 1254	Qualified J	3000 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16021022
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16021022*
- Laboratory Report Date: *February 17, 2016*

  Sample Matrix: *Soil*
  Samples: CB-TP-1-Westwall-3; CB-TP-2-Base-3; CB-TP-2-Sothwall-3
  Sample Matrix: *Aqueous*
  Samples: SAW-7
- Sample Start and End Dates: *February 11, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16021022-002	CB-TP-2-Base-3	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021022-003	CB-TP-2-Southwall-3	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021022-001	CB-TP-1-Westwall-3	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
B16021022-004AMB	MS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, MS analyte (Aroclor 1254) within range, no action necessary
B16021022-004ADB	MSD	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, MSD analyte (Aroclor 1254) within range, no action necessary
B16021022-004	Natural Sample	Decachlorobiphenyl	None	Surrogate recovery below lower Control Limit. All parameters would be qualified UJ; however, sample is field blank and QC samples are not qualified. Surrogate issues do not affect the results of the QC samples, based on other results and QC results; surrogate issue is likely a human error at the lab.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-TP-1-Westwall-3	B16021022-001	Aroclor 1254	Qualified J	0.035 J
CB-TP-2-Base-3	B16021022-002	Aroclor 1254	Qualified J	0.75 J
CB-TP-2-Southwall-3	B16021022-003	Aroclor 1254	Qualified J	0.15 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16021122
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16021122*
- Laboratory Report Date: *February 17, 2016*
  Sample Matrix: *Soil*
  Samples: CB-1-Base; CB-5-Base
- Sample Start and End Dates: *February 15, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batch based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16021122-001	CB-1-Base	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021122-002	CB-5-Base	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-1-Base	B16021122-001	Aroclor 1254	Qualified J	0.016 J
CB-5-Base	B16021122-002	Aroclor 1254	Qualified J	28 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16021143
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16021143*
- Laboratory Report Date: *February 17, 2016*

  Sample Matrix: *Soil*

  Samples: CB-11-Base-2; CB-11-Sothwall-2; CB-7-Base-2; CB-7-Westwall-2; CB-5-Westwall-2
- Sample Start and End Dates: *February 12, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
Lab Noted, "Sample CB7-Base 2 container label indicates the collection time as 12:00 however the Chain of Custody indicates 11:00. Proceeded with the collection time as indicated on the Chain of Custody".

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16021143-001	CB-11-Base-2	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021143-002	CB-11-Southwall-2	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021143-003	CB-7-Base-2	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021143-004	CB-7-Westwall-2	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021143-005	CB-5-Westwall-2	CB-IG-7	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-11-Base-2	B16021143-001	Aroclor 1254	Qualified J	0.22 J
CB-11-Southwall-2	B16021143-002	Aroclor 1254	Qualified J	0.66 J
CB-5-Westwall-2	B16021143-005	Aroclor 1254	Qualified J	1.6 J
CB-7-Base-2	B16021143-003	Aroclor 1254	Qualified J	3.2 J
CB-7-Westwall-2	B16021143-004	Aroclor 1254	Qualified J	0.21 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B1621209
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16021209*
- Laboratory Report Date: *February 19, 2016*

  Sample Matrix: *Soil*
  Samples: CB-14-Base; CB-14-EBade; CB-5-EBase; CB-7-WBase; CB-5-WBase; CB-IG-8
  Sample Matrix: *Aqueous*
  Samples: SAW-8
- Sample Start and End Dates: *February 16, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab notes: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration". Aqueous samples did meet the requirement.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16021209-001	CB-14-Base	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021209-002	CB-14-EBase	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021209-003	CB-5-EBase	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021209-004	CB-7-WBase	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021209-005	CB-5-WBase	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Recovery percent was below REC Limit for Aroclor 1254 for CCVS sample 1254CK3, it appears CCVS was re-performed later. No qualification resulted from this issue.

Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
B16021209-006ADB	DUP	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16021209-006AMB	DUP	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated

Lab ID	Sample Type	Surrogate	Action	Comments
B16021209-005	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16021209-005	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated
B16021209-006	Natural Sample	Decachlorobiphenyl	None	Surrogate was diluted out, no recovery calculated
B16021209-006	Natural Sample	Tetrachloro-m-xylene	None	Surrogate was diluted out, no recovery calculated

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-14-Base	B16021209-001	Aroclor 1254	Qualified J	0.2 J
CB-14-EBase	B16021209-002	Aroclor 1254	Qualified J	0.29 J
CB-5-EBase	B16021209-003	Aroclor 1254	Qualified J	0.39 J
CB-5-WBase	B16021209-005	Aroclor 1254	Qualified J	63 J
CB-7-WBase	B16021209-004	Aroclor 1254	Qualified J	0.24 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16021340
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16021340*
- Laboratory Report Date: *February 22, 2016*

  Sample Matrix: *Soil*

  Samples: Overburden 1; Overburden 2; Overburden 3; Overburden 4; Overburden 5
- Sample Start and End Dates: *February 17, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab notes: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration". Aqueous samples did meet the requirement.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16021340-001	Overburden 1	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021340-002	Overburden 2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021340-003	Overburden 3	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021340-004	Overburden 4	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021340-005	Overburden 5	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
B16021340-004	Natural Sample	Decachlorobiphenyl	Detects qualified J and Non-Detect not qualified	Surrogate recovery greater than Upper Control Limit

Surrogates are used to monitor the performance of the analyses and measure the accuracy of the project's samples. Analytes associated with surrogates outside of the Laboratory Control Limits were qualified J and considered biased high if above control limits and biased low if below the control limits.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
Overburden 1	B16021340-001	Aroclor 1254	Qualified J	0.71 J
Overburden 2	B16021340-002	Aroclor 1254	Qualified J	0.66 J
Overburden 3	B16021340-003	Aroclor 1254	Qualified J	1.8 J
Overburden 4	B16021340-004	Aroclor 1254	Qualified J	4.2 J
Overburden 5	B16021340-005	Aroclor 1254	Qualified J	1.3 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16021702
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16021702*
- Laboratory Report Date: *February 25, 2016*

  Sample Matrix: *Soil*

  Samples: CB-7-Eastwall-2; CB-5-Westwall-3; CB-14-Westwall-2; CB-5-Eastwall-2; CB-14-Eastwall-2; CB-5-WBase-2
- Sample Start and End Dates: *February 23, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16021702-001	CB-7-Eastwall-2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021702-002	CB-5-Westwall-3	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021702-003	CB-14-Westwall-2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021702-004	CB-5-Eastwall-2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021702-005	CB-14-Eastwall-2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021702-006	CB-5-WBase-2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
CB-14-Eastwall-2	B16021702-005	Aroclor 1254	Qualified J	0.22 J
CB-14-Westwall-2	B16021702-003	Aroclor 1254	Qualified J	0.38 J
CB-5-Eastwall-2	B16021702-004	Aroclor 1254	Qualified J	0.18 J
CB-5-WBase-2	B16021702-006	Aroclor 1254	Qualified J	5.9 J

Sample ID	Lab ID	Analyte	Action	Result
CB-5-Westwall-3	B16021702-002	Aroclor 1254	Qualified J	0.28 J
CB-7-Eastwall-2	B16021702-001	Aroclor 1254	Qualified J	0.38 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16021788
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16021788*
- Laboratory Report Date: *February 29, 2016*
  Sample Matrix: *Soil*
  Samples: Overburden-1; Overburden-2; Overburden-3-2
- Sample Start and End Dates: *February 24, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Total RCRA Metals by EPA Method 6010B and Mercury by EPA Method 7473*
  - *Extractable Petroleum Hydrocarbons by MA-EPH and EPA Method 8015*
  - *Percent Moisture by SW3550A*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
Yes.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
No. The following actions were performed:

Sample ID	Lab ID	Associated Blank Sample	Parameter	Action	Comments
Overburden-1	B16021788-001	MB-97200	Chromium	No Qualification	[Sample]>10x[Blank]
Overburden-1	B16021788-001	MB-97200	Selenium	Qualified J	[Blank]>(1/10)[Result], but [Blank]<[Result], possible contamination from blank
Overburden-2	B16021788-002	MB-97200	Chromium	No Qualification	[Sample]>10x[Blank]
Overburden-2	B16021788-002	MB-97200	Selenium	Qualified J	[Blank]>(1/10)[Result], but [Blank]<[Result], possible contamination from blank
Overburden-3-2	B16021788-003	MB-97200	Chromium	No Qualification	[Sample]>10x[Blank]
Overburden-3-2	B16021788-003	MB-97200	Selenium	Qualified J	[Blank]>(1/10)[Result], but [Blank]<[Result], possible contamination from blank
Overburden-4-2	B16021788-004	MB-97200	Chromium	No Qualification	[Sample]>10x[Blank]
Overburden-4-2	B16021788-004	MB-97200	Selenium	No Qualification	Sample result is ND

Sample ID	Lab ID	Associated Blank Sample	Parameter	Action	Comments
Overburden-5-2	B16021788-005	MB-97200	Chromium	No Qualification	[Sample]>10x[Blank]
Overburden-5-2	B16021788-005	MB-97200	Selenium	Qualified J	[Blank]>(1/10)[Result], but [Blank]<[Result], possible contamination from blank

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
No. The following actions were performed:

Associated MS Sample	Associated MSD Sample	Parameter	Action	Comments
B16021788-005AMS3		Barium	Qualified J	Spike recovery outside of advisory limits
B16021788-005AMB	B16021788-005ADB	Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1260, Aroclor 1262, Aroclor 1262	No Action	% Recovery above Upper Control Limit, but Sample concentration is ND, no action necessary
		Aroclor 1254	Qualified J	Spike recovery outside of advisory limits. Lab note: The low percent recovery for Aroclor 1254 in the matrix spike and matrix spike duplicate samples can be attributed to a non-homogeneous sample maxtrix.

A matrix spike is used to document the bias (accuracy) of a method in a given sample matrix. The qualified samples are considered biased low.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16021788-003	Overburden-3-2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021788-004	Overburden-4-2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16021788-005	Overburden-5-2	CB-IG-6	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Lab note for Total Metals (Ar,Cd,Cr,Se,Ag): the analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test. The serial dilution of samples quantitated by Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP9AES) determines whether or not significant physical or chemical interferences exist due to sample matrix. An ICP Serial Dilution analysis should be performed on a sample from each group of samples; this is a deviation from sampling and QC procedure.

Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
1254CK3	CCVS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, CCV analyte (Aroclor 1254) within range, no action necessary

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
Overburden-1	B16021788-001	Barium	Qualified J	95 J
Overburden-1	B16021788-001	Selenium	Qualified J	5 J
Overburden-2	B16021788-002	Barium	Qualified J	187 J
Overburden-2	B16021788-002	Selenium	Qualified J	6 J

Sample ID	Lab ID	Analyte	Action	Result
Overburden-3-2	B16021788-003	Aroclor 1254	Qualified J	0.7 J
Overburden-3-2	B16021788-003	Barium	Qualified J	125 J
Overburden-3-2	B16021788-003	Selenium	Qualified J	7 J
Overburden-4-2	B16021788-004	Aroclor 1254	Qualified J	0.8 J
Overburden-4-2	B16021788-004	Barium	Qualified J	162 J
Overburden-5-2	B16021788-005	Aroclor 1254	Qualified J	0.55 J
Overburden-5-2	B16021788-005	Barium	Qualified J	117 J
Overburden-5-2	B16021788-005	Selenium	Qualified J	6 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16030854
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16030854*
- Laboratory Report Date: *March 16, 2016*

  Sample Matrix: *Soil*

  Samples: 350.0033-Comp1a; 350.0033-Comp1b; 350.0033-Comp2a; 350.0033-Comp2b; 350.0033-Comp3a; 350.0033-Comp3b; 350.0033-Comp4a; 350.0033-Comp4b; 350.0033-Comp5a; 350.0033-Comp5b
- Sample Start and End Dates: *March 9, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
No. Soil Samples did not meet the requirements. Lab notes: "Because the amount of Aroclor 1254 was significantly higher than the spike amount, the MS and MSD samples are calculated as Duplicate samples for Aroclor 1254 based on the spike amount added plus the original sample concentration". Aqueous samples did meet the requirement.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16030854-001	350.0033-Comp1a	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-002	350.0033-Comp1b	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-003	350.0033-Comp2a	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-004	350.0033-Comp2b	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-005	350.0033-Comp3a	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-006	350.0033-Comp3b	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-007	350.0033-Comp4a	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-008	350.0033-Comp4b	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-009	350.0033-Comp5a	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16030854-010	350.0033-Comp5b	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?

Surrogate recovery exceeded control limits for the following samples:

Lab ID	Sample Type	Surrogate	Action	Comments
1254CK3	CCVS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, CCV analyte (Aroclor 1254) within range, no action necessary
1254CK6	CCVS	Decachlorobiphenyl	None	Surrogate flagged for spike recovery outside of advisory limits, CCV analyte (Aroclor 1254) within range, no action necessary

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.

The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
350.0033-Comp1a	B16030854-001	Aroclor 1254	Qualified J	34 J
350.0033-Comp1b	B16030854-002	Aroclor 1254	Qualified J	0.86 J
350.0033-Comp2a	B16030854-003	Aroclor 1254	Qualified J	1.9 J
350.0033-Comp2b	B16030854-004	Aroclor 1254	Qualified J	0.34 J
350.0033-Comp3a	B16030854-005	Aroclor 1254	Qualified J	2.4 J
350.0033-Comp3b	B16030854-006	Aroclor 1254	Qualified J	0.33 J
350.0033-Comp4a	B16030854-007	Aroclor 1254	Qualified J	2.7 J
350.0033-Comp4b	B16030854-008	Aroclor 1254	Qualified J	2.5 J
350.0033-Comp5a	B16030854-009	Aroclor 1254	Qualified J	3.8 J
350.0033-Comp5b	B16030854-010	Aroclor 1254	Qualified J	1.3 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16031713
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16030854*
- Laboratory Report Date: *March 24, 2016*
  Sample Matrix: *Soil*
  Samples: Comp 4C; Comp 5C
- Sample Start and End Dates: *March 21, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?
Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16031713-002	Comp 5C	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria
B16031713-001	Comp 4C	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
Comp 4C	B16031713-001	Aroclor 1254	Qualified J	0.35 J
Comp 5C	B16031713-002	Aroclor 1254	Qualified J	0.39 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.

Data Validation Summary
Laboratory Work Order B16031832
Point of Compliance Analytes

1. Please provide the following information at the beginning of the data validation report:

- Project name: *Phase 4 Remedial Action Report*
- Name and Date of approved Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP), or other applicable document:
- ***SAP:*** *Cooling Pond, Fire Pond Lagoon & East Log Track Area, Sampling and Analysis Plan (SAP), December 1, 2009.*
- Laboratory Name: *Energy Laboratories*
- Laboratory Project ID: *B16031832*
- Laboratory Report Date: *March 24, 2016*
  Sample Matrix: *Soil*
  Samples: Comp1C
- Sample Start and End Dates: *March 24, 2016*
- Parameters Included:
  - *Polychlorinated Biphenyls (PCB's) by EPA method 8082*
  - *Percent Moisture by SW3550A (soil samples only)*

- Date Validated: *May 4, 2016*
- Name of Validator: *Katie Sitler*

2. Please include a description of the data validation criteria used. These data validation criteria should be outlined in the appropriate QAPP, SAP, or other applicable document.

- *Verification of whether field staff conformed to SOPs and field methodologies prosed in the NewFields SAP;*
- *Determination of whether the laboratory reported all requested analyses;*
- *Review to ensure that units of measurements are consistent, and reviews of sample definitions for consistency; and*
- *Inspection for the presence of elevated detection limits due to matrix interference or other data quality concerns indicated by laboratory QC testing.*

3. Please include a description of the acceptability and usability of the data, including any qualified data. Please explain data qualification flags or any other notes used by the laboratory. Please identify and explain any exceptions (i.e., rejected data) to the acceptability and usability of the data.
The following shortcomings/deviations are considered minor and should not affect the usefulness of the data and information to achieve the objectives of the project.

4. Please include a description of the data qualifiers used during this validation.
Qualified J – Result is considered estimated

5. Does the laboratory case narrative note any nonconformance issues with the analytical data? Please identify the nonconformance issues.
No.

6. Were sample chain-of-custody (CoC) forms complete, including a description of all samples, all analyses, and appropriate signatures?
Yes.

7. Were detection limits in accordance with the project requirements?
Yes

8. Were the requested analytical methods in compliance with project requirements (i.e., QAPP, SAP)?
SAP identifies contaminants of concern as PCBs, EPH-screen, and the eight RCRA metals. This sampling event only tested for PCBs.

9. Were samples received in good condition within method specified requirements? Please explain any exceptions, and how sample condition may affect the results.
Yes.

10. Were samples analyzed within method specified or technical holding times?
Yes.

11. Were reported units appropriate for the associated sample matrix/matrices and method(s) of analyses?
Yes.

12. Do the laboratory reports include all constituents requested to be analyzed on the CoC or under the QAPP, SAP, or other applicable document?
Yes.

13. Was the total number of method blank samples prepared equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

14. Were QC laboratory blank samples free of analyte contamination?
Yes.

15. Was the total number of matrix spike samples prepared equal to at least 5% of the total number of samples, or analyzed as required by the method?
Yes.

16. Were MS/MSD percent recoveries and MS/MSD relative percent difference (RPDs) within data validation or laboratory QC limits?
Yes.

17. Was the total number of LCSs samples analyzed equal to at least 5% (1 in 20) of the total number of samples, or analyzed as required by the method?
Yes.

18. Were LCS/LCSD percent recoveries and LCS/LCSD RPDs within laboratory QC limits?
Yes.

19. Were laboratory duplicate RPD values within laboratory-specified limits?
Yes.

20. Were the number of equipment, trip, or field blanks collected equal to at least 10% of the total number of samples, or as required by the project requirements, QAPP, or SAP?

Project SAP states that sample blanks and trip blanks are not considered relevant for this project. However, a field blank was collected at a rate of 5% for this sampling event and was considered for this QC evaluation.

21. Were the trip blank, field blank, and/or equipment blank samples free of analyte contamination?
Yes.

22. Were the field duplicates collected as required by the project requirements, QAPP or SAP?
Project SAP called for field duplicates to be collected at a rate 5% to evaluate data quality. The number of field duplicates collected did equal more than 5% of the total number of samples but duplicates where not collected at a consistent 5% rate. Field duplicate and the results of the laboratory precision analysis were assigned to Laboratory Batches based off date collected and assigning no more than 20 natural samples to one duplicate.

23. Were field duplicate RPD values within data validation QC limits (generally soil 0-50%, water 0-30%, or air 0-25%, or otherwise specified in the QAPP/SAP)? Please explain, and include discussion of how this affects the data.
No. The following samples were qualified due to the associated field duplicate exceeding 20% RPD.

Sample ID	Lab ID	Associated DUP Sample	Parameter	Action	Comments
B16031832-001	Comp 1C	CB-IG-8	Aroclor 1254	Qualified J	RPD was outside acceptable criteria

The duplicate exceeding data validation QC limits indicates a possible error in the laboratories precision, however the inherent variability of the soil is also a likely cause of the exceedance. Samples are qualified J (estimated).

24. Were the Laboratory internal QC checks (surrogates, CCVs, etc.) all within laboratory control limits?
Yes.

25. If any data were qualified, please provide a data qualification summary and include how data is affected/biased.
The following data was qualified:

Sample ID	Lab ID	Analyte	Action	Result
Comp 1C	B16031832-001	Aroclor 1254	Qualified J	0.043 J

Qualified J – Result is estimated

26. Please provide any other general comments or other observations.