APPENDIX D-1: Baseline Environmental Geochemistry Evaluation of Near Surface Materials

FINAL

BLACK BUTTE COPPER PROJECT

BASELINE ENVIRONMENTAL GEOCHEMISTRY
EVALUATION OF NEAR-SURFACE MATERIALS
REVISED MINE OPERATING PERMIT

Prepared for

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Executive Summary

This baseline environmental geochemistry evaluation summarizes geochemical test results for near-surface materials in the vicinity of Tintina's proposed Black Butte Copper (BBC) Project facilities. Shallow, weathered, highly-fractured and oxidized near-surface bedrock (*Ynl Ex*) zones of the Lower Newland Formation and sill-form granodiorite intrusive rocks (*Tgd*) will be excavated and the *Tgd* will be used as sub-grade bedding under lined facilities.

These near-surface materials have been characterized using static multi-element analysis, acid-base accounting, net acid generation potential, and kinetic humidity cell tests. Results of static and kinetic data consistently suggest that these materials release very little metals and are unlikely to generate acid. The *Tgd* exhibited no acid generation or metal release in the 28-week humidity cell test. The *Ynl Ex* demonstrated limited sulfate and metal release but no acid generation, and pH remained well above neutral for the duration of the 35-week humidity cell test. Mineralogical analyses of potential asbestiform mineral content within the near-surface bedrock units were also completed as part of this evaluation and no asbestiform minerals were identified in any of the near-surface construction materials.

The low potential for *Tgd* to produce acid or release metals suggests it is appropriate for Tintina' proposed use as sub-grade bedding layers under lined facilities.

1 Introduction

Shallow, weathered, highly-fractured and oxidized near-surface bedrock (*Ynl Ex*) zones of the Lower Newland Formation and sill-form granodiorite intrusive rocks (*Tgd*) will be excavated at depths up to 20 m below ground surface (bgs) during construction. This rock will be used to build embankments, drains, and foundations for Tintina's proposed Black Butte Copper project (Project), located 15 miles north of White Sulphur Springs, MT. **Figure 1-1** shows the location of the proposed mine facilities, geotechnical drill holes, and test pits.

Two near-surface materials, which comprise the majority of near-surface rock types, were included in this geochemical evaluation: *Ynl Ex* and *Tgd*. Specifically, the *Ynl Ex* is comprised of weathered sediments from the Proterozoic Lower Newland Formation that has been thrust to the surface along the Black Butte Fault (BBF). The *Tgd* is younger granodiorite that intruded the *Ynl Ex* rocks as sill-like tabular bodies. **Figure 1-2** shows that these two rock units have been folded and faulted so that they are exposed together at the surface. This baseline environmental geochemistry evaluation presents data collected for near-surface materials (< 20 m bgs), based on static and kinetic geochemical testing results.

The acid generation and metal release potential of this near-surface rock has been characterized using static multi-element analysis, acid-base accounting (ABA), net acid generation (NAG) potential, and kinetic humidity cell tests (HCTs). Analyses of potential asbestiform mineral content were also completed. The testing described in this report was conducted in conjunction with environmental geochemical testing of the waste rock and tailings for the Project. Data from those tests are reported separately (Enviromin, 2017a).

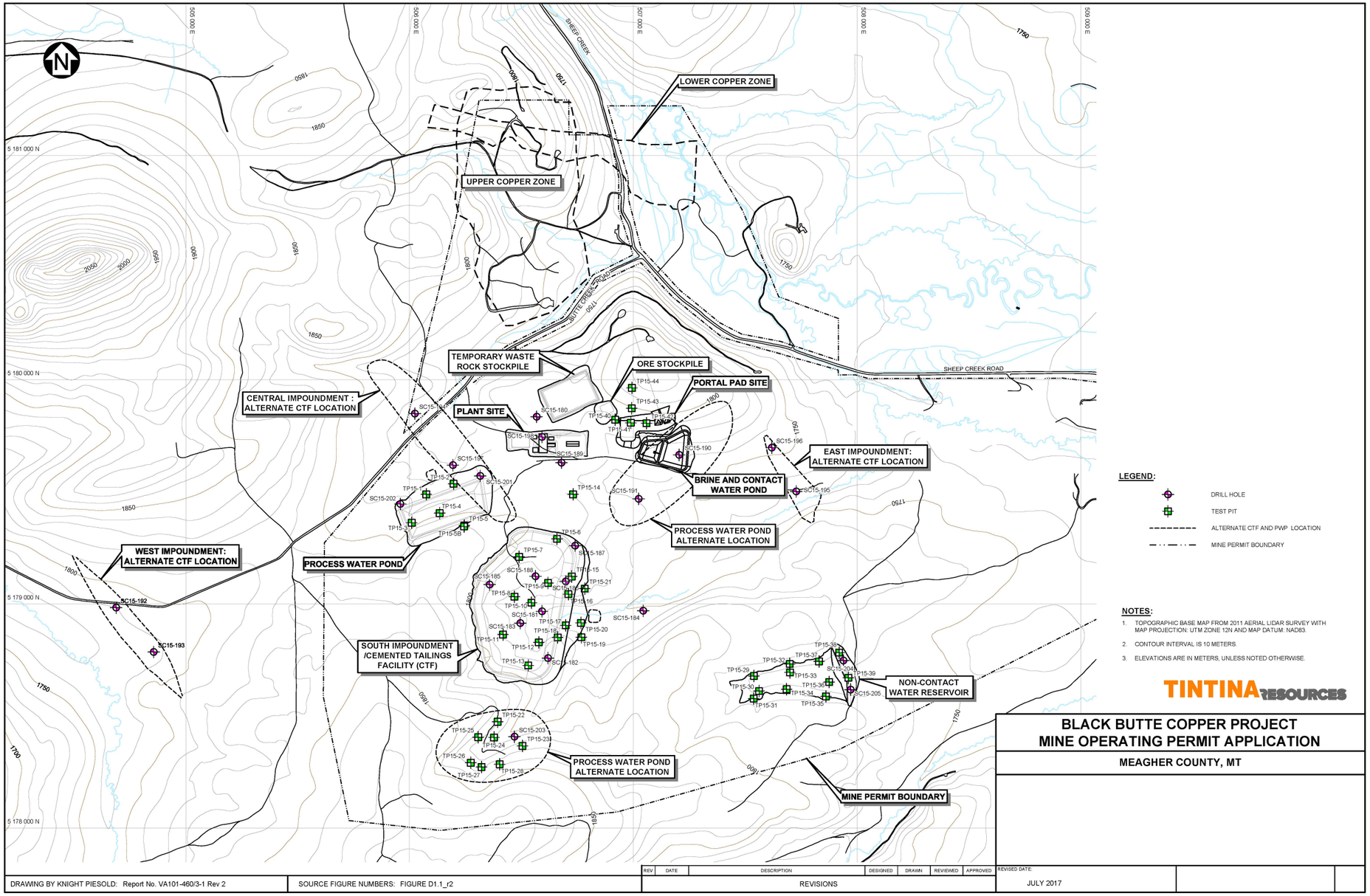

Figure 1-1. Facility Map with Geotechnical Drill Holes and Test Pits

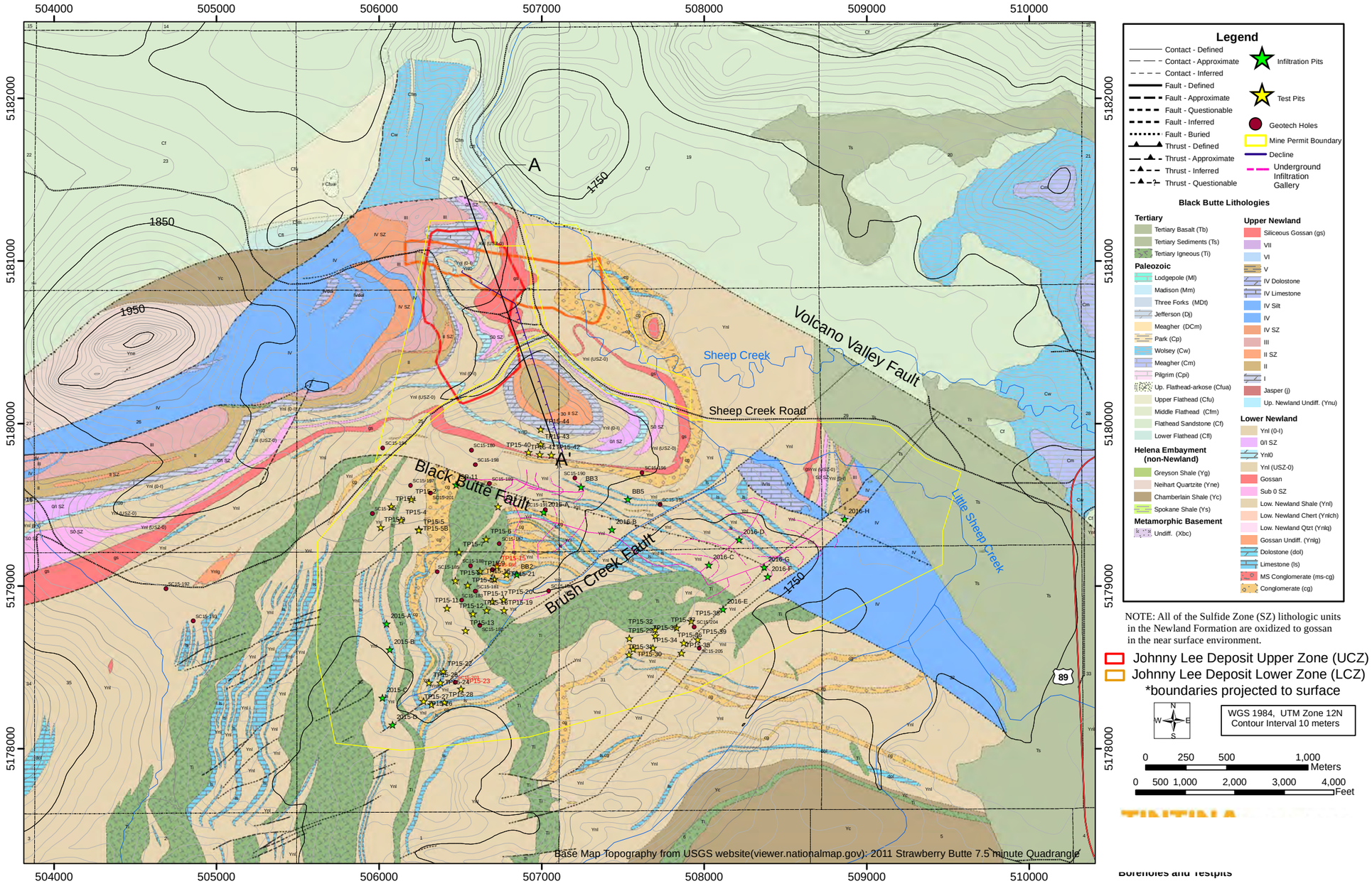

Figure 1-2. Site Geologic Map with Geotechnical Drill Holes and Test Pits

2 Sampling of Near-Surface Materials

A statistical review of select multi-element data as a function of depth was used to determine whether near-surface materials were comparable to deeper materials that were evaluated as waste rock (Enviromin, 2017a). Specifically, statistical summaries of whole rock chemistry for near-surface (less than 20 meters bgs) *Ynl Ex* and *Tgd* samples were compared to samples collected at depth (greater than 20 m bgs) within the *Ynl* below the upper sulfide zone (*Ynl B*) and the igneous dikes (*IG*). These deeper materials were originally tested as part of the baseline environmental geochemistry testing of waste rock and tailings (Enviromin, 2017a). The following specific rock units were compared:

Table 2-1. Shallow and Deep Rock Materials Compared

Shallow Material (<20 meters bgs)		**Deep Material** (>20 meters bgs)	
Ynl Ex	Near-surface Lower Newland Formation	Ynl B	Lower Newland Formation basal conglomerate
Tgd	Near-surface granodiorite intrusions	IG	Igneous dike intrusions

Results of these comparisons are presented in **Table A1** of **Appendix A**. Additionally, **Figure 2-1** displays the sulfur content of the *Ynl B, Ynl Ex*, *IG*, and *Tgd*.

Comparisons of the elemental chemistry as a function of depth demonstrate that weathered near-surface materials are relatively depleted in metals and sulfur and are thus geochemically distinct from the deeper materials. This is consistent with observations made in hand specimens (highly fractured with iron-oxide stained fractures) collected while drilling (Knight Piésold, 2016). Therefore, the near-surface deposits of *Ynl Ex* and *Tgd* have been independently tested to evaluate acid generation and metal release potential using static and kinetic methods.

Representative subsets of the *Tgd* and *Ynl Ex* samples were selected for environmental geochemical testing through analysis of static multi-element geochemical data. Subsamples were identified to represent the mean concentrations of 10 select elements exhibited by the larger pool of available data for each lithotype using a method based on Runnells *et al.* (1997). Although the excavations will not be deeper than 20 m bgs, the *Tgd* subset was selected from a dataset ranging from 0 to 30 m bgs. Comparison of the Tgd subset to data from 0 to 20 m bgs indicates that all average metals in the selected *Tgd* subset are within the acceptable 20 percent margin, with the exception of sulfur, for which the subset is more conservative. This does not apply to the *Ynl Ex* subset, which was selected from a dataset with a depth range of 0 to 20 m. **Table A2** of **Appendix A** presents a complete list of samples selected for analysis, along with multi-element data and averages by rock unit. Sampling locations are shown in **Figures 1-1 and 1-2**.

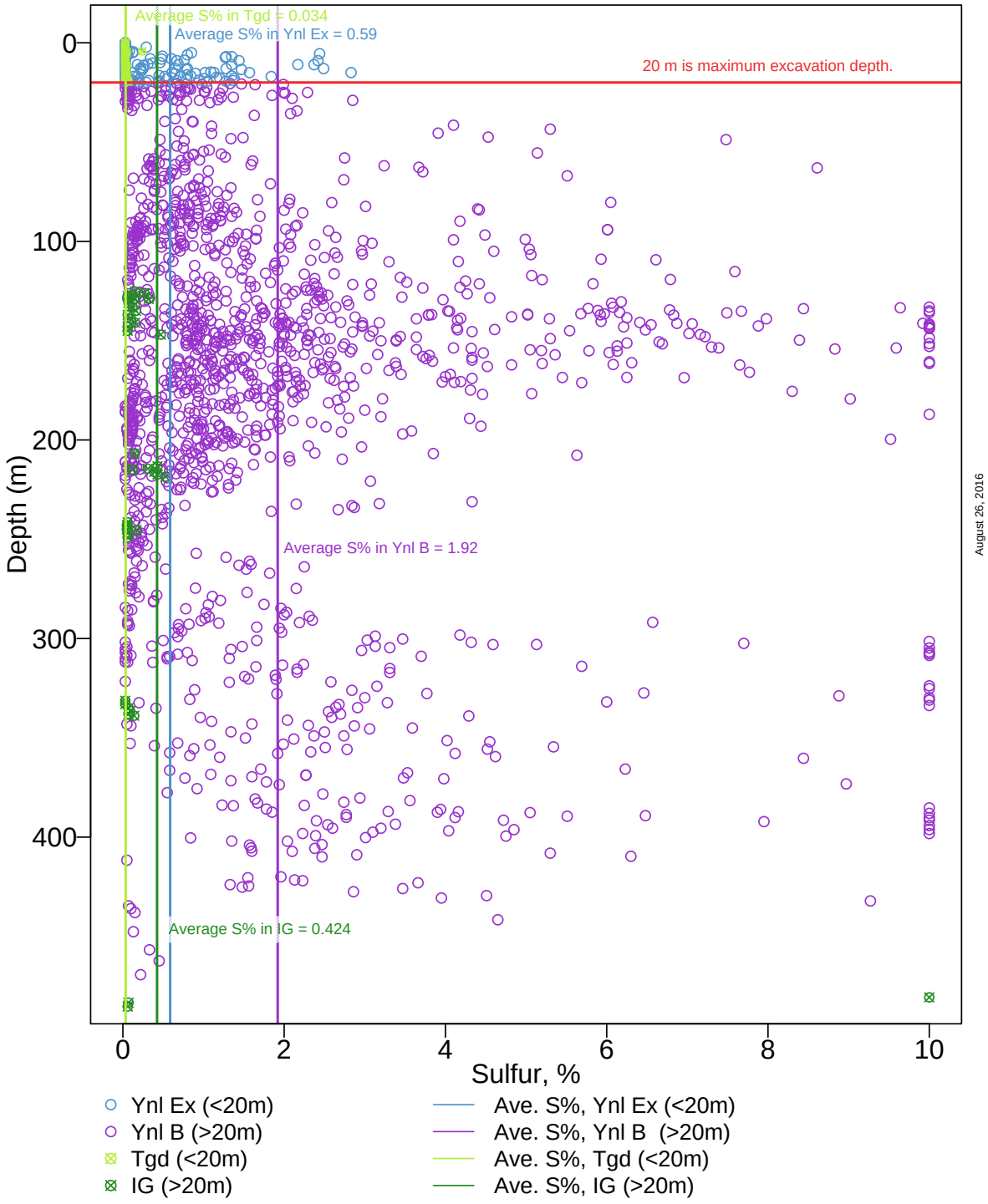

Figure 2-1. Comparison of Sulfur (%) in surface-exposed rocks

3 Geochemical Testing and Results

3.1 Static Acid Base Accounting and Net Acid Generation

The ABA test measures the relative acid production and neutralization potential of material based on the conservative assumption that all sulfides present will oxidize, releasing acidity. The ABA test quantifies the acid potential (AP) and neutralization potential (NP) of a sample in units of tons $CaCO_3$ / kiloton of rock (Sobek *et al*., 1978), allowing calculation of the net neutralization potential (NNP) as NP minus AP, as well as the ratio of NP to AP (INAP, 2012). The ABA test uses a relatively complete digestion of finely ground rock, and therefore conservatively estimates the reactivity of available sulfur (S) minerals. These analyses used the modified Sobek method of ABA analysis (Lawrence and Wang, 1996).

As part of the ABA analysis, S was fractionated to identify the sulfide (S^{2-}), acid-soluble and -insoluble sulfate (SO_4^{2-}), and residual S fractions. Total S was determined by LECO S and SO_4 sulfur was measured in the carbonate-soluble and hydrochloric acid (HCl)-soluble fractions. Sulfide was then calculated by subtracting total SO_4^{2-} from total S. In this study, AP was calculated based on S^{2-}, which was the dominant form of S measured in the majority of samples.

To determine NP, a sample is treated with excess standardized HCl at ambient temperatures for 24 hours. The remaining acid is titrated with a standardized base to a pH of 8.3 to allow the calculation of calcium carbonate equivalent for acid consumed.

The acid generation potential of rock samples is assessed based on calculated values of NNP and NP:AP using the ABA criteria shown in **Table 3-1**. These criteria are also used to identify materials that require kinetic HCT testing and evaluate acid generation and metal release potential under prolonged weathering stress.

Table 3-1. Criteria for Classifying Acid Generation Potential from ABA Data

Classification	ABA Criteria
Potentially Acid Generating (PAG)	NP:AP < 1 and NNP < -20 tons/kton as $CaCO_3$
Uncertain Acid Generation Potential	NP:AP between 1 and 3 and/or NNP between -20 and +20 tons/kton as $CaCO_3$
Unlikely to Generate Acid (NAG)	NP:AP > 3 and NNP > +20 tons/kton as $CaCO_3$

From BLM (1996) and USEPA (1994).

The net acid generation pH (NAG pH) test is another method of evaluating acid generation potential, which relies on the oxidation of a ground sample using hydrogen peroxide (H_2O_2; Miller *et al*., 1997). Most sulfides are oxidized, and available minerals neutralize any acid produced. The NAG pH method avoids the potential bias of assumptions implicit in the ABA method, including the assumed stoichiometry of sulfide mineralogy and the relative efficiency of speciation methods.

A 2.5 gram sample is pulverized and 250 mL of 15 percent H_2O_2 is added. The sample reacts overnight, and is then heated for up to 2 hours to remove excess H_2O_2 and encourage the release of inherent neutralizing capacity. The sample is allowed to cool, the final pH (NAG pH) is measured, and the solution is then titrated with sodium hydroxide, to endpoints of pH 4.5 and 7.0. Samples with a NAG pH of less than 4.5 at completion of the NAG test indicate potential to generate acid; titration results further indicate the material's acid-production ability (**Table 3-2**).

Table 3-2. Criteria for Classifying Net Acid Generation Potential

NAG Prediction	Detailed Prediction	Final NAG pH	NAG Value (t H_2SO_4/ 1000 t)
Potentially net acid generating (PAG)	High capacity	<4.5	>5 (up to 10, depending on site-specific factors)
	Low capacity	<4.5	0-5
Potentially non-net acid generating (NAG)		>4.5	0

Adapted from: Miller et al. 1997, and INAP 2012

Figures 3-1 and **3-2**, as well as **Table 3-3** present a summary of ABA and NAG results for the construction materials. These results show that all but one of the near-surface samples are non-acid generating, although more uncertainty exists when the NNP criteria, rather than the NP:AP, are used as a basis for evaluation.

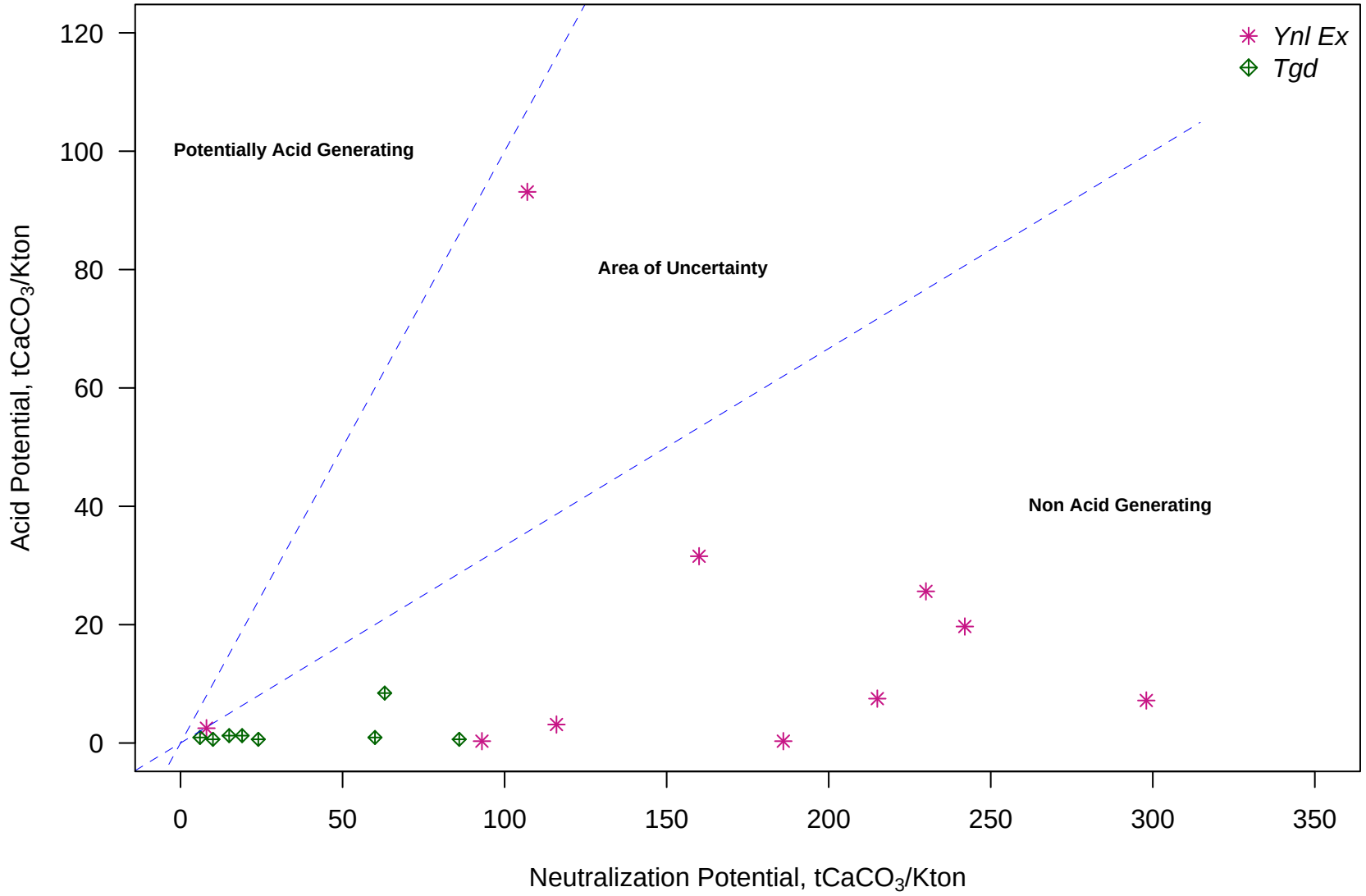

Figure 3-1. Acid Generation Potential for Surface Materials

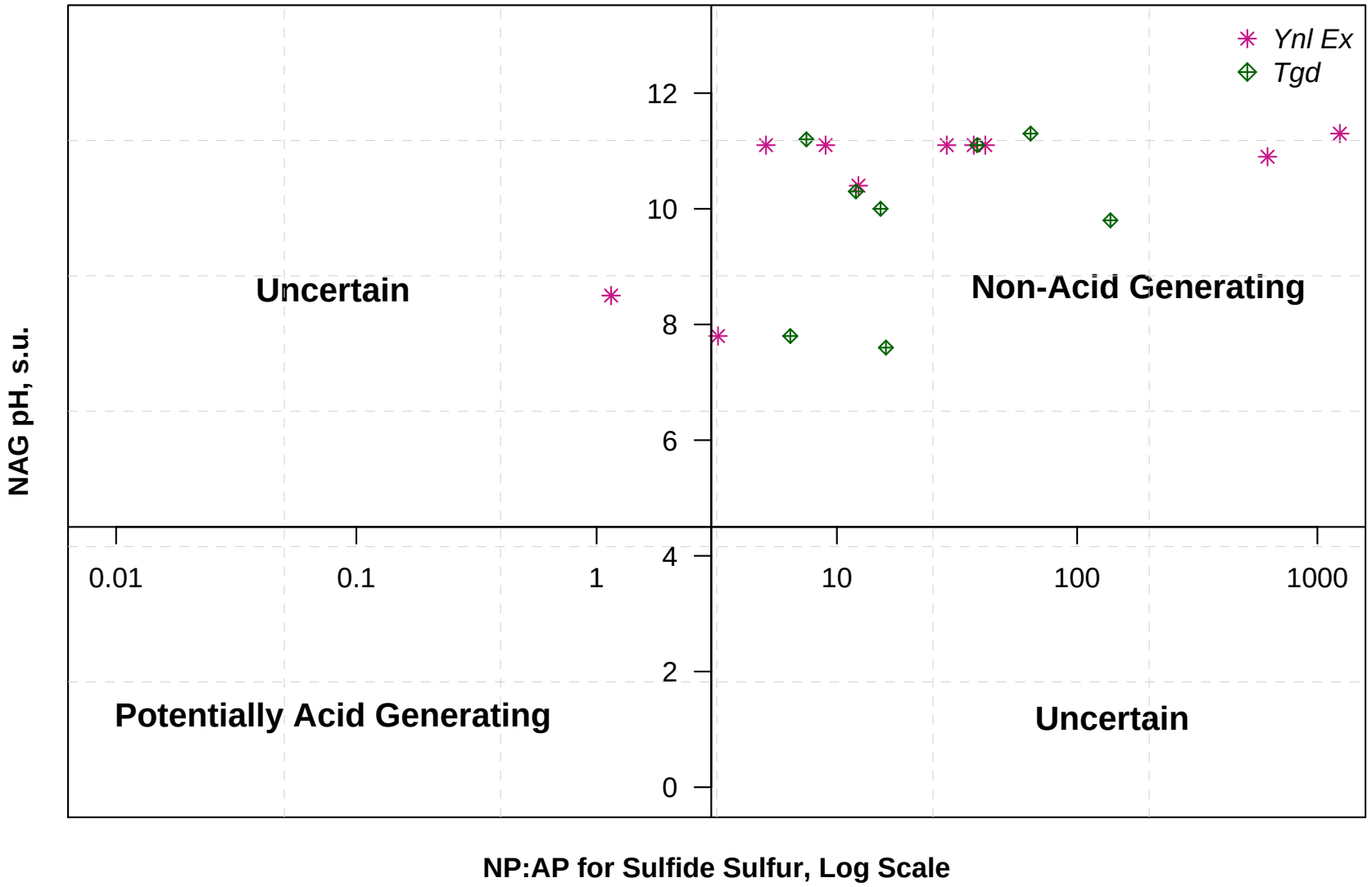

Figure 3-2. Comparison of NAG pH with NP:AP for Surface Materials

Table 3-3. Acid-Base Accounting and Net Acid Generation Data, by Lithotype.

HOLE_ID	Interval (m)		Paste pH	AP*	NNP	FIZZ	NP	NP:AP*	Total S	S $NaCO_3$ SO_4^{2-}	S HCl SO_4^{2-}	S as Sulfide	NAG at pH=4.5	NAG at pH=7.0	NAG pH	Rating
	from	to	s.u.	$tCaCO_3$/Kton	$tCaCO_3$/Kton	s.u.	$tCaCO_3$/Kton	s.u.	%	%	%	%	Kg H_2SO_4/t	Kg H_2SO_4/t	s.u.	
Tgd																
TP6	NA	NA	7.6	0.63	9	1	10	16	0.02	0.01	0.01	0.02	0.01	0.01	7.6	UN
TP14	NA	NA	7.8	0.94	5	1	6	6.4	0.03	0.01	0.01	0.03	0.01	0.01	7.8	UN
SC15-202	9	11	11.1	0.63	23	2	24	38.4	0.02	0.01	0.01	0.02	0.01	0.01	11.1	NAG
SC15-181	6.71	8.7	10	1.25	18	1	19	15.2	0.04	0.01	0.01	0.04	0.01	0.01	10	UN
SC15-183	8	10	9.8	0.63	85	2	86	137.6	0.02	0.01	0.01	0.02	0.01	0.01	9.8	NAG
SC15-185	4.33	6	11.2	8.44	55	2	63	7.47	0.27	0.01	0.01	0.27	0.01	0.01	11.2	NAG
SC15-187	4	4.96	10.3	1.25	14	1	15	12	0.04	0.01	0.01	0.04	0.01	0.01	10.3	UN
SC15-188	10	12	11.3	0.94	59	2	60	64	0.03	0.01	0.01	0.03	0.01	0.01	11.3	NAG
Ynl Ex																
SC15_181	15.4	17.4	8.5	25.63	204	4	230	8.98	0.84	0.02	0.01	0.82	0.01	0.01	11.1	NAG
SC15_181	19.4	21.4	8.6	31.56	128	3	160	5.07	1.03	0.02	0.01	1.01	0.01	0.01	11.1	NAG
SC15_184	10.63	12.25	8.8	0.31	186	3	186	595	0.01	0.01	0.01	0.01	0.01	0.01	11.3	NAG
SC15_184	19.89	21.36	8.6	7.50	207	4	215	28. 7	0.25	0.01	0.01	0.24	0.01	0.01	11.1	NAG
SC15_184	4.57	5.5	8.3	3.13	112	3	116	37.12	0.12	0.02	0.01	0.1	0.01	0.01	11.1	NAG
SC15_191	8.04	10	8.8	7.19	291	4	298	41.5	0.24	0.01	0.03	0.23	0.01	0.01	11.1	NAG
SC15_204	3.18	5	8.4	0.31	93	3	93	298	0.01	0.01	0.01	0.01	0.01	0.01	10.9	NAG
SC15_197	15.7	17.7	8.8	19.69	222	4	242	12.3	0.63	0.01	0.01	0.63	0.01	0.01	10.4	NAG
SC15_199	19	21	8.7	2.50	5	1	8	3.2	0.09	0.01	0.01	0.08	0.01	0.01	7.8	UN
SC15_205	15	16.65	8	93.13	13	3	107	1.15	3.02	0.04	0.01	2.98	0.01	0.01	8.5	UN

**Calculated from Sulfide S*

*Shading refers to the rating systems for respective parameters presented in **Tables 3-1** and **3-2**. Red=Potentially acid generating, Yellow=Uncertain, and Green=Not acid generating.*

3.2 Asbestiform Minerals

Asbestiform serpentine and amphibole minerals are generally associated with metamorphic processes and do not typically occur in carbonaceous or carbonate sedimentary deposits. Chrysotile fibers are most commonly found where serpentinized ultramafic rocks intrude dolomitic marbles. Although amphibole minerals are widely found throughout the earth's crust, few varieties exhibit the rare asbestiform habit resulting from mechanical shearing and/or high temperature metamorphism that pose health risks. Asbestiform mineralization is therefore highly unlikely to occur in the Black Butte copper deposit. Nevertheless, composites of lithotypes were screened for the presence of asbestiform minerals at the request of the Montana Department of Environmental Quality.

The presence/absence of chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite was evaluated by the R.J. Lee Group using Polarized Light Microscopy (PLM) methods at a 400 point count, followed by evaluation of any identified asbestiform fibers following U.S. EPA regulations. Any samples found to contain uncertain or demonstrated asbestiform mineral content were to be analyzed using Transmission Electron Microscopic (TEM) analysis to clearly distinguish between mineral cleavage and fibers, along with elemental analysis of the samples. For this project, detection between 0.001 and 0.1 weight percent was required.

No asbestiform minerals were detected in either the *Tgd* or *Ynl Ex* samples. A copy of the lab report from RJ Lee Group is included in **Appendix A**.

3.3 Kinetic Testing of Waste Rock

HCTs are designed to study the rate of sulfide mineral oxidation and are often used to simulate long-term metals leaching in aerobic (accelerated weathering) environments. Typically, HCTs are run using the established American Society for Testing and Materials (ASTM) testing protocol D5744. Crushed rock is placed in a column and aerated with alternating cycles of humid and dry air, followed by weekly flushing with a relatively large volume of water (approximately 2 pore volumes). The column is allowed to drain and the cycle is repeated weekly for what has conventionally been a 20–week period. However, there are no fixed timelines for HCT duration, and durations are typically determined by evidence of steady state in key reaction rates, such as sulfide oxidation, depletion of alkalinity and release of metals.

Based on results of the static multi-element analyses and ABA/NAG tests, which indicate low potential for acid generation, kinetic HCTs were conducted for composites of *Tgd* and *Ynl Ex* (at McClelland Laboratories, Sparks, NV). These kinetic HCTs ran for 28 weeks and 35 weeks for the *Tgd* and *Ynl Ex*, respectively. The final McClelland Laboratories report, including all laboratory results from kinetic HCTs, is included in Appendix B. Results of HCTs are presented in **Figures 3-3** and **3-4a and b**, and in **Tables B1 and B2** of **Appendix B**.

3.3.1 Granodiorite- *Tgd*

Results of the kinetic HCT of *Tgd* are consistent with the static geochemistry results, indicating that this material has low potential for acid production and metal release.

- In all weeks of testing the pH remained strongly neutral, ranging from 7.82 (week 7) to 8.26 (week 2) with an average of 8.03. The pH averaged 8.4 in the last 12 weeks of testing.

- Redox potential was initially steady and averaged 312 mV through week 12. It then decreased, averaging 240 mV in the remaining 16 weeks with a final value of 269 mV.
- After slightly elevated conductivity readings of over 100 µS/cm in week 0 and 1, the conductivity stabilized throughout the remaining 27 weeks, ranging between 70 and 95 µS/cm and averaging 81 µS/cm.
- Iron was not detected in any weekly extract.
- Sulfate concentrations were consistently low, ranging from 2.1 mg/L in week 17 to 7.0 mg/L in weeks 1, 25, and 26 and averaged 4.8 mg/L.
- Acidity was only detected in week 5 at a concentration of 5 mg/L.
- Alkalinity was consistently in the 35-45 mg/L range, with a maximum observed concentration of 55 mg/L in week 0 and the minimum observed concentration of 33 mg/L in week 16. Alkalinity for the entire test averaged 41 mg/L.

Overall, metal release in the *Tgd* HCT was negligible. Most metal concentrations were consistently below respective method detection limits and no applicable water quality standards (DEQ, 2012) were exceeded.

3.3.2 Near-surface Lower Newland- *Ynl Ex*

The kinetic HCT of *Ynl Ex* remained consistent with the static geochemistry results. This representative composite is primarily comprised of samples with very low sulfur content, but also included a few samples with higher sulfur content (as confirmed by ABA). This suggests that the majority of this material has low potential for acid production and metal release, while local pockets of non-oxidized primary sulfide have greater acid and metal release potential.

- The pH remained strongly neutral and very stable for all weeks of testing, ranging from 7.80 (week 7) to 8.18 (week 35) and averaging 7.96.
- Redox potential remained oxidizing and exhibited a slight, but generally decreasing trend through week 24 followed by a general upturn observed in the last 10 weeks of testing. Over the full test, redox ranged from 130 mV (week 23) to 373 mV (week 11) with an average of 268 mV.
- Conductivity values were initially elevated but then declined over the testing period. A maximum conductivity of 863 µS/cm was observed in week 9 and a minimum value of 194 µS/cm was observed in week 5. Conductivity values averaged 392 µS/cm of the full test period.
- Iron was not detected in any weekly extract.
- Sulfate concentrations followed a release trend similar to other *Ynl* materials (Enviromin, 2017a). After an initial flush in weeks 0 and 1 of 120 mg/L, concentrations dropped well below 100 mg/L for the next five weeks. The sulfate concentration then increased, reaching a test maximum of 510 mg/L in week 10, then declined to 77 mg/L in week 35. Sulfate concentrations averaged 152 mg/L over the full test period.
- Acidity was not detected in any weekly extract.
- Alkalinity was generally high. Following a test high of 109 mg/L in week 0, alkalinity then ranged between 34 mg/L in Week 34 and 72 mg/L in Weeks 2 and 3.

Metal release in the *Ynl Ex* HCT was generally negligible, with a few water quality standard exceedances in the early weeks of testing. Those exceedances occurred for selenium in weeks 0, 1, 2, and 4 at which times the selenium concentration was

at or above the regulatory standard of 0.005 mg/L (DEQ, 2012). However, in subsequent weeks the selenium concentration progressively declined, eventually falling below the reporting limit in Week 28. No other exceedances were observed during testing.

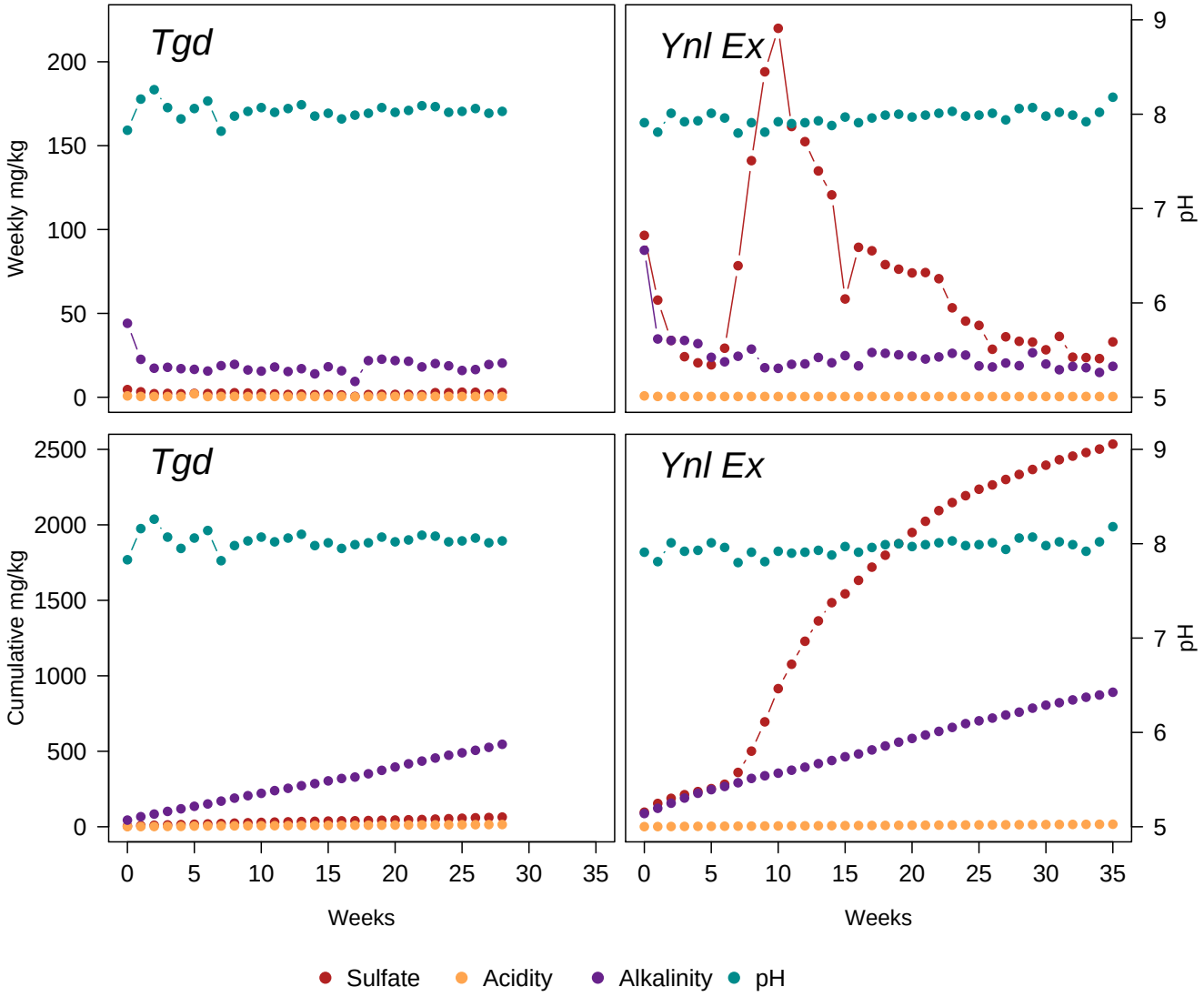

Figure 3-3. Weekly and Cumulative Parameters for *Tgd* and *Ynl Ex* HCTs

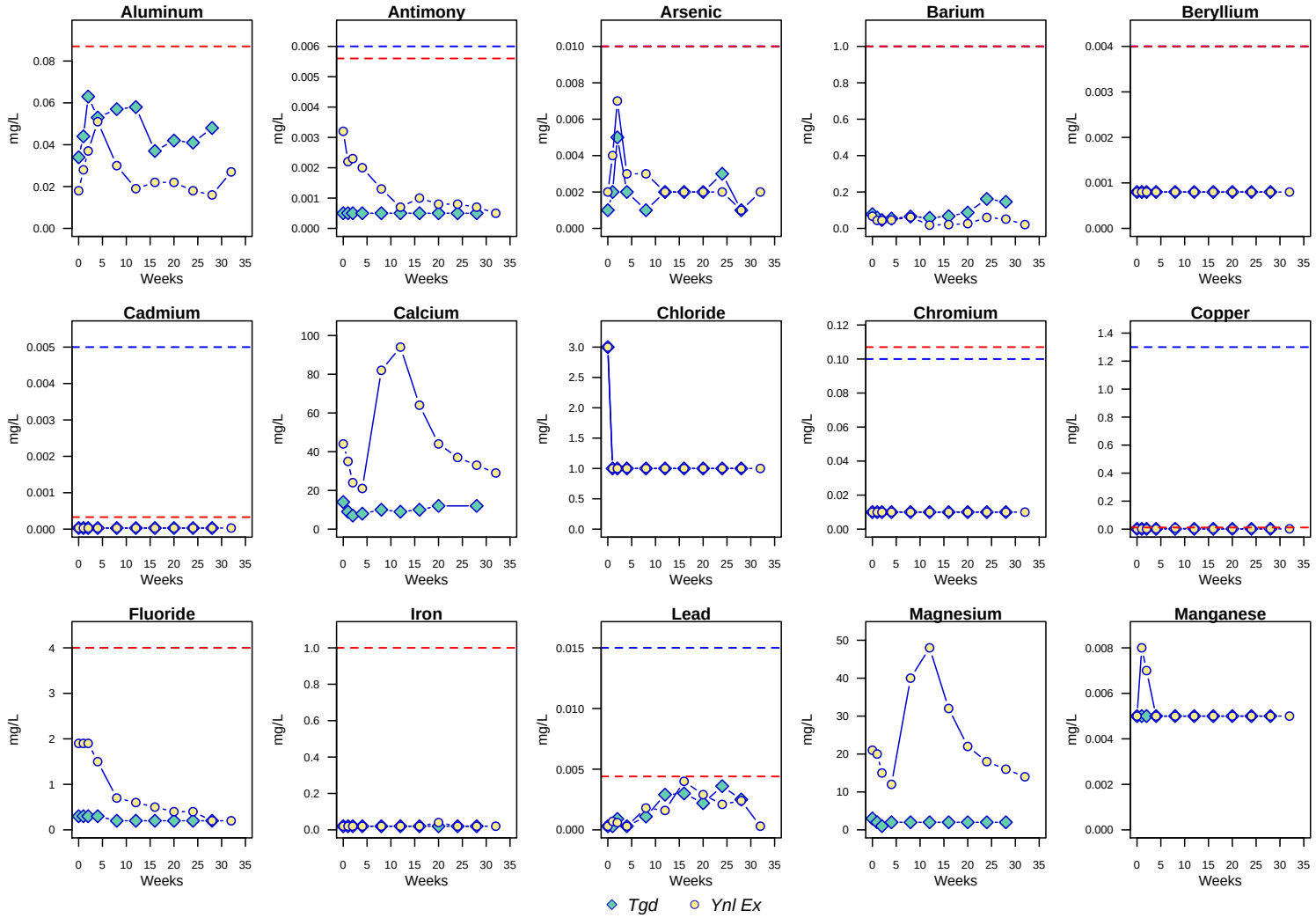

Figure 3-4a. Periodic Metals for *Tgd* and *Ynl E*x HCTs

Blue lines are groundwater standards. Red lines are surface water standards.

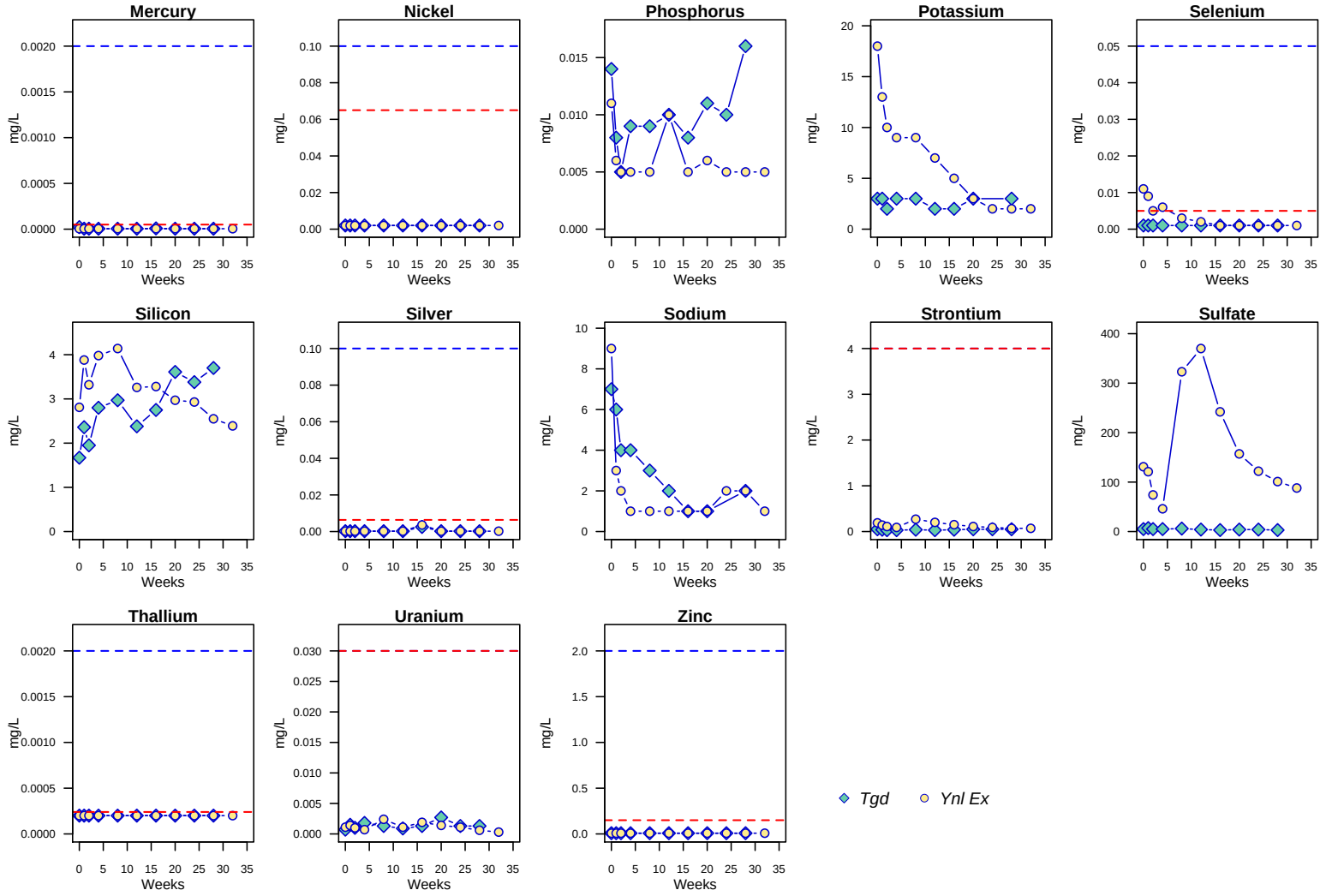

Figure 3-4b. Periodic Metals for *Tgd* and *Ynl Ex* HCTs, cont.

Blue lines are groundwater standards. Red lines are surface water standards.

4 Conclusions

The near-surface materials present at the Project site have been characterized to predict acid generation and metal release potential. These include the Lower Newland Formation conglomerate rocks that lie below the Upper Copper Zone (*Ynl Ex*) and granodiorite (*Tgd*) sills that intrude the *Ynl Ex* unit. These two rock units are exposed together throughout most of the Project area (**Figure 1-2**).

Static multi-element analyses, ABA, NAG, and kinetic data indicate *Tgd* is net neutralizing and do not indicate a metal release potential that would exceed regulatory limits. Tintina plans to use the *Tgd* for gravel beds underneath lined facilities, which is a suitable use for this material based on geochemical test results.

Static and kinetic test results indicate negligible, if any, potential for the *Ynl Ex to* generate acid or metal concentrations exceeding regulatory limits. Early exceedances of selenium surface water standards were followed by declining concentrations that were eventually below the method detection limit, which suggests that elevated selenium release is linked to weathering of freshly exposed surfaces, and not long-term leaching potential. Despite a mid-test increase in sulfate, there was no associated increase in acidity, drop in pH, or increase in metal concentrations. Furthermore, sulfate concentrations declined to background levels more rapidly than was observed in other (deeper) *Ynl* materials tested (Enviromin, 2017a).

5 References

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Appendix A

Static Data

Table A1 Summary statistics of select multi-element data, shallow and deep comparisons

Table A2 Sample subset and multi-element data, by lithotype

ABA/NAG Laboratory Reports (ALS)

Asbestiform Mineral Laboratory Reports (R.J. Lee Group)

Table A1. Whole element data, by lithotype and depth.

		Minimum	1st Quartile	Median	Mean	3rd Quartile	Maximum	Standard Deviation
Ynl Ex (*Ynl B* from excavations <20 meters) N=108	Aluminum (%)	2.0	4.7	5.1	5.3	5.8	9.1	1.2
	Arsenic (ppm)	25	25	25	25	25	50	2.4
	Copper (ppm)	5	20	30	27.2	30	90	12.7
	Iron (%)	1.4	2.6	3.3	3.3	4.0	5.1	0.9
	Manganese (ppm)	80	250	360	355	430	1290	167
	Nickel (ppm)	10	20	20	22	30	50	9
	Lead (ppm)	10	20	35	40	50	140	25
	Sulfur (%)	0.03	0.03	0.32	0.58	0.91	2.83	0.66
	Thallium(ppm)	25	25	25	25	25	50	2
	Zinc (ppm)	10	60	90	132	163	670	114
Ynl B (All *Ynl B* >20 meters) N=1412	Aluminum (%)	0.16	3.91	4.40	4.62	5.25	9.40	1.51
	Arsenic (ppm)	25	25	25	37	25	1040	49
	Copper (ppm)	5	20	30	143	80	24900	768
	Iron (%)	1.0	3.0	3.7	4.4	4.6	42.3	3.0
	Manganese (ppm)	10	290	510	563	750	4010	396
	Nickel (ppm)	5	10	20	28	30	670	33
	Lead (ppm)	10	10	20	45	30	2350	136
	Sulfur (%)	0.025	0.54	1.2	1.9	2.4	10	2.1
	Thallium(ppm)	25	25	25	25	25	110	5
	Zinc (ppm)	10	20	30	53.28	40	2510	140
Tgd <20 meters , N=76	Aluminum (%)	2.3	3.4	4.1	4.2	5.0	6.4	1.0
	Arsenic (ppm)	25	25	25	25.33	25	50	2.9
	Copper (ppm)	5	5	10	14	20	60	11
	Iron (%)	1.8	2.3	2.5	2.5	2.6	4.9	0.3
	Manganese (ppm)	280	370	415	407	440	580	54
	Nickel (ppm)	30	50	50	53	60	80	11
	Lead (ppm)	10	20	20	24	30	80	14
	Sulfur (%)	0.03	0.03	0.03	0.03	0.03	0.24	0.02
	Thallium(ppm)	25	25	25	25	25	25	0
	Zinc (ppm)	30	40	50	52	60	120	15
IG, All Data, N=74	Aluminum (%)	0.88	5.84	6.02	5.79	6.30	7.31	1.16
	Arsenic (ppm)	25	25	25	35	25	410	63
	Copper (ppm)	10	30	40	55	50	470	75
	Iron (%)	2.8	4.4	5.1	5.3	5.4	24.6	3.3
	Manganese (ppm)	110	700	760	753	810	1220	149
	Nickel (ppm)	10	130	210	199	280	340	85
	Lead (ppm)	10	10	20	38	30	690	110
	Sulfur (%)	0.03	0.06	0.1	0.4	0.2	10	1.6
	Thallium (ppm)	25	25	25	27	25	100	12
	Zinc (ppm)	20	70	80	80	90	150	22

Table A2: Sample Subset and whole element data, by lithotype

	Hole ID	From (m)	To (m)	Silver (ppm)	Aluminum (%)	Arsenic (ppm)	Gold (ppm)	Barium (ppm)	Beryllium (ppm)	Calcium (%)	Cadmium (ppm)	Cobalt (ppm)	Chromium (ppm)	Copper (ppm)	Iron (%)	Potassium (%)	Magnesium (%)	Manganese (ppm)	Sodium (%)	Nickel (ppm)	Phosphorus (ppm)	Lead (ppm)	Sulfur (%)	Antimony (ppm)	Strontium (ppm)	Titanium (%)	Thallium (ppm)	Uranium (ppm)	Vandium (ppm)	Zinc (ppm)
***Tgd* Sample Subset (n=8)**	TP6	--	--	1	3.44	25	0.0025	1390	5	1.75	5	10	80	10	2.36	2.2	1.26	370	2.77	40	660	50	0.025	25	670	0.26	25	25	60	60
	TP14	--	--	0.5	3.95	25	0.0025	1320	5	1.37	5	10	80	5	2.37	2.4	1.25	430	2.73	50	750	20	0.025	25	510	0.26	25	25	60	60
	SC15-188	10	12	0.5	4.14	25	0.0025	1430	5	3.13	5	10	80	10	2.64	2.2	1.34	440	2.59	50	800	10	0.025	25	640	0.27	25	25	70	50
	SC15-183	8	10	0.5	4.91	25	0.0025	1230	5	4.41	5	20	80	10	2.38	2	0.78	400	2.01	50	740	30	0.025	25	510	0.27	25	25	60	50
	SC15-181	6.71	8.7	0.5	4.29	25	0.0025	1160	5	1.27	5	10	100	10	2.6	2.5	1.07	540	2.61	60	800	40	0.025	25	420	0.29	25	25	70	70
	SC15-202	9	11	0.5	4.44	25	0.003	1424	5	1.96	5	20	130	5	2.4	2.7	1.53	400	2.79	70	660	30	0.025	25	620	0.29	25	25	60	60
	SC15-185	4.33	6	0.5	3.1	25	0.0025	1470	5	2.72	5	10	100	40	2.57	2.3	1.34	400	2.61	50	740	10	0.24	25	590	0.26	25	25	70	30
	SC15-187	4	4.96	0.5	4.79	25	0.0025	1560	5	1.68	5	10	90	30	2.7	2.4	1.46	440	3.31	50	770	10	0.025	25	720	0.29	25	25	70	60
	***Tgd* Subset Averages**			0.6	4.13	25	0.0025	1373	5	2.29	5	13	93	15	2.50	2.3	1.3	428	2.68	53	740	25	0.05	25	585	0.27	25	25	65	55
	***Tgd* 0-30 m Dataset Averages**			0.6	4.11	25	0.0025	1366	5	2.71	5	12	88	15	2.51	2.3	1.3	410	2.60	53	737	23	0.04	25	578	0.27	25	25	67	51
	% Difference from 0-30 dataset			-2%	-1%	1%	1%	-1%	0%	16%	0%	-6%	-6%	2%	0%	-3%	3%	-4%	-3%	1%	0%	-10%	-18%	0%	-1%	-2%	0%	0%	3%	-8%
	***Tgd* 0-20 m Dataset Averages**			0.6	4.15	25	0.0025	1372	5	2.60	5	13	88	14	2.47	2.3	1.2	407	2.64	53	733	24	0.03	25	547	0.27	25	25	67	52
	% Difference from 0-20 dataset			2%	0%	1%	0%	0%	0%	12%	0%	1%	-5%	-7%	-1%	-3%	-2%	-5%	-1%	1%	-1%	-6%	-74%	0%	-7%	-2%	0%	0%	3%	-5%

	Hole ID	From (m)	To (m)	Silver (ppm)	Aluminum (%)	Arsenic (ppm)	Gold (ppm)	Barium (ppm)	Beryllium (ppm)	Calcium (%)	Cadmium (ppm)	Cobalt (ppm)	Chromium (ppm)	Copper (ppm)	Iron (%)	Potassium (%)	Magnesium (%)	Manganese (ppm)	Sodium (%)	Nickel (ppm)	Phosphorus (ppm)	Lead (ppm)	Sulfur (%)	Antimony (ppm)	Strontium (ppm)	Titanium (%)	Thallium (ppm)	Uranium (ppm)	Vandium (ppm)	Zinc (ppm)
***Ynl Ex* Sample Subset (n=10)**	SC15_181	15.4	17.4	0.5	5.24	25	0.0025	410	5	6	5	20	30	20	3.85	1.2	5.98	460	0.2	20	850	30	0.9	25	90	0.38	25	25	60	80
	SC15_181	19.4	21.4	0.5	5.55	25	0.0025	200	5	4.34	5	20	30	30	4	1.3	5.84	410	0.27	20	690	20	1.28	25	70	0.32	25	25	60	80
	SC15_184	10.63	12.25	0.5	3.68	25	0.0025	150	5	5	5	5	30	10	1.86	1	3.46	370	0.12	10	110	10	0.025	25	50	0.13	25	25	30	10
	SC15_184	19.89	21.36	0.5	5.01	25	0.0025	220	5	4.76	5	5	40	20	2.61	1.3	5.2	320	0.13	20	340	40	0.29	25	40	0.2	25	25	60	70
	SC15_184	4.57	5.5	0.5	6.11	25	0.0025	480	5	2.41	5	10	40	40	4.53	1.5	4.15	320	0.24	30	1370	70	0.13	25	50	0.43	25	25	80	340
	SC15_197	15.7	17.7	0.5	4.23	25	0.0025	130	5	5.4	5	10	30	10	2.46	1.1	6.89	530	0.08	10	180	40	0.64	25	60	0.13	25	25	40	40
	SC15_191	8.04	10	0.5	4.27	25	0.0025	260	5	7.52	5	10	30	20	2.27	1.3	5.66	460	0.2	20	240	70	0.34	25	90	0.16	25	25	50	180
	SC15_199	19	21	0.5	6.59	25	0.0025	310	5	0.16	5	10	60	90	3.25	2.5	3	80	0.63	30	240	40	0.11	25	40	0.31	25	25	70	80
	SC15_204	3.18	5	0.5	5.59	25	0.0025	250	5	2.44	5	10	20	30	3.63	1.8	4.44	300	0.05	20	710	30	0.025	25	40	0.27	25	25	60	100
	SC15_205	15	16.65	0.5	6.14	25	0.0025	220	5	2.69	5	10	30	50	4.93	1.5	4.25	170	0.025	30	1190	70	2.83	25	40	0.42	25	25	80	200
	***Ynl Ex* Subset Averages**			0.5	5.24	25	0.0025	263	5	4.07	5	11	34	32	3.34	1.5	4.9	342	0.19	21	592	42	0.66	25	57	0.28	25	25	59	118
	***Ynl Ex* Dataset Averages**			0.5	5.25	25	0.0026	275	5	4.35	5	10	38	27	3.30	1.6	4.7	355	0.20	22	509	40	0.58	25	63	0.26	25	25	61	132
	% Difference			6%	0%	1%	5%	4%	0%	6%	0%	-6%	10%	-18%	-1%	8%	-4%	4%	3%	6%	-16%	-5%	-12%	0%	10%	-4%	1%	0%	3%	11%

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
www.alsglobal.com

To: **TINTINA MONTANA INC.**
17 MAIN ST
WHITE SULPHUR SPRINGS MT 59645
USA

Finalized Date: 27- NOV- 2015
Account: TINALEX

CERTIFICATE RE15168566

P.O. No.: NA

This report is for 8 Reject samples submitted to our lab in Reno, NV, USA on 30- OCT- 2015.

The following have access to data associated with this certificate:

JACK COTE KATHARINE SEIPEL	LISA KIRK JERRY ZIEG	VINCE SCARTOZZI

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
FND- 03	Find Reject for Addn Analysis
SPLIT- Z	Pulp split for send out
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
WEI- 25	Wt. of Crushed Reject

ANALYTICAL PROCEDURES

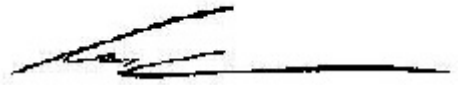
ALS CODE	DESCRIPTION	INSTRUMENT
S- IR08	Total Sulphur (Leco)	LECO
OA- ELE07	Paste pH	
S- CAL06	Sulfide Sulfur (calculated)	LECO
S- GRA06	Sulfate Sulfur- carbonate leach	WST- SEQ
S- GRA06a	Sulfate Sulfur (HCl leachable)	WST- SEQ
OA- VOL11	Static Net Acid Generation	
OA- VOL08m	Modified NP	

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim 'or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519

To: **TINTINA MONTANA INC.**
ATTN: KATHARINE SEIPEL
17 MAIN ST
WHITE SULPHUR SPRINGS MT 59645
USA

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
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To: **TINTINA MONTANA INC.**
17 MAIN ST
WHITE SULPHUR SPRINGS MT 59645
USA

Finalized Date: 27- NOV- 2015
Account: TINALEX

CERTIFICATE OF ANALYSIS RE15168566

Sample Description	Method / Analyte / Units / LOR	WEI- 25 Reject W kg 0.001	OA- VOL11 NAGpH4.5 kg H2SO4/t 0.01	OA- VOL11 NAGpH7.0 kg H2SO4/t 0.01	OA- VOL11 pH Unity 0.1	OA- VOL08m MPA tCaCO3/1Kt 0.3	OA- VOL08m NNP tCaCO3/1Kt 1	OA- VOL08m FIZZ RAT Unity 1	OA- VOL08m NP tCaCO3/1Kt 1	OA- ELE07 pH Unity 0.1	OA- VOL08m Ratio (N Unity 0.01	S- IR08 S % 0.01	S- GRA06 S % 0.01	S- GRA06a S % 0.01	S- CAL06 S % 0.01
219008		0.540	<0.01	<0.01	7.6	0.6	9	1	10	8.6	16.00	0.02	<0.01	0.01	0.02
219009		0.720	<0.01	<0.01	7.8	0.9	5	1	6	8.1	6.40	0.03	<0.01	<0.01	0.03
221054		7.07	<0.01	<0.01	11.1	0.6	23	2	24	8.7	38.40	0.02	<0.01	<0.01	0.02
220517		5.12	<0.01	<0.01	10.0	1.3	18	1	19	8.4	15.20	0.04	<0.01	<0.01	0.04
220556		5.00	<0.01	<0.01	9.8	0.6	85	2	86	8.2	137.60	0.02	<0.01	<0.01	0.02
220595		10.15	<0.01	<0.01	11.2	8.4	55	2	63	8.8	7.47	0.27	<0.01	<0.01	0.27
220634		2.58	<0.01	<0.01	10.3	1.3	14	1	15	8.9	12.00	0.04	<0.01	<0.01	0.04
220678		6.48	<0.01	<0.01	11.3	0.9	59	2	60	8.8	64.00	0.03	<0.01	<0.01	0.03

***** See Appendix Page for comments regarding this certificate *****

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17 MAIN ST
WHITE SULPHUR SPRINGS MT 59645
USA

Finalized Date: 27- NOV- 2015
Account: TINALEX

CERTIFICATE OF ANALYSIS RE15168566

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Reno located at 4977 Energy Way, Reno, NV, USA.

FND- 03	PUL- 31	SPL- 21	SPLIT- Z
WEI- 25			

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

OA- ELE07	OA- VOL08m	OA- VOL11	S- CAL06
S- GRA06	S- GRA06a	S- IR08	

ALS Canada Ltd.

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Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218
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To: **TINTINA MONTANA INC.**
17 MAIN ST
WHITE SULPHUR SPRINGS MT 59645
USA

Finalized Date: 3- FEB- 2016
Account: TINALEX

CERTIFICATE RE16004989

P.O. No.: NA

This report is for 10 Reject samples submitted to our lab in Reno, NV, USA on 12- JAN- 2016.

The following have access to data associated with this certificate:

JACK COTE KATHARINE SEIPEL	LISA KIRK DAMON SHEUMAKER	VINCE SCARTOZZI JERRY ZIEG

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
SPL- 21	Split sample - riffle splitter
PUL- 31	Pulverize split to 85% < 75 um
SPLIT- Z	Pulp split for send out
FND- 03	Find Reject for Addn Analysis
PUL- QC	Pulverizing QC Test
WEI- 25	Wt. of Crushed Reject

ANALYTICAL PROCEDURES

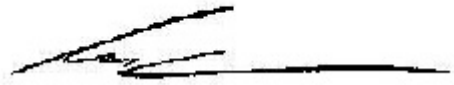
ALS CODE	DESCRIPTION	INSTRUMENT
S- IR08	Total Sulphur (Leco)	LECO
OA- ELE07	Paste pH	
S- CAL06	Sulfide Sulfur (calculated)	LECO
S- GRA06	Sulfate Sulfur- carbonate leach	WST- SEQ
S- GRA06a	Sulfate Sulfur (HCl leachable)	WST- SEQ
OA- VOL11	Static Net Acid Generation	
OA- VOL08m	Modified NP	

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim 'or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519

To: **TINTINA MONTANA INC.**
ATTN: KATHARINE SEIPEL
17 MAIN ST
WHITE SULPHUR SPRINGS MT 59645
USA

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature: 

Colin Ramshaw, Vancouver Laboratory Manager

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To: **TINTINA MONTANA INC.**
17 MAIN ST
WHITE SULPHUR SPRINGS MT 59645
USA

Finalized Date: 3- FEB- 2016
Account: TINALEX

CERTIFICATE OF ANALYSIS RE16004989

Sample Description	Method / Analyte / Units / LOR	WEI- 25 Reject W kg 0.001	OA- VOL11 NAGpH4.5 kg H2SO4/t 0.01	OA- VOL11 NAGpH7.0 kg H2SO4/t 0.01	OA- VOL11 pH Unity 0.1	OA- VOL08m MPA tCaCO3/1Kt 0.3	OA- VOL08m NNP tCaCO3/1Kt 1	OA- VOL08m FIZZ RAT Unity 1	OA- VOL08m NP tCaCO3/1Kt 1	OA- ELE07 pH Unity 0.1	OA- VOL08m Ratio (N Unity 0.01	S- IR08 S % 0.01	S- GRA06 S % 0.01	S- GRA06a S % 0.01	S- CAL06 S % 0.01
220524		6.68	<0.01	<0.01	11.1	26.3	204	4	230	8.5	8.76	0.84	0.02	<0.01	0.82
220526		2.67	<0.01	<0.01	11.1	32.2	128	3	160	8.6	4.97	1.03	0.02	<0.01	1.01
220578		9.00	<0.01	<0.01	11.3	<0.3	186	3	186	8.8	1190.40	<0.01	<0.01	<0.01	<0.01
220585		9.08	<0.01	<0.01	11.1	7.8	207	4	215	8.6	27.52	0.25	0.01	0.01	0.24
220572		3.41	<0.01	<0.01	11.1	3.8	112	3	116	8.3	30.93	0.12	0.02	0.01	0.10
220694		5.51	<0.01	<0.01	11.1	7.5	291	4	298	8.8	39.73	0.24	0.01	0.03	0.23
221088		3.17	<0.01	<0.01	10.9	<0.3	93	3	93	8.4	595.20	<0.01	0.01	0.01	<0.01
220826		5.90	<0.01	<0.01	10.4	19.7	222	4	242	8.8	12.29	0.63	<0.01	<0.01	0.63
220865		6.39	<0.01	<0.01	7.8	2.8	5	1	8	8.7	2.84	0.09	0.01	<0.01	0.08
221113		5.48	<0.01	<0.01	8.5	94.4	13	3	107	8.0	1.13	3.02	0.04	<0.01	2.98

***** See Appendix Page for comments regarding this certificate *****

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www.alsglobal.com

To: **TINTINA MONTANA INC.**
17 MAIN ST
WHITE SULPHUR SPRINGS MT 59645
USA

Finalized Date: 3- FEB- 2016
Account: TINALEX

CERTIFICATE OF ANALYSIS RE16004989

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Reno located at 4977 Energy Way, Reno, NV, USA.

Applies to Method:				
	FND- 03	PUL- 31	PUL- QC	SPL- 21
	SPLIT- Z	WEI- 25		

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:				
	OA- ELE07	OA- VOL08m	OA- VOL11	S- CAL06
	S- GRA06	S- GRA06a	S- IR08	

RJ LeeGroup, Inc.

RJ Lee Group, Inc.
350 Hochberg Road, Monroeville, PA 15146
Tel: 724-325-1776 | Fax: 724-733-1799

Laboratory Report

Revised

Enviromin Inc.
1807 W Dickerson St.
Suite D
Bozeman , MT 59771
Attention: Lisa Kirk
Telephone: 406-581-8261

Report Date	08/05/2016
Sample Receipt Date	03/14/2016
RJ Lee Group Job No.	AOH1040339-0
Authorization/P.O. No.	
Client Job No./Name	3767-01

Analysis: Asbestos in Bulk Samples by Point Count
Method: EPA/600/R-93/116

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date
10360883.HPL	Ynl Ex	Yes	1	ND		100.00	Q, CA, OP, M	JM-03/28/2016
Description:	Gray Dust 400 points counted. Detection limit of 0.25%. No asbestiform minerals detected.							
Weight Loss: 0.0%								
10360884.HPL	Tgd	Yes	1	ND		100.00	Q, CA, OP, M	JM-03/28/2016
Description:	Tan Dust 400 points counted. Detection limit of 0.25%. No asbestiform minerals detected.							
Weight Loss: 0.0%								

RJ LeeGroup, Inc.

Laboratory Report (Cont)

Client Job No./Name: 3767-01

RJ Lee Group Job No: AOH1040339-0

RJLG Sample Number	Client Sample Number	Homogeneous	# of Layers	Asbestos Detected(%)	Non-Asbestos Fibers(%)	Non-Fibrous Materials(%)	Matrix Material	Analyst - Analysis Date

Authorized Signature: Jacquelyn Mershon

Jacquelyn Mershon

ASBESTOS

AM = Amosite
AC = Actinolite
AN = Anthophyllite
CH = Chrysotile
CR = Crocidolite
TR = Tremolite

NON-ASBESTOS

CE = Cellulose
MW = Mineral Wool
FG = Fibrous Glass
SF = Synthetic Fibers
H = Hair
W = Wollastonite
OF = Other Fibers

NON-FIBROUS MATERIALS

AM = Amphibole
B = Binder
CA = Carbonates
CL = Clay
F = Feldspar
G = Gypsum
HY = Hydromagnesite
M = Miscellaneous
MI = Mica
OP = Opaque
OR = Organic
P = Perlite
Q = Quartz
T = Tar
V = Vermiculite

DISCLAIMER NOTES

· "ND" indicates no asbestos was detected; the method detection limit is 0.25%.
· "Trace" or "<" indicates asbestos was identified in the sample, but the concentration is less than the method quantitation limit. PLM coefficients of variance range from approximately 1.8 at the quantitation limit of 0.25% to 0.32 at high fiber concentrations.
· Samples are archived for three months following analysis and are then properly discarded.
· These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which these results are used or interpreted.
· This test report relates to the items tested.
· This report is not valid unless it bears the name of a NVLAP Lab Code 101208-0 approved signatory.
· Any reproduction of this document must be in full in order for the report to be valid.
· This report may not be used to claim product endorsement by NVLAP Lab Code 101208-0, any agency of the U.S. Government or any other laboratory accrediting agency.
· Polarized-light microscopy is not consistently reliable in detecting asbestos in floor coverings and similar nonfriable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as "non-asbestos-containing."
· Sample(s) for this project were analyzed at our: Monroeville, PA (AIHA #100364) facility.
· If RJ Lee Group, Inc. did not collect the samples analyzed, the verifiability of the laboratorys results are limited to the reported values.

Appendix B

Kinetic Data

Table B1 Weekly Parameters from HCTs

Table B2 Periodic Metals from HCTs

McClelland Laboratories Final Report of HCTs
(Including Energy Lab reports)

Table B1. Summary of Weekly Data for 2016 HCT Near-Surface Materials

		Volume	Effluent pH	Redox Potential	Conductivity	Total Fe			Fe^{2+}	Fe^{3+}	SO_4^{2-}			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
	Week	L	s.u.	mV (vs Ag/AgCl)	µS/cm	mg/L	mg/kg	Cum. mg/kg*	mg/L	mg/L	mg/L	mg/kg	Cum. mg/kg*	mg/L	mg/kg	Cum. mg/kg*	mg/L	mg/kg	Cum. mg/kg*
Ynl Ex (35 Weeks)	0	1.611	7.91	304	473	<0.10	<0.080	0.08	<0.10	<0.10	120	96.5	96.5	<1.0	<0.80	0.80	109	87.7	87.7
	1	0.967	7.81	293	395	<0.10	<0.048	0.13	<0.10	<0.10	120	57.9	154	<1.0	<0.48	1.29	72	34.8	122
	2	0.942	8.01	257	302	<0.10	<0.047	0.18	<0.10	<0.10	72	33.9	188	<1.0	<0.47	1.76	72	33.9	156
	3	0.969	7.92	331	240	<0.10	<0.048	0.22	<0.10	<0.10	50	24.2	212	<1.0	<0.48	2.24	70	33.9	190
	4	0.956	7.93	312	215	<0.10	<0.048	0.27	<0.10	<0.10	43	20.5	233	<1.0	<0.48	2.72	67	32.0	222
	5	0.900	8.01	341	194	<0.10	<0.045	0.32	<0.10	<0.10	43	19.3	252	<1.0	<0.45	3.17	53	23.8	246
	6	0.901	7.96	313	236	<0.10	<0.045	0.36	<0.10	<0.10	65	29.2	282	<1.0	<0.45	3.62	47	21.1	267
	7	0.924	7.80	331	437	<0.10	<0.046	0.41	<0.10	<0.10	170	78.4	360	<1.0	<0.46	4.08	53	24.4	291
	8	0.942	7.91	277	674	<0.10	<0.047	0.45	<0.10	<0.10	300	141	501	<1.0	<0.47	4.55	61	28.7	320
	9	0.904	7.81	275	863	<0.10	<0.045	0.50	<0.10	<0.10	430	194	695	<1.0	<0.45	5.00	39	17.6	338
	10	0.864	7.92	366	750	<0.10	<0.043	0.54	<0.10	<0.10	510	220	915	<1.0	<0.43	5.43	40	17.3	355
	11	0.874	7.90	373	707	<0.10	<0.044	0.59	<0.10	<0.10	370	161	1076	<1.0	<0.44	5.87	45	19.6	375
	12	0.848	7.91	350	638	<0.10	<0.042	0.63	<0.10	<0.10	360	152	1229	<1.0	<0.42	6.29	47	19.9	395
	13	0.932	7.93	302	568	<0.10	<0.047	0.68	<0.10	<0.10	290	135	1364	<1.0	<0.47	6.76	51	23.7	418
	14	0.895	7.88	298	505	<0.10	<0.045	0.72	<0.10	<0.10	270	121	1484	<1.0	<0.45	7.20	46	20.6	439
	15	0.903	7.97	267	505	<0.10	<0.045	0.77	<0.10	<0.10	130	58.6	1543	<1.0	<0.45	7.65	55	24.8	464
	16	0.814	7.91	265	539	<0.10	<0.041	0.81	<0.10	<0.10	220	89.4	1632	<1.0	<0.41	8.06	46	18.7	482
	17	0.972	7.96	221	377	<0.10	<0.049	0.85	<0.10	<0.10	180	87.3	1720	<1.0	<0.49	8.54	55	26.7	509
	18	0.990	7.99	233	399	<0.10	<0.049	0.90	<0.10	<0.10	160	79.1	1799	<1.0	<0.49	9.04	53	26.2	535
	19	0.956	8.00	279	425	<0.10	<0.048	0.95	<0.10	<0.10	160	76.4	1875	<1.0	<0.48	9.52	53	25.3	560
	20	0.928	7.97	241	388	<0.10	<0.046	1.00	<0.10	<0.10	160	74.1	1949	<1.0	<0.46	9.98	53	24.6	585
	21	0.993	7.99	283	387	<0.10	<0.050	1.05	<0.10	<0.10	150	74.4	2024	<1.0	<0.49	10.5	46	22.8	608
	22	0.944	8.01	148	369	<0.10	<0.047	1.09	<0.10	<0.10	150	70.7	2094	<1.0	<0.47	10.9	51	24.0	632
	23	0.937	8.03	130	327	<0.10	<0.047	1.14	<0.10	<0.10	114	53.3	2148	<1.0	<0.47	11.4	56	26.2	658
	24	0.968	7.98	132	310	<0.10	<0.048	1.19	<0.10	<0.10	94	45.4	2193	<1.0	<0.48	11.9	52	25.1	683
	25	0.913	7.99	210	309	<0.10	<0.046	1.24	<0.10	<0.10	94	42.8	2236	<1.0	<0.45	12.3	41	18.7	702
	26	0.882	8.01	155	282	<0.10	<0.044	1.28	<0.10	<0.10	65	28.6	2264	<1.0	<0.44	12.8	41	18.1	720
	27	0.950	7.94	196	295	<0.10	<0.047	1.33	<0.10	<0.10	76	36.0	2301	<1.0	<0.47	13.3	43	20.4	740
	28	0.857	8.06	159	284	<0.10	<0.043	1.37	<0.10	<0.10	78	33.4	2334	<1.0	<0.43	13.7	44	18.8	759
	29	1.063	8.07	168	264	<0.10	<0.053	1.42	<0.10	<0.10	62	32.9	2367	<1.0	<0.53	14.2	50	26.5	786
	30	0.945	7.98	233	243	<0.10	<0.047	1.47	<0.10	<0.10	60	28.3	2395	<1.0	<0.47	14.7	42	19.8	805
	31	0.865	8.02	288	242	<0.10	<0.043	1.51	<0.10	<0.10	84	36.3	2431	<1.0	<0.43	15.1	38	16.4	822
	32	0.855	7.99	302	254	<0.10	<0.043	1.56	<0.10	<0.10	56	23.9	2455	<1.0	<0.42	15.5	43	18.4	840
	33	0.929	7.92	373	233	<0.10	<0.046	1.60	<0.10	<0.10	51	23.7	2479	<1.0	<0.46	16.0	38	17.6	858
	34	0.871	8.02	363	228	0.35	0.152	1.75	<0.10	<0.35	53	23.0	2502	<1.0	<0.43	16.4	34	14.8	873
	35	0.859	8.18	273	262	0.58	0.249	2.00	<0.10	<0.58	77	33.0	2535	<1.0	<0.43	16.8	43	18.4	891

Table B1. Summary of Weekly Data for 2016 HCT Near-Surface Materials

		Volume	Effluent pH	Redox Potential	Conductivity	Total Fe			Fe^{2+}	Fe^{3+}	SO_4^{2-}			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
	Week	L	s.u.	mV (vs Ag/AgCl)	µS/cm	mg/L	mg/kg	Cum. mg/kg*	mg/L	mg/L	mg/L	mg/kg	Cum. mg/kg*	mg/L	mg/kg	Cum. mg/kg*	mg/L	mg/kg	Cum. mg/kg*
Tgd (28 Weeks)	0	1.614	7.83	294	136	<0.10	<0.080	0.080	<0.10	<0.10	5.7	4.6	4.6	<1.0	<0.80	0.80	55	44	44
	1	0.929	8.16	267	101	<0.10	<0.046	0.126	<0.10	<0.10	7.0	3.2	7.8	<1.0	<0.46	1.26	49	23	67
	2	0.871	8.26	272	77	<0.10	<0.043	0.170	<0.10	<0.10	4.9	2.1	9.9	<1.0	<0.43	1.70	40	17	84
	3	0.877	8.07	318	80	<0.10	<0.044	0.213	<0.10	<0.10	5.3	2.3	12.2	<1.0	<0.44	2.13	41	18	102
	4	0.837	7.95	314	77	<0.10	<0.042	0.255	<0.10	<0.10	5.0	2.1	14.3	<1.0	<0.42	2.55	41	17	119
	5	0.817	8.06	343	83	<0.10	<0.041	0.295	<0.10	<0.10	5.7	2.3	16.6	5	2.03	4.58	41	17	136
	6	0.828	8.14	303	78	<0.10	<0.041	0.336	<0.10	<0.10	5.4	2.2	18.8	<1.0	<0.41	4.99	38	16	151
	7	0.924	7.82	332	82	<0.10	<0.046	0.382	<0.10	<0.10	5.4	2.5	21.3	<1.0	<0.46	5.45	41	19	170
	8	0.963	7.98	302	84	<0.10	<0.048	0.430	<0.10	<0.10	5.6	2.7	24.0	<1.0	<0.48	5.92	41	20	190
	9	0.820	8.03	311	83	<0.10	<0.041	0.471	<0.10	<0.10	6.2	2.5	26.5	<1.0	<0.41	6.33	40	16	206
	10	0.826	8.07	338	78	<0.10	<0.041	0.512	<0.10	<0.10	5.8	2.4	28.9	<1.0	<0.41	6.74	38	16	221
	11	0.907	8.02	357	78	<0.10	<0.045	0.557	<0.10	<0.10	4.4	2.0	30.9	<1.0	<0.45	7.19	40	18	239
	12	0.858	8.06	316	66	<0.10	<0.043	0.599	<0.10	<0.10	3.9	1.7	32.5	<1.0	<0.43	7.62	36	15	255
	13	0.927	8.10	274	70	<0.10	<0.046	0.645	<0.10	<0.10	4.1	1.9	34.4	<1.0	<0.46	8.08	37	17	272
	14	0.826	7.98	278	70	<0.10	<0.041	0.686	<0.10	<0.10	3.7	1.5	35.9	<1.0	<0.41	8.49	34	14	286
	15	0.963	8.01	257	73	<0.10	<0.048	0.734	<0.10	<0.10	3.5	1.7	37.6	<1.0	<0.48	8.97	38	18	304
	16	0.963	7.95	271	77	<0.10	<0.048	0.782	<0.10	<0.10	2.9	1.4	39.0	<1.0	<0.48	9.44	33	16	320
	17	0.513	7.99	227	74	<0.10	<0.025	0.808	<0.10	<0.10	2.1	0.5	39.5	<1.0	<0.25	9.70	37	9	329
	18	0.956	8.01	229	86	<0.10	<0.047	0.855	<0.10	<0.10	3.4	1.6	41.2	<1.0	<0.47	10.17	46	22	351
	19	0.952	8.07	258	95	<0.10	<0.047	0.902	<0.10	<0.10	3.7	1.7	42.9	<1.0	<0.47	10.65	48	23	374
	20	0.957	8.02	225	93	<0.10	<0.048	0.950	<0.10	<0.10	3.6	1.7	44.6	<1.0	<0.48	11.12	46	22	396
	21	0.983	8.04	269	95	<0.10	<0.049	0.999	<0.10	<0.10	3.6	1.8	46.4	<1.0	<0.49	11.61	44	21	417
	22	0.934	8.09	158	82	<0.10	<0.046	1.045	<0.10	<0.10	3.3	1.5	47.9	<1.0	<0.46	12.07	39	18	435
	23	0.919	8.08	178	92	<0.10	<0.046	1.091	<0.10	<0.10	6.0	2.7	50.6	<1.0	<0.46	12.53	44	20	455
	24	0.920	8.02	213	86	<0.10	<0.046	1.136	<0.10	<0.10	6.0	2.7	53.4	<1.0	<0.46	12.99	41	19	474
	25	0.869	8.03	254	76	<0.10	<0.043	1.180	<0.10	<0.10	7.0	3.0	56.4	<1.0	<0.43	13.42	37	16	490
	26	0.853	8.06	199	78	<0.10	<0.042	1.222	<0.10	<0.10	7.0	3.0	59.4	<1.0	<0.42	13.84	39	17	506
	27	0.936	8.01	273	87	<0.10	<0.046	1.268	<0.10	<0.10	4.0	1.9	61.2	<1.0	<0.46	14.31	42	20	526
	28	0.954	8.03	269	87	<0.10	<0.047	1.316	<0.10	<0.10	6.0	2.8	64.1	<1.0	<0.47	14.78	43	20	546

*If mg/L values were reported below respective method detection limits, the limits were used to calculate mg/kg and cumulative values. Therefore, cumulative values always increase with time.

Table B2. Summary of Energy Labs data for 2016 HCT Near-Surface Materials. Metals are measured in weeks 0,1,2,4, and every fourth week thereafter. All values displayed are mg/L.

		MT DEQ Water Quality Standards	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chloride	Chromium	Copper	Fluoride	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Phosphorus	Potassium	Selenium	Silicon	Silver	Sodium	Strontium	Sulfate	Thallium	Uranium	Zinc
		GW	None	0.006	0.01	1	0.004	0.005	None	None	0.1	1.3	4	None	0.015	None	None	0.002	0.1	None	None	0.05	None	0.1	None	4	None	0.002	0.03	2
		SW[1]	0.087	0.0056	0.01	1	0.004	0.00033	None	None	0.107	0.0117	4	1	0.0044	None	None	0.00005	0.065	None	None	0.005	None	0.00637	None	4	None	0.00024	0.03	0.15
		RRL	0.009	0.0005	0.001	0.003	0.0008	0.00003	None	None	0.01	0.002	0.2	0.02	0.0003	None	None	0.000005	0.002	0.001[2]	None	0.001	None	0.0002	None	0.02	1	0.0002	0.0002	0.008
***2016 Tgd* (28 Weeks)**	0		0.034	<0.0005	<0.001	0.078	<0.0008	<0.00003	14	3	<0.01	<0.002	0.3	<0.02	<0.0003	3	<0.005	0.0000225	<0.002	0.014	3	<0.001	1.67	<0.0002	7	0.05	5	<0.0002	0.0007	<0.008
	1		0.044	<0.0005	0.002	0.059	<0.0008	<0.00003	9	<1	<0.01	<0.002	0.3	<0.02	<0.0003	2	<0.005	0.0000052	<0.002	0.008	3	<0.001	2.36	<0.0002	6	0.04	7	<0.0002	0.0015	<0.008
	2		0.063	<0.0005	0.005	0.046	<0.0008	<0.00003	7	<1	<0.01	<0.002	0.3	0.02	0.0009	1	<0.005	<0.000005	<0.002	<0.005	2	<0.001	1.95	<0.0002	4	0.03	5	<0.0002	0.001	<0.008
	4		0.053	<0.0005	0.002	0.054	<0.0008	<0.00003	8	<1	<0.01	<0.002	0.3	<0.02	<0.0003	2	<0.005	<0.000005	<0.002	0.009	3	<0.001	2.8	<0.0002	4	0.03	5	<0.0002	0.0018	<0.008
	8		0.057	<0.0005	0.001	0.065	<0.0008	<0.00003	10	<1	<0.01	<0.002	0.2	<0.02	0.0011	2	<0.005	<0.000005	<0.002	0.009	3	<0.001	2.97	<0.0002	3	0.04	6	<0.0002	0.0013	<0.008
	12		0.058	<0.0005	0.002	0.058	<0.0008	<0.00003	9	<1	<0.01	<0.002	<0.2	<0.02	0.0029	2	<0.005	<0.000005	<0.002	0.01	2	<0.001	2.38	<0.0002	2	0.03	4	<0.0002	0.0009	<0.008
	16		0.037	<0.0005	0.002	0.067	<0.0008	<0.00003	10	<1	<0.01	<0.002	<0.2	<0.02	0.003	2	<0.005	0.000008	<0.002	0.008	2	<0.001	2.75	0.0025	1	0.04	3	<0.0002	0.0013	<0.008
	20		0.042	<0.0005	0.002	0.087	<0.0008	<0.00003	12	<1	<0.01	<0.002	<0.2	<0.02	0.0022	2	<0.005	<0.000005	<0.002	0.011	3	<0.001	3.61	<0.0002	1	0.05	4	<0.0002	0.0027	<0.008
	24		0.041	<0.0005	0.003	0.162	<0.0008	<0.00003	12	<1	<0.01	<0.002	<0.2	<0.02	0.0036	2	<0.005	0.0000052	<0.002	0.010	3	<0.001	3.38	<0.0002	3	0.05	4	<0.0002	0.0013	<0.008
	28		0.048	<0.0005	0.001	0.146	<0.0008	<0.00003	12	<1	<0.01	<0.002	<0.2	<0.02	0.0025	2	<0.005	<0.000005	<0.002	0.016	3	<0.001	3.70	<0.0002	2	0.05	3	<0.0002	0.0013	<0.008
2016 Ynl Ex (35 Weeks)	0		0.018	0.0032	0.002	0.067	<0.0008	<0.00003	44	3	<0.01	<0.002	1.9	<0.02	<0.0003	21	<0.005	<0.000005	<0.002	0.011	18	0.011	2.81	<0.0002	9	0.19	131	<0.0002	0.0011	<0.008
	1		0.028	0.0022	0.004	0.044	<0.0008	<0.00003	35	<1	<0.01	<0.002	1.9	<0.02	0.0007	20	0.008	<0.000005	<0.002	0.006	13	0.009	3.88	<0.0002	3	0.14	121	<0.0002	0.0014	<0.008
	2		0.037	0.0023	0.007	0.044	<0.0008	<0.00003	24	<1	<0.01	<0.002	1.9	<0.02	0.0006	15	0.007	<0.000005	<0.002	<0.005	10	0.005	3.32	<0.0002	2	0.11	74	<0.0002	0.001	<0.008
	4		0.051	0.002	0.003	0.046	<0.0008	<0.00003	21	<1	<0.01	<0.002	1.5	<0.02	<0.0003	12	<0.005	<0.000005	<0.002	<0.005	9	0.006	3.98	<0.0002	1	0.09	46	<0.0002	0.0007	<0.008
	8		0.03	0.0013	0.003	0.062	<0.0008	<0.00003	82	<1	<0.01	0.007	0.7	<0.02	0.0018	40	<0.005	<0.000005	<0.002	<0.005	9	0.003	4.14	<0.0002	<1	0.27	323	<0.0002	0.0024	<0.008
	12		0.019	0.0007	0.002	0.018	<0.0008	<0.00003	94	<1	<0.01	<0.002	0.6	<0.02	0.0016	48	<0.005	<0.000005	<0.002	0.01	7	0.002	3.26	<0.0002	<1	0.2	370	<0.0002	0.0011	<0.008
	16		0.022	0.001	0.002	0.021	<0.0008	<0.00003	64	<1	<0.01	<0.002	0.5	<0.02	0.004	32	<0.005	<0.000005	<0.002	<0.005	5	0.001	3.28	0.0036	<1	0.15	242	<0.0002	0.0019	<0.008
	20		0.022	0.0008	0.002	0.026	<0.0008	<0.00003	44	<1	<0.01	<0.002	0.4	0.04	0.0029	22	<0.005	<0.000005	<0.002	0.006	3	0.001	2.97	<0.0002	<1	0.11	157	<0.0002	0.0014	<0.008
	24		0.018	0.0008	0.002	0.060	<0.0008	<0.00003	37	<1	<0.01	<0.002	0.4	<0.02	0.0021	18	<0.005	<0.000005	<0.002	<0.005	2	0.001	2.93	<0.0002	2	0.09	122	<0.0002	0.0011	<0.008
	28		0.016	0.0007	0.001	0.051	<0.0008	<0.00003	33	<1	<0.01	<0.002	0.2	<0.02	0.0024	16	<0.005	<0.000005	<0.002	<0.005	2	<0.001	2.55	<0.0002	2	0.07	101	<0.0002	0.0006	<0.008
	32		0.027	0.0005	0.002	0.021	<0.0008	<0.00003	29	<1	<0.01	<0.002	0.2	<0.02	<0.0003	14	<0.005	<0.000005	<0.002	<0.005	2	<0.001	2.39	<0.0002	<1	0.07	88	<0.0002	0.0003	<0.008

GW= Ground water, SW= Surface water, MDL=Required Reporting Limit,
Pink highlighted cells indicate surface water quality exceedances and blue highlighted cells indicate ground water quality exceedances.

[1] Surface water standards are the lowest available, which in most cases in the “chronic aquatic life” criteria. Hardness-dependent criteria have been adjusted for a site hardness of 130 mg/L.
[2] MDL (Method Detection Limit) for phosphorus is the lowest available by lab and differs from the Required Reporting Limit (RRL): MDL=0.005 mg/L, RRL=0.001 mg/L

McClelland Laboratories, Inc.

1016 Greg Street, Sparks, Nevada 89431
(775) 356-1300 * FAX (775) 356-8917
E-Mail: MLI@METTEST.COM

March 6, 2017

Ms. Lisa Kirk
Enviromin, Inc.
P.O. Box 1685
Bozeman, MT 59717

Dear Lisa:

Enclosed is our report concerning results obtained from humidity cell (HC) kinetic acid rock drainage (ARD) potential tests conducted on the Ynl Ex and Tgd samples from the Black Butte Copper project.

Thank you for allowing us to serve you on the Black Butte project.

Sincerely,

Michael Medina
Environmental Project Manager

MM/mh
Enclosure

McClelland Laboratories, Inc.

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Report
on
Humidity Cell (HC) Kinetic Acid Rock Drainage (ARD) Potential Tests -
Ynl Ex and Tgd Samples
MLI Job No. 3767-01
March 6, 2017

for

Ms. Lisa Kirk
Enviromin, Inc.
P.O. Box 1685
Bozeman, MT 59717

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March 6, 2017

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Ms. Lisa Kirk
Enviromin, Inc.
P.O. Box 1685
Bozeman, MT 59717

SUMMARY

A total of 24 individual samples (to create two composites) were received for kinetic humidity cell testing. Kinetic humidity cell (D5744-13, Option A) tests were run on all samples and extracts were submitted to Energy Labs for detailed dissolved metals analysis. Modified ABA analysis was performed all humidity cell feed samples and on ended humidity cell tested residues. Size fraction screen analysis and ICP metals analysis were performed on the humidity cell test residues.

Sample designations
Ynl Ex
Tgd

SAMPLE PREPARATION AND FEED ANALYSIS

Composite Samples
A total of 24 individual samples were received to create two composites for testing. All samples were received at a -1/4" feed size. Appropriate samples were combined in entirety to create the samples for testing according to instructions provided by Enviromin, Inc. Sample make-up tables are included in Section 1 of the Appendix to this report. Samples for testing were individually blended and split (rotary splitter) to obtain 2.0 kg for humidity cell testing, 0.15 kg for mineralogy and 0.30 kg for further crushing. Further crushing splits were pulverized to -150M and were blended and split (roll cloth) to obtain 0.20 kg for Mod ABA analysis. Splits for Mod ABA analysis were submitted to SVL Analytical. Mineralogy splits were shipped to the RJ Lee Group.

Mod ABA static ARD potential tests were conducted on each sample to assess potential of the solids to generate or neutralize acid in a natural weathering and oxidizing environment.

Mod ABA results show that the Ynl Ex and Tgd samples displayed a greater potential to neutralize than to generate acid in a natural environment. Results are summarized as follows:

- Paste pHs were 8.2 and 8.4 for the Ynl Ex and Tgd samples, respectively.
- Pyritic sulfide were 0.03 and <0.01 wt. pct., and resulted in AGP values of 18.1 and 1.6 tons $CaCO_3$ equivalents per 1,000 tons of solids, respectively.
- ANP values were 199 and 72.2 $CaCO_3$/1,000 tons, respectively.
- NNP values were 180.9 and 70.6 $CaCO_3$/1,000 tons, respectively.
- Ratios (ANP ÷ AGP) were 10.99 and 45.13, respectively.

Mod ABA analysis results are provided in Table 1. The SVL report is provided in Section 2 of the Appendix to this report.

Table 1. - Modified Acid/Base Accounting (Mod ABA) Static ARD Potential Test Results, Black Butte Humidity Feed Samples

	Paste	Sulfur, weight percent (as S)									Sulfur, wt. pct. (as S) - HCl Wash		
Sample I.D.	pH	Total	SO_4	Pyritic $S^{=}$	Non-Ext S	Non Sulfate S	AGP[1)]	ANP	NNP	Ratio	SO_4	Pyritic $S^{=}$	Non Sulfate S
Ynl Ex	8.2	0.62	0.03	0.58	0.01	0.59	18.1	199	180.9	10.99	0.10	0.51	0.52
Tgd	8.4	0.05	<0.01	0.05	<0.01	0.05	1.6	72.2	70.6	45.13	0.01	0.04	0.04

1) AGP based on Pyritic S= content (%S= x 31.25). AGP, ANP and NNP in units of tons $CaCO_3$ equivalents per 1,000 tons of solids.
SVL Report # W6E0101

HC KINETIC ARD POTENTIAL TEST PROCEDURE AND RESULTS

Modified HC kinetic ARD potential tests were conducted on 2.0033 kg and 2.0137 kg splits of the Ynl Ex and Tgd (respectively) at the as received feed size (-1/4") to assess potential of the solids to generate or neutralize acid in an aggressive and accelerated weathering and oxidizing environment. The ASTM standard procedure (D5744-13, Option A) was employed the duration of the kinetic testing. The testing duration (with week 0) was 36 weeks for the Ynl Ex sample and 29 weeks for the Tgd sample.

Humidity Cell Procedure

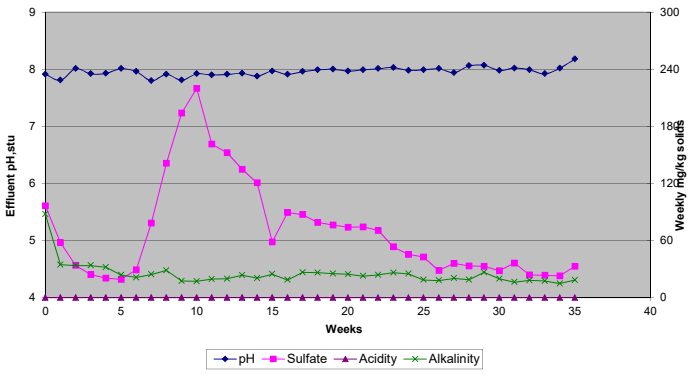
The HC tests were conducted for 29+ weeks in seven day cycles. After initial saturation (week 0), dry, filtered compressed air was passed upwards through the solids charge the first three days of the cycle. Humidified air, generated by sparging filtered compressed air into deionized water (DI H_2O, pH 5.5) contained in a temperature controlled (30° C) vessel, was passed upwards through the charge the next three days of the cycle. On the seventh day, the charge was saturated (flooded) with DI H_2O and allowed to soak for one hour. For both samples, 2.00 L was applied for week 0 and 1.00 L was applied for all subsequent weeks After soaking, effluent was allowed to percolate through and drain freely from the solids charge. Effluent was collected in a sealed container and volume was measured by weighing.
Unfiltered, unpreserved effluent samples were analyzed immediately for redox potential (Ag/AgCl reference), pH, EC, $SO_4^{=}$, acidity and alkalinity. Separate effluent samples (50 mL)

were filtered through a 0.45µm filter to produce extract. Those extracts were analyzed immediately for Fe_t, Fe^{2+} and Fe^{3+} (by difference). Remaining weekly effluents were filtered (0.45µm), appropriately preserved and shipped to Energy Labs for the Montana suite of constituent analyses. Single-use, disposable filters were used for all extracts. Weeks 0, 1, 2, 4, 8, 12, 16, 20 and every 4th week thereafter extracts (not composites) were submitted for detailed metals analysis.

Weekly humidity cell test data are provided in Tables 2 and 3. The figures following each table depict graphically, on a weekly (a figure) and cumulative (b figure) mass basis, analytical data for pH, SO_4, acidity and alkalinity. Constituent analysis results for selected weekly extracts are provided in Tables 4 and 5. Energy Labs report sheets for metals analyses on extracts are provided in the Section 3 of the Appendix to this report.

Table 2 . - Humidity Cell Analytical Results, Black Butte Ynl Ex, (2.0033 kg)

					Total Fe					SO_4=			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	1.611	7.91	304	473	<0.10	0.000	0.000	<0.10	<0.10	120	96.50	96.50	<1	0.00	0.00	109	87.65	87.65
1	0.967	7.81	293	395	<0.10	0.000	0.000	<0.10	<0.10	120	57.92	154.42	<1	0.00	0.00	72	34.75	122.40
2	0.942	8.01	257	302	<0.10	0.000	0.000	<0.10	<0.10	72	33.86	188.28	<1	0.00	0.00	72	33.86	156.26
3	0.969	7.92	331	240	<0.10	0.000	0.000	<0.10	<0.10	50	24.19	212.47	<1	0.00	0.00	70	33.86	190.12
4	0.956	7.93	312	215	<0.10	0.000	0.000	<0.10	<0.10	43	20.52	232.99	<1	0.00	0.00	67	31.97	222.09
5	0.900	8.01	341	194	<0.10	0.000	0.000	<0.10	<0.10	43	19.32	252.31	<1	0.00	0.00	53	23.81	245.90
6	0.901	7.96	313	236	<0.10	0.000	0.000	<0.10	<0.10	65	29.23	281.54	<1	0.00	0.00	47	21.14	267.04
7	0.924	7.80	331	437	<0.10	0.000	0.000	<0.10	<0.10	170	78.41	359.95	<1	0.00	0.00	53	24.45	291.49
8	0.942	7.91	277	674	<0.10	0.000	0.000	<0.10	<0.10	300	141.07	501.02	<1	0.00	0.00	61	28.68	320.17
9	0.904	7.81	275	863	<0.10	0.000	0.000	<0.10	<0.10	430	194.04	695.06	<1	0.00	0.00	39	17.60	337.77
10	0.864	7.92	366	750	<0.10	0.000	0.000	<0.10	<0.10	510	219.96	915.02	<1	0.00	0.00	40	17.25	355.02
11	0.874	7.90	373	707	<0.10	0.000	0.000	<0.10	<0.10	370	161.42	1076.44	<1	0.00	0.00	45	19.63	374.65
12	0.848	7.91	350	638	<0.10	0.000	0.000	<0.10	<0.10	360	152.39	1228.83	<1	0.00	0.00	47	19.90	394.55
13	0.932	7.93	302	568	<0.10	0.000	0.000	<0.10	<0.10	290	134.92	1363.75	<1	0.00	0.00	51	23.73	418.28
14	0.895	7.88	298	505	<0.10	0.000	0.000	<0.10	<0.10	270	120.63	1484.38	<1	0.00	0.00	46	20.55	438.83
15	0.903	7.97	267	505	<0.10	0.000	0.000	<0.10	<0.10	130	58.60	1542.98	<1	0.00	0.00	55	24.79	463.62
16	0.814	7.91	265	539	<0.10	0.000	0.000	<0.10	<0.10	220	89.39	1632.37	<1	0.00	0.00	46	18.69	482.31
17	0.972	7.96	221	377	<0.10	0.000	0.000	<0.10	<0.10	180	87.34	1719.71	<1	0.00	0.00	55	26.69	509.00
18	0.990	7.99	233	399	<0.10	0.000	0.000	<0.10	<0.10	160	79.07	1798.78	<1	0.00	0.00	53	26.19	535.19
19	0.956	8.00	279	425	<0.10	0.000	0.000	<0.10	<0.10	160	76.35	1875.13	<1	0.00	0.00	53	25.29	560.48
20	0.928	7.97	241	388	<0.10	0.000	0.000	<0.10	<0.10	160	74.12	1949.25	<1	0.00	0.00	53	24.55	585.03
21	0.993	7.99	283	387	<0.10	0.000	0.000	<0.10	<0.10	150	74.35	2023.60	<1	0.00	0.00	46	22.80	607.83
22	0.944	8.01	148	369	<0.10	0.000	0.000	<0.10	<0.10	150	70.68	2094.28	<1	0.00	0.00	51	24.03	631.86
23	0.937	8.03	130	327	<0.10	0.000	0.000	<0.10	<0.10	114	53.32	2147.60	<1	0.00	0.00	56	26.19	658.05
24	0.968	7.98	132	310	<0.10	0.000	0.000	<0.10	<0.10	94	45.42	2193.02	<1	0.00	0.00	52	25.13	683.18
25	0.913	7.99	210	309	<0.10	0.000	0.000	<0.10	<0.10	94	42.84	2235.86	<1	0.00	0.00	41	18.69	701.87
26	0.882	8.01	155	282	<0.10	0.000	0.000	<0.10	<0.10	65	28.62	2264.48	<1	0.00	0.00	41	18.05	719.92
27	0.950	7.94	196	295	<0.10	0.000	0.000	<0.10	<0.10	76	36.04	2300.52	<1	0.00	0.00	43	20.39	740.31
28	0.857	8.06	159	284	<0.10	0.000	0.000	<0.10	<0.10	78	33.37	2333.89	<1	0.00	0.00	44	18.82	759.13
29	1.063	8.07	168	264	<0.10	0.000	0.000	<0.10	<0.10	62	32.90	2366.79	<1	0.00	0.00	50	26.53	785.66
30	0.945	7.98	233	243	<0.10	0.000	0.000	<0.10	<0.10	60	28.30	2395.09	<1	0.00	0.00	42	19.81	805.47
31	0.865	8.02	288	242	<0.10	0.000	0.000	<0.10	<0.10	84	36.27	2431.36	<1	0.00	0.00	38	16.41	821.88
32	0.855	7.99	302	254	<0.10	0.000	0.000	<0.10	<0.10	56	23.90	2455.26	<1	0.00	0.00	43	18.35	840.23
33	0.929	7.92	373	233	<0.10	0.000	0.000	<0.10	<0.10	51	23.65	2478.91	<1	0.00	0.00	38	17.62	857.85
34	0.871	8.02	363	228	<0.10	0.000	0.000	<0.10	<0.10	53	23.04	2501.95	<1	0.00	0.00	34	14.78	872.63
35	0.859	8.18	273	262	<0.10	0.000	0.000	<0.10	<0.10	77	33.02	2534.97	<1	0.00	0.00	43	18.44	891.07



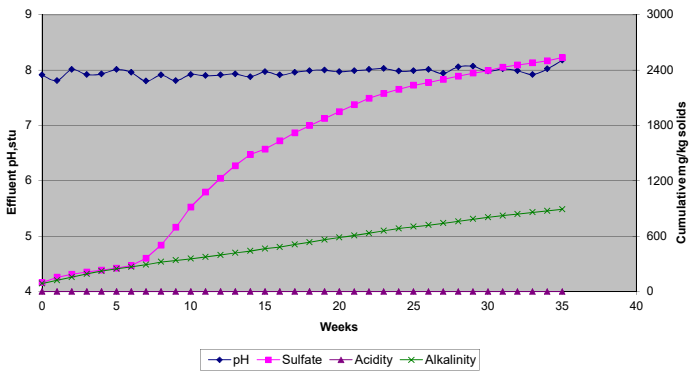
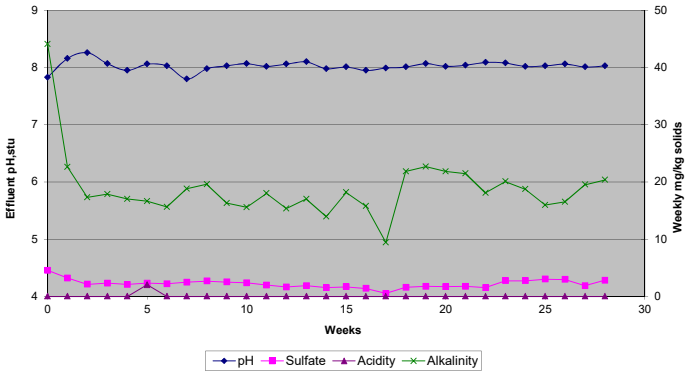


Table 3 . - Humidity Cell Analytical Results, Black Butte Tgd, (2.0137 kg)

					Total Fe					SO_4=			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	1.614	7.83	294	136	<0.10	0.000	0.000	<0.10	<0.10	5.7	4.57	4.57	<1	0.00	0.00	55	44.08	44.08
1	0.929	8.16	267	101	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.23	7.80	<1	0.00	0.00	49	22.61	66.69
2	0.871	8.26	272	76.5	<0.10	0.000	0.000	<0.10	<0.10	4.9	2.12	9.92	<1	0.00	0.00	40	17.30	83.99
3	0.877	8.07	318	79.5	<0.10	0.000	0.000	<0.10	<0.10	5.3	2.31	12.23	<1	0.00	0.00	41	17.86	101.85
4	0.837	7.95	314	76.6	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.08	14.31	<1	0.00	0.00	41	17.04	118.89
5	0.817	8.06	343	82.6	<0.10	0.000	0.000	<0.10	<0.10	5.7	2.31	16.62	5	2.03	2.03	41	16.63	135.52
6	0.828	8.03	303	78.2	<0.10	0.000	0.000	<0.10	<0.10	5.4	2.22	18.84	<1	0.00	2.03	38	15.62	151.14
7	0.924	7.80	332	82.0	<0.10	0.000	0.000	<0.10	<0.10	5.4	2.48	21.32	<1	0.00	2.03	41	18.81	169.95
8	0.963	7.98	302	83.5	<0.10	0.000	0.000	<0.10	<0.10	5.6	2.68	24.00	<1	0.00	2.03	41	19.61	189.56
9	0.820	8.03	311	83.2	<0.10	0.000	0.000	<0.10	<0.10	6.2	2.52	26.52	<1	0.00	2.03	40	16.29	205.85
10	0.826	8.07	338	78.0	<0.10	0.000	0.000	<0.10	<0.10	5.8	2.38	28.90	<1	0.00	2.03	38	15.59	221.44
11	0.907	8.02	357	77.8	<0.10	0.000	0.000	<0.10	<0.10	4.4	1.98	30.88	<1	0.00	2.03	40	18.02	239.46
12	0.858	8.06	316	65.9	<0.10	0.000	0.000	<0.10	<0.10	3.9	1.66	32.54	<1	0.00	2.03	36	15.34	254.80
13	0.927	8.10	274	69.9	<0.10	0.000	0.000	<0.10	<0.10	4.1	1.89	34.43	<1	0.00	2.03	37	17.03	271.83
14	0.826	7.98	278	70.2	<0.10	0.000	0.000	<0.10	<0.10	3.7	1.52	35.95	<1	0.00	2.03	34	13.95	285.78
15	0.963	8.01	257	73.3	<0.10	0.000	0.000	<0.10	<0.10	3.5	1.67	37.62	<1	0.00	2.03	38	18.17	303.95
16	0.963	7.95	271	76.6	<0.10	0.000	0.000	<0.10	<0.10	2.9	1.39	39.01	<1	0.00	2.03	33	15.78	319.73
17	0.513	7.99	227	74.2	<0.10	0.000	0.000	<0.10	<0.10	2.1	0.53	39.54	<1	0.00	2.03	37	9.43	329.16
18	0.956	8.01	229	86.2	<0.10	0.000	0.000	<0.10	<0.10	3.4	1.61	41.15	<1	0.00	2.03	46	21.84	351.00
19	0.952	8.07	258	95.2	<0.10	0.000	0.000	<0.10	<0.10	3.7	1.75	42.90	<1	0.00	2.03	48	22.69	373.69
20	0.957	8.02	225	92.6	<0.10	0.000	0.000	<0.10	<0.10	3.6	1.71	44.61	<1	0.00	2.03	46	21.86	395.55
21	0.983	8.04	269	94.6	<0.10	0.000	0.000	<0.10	<0.10	3.6	1.76	46.37	<1	0.00	2.03	44	21.48	417.03
22	0.934	8.09	158	82.3	<0.10	0.000	0.000	<0.10	<0.10	3.3	1.53	47.90	<1	0.00	2.03	39	18.09	435.12
23	0.919	8.08	178	92.0	<0.10	0.000	0.000	<0.10	<0.10	5.9	2.74	50.64	<1	0.00	2.03	44	20.08	455.20
24	0.920	8.02	213	86.0	<0.10	0.000	0.000	<0.10	<0.10	5.8	2.74	53.38	<1	0.00	2.03	41	18.73	473.93
25	0.869	8.03	254	76.4	<0.10	0.000	0.000	<0.10	<0.10	7.3	3.02	56.40	<1	0.00	2.03	37	15.97	489.90
26	0.853	8.06	199	78.1	<0.10	0.000	0.000	<0.10	<0.10	6.5	2.97	59.37	<1	0.00	2.03	39	16.52	506.42
27	0.936	8.01	273	86.7	<0.10	0.000	0.000	<0.10	<0.10	4.4	1.86	61.23	<1	0.00	2.03	42	19.52	525.94
28	0.954	8.03	269	87.2	<0.10	0.000	0.000	<0.10	<0.10	5.9	2.84	64.07	<1	0.00	2.03	43	20.37	546.31

Testing terminated



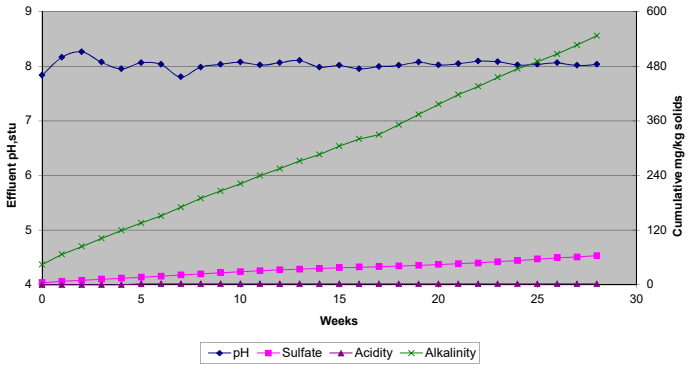


Table 4. - Metals Analysis Results, HC Test Extracts, Black Butte Ynl Ex

	Extract Week										
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20	Week 24	Week 28	Week 32
Aluminum	0.018	0.028	0.037	0.051	0.030	0.019	0.022	0.022	0.018	0.016	0.027
Antimony	0.0032	0.0022	0.0023	0.0020	0.0013	0.0007	0.0010	0.0008	0.0008	0.0007	0.0005
Arsenic	0.002	0.004	0.007	0.003	0.003	0.002	0.002	0.002	0.002	0.001	0.002
Barium	0.067	0.044	0.044	0.046	0.062	0.018	0.021	0.026	0.060	0.051	0.021
Beryllium	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Cadmium	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Calcium	44	35	24	21	82	94	64	44	37	33	29
Chloride	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	<0.002	<0.002	<0.002	<0.002	0.007	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fluoride	1.9	1.9	1.9	1.5	0.7	0.6	0.5	0.4	0.4	0.2	0.2
Iron	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02
Lead	<0.0003	0.0007	0.0006	<0.0003	0.0018	0.0016	0.0040	0.0029	0.0021	0.0024	<0.0003
Magnesium	21	20	15	12	40	48	32	22	18	16	14
Manganese	<0.005	0.008	0.007	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mercury	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005
Nickel	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Phosphorus	0.011	0.006	<0.005	<0.005	<0.005	0.010	<0.005	0.006	<0.005	<0.005	<0.005
Potassium	18	13	10	9	9	7	5	3	2	2	2
Selenium	0.011	0.009	0.005	0.006	0.003	0.002	0.001	0.001	0.001	<0.001	<0.001
Silicon	2.81	3.88	3.32	3.98	4.14	3.26	3.28	2.97	2.93	2.55	2.39
Silver	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0036	<0.0002	<0.0002	<0.0002	<0.0002
Sodium	9	3	2	1	<1	<1	<1	<1	2	2	<1
Strontium	0.19	0.14	0.11	0.09	0.27	0.20	0.15	0.11	0.09	0.07	0.07
Sulfate	131	121	74	46	323	370	242	157	122	101	88
Thallium	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Uranium	0.0011	0.0014	0.0010	0.0007	0.0024	0.0011	0.0019	0.0014	0.0011	0.0006	0.0003
Zinc	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Energy Labs Report #	B16030824	B16031393	B16031896	B16040430	B16050318	B16060099	B16062411	B16072123	B16082331	B16091777	B16101478

Table 5. - Metals Analysis Results, HC Test Extracts, Black Butte Tgd

	Extract Week									
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20	Week 24	Week 28*
Aluminum	0.034	0.044	0.063	0.053	0.057	0.058	0.037	0.042	0.041	0.048
Antimony	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic	<0.001	0.002	0.005	0.002	0.001	0.002	0.002	0.002	0.003	0.001
Barium	0.078	0.059	0.046	0.054	0.065	0.058	0.067	0.087	0.162	0.146
Beryllium	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Cadmium	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003	<0.00003
Calcium	14	9	7	8	10	9	10	12	12	12
Chloride	3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Fluoride	0.3	0.3	0.3	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Iron	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Lead	<0.0003	<0.0003	0.0009	<0.0003	0.0011	0.0029	0.0030	0.0022	0.0036	0.0025
Magnesium	3	2	1	2	2	2	2	2	2	2
Manganese	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Mercury	0.0000225	0.0000052	<0.000005	<0.000005	<0.000005	<0.000005	0.0000083	<0.000005	0.0000052	<0.000005
Nickel	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Phosphorus	0.014	0.008	<0.005	0.009	0.009	0.010	0.008	0.011	0.010	0.016
Potassium	3	3	2	3	3	2	2	3	3	3
Selenium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Silicon	1.67	2.36	1.95	2.80	2.97	2.38	2.75	3.61	3.38	3.70
Silver	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0025	<0.0002	<0.0002	<0.0002
Sodium	7	6	4	4	3	2	1	1	3	2
Strontium	0.05	0.04	0.03	0.03	0.04	0.03	0.04	0.05	0.05	0.05
Sulfate	5	7	5	5	6	4	3	4	4	3
Thallium	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Uranium	0.0007	0.0015	0.0010	0.0018	0.0013	0.0009	0.0013	0.0027	0.0013	0.0013
Zinc	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Energy Labs Report #	B16030824	B16031393	B16031896	B16040430	B16050318	B16060099	B16062411	B16072123	B16082331	B16091777

NR = Not Reported
* Testing terminated after week 28.

HC kinetic ARD potential test data demonstrate that the Ynl Ex and Tgd samples would not generate acid in a natural weathering and oxidizing environment. The nature of the tested samples is demonstrated by the data summary below.

Ynl Ex (terminated after 35 weeks)

- Extract pH was basic (alkaline) and was stable the majority of the test duration. Extract pH ranged from pH 7.80 (week 7) to pH 8.18 (week 35).
- Redox potential was oxidizing and ranged from 130 (week 23) to 373 (weeks11 and 33) mV. This range of oxidizing potential is typical of solid/solution systems exposed to air, but was never at the oxidizing level (> 450 mV) to indicate oxidation of sulfide minerals.
- Conductivity values were low and fairly constant during the kinetic test, and ranged from 194 (week 5) to 863 (week 9) µS/cm.
- Iron mobility (dissolution) was minimal and was <0.10 mg/L for all testing weeks.
- Sulfate mobility was moderate. Week 0 extract concentration was 120 mgSO_4/L. Sulfate concentration peaked at week 10 (510 mgSO_4/L). After week 10 sulfate concentrations steadily decreased with the final 12 weeks below 100 mgSO_4/L. Only 13.63 percent of the contained sulfate was mobilized during the kinetic test.
- Acidity was not detected in any weekly extract.
- Alkalinity was detected in all weekly extracts and concentrations ranged from 34 (week 34) to 109 (week 0) mg$CaCO_3$ equivalents/L. Maximum available alkalinity in the Ynl Ex sample was 199,000 mg/kg, but only 891.07 mg$CaCO_3$/kg was consumed (0.45 percent of total) during the HCT.

Tgd (terminated after 28 weeks)

- Extract pH was basic (alkaline) and was stable the duration of the HCT. Extract pH ranged from pH 7.80 (week 7) to pH 8.26 (week 2).
- Redox potential was oxidizing and ranged from 158 (week 22) to 357 (week 11) mV. This range of oxidizing potential is typical of solid/solution systems exposed to air, but was never at the oxidizing level (> 450 mV) to indicate oxidation of sulfide minerals.
- Conductivity values were low and fairly constant during the kinetic test, and ranged from 65.9 (week 12) to 136 (week 0) µS/cm.
- Iron mobility (dissolution) was minimal and was <0.10 mg/L for all testing weeks.
- Sulfate mobility was slight. Week 0 extract concentration was 5.7 mgSO_4/L and all testing weeks were below 10 mgSO_4/L. A total of 4.27 percent of the contained sulfate was mobilized during the kinetic test.
- Acidity was only detected in 1 weekly extract.
- Alkalinity was detected in all weekly extracts and concentrations ranged from 33 (week 16) to 55 (week 0) mg$CaCO_3$ equivalents/L. Maximum available alkalinity in the Tgd sample was 72,000 mg/kg, but only 546.31 mg$CaCO_3$/kg was consumed (0.76 percent of total) during the HCT.

Table 6 provides maximum available acidity, sulfate and alkalinity, on a mass basis, and those component dissolutions (mass basis) during the HC kinetic ARD potential test. Maximum availability data obtained from Mod ABA static ARD potential testing data.

Table 6. - Comparative Static and Kinetic Test Acidity, Sulfate and Alkalinity Generation Data, Black Butte Composites

	Acidity, mg/kg			Sulfate, mg/kg			Alkalinity, mg/kg		
	Max. from	Generated		Max. from	Generated		Max. from	Generated	
Sample I.D.	Solids[1)]	HC Test	Pct. of Total	Solids[2)]	HC Test	Pct. of Total	Solids[3)]	HC Test	Pct. of Total
Ynl Ex	18,100	0.00	0.00	18,600	2,534.97	13.63	199,000	891.07	0.45
Tgd	1,600	2.03	0.13	1,500	64.07	4.27	72,200	546.31	0.76

1) AGP (tons $CaCO_3$/1000 tons) x 1000.
2) Total S as $SO_4^=$ converted from weight percent to mg/kg.
3) ANP (tons $CaCO_3$/1000 tons) x 1000.

Mass data demonstrate that for the Ynl Ex and Tgd samples small percentages of acidity, sulfate and alkalinity contained in the feeds were generated during the HC tests.

Extract analysis results show that constituent (metals) mobility was minimal during the kinetic HCT for the Ynl Ex and Tgd samples.

RESIDUE ANALYSIS

After testing, splits were taken from both humidity cell residues for Mod ABA, ICP metals and size fraction analyses. Splits for Mod ABA analysis were submitted to SVL Analytical, Inc. Splits for ICP analysis were submitted to ALS.

Mod ABA results show that the Ynl Ex and Tgd samples displayed a greater potential to neutralize than to generate acid in a natural environment. Results are summarized as follows:

- Paste pHs were 7.9 and 8.7 for the Ynl Ex and Tgd samples, respectively.
- Pyritic sulfide contents were 0.45 and 0.03 wt. pct. and resulted in AGP values of 14.1 and 0.9 tons $CaCO_3$ equivalents per 1,000 tons of solids, respectively.
- ANP values were 165 and 52.8 $CaCO_3$/1,000 tons, respectively.
- NNP values were 150.9 and 51.9 $CaCO_3$/1,000 tons, respectively.
- Ratios (ANP ÷ AGP) were 11.70 and 58.67, respectively.

Mod ABA analysis results are provided in Table 7. ICP metals results are provided in Table 8. Size fraction screen analysis results are provided in Table 9 and 10. The SVL Analytical report for ABA analysis and the ALS report for ICP metals are provided in Section 2 of the Appendix to this report.

Table 7. - Modified Acid/Base Accounting (Mod ABA) Static ARD Potential Test Results, Black Butte Humidity Cell Residues

	Paste	Sulfur, weight percent (as S)									Sulfur, wt. pct. (as S) - HCl Wash		
Sample I.D.	pH	Total	SO_4	Pyritic $S^=$	Non-Ext S	Non Sulfate S	AGP[1)]	ANP	NNP	Ratio	SO_4	Pyritic $S^=$	Non Sulfate S
Ynl Ex	7.9	0.55	0.10	0.45	<0.01	0.45	14.1	165	150.9	11.70	0.2	0.3	0.34
Tgd	8.7	0.03	<0.01	0.03	<0.01	0.03	0.9	52.8	51.9	58.67	0.01	0.02	0.02

1) AGP based on Pyritic S= content (%S= x 31.25). AGP, ANP and NNP in units of tons $CaCO_3$ equivalents per 1,000 tons of solids.
SVL Report # W6J0157, W6L0308

Table 8. - Multi Element ICP Analytical Results, Black Butte Humidity Cell Residues

	Sample I.D.	
Analysis, mg/kg	Ynl Ex	Tgd
Ag	0.14	0.05
Al	54,900	77,200
As	13.9	3.6
Ba	290	1,490
Be	1.59	2.22
Bi	0.20	0.22
Ca	39,700	25,500
Cd	0.40	0.04
Ce	49.7	68.3
Co	9.5	13.3
Cr	37	129
Cs	6.98	2.55
Cu	36.2	19.1
Fe	33,500	27,200
Ga	14.10	20.8
Ge	0.13	0.15
Hf	2.1	2.9
Hg	0.058	0.020
In	0.059	0.033
K	18,400	26,500
La	27.5	36.5
Li	93.6	27.5
Mg	50,100	15,300
Mn	319	414
Mo	0.64	0.77
Na	1,900	27,600
Nb	9.3	13.2
Ni	22.5	58.1
P	580	830
Pb	40.7	26.8
Rb	104.0	76.6
Re	<0.002	<0.002
S (total)	5,900	400
Sb	0.74	0.26
Sc	10.4	7.7
Se	1	1
Sn	1.5	1.3
Sr	66.0	718
Ta	0.57	0.70
Te	<0.05	<0.05
Th	7.03	9.48
Ti	2,710	2,930
Tl	0.73	0.54
U	2.8	2.3
V	57	65
W	1.0	0.9
Y	16.0	7.9
Zn	124	60
Zr	79.8	97.1
ALS Minerals Report #	RE16215364	RE16170310

Table 9. - Residue Screen Analysis, 100%-1/4" Feed Size, Black Butte Ynl Ex

	Weight	
Size Fraction (Tyler Mesh)	%	Cum. %
+6M	2.7	2.7
-6M+10M	24.7	27.4
-10M+28M	33.3	60.7
-28M+35M	6.0	66.7
-35M+48M	5.3	72.0
-48M+100M	7.9	79.9
-100M+200M	4.7	84.6
-200M+270M	1.6	86.2
-270M	13.8	100.0
Composite	100.0	

Table 10. - Residue Screen Analysis, 100%-1/4" Feed Size, Black Butte Tgd

	Weight	
Size Fraction (Tyler Mesh)	%	Cum. %
+6M	3.4	3.4
-6M+10M	27.5	30.9
-10M+28M	32.6	63.5
-28M+35M	6.4	69.9
-35M+48M	5.3	75.2
-48M+100M	7.9	83.1
-100M+200M	4.9	88.0
-200M+270M	2.2	90.2
-270M	9.8	100.0
Composite	100.0	

CONCLUSION

- The Ynl Ex and Tgd samples would not produce acid in a natural weathering and oxidizing environment as predicted by the static ABA data.

Michael Medina
Environmental Project Manager

MM/mh

APPENDIX

Section 1 - Composite Make-up Table

Section 2 - SVL and ALS Reports

Section 3 - Energy Lab Reports

APPENDIX

Section 1 - Composite Make-up Table

A1-1. - 3767-01 - Ynl Ex Make-up Table

Sample I.D.	weight to sample (kg)
220524	0.59
220526	0.47
220578	0.49
220585	0.52
220572	0.50
220694	0.64
221088	0.55
220826	0.52
220865	0.63
221113	0.58
	5.49

A1-2. - 3767-01 - Tgd Make-up Table

Sample I.D.	weight to sample (kg)
219008	0.28
219009	0.29
221054	0.31
221054	0.30
220517	0.30
220517	0.30
220556	0.30
220556	0.30
220595	0.31
220595	0.30
220634	0.29
220634	0.29
220678	0.32
220678	0.30
	4.19

APPENDIX

Section 2 - SVL and ALS Reports

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McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
USZ COMPOSITE	W6E0101-01	Soil	03-May-16 00:00	JH	05-May-2016	
YC COMPOSITE	W6E0101-02	Soil	03-May-16 00:00	JH	05-May-2016	
TAILINGS	W6E0101-03	Soil	03-May-16 00:00	JH	05-May-2016	
YNL B COMPOSITE	W6E0101-04	Soil	03-May-16 00:00	JH	05-May-2016	
LZFW COMPOSITE	W6E0101-05	Soil	03-May-16 00:00	JH	05-May-2016	
YNLB EX	W6E0101-06	Soil	03-May-16 00:00	JH	05-May-2016	
Y GD	W6E0101-07	Soil	03-May-16 00:00	JH	05-May-2016	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Client Sample ID: **USZ COMPOSITE**
SVL Sample ID: **W6E0101-01 (Soil)**

Sampled: 03-May-16 00:00
Received: 05-May-16
Sampled By: JH

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	-584.0	TCaCO3/kT	4.5			N/A		05/17/16 12:53	
Modified Sobek	**AGP**	712	TCaCO3/kT	4.5			N/A		05/16/16 15:04	
Modified Sobek	**ANP**	128	TCaCO3/kT	0.3			W620064	AGF	05/17/16 12:53	A2
Modified Sobek	**Non-extractable Sulfur**	0.46	%	0.01	0.005		W620064	AGF	05/16/16 15:04	
Modified Sobek	**Non-Sulfate Sulfur**	23.2	%	0.15	0.08	15	W620064	AGF	05/16/16 13:31	D2
Modified Sobek	**Pyritic Sulfur**	22.80	%	0.15			N/A		05/16/16 15:04	
Modified Sobek	**Sulfate Sulfur**	6.00	%	0.15			N/A		05/16/16 13:31	
Modified Sobek	**Total Sulfur**	29.2	%	0.15	0.08	15	W620064	AGF	05/10/16 15:03	B7,D2
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	-518.0	TCaCO3/kT	4.5			N/A		05/17/16 12:53	
Modified Sobek	**AGP-HCl**	646	TCaCO3/kT	4.5			N/A		05/16/16 15:04	
Modified Sobek	**Non-extractable Sulfur**	0.46	%	0.01	0.005		W620064	AGF	05/16/16 15:04	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	21.2	%	0.15	0.08	15	W620064	AGF	05/16/16 14:17	D2
Modified Sobek	**Pyritic Sulfur-HCl**	20.70	%	0.15			N/A		05/16/16 15:04	
Modified Sobek	**Sulfate Sulfur-HCl**	8.10	%	0.15			N/A		05/16/16 14:17	
Modified Sobek	**Total Sulfur**	29.2	%	0.15	0.08	15	W620064	AGF	05/10/16 15:03	D2
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @19.7°C**	5.9	pH Units				W621060	AGF	05/17/16 11:30	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

Kirby Gray
Technical Director

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McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Client Sample ID: **YC COMPOSITE**
SVL Sample ID: **W6E0101-02 (Soil)**

Sampled: 03-May-16 00:00
Received: 05-May-16
Sampled By: JH

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	32.0	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP**	4.8	TCaCO3/kT	0.3			N/A		05/16/16 15:13	
Modified Sobek	**ANP**	36.7	TCaCO3/kT	0.3			W620064	AGF	05/17/16 12:53	A2
Modified Sobek	**Non-extractable Sulfur**	0.02	%	0.01	0.005		W620064	AGF	05/16/16 15:13	
Modified Sobek	**Non-Sulfate Sulfur**	0.17	%	0.01	0.005		W620064	AGF	05/16/16 13:34	
Modified Sobek	**Pyritic Sulfur**	0.15	%	0.01			N/A		05/16/16 15:13	
Modified Sobek	Sulfate Sulfur	< 0.01	%	0.01			N/A		05/16/16 13:34	
Modified Sobek	**Total Sulfur**	0.18	%	0.01	0.005		W620064	AGF	05/10/16 13:22	B7
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	31.8	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP-HCl**	5.0	TCaCO3/kT	0.3			N/A		05/16/16 15:13	
Modified Sobek	**Non-extractable Sulfur**	0.02	%	0.01	0.005		W620064	AGF	05/16/16 15:13	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.18	%	0.01	0.005		W620064	AGF	05/16/16 14:21	
Modified Sobek	**Pyritic Sulfur-HCl**	0.16	%	0.01			N/A		05/16/16 15:13	
Modified Sobek	Sulfate Sulfur-HCl	< 0.01	%	0.01			N/A		05/16/16 14:21	
Modified Sobek	**Total Sulfur**	0.18	%	0.01	0.005		W620064	AGF	05/10/16 13:22	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @19.6°C**	8.0	pH Units				W621060	AGF	05/17/16 11:30	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

Kirby Gray
Technical Director

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Client Sample ID: **TAILINGS**
SVL Sample ID: **W6E0101-03 (Soil)**

Sampled: 03-May-16 00:00
Received: 05-May-16
Sampled By: JH

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	-533.0	TCaCO3/kT	4.5			N/A		05/17/16 12:53	
Modified Sobek	**AGP**	553	TCaCO3/kT	4.5			N/A		05/16/16 15:18	
Modified Sobek	**ANP**	19.8	TCaCO3/kT	0.3			W620064	AGF	05/17/16 12:53	A5
Modified Sobek	**Non-extractable Sulfur**	0.30	%	0.01	0.005		W620064	AGF	05/16/16 15:18	
Modified Sobek	**Non-Sulfate Sulfur**	18.0	%	0.15	0.08	15	W620064	AGF	05/16/16 13:37	D2
Modified Sobek	**Pyritic Sulfur**	17.70	%	0.15			N/A		05/16/16 15:18	
Modified Sobek	**Sulfate Sulfur**	8.25	%	0.15			N/A		05/16/16 13:37	
Modified Sobek	**Total Sulfur**	26.2	%	0.15	0.08	15	W620064	AGF	05/10/16 15:06	B7,D2
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	-585.0	TCaCO3/kT	4.5			N/A		05/17/16 12:53	
Modified Sobek	**AGP-HCl**	605	TCaCO3/kT	4.5			N/A		05/16/16 15:18	
Modified Sobek	**Non-extractable Sulfur**	0.30	%	0.01	0.005		W620064	AGF	05/16/16 15:18	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	19.6	%	0.15	0.08	15	W620064	AGF	05/16/16 14:25	D2
Modified Sobek	**Pyritic Sulfur-HCl**	19.30	%	0.15			N/A		05/16/16 15:18	
Modified Sobek	**Sulfate Sulfur-HCl**	6.60	%	0.15			N/A		05/16/16 14:25	
Modified Sobek	**Total Sulfur**	26.2	%	0.15	0.08	15	W620064	AGF	05/10/16 15:06	D2
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @19.7°C**	3.9	pH Units				W621060	AGF	05/17/16 11:30	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Client Sample ID: **YNL B COMPOSITE**
SVL Sample ID: **W6E0101-04 (Soil)**

Sampled: 03-May-16 00:00
Received: 05-May-16
Sampled By: JH

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	160	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP**	19.9	TCaCO3/kT	0.3			N/A		05/16/16 15:21	
Modified Sobek	**ANP**	180	TCaCO3/kT	0.3			W620064	AGF	05/17/16 12:53	A2
Modified Sobek	**Non-extractable Sulfur**	0.04	%	0.01	0.005		W620064	AGF	05/16/16 15:21	
Modified Sobek	**Non-Sulfate Sulfur**	0.68	%	0.01	0.005		W620064	AGF	05/16/16 13:41	
Modified Sobek	**Pyritic Sulfur**	0.64	%	0.01			N/A		05/16/16 15:21	
Modified Sobek	**Sulfate Sulfur**	0.08	%	0.01			N/A		05/16/16 13:41	
Modified Sobek	**Total Sulfur**	0.76	%	0.01	0.005		W620064	AGF	05/10/16 13:27	B7
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	161	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP-HCl**	18.5	TCaCO3/kT	0.3			N/A		05/16/16 15:21	
Modified Sobek	**Non-extractable Sulfur**	0.04	%	0.01	0.005		W620064	AGF	05/16/16 15:21	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.63	%	0.01	0.005		W620064	AGF	05/16/16 14:34	
Modified Sobek	**Pyritic Sulfur-HCl**	0.59	%	0.01			N/A		05/16/16 15:21	
Modified Sobek	**Sulfate Sulfur-HCl**	0.13	%	0.01			N/A		05/16/16 14:34	
Modified Sobek	**Total Sulfur**	0.76	%	0.01	0.005		W620064	AGF	05/10/16 13:27	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @19.8°C**	7.8	pH Units				W621060	AGF	05/17/16 11:30	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Client Sample ID: **LZFW COMPOSITE**
SVL Sample ID: **W6E0101-05 (Soil)**

Sampled: 03-May-16 00:00
Received: 05-May-16
Sampled By: JH

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	5.6	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP**	54.7	TCaCO3/kT	0.3			N/A		05/16/16 15:24	
Modified Sobek	**ANP**	60.3	TCaCO3/kT	0.3			W620064	AGF	05/17/16 12:53	A5
Modified Sobek	**Non-extractable Sulfur**	0.06	%	0.01	0.005		W620064	AGF	05/16/16 15:24	
Modified Sobek	**Non-Sulfate Sulfur**	1.81	%	0.01	0.005		W620064	AGF	05/16/16 13:45	
Modified Sobek	**Pyritic Sulfur**	1.75	%	0.01			N/A		05/16/16 15:24	
Modified Sobek	**Sulfate Sulfur**	0.20	%	0.01			N/A		05/16/16 13:45	
Modified Sobek	**Total Sulfur**	2.01	%	0.01	0.005		W620064	AGF	05/10/16 13:30	B7
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	9.3	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP-HCl**	51.0	TCaCO3/kT	0.3			N/A		05/16/16 15:24	
Modified Sobek	**Non-extractable Sulfur**	0.06	%	0.01	0.005		W620064	AGF	05/16/16 15:24	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	1.69	%	0.01	0.005		W620064	AGF	05/16/16 14:39	
Modified Sobek	**Pyritic Sulfur-HCl**	1.63	%	0.01			N/A		05/16/16 15:24	
Modified Sobek	**Sulfate Sulfur-HCl**	0.32	%	0.01			N/A		05/16/16 14:39	
Modified Sobek	**Total Sulfur**	2.01	%	0.01	0.005		W620064	AGF	05/10/16 13:30	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @20.0°C**	7.7	pH Units				W621060	AGF	05/17/16 11:30	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Client Sample ID: **YNLB EX**
SVL Sample ID: **W6E0101-06 (Soil)**

Sampled: 03-May-16 00:00
Received: 05-May-16
Sampled By: JH

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	181	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP**	18.0	TCaCO3/kT	0.3			N/A		05/16/16 15:27	
Modified Sobek	**ANP**	199	TCaCO3/kT	0.3			W620064	AGF	05/17/16 12:53	A2
Modified Sobek	**Non-extractable Sulfur**	0.01	%	0.01	0.005		W620064	AGF	05/16/16 15:27	
Modified Sobek	**Non-Sulfate Sulfur**	0.59	%	0.01	0.005		W620064	AGF	05/16/16 13:55	
Modified Sobek	**Pyritic Sulfur**	0.58	%	0.01			N/A		05/16/16 15:27	
Modified Sobek	**Sulfate Sulfur**	0.03	%	0.01			N/A		05/16/16 13:55	
Modified Sobek	**Total Sulfur**	0.62	%	0.01	0.005		W620064	AGF	05/10/16 13:34	B7
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	183	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP-HCl**	16.1	TCaCO3/kT	0.3			N/A		05/16/16 15:27	
Modified Sobek	**Non-extractable Sulfur**	0.01	%	0.01	0.005		W620064	AGF	05/16/16 15:27	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.52	%	0.01	0.005		W620064	AGF	05/16/16 14:41	
Modified Sobek	**Pyritic Sulfur-HCl**	0.51	%	0.01			N/A		05/16/16 15:27	
Modified Sobek	**Sulfate Sulfur-HCl**	0.10	%	0.01			N/A		05/16/16 14:41	
Modified Sobek	**Total Sulfur**	0.62	%	0.01	0.005		W620064	AGF	05/10/16 13:34	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @19.8°C**	8.2	pH Units				W621060	AGF	05/17/16 11:30	

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Kirby Gray
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Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Client Sample ID: **Y GD**
SVL Sample ID: **W6E0101-07 (Soil)**

Sampled: 03-May-16 00:00
Received: 05-May-16
Sampled By: JH

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	70.8	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP**	1.4	TCaCO3/kT	0.3			N/A		05/16/16 15:30	
Modified Sobek	**ANP**	72.2	TCaCO3/kT	0.3			W620064	AGF	05/17/16 12:53	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W620064	AGF	05/16/16 15:30	
Modified Sobek	**Non-Sulfate Sulfur**	0.05	%	0.01	0.005		W620064	AGF	05/16/16 13:58	
Modified Sobek	**Pyritic Sulfur**	0.05	%	0.01			N/A		05/16/16 15:30	
Modified Sobek	Sulfate Sulfur	< 0.01	%	0.01			N/A		05/17/16 09:57	
Modified Sobek	**Total Sulfur**	0.05	%	0.01	0.005		W620064	AGF	05/17/16 09:57	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	71.0	TCaCO3/kT	0.3			N/A		05/17/16 12:53	
Modified Sobek	**AGP-HCl**	1.2	TCaCO3/kT	0.3			N/A		05/16/16 15:30	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W620064	AGF	05/16/16 15:30	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.04	%	0.01	0.005		W620064	AGF	05/16/16 14:44	
Modified Sobek	**Pyritic Sulfur-HCl**	0.04	%	0.01			N/A		05/16/16 15:30	
Modified Sobek	**Sulfate Sulfur-HCl**	0.01	%	0.01			N/A		05/17/16 09:57	
Modified Sobek	**Total Sulfur**	0.05	%	0.01	0.005		W620064	AGF	05/17/16 09:57	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @19.7°C**	8.4	pH Units				W621060	AGF	05/17/16 11:30	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms								
Modified Sobek	ANP	TCaCO3/kT	<0.3		0.3	W620064	17-May-16	
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.005	0.01	W620064	16-May-16	
Modified Sobek	Non-Sulfate Sulfur	%	<0.01	0.005	0.01	W620064	16-May-16	
Modified Sobek	Total Sulfur	%	0.01	0.005	0.01	W620064	10-May-16	B7
Modified Sobek	Total Sulfur	%	<0.01	0.005	0.01	W620064	17-May-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)								
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.005	0.01	W620064	16-May-16	
Modified Sobek	Non-Sulfate Sulfur-HCl	%	<0.01	0.005	0.01	W620064	16-May-16	
Modified Sobek	Total Sulfur	%	0.01	0.005	0.01	W620064	10-May-16	B7
Modified Sobek	Total Sulfur	%	<0.01	0.005	0.01	W620064	17-May-16	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TCaCO3/kT	215	212	102	80 - 120	W620064	17-May-16	
Modified Sobek	Total Sulfur	%	1.08	1.00	108	80 - 120	W620064	10-May-16	
Modified Sobek	Total Sulfur	%	1.12	1.00	112	80 - 120	W620064	17-May-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)									
Modified Sobek	Total Sulfur	%	1.08	1.00	108	80 - 120	W620064	10-May-16	
Modified Sobek	Total Sulfur	%	1.12	1.00	112	80 - 120	W620064	17-May-16	
Classical Chemistry Parameters									
EPA 600/2-78-054 mod	Paste pH	pH Units	7.2	7.40	97.0	93.7 - 106.3	W621060	17-May-16	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TCaCO3/kT	6.1	6.6	8.0	20	W620064	17-May-16	
Modified Sobek	Non-extractable Sulfur	%	0.12	0.13	10.4	20	W620064	16-May-16	
Modified Sobek	Non-Sulfate Sulfur	%	1.33	1.39	4.4	20	W620064	16-May-16	
Modified Sobek	Total Sulfur	%	0.10	0.10	2.9	20	W620064	17-May-16	
Modified Sobek	Total Sulfur	%	1.72	1.61	6.6	20	W620064	10-May-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)									
Modified Sobek	Non-extractable Sulfur	%	0.12	0.13	10.4	20	W620064	16-May-16	
Modified Sobek	Non-Sulfate Sulfur-HCl	%	1.11	1.31	16.5	20	W620064	16-May-16	
Modified Sobek	Total Sulfur	%	0.10	0.10	2.9	20	W620064	17-May-16	
Modified Sobek	Total Sulfur	%	1.72	1.61	6.6	20	W620064	10-May-16	

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6E0101**
Reported: 18-May-16 15:23

Quality Control - DUPLICATE Data (Continued)

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
EPA 600/2-78-054 mod	Paste pH	pH Units	8.0	8.1	1.1	20	W621060	17-May-16	

Notes and Definitions

A2	2 g of sample used in ANP analysis
A5	5 g of sample used in ANP analysis
B7	Target analyte detected in method blank exceeded method QC limits, but concentrations in the samples are at least 10x the blank concentration.
D2	Sample required dilution due to high concentration of target analyte.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6J0157**
Reported: 17-Oct-16 13:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
3767-01 TGD (HC-8)	W6J0157-01	Soil	05-Oct-16 10:00	07-Oct-2016	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6J0157**
Reported: 17-Oct-16 13:53

Client Sample ID: **3767-01 TGD (HC-8)**
SVL Sample ID: **W6J0157-01 (Soil)**

Sampled: 05-Oct-16 10:00
Received: 07-Oct-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	52.0	TCaCO3/kT	0.3			N/A		10/17/16 12:57	
Modified Sobek	**AGP**	0.9	TCaCO3/kT	0.3			N/A		10/17/16 12:57	
Modified Sobek	**ANP**	52.8	TCaCO3/kT	0.3			W642106	PRM	10/17/16 11:51	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W642106	PRM	10/17/16 12:57	
Modified Sobek	**Non-Sulfate Sulfur**	0.03	%	0.01	0.005		W642106	PRM	10/14/16 14:04	
Modified Sobek	**Pyritic Sulfur**	0.03	%	0.01			N/A		10/17/16 12:57	
Modified Sobek	Sulfate Sulfur	< 0.01	%	0.01			N/A		10/14/16 14:04	
Modified Sobek	**Total Sulfur**	0.03	%	0.01	0.005		W642106	AGF	10/13/16 11:56	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	52.2	TCaCO3/kT	0.3			N/A		10/17/16 12:57	
Modified Sobek	**AGP-HCl**	0.6	TCaCO3/kT	0.3			N/A		10/17/16 12:57	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W642106	PRM	10/17/16 12:57	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.02	%	0.01	0.005		W642106	PRM	10/17/16 08:10	
Modified Sobek	**Pyritic Sulfur-HCl**	0.02	%	0.01			N/A		10/17/16 12:57	
Modified Sobek	**Sulfate Sulfur-HCl**	0.01	%	0.01			N/A		10/17/16 08:10	
Modified Sobek	**Total Sulfur**	0.03	%	0.01	0.005		W642106	PRM	10/13/16 11:56	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @17.7°C**	8.7	pH Units				W642203	DKS	10/14/16 11:40	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3767 / 3767-01
Work Order: **W6J0157**
Reported: 17-Oct-16 13:53

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms								
Modified Sobek	ANP	TCaCO3/kT	<0.3		0.3	W642106	17-Oct-16	
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.005	0.01	W642106	17-Oct-16	
Modified Sobek	Non-Sulfate Sulfur	%	<0.01	0.005	0.01	W642106	14-Oct-16	
Modified Sobek	Non-Sulfate Sulfur	%	<0.01	0.005	0.01	W642106	17-Oct-16	
Modified Sobek	Total Sulfur	%	<0.01	0.005	0.01	W642106	13-Oct-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)								
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.005	0.01	W642106	17-Oct-16	
Modified Sobek	Non-Sulfate Sulfur-HCl	%	<0.01	0.005	0.01	W642106	17-Oct-16	
Modified Sobek	Total Sulfur	%	<0.01	0.005	0.01	W642106	13-Oct-16	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TCaCO3/kT	199	212	93.8	80 - 120	W642106	17-Oct-16	
Modified Sobek	Total Sulfur	%	0.94	1.00	94.0	80 - 120	W642106	13-Oct-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)									
Modified Sobek	Total Sulfur	%	0.94	1.00	94.0	80 - 120	W642106	13-Oct-16	
Classical Chemistry Parameters									
EPA 600/2-78-054 mod	Paste pH @17.7°C	pH Units	7.7	7.40	104	93.7 - 106.3	W642203	14-Oct-16	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TCaCO3/kT	201	209	3.7	20	W642106	17-Oct-16	
Modified Sobek	Non-extractable Sulfur	%	<0.01	<0.01	<RL	20	W642106	17-Oct-16	
Modified Sobek	Non-Sulfate Sulfur	%	0.34	0.38	11.0	20	W642106	14-Oct-16	
Modified Sobek	Non-Sulfate Sulfur	%	<0.01	<0.01	UDL	20	W642106	17-Oct-16	
Modified Sobek	Total Sulfur	%	0.92	0.85	7.0	20	W642106	13-Oct-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)									
Modified Sobek	Non-extractable Sulfur	%	<0.01	<0.01	<RL	20	W642106	17-Oct-16	
Modified Sobek	Non-Sulfate Sulfur-HCl	%	0.59	0.44	28.1	20	W642106	17-Oct-16	R2B
Modified Sobek	Total Sulfur	%	0.92	0.85	7.0	20	W642106	13-Oct-16	
Classical Chemistry Parameters									
EPA 600/2-78-054 mod	Paste pH @17.6°C	pH Units	8.6	8.7	0.6	20	W642203	14-Oct-16	

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6J0157**
Reported: 17-Oct-16 13:53

Notes and Definitions

A2	2 g of sample used in ANP analysis
R2B	RPD exceeded the laboratory acceptance limit.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6L0308**
Reported: 29-Dec-16 13:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
3767-01 USZ COMPOSITE (HC-1) ABA	W6L0308-01	Soil	—	14-Dec-2016	
3767-01 YNL EX (HC-7) ABA	W6L0308-02	Soil	—	14-Dec-2016	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6L0308**
Reported: 29-Dec-16 13:49

Client Sample ID: **3767-01 USZ COMPOSITE (HC-1) ABA**
SVL Sample ID: **W6L0308-01 (Soil)**

Sampled: —
Received: 14-Dec-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	-484.0	TCaCO3/kT	4.5			N/A		12/23/16 11:55	
Modified Sobek	**AGP**	525	TCaCO3/kT	4.5			N/A		12/23/16 11:55	
Modified Sobek	**ANP**	40.5	TCaCO3/kT	0.3			W652014	AGF	12/22/16 14:39	A5
Modified Sobek	**Non-extractable Sulfur**	0.62	%	0.01	0.003		W652014	AGF	12/23/16 11:55	
Modified Sobek	**Non-Sulfate Sulfur**	17.4	%	0.15	0.04	15	W652014	AGF	12/22/16 12:04	D2
Modified Sobek	**Pyritic Sulfur**	16.80	%	0.15			N/A		12/23/16 11:55	
Modified Sobek	**Sulfate Sulfur**	13.70	%	0.15			N/A		12/22/16 12:04	
Modified Sobek	**Total Sulfur**	31.1	%	0.15	0.04	15	W652014	AGF	12/20/16 11:32	D2
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	-489.0	TCaCO3/kT	4.5			N/A		12/23/16 11:55	
Modified Sobek	**AGP-HCl**	529	TCaCO3/kT	4.5			N/A		12/23/16 11:55	
Modified Sobek	**Non-extractable Sulfur**	0.62	%	0.01	0.003		W652014	AGF	12/23/16 11:55	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	17.6	%	0.15	0.04	15	W652014	AGF	12/22/16 13:53	D2
Modified Sobek	**Pyritic Sulfur-HCl**	16.90	%	0.15			N/A		12/23/16 11:55	
Modified Sobek	**Sulfate Sulfur-HCl**	13.50	%	0.15			N/A		12/22/16 13:53	
Modified Sobek	**Total Sulfur**	31.1	%	0.15	0.04	15	W652014	AGF	12/20/16 11:32	D2
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @17.9°C**	5.3	pH Units				W653026	AGF	12/29/16 10:00	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6L0308**
Reported: 29-Dec-16 13:49

Client Sample ID: **3767-01 YNL EX (HC-7) ABA**
SVL Sample ID: **W6L0308-02 (Soil)**

Sampled: —
Received: 14-Dec-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	151	TCaCO3/kT	0.3			N/A		12/22/16 14:39	
Modified Sobek	**AGP**	14.1	TCaCO3/kT	0.3			N/A		12/22/16 12:07	
Modified Sobek	**ANP**	165	TCaCO3/kT	0.3			W652014	AGF	12/22/16 14:39	A5
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.003		W652014	AGF	12/22/16 11:13	
Modified Sobek	**Non-Sulfate Sulfur**	0.45	%	0.01	0.003		W652014	AGF	12/22/16 12:07	
Modified Sobek	**Pyritic Sulfur**	0.45	%	0.01			N/A		12/22/16 12:07	
Modified Sobek	**Sulfate Sulfur**	0.10	%	0.01			N/A		12/22/16 12:07	
Modified Sobek	**Total Sulfur**	0.55	%	0.01	0.003		W652014	AGF	12/20/16 12:17	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	155	TCaCO3/kT	0.3			N/A		12/22/16 14:39	
Modified Sobek	**AGP-HCl**	10.6	TCaCO3/kT	0.3			N/A		12/22/16 14:02	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.003		W652014	AGF	12/22/16 11:13	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.34	%	0.01	0.003		W652014	AGF	12/22/16 14:02	
Modified Sobek	**Pyritic Sulfur-HCl**	0.30	%	0.01			N/A		12/22/16 14:02	
Modified Sobek	**Sulfate Sulfur-HCl**	0.20	%	0.01			N/A		12/22/16 14:02	
Modified Sobek	**Total Sulfur**	0.55	%	0.01	0.003		W652014	AGF	12/20/16 12:17	
Classical Chemistry Parameters										
EPA 600/2-78-054 mod	**Paste pH @17.1°C**	7.9	pH Units				W653026	AGF	12/29/16 10:00	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Project Name: MLI: 3767 / 3767-01
Work Order: **W6L0308**
Reported: 29-Dec-16 13:49

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms								
Modified Sobek	ANP	TCaCO3/kT	<0.3		0.3	W652014	22-Dec-16	
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.003	0.01	W652014	22-Dec-16	
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.003	0.01	W652014	23-Dec-16	
Modified Sobek	Non-Sulfate Sulfur	%	<0.01	0.003	0.01	W652014	22-Dec-16	
Modified Sobek	Non-Sulfate Sulfur	%	<0.01	0.003	0.01	W652014	23-Dec-16	
Modified Sobek	Total Sulfur	%	<0.01	0.003	0.01	W652014	20-Dec-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)								
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.003	0.01	W652014	22-Dec-16	
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.003	0.01	W652014	23-Dec-16	
Modified Sobek	Non-Sulfate Sulfur-HCl	%	<0.01	0.003	0.01	W652014	22-Dec-16	
Modified Sobek	Total Sulfur	%	<0.01	0.003	0.01	W652014	20-Dec-16	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TCaCO3/kT	205	212	96.8	80 - 120	W652014	22-Dec-16	
Modified Sobek	Total Sulfur	%	1.05	1.00	105	80 - 120	W652014	20-Dec-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)									
Modified Sobek	Total Sulfur	%	1.05	1.00	105	80 - 120	W652014	20-Dec-16	
Classical Chemistry Parameters									
EPA 600/2-78-054 mod	Paste pH @18.1°C	pH Units	7.3	7.40	99.2	93.7 - 106.3	W653026	29-Dec-16	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TCaCO3/kT	40.5	40.5	0.0	20	W652014	22-Dec-16	
Modified Sobek	Non-extractable Sulfur	%	0.72	0.62	15.5	20	W652014	23-Dec-16	
Modified Sobek	Non-Sulfate Sulfur	%	0.01	0.01	16.1	20	W652014	23-Dec-16	
Modified Sobek	Non-Sulfate Sulfur	%	20.3	17.4	15.1	20	W652014	22-Dec-16	D2
Modified Sobek	Total Sulfur	%	31.2	31.1	0.5	20	W652014	20-Dec-16	D2
Acid/Base Accounting & Sulfur Forms (HCl Wash)									
Modified Sobek	Non-extractable Sulfur	%	0.72	0.62	15.5	20	W652014	23-Dec-16	
Modified Sobek	Non-Sulfate Sulfur-HCl	%	15.9	17.6	9.9	20	W652014	22-Dec-16	D2
Modified Sobek	Total Sulfur	%	31.2	31.1	0.5	20	W652014	20-Dec-16	D2

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McClelland Laboratories Inc
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Project Name: MLI: 3767 / 3767-01
Work Order: **W6L0308**
Reported: 29-Dec-16 13:49

Quality Control - DUPLICATE Data (Continued)

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Classical Chemistry Parameters									
EPA 600/2-78-054 mod	Paste pH @17.7°C	pH Units	5.3	5.3	0.6	20	W653026	29-Dec-16	

Notes and Definitions

A5	5 g of sample used in ANP analysis
D2	Sample required dilution due to high concentration of target analyte.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable

ALS USA Inc.
4977 Energy Way
Reno NV 89502
Phone: +1 775 356 5395 Fax: +1 775 355 0179 www.alsglobal.com

To: MCCLELLAND LABS
1016 GREG ST
SPARKS NV 89431

Finalized Date: 4- JAN- 2017
Account: EIM

CERTIFICATE RE16215364

Project: 3767- 01

This report is for 2 Pulp samples submitted to our lab in Reno, NV, USA on 8- DEC- 2016.

The following have access to data associated with this certificate:

CHRISTINE DEBURLE	JACK MCPARTLAND	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- MS61	48 element four acid ICP- MS	

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim 'or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519

To: MCCLELLAND LABS
ATTN: JACK MCPARTLAND
1016 GREG ST
SPARKS NV 89431

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS USA Inc.
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To: MCCLELLAND LABS
1016 GREG ST
SPARKS NV 89431

Finalized Date: 4- JAN- 2017
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16215364

Sample Description	Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
	LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
3767- 01 USZ Composite (HC- 1) ICP		0.12	11.10	1.68	418	20	1.37	17.55	1.38	0.26	5.19	217	52	3.26	3150	24.3
3767- 01 Ynl EX (HC- 7) ICP		0.12	0.14	5.49	13.9	290	1.59	0.20	3.97	0.40	49.7	9.5	37	6.98	36.2	3.35

***** See Appendix Page for comments regarding this certificate *****

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To: MCCLELLAND LABS
1016 GREG ST
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Finalized Date: 4- JAN- 2017
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16215364

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
3767- 01 USZ Composite (HC- 1) ICP		7.55	0.09	0.9	2.31	0.593	1.25	1.8	12.3	0.55	186	4.63	0.02	2.9	52.5	260
3767- 01 Ynl EX (HC- 7) ICP		14.10	0.13	2.1	0.058	0.059	1.84	27.5	93.6	5.01	319	0.64	0.19	9.3	22.5	580

***** See Appendix Page for comments regarding this certificate *****

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To: MCCLELLAND LABS
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Finalized Date: 4- JAN- 2017
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16215364

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
3767- 01 USZ Composite (HC- 1) ICP		1000	39.7	0.002	>10.0	27.0	3.0	1	0.7	3530	0.20	<0.05	1.22	0.070	72.7	1.6
3767- 01 Ynl EX (HC- 7) ICP		40.7	104.0	<0.002	0.59	0.74	10.4	1	1.5	66.0	0.57	<0.05	7.03	0.271	0.73	2.8

***** See Appendix Page for comments regarding this certificate *****

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Reno NV 89502
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To: MCCLELLAND LABS
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SPARKS NV 89431

Finalized Date: 4- JAN- 2017
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16215364

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5
3767- 01 USZ Composite (HC- 1) ICP		26	0.8	6.5	93	32.6
3767- 01 Ynl EX (HC- 7) ICP		57	1.0	16.0	124	79.8

***** See Appendix Page for comments regarding this certificate *****

ALS USA Inc.
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To: MCCLELLAND LABS
1016 GREG ST
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Finalized Date: 4- JAN- 2017
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16215364

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Reno located at 4977 Energy Way, Reno, NV, USA.
LOG- 24 WEI- 21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
Hg- MS42 ME- MS61

ALS USA Inc.
4977 Energy Way
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To: MCCLELLAND LABS
1016 GREG ST
SPARKS NV 89431

Finalized Date: 25- OCT- 2016
Account: EIM

CERTIFICATE RE16170310

Project: 3767- 01

This report is for 1 Pulp sample submitted to our lab in Reno, NV, USA on 6- OCT- 2016.

The following have access to data associated with this certificate:

CHRISTINE DEBURLE	JACK MCPARTLAND	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 24	Pulp Login - Rcd w/o Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	
ME- MS61	48 element four acid ICP- MS	
Hg- MS42	Trace Hg by ICPMS	ICP- MS

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim 'or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519

To: MCCLELLAND LABS
ATTN: JACK MCPARTLAND
1016 GREG ST
SPARKS NV 89431

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS USA Inc.
4977 Energy Way
Reno NV 89502
Phone: +1 775 356 5395 Fax: +1 775 355 0179 www.alsglobal.com

To: MCCLELLAND LABS
1016 GREG ST
SPARKS NV 89431

Finalized Date: 25- OCT- 2016
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16170310

Sample Description	Method Analyte Units LOR	WEI- 21 Recvd Wt. kg 0.02	ME- MS61 Ag ppm 0.01	ME- MS61 Al % 0.01	ME- MS61 As ppm 0.2	ME- MS61 Ba ppm 10	ME- MS61 Be ppm 0.05	ME- MS61 Bi ppm 0.01	ME- MS61 Ca % 0.01	ME- MS61 Cd ppm 0.02	ME- MS61 Ce ppm 0.01	ME- MS61 Co ppm 0.1	ME- MS61 Cr ppm 1	ME- MS61 Cs ppm 0.05	ME- MS61 Cu ppm 0.2	ME- MS61 Fe % 0.01
3767- 01 Tgd (HC- 8) ICP		0.11	0.05	7.72	3.6	1490	2.22	0.22	2.55	0.04	68.3	13.3	129	2.55	19.1	2.72

***** See Appendix Page for comments regarding this certificate *****

ALS USA Inc.
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1016 GREG ST
SPARKS NV 89431

Finalized Date: 25- OCT- 2016
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16170310

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	Hg- MS42	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.05	0.05	0.1	0.005	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
3767- 01 Tgd (HC- 8) ICP		20.8	0.15	2.9	0.020	0.033	2.65	36.5	27.5	1.53	414	0.77	2.76	13.2	58.1	830

***** See Appendix Page for comments regarding this certificate *****

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1016 GREG ST
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Finalized Date: 25- OCT- 2016
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16170310

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
3767- 01 Tgd (HC- 8) ICP		26.8	76.6	<0.002	0.04	0.26	7.7	1	1.3	718	0.70	<0.05	9.48	0.293	0.54	2.3

***** See Appendix Page for comments regarding this certificate *****

ALS USA Inc.
4977 Energy Way
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1016 GREG ST
SPARKS NV 89431

Finalized Date: 25- OCT- 2016
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16170310

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5
3767- 01 Tgd (HC- 8) ICP		65	0.9	7.9	60	97.1

***** See Appendix Page for comments regarding this certificate *****

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1016 GREG ST
SPARKS NV 89431

Finalized Date: 25- OCT- 2016
Account: EIM

Project: 3767- 01

CERTIFICATE OF ANALYSIS RE16170310

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

Applies to Method: REE's may not be totally soluble in this method.
ME- MS61

LABORATORY ADDRESSES

Applies to Method: Processed at ALS Reno located at 4977 Energy Way, Reno, NV, USA.
LOG- 24 WEI- 21

Applies to Method: Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
Hg- MS42 ME- MS61

APPENDIX

Section 3 - Energy Lab Reports

ANALYTICAL SUMMARY REPORT

March 18, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16030824 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK:0

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 3/9/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16030824-001	Ynl B EX	03/08/16 9:00	03/09/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16030824-002	Y Gd	03/08/16 9:00	03/09/16	Aqueous	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: Tintina Montana Inc
Project: 3767-01 WK:0
Lab ID: B16030824-001
Client Sample ID: Ynl B EX

Report Date: 03/18/16
Collection Date: 03/08/16 09:00
DateReceived: 03/09/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	3	mg/L		1		E300.0	03/11/16 19:05 / cmb
Sulfate	131	mg/L		1		E300.0	03/11/16 19:05 / cmb
Fluoride	1.9	mg/L		0.2		A4500-F C	03/15/16 13:08 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.011	mg/L	L	0.005		E365.1	03/15/16 09:35 / bas
METALS, DISSOLVED							
Aluminum	0.018	mg/L		0.009		E200.8	03/10/16 13:19 / mas
Antimony	0.0032	mg/L		0.0005		E200.8	03/10/16 13:19 / mas
Arsenic	0.002	mg/L		0.001		E200.8	03/10/16 13:19 / mas
Barium	0.067	mg/L		0.003		E200.7	03/10/16 12:32 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	03/10/16 12:32 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	03/10/16 13:19 / mas
Calcium	44	mg/L		1		E200.7	03/10/16 12:32 / rlh
Chromium	ND	mg/L		0.01		E200.7	03/10/16 12:32 / rlh
Copper	ND	mg/L		0.002		E200.8	03/10/16 13:19 / mas
Iron	ND	mg/L		0.02		E200.7	03/10/16 12:32 / rlh
Lead	ND	mg/L		0.0003		E200.8	03/10/16 13:19 / mas
Magnesium	21	mg/L		1		E200.7	03/10/16 12:32 / rlh
Manganese	ND	mg/L		0.005		E200.7	03/10/16 12:32 / rlh
Mercury	ND	mg/L		5E-06		E245.1	03/10/16 15:24 / ser
Nickel	ND	mg/L		0.002		E200.8	03/10/16 13:19 / mas
Potassium	18	mg/L		1		E200.7	03/10/16 12:32 / rlh
Selenium	0.011	mg/L		0.001		E200.8	03/10/16 13:19 / mas
Silicon	2.81	mg/L		0.05		E200.7	03/10/16 12:32 / rlh
Silver	ND	mg/L		0.0002		E200.8	03/10/16 13:19 / mas
Sodium	9	mg/L		1		E200.7	03/10/16 12:32 / rlh
Strontium	0.19	mg/L		0.02		E200.7	03/10/16 12:32 / rlh
Thallium	ND	mg/L		0.0002		E200.8	03/10/16 13:19 / mas
Uranium	0.0011	mg/L		0.0002		E200.8	03/10/16 13:19 / mas
Zinc	ND	mg/L		0.008		E200.7	03/10/16 12:32 / rlh

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:0
Lab ID: B16030824-002
Client Sample ID: Y Gd

Report Date: 03/18/16
Collection Date: 03/08/16 09:00
DateReceived: 03/09/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	3	mg/L		1		E300.0	03/11/16 19:18 / cmb
Sulfate	5	mg/L		1		E300.0	03/11/16 19:18 / cmb
Fluoride	0.3	mg/L		0.2		A4500-F C	03/15/16 13:11 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.014	mg/L	L	0.005		E365.1	03/15/16 09:36 / bas
METALS, DISSOLVED							
Aluminum	0.034	mg/L		0.009		E200.8	03/10/16 13:22 / mas
Antimony	ND	mg/L		0.0005		E200.8	03/10/16 13:22 / mas
Arsenic	ND	mg/L		0.001		E200.8	03/10/16 13:22 / mas
Barium	0.078	mg/L		0.003		E200.7	03/10/16 12:36 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	03/10/16 12:36 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	03/10/16 13:22 / mas
Calcium	14	mg/L		1		E200.7	03/10/16 12:36 / rlh
Chromium	ND	mg/L		0.01		E200.7	03/10/16 12:36 / rlh
Copper	ND	mg/L		0.002		E200.8	03/10/16 13:22 / mas
Iron	ND	mg/L		0.02		E200.7	03/10/16 12:36 / rlh
Lead	ND	mg/L		0.0003		E200.8	03/10/16 13:22 / mas
Magnesium	3	mg/L		1		E200.7	03/10/16 12:36 / rlh
Manganese	ND	mg/L		0.005		E200.7	03/10/16 12:36 / rlh
Mercury	0.0000225	mg/L		5E-06		E245.1	03/14/16 15:59 / ser
Nickel	ND	mg/L		0.002		E200.8	03/10/16 13:22 / mas
Potassium	3	mg/L		1		E200.7	03/10/16 12:36 / rlh
Selenium	ND	mg/L		0.001		E200.8	03/10/16 13:22 / mas
Silicon	1.67	mg/L		0.05		E200.7	03/10/16 12:36 / rlh
Silver	ND	mg/L		0.0002		E200.8	03/10/16 13:22 / mas
Sodium	7	mg/L		1		E200.7	03/10/16 12:36 / rlh
Strontium	0.05	mg/L		0.02		E200.7	03/10/16 12:36 / rlh
Thallium	ND	mg/L		0.0002		E200.8	03/10/16 13:22 / mas
Uranium	0.0007	mg/L		0.0002		E200.8	03/10/16 13:22 / mas
Zinc	ND	mg/L		0.008		E200.7	03/10/16 12:36 / rlh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/18/16
Project: 3767-01 WK:0
Work Order: B16030824

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**									Analytical Run: MAN-TECH_160315A	
Lab ID: **ICV**	Initial Calibration Verification Standard								03/15/16 11:48	
Fluoride		1.05	mg/L	0.10	105	90	110			
Method: **A4500-F C**									Batch: R258018	
Lab ID: **MBLK**	Method Blank					Run: MAN-TECH_160315A			03/15/16 11:43	
Fluoride		0.03	mg/L	0.03						
Lab ID: **LFB**	Laboratory Fortified Blank					Run: MAN-TECH_160315A			03/15/16 11:56	
Fluoride		0.990	mg/L	0.10	96	90	110			
Lab ID: **B16030809-005AMS**	Sample Matrix Spike					Run: MAN-TECH_160315A			03/15/16 12:52	
Fluoride		1.51	mg/L	0.10	103	80	120			
Lab ID: **B16030809-005AMSD**	Sample Matrix Spike Duplicate					Run: MAN-TECH_160315A			03/15/16 12:55	
Fluoride		1.51	mg/L	0.10	103	80	120	0.0	10	
Lab ID: **B16030916-003AMS**	Sample Matrix Spike					Run: MAN-TECH_160315A			03/15/16 13:35	
Fluoride		1.17	mg/L	0.10	93	80	120			
Lab ID: **B16030916-003AMSD**	Sample Matrix Spike Duplicate					Run: MAN-TECH_160315A			03/15/16 13:38	
Fluoride		1.20	mg/L	0.10	96	80	120	2.5	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/18/16
Project: 3767-01 WK:0
Work Order: B16030824

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC METROHM 2_160311A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							03/11/16 15:54	
Chloride			2.09	mg/L	1.0	93	90	110			
Sulfate			8.72	mg/L	1.0	97	90	110			
Method:	**E300.0**									Batch: R257835	
Lab ID:	**ICB**	2	Method Blank				Run: IC METROHM 2_160311A			03/11/16 16:08	
Chloride			ND	mg/L	0.02						
Sulfate			ND	mg/L	0.2						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC METROHM 2_160311A			03/11/16 16:21	
Chloride			10.1	mg/L	1.0	101	90	110			
Sulfate			30.2	mg/L	1.0	101	90	110			
Lab ID:	**B16030826-001AMS**	2	Sample Matrix Spike				Run: IC METROHM 2_160311A			03/11/16 20:12	
Chloride			1120	mg/L	6.1	104	90	110			
Sulfate			6170	mg/L	18	100	90	110			
Lab ID:	**B16030826-001AMSD**	2	Sample Matrix Spike Duplicate				Run: IC METROHM 2_160311A			03/11/16 20:25	
Chloride			1120	mg/L	6.1	104	90	110	0.1	20	
Sulfate			6200	mg/L	18	101	90	110	0.5	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/18/16
Project: 3767-01 WK:0
Work Order: B16030824

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1										Analytical Run: FIA202-B_160315B
Lab ID: ICV		Initial Calibration Verification Standard								03/15/16 09:26
Phosphorus, Total as P		0.500	mg/L	0.0050	100	90	110			
Method: E365.1										Batch: 97535
Lab ID: MB-97535		Method Blank				Run: FIA202-B_160315B				03/15/16 09:28
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-97535		Laboratory Control Sample				Run: FIA202-B_160315B				03/15/16 09:29
Phosphorus, Total as P		0.197	mg/L	0.0050	99	90	110			
Lab ID: B16030820-001CMS		Sample Matrix Spike				Run: FIA202-B_160315B				03/15/16 09:31
Phosphorus, Total Dissolved as P		0.398	mg/L	0.010	100	90	110			
Lab ID: B16030820-001CMSD		Sample Matrix Spike Duplicate				Run: FIA202-B_160315B				03/15/16 09:32
Phosphorus, Total Dissolved as P		0.394	mg/L	0.010	99	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/18/16
Project: 3767-01 WK:0
Work Order: B16030824

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: ICP203-B_160310A	
Lab ID: ICV	12	Continuing Calibration Verification Standard							03/10/16 09:24	
Barium		2.48	mg/L	0.10	99	95	105			
Beryllium		1.22	mg/L	0.010	98	95	105			
Calcium		25.1	mg/L	1.0	100	95	105			
Chromium		2.48	mg/L	0.050	99	95	105			
Iron		2.49	mg/L	0.020	100	95	105			
Magnesium		25.8	mg/L	1.0	103	95	105			
Manganese		2.41	mg/L	0.010	96	95	105			
Potassium		25.1	mg/L	1.0	100	95	105			
Silicon		4.89	mg/L	0.10	98	95	105			
Sodium		25.1	mg/L	1.0	101	95	105			
Strontium		2.46	mg/L	0.10	99	95	105			
Zinc		2.42	mg/L	0.010	97	95	105			
Method: E200.7									Batch: R257738	
Lab ID: MB-6500DIS160310A	12	Method Blank				Run: ICP203-B_160310A			03/10/16 09:31	
Barium		ND	mg/L	0.0002						
Beryllium		ND	mg/L	0.0001						
Calcium		ND	mg/L	0.08						
Chromium		ND	mg/L	0.003						
Iron		ND	mg/L	0.003						
Magnesium		ND	mg/L	0.006						
Manganese		0.0008	mg/L	0.0006						
Potassium		ND	mg/L	0.04						
Silicon		ND	mg/L	0.01						
Sodium		0.01	mg/L	0.01						
Strontium		ND	mg/L	0.0003						
Zinc		ND	mg/L	0.002						
Lab ID: LFB-6500DIS160310A	12	Laboratory Fortified Blank				Run: ICP203-B_160310A			03/10/16 09:38	
Barium		0.967	mg/L	0.10	97	85	115			
Beryllium		0.495	mg/L	0.010	99	85	115			
Calcium		48.8	mg/L	1.0	98	85	115			
Chromium		0.964	mg/L	0.050	96	85	115			
Iron		4.84	mg/L	0.020	97	85	115			
Magnesium		51.5	mg/L	1.0	103	85	115			
Manganese		4.70	mg/L	0.010	94	85	115			
Potassium		49.1	mg/L	1.0	98	85	115			
Silicon		9.56	mg/L	0.10	96	85	115			
Sodium		49.2	mg/L	1.0	98	85	115			
Strontium		1.00	mg/L	0.10	100	85	115			
Zinc		0.939	mg/L	0.010	94	85	115			
Lab ID: B16030820-002BMS2	12	Sample Matrix Spike				Run: ICP203-B_160310A			03/10/16 12:26	
Barium		0.935	mg/L	0.050	92	70	130			
Beryllium		0.509	mg/L	0.0010	102	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/18/16
Project: 3767-01 WK:0
Work Order: B16030824

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**										Batch: R257738
Lab ID: **B16030820-002BMS2**	12	Sample Matrix Spike				Run: ICP203-B_160310A				03/10/16 12:26
Calcium		69.8	mg/L	1.0	94	70	130			
Chromium		0.928	mg/L	0.0050	93	70	130			
Iron		4.66	mg/L	0.020	93	70	130			
Magnesium		64.1	mg/L	1.0	98	70	130			
Manganese		4.72	mg/L	0.0011	94	70	130			
Potassium		50.5	mg/L	1.0	97	70	130			
Silicon		14.2	mg/L	0.10	94	70	130			
Sodium		50.8	mg/L	1.0	101	70	130			
Strontium		1.18	mg/L	0.010	105	70	130			
Zinc		0.939	mg/L	0.010	94	70	130			
Lab ID: **B16030820-002BMSD**	12	Sample Matrix Spike Duplicate				Run: ICP203-B_160310A				03/10/16 12:29
Barium		0.926	mg/L	0.050	91	70	130	0.9	20	
Beryllium		0.505	mg/L	0.0010	101	70	130	0.9	20	
Calcium		69.3	mg/L	1.0	93	70	130	0.7	20	
Chromium		0.916	mg/L	0.0050	92	70	130	1.3	20	
Iron		4.62	mg/L	0.020	92	70	130	0.8	20	
Magnesium		63.8	mg/L	1.0	97	70	130	0.5	20	
Manganese		4.68	mg/L	0.0011	93	70	130	0.8	20	
Potassium		49.9	mg/L	1.0	96	70	130	1.1	20	
Silicon		14.1	mg/L	0.10	93	70	130	0.8	20	
Sodium		50.1	mg/L	1.0	100	70	130	1.3	20	
Strontium		1.17	mg/L	0.010	104	70	130	0.8	20	
Zinc		0.944	mg/L	0.010	94	70	130	0.6	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/18/16
Project: 3767-01 WK:0
Work Order: B16030824

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS202-B_160310A	
Lab ID: QCS	11	Initial Calibration Verification Standard							03/10/16 09:51	
Aluminum		0.240	mg/L	0.10	96	90	110			
Antimony		0.0494	mg/L	0.050	99	90	110			
Arsenic		0.0494	mg/L	0.0050	99	90	110			
Cadmium		0.0258	mg/L	0.0010	103	90	110			
Copper		0.0501	mg/L	0.010	100	90	110			
Lead		0.0501	mg/L	0.010	100	90	110			
Nickel		0.0505	mg/L	0.010	101	90	110			
Selenium		0.0488	mg/L	0.0050	98	90	110			
Silver		0.0260	mg/L	0.0050	104	90	110			
Thallium		0.0489	mg/L	0.10	98	90	110			
Uranium		0.0196	mg/L	0.0010	98	90	110			
Method: E200.8									Batch: R257775	
Lab ID: LFB	11	Laboratory Fortified Blank				Run: ICPMS202-B_160310A			03/10/16 10:10	
Aluminum		0.0480	mg/L	0.10	96	85	115			
Antimony		0.0458	mg/L	0.050	92	85	115			
Arsenic		0.0488	mg/L	0.0050	98	85	115			
Cadmium		0.0494	mg/L	0.0010	99	85	115			
Copper		0.0503	mg/L	0.010	101	85	115			
Lead		0.0507	mg/L	0.010	101	85	115			
Nickel		0.0497	mg/L	0.010	99	85	115			
Selenium		0.0469	mg/L	0.0050	94	85	115			
Silver		0.0209	mg/L	0.0050	104	85	115			
Thallium		0.0500	mg/L	0.10	100	85	115			
Uranium		0.0487	mg/L	0.0010	97	85	115			
Lab ID: LRB	11	Method Blank				Run: ICPMS202-B_160310A			03/10/16 10:29	
Aluminum		ND	mg/L	0.0004						
Antimony		ND	mg/L	4E-05						
Arsenic		ND	mg/L	9E-05						
Cadmium		ND	mg/L	9E-06						
Copper		ND	mg/L	9E-05						
Lead		ND	mg/L	2E-05						
Nickel		ND	mg/L	9E-05						
Selenium		ND	mg/L	0.0002						
Silver		ND	mg/L	4E-05						
Thallium		ND	mg/L	1E-05						
Uranium		ND	mg/L	1E-05						
Lab ID: B16030817-001BMS	11	Sample Matrix Spike				Run: ICPMS202-B_160310A			03/10/16 12:59	
Aluminum		0.128	mg/L	0.030	83	70	130			
Antimony		0.0462	mg/L	0.0010	91	70	130			
Arsenic		0.0693	mg/L	0.0010	103	70	130			
Cadmium		0.0512	mg/L	0.0010	102	70	130			
Copper		0.0530	mg/L	0.0050	104	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/18/16
Project: 3767-01 WK:0
Work Order: B16030824

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**										Batch: R257775
Lab ID: **B16030817-001BMS**	11	Sample Matrix Spike				Run: ICPMS202-B_160310A				03/10/16 12:59
Lead		0.0517	mg/L	0.0010	102	70	130			
Nickel		0.0496	mg/L	0.0050	99	70	130			
Selenium		0.0544	mg/L	0.0010	107	70	130			
Silver		0.0210	mg/L	0.0010	105	70	130			
Thallium		0.0501	mg/L	0.00050	100	70	130			
Uranium		0.0488	mg/L	0.00030	93	70	130			
Lab ID: **B16030817-001BMSD**	11	Sample Matrix Spike Duplicate				Run: ICPMS202-B_160310A				03/10/16 13:02
Aluminum		0.137	mg/L	0.030	102	70	130	7.2	20	
Antimony		0.0462	mg/L	0.0010	91	70	130	0.1	20	
Arsenic		0.0691	mg/L	0.0010	103	70	130	0.3	20	
Cadmium		0.0509	mg/L	0.0010	102	70	130	0.6	20	
Copper		0.0543	mg/L	0.0050	107	70	130	2.4	20	
Lead		0.0519	mg/L	0.0010	103	70	130	0.5	20	
Nickel		0.0509	mg/L	0.0050	101	70	130	2.4	20	
Selenium		0.0521	mg/L	0.0010	103	70	130	4.2	20	
Silver		0.0205	mg/L	0.0010	103	70	130	2.4	20	
Thallium		0.0503	mg/L	0.00050	101	70	130	0.5	20	
Uranium		0.0494	mg/L	0.00030	94	70	130	1.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/18/16
Project: 3767-01 WK:0
Work Order: B16030824

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV203-B_160310A	
Lab ID: **ICV**	Initial Calibration Verification Standard								03/10/16 11:08	
Mercury		0.000216	mg/L	1.0E-05	108	90	110			
Method: **E245.1**									Batch: 97493	
Lab ID: **MB-97493**	Method Blank					Run: HGCV203-B_160310A			03/10/16 14:58	
Mercury		ND	mg/L	1E-06						
Lab ID: **LCS-97493**	Laboratory Control Sample					Run: HGCV203-B_160310A			03/10/16 15:01	
Mercury		0.000183	mg/L	1.0E-05	92	85	115			
Lab ID: **B16030653-012BMS**	Sample Matrix Spike					Run: HGCV203-B_160310A			03/10/16 15:08	
Mercury		0.000179	mg/L	1.0E-05	90	70	130			
Lab ID: **B16030653-012BMSD**	Sample Matrix Spike Duplicate					Run: HGCV203-B_160310A			03/10/16 15:11	
Mercury		0.000177	mg/L	1.0E-05	89	70	130	1.1	30	
Method: **E245.1**									Analytical Run: HGCV203-B_160314A	
Lab ID: **ICV**	Initial Calibration Verification Standard								03/14/16 14:54	
Mercury		0.000194	mg/L	1.0E-05	97	90	110			
Method: **E245.1**									Batch: 97564	
Lab ID: **MB-97564**	Method Blank					Run: HGCV203-B_160314A			03/14/16 15:49	
Mercury		ND	mg/L	1E-06						
Lab ID: **LCS-97564**	Laboratory Control Sample					Run: HGCV203-B_160314A			03/14/16 15:51	
Mercury		0.000197	mg/L	1.0E-05	98	85	115			
Lab ID: **B16031098-005BMS**	Sample Matrix Spike					Run: HGCV203-B_160314A			03/14/16 16:14	
Mercury		0.000203	mg/L	1.0E-05	102	70	130			
Lab ID: **B16031098-005BMSD**	Sample Matrix Spike Duplicate					Run: HGCV203-B_160314A			03/14/16 16:16	
Mercury		0.000200	mg/L	1.0E-05	100	70	130	1.5	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16030824

Login completed by: Tabitha Edwards
Date Received: 3/9/2016

Reviewed by: BL2000\jmueller
Received by: jlb

Reviewed Date: 3/10/2016
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:	7.4°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:

The collection date and time for Y Gd was recorded from the container label.

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:
McClelland Lab	3767-01 WK:0	State: NV	Yes ☐ No ☐

Report Mail Address:	Contact Name:	Phone/Fax:	Email:	Sampler: (Please Print)
Tintina Resources 200 Granville St. Suite 2560 Vancouver, BC V6C 1S4 Canada	Mike Medina	775-356-1300	MLI@METTEST.COM	Robert Johnson

Invoice Address:	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:
Tintina Resources 200 Granville St. Suite 2560 Vancouver, BC V6C 1S4 Canada	Mr Bob Jacko 604-628-1162		

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT(Electronic Data)
☐ POTW/WWTP Format:_____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

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

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride					SEE ATTACHED	Normal Turnaround (TAT)
1 Ynl B EX	3/8/16	09:00	Water	X	X	X	X					X	X
2 Y Gd				X	X	X	X						
3													
4													
5													
6													
7													
8													
9													
10													

RUSH

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

Comments:

Please Copy results to: B160308 24-001
MLI@METTEST.COM 2 002
hold remaining preserved
samples (frozen) until
further notice.

Shipped by: Robert UPS NDA
Cooler ID(s):
Receipt Temp 7.4 °C
On Ice: (Yes) No
Custody Seal Y N
Intact Y N
Signature Match Y N

LABORATORY USE ONLY

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
JOE CHASEY	3/8/16 9Am				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Sample Disposal: Return to Client: _____ Lab Disposal: _____			Received by Laboratory:	Date/Time: 3/9/16 9:25	Signature:

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.

3767-01
HC-7, 8

Parameter	Required Reporting Value (mg/L)[A]
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-

ANALYTICAL SUMMARY REPORT

March 24, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16031393 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK:1

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 3/16/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16031393-001	Ynl B EX	03/15/16 9:00	03/16/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16031393-002	Y Gd	03/15/16 9:00	03/16/16	Aqueous	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: Tintina Montana Inc
Project: 3767-01 WK:1
Report Date: 03/24/16

Lab ID: B16031393-001
Client Sample ID: Ynl B EX
Collection Date: 03/15/16 09:00
DateReceived: 03/16/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	03/18/16 21:10 / jpv
Sulfate	121	mg/L		1		E300.0	03/18/16 21:10 / jpv
Fluoride	1.9	mg/L		0.2		A4500-F C	03/18/16 16:14 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.006	mg/L	L	0.005		E365.1	03/21/16 10:34 / bas
METALS, DISSOLVED							
Aluminum	0.028	mg/L		0.009		E200.8	03/18/16 16:30 / mas
Antimony	0.0022	mg/L		0.0005		E200.8	03/18/16 16:30 / mas
Arsenic	0.004	mg/L		0.001		E200.8	03/18/16 16:30 / mas
Barium	0.044	mg/L		0.003		E200.7	03/17/16 17:59 / mas
Beryllium	ND	mg/L		0.0008		E200.7	03/17/16 17:59 / mas
Cadmium	ND	mg/L		0.00003		E200.8	03/18/16 16:30 / mas
Calcium	35	mg/L		1		E200.7	03/17/16 17:59 / mas
Chromium	ND	mg/L		0.01		E200.7	03/17/16 17:59 / mas
Copper	ND	mg/L		0.002		E200.8	03/18/16 16:30 / mas
Iron	ND	mg/L		0.02		E200.7	03/17/16 17:59 / mas
Lead	0.0007	mg/L		0.0003		E200.8	03/18/16 16:30 / mas
Magnesium	20	mg/L		1		E200.7	03/17/16 17:59 / mas
Manganese	0.008	mg/L		0.005		E200.7	03/17/16 17:59 / mas
Mercury	ND	mg/L		5E-06		E245.1	03/18/16 14:45 / ser
Nickel	ND	mg/L		0.002		E200.8	03/18/16 16:30 / mas
Potassium	13	mg/L		1		E200.7	03/17/16 17:59 / mas
Selenium	0.009	mg/L		0.001		E200.8	03/18/16 16:30 / mas
Silicon	3.88	mg/L		0.05		E200.7	03/17/16 17:59 / mas
Silver	ND	mg/L		0.0002		E200.8	03/18/16 16:30 / mas
Sodium	3	mg/L		1		E200.7	03/17/16 17:59 / mas
Strontium	0.14	mg/L		0.02		E200.7	03/17/16 17:59 / mas
Thallium	ND	mg/L		0.0002		E200.8	03/18/16 16:30 / mas
Uranium	0.0014	mg/L		0.0002		E200.8	03/18/16 16:30 / mas
Zinc	ND	mg/L		0.008		E200.7	03/17/16 17:59 / mas

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:1
Report Date: 03/24/16

Lab ID: B16031393-002
Client Sample ID: Y Gd
Collection Date: 03/15/16 09:00
DateReceived: 03/16/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	03/18/16 21:24 / jpv
Sulfate	7	mg/L		1		E300.0	03/18/16 21:24 / jpv
Fluoride	0.3	mg/L		0.2		A4500-F C	03/18/16 16:23 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.008	mg/L	L	0.005		E365.1	03/21/16 10:35 / bas
METALS, DISSOLVED							
Aluminum	0.044	mg/L		0.009		E200.8	03/18/16 16:33 / mas
Antimony	ND	mg/L		0.0005		E200.8	03/18/16 16:33 / mas
Arsenic	0.002	mg/L		0.001		E200.8	03/18/16 16:33 / mas
Barium	0.059	mg/L		0.003		E200.7	03/17/16 18:02 / mas
Beryllium	ND	mg/L		0.0008		E200.7	03/17/16 18:02 / mas
Cadmium	ND	mg/L		0.00003		E200.8	03/18/16 16:33 / mas
Calcium	9	mg/L		1		E200.7	03/17/16 18:02 / mas
Chromium	ND	mg/L		0.01		E200.7	03/17/16 18:02 / mas
Copper	ND	mg/L		0.002		E200.8	03/18/16 16:33 / mas
Iron	ND	mg/L		0.02		E200.7	03/17/16 18:02 / mas
Lead	ND	mg/L		0.0003		E200.8	03/18/16 16:33 / mas
Magnesium	2	mg/L		1		E200.7	03/17/16 18:02 / mas
Manganese	ND	mg/L		0.005		E200.7	03/17/16 18:02 / mas
Mercury	5.2E-06	mg/L		5E-06		E245.1	03/21/16 15:48 / ser
Nickel	ND	mg/L		0.002		E200.8	03/18/16 16:33 / mas
Potassium	3	mg/L		1		E200.7	03/17/16 18:02 / mas
Selenium	ND	mg/L		0.001		E200.8	03/18/16 16:33 / mas
Silicon	2.36	mg/L		0.05		E200.7	03/17/16 18:02 / mas
Silver	ND	mg/L		0.0002		E200.8	03/18/16 16:33 / mas
Sodium	6	mg/L		1		E200.7	03/17/16 18:02 / mas
Strontium	0.04	mg/L		0.02		E200.7	03/17/16 18:02 / mas
Thallium	ND	mg/L		0.0002		E200.8	03/18/16 16:33 / mas
Uranium	0.0015	mg/L		0.0002		E200.8	03/18/16 16:33 / mas
Zinc	ND	mg/L		0.008		E200.7	03/17/16 18:02 / mas

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/24/16
Project: 3767-01 WK:1
Work Order: B16031393

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**									Analytical Run: MAN-TECH_160318A	
Lab ID: **ICV**	Initial Calibration Verification Standard								03/18/16 15:42	
Fluoride		1.02	mg/L	0.10	102	90	110			
Method: **A4500-F C**									Batch: R258247	
Lab ID: **MBLK**	Method Blank					Run: MAN-TECH_160318A			03/18/16 15:37	
Fluoride		0.03	mg/L	0.03						
Lab ID: **LFB**	Laboratory Fortified Blank					Run: MAN-TECH_160318A			03/18/16 15:39	
Fluoride		0.930	mg/L	0.10	90	90	110			
Lab ID: **B16031393-002AMS**	Sample Matrix Spike					Run: MAN-TECH_160318A			03/18/16 16:26	
Fluoride		1.36	mg/L	0.10	103	80	120			
Lab ID: **B16031393-002AMSD**	Sample Matrix Spike Duplicate					Run: MAN-TECH_160318A			03/18/16 16:28	
Fluoride		1.36	mg/L	0.10	103	80	120	0.0	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/24/16
Project: 3767-01 WK:1
Work Order: B16031393

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: ICP203-B_160317A	
Lab ID: ICV	12	Continuing Calibration Verification Standard							03/17/16 10:43	
Barium		2.50	mg/L	0.10	100	95	105			
Beryllium		1.29	mg/L	0.010	104	95	105			
Calcium		25.1	mg/L	1.0	100	95	105			
Chromium		2.51	mg/L	0.050	100	95	105			
Iron		2.51	mg/L	0.020	100	95	105			
Magnesium		26.3	mg/L	1.0	105	95	105			
Manganese		2.51	mg/L	0.010	101	95	105			
Potassium		25.2	mg/L	1.0	101	95	105			
Silicon		5.12	mg/L	0.10	102	95	105			
Sodium		25.4	mg/L	1.0	101	95	105			
Strontium		2.59	mg/L	0.10	104	95	105			
Zinc		2.55	mg/L	0.010	102	95	105			
Method: E200.7									Batch: R258127	
Lab ID: MB-6500DIS160317A	12	Method Blank				Run: ICP203-B_160317A			03/17/16 10:50	
Barium		ND	mg/L	0.0002						
Beryllium		ND	mg/L	0.0001						
Calcium		ND	mg/L	0.08						
Chromium		ND	mg/L	0.003						
Iron		ND	mg/L	0.003						
Magnesium		ND	mg/L	0.006						
Manganese		ND	mg/L	0.0006						
Potassium		ND	mg/L	0.04						
Silicon		ND	mg/L	0.01						
Sodium		ND	mg/L	0.01						
Strontium		ND	mg/L	0.0003						
Zinc		ND	mg/L	0.002						
Lab ID: LFB-6500DIS160317A	12	Laboratory Fortified Blank				Run: ICP203-B_160317A			03/17/16 10:57	
Barium		1.02	mg/L	0.10	102	85	115			
Beryllium		0.542	mg/L	0.010	108	85	115			
Calcium		50.9	mg/L	1.0	102	85	115			
Chromium		1.01	mg/L	0.050	101	85	115			
Iron		5.06	mg/L	0.020	101	85	115			
Magnesium		51.2	mg/L	1.0	102	85	115			
Manganese		5.12	mg/L	0.010	102	85	115			
Potassium		50.6	mg/L	1.0	101	85	115			
Silicon		10.2	mg/L	0.10	102	85	115			
Sodium		50.7	mg/L	1.0	101	85	115			
Strontium		1.09	mg/L	0.10	109	85	115			
Zinc		1.01	mg/L	0.010	101	85	115			
Lab ID: B16031390-001CMS2	12	Sample Matrix Spike				Run: ICP203-B_160317A			03/17/16 17:41	
Barium		0.921	mg/L	0.050	90	70	130			
Beryllium		0.458	mg/L	0.0010	92	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/24/16
Project: 3767-01 WK:1
Work Order: B16031393

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**										Batch: R258127
Lab ID: **B16031390-001CMS2**	12	Sample Matrix Spike				Run: ICP203-B_160317A				03/17/16 17:41
Calcium		69.0	mg/L	1.0	91	70	130			
Chromium		0.908	mg/L	0.0050	91	70	130			
Iron		4.57	mg/L	0.020	91	70	130			
Magnesium		53.1	mg/L	1.0	93	70	130			
Manganese		4.53	mg/L	0.0010	91	70	130			
Potassium		46.4	mg/L	1.0	92	70	130			
Silicon		13.2	mg/L	0.10	96	70	130			
Sodium		47.2	mg/L	1.0	92	70	130			
Strontium		1.02	mg/L	0.010	92	70	130			
Zinc		0.930	mg/L	0.010	93	70	130			
Lab ID: **B16031390-001CMSD**	12	Sample Matrix Spike Duplicate				Run: ICP203-B_160317A				03/17/16 17:45
Barium		0.966	mg/L	0.050	95	70	130	4.8	20	
Beryllium		0.484	mg/L	0.0010	97	70	130	5.6	20	
Calcium		72.1	mg/L	1.0	97	70	130	4.3	20	
Chromium		0.958	mg/L	0.0050	96	70	130	5.4	20	
Iron		4.83	mg/L	0.020	97	70	130	5.5	20	
Magnesium		55.9	mg/L	1.0	99	70	130	5.2	20	
Manganese		4.78	mg/L	0.0010	96	70	130	5.3	20	
Potassium		48.6	mg/L	1.0	96	70	130	4.7	20	
Silicon		13.2	mg/L	0.10	97	70	130	0.5	20	
Sodium		49.3	mg/L	1.0	96	70	130	4.4	20	
Strontium		1.07	mg/L	0.010	97	70	130	4.9	20	
Zinc		0.959	mg/L	0.010	96	70	130	3.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/24/16
Project: 3767-01 WK:1
Work Order: B16031393

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS202-B_160318A	
Lab ID: QCS	11	Initial Calibration Verification Standard							03/18/16 14:54	
Aluminum		0.226	mg/L	0.10	90	90	110			
Antimony		0.0485	mg/L	0.050	97	90	110			
Arsenic		0.0502	mg/L	0.0050	100	90	110			
Cadmium		0.0247	mg/L	0.0010	99	90	110			
Copper		0.0519	mg/L	0.010	104	90	110			
Lead		0.0497	mg/L	0.010	99	90	110			
Nickel		0.0521	mg/L	0.010	104	90	110			
Selenium		0.0497	mg/L	0.0050	99	90	110			
Silver		0.0258	mg/L	0.0050	103	90	110			
Thallium		0.0489	mg/L	0.10	98	90	110			
Uranium		0.0192	mg/L	0.0010	96	90	110			
Method: E200.8									Batch: R258211	
Lab ID: LFB	11	Laboratory Fortified Blank				Run: ICPMS202-B_160318A			03/18/16 12:01	
Aluminum		0.0435	mg/L	0.10	87	85	115			
Antimony		0.0483	mg/L	0.050	97	85	115			
Arsenic		0.0479	mg/L	0.0050	96	85	115			
Cadmium		0.0497	mg/L	0.0010	99	85	115			
Copper		0.0526	mg/L	0.010	105	85	115			
Lead		0.0488	mg/L	0.010	98	85	115			
Nickel		0.0498	mg/L	0.010	100	85	115			
Selenium		0.0494	mg/L	0.0050	99	85	115			
Silver		0.0212	mg/L	0.0050	106	85	115			
Thallium		0.0483	mg/L	0.10	97	85	115			
Uranium		0.0481	mg/L	0.0010	96	85	115			
Lab ID: LRB	11	Method Blank				Run: ICPMS202-B_160318A			03/18/16 12:26	
Aluminum		ND	mg/L	0.0004						
Antimony		ND	mg/L	4E-05						
Arsenic		ND	mg/L	9E-05						
Cadmium		ND	mg/L	9E-06						
Copper		ND	mg/L	9E-05						
Lead		ND	mg/L	2E-05						
Nickel		ND	mg/L	9E-05						
Selenium		ND	mg/L	0.0002						
Silver		ND	mg/L	4E-05						
Thallium		ND	mg/L	1E-05						
Uranium		ND	mg/L	1E-05						
Lab ID: B16031397-002CMS	11	Sample Matrix Spike				Run: ICPMS202-B_160318A			03/18/16 16:39	
Aluminum		0.0394	mg/L	0.030	77	70	130			
Antimony		0.0500	mg/L	0.0010	100	70	130			
Arsenic		0.0538	mg/L	0.0010	107	70	130			
Cadmium		0.0489	mg/L	0.0010	98	70	130			
Copper		0.0495	mg/L	0.0050	99	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/24/16
Project: 3767-01 WK:1
Work Order: B16031393

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**										Batch: R258211
Lab ID: **B16031397-002CMS**	11	Sample Matrix Spike				Run: ICPMS202-B_160318A				03/18/16 16:39
Lead		0.0519	mg/L	0.0010	104	70	130			
Nickel		0.0520	mg/L	0.0050	103	70	130			
Selenium		0.0532	mg/L	0.0010	105	70	130			
Silver		0.0171	mg/L	0.0010	85	70	130			
Thallium		0.0512	mg/L	0.00050	102	70	130			
Uranium		0.0537	mg/L	0.00030	107	70	130			
Lab ID: **B16031397-002CMSD**	11	Sample Matrix Spike Duplicate				Run: ICPMS202-B_160318A				03/18/16 16:41
Aluminum		0.0415	mg/L	0.030	81	70	130	5.3	20	
Antimony		0.0534	mg/L	0.0010	107	70	130	6.4	20	
Arsenic		0.0555	mg/L	0.0010	110	70	130	3.2	20	
Cadmium		0.0518	mg/L	0.0010	104	70	130	5.7	20	
Copper		0.0528	mg/L	0.0050	106	70	130	6.3	20	
Lead		0.0540	mg/L	0.0010	108	70	130	4.0	20	
Nickel		0.0534	mg/L	0.0050	105	70	130	2.6	20	
Selenium		0.0566	mg/L	0.0010	112	70	130	6.3	20	
Silver		0.0183	mg/L	0.0010	92	70	130	7.1	20	
Thallium		0.0531	mg/L	0.00050	106	70	130	3.7	20	
Uranium		0.0561	mg/L	0.00030	112	70	130	4.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/24/16
Project: 3767-01 WK:1
Work Order: B16031393

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV202-B_160321A	
Lab ID: **ICV**	Initial Calibration Verification Standard								03/21/16 15:32	
Mercury		0.000205	mg/L	1.0E-05	103	90	110			
Method: **E245.1**									Batch: 97754	
Lab ID: **MB-97754**	Method Blank					Run: HGCV202-B_160321A			03/21/16 15:42	
Mercury		7E-07	mg/L							
Lab ID: **LCS-97754**	Laboratory Control Sample					Run: HGCV202-B_160321A			03/21/16 15:46	
Mercury		0.000205	mg/L	1.0E-05	102	85	115			
Lab ID: **B16031599-004BMS**	Sample Matrix Spike					Run: HGCV202-B_160321A			03/21/16 16:05	
Mercury		0.000199	mg/L	1.0E-05	98	70	130			
Lab ID: **B16031599-004BMSD**	Sample Matrix Spike Duplicate					Run: HGCV202-B_160321A			03/21/16 16:07	
Mercury		0.000207	mg/L	1.0E-05	102	70	130	3.6	30	
Method: **E245.1**									Analytical Run: HGCV203-B_160318A	
Lab ID: **ICV**	Initial Calibration Verification Standard								03/18/16 13:27	
Mercury		0.000205	mg/L	1.0E-05	103	90	110			
Method: **E245.1**									Batch: 97677	
Lab ID: **MB-97677**	Method Blank					Run: HGCV203-B_160318A			03/18/16 14:40	
Mercury		ND	mg/L	1E-06						
Lab ID: **LCS-97677**	Laboratory Control Sample					Run: HGCV203-B_160318A			03/18/16 14:43	
Mercury		0.000202	mg/L	1.0E-05	101	85	115			
Lab ID: **B16031409-005BMS**	Sample Matrix Spike					Run: HGCV203-B_160318A			03/18/16 15:16	
Mercury		0.000200	mg/L	1.0E-05	99	70	130			
Lab ID: **B16031409-005BMSD**	Sample Matrix Spike Duplicate					Run: HGCV203-B_160318A			03/18/16 15:19	
Mercury		0.000205	mg/L	1.0E-05	102	70	130	2.5	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/24/16
Project: 3767-01 WK:1
Work Order: B16031393

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC METROHM 2_160318A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							03/18/16 10:09	
Chloride			2.08	mg/L	1.0	92	90	110			
Sulfate			8.65	mg/L	1.0	96	90	110			
Method:	**E300.0**									Batch: R258224	
Lab ID:	**ICB**	2	Method Blank				Run: IC METROHM 2_160318A			03/18/16 10:22	
Chloride			ND	mg/L	0.02						
Sulfate			ND	mg/L	0.2						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC METROHM 2_160318A			03/18/16 10:36	
Chloride			10.3	mg/L	1.0	103	90	110			
Sulfate			30.9	mg/L	1.0	103	90	110			
Lab ID:	**B16031390-004AMS**	2	Sample Matrix Spike				Run: IC METROHM 2_160318A			03/18/16 20:43	
Chloride			20.9	mg/L	1.0	103	90	110			
Sulfate			71.9	mg/L	1.0	104	90	110			
Lab ID:	**B16031390-004AMSD**	2	Sample Matrix Spike Duplicate				Run: IC METROHM 2_160318A			03/18/16 20:57	
Chloride			21.1	mg/L	1.0	104	90	110	1.0	20	
Sulfate			72.5	mg/L	1.0	105	90	110	0.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 03/24/16
Project: 3767-01 WK:1
Work Order: B16031393

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1										Analytical Run: FIA202-B_160321A
Lab ID: ICV		Initial Calibration Verification Standard								03/21/16 09:27
Phosphorus, Total as P		0.496	mg/L	0.0050	99	90	110			
Method: E365.1										Batch: 97729
Lab ID: MB-97729		Method Blank				Run: FIA202-B_160321A				03/21/16 10:01
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-97729		Laboratory Control Sample				Run: FIA202-B_160321A				03/21/16 10:02
Phosphorus, Total as P		0.193	mg/L	0.0050	97	90	110			
Lab ID: B16031393-002CMS		Sample Matrix Spike				Run: FIA202-B_160321A				03/21/16 10:36
Phosphorus, Total Dissolved as P		0.201	mg/L	0.0050	97	90	110			
Lab ID: B16031393-002CMSD		Sample Matrix Spike Duplicate				Run: FIA202-B_160321A				03/21/16 10:37
Phosphorus, Total Dissolved as P		0.202	mg/L	0.0050	97	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16031393

Login completed by: Leslie S. Cadreau
Date Received: 3/16/2016

Reviewed by: BL2000\jmueller
Received by: dlf

Reviewed Date: 3/17/2016
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:	4.8°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:

See attached marked on the Chain of Custody but no attachment was received. Per phone call to Mike Medina, analyze same as history plus added analytes listed on the Chain of Custody.

Collection date/time of 03/15/16 at 09:00 for sample Y Gd taken from sample containers.

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:
McClelland Lab	3767-01 WK:1	State: NV	Yes ☐ No ☐

Report Mail Address:	Contact Name:	Phone/Fax:	Email:	Sampler: (Please Print)
Tintina Resources 200 Granville St. Suite 2560 Vancouver, BC V6C 1S4 Canada	Mike Medina	775-356-1300	MLI@METTEST.COM	Robert Johnson

Invoice Address:	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:
Tintina Resources 200 Granville St. Suite 2560 Vancouver, BC V6C 1S4 Canada	Mr Bob Jacko 604-628-1162		

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

- ☐ DW
- ☐ GSA
- ☐ POTW/WWTP
- ☐ State: _____
- ☐ Other: _____
- ☐ A2LA
- ☐ EDD/EDT(Electronic Data) Format: _____
- ☐ LEVEL IV
- ☐ NELAC

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

ANALYSIS REQUESTED

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride					SEE ATTACHED	Normal Turnaround (TAT)
1	Ynl B EX	3/15/16	09:00	Water	X	X	X	X					X	X
2	Y Gd				X	X	X	X						
3														
4														
5														
6														
7														
8														
9														
10														

RUSH

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

Comments:

B160031393

Please Copy results to: -001

MLI@METTEST.COM -002

hold remaining preserved samples (frozen) until further notice.

Shipped by: Robert UPS NDA

Cooler ID(s):

Receipt Temp 4.8 °C

On Ice: (Yes) No

Custody Seal (Y) N

Intact (Y) N

Signature Match (Y) N

LABORATORY USE ONLY

Custody Record MUST be Signed

	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
	JOE CHANEY	3/15/16 9Am				
	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
				Received by Laboratory:	Date/Time:	Signature:
				3/16/16	0915	

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

April 01, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16031896 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK:2

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 3/23/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16031896-001	Ynl B EX	03/22/16 9:00	03/23/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16031896-002	Y Gd	03/22/16 9:00	03/23/16	Aqueous	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: Tintina Montana Inc
Project: 3767-01 WK:2
Lab ID: B16031896-001
Client Sample ID: Ynl B EX

Report Date: 04/01/16
Collection Date: 03/22/16 09:00
DateReceived: 03/23/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	03/25/16 15:51 / cmb
Sulfate	74	mg/L		1		E300.0	03/25/16 15:51 / cmb
Fluoride	1.9	mg/L		0.2		A4500-F C	03/28/16 16:32 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	ND	mg/L	L	0.005		E365.1	04/01/16 09:31 / bas
METALS, DISSOLVED							
Aluminum	0.037	mg/L		0.009		E200.8	03/25/16 14:08 / mas
Antimony	0.0023	mg/L		0.0005		E200.8	03/25/16 14:08 / mas
Arsenic	0.007	mg/L		0.001		E200.8	03/25/16 14:08 / mas
Barium	0.044	mg/L		0.003		E200.8	03/24/16 13:07 / mas
Beryllium	ND	mg/L		0.0008		E200.8	03/24/16 13:07 / mas
Cadmium	ND	mg/L		0.00003		E200.8	03/24/16 13:07 / mas
Calcium	24	mg/L		1		E200.8	03/24/16 13:07 / mas
Chromium	ND	mg/L		0.01		E200.8	03/25/16 14:08 / mas
Copper	ND	mg/L		0.002		E200.8	03/25/16 14:08 / mas
Iron	ND	mg/L		0.02		E200.7	03/25/16 14:36 / rlh
Lead	0.0006	mg/L		0.0003		E200.8	03/24/16 13:07 / mas
Magnesium	15	mg/L		1		E200.8	03/25/16 14:08 / mas
Manganese	0.007	mg/L		0.005		E200.8	03/24/16 13:07 / mas
Mercury	ND	mg/L		5E-06		E245.1	03/25/16 13:18 / ser
Nickel	ND	mg/L		0.002		E200.8	03/25/16 14:08 / mas
Potassium	10	mg/L		1		E200.8	03/25/16 14:08 / mas
Selenium	0.005	mg/L		0.001		E200.8	03/25/16 14:08 / mas
Silicon	3.32	mg/L		0.05		E200.8	03/24/16 13:07 / mas
Silver	ND	mg/L		0.0002		E200.8	03/24/16 13:07 / mas
Sodium	2	mg/L		1		E200.8	03/25/16 14:08 / mas
Strontium	0.11	mg/L		0.02		E200.8	03/25/16 14:08 / mas
Thallium	ND	mg/L		0.0002		E200.8	03/24/16 13:07 / mas
Uranium	0.0010	mg/L		0.0002		E200.8	03/24/16 13:07 / mas
Zinc	ND	mg/L		0.008		E200.8	03/25/16 14:08 / mas

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:2
Lab ID: B16031896-002
Client Sample ID: Y Gd

Report Date: 04/01/16
Collection Date: 03/22/16 09:00
DateReceived: 03/23/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	03/25/16 02:35 / cmb
Sulfate	5	mg/L		1		E300.0	03/25/16 02:35 / cmb
Fluoride	0.3	mg/L		0.2		A4500-F C	03/28/16 16:34 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	ND	mg/L	L	0.005		E365.1	04/01/16 09:34 / bas
METALS, DISSOLVED							
Aluminum	0.063	mg/L		0.009		E200.8	03/25/16 14:11 / mas
Antimony	ND	mg/L		0.0005		E200.8	03/25/16 14:11 / mas
Arsenic	0.005	mg/L		0.001		E200.8	03/24/16 13:10 / mas
Barium	0.046	mg/L		0.003		E200.8	03/24/16 13:10 / mas
Beryllium	ND	mg/L		0.0008		E200.8	03/24/16 13:10 / mas
Cadmium	ND	mg/L		0.00003		E200.8	03/24/16 13:10 / mas
Calcium	7	mg/L		1		E200.8	03/24/16 13:10 / mas
Chromium	ND	mg/L		0.01		E200.8	03/24/16 13:10 / mas
Copper	ND	mg/L		0.002		E200.8	03/24/16 13:10 / mas
Iron	0.02	mg/L		0.02		E200.8	03/24/16 13:10 / mas
Lead	0.0009	mg/L		0.0003		E200.8	03/24/16 13:10 / mas
Magnesium	1	mg/L		1		E200.8	03/24/16 13:10 / mas
Manganese	ND	mg/L		0.005		E200.8	03/24/16 13:10 / mas
Mercury	ND	mg/L		5E-06		E245.1	03/31/16 14:51 / ser
Nickel	ND	mg/L		0.002		E200.8	03/24/16 13:10 / mas
Potassium	2	mg/L		1		E200.8	03/24/16 13:10 / mas
Selenium	ND	mg/L		0.001		E200.8	03/24/16 13:10 / mas
Silicon	1.95	mg/L		0.05		E200.8	03/24/16 13:10 / mas
Silver	ND	mg/L		0.0002		E200.8	03/24/16 13:10 / mas
Sodium	4	mg/L		1		E200.8	03/24/16 13:10 / mas
Strontium	0.03	mg/L		0.02		E200.8	03/25/16 14:11 / mas
Thallium	ND	mg/L		0.0002		E200.8	03/24/16 13:10 / mas
Uranium	0.0010	mg/L		0.0002		E200.8	03/24/16 13:10 / mas
Zinc	ND	mg/L		0.008		E200.8	03/24/16 13:10 / mas

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:2

Report Date: 04/01/16
Work Order: B16031896

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**								Analytical Run: MAN-TECH_160328A	
Lab ID: **ICV**	Initial Calibration Verification Standard							03/28/16 15:28	
Fluoride	1.01	mg/L	0.10	101	90	110			
Method: **A4500-F C**								Batch: R258684	
Lab ID: **MBLK**	Method Blank				Run: MAN-TECH_160328A			03/28/16 15:21	
Fluoride	ND	mg/L	0.03						
Lab ID: **LFB**	Laboratory Fortified Blank				Run: MAN-TECH_160328A			03/28/16 15:25	
Fluoride	0.910	mg/L	0.10	91	90	110			
Lab ID: **B16031888-002AMS**	Sample Matrix Spike				Run: MAN-TECH_160328A			03/28/16 16:09	
Fluoride	1.23	mg/L	0.10	102	80	120			
Lab ID: **B16031888-002AMSD**	Sample Matrix Spike Duplicate				Run: MAN-TECH_160328A			03/28/16 16:11	
Fluoride	1.23	mg/L	0.10	102	80	120	0.0	10	
Lab ID: **B16031920-001AMS**	Sample Matrix Spike				Run: MAN-TECH_160328A			03/28/16 16:50	
Fluoride	1.11	mg/L	0.10	99	80	120			
Lab ID: **B16031920-001AMSD**	Sample Matrix Spike Duplicate				Run: MAN-TECH_160328A			03/28/16 16:53	
Fluoride	1.12	mg/L	0.10	100	80	120	0.9	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:2

Report Date: 04/01/16
Work Order: B16031896

Analyte		Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**								Analytical Run: IC METROHM 1_160324A	
Lab ID:	**ICV**	Initial Calibration Verification Standard							03/24/16 12:26	
Chloride		2.10	mg/L	1.0	94	90	110			
Sulfate		8.80	mg/L	1.0	98	90	110			
Method:	**E300.0**								Batch: R258566	
Lab ID:	**ICB**	Method Blank				Run: IC METROHM 1_160324A			03/24/16 12:39	
Chloride		ND	mg/L	0.02						
Sulfate		ND	mg/L	0.2						
Lab ID:	**LFB**	Laboratory Fortified Blank				Run: IC METROHM 1_160324A			03/24/16 12:52	
Chloride		10.0	mg/L	1.0	100	90	110			
Sulfate		29.8	mg/L	1.0	99	90	110			
Lab ID:	**B16031933-004AMS**	Sample Matrix Spike				Run: IC METROHM 1_160324A			03/25/16 03:42	
Chloride		154	mg/L	1.0	106	90	110			
Sulfate		478	mg/L	1.8	104	90	110			
Lab ID:	**B16031933-004AMSD**	Sample Matrix Spike Duplicate				Run: IC METROHM 1_160324A			03/25/16 03:56	
Chloride		155	mg/L	1.0	107	90	110	0.5	20	
Sulfate		480	mg/L	1.8	105	90	110	0.5	20	
Method:	**E300.0**								Analytical Run: IC METROHM 1_160325A	
Lab ID:	**ICV**	Initial Calibration Verification Standard							03/25/16 12:51	
Chloride		2.11	mg/L	1.0	94	90	110			
Sulfate		8.81	mg/L	1.0	98	90	110			
Method:	**E300.0**								Batch: R258640	
Lab ID:	**ICB**	Method Blank				Run: IC METROHM 1_160325A			03/25/16 13:05	
Chloride		ND	mg/L	0.02						
Sulfate		ND	mg/L	0.2						
Lab ID:	**LFB**	Laboratory Fortified Blank				Run: IC METROHM 1_160325A			03/25/16 13:18	
Chloride		10.1	mg/L	1.0	101	90	110			
Sulfate		30.0	mg/L	1.0	100	90	110			
Lab ID:	**B16031938-002AMS**	Sample Matrix Spike				Run: IC METROHM 1_160325A			03/25/16 16:58	
Chloride		573	mg/L	3.0	104	90	110			
Sulfate		3260	mg/L	9.1	99	90	110			
Lab ID:	**B16031938-002AMSD**	Sample Matrix Spike Duplicate				Run: IC METROHM 1_160325A			03/25/16 17:12	
Chloride		575	mg/L	3.0	104	90	110	0.4	20	
Sulfate		3230	mg/L	9.1	97	90	110	0.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/01/16
Project: 3767-01 WK:2
Work Order: B16031896

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1									Analytical Run: FIA202-B_160401B
Lab ID: ICV	Initial Calibration Verification Standard								04/01/16 09:21
Phosphorus, Total as P	0.517	mg/L	0.0050	103	90	110			
Method: E365.1									Batch: 98082
Lab ID: MB-98082	Method Blank				Run: FIA202-B_160401B				04/01/16 09:23
Phosphorus, Total as P	ND	mg/L	0.002						
Lab ID: LCS-98082	Laboratory Control Sample				Run: FIA202-B_160401B				04/01/16 09:24
Phosphorus, Total as P	0.198	mg/L	0.0050	99	90	110			
Lab ID: B16031896-001CMS	Sample Matrix Spike				Run: FIA202-B_160401B				04/01/16 09:32
Phosphorus, Total Dissolved as P	0.194	mg/L	0.0050	97	90	110			
Lab ID: B16031896-001CMSD	Sample Matrix Spike Duplicate				Run: FIA202-B_160401B				04/01/16 09:33
Phosphorus, Total Dissolved as P	0.193	mg/L	0.0050	97	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/01/16
Project: 3767-01 WK:2
Work Order: B16031896

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**									Analytical Run: ICP203-B_160325A	
Lab ID: **ICV**		Continuing Calibration Verification Standard							03/25/16 09:07	
Iron		2.47	mg/L	0.020	99	95	105			
Method: **E200.7**									Batch: R258576	
Lab ID: **MB-6500DIS160325A**		Method Blank				Run: ICP203-B_160325A			03/25/16 09:14	
Iron		0.002	mg/L	0.002						
Lab ID: **LFB-6500DIS160325A**		Laboratory Fortified Blank				Run: ICP203-B_160325A			03/25/16 09:21	
Iron		5.05	mg/L	0.020	101	85	115			
Lab ID: **B16031893-001BMS2**		Sample Matrix Spike				Run: ICP203-B_160325A			03/25/16 14:15	
Iron		25.7	mg/L	0.020	103	70	130			
Lab ID: **B16031893-001BMSD**		Sample Matrix Spike Duplicate				Run: ICP203-B_160325A			03/25/16 14:19	
Iron		26.2	mg/L	0.020	105	70	130	1.9	20	
Lab ID: **B16031938-005BMS2**		Sample Matrix Spike				Run: ICP203-B_160325A			03/25/16 15:04	
Iron		25.4	mg/L	0.020	102	70	130			
Lab ID: **B16031938-005BMSD**		Sample Matrix Spike Duplicate				Run: ICP203-B_160325A			03/25/16 15:14	
Iron		25.0	mg/L	0.020	100	70	130	1.8	20	
Lab ID: **B16031888-003BMS2**		Sample Matrix Spike				Run: ICP203-B_160325A			03/25/16 17:14	
Iron		4.75	mg/L	0.020	95	70	130			
Lab ID: **B16031888-003BMSD**		Sample Matrix Spike Duplicate				Run: ICP203-B_160325A			03/25/16 17:17	
Iron		5.09	mg/L	0.020	102	70	130	6.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/01/16
Project: 3767-01 WK:2
Work Order: B16031896

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS206-B_160324A	
Lab ID: QCS	20	Initial Calibration Verification Standard							03/24/16 10:16	
Arsenic		0.0521	mg/L	0.0050	104	90	110			
Barium		0.0499	mg/L	0.10	100	90	110			
Beryllium		0.0249	mg/L	0.0010	99	90	110			
Cadmium		0.0256	mg/L	0.0010	103	90	110			
Calcium		2.65	mg/L	0.50	106	90	110			
Chromium		0.0497	mg/L	0.010	99	90	110			
Copper		0.0522	mg/L	0.010	104	90	110			
Iron		0.255	mg/L	0.020	102	90	110			
Lead		0.0499	mg/L	0.010	100	90	110			
Magnesium		2.64	mg/L	0.50	106	90	110			
Manganese		0.254	mg/L	0.010	102	90	110			
Nickel		0.0522	mg/L	0.010	104	90	110			
Potassium		2.56	mg/L	0.50	103	90	110			
Selenium		0.0483	mg/L	0.0050	97	90	110			
Silicon		0.489	mg/L	0.10	98	90	110			
Silver		0.0261	mg/L	0.0050	105	90	110			
Sodium		2.59	mg/L	0.50	104	90	110			
Thallium		0.0500	mg/L	0.10	100	90	110			
Uranium		0.0200	mg/L	0.0010	100	90	110			
Zinc		0.0482	mg/L	0.010	96	90	110			
Method: E200.8										Batch: R258503
Lab ID: LFB	20	Laboratory Fortified Blank				Run: ICPMS206-B_160324A			03/24/16 09:06	
Arsenic		0.0509	mg/L	0.0050	102	85	115			
Barium		0.0505	mg/L	0.10	101	85	115			
Beryllium		0.0515	mg/L	0.0010	103	85	115			
Cadmium		0.0504	mg/L	0.0010	101	85	115			
Calcium		49.2	mg/L	0.50	98	85	115			
Chromium		0.0517	mg/L	0.010	103	85	115			
Copper		0.0490	mg/L	0.010	98	85	115			
Iron		4.65	mg/L	0.020	93	85	115			
Lead		0.0519	mg/L	0.010	104	85	115			
Magnesium		48.2	mg/L	0.50	96	85	115			
Manganese		0.0513	mg/L	0.010	103	85	115			
Nickel		0.0503	mg/L	0.010	101	85	115			
Potassium		49.5	mg/L	0.50	99	85	115			
Selenium		0.0478	mg/L	0.0050	96	85	115			
Silicon		0.197	mg/L	0.10	98	85	115			
Silver		0.0210	mg/L	0.0050	105	85	115			
Sodium		48.3	mg/L	0.50	97	85	115			
Thallium		0.0519	mg/L	0.10	104	85	115			
Uranium		0.0521	mg/L	0.0010	104	85	115			
Zinc		0.0474	mg/L	0.010	95	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/01/16
Project: 3767-01 WK:2
Work Order: B16031896

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R258503
Lab ID: LRB	20	Method Blank				Run: ICPMS206-B_160324A				03/24/16 09:38
Arsenic		0.0002	mg/L	6E-05						
Barium		ND	mg/L	0.0004						
Beryllium		ND	mg/L	1E-05						
Cadmium		ND	mg/L	3E-05						
Calcium		ND	mg/L	0.008						
Chromium		ND	mg/L	4E-05						
Copper		ND	mg/L	6E-05						
Iron		ND	mg/L	0.0007						
Lead		ND	mg/L	5E-05						
Magnesium		ND	mg/L	0.005						
Manganese		ND	mg/L	4E-05						
Nickel		ND	mg/L	6E-05						
Potassium		ND	mg/L	0.005						
Selenium		ND	mg/L	0.0001						
Silicon		0.005	mg/L	0.002						
Silver		ND	mg/L	2E-05						
Sodium		ND	mg/L	0.01						
Thallium		ND	mg/L	7E-05						
Uranium		ND	mg/L	5E-05						
Zinc		ND	mg/L	0.0001						
Lab ID: B16031913-002AMS	20	Sample Matrix Spike				Run: ICPMS206-B_160324A				03/24/16 13:19
Arsenic		0.0515	mg/L	0.0010	101	70	130			
Barium		0.0842	mg/L	0.050	107	70	130			
Beryllium		0.0460	mg/L	0.0010	92	70	130			
Cadmium		0.0539	mg/L	0.0010	101	70	130			
Calcium		119	mg/L	1.0	99	70	130			
Chromium		0.0506	mg/L	0.0050	101	70	130			
Copper		0.0500	mg/L	0.0050	100	70	130			
Iron		4.99	mg/L	0.020	100	70	130			
Lead		0.0522	mg/L	0.0010	104	70	130			
Magnesium		68.6	mg/L	1.0	96	70	130			
Manganese		0.741	mg/L	0.0010		70	130			A
Nickel		0.0696	mg/L	0.0050	98	70	130			
Potassium		51.7	mg/L	1.0	94	70	130			
Selenium		0.0541	mg/L	0.0010	107	70	130			
Silicon		11.4	mg/L	0.10		70	130			A
Silver		0.0209	mg/L	0.0010	105	70	130			
Sodium		58.4	mg/L	1.0	99	70	130			
Thallium		0.0520	mg/L	0.00050	104	70	130			
Uranium		0.0531	mg/L	0.00030	105	70	130			
Zinc		0.208	mg/L	0.010	79	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/01/16
Project: 3767-01 WK:2
Work Order: B16031896

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**									Batch: R258503	
Lab ID: **B16031913-002AMSD**	20	Sample Matrix Spike Duplicate				Run: ICPMS206-B_160324A			03/24/16 13:22	
Arsenic		0.0545	mg/L	0.0010	107	70	130	5.7	20	
Barium		0.0852	mg/L	0.050	109	70	130	1.2	20	
Beryllium		0.0469	mg/L	0.0010	94	70	130	1.9	20	
Cadmium		0.0551	mg/L	0.0010	103	70	130	2.2	20	
Calcium		122	mg/L	1.0	105	70	130	2.5	20	
Chromium		0.0520	mg/L	0.0050	104	70	130	2.8	20	
Copper		0.0519	mg/L	0.0050	104	70	130	3.7	20	
Iron		5.05	mg/L	0.020	101	70	130	1.3	20	
Lead		0.0530	mg/L	0.0010	106	70	130	1.5	20	
Magnesium		68.8	mg/L	1.0	97	70	130	0.4	20	
Manganese		0.745	mg/L	0.0010		70	130	0.6	20	A
Nickel		0.0701	mg/L	0.0050	99	70	130	0.8	20	
Potassium		53.9	mg/L	1.0	98	70	130	4.2	20	
Selenium		0.0566	mg/L	0.0010	111	70	130	4.5	20	
Silicon		11.8	mg/L	0.10		70	130	3.3	20	A
Silver		0.0229	mg/L	0.0010	114	70	130	8.8	20	
Sodium		58.9	mg/L	1.0	100	70	130	0.8	20	
Thallium		0.0533	mg/L	0.00050	107	70	130	2.5	20	
Uranium		0.0541	mg/L	0.00030	107	70	130	1.9	20	
Zinc		0.208	mg/L	0.010	79	70	130	0.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/01/16
Project: 3767-01 WK:2
Work Order: B16031896

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS206-B_160325A	
Lab ID: QCS	12	Initial Calibration Verification Standard								03/25/16 11:10
Aluminum		0.251	mg/L	0.10	101	90	110			
Antimony		0.0534	mg/L	0.050	107	90	110			
Arsenic		0.0513	mg/L	0.0050	103	90	110			
Chromium		0.0497	mg/L	0.010	99	90	110			
Copper		0.0520	mg/L	0.010	104	90	110			
Magnesium		2.45	mg/L	0.50	98	90	110			
Nickel		0.0506	mg/L	0.010	101	90	110			
Potassium		2.36	mg/L	0.50	94	90	110			
Selenium		0.0516	mg/L	0.0050	103	90	110			
Sodium		2.41	mg/L	0.50	96	90	110			
Strontium		0.0499	mg/L	0.10	100	90	110			
Zinc		0.0508	mg/L	0.010	102	90	110			
Method: E200.8										Batch: R258578
Lab ID: LFB	12	Laboratory Fortified Blank				Run: ICPMS206-B_160325A				03/25/16 10:19
Aluminum		0.0555	mg/L	0.10	111	85	115			
Antimony		0.0521	mg/L	0.050	104	85	115			
Arsenic		0.0550	mg/L	0.0050	110	85	115			
Chromium		0.0571	mg/L	0.010	114	85	115			
Copper		0.0565	mg/L	0.010	113	85	115			
Magnesium		52.3	mg/L	0.50	105	85	115			
Nickel		0.0563	mg/L	0.010	113	85	115			
Potassium		51.4	mg/L	0.50	103	85	115			
Selenium		0.0577	mg/L	0.0050	115	85	115			
Sodium		52.2	mg/L	0.50	104	85	115			
Strontium		0.0557	mg/L	0.10	111	85	115			
Zinc		0.0554	mg/L	0.010	111	85	115			
Lab ID: LRB	12	Method Blank				Run: ICPMS206-B_160325A				03/25/16 10:31
Aluminum		0.004	mg/L	0.0001						
Antimony		0.0003	mg/L	8E-05						
Arsenic		ND	mg/L	6E-05						
Chromium		9E-05	mg/L	4E-05						
Copper		ND	mg/L	6E-05						
Magnesium		0.009	mg/L	0.005						
Nickel		ND	mg/L	6E-05						
Potassium		ND	mg/L	0.005						
Selenium		ND	mg/L	0.0001						
Sodium		0.02	mg/L	0.01						
Strontium		ND	mg/L	1E-05						
Zinc		ND	mg/L	0.0001						
Lab ID: B16032014-001BMS	12	Sample Matrix Spike				Run: ICPMS206-B_160325A				03/25/16 14:25
Aluminum		0.140	mg/L	0.030	104	70	130			
Antimony		0.0584	mg/L	0.0010	116	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/01/16
Project: 3767-01 WK:2
Work Order: B16031896

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R258578
Lab ID: B16032014-001BMS	12	Sample Matrix Spike				Run: ICPMS206-B_160325A				03/25/16 14:25
Arsenic		0.0560	mg/L	0.0010	109	70	130			
Chromium		0.0665	mg/L	0.0050	109	70	130			
Copper		0.0529	mg/L	0.0050	105	70	130			
Magnesium		49.0	mg/L	1.0	96	70	130			
Nickel		0.0519	mg/L	0.0050	103	70	130			
Potassium		49.2	mg/L	1.0	96	70	130			
Selenium		0.0609	mg/L	0.0010	110	70	130			
Sodium		64.7	mg/L	1.0	96	70	130			
Strontium		0.175	mg/L	0.010	106	70	130			
Zinc		0.0543	mg/L	0.010	109	70	130			
Lab ID: B16032014-001BMSD	12	Sample Matrix Spike Duplicate				Run: ICPMS206-B_160325A				03/25/16 14:28
Aluminum		0.142	mg/L	0.030	109	70	130	1.8	20	
Antimony		0.0591	mg/L	0.0010	117	70	130	1.3	20	
Arsenic		0.0580	mg/L	0.0010	113	70	130	3.5	20	
Chromium		0.0653	mg/L	0.0050	106	70	130	1.8	20	
Copper		0.0524	mg/L	0.0050	104	70	130	0.8	20	
Magnesium		49.4	mg/L	1.0	97	70	130	0.8	20	
Nickel		0.0505	mg/L	0.0050	100	70	130	2.7	20	
Potassium		48.8	mg/L	1.0	95	70	130	0.7	20	
Selenium		0.0630	mg/L	0.0010	114	70	130	3.3	20	
Sodium		65.1	mg/L	1.0	96	70	130	0.7	20	
Strontium		0.176	mg/L	0.010	108	70	130	0.6	20	
Zinc		0.0531	mg/L	0.010	106	70	130	2.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/01/16
Project: 3767-01 WK:2
Work Order: B16031896

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV202-B_160325A	
Lab ID: **ICV**	Initial Calibration Verification Standard								03/25/16 12:17	
Mercury		0.000202	mg/L	1.0E-05	101	90	110			
Method: **E245.1**									Batch: 97879	
Lab ID: **MB-97879**	Method Blank					Run: HGCV202-B_160325A			03/25/16 12:25	
Mercury		3E-06	mg/L							
Lab ID: **LCS-97879**	Laboratory Control Sample					Run: HGCV202-B_160325A			03/25/16 12:27	
Mercury		0.000203	mg/L	1.0E-05	100	85	115			
Lab ID: **B16031896-002BMS**	Sample Matrix Spike					Run: HGCV202-B_160325A			03/25/16 13:23	
Mercury		0.000229	mg/L	1.0E-05	109	70	130			
Lab ID: **B16031896-002BMSD**	Sample Matrix Spike Duplicate					Run: HGCV202-B_160325A			03/25/16 13:26	
Mercury		0.000226	mg/L	1.0E-05	108	70	130	1.2	30	
Method: **E245.1**									Analytical Run: HGCV203-B_160331A	
Lab ID: **ICV**	Initial Calibration Verification Standard								03/31/16 12:51	
Mercury		0.000193	mg/L	0.00010	97	90	110			
Method: **E245.1**									Batch: 98040	
Lab ID: **MB-98040**	Method Blank					Run: HGCV203-B_160331A			03/31/16 14:43	
Mercury		ND	mg/L	1E-06						
Lab ID: **LCS-98040**	Laboratory Control Sample					Run: HGCV203-B_160331A			03/31/16 14:46	
Mercury		0.000207	mg/L	1.0E-05	104	85	115			
Lab ID: **B16032209-001BMS**	Sample Matrix Spike					Run: HGCV203-B_160331A			03/31/16 14:56	
Mercury		0.000205	mg/L	1.0E-05	102	70	130			
Lab ID: **B16032209-001BMSD**	Sample Matrix Spike Duplicate					Run: HGCV203-B_160331A			03/31/16 14:59	
Mercury		0.000210	mg/L	1.0E-05	104	70	130	2.4	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16031896

Login completed by: Tabitha Edwards
Date Received: 3/23/2016

Reviewed by: BL2000\jmueller
Received by: src

Reviewed Date: 3/23/2016
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:	10.1°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 container labels and Chain of Custody indicates a collection date of 3/22/2015. Per Mike Medina these were collected 3/22/2016.

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:
McClelland Lab	3767-01 WK: 2	State: NV	Yes ☐ No ☐

Report Mail Address:	Contact Name:	Phone/Fax:	Email:	Sampler: (Please Print)
Tintina Resources 200 Granville St. Suite 2560 Vancouver, BC V6C 1S4 Canada	Mike Medina	775-356-1300	MLI@METTEST.COM	Robert Johnson

Invoice Address:	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:
Tintina Resources 200 Granville St. Suite 2560 Vancouver, BC V6C 1S4 Canada	Mr Bob Jacko 604-628-1162		

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

- ☐ DW
- ☐ GSA
- ☐ POTW/WWTP
- ☐ State: _____
- ☐ Other: _____
- ☐ A2LA
- ☐ EDD/EDT (Electronic Data) Format: _____
- ☐ LEVEL IV
- ☐ NELAC

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

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride					SEE ATTACHED	Normal Turnaround (TAT)
1 Ynl B EX	3/22/15	09:00	Water	X	X	X	X					X	X
2 Y Gd	↓	↓		X	X	X	X						
3		per container THE 3/23/16											
4													
5													
6													
7													
8													
9													
10													

RUSH

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

Comments:

Please Copy results to: B1603896-001
MLI@METTEST.COM 2 002

hold remaining preserved
samples (frozen) until
further notice.

Shipped by: UPS
Robert UDA
Cooler ID(s):
Receipt Temp 10.1 °C
On Ice: Yes No
Custody Seal Y N
Intact Y N
Signature Match Y N

LABORATORY USE ONLY

Custody Record MUST be Signed

	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
	JOE CHANEY	3/22/16 5PM				
	Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
				Received by Laboratory:	Date/Time:	Signature:
					9:20 3/23/16	

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.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

3767-01
HC-7, 8

Table 2: Trace Element Parameters for Post-Humidity Cell Leachate Analysis	
Parameter	Required Reporting Value (mg/L)[A]
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-

ANALYTICAL SUMMARY REPORT

August 10, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16040430 Quote ID: B2868 - Tintina Project

Project Name: 3767-001 WK:4

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 4/6/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16040430-001	Ynl Ex	04/05/16 9:00	04/06/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16040430-002	Tgd	04/05/16 9:00	04/06/16	Aqueous	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:

CLIENT: Tintina Montana Inc
Project: 3767-001 WK:4
Work Order: B16040430

Revised Date: 08/10/16
Report Date: 04/14/16

CASE NARRATIVE

Revised 8/10/2016:

Per Damon Sheumaker on 8/2/16, make the following Client Sample ID changes:

B16040430-001 change from Ynl B EX to Ynl Ex
B16040430-002 change from Y Gd to Tgd

The report has been revised and replaces any previously issued report in its entirety.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-001 WK:4
Lab ID: B16040430-001
Client Sample ID: Ynl Ex

Revised Date: 08/10/16
Report Date: 04/14/16
Collection Date: 04/05/16 09:00
DateReceived: 04/06/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	04/08/16 14:49 / cmb
Sulfate	46	mg/L		1		E300.0	04/08/16 14:49 / cmb
Fluoride	1.5	mg/L		0.2		A4500-F C	04/08/16 14:32 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	ND	mg/L	L	0.005		E365.1	04/11/16 11:32 / bas
METALS, DISSOLVED							
Aluminum	0.051	mg/L		0.009		E200.8	04/07/16 13:45 / mas
Antimony	0.0020	mg/L		0.0005		E200.8	04/11/16 17:24 / mas
Arsenic	0.003	mg/L		0.001		E200.8	04/07/16 13:45 / mas
Barium	0.046	mg/L		0.003		E200.7	04/07/16 13:37 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	04/07/16 13:37 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	04/07/16 13:45 / mas
Calcium	21	mg/L		1		E200.7	04/07/16 13:37 / rlh
Chromium	ND	mg/L		0.01		E200.7	04/07/16 13:37 / rlh
Copper	ND	mg/L		0.002		E200.8	04/07/16 13:45 / mas
Iron	ND	mg/L		0.02		E200.7	04/07/16 13:37 / rlh
Lead	ND	mg/L		0.0003		E200.8	04/07/16 13:45 / mas
Magnesium	12	mg/L		1		E200.7	04/07/16 13:37 / rlh
Manganese	ND	mg/L		0.005		E200.7	04/07/16 13:37 / rlh
Mercury	ND	mg/L		5E-06		E245.1	04/12/16 15:03 / ser
Nickel	ND	mg/L		0.002		E200.8	04/07/16 13:45 / mas
Potassium	9	mg/L		1		E200.7	04/07/16 13:37 / rlh
Selenium	0.006	mg/L		0.001		E200.8	04/07/16 13:45 / mas
Silicon	3.98	mg/L		0.05		E200.7	04/07/16 13:37 / rlh
Silver	ND	mg/L		0.0002		E200.8	04/07/16 13:45 / mas
Sodium	ND	mg/L		1		E200.7	04/07/16 13:37 / rlh
Strontium	0.09	mg/L		0.02		E200.7	04/07/16 13:37 / rlh
Thallium	ND	mg/L		0.0002		E200.8	04/07/16 13:45 / mas
Uranium	0.0007	mg/L		0.0002		E200.8	04/07/16 13:45 / mas
Zinc	ND	mg/L		0.008		E200.7	04/07/16 13:37 / rlh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-001 WK:4
Lab ID: B16040430-002
Client Sample ID: Tgd

Revised Date: 08/10/16
Report Date: 04/14/16
Collection Date: 04/05/16 09:00
DateReceived: 04/06/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	04/08/16 15:02 / cmb
Sulfate	5	mg/L		1		E300.0	04/08/16 15:02 / cmb
Fluoride	0.3	mg/L		0.2		A4500-F C	04/08/16 14:35 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.009	mg/L	L	0.005		E365.1	04/11/16 11:38 / bas
METALS, DISSOLVED							
Aluminum	0.053	mg/L		0.009		E200.8	04/07/16 13:48 / mas
Antimony	ND	mg/L		0.0005		E200.8	04/11/16 17:26 / mas
Arsenic	0.002	mg/L		0.001		E200.8	04/07/16 13:48 / mas
Barium	0.054	mg/L		0.003		E200.7	04/07/16 13:41 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	04/07/16 13:41 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	04/07/16 13:48 / mas
Calcium	8	mg/L		1		E200.7	04/07/16 13:41 / rlh
Chromium	ND	mg/L		0.01		E200.7	04/07/16 13:41 / rlh
Copper	ND	mg/L		0.002		E200.8	04/07/16 13:48 / mas
Iron	ND	mg/L		0.02		E200.7	04/07/16 13:41 / rlh
Lead	ND	mg/L		0.0003		E200.8	04/07/16 13:48 / mas
Magnesium	2	mg/L		1		E200.7	04/07/16 13:41 / rlh
Manganese	ND	mg/L		0.005		E200.7	04/07/16 13:41 / rlh
Mercury	ND	mg/L		5E-06		E245.1	04/12/16 15:13 / ser
Nickel	ND	mg/L		0.002		E200.8	04/07/16 13:48 / mas
Potassium	3	mg/L		1		E200.7	04/07/16 13:41 / rlh
Selenium	ND	mg/L		0.001		E200.8	04/07/16 13:48 / mas
Silicon	2.80	mg/L		0.05		E200.7	04/07/16 13:41 / rlh
Silver	ND	mg/L		0.0002		E200.8	04/07/16 13:48 / mas
Sodium	4	mg/L		1		E200.7	04/07/16 13:41 / rlh
Strontium	0.03	mg/L		0.02		E200.7	04/07/16 13:41 / rlh
Thallium	ND	mg/L		0.0002		E200.8	04/07/16 13:48 / mas
Uranium	0.0018	mg/L		0.0002		E200.8	04/07/16 13:48 / mas
Zinc	ND	mg/L		0.008		E200.7	04/07/16 13:41 / rlh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/14/16
Project: 3767-001 WK:4
Work Order: B16040430

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**									Analytical Run: ICP203-B_160407A	
Lab ID: **ICV**	12	Continuing Calibration Verification Standard							04/07/16 09:05	
Barium		2.49	mg/L	0.10	100	95	105			
Beryllium		1.25	mg/L	0.010	100	95	105			
Calcium		26.2	mg/L	1.0	105	95	105			
Chromium		2.44	mg/L	0.050	98	95	105			
Iron		2.55	mg/L	0.020	102	95	105			
Magnesium		26.2	mg/L	1.0	105	95	105			
Manganese		2.45	mg/L	0.010	98	95	105			
Potassium		25.8	mg/L	1.0	103	95	105			
Silicon		5.03	mg/L	0.10	101	95	105			
Sodium		25.9	mg/L	1.0	103	95	105			
Strontium		2.51	mg/L	0.10	100	95	105			
Zinc		2.47	mg/L	0.010	99	95	105			
Method: **E200.7**									Batch: R259170	
Lab ID: **MB-6500DIS160407A**	12	Method Blank				Run: ICP203-B_160407A			04/07/16 09:12	
Barium		ND	mg/L	0.0003						
Beryllium		ND	mg/L	0.0002						
Calcium		ND	mg/L	0.02						
Chromium		ND	mg/L	0.003						
Iron		ND	mg/L	0.002						
Magnesium		ND	mg/L	0.003						
Manganese		ND	mg/L	0.0006						
Potassium		ND	mg/L	0.09						
Silicon		ND	mg/L	0.02						
Sodium		ND	mg/L	0.03						
Strontium		ND	mg/L	0.0002						
Zinc		ND	mg/L	0.002						
Lab ID: **LFB-6500DIS160407A**	12	Laboratory Fortified Blank				Run: ICP203-B_160407A			04/07/16 09:19	
Barium		0.983	mg/L	0.10	98	85	115			
Beryllium		0.502	mg/L	0.010	100	85	115			
Calcium		50.9	mg/L	1.0	102	85	115			
Chromium		0.947	mg/L	0.050	95	85	115			
Iron		4.89	mg/L	0.020	98	85	115			
Magnesium		52.4	mg/L	1.0	105	85	115			
Manganese		4.74	mg/L	0.010	95	85	115			
Potassium		50.2	mg/L	1.0	100	85	115			
Silicon		9.83	mg/L	0.10	98	85	115			
Sodium		50.6	mg/L	1.0	101	85	115			
Strontium		1.02	mg/L	0.10	102	85	115			
Zinc		0.978	mg/L	0.010	98	85	115			
Lab ID: **B16040430-002BMS2**	12	Sample Matrix Spike				Run: ICP203-B_160407A			04/07/16 13:51	
Barium		1.07	mg/L	0.050	102	70	130			
Beryllium		0.522	mg/L	0.0010	104	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/14/16
Project: 3767-001 WK:4
Work Order: B16040430

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**										Batch: R259170
Lab ID: **B16040430-002BMS2**	12	Sample Matrix Spike				Run: ICP203-B_160407A				04/07/16 13:51
Calcium		59.8	mg/L	1.0	103	70	130			
Chromium		1.01	mg/L	0.0050	101	70	130			
Iron		5.23	mg/L	0.020	104	70	130			
Magnesium		53.3	mg/L	1.0	103	70	130			
Manganese		5.11	mg/L	0.0010	102	70	130			
Potassium		54.9	mg/L	1.0	104	70	130			
Silicon		12.9	mg/L	0.10	101	70	130			
Sodium		55.9	mg/L	1.0	104	70	130			
Strontium		1.06	mg/L	0.010	103	70	130			
Zinc		1.01	mg/L	0.010	101	70	130			
Lab ID: **B16040430-002BMSD**	12	Sample Matrix Spike Duplicate				Run: ICP203-B_160407A				04/07/16 13:55
Barium		1.08	mg/L	0.050	102	70	130	0.6	20	
Beryllium		0.517	mg/L	0.0010	103	70	130	1.0	20	
Calcium		60.2	mg/L	1.0	104	70	130	0.6	20	
Chromium		1.01	mg/L	0.0050	101	70	130	0.2	20	
Iron		5.21	mg/L	0.020	104	70	130	0.2	20	
Magnesium		53.9	mg/L	1.0	104	70	130	1.0	20	
Manganese		5.10	mg/L	0.0010	102	70	130	0.3	20	
Potassium		55.0	mg/L	1.0	104	70	130	0.2	20	
Silicon		12.9	mg/L	0.10	101	70	130	0.1	20	
Sodium		56.0	mg/L	1.0	104	70	130	0.1	20	
Strontium		1.06	mg/L	0.010	103	70	130	0.4	20	
Zinc		1.02	mg/L	0.010	102	70	130	0.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/14/16
Project: 3767-001 WK:4
Work Order: B16040430

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**									Analytical Run: ICPMS202-B_160407A	
Lab ID: **QCS**	10	Initial Calibration Verification Standard							04/07/16 12:32	
Aluminum		0.257	mg/L	0.10	103	90	110			
Arsenic		0.0481	mg/L	0.0050	96	90	110			
Cadmium		0.0251	mg/L	0.0010	100	90	110			
Copper		0.0489	mg/L	0.010	98	90	110			
Lead		0.0464	mg/L	0.010	93	90	110			
Nickel		0.0492	mg/L	0.010	99	90	110			
Selenium		0.0489	mg/L	0.0050	98	90	110			
Silver		0.0250	mg/L	0.0050	100	90	110			
Thallium		0.0458	mg/L	0.10	92	90	110			
Uranium		0.0183	mg/L	0.0010	91	90	110			
Method: **E200.8**									Batch: R259188	
Lab ID: **LFB**	10	Laboratory Fortified Blank				Run: ICPMS202-B_160407A			04/07/16 10:59	
Aluminum		0.0443	mg/L	0.10	89	85	115			
Arsenic		0.0451	mg/L	0.0050	90	85	115			
Cadmium		0.0449	mg/L	0.0010	90	85	115			
Copper		0.0457	mg/L	0.010	91	85	115			
Lead		0.0469	mg/L	0.010	94	85	115			
Nickel		0.0451	mg/L	0.010	90	85	115			
Selenium		0.0441	mg/L	0.0050	88	85	115			
Silver		0.0184	mg/L	0.0050	92	85	115			
Thallium		0.0480	mg/L	0.10	96	85	115			
Uranium		0.0477	mg/L	0.0010	95	85	115			
Lab ID: **LRB**	10	Method Blank				Run: ICPMS202-B_160407A			04/07/16 11:20	
Aluminum		ND	mg/L	0.0004						
Arsenic		ND	mg/L	9E-05						
Cadmium		ND	mg/L	9E-06						
Copper		ND	mg/L	9E-05						
Lead		ND	mg/L	2E-05						
Nickel		ND	mg/L	9E-05						
Selenium		ND	mg/L	0.0002						
Silver		ND	mg/L	4E-05						
Thallium		2E-05	mg/L	1E-05						
Uranium		ND	mg/L	1E-05						
Lab ID: **B16040308-001BMS**	10	Sample Matrix Spike				Run: ICPMS202-B_160407A			04/07/16 13:02	
Aluminum		0.0790	mg/L	0.030	95	70	130			
Arsenic		0.0564	mg/L	0.0010	110	70	130			
Cadmium		0.0497	mg/L	0.0010	99	70	130			
Copper		0.0955	mg/L	0.0050	99	70	130			
Lead		0.0497	mg/L	0.0010	99	70	130			
Nickel		0.0518	mg/L	0.0050	98	70	130			
Selenium		0.0592	mg/L	0.0010	117	70	130			
Silver		0.0133	mg/L	0.0010	66	70	130			S

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: Tintina Montana Inc
Report Date: 04/14/16
Project: 3767-001 WK:4
Work Order: B16040430

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R259188
Lab ID: B16040308-001BMS	10	Sample Matrix Spike				Run: ICPMS202-B_160407A				04/07/16 13:02
Thallium		0.0481	mg/L	0.00050	96	70	130			
Uranium		0.0535	mg/L	0.00030	104	70	130			
Lab ID: B16040308-001BMSD	10	Sample Matrix Spike Duplicate				Run: ICPMS202-B_160407A				04/07/16 13:05
Aluminum		0.0780	mg/L	0.030	93	70	130	1.3	20	
Arsenic		0.0539	mg/L	0.0010	105	70	130	4.6	20	
Cadmium		0.0479	mg/L	0.0010	96	70	130	3.7	20	
Copper		0.0925	mg/L	0.0050	93	70	130	3.2	20	
Lead		0.0486	mg/L	0.0010	97	70	130	2.2	20	
Nickel		0.0492	mg/L	0.0050	93	70	130	5.1	20	
Selenium		0.0553	mg/L	0.0010	109	70	130	6.8	20	
Silver		0.0159	mg/L	0.0010	79	70	130	18	20	
Thallium		0.0469	mg/L	0.00050	94	70	130	2.5	20	
Uranium		0.0530	mg/L	0.00030	103	70	130	1.1	20	
Method: E200.8										Analytical Run: ICPMS202-B_160411A
Lab ID: QCS		Initial Calibration Verification Standard								04/11/16 16:16
Antimony		0.0476	mg/L	0.050	95	90	110			
Method: E200.8										Batch: R259303
Lab ID: LFB		Laboratory Fortified Blank				Run: ICPMS202-B_160411A				04/11/16 12:56
Antimony		0.0466	mg/L	0.050	93	85	115			
Lab ID: LRB		Method Blank				Run: ICPMS202-B_160411A				04/11/16 13:58
Antimony		ND	mg/L	4E-05						
Lab ID: B16040419-001BMS		Sample Matrix Spike				Run: ICPMS202-B_160411A				04/11/16 17:13
Antimony		0.0504	mg/L	0.0010	99	70	130			
Lab ID: B16040419-001BMSD		Sample Matrix Spike Duplicate				Run: ICPMS202-B_160411A				04/11/16 17:16
Antimony		0.0515	mg/L	0.0010	101	70	130	2.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/14/16
Project: 3767-001 WK:4
Work Order: B16040430

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV203-B_160412A	
Lab ID: **ICV**		Initial Calibration Verification Standard							04/12/16 14:43	
Mercury		0.000195	mg/L	1.0E-05	98	90	110			
Lab ID: **CCV**		Continuing Calibration Verification Standard							04/12/16 14:46	
Mercury		0.000100	mg/L	1.0E-05	100	90	110			
Method: **E245.1**									Batch: 98356	
Lab ID: **MB-98356**		Method Blank				Run: HGCV203-B_160412A			04/12/16 14:52	
Mercury		1.0E-06	mg/L	1E-06						
Lab ID: **LCS-98356**		Laboratory Control Sample				Run: HGCV203-B_160412A			04/12/16 14:55	
Mercury		0.000194	mg/L	1.0E-05	97	85	115			
Lab ID: **B16040430-001BMS**		Sample Matrix Spike				Run: HGCV203-B_160412A			04/12/16 15:08	
Mercury		0.000192	mg/L	1.0E-05	96	70	130			
Lab ID: **B16040430-001BMSD**		Sample Matrix Spike Duplicate				Run: HGCV203-B_160412A			04/12/16 15:11	
Mercury		0.000193	mg/L	1.0E-05	97	70	130	0.5	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/14/16
Project: 3767-001 WK:4
Work Order: B16040430

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**									Analytical Run: MAN-TECH_160408A	
Lab ID: **ICV**	Initial Calibration Verification Standard								04/08/16 14:22	
Fluoride		1.03	mg/L	0.10	103	90	110			
Method: **A4500-F C**									Batch: R259269	
Lab ID: **MBLK**	Method Blank					Run: MAN-TECH_160408A			04/08/16 14:17	
Fluoride		0.03	mg/L	0.03						
Lab ID: **LFB**	Laboratory Fortified Blank					Run: MAN-TECH_160408A			04/08/16 14:19	
Fluoride		0.950	mg/L	0.10	92	90	110			
Lab ID: **B16040426-001AMS**	Sample Matrix Spike					Run: MAN-TECH_160408A			04/08/16 14:27	
Fluoride		1.24	mg/L	0.10	111	80	120			
Lab ID: **B16040426-001AMSD**	Sample Matrix Spike Duplicate					Run: MAN-TECH_160408A			04/08/16 14:30	
Fluoride		1.15	mg/L	0.10	102	80	120	7.5	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/14/16
Project: 3767-001 WK:4
Work Order: B16040430

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC METROHM 2_160408A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							04/08/16 09:39	
Chloride			2.13	mg/L	1.0	95	90	110			
Sulfate			8.89	mg/L	1.0	99	90	110			
Method:	**E300.0**									Batch: R259254	
Lab ID:	**ICB**	2	Method Blank				Run: IC METROHM 2_160408A			04/08/16 09:53	
Chloride			ND	mg/L	0.02						
Sulfate			ND	mg/L	0.2						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC METROHM 2_160408A			04/08/16 10:06	
Chloride			10.1	mg/L	1.0	101	90	110			
Sulfate			30.2	mg/L	1.0	101	90	110			
Lab ID:	**B16040419-001AMS**	2	Sample Matrix Spike				Run: IC METROHM 2_160408A			04/08/16 14:08	
Chloride			209	mg/L	1.2	103	90	110			
Sulfate			1300	mg/L	3.7	104	90	110			
Lab ID:	**B16040419-001AMSD**	2	Sample Matrix Spike Duplicate				Run: IC METROHM 2_160408A			04/08/16 14:22	
Chloride			209	mg/L	1.2	103	90	110	0.0	20	
Sulfate			1280	mg/L	3.7	101	90	110	1.5	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 04/14/16
Project: 3767-001 WK:4
Work Order: B16040430

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1										Analytical Run: FIA202-B_160411A
Lab ID: ICV		Initial Calibration Verification Standard								04/11/16 11:14
Phosphorus, Total as P		0.523	mg/L	0.0050	105	90	110			
Method: E365.1										Batch: 98265
Lab ID: MB-98265		Method Blank				Run: FIA202-B_160411A				04/11/16 11:17
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-98265		Laboratory Control Sample				Run: FIA202-B_160411A				04/11/16 11:18
Phosphorus, Total as P		0.195	mg/L	0.0050	96	90	110			
Lab ID: MB-98325		Method Blank				Run: FIA202-B_160411A				04/11/16 11:19
Phosphorus, Total Dissolved as P		ND	mg/L	0.005						
Lab ID: B16040430-001CMS		Sample Matrix Spike				Run: FIA202-B_160411A				04/11/16 11:34
Phosphorus, Total Dissolved as P		0.195	mg/L	0.0050	98	90	110			
Lab ID: B16040430-001CMSD		Sample Matrix Spike Duplicate				Run: FIA202-B_160411A				04/11/16 11:35
Phosphorus, Total Dissolved as P		0.194	mg/L	0.0050	97	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16040430

Login completed by: Brittaney R. Garza
Date Received: 4/6/2016
Reviewed by: BL2000\lcadreau
Received by: qej
Reviewed Date: 4/7/2016
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:	9.4°C No 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:

The collection date and time for sample Tgd was not indicated on the Chain of Custody. Collection date and time of 4/05/2016 at 9:00 taken from sample containers.

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:
McClelland Lab	3767-01 WK: 4	State: NV	Yes ☐ No ☐

Report Mail Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada

Contact Name: Mike Medina — Phone/Fax: 775-356-1300 — Email: MLI@METTEST.COM

Sampler: (Please Print) Robert Johnson

Invoice Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada

Invoice Contact & Phone: Mr Bob Jacko 604-628-1162

Purchase Order:

Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

- ☐ DW
- ☐ GSA
- ☐ POTW/WWTP
- ☐ State: ______
- ☐ Other: ______
- ☐ A2LA
- ☐ EDD/EDT (Electronic Data) Format: ______
- ☐ LEVEL IV
- ☐ NELAC

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

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride						SEE ATTACHED	Normal Turnaround (TAT)	RUSH
1 Ynl B EX	4/5/16	09:00	Water	X	X	X	X						X	X	
2 Y Gd				X	X	X	X								
3															
4															
5															
6															
7															
8															
9															
10															

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

Comments: Please Copy results to: MLI@METTEST.COM

hold remaining preserved samples (frozen) until further notice.

LABORATORY USE ONLY

Shipped by: Robert UPS NDA

Cooler ID(s):

Receipt Temp 9.4 °C

On Ice: (Yes) No

Custody Seal (Y) N

Intact (Y) N

Signature Match (Y) N

001 ~~B1604045~~ B16040480 ~~001~~ 002

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
JOE CHANEY	4/5/16 9AM	[signature]			
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Sample Disposal: Return to Client: ______		Lab Disposal: ______	Received by Laboratory: Quincee Janes	4/6/16 09:15	

3767-01
HC-7, 8

Parameter	Required Reporting Value (mg/L)[A]
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-

ANALYTICAL SUMMARY REPORT

May 13, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16050318 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK: 8

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 5/4/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16050318-001	Ynl B EX	05/03/16 9:00	05/04/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16050318-002	Y Gd	05/03/16 9:00	05/04/16	Aqueous	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:

CLIENT: Tintina Montana Inc
Project: 3767-01 WK: 8
Work Order: B16050318

Revised Date: 05/13/16
Report Date: 05/11/16

CASE NARRATIVE

Revised 5/13/2016:

Per Mike Medina on 5/12/16, add Dissolved Potassium and Sodium to samples Ynl B EX (B16050318-001) and Y Gd (B16050318-002).

The report has been revised and replaces any previously issued report in its entirety.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK: 8
Lab ID: B16050318-001
Client Sample ID: Ynl B EX

Revised Date: 05/13/16
Report Date: 05/11/16
Collection Date: 05/03/16 09:00
DateReceived: 05/04/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	05/06/16 16:35 / cmb
Sulfate	323	mg/L		1		E300.0	05/06/16 16:35 / cmb
Fluoride	0.7	mg/L		0.2		A4500-F C	05/06/16 12:39 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	ND	mg/L	L	0.005		E365.1	05/06/16 15:48 / jmg
METALS, DISSOLVED							
Aluminum	0.030	mg/L		0.009		E200.8	05/06/16 16:20 / mas
Antimony	0.0013	mg/L		0.0005		E200.8	05/05/16 18:30 / mas
Arsenic	0.003	mg/L		0.001		E200.8	05/05/16 18:30 / mas
Barium	0.062	mg/L		0.003		E200.7	05/05/16 14:48 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	05/05/16 14:48 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	05/05/16 18:30 / mas
Calcium	82	mg/L		1		E200.7	05/05/16 14:48 / rlh
Chromium	ND	mg/L		0.01		E200.7	05/05/16 14:48 / rlh
Copper	0.007	mg/L		0.002		E200.8	05/05/16 18:30 / mas
Iron	ND	mg/L		0.02		E200.7	05/05/16 14:48 / rlh
Lead	0.0018	mg/L		0.0003		E200.8	05/05/16 18:30 / mas
Magnesium	40	mg/L		1		E200.7	05/05/16 14:48 / rlh
Manganese	0.005	mg/L		0.005		E200.7	05/05/16 14:48 / rlh
Mercury	ND	mg/L		5E-06		E245.1	05/06/16 16:33 / ser
Nickel	ND	mg/L		0.002		E200.8	05/05/16 18:30 / mas
Potassium	9	mg/L		1		E200.7	05/05/16 14:48 / rlh
Selenium	0.003	mg/L		0.001		E200.8	05/05/16 18:30 / mas
Silicon	4.14	mg/L		0.05		E200.7	05/05/16 14:48 / rlh
Silver	ND	mg/L		0.0002		E200.8	05/05/16 18:30 / mas
Sodium	ND	mg/L		1		E200.7	05/05/16 14:48 / rlh
Strontium	0.27	mg/L		0.02		E200.7	05/05/16 14:48 / rlh
Thallium	ND	mg/L		0.0002		E200.8	05/05/16 18:30 / mas
Uranium	0.0024	mg/L		0.0002		E200.8	05/05/16 18:30 / mas
Zinc	ND	mg/L		0.008		E200.7	05/05/16 14:48 / rlh

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK: 8
Lab ID: B16050318-002
Client Sample ID: Y Gd

Revised Date: 05/13/16
Report Date: 05/11/16
Collection Date: 05/03/16 09:00
DateReceived: 05/04/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	05/05/16 21:38 / cmb
Sulfate	6	mg/L		1		E300.0	05/05/16 21:38 / cmb
Fluoride	0.2	mg/L		0.2		A4500-F C	05/06/16 12:42 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.009	mg/L	L	0.005		E365.1	05/06/16 15:49 / jmg
METALS, DISSOLVED							
Aluminum	0.057	mg/L		0.009		E200.8	05/06/16 16:24 / mas
Antimony	ND	mg/L		0.0005		E200.8	05/05/16 18:32 / mas
Arsenic	0.001	mg/L		0.001		E200.8	05/05/16 18:32 / mas
Barium	0.065	mg/L		0.003		E200.7	05/05/16 14:51 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	05/05/16 14:51 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	05/05/16 18:32 / mas
Calcium	10	mg/L		1		E200.7	05/05/16 14:51 / rlh
Chromium	ND	mg/L		0.01		E200.7	05/05/16 14:51 / rlh
Copper	ND	mg/L		0.002		E200.8	05/05/16 18:32 / mas
Iron	ND	mg/L		0.02		E200.7	05/05/16 14:51 / rlh
Lead	0.0011	mg/L		0.0003		E200.8	05/05/16 18:32 / mas
Magnesium	2	mg/L		1		E200.7	05/05/16 14:51 / rlh
Manganese	ND	mg/L		0.005		E200.7	05/05/16 14:51 / rlh
Mercury	ND	mg/L		5E-06		E245.1	05/06/16 16:36 / ser
Nickel	ND	mg/L		0.002		E200.8	05/05/16 18:32 / mas
Potassium	3	mg/L		1		E200.7	05/05/16 14:51 / rlh
Selenium	ND	mg/L		0.001		E200.8	05/05/16 18:32 / mas
Silicon	2.97	mg/L		0.05		E200.7	05/05/16 14:51 / rlh
Silver	ND	mg/L		0.0002		E200.8	05/05/16 18:32 / mas
Sodium	3	mg/L		1		E200.7	05/05/16 14:51 / rlh
Strontium	0.04	mg/L		0.02		E200.7	05/05/16 14:51 / rlh
Thallium	ND	mg/L		0.0002		E200.8	05/05/16 18:32 / mas
Uranium	0.0013	mg/L		0.0002		E200.8	05/05/16 18:32 / mas
Zinc	ND	mg/L		0.008		E200.7	05/05/16 14:51 / rlh

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 05/13/16

Client: Tintina Montana Inc

Report Date: 05/11/16

Project: 3767-01 WK: 8

Work Order: B16050318

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**									Analytical Run: ICP203-B_160505A	
Lab ID: **ICV**	12	Continuing Calibration Verification Standard							05/05/16 09:04	
Barium		2.54	mg/L	0.10	102	95	105			
Beryllium		1.28	mg/L	0.010	102	95	105			
Calcium		25.7	mg/L	1.0	103	95	105			
Chromium		2.52	mg/L	0.050	101	95	105			
Iron		2.55	mg/L	0.020	102	95	105			
Magnesium		25.6	mg/L	1.0	102	95	105			
Manganese		2.53	mg/L	0.010	101	95	105			
Potassium		25.3	mg/L	1.0	101	95	105			
Silicon		5.17	mg/L	0.10	103	95	105			
Sodium		25.4	mg/L	1.0	102	95	105			
Strontium		2.57	mg/L	0.10	103	95	105			
Zinc		2.53	mg/L	0.010	101	95	105			
Method: **E200.7**									Batch: R260526	
Lab ID: **MB-6500DIS160505A**	12	Method Blank				Run: ICP203-B_160505A			05/05/16 09:11	
Barium		ND	mg/L	0.0003						
Beryllium		ND	mg/L	0.0002						
Calcium		ND	mg/L	0.02						
Chromium		ND	mg/L	0.003						
Iron		ND	mg/L	0.002						
Magnesium		0.004	mg/L	0.003						
Manganese		ND	mg/L	0.0006						
Potassium		ND	mg/L	0.09						
Silicon		ND	mg/L	0.02						
Sodium		ND	mg/L	0.03						
Strontium		ND	mg/L	0.0002						
Zinc		ND	mg/L	0.002						
Lab ID: **LFB-6500DIS160505A**	12	Laboratory Fortified Blank				Run: ICP203-B_160505A			05/05/16 09:18	
Barium		1.01	mg/L	0.10	101	85	115			
Beryllium		0.519	mg/L	0.010	104	85	115			
Calcium		50.7	mg/L	1.0	101	85	115			
Chromium		1.00	mg/L	0.050	100	85	115			
Iron		5.02	mg/L	0.020	100	85	115			
Magnesium		50.8	mg/L	1.0	102	85	115			
Manganese		5.06	mg/L	0.010	101	85	115			
Potassium		50.6	mg/L	1.0	101	85	115			
Silicon		10.1	mg/L	0.10	101	85	115			
Sodium		50.6	mg/L	1.0	101	85	115			
Strontium		1.04	mg/L	0.10	104	85	115			
Zinc		0.983	mg/L	0.010	98	85	115			
Lab ID: **B16050315-001BMS2**	12	Sample Matrix Spike				Run: ICP203-B_160505A			05/05/16 14:37	
Barium		1.99	mg/L	0.050	99	70	130			
Beryllium		1.04	mg/L	0.0010	104	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 05/13/16

Client: Tintina Montana Inc

Report Date: 05/11/16

Project: 3767-01 WK: 8

Work Order: B16050318

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**										Batch: R260526
Lab ID: **B16050315-001BMS2**	12	Sample Matrix Spike				Run: ICP203-B_160505A				05/05/16 14:37
Calcium		181	mg/L	1.0	100	70	130			
Chromium		1.95	mg/L	0.0071	98	70	130			
Iron		10.0	mg/L	0.020	100	70	130			
Magnesium		127	mg/L	1.0	101	70	130			
Manganese		9.93	mg/L	0.0012	99	70	130			
Potassium		111	mg/L	1.0	102	70	130			
Silicon		27.1	mg/L	0.10	103	70	130			
Sodium		230	mg/L	1.0	100	70	130			
Strontium		2.55	mg/L	0.010	107	70	130			
Zinc		1.99	mg/L	0.010	99	70	130			
Lab ID: **B16050315-001BMSD**	12	Sample Matrix Spike Duplicate				Run: ICP203-B_160505A				05/05/16 14:41
Barium		1.95	mg/L	0.050	97	70	130	1.8	20	
Beryllium		1.03	mg/L	0.0010	103	70	130	1.2	20	
Calcium		178	mg/L	1.0	97	70	130	1.5	20	
Chromium		1.92	mg/L	0.0071	96	70	130	1.5	20	
Iron		9.84	mg/L	0.020	98	70	130	1.7	20	
Magnesium		125	mg/L	1.0	99	70	130	1.3	20	
Manganese		9.74	mg/L	0.0012	97	70	130	1.9	20	
Potassium		111	mg/L	1.0	102	70	130	0.1	20	
Silicon		26.4	mg/L	0.10	99	70	130	2.6	20	
Sodium		227	mg/L	1.0	97	70	130	1.3	20	
Strontium		2.52	mg/L	0.010	105	70	130	1.4	20	
Zinc		1.99	mg/L	0.010	100	70	130	0.2	20	

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 05/13/16

Client: Tintina Montana Inc

Report Date: 05/11/16

Project: 3767-01 WK: 8

Work Order: B16050318

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**									Analytical Run: ICPMS203-B_160506A	
Lab ID: **QCS**		Initial Calibration Verification Standard							05/06/16 14:09	
Aluminum		0.242	mg/L	0.10	97	90	110			
Method: **E200.8**									Batch: R260631	
Lab ID: **LRB**		Method Blank				Run: ICPMS203-B_160506A			05/06/16 14:24	
Aluminum		ND	mg/L	0.0002						
Lab ID: **MB-99028**		Method Blank				Run: ICPMS203-B_160506A			05/06/16 15:29	
Aluminum		0.006	mg/L	0.0002						
Lab ID: **B16050016-001BMS**		Sample Matrix Spike				Run: ICPMS203-B_160506A			05/06/16 15:53	
Aluminum		0.285	mg/L	0.030	111	70	130			
Lab ID: **B16050016-001BMSD**		Sample Matrix Spike Duplicate				Run: ICPMS203-B_160506A			05/06/16 15:56	
Aluminum		0.302	mg/L	0.030	118	70	130	5.9	20	
Lab ID: **LFB**		Laboratory Fortified Blank				Run: ICPMS203-B_160506A			05/06/16 16:56	
Aluminum		0.0511	mg/L	0.10	102	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 05/13/16

Client: Tintina Montana Inc

Report Date: 05/11/16

Project: 3767-01 WK: 8

Work Order: B16050318

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS206-B_160505A	
Lab ID: QCS	10	Initial Calibration Verification Standard							05/05/16 17:52	
Antimony		0.0504	mg/L	0.050	101	90	110			
Arsenic		0.0512	mg/L	0.0050	102	90	110			
Cadmium		0.0263	mg/L	0.0010	105	90	110			
Copper		0.0508	mg/L	0.010	102	90	110			
Lead		0.0481	mg/L	0.010	96	90	110			
Nickel		0.0510	mg/L	0.010	102	90	110			
Selenium		0.0483	mg/L	0.0050	97	90	110			
Silver		0.0266	mg/L	0.0050	107	90	110			
Thallium		0.0485	mg/L	0.10	97	90	110			
Uranium		0.0197	mg/L	0.0010	98	90	110			
Method: E200.8									Batch: R260565	
Lab ID: LFB	10	Laboratory Fortified Blank				Run: ICPMS206-B_160505A			05/05/16 12:47	
Antimony		0.0472	mg/L	0.050	94	85	115			
Arsenic		0.0504	mg/L	0.0050	101	85	115			
Cadmium		0.0502	mg/L	0.0010	100	85	115			
Copper		0.0482	mg/L	0.010	96	85	115			
Lead		0.0540	mg/L	0.010	108	85	115			
Nickel		0.0483	mg/L	0.010	97	85	115			
Selenium		0.0487	mg/L	0.0050	97	85	115			
Silver		0.0205	mg/L	0.0050	103	85	115			
Thallium		0.0546	mg/L	0.10	109	85	115			
Uranium		0.0550	mg/L	0.0010	110	85	115			
Lab ID: LRB	10	Method Blank				Run: ICPMS206-B_160505A			05/05/16 14:31	
Antimony		ND	mg/L	8E-05						
Arsenic		ND	mg/L	6E-05						
Cadmium		ND	mg/L	3E-05						
Copper		ND	mg/L	6E-05						
Lead		ND	mg/L	5E-05						
Nickel		ND	mg/L	6E-05						
Selenium		ND	mg/L	0.0001						
Silver		ND	mg/L	2E-05						
Thallium		ND	mg/L	7E-05						
Uranium		ND	mg/L	5E-05						
Lab ID: B16050328-001BMS	10	Sample Matrix Spike				Run: ICPMS206-B_160505A			05/05/16 18:53	
Antimony		0.0970	mg/L	0.0010	96	70	130			
Arsenic		0.103	mg/L	0.0010	102	70	130			
Cadmium		0.0982	mg/L	0.0010	98	70	130			
Copper		0.102	mg/L	0.0050	101	70	130			
Lead		0.102	mg/L	0.0010	101	70	130			
Nickel		0.100	mg/L	0.0050	98	70	130			
Selenium		0.102	mg/L	0.0010	102	70	130			
Silver		0.0380	mg/L	0.0010	95	70	130			

Qualifiers:

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ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 05/13/16

Client: Tintina Montana Inc

Report Date: 05/11/16

Project: 3767-01 WK: 8

Work Order: B16050318

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**										Batch: R260565
Lab ID: **B16050328-001BMS**	10	Sample Matrix Spike				Run: ICPMS206-B_160505A				05/05/16 18:53
Thallium		0.101	mg/L	0.00050	101	70	130			
Uranium		0.107	mg/L	0.00030	105	70	130			
Lab ID: **B16050328-001BMSD**	10	Sample Matrix Spike Duplicate				Run: ICPMS206-B_160505A				05/05/16 18:56
Antimony		0.101	mg/L	0.0010	100	70	130	4.1	20	
Arsenic		0.102	mg/L	0.0010	101	70	130	1.1	20	
Cadmium		0.101	mg/L	0.0010	101	70	130	3.2	20	
Copper		0.0989	mg/L	0.0050	98	70	130	3.0	20	
Lead		0.103	mg/L	0.0010	103	70	130	1.8	20	
Nickel		0.0994	mg/L	0.0050	98	70	130	0.6	20	
Selenium		0.105	mg/L	0.0010	105	70	130	3.0	20	
Silver		0.0391	mg/L	0.0010	98	70	130	2.9	20	
Thallium		0.103	mg/L	0.00050	103	70	130	1.2	20	
Uranium		0.107	mg/L	0.00030	105	70	130	0.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 05/13/16

Client: Tintina Montana Inc

Report Date: 05/11/16

Project: 3767-01 WK: 8

Work Order: B16050318

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV203-B_160506A	
Lab ID: **ICV**		Initial Calibration Verification Standard							05/06/16 15:17	
Mercury		0.000126	mg/L	1.0E-05	105	90	110			
Method: **E245.1**									Batch: 99042	
Lab ID: **MB-99042**		Method Blank				Run: HGCV203-B_160506A			05/06/16 16:28	
Mercury		9E-07	mg/L	1E-06						
Lab ID: **LCS-99042**		Laboratory Control Sample				Run: HGCV203-B_160506A			05/06/16 16:31	
Mercury		0.000122	mg/L	1.0E-05	101	85	115			
Lab ID: **B16050459-001BMS**		Sample Matrix Spike				Run: HGCV203-B_160506A			05/06/16 16:46	
Mercury		0.000130	mg/L	1.0E-05	97	70	130			
Lab ID: **B16050459-001BMSD**		Sample Matrix Spike Duplicate				Run: HGCV203-B_160506A			05/06/16 16:49	
Mercury		0.000138	mg/L	1.0E-05	103	70	130	6.0	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16050318

Login completed by: Brittaney R. Garza
Date Received: 5/4/2016

Reviewed by: BL2000\lcadreau
Received by: qej

Reviewed Date: 5/5/2016
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:	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:

Sample Y Gd has a collection date/time of 5/03/16 at 9:00 on the sample container labels and on the Chain of Custody the collection date/time is not indicated. Proceeded with the collection date/time as indicated on the sample container labels.

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: McClelland Lab	Project Name, PWS, Permit, Etc.: 3767-01 WK: 8	Sample Origin State: NV	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Contact Name: Mike Medina; Phone/Fax: 775-356-1300; Email: MLI@METTEST.COM		Sampler: (Please Print) Robert Johnson
Invoice Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Invoice Contact & Phone: Mr Bob Jacko 604-628-1162	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

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

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride					SEE ATTACHED	Normal Turnaround (TAT)
1 Ynl B EX	5/3/16	09:00	Water	X	X	X	X					X	X
2 Y Gd				X	X	X	X						
3													
4													
5													
6													
7													
8													
9													
10													

RUSH

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

Comments:

Please Copy results to: MLI@METTEST.COM

hold remaining preserved samples (frozen) until further notice.

Shipped by: Robert UPS NDA
Cooler ID(s):
Receipt Temp 5.8 °C
On Ice: (Y) No
Custody Seal (Y) N
Intact (Y) N
Signature Match (Y) N

B16050318 -001 -002

LABORATORY USE ONLY

Custody Record MUST be Signed

Relinquished by (print): JOE CHANEY	Date/Time: 5/3/16 9AM	Signature:	Received by (print): / Date/Time: / Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print): / Date/Time: / Signature:
Sample Disposal: Return to Client: _____ Lab Disposal: _____			Received by Laboratory: Quinee James Date/Time: 5/4/16 09:15 Signature:

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.

Table 2. Trace element parameters recommended by DEQ for leachate analysis following proposed humidity cell testing, Tintina project

Parameter	Required Reporting Value (mg/L)
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1.0
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1.0
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1.0
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

Based on MT DEQ7 revised 10/2012

ANALYTICAL SUMMARY REPORT

June 09, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16060099 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK:12

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 6/1/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16060099-001	YnI B EX	05/31/16 9:00	06/01/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16060099-002	Y GD	05/31/16 9:00	06/01/16	Aqueous	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: Tintina Montana Inc
Project: 3767-01 WK:12
Lab ID: B16060099-001
Client Sample ID: YnI B EX

Report Date: 06/09/16
Collection Date: 05/31/16 09:00
DateReceived: 06/01/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	06/07/16 14:43 / cmb
Sulfate	370	mg/L		1		E300.0	06/07/16 14:43 / cmb
Fluoride	0.6	mg/L		0.2		A4500-F C	06/06/16 13:00 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.010	mg/L	L	0.005		E365.1	06/06/16 09:11 / bas
METALS, DISSOLVED							
Aluminum	0.019	mg/L		0.009		E200.8	06/02/16 19:04 / rlh
Antimony	0.0007	mg/L		0.0005		E200.8	06/02/16 19:04 / rlh
Arsenic	0.002	mg/L		0.001		E200.8	06/02/16 19:04 / rlh
Barium	0.018	mg/L		0.003		E200.7	06/02/16 19:00 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	06/02/16 19:00 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	06/02/16 19:04 / rlh
Calcium	94	mg/L		1		E200.7	06/02/16 19:00 / rlh
Chromium	ND	mg/L		0.01		E200.7	06/02/16 19:00 / rlh
Copper	ND	mg/L		0.002		E200.8	06/02/16 19:04 / rlh
Iron	ND	mg/L		0.02		E200.7	06/02/16 19:00 / rlh
Lead	0.0016	mg/L		0.0003		E200.8	06/02/16 19:04 / rlh
Magnesium	48	mg/L		1		E200.7	06/02/16 19:00 / rlh
Manganese	ND	mg/L		0.005		E200.7	06/02/16 19:00 / rlh
Mercury	ND	mg/L		5E-06		E245.1	06/07/16 15:21 / ser
Nickel	ND	mg/L		0.002		E200.8	06/02/16 19:04 / rlh
Potassium	7	mg/L		1		E200.7	06/02/16 19:00 / rlh
Selenium	0.002	mg/L		0.001		E200.8	06/02/16 19:04 / rlh
Silicon	3.26	mg/L		0.05		E200.7	06/02/16 19:00 / rlh
Silver	ND	mg/L		0.0002		E200.8	06/03/16 18:48 / rlh
Sodium	ND	mg/L		1		E200.7	06/02/16 19:00 / rlh
Strontium	0.20	mg/L		0.02		E200.7	06/02/16 19:00 / rlh
Thallium	ND	mg/L		0.0002		E200.8	06/02/16 19:04 / rlh
Uranium	0.0011	mg/L		0.0002		E200.8	06/02/16 19:04 / rlh
Zinc	ND	mg/L		0.008		E200.7	06/02/16 19:00 / rlh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:12
Lab ID: B16060099-002
Client Sample ID: Y GD

Report Date: 06/09/16
Collection Date: 05/31/16 09:00
DateReceived: 06/01/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	06/06/16 21:44 / cmb
Sulfate	4	mg/L		1		E300.0	06/06/16 21:44 / cmb
Fluoride	ND	mg/L		0.2		A4500-F C	06/06/16 13:03 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.010	mg/L	L	0.005		E365.1	06/06/16 09:12 / bas
METALS, DISSOLVED							
Aluminum	0.058	mg/L		0.009		E200.8	06/02/16 19:06 / rlh
Antimony	ND	mg/L		0.0005		E200.8	06/02/16 19:06 / rlh
Arsenic	0.002	mg/L		0.001		E200.8	06/02/16 19:06 / rlh
Barium	0.058	mg/L		0.003		E200.7	06/02/16 19:03 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	06/02/16 19:03 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	06/02/16 19:06 / rlh
Calcium	9	mg/L		1		E200.7	06/02/16 19:03 / rlh
Chromium	ND	mg/L		0.01		E200.7	06/02/16 19:03 / rlh
Copper	ND	mg/L		0.002		E200.8	06/02/16 19:06 / rlh
Iron	ND	mg/L		0.02		E200.7	06/02/16 19:03 / rlh
Lead	0.0029	mg/L		0.0003		E200.8	06/02/16 19:06 / rlh
Magnesium	2	mg/L		1		E200.7	06/02/16 19:03 / rlh
Manganese	ND	mg/L		0.005		E200.7	06/02/16 19:03 / rlh
Mercury	ND	mg/L		5E-06		E245.1	06/07/16 15:23 / ser
Nickel	ND	mg/L		0.002		E200.8	06/02/16 19:06 / rlh
Potassium	2	mg/L		1		E200.7	06/02/16 19:03 / rlh
Selenium	ND	mg/L		0.001		E200.8	06/02/16 19:06 / rlh
Silicon	2.38	mg/L		0.05		E200.7	06/02/16 19:03 / rlh
Silver	ND	mg/L		0.0002		E200.8	06/03/16 18:53 / rlh
Sodium	2	mg/L		1		E200.7	06/02/16 19:03 / rlh
Strontium	0.03	mg/L		0.02		E200.7	06/02/16 19:03 / rlh
Thallium	ND	mg/L		0.0002		E200.8	06/02/16 19:06 / rlh
Uranium	0.0009	mg/L		0.0002		E200.8	06/02/16 19:06 / rlh
Zinc	ND	mg/L		0.008		E200.7	06/02/16 19:03 / rlh

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 06/09/16
Project: 3767-01 WK:12
Work Order: B16060099

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**									Analytical Run: MAN-TECH_160606A	
Lab ID: **ICV**		Initial Calibration Verification Standard							06/06/16 12:04	
Fluoride		0.990	mg/L	0.10	99	90	110			
Method: **A4500-F C**									Batch: R262017	
Lab ID: **MBLK**		Method Blank				Run: MAN-TECH_160606A			06/06/16 11:59	
Fluoride		ND	mg/L	0.03						
Lab ID: **LFB**		Laboratory Fortified Blank				Run: MAN-TECH_160606A			06/06/16 12:01	
Fluoride		0.960	mg/L	0.10	96	90	110			
Lab ID: **B16060090-001AMS**		Sample Matrix Spike				Run: MAN-TECH_160606A			06/06/16 12:55	
Fluoride		1.10	mg/L	0.10	99	80	120			
Lab ID: **B16060090-001AMSD**		Sample Matrix Spike Duplicate				Run: MAN-TECH_160606A			06/06/16 12:58	
Fluoride		1.11	mg/L	0.10	100	80	120	0.9	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 06/09/16
Project: 3767-01 WK:12
Work Order: B16060099

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**									Analytical Run: ICP203-B_160602A	
Lab ID: **ICV**	12	Continuing Calibration Verification Standard							06/02/16 14:03	
Barium		2.49	mg/L	0.10	99	95	105			
Beryllium		1.23	mg/L	0.010	98	95	105			
Calcium		24.8	mg/L	1.0	99	95	105			
Chromium		2.48	mg/L	0.050	99	95	105			
Iron		2.50	mg/L	0.020	100	95	105			
Magnesium		24.7	mg/L	1.0	99	95	105			
Manganese		2.42	mg/L	0.010	97	95	105			
Potassium		24.8	mg/L	1.0	99	95	105			
Silicon		4.99	mg/L	0.10	100	95	105			
Sodium		24.8	mg/L	1.0	99	95	105			
Strontium		2.47	mg/L	0.10	99	95	105			
Zinc		2.44	mg/L	0.010	98	95	105			
Method: **E200.7**									Batch: R261855	
Lab ID: **MB-6500DIS160602A**	12	Method Blank				Run: ICP203-B_160602A			06/02/16 14:10	
Barium		ND	mg/L	0.0003						
Beryllium		ND	mg/L	0.0002						
Calcium		ND	mg/L	0.02						
Chromium		ND	mg/L	0.003						
Iron		ND	mg/L	0.002						
Magnesium		0.005	mg/L	0.003						
Manganese		0.0008	mg/L	0.0006						
Potassium		ND	mg/L	0.09						
Silicon		0.03	mg/L	0.02						
Sodium		ND	mg/L	0.03						
Strontium		0.0004	mg/L	0.0002						
Zinc		ND	mg/L	0.002						
Lab ID: **LFB-6500DIS160602A**	12	Laboratory Fortified Blank				Run: ICP203-B_160602A			06/02/16 14:17	
Barium		0.997	mg/L	0.10	100	85	115			
Beryllium		0.497	mg/L	0.010	99	85	115			
Calcium		49.6	mg/L	1.0	99	85	115			
Chromium		0.979	mg/L	0.050	98	85	115			
Iron		5.02	mg/L	0.020	100	85	115			
Magnesium		49.7	mg/L	1.0	99	85	115			
Manganese		4.85	mg/L	0.010	97	85	115			
Potassium		50.1	mg/L	1.0	100	85	115			
Silicon		9.83	mg/L	0.10	98	85	115			
Sodium		49.9	mg/L	1.0	100	85	115			
Strontium		1.00	mg/L	0.10	100	85	115			
Zinc		0.989	mg/L	0.010	99	85	115			
Lab ID: **B16060069-003BMS2**	12	Sample Matrix Spike				Run: ICP203-B_160602A			06/02/16 18:21	
Barium		1.10	mg/L	0.050	107	70	130			
Beryllium		0.515	mg/L	0.0010	103	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 06/09/16
Project: 3767-01 WK:12
Work Order: B16060099

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: R261855
Lab ID: B16060069-003BMS2	12	Sample Matrix Spike				Run: ICP203-B_160602A				06/02/16 18:21
Calcium		143	mg/L	1.0	108	70	130			
Chromium		1.05	mg/L	0.0050	105	70	130			
Iron		5.33	mg/L	0.020	106	70	130			
Magnesium		75.3	mg/L	1.0	106	70	130			
Manganese		5.29	mg/L	0.0010	105	70	130			
Potassium		54.8	mg/L	1.0	106	70	130			
Silicon		17.1	mg/L	0.10	106	70	130			
Sodium		71.4	mg/L	1.0	105	70	130			
Strontium		1.62	mg/L	0.010	102	70	130			
Zinc		1.06	mg/L	0.010	104	70	130			
Lab ID: B16060069-003BMSD	12	Sample Matrix Spike Duplicate				Run: ICP203-B_160602A				06/02/16 18:24
Barium		1.09	mg/L	0.050	106	70	130	0.9	20	
Beryllium		0.502	mg/L	0.0010	100	70	130	2.6	20	
Calcium		139	mg/L	1.0	99	70	130	3.0	20	
Chromium		1.04	mg/L	0.0050	104	70	130	1.3	20	
Iron		5.26	mg/L	0.020	105	70	130	1.5	20	
Magnesium		73.3	mg/L	1.0	102	70	130	2.6	20	
Manganese		5.20	mg/L	0.0010	103	70	130	1.8	20	
Potassium		54.1	mg/L	1.0	105	70	130	1.2	20	
Silicon		16.8	mg/L	0.10	103	70	130	1.8	20	
Sodium		70.3	mg/L	1.0	103	70	130	1.5	20	
Strontium		1.58	mg/L	0.010	98	70	130	2.3	20	
Zinc		1.07	mg/L	0.010	105	70	130	1.0	20	
Lab ID: B16060103-001CMS2	12	Sample Matrix Spike				Run: ICP203-B_160602A				06/02/16 19:42
Barium		29.3	mg/L	0.050	116	70	130			
Beryllium		11.2	mg/L	0.0031	112	70	130			
Calcium		1150	mg/L	1.0	114	70	130			
Chromium		22.3	mg/L	0.071	111	70	130			
Iron		112	mg/L	0.045	112	70	130			
Magnesium		1130	mg/L	1.0	113	70	130			
Manganese		111	mg/L	0.012	110	70	130			
Potassium		1210	mg/L	1.9	120	70	130			
Silicon		179	mg/L	0.34	83	70	130			
Sodium		4360	mg/L	7.9	125	70	130			
Strontium		25.2	mg/L	0.010	118	70	130			
Zinc		16.1	mg/L	0.041	80	70	130			
Lab ID: B16060103-001CMSD	12	Sample Matrix Spike Duplicate				Run: ICP203-B_160602A				06/02/16 19:45
Barium		30.0	mg/L	0.050	120	70	130	2.3	20	
Beryllium		11.7	mg/L	0.0031	117	70	130	3.8	20	
Calcium		1200	mg/L	1.0	119	70	130	4.3	20	
Chromium		23.2	mg/L	0.071	116	70	130	4.3	20	
Iron		117	mg/L	0.045	116	70	130	3.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 06/09/16
Project: 3767-01 WK:12
Work Order: B16060099

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**										Batch: R261855
Lab ID: **B16060103-001CMSD**	12	Sample Matrix Spike Duplicate				Run: ICP203-B_160602A				06/02/16 19:45
Magnesium		1180	mg/L	1.0	118	70	130	4.4	20	
Manganese		116	mg/L	0.012	115	70	130	4.4	20	
Potassium		1240	mg/L	1.9	124	70	130	2.7	20	
Silicon		181	mg/L	0.34	84	70	130	1.0	20	
Sodium		4360	mg/L	7.9	125	70	130	0.2	20	
Strontium		25.7	mg/L	0.010	120	70	130	2.2	20	
Zinc		16.2	mg/L	0.041	81	70	130	0.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 06/09/16
Project: 3767-01 WK:12
Work Order: B16060099

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS202-B_160602A	
Lab ID: QCS	10	Initial Calibration Verification Standard								06/02/16 17:39
Aluminum		0.261	mg/L	0.10	104	90	110			
Antimony		0.0517	mg/L	0.050	103	90	110			
Arsenic		0.0502	mg/L	0.0050	100	90	110			
Cadmium		0.0256	mg/L	0.0010	102	90	110			
Copper		0.0534	mg/L	0.010	107	90	110			
Lead		0.0488	mg/L	0.010	98	90	110			
Nickel		0.0493	mg/L	0.010	99	90	110			
Selenium		0.0492	mg/L	0.0050	98	90	110			
Thallium		0.0482	mg/L	0.10	96	90	110			
Uranium		0.0186	mg/L	0.0010	93	90	110			
Method: E200.8										Batch: R261861
Lab ID: LRB	10	Method Blank				Run: ICPMS202-B_160602A				06/02/16 11:53
Aluminum		ND	mg/L	0.0004						
Antimony		0.0001	mg/L	4E-05						
Arsenic		0.0002	mg/L	9E-05						
Cadmium		2E-05	mg/L	9E-06						
Copper		ND	mg/L	9E-05						
Lead		3E-05	mg/L	2E-05						
Nickel		ND	mg/L	9E-05						
Selenium		ND	mg/L	0.0002						
Thallium		4E-05	mg/L	1E-05						
Uranium		3E-05	mg/L	1E-05						
Lab ID: LFB	10	Laboratory Fortified Blank				Run: ICPMS202-B_160602A				06/02/16 11:56
Aluminum		0.0487	mg/L	0.10	97	85	115			
Antimony		0.0471	mg/L	0.050	94	85	115			
Arsenic		0.0482	mg/L	0.0050	96	85	115			
Cadmium		0.0478	mg/L	0.0010	96	85	115			
Copper		0.0489	mg/L	0.010	98	85	115			
Lead		0.0474	mg/L	0.010	95	85	115			
Nickel		0.0496	mg/L	0.010	99	85	115			
Selenium		0.0467	mg/L	0.0050	93	85	115			
Thallium		0.0481	mg/L	0.10	96	85	115			
Uranium		0.0501	mg/L	0.0010	100	85	115			
Lab ID: B16060083-001CMS	10	Sample Matrix Spike				Run: ICPMS202-B_160602A				06/02/16 18:39
Aluminum		0.530	mg/L	0.030	103	70	130			
Antimony		0.545	mg/L	0.0010	109	70	130			
Arsenic		0.537	mg/L	0.0010	107	70	130			
Cadmium		0.508	mg/L	0.0010	102	70	130			
Copper		0.510	mg/L	0.0050	102	70	130			
Lead		0.500	mg/L	0.0010	100	70	130			
Nickel		0.495	mg/L	0.0050	99	70	130			
Selenium		0.543	mg/L	0.0025	109	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc **Report Date:** 06/09/16

Project: 3767-01 WK:12 **Work Order:** B16060099

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**										Batch: R261861
Lab ID: **B16060083-001CMS**	10	Sample Matrix Spike				Run: ICPMS202-B_160602A				06/02/16 18:39
Thallium		0.484	mg/L	0.00050	97	70	130			
Uranium		0.540	mg/L	0.00030	108	70	130			
Lab ID: **B16060083-001CMSD**	10	Sample Matrix Spike Duplicate				Run: ICPMS202-B_160602A				06/02/16 18:42
Aluminum		0.526	mg/L	0.030	102	70	130	0.7	20	
Antimony		0.539	mg/L	0.0010	108	70	130	1.0	20	
Arsenic		0.513	mg/L	0.0010	103	70	130	4.5	20	
Cadmium		0.502	mg/L	0.0010	100	70	130	1.0	20	
Copper		0.495	mg/L	0.0050	99	70	130	3.1	20	
Lead		0.490	mg/L	0.0010	98	70	130	2.1	20	
Nickel		0.482	mg/L	0.0050	96	70	130	2.7	20	
Selenium		0.524	mg/L	0.0025	105	70	130	3.6	20	
Thallium		0.480	mg/L	0.00050	96	70	130	0.7	20	
Uranium		0.523	mg/L	0.00030	105	70	130	3.2	20	
Method: **E200.8**										Analytical Run: ICPMS203-B_160603A
Lab ID: **QCS**		Initial Calibration Verification Standard								06/03/16 12:58
Silver		0.0250	mg/L	0.0050	100	90	110			
Method: **E200.8**										Batch: R261916
Lab ID: **LRB**		Method Blank				Run: ICPMS203-B_160603A				06/03/16 13:19
Silver		2E-05	mg/L	2E-05						
Lab ID: **LFB**		Laboratory Fortified Blank				Run: ICPMS203-B_160603A				06/03/16 13:25
Silver		0.0173	mg/L	0.0050	86	85	115			
Lab ID: **B16060096-001BMS**		Sample Matrix Spike				Run: ICPMS203-B_160603A				06/03/16 18:32
Silver		0.0173	mg/L	0.0010	87	70	130			
Lab ID: **B16060096-001BMSD**		Sample Matrix Spike Duplicate				Run: ICPMS203-B_160603A				06/03/16 18:37
Silver		0.0178	mg/L	0.0010	89	70	130	2.5	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 06/09/16
Project: 3767-01 WK:12
Work Order: B16060099

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV203-B_160607A	
Lab ID: **ICV**		Initial Calibration Verification Standard							06/07/16 14:57	
Mercury		0.000199	mg/L	1.0E-05	100	90	110			
Method: **E245.1**									Batch: 99848	
Lab ID: **MB-99848**		Method Blank				Run: HGCV203-B_160607A			06/07/16 15:05	
Mercury		ND	mg/L	1E-06						
Lab ID: **LCS-99848**		Laboratory Control Sample				Run: HGCV203-B_160607A			06/07/16 15:08	
Mercury		0.000199	mg/L	1.0E-05	100	85	115			
Lab ID: **B16060048-001CMS**		Sample Matrix Spike				Run: HGCV203-B_160607A			06/07/16 15:13	
Mercury		0.000204	mg/L	1.0E-05	102	70	130			
Lab ID: **B16060048-001CMSD**		Sample Matrix Spike Duplicate				Run: HGCV203-B_160607A			06/07/16 15:16	
Mercury		0.000200	mg/L	1.0E-05	100	70	130	2.0	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc **Report Date:** 06/09/16

Project: 3767-01 WK:12 **Work Order:** B16060099

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC METROHM 1_160606A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							06/06/16 10:03	
Chloride			2.10	mg/L	1.0	93	90	110			
Sulfate			8.84	mg/L	1.0	98	90	110			
Method:	**E300.0**									Batch: R262026	
Lab ID:	**ICB**	2	Method Blank				Run: IC METROHM 1_160606A			06/06/16 10:17	
Chloride			ND	mg/L	0.008						
Sulfate			ND	mg/L	0.06						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC METROHM 1_160606A			06/06/16 10:30	
Chloride			10.1	mg/L	1.0	101	90	110			
Sulfate			30.4	mg/L	1.0	101	90	110			
Lab ID:	**B16060103-001AMS**	2	Sample Matrix Spike				Run: IC METROHM 1_160606A			06/06/16 22:11	
Chloride			2230	mg/L	12	107	90	110			
Sulfate			6340	mg/L	37	105	90	110			
Lab ID:	**B16060103-001AMSD**	2	Sample Matrix Spike Duplicate				Run: IC METROHM 1_160606A			06/06/16 22:25	
Chloride			2230	mg/L	12	107	90	110	0.1	20	
Sulfate			6350	mg/L	37	105	90	110	0.2	20	
Method:	**E300.0**									Analytical Run: IC METROHM 1_160607A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							06/07/16 13:09	
Chloride			2.13	mg/L	1.0	95	90	110			
Sulfate			8.96	mg/L	1.0	100	90	110			
Method:	**E300.0**									Batch: R262101	
Lab ID:	**ICB**	2	Method Blank				Run: IC METROHM 1_160607A			06/07/16 13:23	
Chloride			ND	mg/L	0.008						
Sulfate			ND	mg/L	0.06						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC METROHM 1_160607A			06/07/16 13:36	
Chloride			10.2	mg/L	1.0	102	90	110			
Sulfate			30.7	mg/L	1.0	102	90	110			
Lab ID:	**B16060216-001AMS**	2	Sample Matrix Spike				Run: IC METROHM 1_160607A			06/07/16 15:37	
Chloride			155	mg/L	1.0	103	90	110			
Sulfate			370	mg/L	1.8	105	90	110			
Lab ID:	**B16060216-001AMSD**	2	Sample Matrix Spike Duplicate				Run: IC METROHM 1_160607A			06/07/16 15:51	
Chloride			155	mg/L	1.0	103	90	110	0.0	20	
Sulfate			372	mg/L	1.8	105	90	110	0.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 06/09/16
Project: 3767-01 WK:12
Work Order: B16060099

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1										Analytical Run: FIA202-B_160606A
Lab ID: ICV		Initial Calibration Verification Standard								06/06/16 08:58
Phosphorus, Total as P		0.529	mg/L	0.0050	106	90	110			
Method: E365.1										Batch: 99753
Lab ID: MB-99753		Method Blank				Run: FIA202-B_160606A				06/06/16 09:00
Phosphorus, Total as P		0.003	mg/L	0.002						
Lab ID: LCS-99753		Laboratory Control Sample				Run: FIA202-B_160606A				06/06/16 09:01
Phosphorus, Total as P		0.201	mg/L	0.0050	99	90	110			
Lab ID: B16060096-001CMS		Sample Matrix Spike				Run: FIA202-B_160606A				06/06/16 09:09
Phosphorus, Total Dissolved as P		0.212	mg/L	0.0050	103	90	110			
Lab ID: B16060096-001CMSD		Sample Matrix Spike Duplicate				Run: FIA202-B_160606A				06/06/16 09:10
Phosphorus, Total Dissolved as P		0.213	mg/L	0.0050	103	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16060099

Login completed by: Ladonna Weis
Date Received: 6/1/2016

Reviewed by: BL2000\tedwards
Received by: src

Reviewed Date: 6/3/2016
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:	10.2°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 Y Gd has a collection date/time of 5/31/16 at 9:00 on the sample container labels and on the Chain of Custody the collection date/time is not indicated. Proceeded with the collection date/time as indicated on the sample container labels.

The filtered and sulfuric acid preserved container for sample Y GD was received with a crack, and was leaking. The sample was transfered into a new container and Shari Endi, ELI Project manager, was notified.

Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT- Provide as much information as possible.

Company Name: McClelland Lab	Project Name, PWS, Permit, Etc.: 3767-01 WK: 12	Sample Origin State: NV	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Contact Name: Mike Medina; Phone/Fax: 775-356-1300; Email: MLI@METTEST.COM		Sampler: (Please Print) Robert Johnson
Invoice Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Invoice Contact & Phone: Mr Bob Jacko 604-628-1162	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ GSA ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____
☐ A2LA ☐ EDD/EDT (Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Number of Containers / Sample Type: A W S V B O / Air Water Soils/Solids Vegetation Bioassay Other	ANALYSIS REQUESTED: SEE ATTACHED	Sodium	Potassium	Chloride	SEE ATTACHED	Normal Turnaround (TAT)
1	Ynl B EX	5/31/16	09:00	Water		X	X	X	X	X	X
2	Y Gd					X	X	X	X		
3											
4											
5											
6											
7											
8											
9											
10											

RUSH

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

Comments: B160626199

Please Copy results to: MLI@METTEST.COM

hold remaining preserved samples (frozen) until further notice.

Shipped by: UPS Robert UDA

Cooler ID(s):

Receipt Temp 10-2 °C

On Ice: (Yes) No

Custody Seal (Y) N

Intact Y N

Signature Match Y N

LABORATORY USE ONLY 001 002

Custody Record MUST be Signed

Relinquished by (print): JOE CHANEY	Date/Time: 5/31/16 9AM	Signature:	Received by (print): / Date/Time: / Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print): / Date/Time: / Signature:
Sample Disposal: Return to Client: _____ Lab Disposal: _____			Received by Laboratory: Date/Time: 9:10 6-1-16 Signature:

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.

3767-01
HC-7, 8

Table 2. Trace Element Parameters for Post-Humidity Cell Leachate Analysis	
Parameter	**Required Reporting Value (mg/L)^**
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-

ANALYTICAL SUMMARY REPORT

July 19, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16062411 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK: 16

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 6/29/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16062411-001	Ynl B EX	06/28/16 9:00	06/29/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16062411-002	Y Gd	06/28/16 9:00	06/29/16	Aqueous	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:

CLIENT: Tintina Montana Inc
Project: 3767-01 WK: 16
Work Order: B16062411

Report Date: 07/19/16

CASE NARRATIVE

Tests associated with analyst identified as ELI-H were subcontracted to Energy Laboratories, 3161 East Lyndale Ave, Helena, MT, EPA Number MT00945.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK: 16
Lab ID: B16062411-001
Client Sample ID: Ynl B EX

Report Date: 07/19/16
Collection Date: 06/28/16 09:00
DateReceived: 06/29/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	07/01/16 06:31 / cmb
Sulfate	242	mg/L		1		E300.0	07/01/16 06:31 / cmb
Fluoride	0.5	mg/L		0.2		A4500-F C	06/30/16 14:08 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	ND	mg/L	L	0.005		E365.1	07/06/16 13:36 / bas
METALS, DISSOLVED							
Aluminum	0.022	mg/L		0.009		E200.8	06/30/16 18:45 / rlh
Antimony	0.0010	mg/L		0.0005		E200.8	06/30/16 18:45 / rlh
Arsenic	0.002	mg/L		0.001		E200.8	06/30/16 18:45 / rlh
Barium	0.021	mg/L		0.003		E200.7	06/30/16 17:13 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	06/30/16 17:13 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	06/30/16 18:45 / rlh
Calcium	64	mg/L		1		E200.7	06/30/16 17:13 / rlh
Chromium	ND	mg/L		0.01		E200.7	06/30/16 17:13 / rlh
Copper	ND	mg/L		0.002		E200.8	06/30/16 18:45 / rlh
Iron	ND	mg/L		0.02		E200.7	06/30/16 17:13 / rlh
Lead	0.0040	mg/L		0.0003		E200.8	06/30/16 18:45 / rlh
Magnesium	32	mg/L		1		E200.7	06/30/16 17:13 / rlh
Manganese	ND	mg/L		0.005		E200.7	06/30/16 17:13 / rlh
Mercury	ND	mg/L		5E-06		E245.1	07/12/16 16:19 / eli-h
Nickel	ND	mg/L		0.002		E200.8	06/30/16 18:45 / rlh
Potassium	5	mg/L		1		E200.7	06/30/16 17:13 / rlh
Selenium	0.001	mg/L		0.001		E200.8	06/30/16 18:45 / rlh
Silicon	3.28	mg/L		0.05		E200.7	06/30/16 17:13 / rlh
Silver	0.0036	mg/L		0.0002		E200.8	07/08/16 13:13 / mas
Sodium	ND	mg/L		1		E200.7	06/30/16 17:13 / rlh
Strontium	0.15	mg/L		0.02		E200.7	06/30/16 17:13 / rlh
Thallium	ND	mg/L		0.0002		E200.8	06/30/16 18:45 / rlh
Uranium	0.0019	mg/L		0.0002		E200.8	06/30/16 18:45 / rlh
Zinc	ND	mg/L		0.008		E200.7	06/30/16 17:13 / rlh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK: 16
Lab ID: B16062411-002
Client Sample ID: Y Gd

Report Date: 07/19/16
Collection Date: 06/28/16 09:00
DateReceived: 06/29/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	07/01/16 06:45 / cmb
Sulfate	3	mg/L		1		E300.0	07/01/16 06:45 / cmb
Fluoride	ND	mg/L		0.2		A4500-F C	06/30/16 14:16 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.008	mg/L	L	0.005		E365.1	07/06/16 13:37 / bas
METALS, DISSOLVED							
Aluminum	0.037	mg/L		0.009		E200.8	06/30/16 18:48 / rlh
Antimony	ND	mg/L		0.0005		E200.8	06/30/16 18:48 / rlh
Arsenic	0.002	mg/L		0.001		E200.8	06/30/16 18:48 / rlh
Barium	0.067	mg/L		0.003		E200.7	06/30/16 17:30 / rlh
Beryllium	ND	mg/L		0.0008		E200.7	06/30/16 17:30 / rlh
Cadmium	ND	mg/L		0.00003		E200.8	06/30/16 18:48 / rlh
Calcium	10	mg/L		1		E200.7	06/30/16 17:30 / rlh
Chromium	ND	mg/L		0.01		E200.7	06/30/16 17:30 / rlh
Copper	ND	mg/L		0.002		E200.8	06/30/16 18:48 / rlh
Iron	ND	mg/L		0.02		E200.7	06/30/16 17:30 / rlh
Lead	0.0030	mg/L		0.0003		E200.8	06/30/16 18:48 / rlh
Magnesium	2	mg/L		1		E200.7	06/30/16 17:30 / rlh
Manganese	ND	mg/L		0.005		E200.7	06/30/16 17:30 / rlh
Mercury	8.3E-06	mg/L		5E-06		E245.1	07/12/16 16:22 / eli-h
Nickel	ND	mg/L		0.002		E200.8	06/30/16 18:48 / rlh
Potassium	2	mg/L		1		E200.7	06/30/16 17:30 / rlh
Selenium	ND	mg/L		0.001		E200.8	06/30/16 18:48 / rlh
Silicon	2.75	mg/L		0.05		E200.7	06/30/16 17:30 / rlh
Silver	0.0025	mg/L	D	0.0003		E200.8	07/08/16 13:16 / mas
Sodium	1	mg/L		1		E200.7	06/30/16 17:30 / rlh
Strontium	0.04	mg/L		0.02		E200.7	06/30/16 17:30 / rlh
Thallium	ND	mg/L		0.0002		E200.8	06/30/16 18:48 / rlh
Uranium	0.0013	mg/L		0.0002		E200.8	06/30/16 18:48 / rlh
Zinc	ND	mg/L		0.008		E200.7	06/30/16 17:30 / rlh

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.
L - Lowest available reporting limit for the analytical method used.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 07/19/16
Project: 3767-01 WK: 16
Work Order: B16062411

Analyte		Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**A4500-F C**								Analytical Run: MAN-TECH_160630A	
Lab ID:	**ICV**	Initial Calibration Verification Standard							06/30/16 13:23	
Fluoride		0.980	mg/L	0.10	98	90	110			
Method:	**A4500-F C**								Batch: R263213	
Lab ID:	**MBLK**	Method Blank				Run: MAN-TECH_160630A			06/30/16 13:15	
Fluoride		ND	mg/L	0.03						
Lab ID:	**LFB**	Laboratory Fortified Blank				Run: MAN-TECH_160630A			06/30/16 13:21	
Fluoride		0.950	mg/L	0.10	95	90	110			
Lab ID:	**B16062411-001AMS**	Sample Matrix Spike				Run: MAN-TECH_160630A			06/30/16 14:11	
Fluoride		1.53	mg/L	0.10	100	80	120			
Lab ID:	**B16062411-001AMSD**	Sample Matrix Spike Duplicate				Run: MAN-TECH_160630A			06/30/16 14:13	
Fluoride		1.52	mg/L	0.10	99	80	120	0.7	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 07/19/16
Project: 3767-01 WK: 16
Work Order: B16062411

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**								Analytical Run: ICP203-B_160630A	
Lab ID: **ICV**	Continuing Calibration Verification Standard							06/30/16 10:32	
Barium	2.47	mg/L	0.10	99	95	105			
Beryllium	1.26	mg/L	0.010	101	95	105			
Calcium	24.9	mg/L	1.0	100	95	105			
Chromium	2.45	mg/L	0.050	98	95	105			
Iron	2.49	mg/L	0.020	100	95	105			
Magnesium	25.1	mg/L	1.0	100	95	105			
Manganese	2.49	mg/L	0.010	100	95	105			
Potassium	25.1	mg/L	1.0	100	95	105			
Silicon	5.05	mg/L	0.10	101	95	105			
Sodium	25.1	mg/L	1.0	100	95	105			
Strontium	2.63	mg/L	0.10	105	95	105			
Zinc	2.46	mg/L	0.010	98	95	105			
Method: **E200.7**								Batch: R263196	
Lab ID: **MB-6500DIS160630A**	Method Blank				Run: ICP203-B_160630A			06/30/16 10:39	
Barium	ND	mg/L	0.0003						
Beryllium	ND	mg/L	0.0002						
Calcium	ND	mg/L	0.02						
Chromium	ND	mg/L	0.003						
Iron	ND	mg/L	0.002						
Magnesium	0.004	mg/L	0.003						
Manganese	0.0009	mg/L	0.0006						
Potassium	ND	mg/L	0.09						
Silicon	0.03	mg/L	0.02						
Sodium	ND	mg/L	0.03						
Strontium	0.0003	mg/L	0.0002						
Zinc	ND	mg/L	0.002						
Lab ID: **LFB-6500DIS160630A**	Laboratory Fortified Blank				Run: ICP203-B_160630A			06/30/16 10:46	
Barium	0.984	mg/L	0.10	98	85	115			
Beryllium	0.510	mg/L	0.010	102	85	115			
Calcium	49.6	mg/L	1.0	99	85	115			
Chromium	0.963	mg/L	0.050	96	85	115			
Iron	4.95	mg/L	0.020	99	85	115			
Magnesium	50.1	mg/L	1.0	100	85	115			
Manganese	4.94	mg/L	0.010	99	85	115			
Potassium	50.1	mg/L	1.0	100	85	115			
Silicon	10.1	mg/L	0.10	101	85	115			
Sodium	50.0	mg/L	1.0	100	85	115			
Strontium	1.05	mg/L	0.10	105	85	115			
Zinc	0.998	mg/L	0.010	100	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 07/19/16
Project: 3767-01 WK: 16
Work Order: B16062411

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**									Batch: R263196
Lab ID: **B16062411-001BMS2**	Sample Matrix Spike				Run: ICP203-B_160630A				06/30/16 17:23
Barium	0.943	mg/L	0.050	92	70	130			
Beryllium	0.452	mg/L	0.0010	90	70	130			
Calcium	109	mg/L	1.0	89	70	130			
Chromium	0.922	mg/L	0.0050	92	70	130			
Iron	4.68	mg/L	0.020	94	70	130			
Magnesium	78.4	mg/L	1.0	93	70	130			
Manganese	4.59	mg/L	0.0010	92	70	130			
Potassium	53.1	mg/L	1.0	96	70	130			
Silicon	12.3	mg/L	0.10	91	70	130			
Sodium	47.3	mg/L	1.0	94	70	130			
Strontium	1.05	mg/L	0.010	90	70	130			
Zinc	0.935	mg/L	0.010	93	70	130			
Lab ID: **B16062411-001BMSD2**	Sample Matrix Spike Duplicate				Run: ICP203-B_160630A				06/30/16 17:27
Barium	1.00	mg/L	0.050	98	70	130	6.2	20	
Beryllium	0.481	mg/L	0.0010	96	70	130	6.3	20	
Calcium	114	mg/L	1.0	100	70	130	5.0	20	
Chromium	0.965	mg/L	0.0050	97	70	130	4.5	20	
Iron	4.94	mg/L	0.020	99	70	130	5.4	20	
Magnesium	82.6	mg/L	1.0	102	70	130	5.2	20	
Manganese	4.85	mg/L	0.0010	97	70	130	5.5	20	
Potassium	55.3	mg/L	1.0	101	70	130	4.1	20	
Silicon	13.1	mg/L	0.10	98	70	130	5.7	20	
Sodium	50.0	mg/L	1.0	100	70	130	5.5	20	
Strontium	1.12	mg/L	0.010	97	70	130	6.1	20	
Zinc	0.990	mg/L	0.010	99	70	130	5.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 07/19/16
Project: 3767-01 WK: 16
Work Order: B16062411

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**								Analytical Run: ICPMS206-B_160630A	
Lab ID: **QCS**	Initial Calibration Verification Standard								06/30/16 16:22
Aluminum	0.247	mg/L	0.10	99	90	110			
Antimony	0.0505	mg/L	0.050	101	90	110			
Arsenic	0.0503	mg/L	0.0050	101	90	110			
Cadmium	0.0257	mg/L	0.0010	103	90	110			
Copper	0.0511	mg/L	0.010	102	90	110			
Lead	0.0489	mg/L	0.010	98	90	110			
Nickel	0.0511	mg/L	0.010	102	90	110			
Selenium	0.0476	mg/L	0.0050	95	90	110			
Thallium	0.0487	mg/L	0.10	97	90	110			
Uranium	0.0199	mg/L	0.0010	99	90	110			
Method: **E200.8**									Batch: R263215
Lab ID: **LRB**	Method Blank				Run: ICPMS206-B_160630A				06/30/16 10:16
Aluminum	ND	mg/L	0.0001						
Antimony	0.0001	mg/L	8E-05						
Arsenic	ND	mg/L	6E-05						
Cadmium	ND	mg/L	3E-05						
Copper	ND	mg/L	6E-05						
Lead	0.0002	mg/L	5E-05						
Nickel	ND	mg/L	6E-05						
Selenium	ND	mg/L	0.0001						
Thallium	ND	mg/L	7E-05						
Uranium	ND	mg/L	5E-05						
Lab ID: **LFB**	Laboratory Fortified Blank				Run: ICPMS206-B_160630A				06/30/16 11:30
Aluminum	0.0521	mg/L	0.10	104	85	115			
Antimony	0.0491	mg/L	0.050	98	85	115			
Arsenic	0.0504	mg/L	0.0050	101	85	115			
Cadmium	0.0507	mg/L	0.0010	101	85	115			
Copper	0.0498	mg/L	0.010	100	85	115			
Lead	0.0510	mg/L	0.010	102	85	115			
Nickel	0.0494	mg/L	0.010	99	85	115			
Selenium	0.0490	mg/L	0.0050	98	85	115			
Thallium	0.0517	mg/L	0.10	103	85	115			
Uranium	0.0511	mg/L	0.0010	102	85	115			
Lab ID: **B16062346-004BMS**	Sample Matrix Spike				Run: ICPMS206-B_160630A				06/30/16 18:20
Aluminum	0.106	mg/L	0.030	101	70	130			
Antimony	0.100	mg/L	0.0010	100	70	130			
Arsenic	0.107	mg/L	0.0010	104	70	130			
Cadmium	0.1000	mg/L	0.0010	100	70	130			
Copper	0.115	mg/L	0.0050	97	70	130			
Lead	0.103	mg/L	0.0010	103	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 07/19/16
Project: 3767-01 WK: 16
Work Order: B16062411

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**									Batch: R263215
Lab ID: **B16062346-004BMS**	Sample Matrix Spike				Run: ICPMS206-B_160630A				06/30/16 18:20
Nickel	0.101	mg/L	0.0050	95	70	130			
Selenium	0.106	mg/L	0.0010	104	70	130			
Thallium	0.101	mg/L	0.00050	101	70	130			
Uranium	0.114	mg/L	0.00030	103	70	130			
Lab ID: **B16062346-004BMSD**	Sample Matrix Spike Duplicate				Run: ICPMS206-B_160630A				06/30/16 18:23
Aluminum	0.107	mg/L	0.030	102	70	130	1.3	20	
Antimony	0.103	mg/L	0.0010	103	70	130	3.1	20	
Arsenic	0.108	mg/L	0.0010	105	70	130	0.8	20	
Cadmium	0.101	mg/L	0.0010	101	70	130	0.9	20	
Copper	0.115	mg/L	0.0050	98	70	130	0.1	20	
Lead	0.104	mg/L	0.0010	104	70	130	1.0	20	
Nickel	0.102	mg/L	0.0050	96	70	130	1.1	20	
Selenium	0.107	mg/L	0.0010	104	70	130	0.7	20	
Thallium	0.103	mg/L	0.00050	103	70	130	1.7	20	
Uranium	0.116	mg/L	0.00030	106	70	130	2.2	20	
Method: **E200.8**									Analytical Run: ICPMS206-B_160708A
Lab ID: **QCS**	Initial Calibration Verification Standard								07/08/16 14:57
Silver	0.0257	mg/L	0.0050	103	90	110			
Method: **E200.8**									Batch: R263533
Lab ID: **LRB**	Method Blank				Run: ICPMS206-B_160708A				07/08/16 11:25
Silver	0.0004	mg/L	2E-05						
Lab ID: **LFB**	Laboratory Fortified Blank				Run: ICPMS206-B_160708A				07/08/16 11:28
Silver	0.0189	mg/L	0.0050	93	85	115			
Lab ID: **B16070275-001BMS**	Sample Matrix Spike				Run: ICPMS206-B_160708A				07/08/16 12:24
Silver	0.0218	mg/L	0.0010	109	70	130			
Lab ID: **B16070275-001BMSD**	Sample Matrix Spike Duplicate				Run: ICPMS206-B_160708A				07/08/16 12:27
Silver	0.0192	mg/L	0.0010	95	70	130	13	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 07/19/16
Project: 3767-01 WK: 16
Work Order: B16062411

Analyte		Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E245.1**								Analytical Run: SUB-H116721	
Lab ID:	**ICV**	Initial Calibration Verification Standard							07/12/16 14:38	
Mercury		0.000200	mg/L	0.00010	100	90	110			
Lab ID:	**CCV1**	Continuing Calibration Verification Standard							07/12/16 14:40	
Mercury		0.000198	mg/L	0.00010	99	90	110			
Method:	**E245.1**								Batch: H_33593	
Lab ID:	**MB-33593**	Method Blank				Run: SUB-H116721			07/12/16 16:11	
Mercury		ND	mg/L	1E-06						
Lab ID:	**LCS-33593**	Laboratory Control Sample				Run: SUB-H116721			07/12/16 16:14	
Mercury		0.000155	mg/L	1.0E-05	103	85	115			
Lab ID:	**H16070062-001DMS**	Sample Matrix Spike				Run: SUB-H116721			07/12/16 16:28	
Mercury		0.000156	mg/L	1.0E-05	104	70	130			
Lab ID:	**H16070062-001DMSD**	Sample Matrix Spike Duplicate				Run: SUB-H116721			07/12/16 16:30	
Mercury		0.000162	mg/L	1.0E-05	108	70	130	3.7	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 07/19/16
Project: 3767-01 WK: 16
Work Order: B16062411

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E300.0**								Analytical Run: IC METROHM 2_160630A	
Lab ID: **ICV**	Initial Calibration Verification Standard							06/30/16 15:29	
Chloride	2.11	mg/L	1.0	94	90	110			
Sulfate	8.76	mg/L	1.0	97	90	110			
Method: **E300.0**								Batch: R263240	
Lab ID: **ICB**	Method Blank				Run: IC METROHM 2_160630A			06/30/16 15:42	
Chloride	ND	mg/L	0.004						
Sulfate	ND	mg/L	0.02						
Lab ID: **LFB**	Laboratory Fortified Blank				Run: IC METROHM 2_160630A			06/30/16 15:55	
Chloride	10.2	mg/L	1.0	102	90	110			
Sulfate	30.8	mg/L	1.0	103	90	110			
Lab ID: **B16062409-001AMS**	Sample Matrix Spike				Run: IC METROHM 2_160630A			07/01/16 05:51	
Chloride	221	mg/L	1.2	105	90	110			
Sulfate	1520	mg/L	3.7	103	90	110			
Lab ID: **B16062409-001AMSD**	Sample Matrix Spike Duplicate				Run: IC METROHM 2_160630A			07/01/16 06:04	
Chloride	222	mg/L	1.2	105	90	110	0.2	20	
Sulfate	1520	mg/L	3.7	102	90	110	0.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 07/19/16
Project: 3767-01 WK: 16
Work Order: B16062411

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1								Analytical Run: FIA202-B_160706A	
Lab ID: ICV	Initial Calibration Verification Standard							07/06/16 13:24	
Phosphorus, Total as P	0.499	mg/L	0.0050	100	90	110			
Method: E365.1								Batch: 100535	
Lab ID: MB-100535	Method Blank				Run: FIA202-B_160706A			07/06/16 13:26	
Phosphorus, Total as P	0.003	mg/L	0.002						
Lab ID: LCS-100535	Laboratory Control Sample				Run: FIA202-B_160706A			07/06/16 13:27	
Phosphorus, Total as P	0.191	mg/L	0.0050	94	90	110			
Lab ID: B16062414-001CMS	Sample Matrix Spike				Run: FIA202-B_160706A			07/06/16 13:40	
Phosphorus, Total Dissolved as P	0.193	mg/L	0.0050	91	90	110			
Lab ID: B16062414-001CMSD	Sample Matrix Spike Duplicate				Run: FIA202-B_160706A			07/06/16 13:41	
Phosphorus, Total Dissolved as P	0.196	mg/L	0.0050	93	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16062411

Login completed by: Cindy Rohrer
Date Received: 6/29/2016

Reviewed by: BL2000\lcadreau
Received by: dlf

Reviewed Date: 7/2/2016
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:	1.6°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:

Collection date/time not listed on the Chain of Custody for sample Y Gd. Dat/time taken from sample containers.

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: McCleland Lab	Project Name, PWS, Permit, Etc.: 3767-01 WK: 16	Sample Origin State: NV	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Contact Name: Mike Medina; Phone/Fax: 775-356-1300; Email: MLI@METTEST.COM		Sampler: (Please Print) Robert Johnson
Invoice Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Invoice Contact & Phone: Mr Bob Jacko 604-628-1162	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data) Format:_____
☐ POTW/WWTP ☐ LEVEL IV
☐ State: _____ ☐ NELAC
☐ Other: _____

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

Comments:

Shipped by: Robert UPS NDA
Cooler ID(s):
Receipt Temp: 1.6 °C
On Ice: (Yes) No
Custody Seal (Y) N
Intact (Y) N
Signature Match (Y) N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride						SEE ATTACHED	Normal Turnaround (TAT)	RUSH	
1 Ynl B EX	6/28/16	09:00	Water	X	X	X	X						X	X		Please Copy results to: B16062411-001
2 Y Gd				X	X	X	X									MLI@METTEST.COM - 002
3																
4																hold remaining preserved
5																samples (frozen) until
6																further notice.
7																
8																
9																
10																

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

LABORATORY USE ONLY

Custody Record MUST be Signed

Relinquished by (print): JOE CHANEY	Date/Time: 6/28/16 9AM	Signature:	Received by (print): / Date/Time: / Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print): / Date/Time: / Signature:
Sample Disposal: Return to Client: _____ Lab Disposal: _____			Received by Laboratory: 6/29/16 0915 Date/Time: / Signature:

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.

3767-01
HC-7, 8

Table 2. Trace Element Parameters for Post-Humidity Cell Leachate Analysis	
Parameter	**Required Reporting Value (mg/L)[A]**
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-

ANALYTICAL SUMMARY REPORT

August 04, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16072123 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK: 20

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 7/27/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16072123-001	Ynl Ex	07/26/16 9:00	07/27/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16072123-002	Tgd	07/26/16 9:00	07/27/16	Aqueous	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: Tintina Montana Inc
Project: 3767-01 WK: 20
Lab ID: B16072123-001
Client Sample ID: Ynl Ex

Report Date: 08/04/16
Collection Date: 07/26/16 09:00
DateReceived: 07/27/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	07/29/16 02:04 / cmb
Sulfate	157	mg/L		1		E300.0	07/29/16 02:04 / cmb
Fluoride	0.4	mg/L		0.2		A4500-F C	07/28/16 15:41 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.006	mg/L	L	0.005		E365.1	08/01/16 15:41 / bas
METALS, DISSOLVED							
Aluminum	0.022	mg/L		0.009		E200.7	07/29/16 10:50 / jh
Antimony	0.0008	mg/L		0.0005		E200.8	07/29/16 18:07 / mas
Arsenic	0.002	mg/L		0.001		E200.8	07/29/16 18:07 / mas
Barium	0.026	mg/L		0.003		E200.7	07/29/16 10:50 / jh
Beryllium	ND	mg/L		0.0008		E200.7	07/29/16 10:50 / jh
Cadmium	ND	mg/L		0.00003		E200.8	07/29/16 18:07 / mas
Calcium	44	mg/L		1		E200.7	07/29/16 10:50 / jh
Chromium	ND	mg/L		0.01		E200.7	07/29/16 10:50 / jh
Copper	ND	mg/L		0.002		E200.8	07/29/16 18:07 / mas
Iron	0.04	mg/L		0.02		E200.8	07/29/16 18:07 / mas
Lead	0.0029	mg/L		0.0003		E200.8	07/29/16 18:07 / mas
Magnesium	22	mg/L		1		E200.7	07/29/16 10:50 / jh
Manganese	ND	mg/L		0.005		E200.7	07/29/16 10:50 / jh
Mercury	ND	mg/L		5E-06		E245.1	07/28/16 16:46 / ser
Nickel	ND	mg/L		0.002		E200.8	07/29/16 18:07 / mas
Potassium	3	mg/L		1		E200.7	07/29/16 10:50 / jh
Selenium	0.001	mg/L		0.001		E200.8	07/29/16 18:07 / mas
Silicon	2.97	mg/L		0.05		E200.7	07/29/16 10:50 / jh
Silver	ND	mg/L		0.0002		E200.8	07/29/16 18:07 / mas
Sodium	ND	mg/L		1		E200.7	07/29/16 10:50 / jh
Strontium	0.11	mg/L		0.02		E200.7	07/29/16 10:50 / jh
Thallium	ND	mg/L		0.0002		E200.8	07/29/16 18:07 / mas
Uranium	0.0014	mg/L		0.0002		E200.8	07/29/16 18:07 / mas
Zinc	ND	mg/L		0.008		E200.7	07/29/16 10:50 / jh

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK: 20
Lab ID: B16072123-002
Client Sample ID: Tgd

Report Date: 08/04/16
Collection Date: 07/26/16 09:00
DateReceived: 07/27/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	07/29/16 02:17 / cmb
Sulfate	4	mg/L		1		E300.0	07/29/16 02:17 / cmb
Fluoride	ND	mg/L		0.2		A4500-F C	07/28/16 15:44 / cnm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.011	mg/L	L	0.005		E365.1	08/01/16 15:42 / bas
METALS, DISSOLVED							
Aluminum	0.042	mg/L		0.009		E200.7	07/29/16 10:54 / jh
Antimony	ND	mg/L		0.0005		E200.8	07/29/16 18:10 / mas
Arsenic	0.002	mg/L		0.001		E200.8	07/29/16 18:10 / mas
Barium	0.087	mg/L		0.003		E200.7	07/29/16 10:54 / jh
Beryllium	ND	mg/L		0.0008		E200.7	07/29/16 10:54 / jh
Cadmium	ND	mg/L		0.00003		E200.8	07/29/16 18:10 / mas
Calcium	12	mg/L		1		E200.7	07/29/16 10:54 / jh
Chromium	ND	mg/L		0.01		E200.7	07/29/16 10:54 / jh
Copper	ND	mg/L		0.002		E200.8	07/29/16 18:10 / mas
Iron	ND	mg/L		0.02		E200.7	07/29/16 10:54 / jh
Lead	0.0022	mg/L		0.0003		E200.8	07/29/16 18:10 / mas
Magnesium	2	mg/L		1		E200.7	07/29/16 10:54 / jh
Manganese	ND	mg/L		0.005		E200.7	07/29/16 10:54 / jh
Mercury	ND	mg/L		5E-06		E245.1	07/28/16 16:48 / ser
Nickel	ND	mg/L		0.002		E200.8	07/29/16 18:10 / mas
Potassium	3	mg/L		1		E200.7	07/29/16 10:54 / jh
Selenium	ND	mg/L		0.001		E200.8	07/29/16 18:10 / mas
Silicon	3.61	mg/L		0.05		E200.7	07/29/16 10:54 / jh
Silver	ND	mg/L		0.0002		E200.8	07/29/16 18:10 / mas
Sodium	1	mg/L		1		E200.7	07/29/16 10:54 / jh
Strontium	0.05	mg/L		0.02		E200.7	07/29/16 10:54 / jh
Thallium	ND	mg/L		0.0002		E200.8	07/29/16 18:10 / mas
Uranium	0.0027	mg/L		0.0002		E200.8	07/29/16 18:10 / mas
Zinc	ND	mg/L		0.008		E200.7	07/29/16 10:54 / jh

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 08/04/16
Project: 3767-01 WK: 20
Work Order: B16072123

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**									Analytical Run: MAN-TECH_160728A	
Lab ID: **ICV**		Initial Calibration Verification Standard							07/28/16 15:13	
Fluoride		1.00	mg/L	0.10	100	90	110			
Method: **A4500-F C**									Batch: R264602	
Lab ID: **MBLK**		Method Blank				Run: MAN-TECH_160728A			07/28/16 15:08	
Fluoride		ND	mg/L	0.03						
Lab ID: **LFB**		Laboratory Fortified Blank				Run: MAN-TECH_160728A			07/28/16 15:11	
Fluoride		0.970	mg/L	0.10	97	90	110			
Lab ID: **B16072169-001AMS**		Sample Matrix Spike				Run: MAN-TECH_160728A			07/28/16 16:06	
Fluoride		1.27	mg/L	0.10	100	80	120			
Lab ID: **B16072169-001AMSD**		Sample Matrix Spike Duplicate				Run: MAN-TECH_160728A			07/28/16 16:08	
Fluoride		1.27	mg/L	0.10	100	80	120	0.0	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 08/04/16
Project: 3767-01 WK: 20
Work Order: B16072123

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Analytical Run: ICP203-B_160729A	
Lab ID: ICV	13	Continuing Calibration Verification Standard							07/29/16 09:06	
Aluminum		2.50	mg/L	0.10	100	95	105			
Barium		2.43	mg/L	0.10	97	95	105			
Beryllium		1.24	mg/L	0.010	100	95	105			
Calcium		25.1	mg/L	1.0	100	95	105			
Chromium		2.45	mg/L	0.050	98	95	105			
Iron		2.50	mg/L	0.020	100	95	105			
Magnesium		25.3	mg/L	1.0	101	95	105			
Manganese		2.47	mg/L	0.010	99	95	105			
Potassium		25.4	mg/L	1.0	102	95	105			
Silicon		4.98	mg/L	0.10	100	95	105			
Sodium		25.6	mg/L	1.0	102	95	105			
Strontium		2.41	mg/L	0.10	97	95	105			
Zinc		2.51	mg/L	0.010	100	95	105			
Method: E200.7									Batch: R264609	
Lab ID: MB-6500DIS160729A	13	Method Blank				Run: ICP203-B_160729A			07/29/16 09:13	
Aluminum		ND	mg/L	0.004						
Barium		ND	mg/L	0.0005						
Beryllium		ND	mg/L	0.0001						
Calcium		ND	mg/L	0.06						
Chromium		ND	mg/L	0.006						
Iron		ND	mg/L	0.002						
Magnesium		ND	mg/L	0.002						
Manganese		ND	mg/L	0.0005						
Potassium		ND	mg/L	0.05						
Silicon		ND	mg/L	0.02						
Sodium		ND	mg/L	0.04						
Strontium		ND	mg/L	0.0001						
Zinc		ND	mg/L	0.0007						
Lab ID: LFB-6500DIS160729A	13	Laboratory Fortified Blank				Run: ICP203-B_160729A			07/29/16 09:20	
Aluminum		4.91	mg/L	0.10	98	85	115			
Barium		0.929	mg/L	0.10	93	85	115			
Beryllium		0.475	mg/L	0.010	95	85	115			
Calcium		48.1	mg/L	1.0	96	85	115			
Chromium		0.941	mg/L	0.050	94	85	115			
Iron		4.77	mg/L	0.020	95	85	115			
Magnesium		49.7	mg/L	1.0	99	85	115			
Manganese		4.70	mg/L	0.010	94	85	115			
Potassium		49.1	mg/L	1.0	98	85	115			
Silicon		9.62	mg/L	0.10	96	85	115			
Sodium		49.3	mg/L	1.0	99	85	115			
Strontium		0.947	mg/L	0.10	95	85	115			
Zinc		0.981	mg/L	0.010	98	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 08/04/16
Project: 3767-01 WK: 20
Work Order: B16072123

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**										Batch: R264609
Lab ID: **B16072059-003BMS2**	13	Sample Matrix Spike				Run: ICP203-B_160729A				07/29/16 10:40
Aluminum		24.8	mg/L	0.030	99	70	130			
Barium		5.25	mg/L	0.050	93	70	130			
Beryllium		2.37	mg/L	0.0010	95	70	130			
Calcium		258	mg/L	1.0	96	70	130			
Chromium		4.68	mg/L	0.029	94	70	130			
Iron		24.0	mg/L	0.020	95	70	130			
Magnesium		250	mg/L	1.0	95	70	130			
Manganese		23.4	mg/L	0.0025	94	70	130			
Potassium		254	mg/L	1.0	97	70	130			
Silicon		53.9	mg/L	0.13	96	70	130			
Sodium		788	mg/L	1.8	95	70	130			
Strontium		5.29	mg/L	0.010	95	70	130			
Zinc		4.92	mg/L	0.010	98	70	130			
Lab ID: **B16072059-003BMSD**	13	Sample Matrix Spike Duplicate				Run: ICP203-B_160729A				07/29/16 10:44
Aluminum		24.6	mg/L	0.030	98	70	130	1.1	20	
Barium		5.37	mg/L	0.050	96	70	130	2.4	20	
Beryllium		2.43	mg/L	0.0010	97	70	130	2.4	20	
Calcium		263	mg/L	1.0	98	70	130	1.7	20	
Chromium		4.79	mg/L	0.029	96	70	130	2.4	20	
Iron		24.6	mg/L	0.020	98	70	130	2.5	20	
Magnesium		256	mg/L	1.0	98	70	130	2.2	20	
Manganese		24.0	mg/L	0.0025	96	70	130	2.4	20	
Potassium		260	mg/L	1.0	100	70	130	2.3	20	
Silicon		53.5	mg/L	0.13	95	70	130	0.9	20	
Sodium		797	mg/L	1.8	98	70	130	1.1	20	
Strontium		5.41	mg/L	0.010	97	70	130	2.2	20	
Zinc		4.86	mg/L	0.010	97	70	130	1.4	20	
Lab ID: **MB-101235**	13	Method Blank				Run: ICP203-B_160729A				07/29/16 14:47
Aluminum		ND	mg/L	0.004						
Barium		0.0005	mg/L	0.0005						
Beryllium		ND	mg/L	0.0001						
Calcium		ND	mg/L	0.06						
Chromium		ND	mg/L	0.006						
Iron		0.005	mg/L	0.002						
Magnesium		0.010	mg/L	0.002						
Manganese		ND	mg/L	0.0005						
Potassium		0.2	mg/L	0.05						
Silicon		ND	mg/L	0.02						
Sodium		0.2	mg/L	0.04						
Strontium		ND	mg/L	0.0001						
Zinc		0.002	mg/L	0.0007						

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 08/04/16
Project: 3767-01 WK: 20
Work Order: B16072123

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**									Analytical Run: ICPMS206-B_160729A	
Lab ID: **QCS**	11	Initial Calibration Verification Standard							07/29/16 17:32	
Antimony		0.0452	mg/L	0.050	90	90	110			
Arsenic		0.0507	mg/L	0.0050	101	90	110			
Cadmium		0.0245	mg/L	0.0010	98	90	110			
Copper		0.0517	mg/L	0.010	103	90	110			
Iron		0.265	mg/L	0.020	106	90	110			
Lead		0.0495	mg/L	0.010	99	90	110			
Nickel		0.0510	mg/L	0.010	102	90	110			
Selenium		0.0486	mg/L	0.0050	97	90	110			
Silver		0.0245	mg/L	0.0050	98	90	110			
Thallium		0.0500	mg/L	0.10	100	90	110			
Uranium		0.0198	mg/L	0.0010	99	90	110			
Method: **E200.8**										Batch: R264618
Lab ID: **LRB**	11	Method Blank				Run: ICPMS206-B_160729A			07/29/16 10:39	
Antimony		ND	mg/L	8E-05						
Arsenic		ND	mg/L	6E-05						
Cadmium		ND	mg/L	3E-05						
Copper		ND	mg/L	6E-05						
Iron		ND	mg/L	0.0007						
Lead		ND	mg/L	5E-05						
Nickel		ND	mg/L	6E-05						
Selenium		ND	mg/L	0.0001						
Silver		5E-05	mg/L	2E-05						
Thallium		ND	mg/L	7E-05						
Uranium		ND	mg/L	5E-05						
Lab ID: **LFB**	11	Laboratory Fortified Blank				Run: ICPMS206-B_160729A			07/29/16 10:41	
Antimony		0.0476	mg/L	0.050	95	85	115			
Arsenic		0.0526	mg/L	0.0050	105	85	115			
Cadmium		0.0523	mg/L	0.0010	105	85	115			
Copper		0.0513	mg/L	0.010	103	85	115			
Iron		5.37	mg/L	0.020	107	85	115			
Lead		0.0526	mg/L	0.010	105	85	115			
Nickel		0.0519	mg/L	0.010	104	85	115			
Selenium		0.0512	mg/L	0.0050	102	85	115			
Silver		0.0200	mg/L	0.0050	100	85	115			
Thallium		0.0528	mg/L	0.10	106	85	115			
Uranium		0.0534	mg/L	0.0010	107	85	115			
Lab ID: **B16072169-001BMS**	11	Sample Matrix Spike				Run: ICPMS206-B_160729A			07/29/16 19:07	
Antimony		0.0513	mg/L	0.0010	102	70	130			
Arsenic		0.0585	mg/L	0.0010	108	70	130			
Cadmium		0.0512	mg/L	0.0010	102	70	130			
Copper		0.0546	mg/L	0.0050	107	70	130			
Iron		5.35	mg/L	0.020	107	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 08/04/16
Project: 3767-01 WK: 20
Work Order: B16072123

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**										Batch: R264618
Lab ID: **B16072169-001BMS**	11	Sample Matrix Spike				Run: ICPMS206-B_160729A				07/29/16 19:07
Lead		0.0524	mg/L	0.0010	105	70	130			
Nickel		0.0529	mg/L	0.0050	106	70	130			
Selenium		0.0547	mg/L	0.0010	108	70	130			
Silver		0.0230	mg/L	0.0010	115	70	130			
Thallium		0.0529	mg/L	0.00050	106	70	130			
Uranium		0.0549	mg/L	0.00030	106	70	130			
Lab ID: **B16072169-001BMSD**	11	Sample Matrix Spike Duplicate				Run: ICPMS206-B_160729A				07/29/16 19:10
Antimony		0.0540	mg/L	0.0010	108	70	130	5.2	20	
Arsenic		0.0609	mg/L	0.0010	113	70	130	3.9	20	
Cadmium		0.0550	mg/L	0.0010	110	70	130	7.3	20	
Copper		0.0573	mg/L	0.0050	113	70	130	4.7	20	
Iron		5.78	mg/L	0.020	116	70	130	7.8	20	
Lead		0.0560	mg/L	0.0010	112	70	130	6.7	20	
Nickel		0.0559	mg/L	0.0050	111	70	130	5.4	20	
Selenium		0.0567	mg/L	0.0010	112	70	130	3.6	20	
Silver		0.0194	mg/L	0.0010	97	70	130	17	20	
Thallium		0.0562	mg/L	0.00050	112	70	130	6.1	20	
Uranium		0.0587	mg/L	0.00030	114	70	130	6.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 08/04/16
Project: 3767-01 WK: 20
Work Order: B16072123

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV203-B_160728A	
Lab ID: **ICV**		Initial Calibration Verification Standard							07/28/16 14:56	
Mercury		0.000208	mg/L	1.0E-05	104	90	110			
Lab ID: **CCV**		Continuing Calibration Verification Standard							07/28/16 16:23	
Mercury		9.58E-05	mg/L	1.0E-05	96	90	110			
Method: **E245.1**									Batch: 101244	
Lab ID: **MB-101244**		Method Blank				Run: HGCV203-B_160728A			07/28/16 16:12	
Mercury		2E-06	mg/L	1E-06						
Lab ID: **LCS-101244**		Laboratory Control Sample				Run: HGCV203-B_160728A			07/28/16 16:15	
Mercury		0.000208	mg/L	1.0E-05	103	85	115			
Lab ID: **B16072123-002BMS**		Sample Matrix Spike				Run: HGCV203-B_160728A			07/28/16 16:51	
Mercury		0.000213	mg/L	1.0E-05	105	70	130			
Lab ID: **B16072123-002BMSD**		Sample Matrix Spike Duplicate				Run: HGCV203-B_160728A			07/28/16 16:54	
Mercury		0.000216	mg/L	1.0E-05	106	70	130	1.4	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 08/04/16
Project: 3767-01 WK: 20
Work Order: B16072123

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC METROHM 1_160728A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							07/28/16 12:08	
Chloride			2.18	mg/L	1.0	97	90	110			
Sulfate			9.06	mg/L	1.0	101	90	110			
Method:	**E300.0**									Batch: R264563	
Lab ID:	**ICB**	2	Method Blank				Run: IC METROHM 1_160728A			07/28/16 12:22	
Chloride			ND	mg/L	0.008						
Sulfate			ND	mg/L	0.06						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC METROHM 1_160728A			07/28/16 12:35	
Chloride			10.3	mg/L	1.0	103	90	110			
Sulfate			30.8	mg/L	1.0	103	90	110			
Lab ID:	**B16072132-002AMS**	2	Sample Matrix Spike				Run: IC METROHM 1_160728A			07/29/16 02:58	
Chloride			53.6	mg/L	1.0	104	90	110			
Sulfate			166	mg/L	1.0	105	90	110			
Lab ID:	**B16072132-002AMSD**	2	Sample Matrix Spike Duplicate				Run: IC METROHM 1_160728A			07/29/16 03:11	
Chloride			53.6	mg/L	1.0	104	90	110	0.0	20	
Sulfate			166	mg/L	1.0	105	90	110	0.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 08/04/16
Project: 3767-01 WK: 20
Work Order: B16072123

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1										Analytical Run: FIA202-B_160801B
Lab ID: ICV		Initial Calibration Verification Standard								08/01/16 14:56
Phosphorus, Total as P		0.529	mg/L	0.0050	106	90	110			
Method: E365.1										Batch: 101308
Lab ID: MB-101308		Method Blank				Run: FIA202-B_160801B				08/01/16 15:33
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-101308		Laboratory Control Sample				Run: FIA202-B_160801B				08/01/16 15:34
Phosphorus, Total as P		0.196	mg/L	0.0050	98	90	110			
Lab ID: B16072123-002CMSD		Sample Matrix Spike Duplicate				Run: FIA202-B_160801B				08/01/16 15:44
Phosphorus, Total Dissolved as P		0.209	mg/L	0.0050	99	90	110			
Lab ID: B16072123-002CMS		Sample Matrix Spike				Run: FIA202-B_160801B				08/01/16 16:23
Phosphorus, Total Dissolved as P		0.207	mg/L	0.0050	98	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16072123

Login completed by: Gina McCartney
Date Received: 7/27/2016

Reviewed by: BL2000\tedwards
Received by: mme

Reviewed Date: 7/29/2016
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:	7.8°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:

Sample ID's were changed from Ynl B EX and Y Gd to Ynl Ex and Tgd per Shari Endy, Project Manager, on 08/03/16.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: McClelland Lab	Project Name, PWS, Permit, Etc. 3767-01 WK: 20	Sample Origin State: NV	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Contact Name: Mike Medina; Phone/Fax: 775-356-1300	Email: MLI@METTEST.COM	Sampler: (Please Print) Robert Johnson
Invoice Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Invoice Contact & Phone: Mr Bob Jacko 604-628-1162	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

- ☐ DW
- ☐ GSA
- ☐ POTW/WWTP
- ☐ State: ______
- ☐ Other: ______
- ☐ A2LA
- ☐ EDD/EDT (Electronic Data) Format: ______
- ☐ LEVEL IV
- ☐ NELAC

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

ANALYSIS REQUESTED

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

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride						SEE ATTACHED	Normal Turnaround (TAT)	RUSH	Comments:	LABORATORY USE ONLY
1	Ynl B EX	7/26/16	09:00	Water	X	X	X	X						X	X		Please Copy results to:	B16072123-001
2	Y Gd	7/26/16	0900		X	X	X	X									MLI@METTEST.COM	↓ -002
3		sample date, and time																
4		taken from container															hold remaining preserved	
5				MK 7/27/16													samples (frozen) until	
6																	further notice.	
7																		
8																		
9																		
10																		

Shipped by: Robert UPS NDA
Cooler ID(s):
Receipt Temp ~~UPS NDA~~ 7.8 °C
On Ice: (Yes) No
Custody Seal (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:
JOE CHANEY	7/26/16 9Am	[signature]			

Sample Disposal: Return to Client: ______ Lab Disposal: ______

Received by Laboratory: [signature] Date/Time: 7/27/16 0920 Signature:

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.

3767-01
HC-7, 8

Parameter	Required Reporting Value (mg/L)[A]
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-

ANALYTICAL SUMMARY REPORT

November 04, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16082331 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK:24

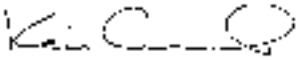
Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 8/24/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16082331-001	Ynl Ex	08/23/16 9:00	08/24/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16082331-002	Tgd	08/23/16 9:00	08/24/16	Aqueous	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: 2016.11.04 08:36:41 -06:00

CLIENT: Tintina Montana Inc
Project: 3767-01 WK:24
Work Order: B16082331

Revised Date: 11/04/16
Report Date: 09/06/16

CASE NARRATIVE

Revised 11/4/2016:

Per Mike Medina on 11/2/16, add Chloride, Potassium and Sodium to samples Ynl Ex (B16082331-001) and Tgd (B16082331-002).

The report has been revised and replaces any previously issued report in its entirety.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:24
Lab ID: B16082331-001
Client Sample ID: Ynl Ex

Revised Date: 11/04/16
Report Date: 09/06/16
Collection Date: 08/23/16 09:00
DateReceived: 08/24/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	08/26/16 23:06 / cmb
Sulfate	122	mg/L		1		E300.0	08/26/16 23:06 / cmb
Fluoride	0.4	mg/L		0.2		A4500-F C	09/02/16 08:53 / cjm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	ND	mg/L	L	0.005		E365.1	08/31/16 13:57 / bas
METALS, DISSOLVED							
Aluminum	0.018	mg/L		0.009		E200.8	08/25/16 12:14 / mas
Antimony	0.0008	mg/L		0.0005		E200.8	08/25/16 12:14 / mas
Arsenic	0.002	mg/L		0.001		E200.8	08/25/16 12:14 / mas
Barium	0.060	mg/L		0.003		E200.8	08/25/16 12:14 / mas
Beryllium	ND	mg/L		0.0008		E200.8	08/25/16 12:14 / mas
Cadmium	ND	mg/L		0.00003		E200.8	08/25/16 12:14 / mas
Calcium	37	mg/L		1		E200.8	08/25/16 12:14 / mas
Chromium	ND	mg/L		0.01		E200.8	08/25/16 12:14 / mas
Copper	ND	mg/L		0.002		E200.8	08/25/16 12:14 / mas
Iron	ND	mg/L		0.02		E200.8	08/25/16 12:14 / mas
Lead	0.0021	mg/L		0.0003		E200.8	08/25/16 12:14 / mas
Magnesium	18	mg/L		1		E200.8	08/25/16 12:14 / mas
Manganese	ND	mg/L		0.005		E200.8	08/25/16 12:14 / mas
Nickel	ND	mg/L		0.002		E200.8	08/25/16 12:14 / mas
Potassium	2	mg/L		1		E200.8	08/25/16 12:14 / mas
Selenium	0.001	mg/L		0.001		E200.8	08/25/16 12:14 / mas
Silicon	2.93	mg/L		0.05		E200.8	08/25/16 12:14 / mas
Silver	ND	mg/L		0.0002		E200.8	08/25/16 12:14 / mas
Sodium	2	mg/L		1		E200.8	08/25/16 12:14 / mas
Strontium	0.09	mg/L		0.02		E200.8	08/25/16 12:14 / mas
Thallium	ND	mg/L		0.0002		E200.8	08/25/16 12:14 / mas
Uranium	0.0011	mg/L		0.0002		E200.8	08/25/16 12:14 / mas
Zinc	ND	mg/L		0.008		E200.8	08/25/16 12:14 / mas
METALS, DISSOLVED							
Mercury	ND	mg/L		5E-06		E245.1	08/25/16 15:11 / ser

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:24
Lab ID: B16082331-002
Client Sample ID: Tgd

Revised Date: 11/04/16
Report Date: 09/06/16
Collection Date: 08/23/16 09:00
DateReceived: 08/24/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	08/26/16 23:19 / cmb
Sulfate	4	mg/L		1		E300.0	08/26/16 23:19 / cmb
Fluoride	ND	mg/L		0.2		A4500-F C	09/02/16 08:53 / cjm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.010	mg/L	L	0.005		E365.1	08/31/16 14:01 / bas
METALS, DISSOLVED							
Aluminum	0.041	mg/L		0.009		E200.8	08/25/16 12:17 / mas
Antimony	ND	mg/L		0.0005		E200.8	08/25/16 12:17 / mas
Arsenic	0.003	mg/L		0.001		E200.8	08/25/16 12:17 / mas
Barium	0.162	mg/L		0.003		E200.8	08/25/16 12:17 / mas
Beryllium	ND	mg/L		0.0008		E200.8	08/25/16 12:17 / mas
Cadmium	ND	mg/L		0.00003		E200.8	08/25/16 12:17 / mas
Calcium	12	mg/L		1		E200.8	08/25/16 12:17 / mas
Chromium	ND	mg/L		0.01		E200.8	08/25/16 12:17 / mas
Copper	ND	mg/L		0.002		E200.8	08/25/16 12:17 / mas
Iron	ND	mg/L		0.02		E200.8	08/25/16 12:17 / mas
Lead	0.0036	mg/L		0.0003		E200.8	08/25/16 12:17 / mas
Magnesium	2	mg/L		1		E200.8	08/25/16 12:17 / mas
Manganese	ND	mg/L		0.005		E200.8	08/25/16 12:17 / mas
Nickel	ND	mg/L		0.002		E200.8	08/25/16 12:17 / mas
Potassium	3	mg/L		1		E200.8	08/25/16 12:17 / mas
Selenium	ND	mg/L		0.001		E200.8	08/25/16 12:17 / mas
Silicon	3.38	mg/L		0.05		E200.8	08/25/16 12:17 / mas
Silver	ND	mg/L		0.0002		E200.8	08/25/16 12:17 / mas
Sodium	3	mg/L		1		E200.8	08/25/16 12:17 / mas
Strontium	0.05	mg/L		0.02		E200.8	08/25/16 12:17 / mas
Thallium	ND	mg/L		0.0002		E200.8	08/25/16 12:17 / mas
Uranium	0.0013	mg/L		0.0002		E200.8	08/25/16 12:17 / mas
Zinc	ND	mg/L		0.008		E200.8	08/25/16 12:17 / mas
METALS, DISSOLVED							
Mercury	5.2E-06	mg/L		5E-06		E245.1	08/25/16 15:18 / ser

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 11/04/16

Client: Tintina Montana Inc

Report Date: 09/06/16

Project: 3767-01 WK:24

Work Order: B16082331

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**									Analytical Run: AR50_160902A	
Lab ID: **ICV**	Initial Calibration Verification Standard								09/02/16 08:53	
Fluoride		0.996	mg/L	0.10	100	90	110			
Method: **A4500-F C**									Batch: FISE160902	
Lab ID: **B16082331-001AMS**	Sample Matrix Spike					Run: AR50_160902A			09/02/16 08:53	
Fluoride		1.39	mg/L	0.10	101	80	120			
Lab ID: **B16082331-001AMSD**	Sample Matrix Spike Duplicate					Run: AR50_160902A			09/02/16 08:53	
Fluoride		1.38	mg/L	0.10	100	80	120	0.7	10	
Lab ID: **LFB**	Laboratory Fortified Blank					Run: AR50_160902A			09/02/16 08:53	
Fluoride		1.03	mg/L	0.10	103	90	110			
Lab ID: **MBLK**	Method Blank					Run: AR50_160902A			09/02/16 08:53	
Fluoride		ND	mg/L	0.06						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 11/04/16

Client: Tintina Montana Inc

Report Date: 09/06/16

Project: 3767-01 WK:24

Work Order: B16082331

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**									Analytical Run: ICPMS206-B_160825A	
Lab ID: **QCS**	23	Initial Calibration Verification Standard							08/25/16 11:25	
Aluminum		0.254	mg/L	0.10	102	90	110			
Antimony		0.0491	mg/L	0.050	98	90	110			
Arsenic		0.0499	mg/L	0.0050	100	90	110			
Barium		0.0488	mg/L	0.10	98	90	110			
Beryllium		0.0254	mg/L	0.0010	101	90	110			
Cadmium		0.0250	mg/L	0.0010	100	90	110			
Calcium		2.63	mg/L	0.50	105	90	110			
Chromium		0.0524	mg/L	0.010	105	90	110			
Copper		0.0522	mg/L	0.010	104	90	110			
Iron		0.260	mg/L	0.020	104	90	110			
Lead		0.0496	mg/L	0.010	99	90	110			
Magnesium		2.63	mg/L	0.50	105	90	110			
Manganese		0.256	mg/L	0.010	102	90	110			
Nickel		0.0531	mg/L	0.010	106	90	110			
Potassium		2.64	mg/L	0.50	106	90	110			
Selenium		0.0480	mg/L	0.0050	96	90	110			
Silicon		0.492	mg/L	0.10	98	90	110			
Silver		0.0247	mg/L	0.0050	99	90	110			
Sodium		2.52	mg/L	0.50	101	90	110			
Strontium		0.0505	mg/L	0.10	101	90	110			
Thallium		0.0498	mg/L	0.10	100	90	110			
Uranium		0.0204	mg/L	0.0010	102	90	110			
Zinc		0.0516	mg/L	0.010	103	90	110			
Method: **E200.8**									Batch: R266116	
Lab ID: **LRB**	23	Method Blank				Run: ICPMS206-B_160825A			08/25/16 11:35	
Aluminum		ND	mg/L	0.0001						
Antimony		ND	mg/L	8E-05						
Arsenic		ND	mg/L	6E-05						
Barium		ND	mg/L	0.0004						
Beryllium		ND	mg/L	1E-05						
Cadmium		ND	mg/L	3E-05						
Calcium		ND	mg/L	0.008						
Chromium		ND	mg/L	4E-05						
Copper		ND	mg/L	6E-05						
Iron		ND	mg/L	0.0007						
Lead		ND	mg/L	5E-05						
Magnesium		ND	mg/L	0.005						
Manganese		ND	mg/L	4E-05						
Nickel		ND	mg/L	6E-05						
Potassium		ND	mg/L	0.005						
Selenium		ND	mg/L	0.0001						
Silicon		ND	mg/L	0.002						
Silver		ND	mg/L	2E-05						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 11/04/16

Client: Tintina Montana Inc

Report Date: 09/06/16

Project: 3767-01 WK:24

Work Order: B16082331

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R266116
Lab ID: LRB	23	Method Blank				Run: ICPMS206-B_160825A				08/25/16 11:35
Sodium		ND	mg/L	0.01						
Strontium		ND	mg/L	1E-05						
Thallium		ND	mg/L	7E-05						
Uranium		2E-05	mg/L							
Zinc		ND	mg/L	0.0001						
Lab ID: LFB	23	Laboratory Fortified Blank				Run: ICPMS206-B_160825A				08/25/16 11:42
Aluminum		0.0495	mg/L	0.10	99	85	115			
Antimony		0.0546	mg/L	0.050	109	85	115			
Arsenic		0.0493	mg/L	0.0050	99	85	115			
Barium		0.0498	mg/L	0.10	100	85	115			
Beryllium		0.0497	mg/L	0.0010	99	85	115			
Cadmium		0.0500	mg/L	0.0010	100	85	115			
Calcium		49.3	mg/L	0.50	99	85	115			
Chromium		0.0493	mg/L	0.010	99	85	115			
Copper		0.0495	mg/L	0.010	99	85	115			
Iron		5.03	mg/L	0.020	101	85	115			
Lead		0.0489	mg/L	0.010	98	85	115			
Magnesium		50.1	mg/L	0.50	100	85	115			
Manganese		0.0501	mg/L	0.010	100	85	115			
Nickel		0.0488	mg/L	0.010	98	85	115			
Potassium		49.9	mg/L	0.50	100	85	115			
Selenium		0.0493	mg/L	0.0050	99	85	115			
Silicon		0.226	mg/L	0.10	113	85	115			
Silver		0.0203	mg/L	0.0050	102	85	115			
Sodium		48.6	mg/L	0.50	97	85	115			
Strontium		0.0508	mg/L	0.10	102	85	115			
Thallium		0.0488	mg/L	0.10	98	85	115			
Uranium		0.0494	mg/L	0.0010	99	85	115			
Zinc		0.0501	mg/L	0.010	100	85	115			
Lab ID: B16082239-010AMS	23	Sample Matrix Spike				Run: ICPMS206-B_160825A				08/25/16 12:22
Aluminum		0.0601	mg/L	0.030	100	70	130			
Antimony		0.0554	mg/L	0.0010	111	70	130			
Arsenic		0.0511	mg/L	0.0010	102	70	130			
Barium		0.0989	mg/L	0.050	97	70	130			
Beryllium		0.0492	mg/L	0.0010	98	70	130			
Cadmium		0.0535	mg/L	0.0010	107	70	130			
Calcium		77.8	mg/L	1.0	100	70	130			
Chromium		0.0526	mg/L	0.0050	105	70	130			
Copper		0.0539	mg/L	0.0050	106	70	130			
Iron		5.48	mg/L	0.020	105	70	130			
Lead		0.0526	mg/L	0.0010	105	70	130			
Magnesium		62.5	mg/L	1.0	104	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 11/04/16

Client: Tintina Montana Inc

Report Date: 09/06/16

Project: 3767-01 WK:24

Work Order: B16082331

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**									Batch: R266116	
Lab ID: **B16082239-010AMS**	23	Sample Matrix Spike				Run: ICPMS206-B_160825A			08/25/16 12:22	
Manganese		0.124	mg/L	0.0010	96	70	130			
Nickel		0.0521	mg/L	0.0050	104	70	130			
Potassium		53.8	mg/L	1.0	106	70	130			
Selenium		0.0515	mg/L	0.0010	103	70	130			
Silicon		2.83	mg/L	0.10		70	130			A
Silver		0.0203	mg/L	0.0010	102	70	130			
Sodium		52.4	mg/L	1.0	100	70	130			
Strontium		0.127	mg/L	0.010	93	70	130			
Thallium		0.0525	mg/L	0.00050	105	70	130			
Uranium		0.0519	mg/L	0.00030	102	70	130			
Zinc		0.102	mg/L	0.010	95	70	130			
Lab ID: **B16082239-010AMSD**	23	Sample Matrix Spike Duplicate				Run: ICPMS206-B_160825A			08/25/16 12:24	
Aluminum		0.0588	mg/L	0.030	97	70	130	2.1	20	
Antimony		0.0547	mg/L	0.0010	109	70	130	1.2	20	
Arsenic		0.0496	mg/L	0.0010	99	70	130	2.9	20	
Barium		0.0981	mg/L	0.050	95	70	130	0.8	20	
Beryllium		0.0484	mg/L	0.0010	97	70	130	1.5	20	
Cadmium		0.0502	mg/L	0.0010	100	70	130	6.5	20	
Calcium		75.6	mg/L	1.0	96	70	130	2.8	20	
Chromium		0.0506	mg/L	0.0050	101	70	130	3.9	20	
Copper		0.0509	mg/L	0.0050	100	70	130	5.8	20	
Iron		5.22	mg/L	0.020	100	70	130	5.0	20	
Lead		0.0509	mg/L	0.0010	101	70	130	3.3	20	
Magnesium		61.3	mg/L	1.0	102	70	130	1.9	20	
Manganese		0.123	mg/L	0.0010	95	70	130	0.6	20	
Nickel		0.0494	mg/L	0.0050	98	70	130	5.4	20	
Potassium		51.4	mg/L	1.0	101	70	130	4.6	20	
Selenium		0.0507	mg/L	0.0010	101	70	130	1.5	20	
Silicon		2.82	mg/L	0.10		70	130	0.1	20	A
Silver		0.0229	mg/L	0.0010	115	70	130	12	20	
Sodium		51.0	mg/L	1.0	98	70	130	2.7	20	
Strontium		0.126	mg/L	0.010	93	70	130	0.1	20	
Thallium		0.0514	mg/L	0.00050	103	70	130	2.1	20	
Uranium		0.0496	mg/L	0.00030	98	70	130	4.6	20	
Zinc		0.0997	mg/L	0.010	92	70	130	1.8	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 11/04/16

Client: Tintina Montana Inc

Report Date: 09/06/16

Project: 3767-01 WK:24

Work Order: B16082331

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV203-B_160825A	
Lab ID: **ICV**		Initial Calibration Verification Standard							08/25/16 14:47	
Mercury		0.000211	mg/L	1.0E-05	106	90	110			
Method: **E245.1**									Batch: 102111	
Lab ID: **MB-102111**		Method Blank				Run: HGCV203-B_160825A			08/25/16 14:56	
Mercury		4E-06	mg/L	1E-06						
Lab ID: **LCS-102111**		Laboratory Control Sample				Run: HGCV203-B_160825A			08/25/16 14:58	
Mercury		0.000199	mg/L	1.0E-05	98	85	115			
Lab ID: **B16082331-001BMS**		Sample Matrix Spike				Run: HGCV203-B_160825A			08/25/16 15:13	
Mercury		0.000212	mg/L	1.0E-05	104	70	130			
Lab ID: **B16082331-001BMSD**		Sample Matrix Spike Duplicate				Run: HGCV203-B_160825A			08/25/16 15:16	
Mercury		0.000211	mg/L	1.0E-05	103	70	130	0.5	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 11/04/16

Client: Tintina Montana Inc

Report Date: 09/06/16

Project: 3767-01 WK:24

Work Order: B16082331

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC METROHM 1_160826A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							08/26/16 13:27	
Chloride			2.09	mg/L	1.0	93	90	110			
Sulfate			8.77	mg/L	1.0	97	90	110			
Method:	**E300.0**									Batch: R266204	
Lab ID:	**ICB**	2	Method Blank				Run: IC METROHM 1_160826A			08/26/16 13:53	
Chloride			ND	mg/L	0.008						
Sulfate			ND	mg/L	0.06						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC METROHM 1_160826A			08/26/16 14:07	
Chloride			10.2	mg/L	1.0	102	90	110			
Sulfate			30.7	mg/L	1.0	102	90	110			
Lab ID:	**B16081993-013AMS**	2	Sample Matrix Spike				Run: IC METROHM 1_160826A			08/26/16 20:51	
Chloride			535	mg/L	3.0	104	90	110			
Sulfate			4020	mg/L	9.1	103	90	110			
Lab ID:	**B16081993-013AMSD**	2	Sample Matrix Spike Duplicate				Run: IC METROHM 1_160826A			08/26/16 21:05	
Chloride			534	mg/L	3.0	104	90	110	0.1	20	
Sulfate			4010	mg/L	9.1	102	90	110	0.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Revised Date: 11/04/16

Client: Tintina Montana Inc

Report Date: 09/06/16

Project: 3767-01 WK:24

Work Order: B16082331

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1									Analytical Run: FIA202-B_160831B	
Lab ID: ICV		Initial Calibration Verification Standard							08/31/16 13:32	
Phosphorus, Total as P		0.524	mg/L	0.0050	105	90	110			
Method: E365.1									Batch: 102278	
Lab ID: MB-102278		Method Blank				Run: FIA202-B_160831B			08/31/16 13:34	
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-102278		Laboratory Control Sample				Run: FIA202-B_160831B			08/31/16 13:35	
Phosphorus, Total as P		0.192	mg/L	0.0050	96	90	110			
Lab ID: B16082331-001CMS		Sample Matrix Spike				Run: FIA202-B_160831B			08/31/16 13:58	
Phosphorus, Total Dissolved as P		0.197	mg/L	0.0050	99	90	110			
Lab ID: B16082331-001CMSD		Sample Matrix Spike Duplicate				Run: FIA202-B_160831B			08/31/16 13:59	
Phosphorus, Total Dissolved as P		0.196	mg/L	0.0050	98	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16082331

Login completed by: Gina McCartney
Date Received: 8/24/2016

Reviewed by: BL2000\cindy
Received by: car

Reviewed Date: 8/25/2016
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, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	6.2°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

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:
McClelland Lab	3767-01 WK: 24	State: NV	Yes ☐ No ☐
Report Mail Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	**Contact Name:** Mike Medina **Phone/Fax:** 775-356-1300 **Email:** MLI@METTEST.COM		**Sampler: (Please Print)** Robert Johnson
Invoice Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	**Invoice Contact & Phone:** Mr Bob Jacko 604-628-1162	**Purchase Order:**	**Quote/Bottle Order:**

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP **Format:**
☐ State: ☐ LEVEL IV
☐ Other: ☐ NELAC

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

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride					SEE ATTACHED	Normal Turnaround (TAT)	RUSH
1 Ynl Ex	8/23/16	09:00	Water	X	X	X	X					X	X	
2 Tgd	8-23-16 per Shmelo Container gm 8-24-16	09:00		X	X	X	X							
3														
4														
5														
6														
7														
8														
9														
10														

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

Comments:

Please Copy results to: B16082331-001
MLI@METTEST.COM ↓ -002
hold remaining preserved samples (frozen) until further notice.

Shipped by: Robert
Cooler ID(s):
Receipt Temp ____ °C
On Ice: Yes No
Custody Seal Y N
Intact Y N
Signature Match Y N

LABORATORY USE ONLY

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
JOE CHANEY	8/23/16 9AM				
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time:	Signature:
			Cindy Rohner	8-24-16 9:15	

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 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.

3767-01
HC-7, 8

Parameter	Required Reporting Value (mg/L)[A]
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-

ANALYTICAL SUMMARY REPORT

September 29, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16091777 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK:28

Energy Laboratories Inc Billings MT received the following 2 samples for Tintina Montana Inc on 9/21/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16091777-001	Ynl Ex	09/20/16 9:00	09/21/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved
B16091777-002	Tgd	09/20/16 9:00	09/21/16	Aqueous	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: Tintina Montana Inc
Project: 3767-01 WK:28
Lab ID: B16091777-001
Client Sample ID: Ynl Ex

Report Date: 09/29/16
Collection Date: 09/20/16 09:00
DateReceived: 09/21/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	09/28/16 14:08 / cmb
Sulfate	101	mg/L		1		E300.0	09/28/16 15:16 / cmb
Fluoride	0.2	mg/L		0.2		A4500-F C	09/28/16 14:21 / cjm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	ND	mg/L	L	0.005		E365.1	09/27/16 11:29 / bas
METALS, DISSOLVED							
Aluminum	0.016	mg/L		0.009		E200.7	09/23/16 13:24 / rlh
Antimony	0.0007	mg/L		0.0005		E200.8	09/22/16 17:47 / mas
Arsenic	0.001	mg/L		0.001		E200.8	09/22/16 17:47 / mas
Barium	0.051	mg/L		0.003		E200.8	09/23/16 17:55 / mas
Beryllium	ND	mg/L		0.0008		E200.8	09/22/16 17:47 / mas
Cadmium	ND	mg/L		0.00003		E200.8	09/22/16 17:47 / mas
Calcium	33	mg/L		1		E200.7	09/23/16 13:24 / rlh
Chromium	ND	mg/L		0.01		E200.8	09/23/16 17:55 / mas
Copper	ND	mg/L		0.002		E200.8	09/22/16 17:47 / mas
Iron	ND	mg/L		0.02		E200.7	09/23/16 13:24 / rlh
Lead	0.0024	mg/L		0.0003		E200.8	09/22/16 17:47 / mas
Magnesium	16	mg/L		1		E200.7	09/23/16 13:24 / rlh
Manganese	ND	mg/L		0.005		E200.8	09/23/16 17:55 / mas
Mercury	ND	mg/L		5E-06		E245.1	09/27/16 14:53 / ser
Nickel	ND	mg/L		0.002		E200.8	09/23/16 17:55 / mas
Potassium	2	mg/L		1		E200.7	09/23/16 13:24 / rlh
Selenium	ND	mg/L		0.001		E200.8	09/22/16 17:47 / mas
Silicon	2.55	mg/L		0.05		E200.7	09/23/16 13:24 / rlh
Silver	ND	mg/L		0.0002		E200.8	09/22/16 17:47 / mas
Sodium	2	mg/L		1		E200.7	09/23/16 13:24 / rlh
Strontium	0.07	mg/L		0.02		E200.8	09/22/16 17:47 / mas
Thallium	ND	mg/L		0.0002		E200.8	09/22/16 17:47 / mas
Uranium	0.0006	mg/L		0.0002		E200.8	09/22/16 17:47 / mas
Zinc	ND	mg/L		0.008		E200.8	09/22/16 17:47 / mas

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Project: 3767-01 WK:28
Lab ID: B16091777-002
Client Sample ID: Tgd

Report Date: 09/29/16
Collection Date: 09/20/16 09:00
DateReceived: 09/21/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	09/28/16 14:22 / cmb
Sulfate	3	mg/L		1		E300.0	09/28/16 14:22 / cmb
Fluoride	ND	mg/L		0.2		A4500-F C	09/28/16 14:24 / cjm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	0.016	mg/L	L	0.005		E365.1	09/27/16 11:30 / bas
METALS, DISSOLVED							
Aluminum	0.048	mg/L		0.009		E200.7	09/23/16 13:38 / rlh
Antimony	ND	mg/L		0.0005		E200.8	09/22/16 17:50 / mas
Arsenic	0.001	mg/L		0.001		E200.8	09/22/16 17:50 / mas
Barium	0.146	mg/L		0.003		E200.8	09/23/16 17:58 / mas
Beryllium	ND	mg/L		0.0008		E200.8	09/22/16 17:50 / mas
Cadmium	ND	mg/L		0.00003		E200.8	09/22/16 17:50 / mas
Calcium	12	mg/L		1		E200.7	09/23/16 13:38 / rlh
Chromium	ND	mg/L		0.01		E200.8	09/23/16 17:58 / mas
Copper	ND	mg/L		0.002		E200.8	09/22/16 17:50 / mas
Iron	ND	mg/L		0.02		E200.7	09/23/16 13:38 / rlh
Lead	0.0025	mg/L		0.0003		E200.8	09/22/16 17:50 / mas
Magnesium	2	mg/L		1		E200.7	09/23/16 13:38 / rlh
Manganese	ND	mg/L		0.005		E200.8	09/23/16 17:58 / mas
Mercury	ND	mg/L		5E-06		E245.1	09/27/16 14:55 / ser
Nickel	ND	mg/L		0.002		E200.8	09/23/16 17:58 / mas
Potassium	3	mg/L		1		E200.7	09/23/16 13:38 / rlh
Selenium	ND	mg/L		0.001		E200.8	09/22/16 17:50 / mas
Silicon	3.70	mg/L		0.05		E200.7	09/23/16 13:38 / rlh
Silver	ND	mg/L		0.0002		E200.8	09/22/16 17:50 / mas
Sodium	2	mg/L		1		E200.7	09/23/16 13:38 / rlh
Strontium	0.05	mg/L		0.02		E200.8	09/22/16 17:50 / mas
Thallium	ND	mg/L		0.0002		E200.8	09/22/16 17:50 / mas
Uranium	0.0013	mg/L		0.0002		E200.8	09/22/16 17:50 / mas
Zinc	ND	mg/L		0.008		E200.8	09/22/16 17:50 / mas

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 09/29/16
Project: 3767-01 WK:28
Work Order: B16091777

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**									Analytical Run: MAN-TECH_160928A	
Lab ID: **ICV**		Initial Calibration Verification Standard							09/28/16 11:46	
Fluoride		0.940	mg/L	0.10	94	90	110			
Method: **A4500-F C**									Batch: R267830	
Lab ID: **MBLK**		Method Blank				Run: MAN-TECH_160928A			09/28/16 11:41	
Fluoride		ND	mg/L	0.03						
Lab ID: **LFB**		Laboratory Fortified Blank				Run: MAN-TECH_160928A			09/28/16 11:44	
Fluoride		0.990	mg/L	0.10	99	90	110			
Lab ID: **B16091794-002AMS**		Sample Matrix Spike				Run: MAN-TECH_160928A			09/28/16 15:03	
Fluoride		1.28	mg/L	0.10	80	80	120			
Lab ID: **B16091794-002AMSD**		Sample Matrix Spike Duplicate				Run: MAN-TECH_160928A			09/28/16 15:06	
Fluoride		1.28	mg/L	0.10	80	80	120	0.0	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 09/29/16
Project: 3767-01 WK:28
Work Order: B16091777

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0									Analytical Run: IC METROHM 1_160928A	
Lab ID: ICV	2	Initial Calibration Verification Standard							09/28/16 13:15	
Chloride		2.16	mg/L	1.0	96	90	110			
Sulfate		8.98	mg/L	1.0	100	90	110			
Method: E300.0									Batch: R267843	
Lab ID: ICB	2	Method Blank				Run: IC METROHM 1_160928A			09/28/16 13:28	
Chloride		ND	mg/L	0.008						
Sulfate		ND	mg/L	0.06						
Lab ID: LFB	2	Laboratory Fortified Blank				Run: IC METROHM 1_160928A			09/28/16 13:42	
Chloride		10.2	mg/L	1.0	102	90	110			
Sulfate		30.6	mg/L	1.0	102	90	110			
Lab ID: B16092045-044AMS	2	Sample Matrix Spike				Run: IC METROHM 1_160928A			09/28/16 14:49	
Chloride		543	mg/L	3.0	105	90	110			
Sulfate		3200	mg/L	9.1	98	90	110			
Lab ID: B16092045-044AMSD	2	Sample Matrix Spike Duplicate				Run: IC METROHM 1_160928A			09/28/16 15:02	
Chloride		528	mg/L	3.0	102	90	110	2.9	20	
Sulfate		3100	mg/L	9.1	92	90	110	3.2	20	
Lab ID: B16092193-005AMS	2	Sample Matrix Spike				Run: IC METROHM 1_160928A			09/29/16 09:28	
Chloride		55.4	mg/L	1.0	106	90	110			
Sulfate		165	mg/L	1.0	106	90	110			
Lab ID: B16092193-005AMSD	2	Sample Matrix Spike Duplicate				Run: IC METROHM 1_160928A			09/29/16 09:41	
Chloride		55.3	mg/L	1.0	106	90	110	0.1	20	
Sulfate		166	mg/L	1.0	106	90	110	0.1	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 09/29/16
Project: 3767-01 WK:28
Work Order: B16091777

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1										Analytical Run: FIA202-B_160927B
Lab ID: ICV		Initial Calibration Verification Standard								09/27/16 10:38
Phosphorus, Total as P		0.517	mg/L	0.0050	103	90	110			
Method: E365.1										Batch: 102976
Lab ID: MB-102976		Method Blank				Run: FIA202-B_160927B				09/27/16 11:15
Phosphorus, Total as P		0.003	mg/L	0.002						
Lab ID: LCS-102976		Laboratory Control Sample				Run: FIA202-B_160927B				09/27/16 11:17
Phosphorus, Total as P		0.194	mg/L	0.0050	95	90	110			
Lab ID: B16091777-002CMS		Sample Matrix Spike				Run: FIA202-B_160927B				09/27/16 11:31
Phosphorus, Total Dissolved as P		0.200	mg/L	0.0050	92	90	110			
Lab ID: B16091777-002CMSD		Sample Matrix Spike Duplicate				Run: FIA202-B_160927B				09/27/16 11:33
Phosphorus, Total Dissolved as P		0.200	mg/L	0.0050	92	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 09/29/16
Project: 3767-01 WK:28
Work Order: B16091777

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Analytical Run: ICP203-B_160923A
Lab ID: ICV	7	Continuing Calibration Verification Standard								09/23/16 09:05
Aluminum		2.45	mg/L	0.10	98	95	105			
Calcium		24.6	mg/L	1.0	98	95	105			
Iron		2.45	mg/L	0.020	98	95	105			
Magnesium		24.7	mg/L	1.0	99	95	105			
Potassium		24.6	mg/L	1.0	99	95	105			
Silicon		5.05	mg/L	0.10	101	95	105			
Sodium		24.7	mg/L	1.0	99	95	105			
Method: E200.7										Batch: R267543
Lab ID: MB-6500DIS160923A	7	Method Blank				Run: ICP203-B_160923A				09/23/16 09:12
Aluminum		ND	mg/L	0.004						
Calcium		ND	mg/L	0.06						
Iron		ND	mg/L	0.002						
Magnesium		ND	mg/L	0.002						
Potassium		ND	mg/L	0.05						
Silicon		ND	mg/L	0.02						
Sodium		ND	mg/L	0.04						
Lab ID: LFB-6500DIS160923A	7	Laboratory Fortified Blank				Run: ICP203-B_160923A				09/23/16 09:19
Aluminum		4.79	mg/L	0.10	96	85	115			
Calcium		47.6	mg/L	1.0	95	85	115			
Iron		4.80	mg/L	0.020	96	85	115			
Magnesium		48.7	mg/L	1.0	97	85	115			
Potassium		48.8	mg/L	1.0	98	85	115			
Silicon		9.91	mg/L	0.10	99	85	115			
Sodium		49.2	mg/L	1.0	99	85	115			
Lab ID: B16091777-001BMS2	7	Sample Matrix Spike				Run: ICP203-B_160923A				09/23/16 13:31
Aluminum		4.96	mg/L	0.030	99	70	130			
Calcium		83.8	mg/L	1.0	102	70	130			
Iron		5.14	mg/L	0.020	103	70	130			
Magnesium		67.3	mg/L	1.0	103	70	130			
Potassium		55.3	mg/L	1.0	107	70	130			
Silicon		12.9	mg/L	0.10	103	70	130			
Sodium		53.8	mg/L	1.0	104	70	130			
Lab ID: B16091777-001BMSD	7	Sample Matrix Spike Duplicate				Run: ICP203-B_160923A				09/23/16 13:34
Aluminum		5.01	mg/L	0.030	100	70	130	1.1	20	
Calcium		83.9	mg/L	1.0	102	70	130	0.1	20	
Iron		5.15	mg/L	0.020	103	70	130	0.1	20	
Magnesium		67.4	mg/L	1.0	103	70	130	0.2	20	
Potassium		53.7	mg/L	1.0	104	70	130	3.0	20	
Silicon		12.9	mg/L	0.10	103	70	130	0.3	20	
Sodium		53.5	mg/L	1.0	103	70	130	0.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 09/29/16
Project: 3767-01 WK:28
Work Order: B16091777

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Analytical Run: ICPMS202-B_160922A
Lab ID: QCS	12	Initial Calibration Verification Standard								09/22/16 14:32
Antimony		0.0497	mg/L	0.050	99	90	110			
Arsenic		0.0514	mg/L	0.0050	103	90	110			
Beryllium		0.0247	mg/L	0.0010	99	90	110			
Cadmium		0.0261	mg/L	0.0010	104	90	110			
Copper		0.0515	mg/L	0.010	103	90	110			
Lead		0.0500	mg/L	0.010	100	90	110			
Selenium		0.0506	mg/L	0.0050	101	90	110			
Silver		0.0253	mg/L	0.0050	101	90	110			
Strontium		0.0484	mg/L	0.10	97	90	110			
Thallium		0.0518	mg/L	0.10	104	90	110			
Uranium		0.0201	mg/L	0.0010	101	90	110			
Zinc		0.0519	mg/L	0.010	104	90	110			
Method: E200.8										Batch: R267483
Lab ID: LRB	12	Method Blank				Run: ICPMS202-B_160922A				09/22/16 11:47
Antimony		ND	mg/L	4E-05						
Arsenic		ND	mg/L	9E-05						
Beryllium		ND	mg/L	5E-05						
Cadmium		ND	mg/L	9E-06						
Copper		ND	mg/L	9E-05						
Lead		ND	mg/L	2E-05						
Selenium		ND	mg/L	0.0002						
Silver		ND	mg/L	4E-05						
Strontium		ND	mg/L	0.0001						
Thallium		ND	mg/L	1E-05						
Uranium		ND	mg/L	1E-05						
Zinc		ND	mg/L	0.0002						
Lab ID: LFB	12	Laboratory Fortified Blank				Run: ICPMS202-B_160922A				09/22/16 11:49
Antimony		0.0464	mg/L	0.050	93	85	115			
Arsenic		0.0504	mg/L	0.0050	101	85	115			
Beryllium		0.0505	mg/L	0.0010	101	85	115			
Cadmium		0.0498	mg/L	0.0010	100	85	115			
Copper		0.0504	mg/L	0.010	101	85	115			
Lead		0.0508	mg/L	0.010	102	85	115			
Selenium		0.0491	mg/L	0.0050	98	85	115			
Silver		0.0192	mg/L	0.0050	96	85	115			
Strontium		0.0501	mg/L	0.10	100	85	115			
Thallium		0.0509	mg/L	0.10	102	85	115			
Uranium		0.0535	mg/L	0.0010	107	85	115			
Zinc		0.0504	mg/L	0.010	101	85	115			
Lab ID: B16091771-007BMS	12	Sample Matrix Spike				Run: ICPMS202-B_160922A				09/22/16 17:25
Antimony		0.0521	mg/L	0.0010	104	70	130			
Arsenic		0.0625	mg/L	0.0010	122	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 09/29/16
Project: 3767-01 WK:28
Work Order: B16091777

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.8**									Batch: R267483	
Lab ID: **B16091771-007BMS**	12	Sample Matrix Spike				Run: ICPMS202-B_160922A			09/22/16 17:25	
Beryllium		0.0460	mg/L	0.0010	92	70	130			
Cadmium		0.0492	mg/L	0.0010	98	70	130			
Copper		0.0542	mg/L	0.0050	104	70	130			
Lead		0.0556	mg/L	0.0010	111	70	130			
Selenium		0.0615	mg/L	0.0010	123	70	130			
Silver		0.0133	mg/L	0.0010	67	70	130			S
Strontium		5.71	mg/L	0.010		70	130			A
Thallium		0.0571	mg/L	0.00050	114	70	130			
Uranium		0.0723	mg/L	0.00030	121	70	130			
Zinc		0.0516	mg/L	0.010	94	70	130			
Lab ID: **B16091771-007BMSD**	12	Sample Matrix Spike Duplicate				Run: ICPMS202-B_160922A			09/22/16 17:28	
Antimony		0.0512	mg/L	0.0010	102	70	130	1.7	20	
Arsenic		0.0613	mg/L	0.0010	119	70	130	1.9	20	
Beryllium		0.0450	mg/L	0.0010	90	70	130	2.3	20	
Cadmium		0.0476	mg/L	0.0010	95	70	130	3.4	20	
Copper		0.0514	mg/L	0.0050	99	70	130	5.4	20	
Lead		0.0548	mg/L	0.0010	110	70	130	1.5	20	
Selenium		0.0626	mg/L	0.0010	125	70	130	1.7	20	
Silver		0.0100	mg/L	0.0010	50	70	130	28	20	SR
Strontium		5.72	mg/L	0.010		70	130	0.1	20	A
Thallium		0.0569	mg/L	0.00050	114	70	130	0.3	20	
Uranium		0.0709	mg/L	0.00030	119	70	130	1.9	20	
Zinc		0.0496	mg/L	0.010	90	70	130	3.8	20	
Lab ID: **B16091793-002CMS**	12	Sample Matrix Spike				Run: ICPMS202-B_160922A			09/22/16 18:09	
Antimony		0.0547	mg/L	0.0010	109	70	130			
Arsenic		0.0662	mg/L	0.0010	116	70	130			
Beryllium		0.0513	mg/L	0.0010	103	70	130			
Cadmium		0.0477	mg/L	0.0010	95	70	130			
Copper		0.0497	mg/L	0.0050	95	70	130			
Lead		0.0541	mg/L	0.0010	108	70	130			
Selenium		0.0738	mg/L	0.0010	118	70	130			
Silver		0.0138	mg/L	0.0010	69	70	130			S
Strontium		1.96	mg/L	0.010		70	130			A
Thallium		0.0548	mg/L	0.00050	110	70	130			
Uranium		0.0837	mg/L	0.00030	118	70	130			
Zinc		0.0470	mg/L	0.010	90	70	130			
Lab ID: **B16091793-002CMSD**	12	Sample Matrix Spike Duplicate				Run: ICPMS202-B_160922A			09/22/16 18:11	
Antimony		0.0548	mg/L	0.0010	109	70	130	0.1	20	
Arsenic		0.0666	mg/L	0.0010	117	70	130	0.6	20	
Beryllium		0.0517	mg/L	0.0010	103	70	130	0.7	20	
Cadmium		0.0480	mg/L	0.0010	96	70	130	0.7	20	
Copper		0.0509	mg/L	0.0050	97	70	130	2.4	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

R - RPD exceeds advisory limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 09/29/16
Project: 3767-01 WK:28
Work Order: B16091777

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R267483
Lab ID: B16091793-002CMSD	12	Sample Matrix Spike Duplicate				Run: ICPMS202-B_160922A				09/22/16 18:11
Lead		0.0545	mg/L	0.0010	109	70	130	0.7	20	
Selenium		0.0734	mg/L	0.0010	117	70	130	0.6	20	
Silver		0.0108	mg/L	0.0010	54	70	130	25	20	SR
Strontium		1.96	mg/L	0.010		70	130	0.3	20	A
Thallium		0.0550	mg/L	0.00050	110	70	130	0.2	20	
Uranium		0.0836	mg/L	0.00030	118	70	130	0.1	20	
Zinc		0.0472	mg/L	0.010	91	70	130	0.5	20	
Method: E200.8										Analytical Run: ICPMS202-B_160923A
Lab ID: QCS	4	Initial Calibration Verification Standard								09/23/16 10:49
Barium		0.0506	mg/L	0.10	101	90	110			
Chromium		0.0497	mg/L	0.010	99	90	110			
Manganese		0.252	mg/L	0.010	101	90	110			
Nickel		0.0511	mg/L	0.010	102	90	110			
Method: E200.8										Batch: R267557
Lab ID: LRB	4	Method Blank				Run: ICPMS202-B_160923A				09/23/16 11:00
Barium		ND	mg/L	0.0003						
Chromium		ND	mg/L	8E-05						
Manganese		ND	mg/L	6E-05						
Nickel		ND	mg/L	9E-05						
Lab ID: LFB	4	Laboratory Fortified Blank				Run: ICPMS202-B_160923A				09/23/16 11:02
Barium		0.0536	mg/L	0.10	107	85	115			
Chromium		0.0530	mg/L	0.010	106	85	115			
Manganese		0.0527	mg/L	0.010	105	85	115			
Nickel		0.0548	mg/L	0.010	110	85	115			
Lab ID: B16091793-002CMS	4	Sample Matrix Spike				Run: ICPMS202-B_160923A				09/23/16 18:25
Barium		0.126	mg/L	0.050	103	70	130			
Chromium		0.105	mg/L	0.0050	105	70	130			
Manganese		0.189	mg/L	0.0010	112	70	130			
Nickel		0.115	mg/L	0.0050	109	70	130			
Lab ID: B16091793-002CMSD	4	Sample Matrix Spike Duplicate				Run: ICPMS202-B_160923A				09/23/16 18:28
Barium		0.127	mg/L	0.050	105	70	130	1.5	20	
Chromium		0.102	mg/L	0.0050	102	70	130	3.0	20	
Manganese		0.181	mg/L	0.0010	105	70	130	3.8	20	
Nickel		0.112	mg/L	0.0050	105	70	130	3.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

R - RPD exceeds advisory limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 09/29/16
Project: 3767-01 WK:28
Work Order: B16091777

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV203-B_160927A	
Lab ID: **ICV**		Initial Calibration Verification Standard							09/27/16 13:04	
Mercury		0.000215	mg/L	1.0E-05	107	90	110			
Method: **E245.1**									Batch: 103022	
Lab ID: **MB-103022**		Method Blank				Run: HGCV203-B_160927A			09/27/16 14:33	
Mercury		ND	mg/L	1E-06						
Lab ID: **LCS-103022**		Laboratory Control Sample				Run: HGCV203-B_160927A			09/27/16 14:35	
Mercury		0.000212	mg/L	1.0E-05	106	85	115			
Lab ID: **B16091499-001BMS**		Sample Matrix Spike				Run: HGCV203-B_160927A			09/27/16 14:40	
Mercury		0.000224	mg/L	1.0E-05	107	70	130			
Lab ID: **B16091499-001BMSD**		Sample Matrix Spike Duplicate				Run: HGCV203-B_160927A			09/27/16 14:43	
Mercury		0.000226	mg/L	1.0E-05	108	70	130	0.9	30	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16091777

Login completed by: Siobhan H. Coop
Date Received: 9/21/2016
Reviewed by: BL2000\lcadreau
Received by: hmr
Reviewed Date: 9/25/2016
Carrier name: 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:	10.6°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:

Collection date and time not listed on the Chain of Custody for sample Tgd. Sample was collected 09/20/16 at 09:00 per sample containers.

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: McClelland Lab	Project Name, PWS, Permit, Etc.: 3767-01 WK: 28	Sample Origin State: NV	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Contact Name: Mike Medina; Phone/Fax: 775-356-1300; Email: MLI@METTEST.COM		Sampler: (Please Print) Robert Johnson
Invoice Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Invoice Contact & Phone: Mr Bob Jacko 604-628-1162	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

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

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride					SEE ATTACHED	Normal Turnaround (TAT)
1 Ynl Ex	9/20/16	09:00	Water	X	X	X	X					X	X
2 Tgd				X	X	X	X						
3													
4													
5													
6													
7													
8													
9													
10													

RUSH

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

Comments:

Please Copy results to: MLI@METTEST.COM

hold remaining preserved samples (frozen) until further notice.

Shipped by: Robert

Cooler ID(s):

Receipt Temp _____ °C

On Ice: Yes No

Custody Seal Y N
Intact Y N
Signature Match Y N

LABORATORY USE ONLY: B16091777-001 -002

Custody Record MUST be Signed

Relinquished by (print): JOE CHANEY	Date/Time: 9/20/16 9AM	Signature:	Received by (print):	Date/Time:	Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Sample Disposal: Return to Client: _____ Lab Disposal: _____			Received by Laboratory: Heather Rea	Date/Time: 9-21-16 9:10	Signature:

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.

3767-01
HC-7, 8

Table 2. Trace Element Parameters for Best-Humidity Cell Leachate Analysis	
Parameter	**Required Reporting Value (µg/L)[A]**
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-

ANALYTICAL SUMMARY REPORT

October 28, 2016

Tintina Montana Inc
PO Box 48736 Bentall
Vancouver, BC V7X 1A6

Work Order: B16101478 Quote ID: B2868 - Tintina Project

Project Name: 3767-01 WK: 32

Energy Laboratories Inc Billings MT received the following 1 sample for Tintina Montana Inc on 10/19/2016 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B16101478-001	Ynl Ex	10/18/16 9:00	10/19/16	Aqueous	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Fluoride Anions by Ion Chromatography Digestion, Mercury by CVAA Digestion, Total P Phosphorus, Total Dissolved

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: Tintina Montana Inc
Project: 3767-01 WK: 32
Lab ID: B16101478-001
Client Sample ID: Ynl Ex

Report Date: 10/28/16
Collection Date: 10/18/16 09:00
DateReceived: 10/19/16
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	ND	mg/L		1		E300.0	10/21/16 16:02 / mej
Sulfate	88	mg/L		1		E300.0	10/21/16 16:02 / mej
Fluoride	0.2	mg/L		0.2		A4500-F C	10/20/16 15:40 / cjm
NUTRIENTS, DISSOLVED							
Phosphorus, Total Dissolved as P	ND	mg/L	L	0.005		E365.1	10/21/16 15:55 / ks
METALS, DISSOLVED							
Aluminum	0.027	mg/L		0.009		E200.8	10/20/16 13:41 / jpv
Antimony	0.0005	mg/L		0.0005		E200.8	10/21/16 20:39 / jpv
Arsenic	0.002	mg/L		0.001		E200.8	10/20/16 13:41 / jpv
Barium	0.021	mg/L		0.003		E200.8	10/20/16 13:41 / jpv
Beryllium	ND	mg/L		0.0008		E200.8	10/20/16 13:41 / jpv
Cadmium	ND	mg/L		0.00003		E200.8	10/20/16 13:41 / jpv
Calcium	29	mg/L		1		E200.7	10/20/16 18:31 / rlh
Chromium	ND	mg/L		0.01		E200.8	10/20/16 13:41 / jpv
Copper	ND	mg/L		0.002		E200.8	10/20/16 13:41 / jpv
Iron	ND	mg/L		0.02		E200.7	10/20/16 18:31 / rlh
Lead	ND	mg/L		0.0003		E200.8	10/20/16 13:41 / jpv
Magnesium	14	mg/L		1		E200.7	10/20/16 18:31 / rlh
Manganese	ND	mg/L		0.005		E200.8	10/20/16 13:41 / jpv
Mercury	ND	mg/L		5E-06		E245.1	10/21/16 11:08 / mas
Nickel	ND	mg/L		0.002		E200.8	10/20/16 13:41 / jpv
Potassium	2	mg/L		1		E200.7	10/20/16 18:31 / rlh
Selenium	ND	mg/L		0.001		E200.8	10/21/16 20:39 / jpv
Silicon	2.39	mg/L		0.05		E200.7	10/20/16 18:31 / rlh
Silver	ND	mg/L		0.0002		E200.8	10/20/16 13:41 / jpv
Sodium	ND	mg/L		1		E200.7	10/20/16 18:31 / rlh
Strontium	0.07	mg/L		0.02		E200.8	10/20/16 13:41 / jpv
Thallium	ND	mg/L		0.0002		E200.8	10/20/16 13:41 / jpv
Uranium	0.0003	mg/L		0.0002		E200.8	10/21/16 20:39 / jpv
Zinc	ND	mg/L		0.008		E200.8	10/20/16 13:41 / jpv

Report Definitions:

RL - Analyte reporting limit.
QCL - Quality control limit.
L - Lowest available reporting limit for the analytical method used.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 10/28/16
Project: 3767-01 WK: 32
Work Order: B16101478

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **A4500-F C**									Analytical Run: MAN-TECH_161020A	
Lab ID: **ICV**		Initial Calibration Verification Standard							10/20/16 14:07	
Fluoride		1.01	mg/L	0.10	101	90	110			
Method: **A4500-F C**									Batch: R269038	
Lab ID: **MBLK**		Method Blank				Run: MAN-TECH_161020A			10/20/16 14:01	
Fluoride		ND	mg/L	0.03						
Lab ID: **LFB**		Laboratory Fortified Blank				Run: MAN-TECH_161020A			10/20/16 14:04	
Fluoride		0.990	mg/L	0.10	99	90	110			
Lab ID: **B16101433-009AMS**		Sample Matrix Spike				Run: MAN-TECH_161020A			10/20/16 15:18	
Fluoride		1.62	mg/L	0.10	100	80	120			
Lab ID: **B16101433-009AMSD**		Sample Matrix Spike Duplicate				Run: MAN-TECH_161020A			10/20/16 15:20	
Fluoride		1.63	mg/L	0.10	101	80	120	0.6	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 10/28/16
Project: 3767-01 WK: 32
Work Order: B16101478

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E200.7**									Analytical Run: ICP203-B_161020A	
Lab ID: **ICV**	6	Continuing Calibration Verification Standard							10/20/16 11:49	
Calcium		26.3	mg/L	1.0	105	95	105			
Iron		2.51	mg/L	0.020	101	95	105			
Magnesium		25.6	mg/L	1.0	102	95	105			
Potassium		26.1	mg/L	1.0	105	95	105			
Silicon		5.20	mg/L	0.10	104	95	105			
Sodium		26.2	mg/L	1.0	105	95	105			
Method: **E200.7**									Batch: R269015	
Lab ID: **MB-6500DIS161020A**	6	Method Blank				Run: ICP203-B_161020A			10/20/16 11:56	
Calcium		ND	mg/L	0.06						
Iron		ND	mg/L	0.002						
Magnesium		ND	mg/L	0.002						
Potassium		ND	mg/L	0.05						
Silicon		ND	mg/L	0.02						
Sodium		ND	mg/L	0.04						
Lab ID: **LFB-6500DIS161020A**	6	Laboratory Fortified Blank				Run: ICP203-B_161020A			10/20/16 12:04	
Calcium		50.0	mg/L	1.0	100	85	115			
Iron		5.01	mg/L	0.020	100	85	115			
Magnesium		49.5	mg/L	1.0	99	85	115			
Potassium		49.0	mg/L	1.0	98	85	115			
Silicon		9.89	mg/L	0.10	99	85	115			
Sodium		49.2	mg/L	1.0	98	85	115			
Lab ID: **B16101478-001BMS2**	6	Sample Matrix Spike				Run: ICP203-B_161020A			10/20/16 18:46	
Calcium		79.5	mg/L	1.0	101	70	130			
Iron		5.12	mg/L	0.020	102	70	130			
Magnesium		65.3	mg/L	1.0	102	70	130			
Potassium		51.9	mg/L	1.0	100	70	130			
Silicon		12.5	mg/L	0.10	101	70	130			
Sodium		50.4	mg/L	1.0	100	70	130			
Lab ID: **B16101478-001BMSD**	6	Sample Matrix Spike Duplicate				Run: ICP203-B_161020A			10/20/16 18:49	
Calcium		82.2	mg/L	1.0	106	70	130	3.3	20	
Iron		5.43	mg/L	0.020	109	70	130	6.0	20	
Magnesium		68.3	mg/L	1.0	108	70	130	4.6	20	
Potassium		54.6	mg/L	1.0	106	70	130	5.1	20	
Silicon		12.0	mg/L	0.10	96	70	130	3.4	20	
Sodium		53.5	mg/L	1.0	107	70	130	6.0	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 10/28/16
Project: 3767-01 WK: 32
Work Order: B16101478

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Analytical Run: ICPMS202-B_161020A	
Lab ID: QCS	14	Initial Calibration Verification Standard							10/20/16 10:53	
Aluminum		0.247	mg/L	0.10	99	90	110			
Arsenic		0.0513	mg/L	0.0050	103	90	110			
Barium		0.0518	mg/L	0.10	104	90	110			
Beryllium		0.0254	mg/L	0.0010	101	90	110			
Cadmium		0.0266	mg/L	0.0010	107	90	110			
Chromium		0.0506	mg/L	0.010	101	90	110			
Copper		0.0503	mg/L	0.010	101	90	110			
Lead		0.0500	mg/L	0.010	100	90	110			
Manganese		0.242	mg/L	0.010	97	90	110			
Nickel		0.0505	mg/L	0.010	101	90	110			
Silver		0.0264	mg/L	0.0050	106	90	110			
Strontium		0.0502	mg/L	0.10	100	90	110			
Thallium		0.0503	mg/L	0.10	101	90	110			
Zinc		0.0510	mg/L	0.010	102	90	110			
Method: E200.8									Batch: R269005	
Lab ID: LRB	14	Method Blank				Run: ICPMS202-B_161020A			10/20/16 11:10	
Aluminum		0.001	mg/L	0.0004						
Arsenic		ND	mg/L	9E-05						
Barium		ND	mg/L	0.0003						
Beryllium		ND	mg/L	5E-05						
Cadmium		ND	mg/L	9E-06						
Chromium		ND	mg/L	8E-05						
Copper		ND	mg/L	9E-05						
Lead		ND	mg/L	2E-05						
Manganese		ND	mg/L	6E-05						
Nickel		ND	mg/L	9E-05						
Silver		ND	mg/L	4E-05						
Strontium		ND	mg/L	0.0001						
Thallium		ND	mg/L	1E-05						
Zinc		ND	mg/L	0.0002						
Lab ID: LFB	14	Laboratory Fortified Blank				Run: ICPMS202-B_161020A			10/20/16 11:12	
Aluminum		0.0494	mg/L	0.10	97	85	115			
Arsenic		0.0497	mg/L	0.0050	99	85	115			
Barium		0.0507	mg/L	0.10	101	85	115			
Beryllium		0.0492	mg/L	0.0010	98	85	115			
Cadmium		0.0492	mg/L	0.0010	98	85	115			
Chromium		0.0505	mg/L	0.010	101	85	115			
Copper		0.0496	mg/L	0.010	99	85	115			
Lead		0.0499	mg/L	0.010	100	85	115			
Manganese		0.0493	mg/L	0.010	99	85	115			
Nickel		0.0486	mg/L	0.010	97	85	115			
Silver		0.0183	mg/L	0.0050	92	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 10/28/16
Project: 3767-01 WK: 32
Work Order: B16101478

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R269005
Lab ID: LFB	14	Laboratory Fortified Blank				Run: ICPMS202-B_161020A				10/20/16 11:12
Strontium		0.0506	mg/L	0.10	101	85	115			
Thallium		0.0496	mg/L	0.10	99	85	115			
Zinc		0.0487	mg/L	0.010	97	85	115			
Lab ID: B16101305-001CMS	14	Sample Matrix Spike				Run: ICPMS202-B_161020A				10/20/16 13:25
Aluminum		0.291	mg/L	0.030		70	130			A
Arsenic		0.284	mg/L	0.0010		70	130			A
Barium		0.0569	mg/L	0.050	103	70	130			
Beryllium		0.0487	mg/L	0.0010	94	70	130			
Cadmium		0.0506	mg/L	0.0010	101	70	130			
Chromium		0.0556	mg/L	0.0050	110	70	130			
Copper		0.0501	mg/L	0.0050	99	70	130			
Lead		0.0520	mg/L	0.0010	104	70	130			
Manganese		0.0638	mg/L	0.0010	108	70	130			
Nickel		0.0509	mg/L	0.0050	101	70	130			
Silver		0.0209	mg/L	0.0010	105	70	130			
Strontium		0.0656	mg/L	0.010	107	70	130			
Thallium		0.0527	mg/L	0.00050	105	70	130			
Zinc		0.0523	mg/L	0.010	93	70	130			
Lab ID: B16101305-001CMSD	14	Sample Matrix Spike Duplicate				Run: ICPMS202-B_161020A				10/20/16 13:28
Aluminum		0.292	mg/L	0.030		70	130	0.4	20	A
Arsenic		0.285	mg/L	0.0010		70	130	0.3	20	A
Barium		0.0584	mg/L	0.050	106	70	130	2.6	20	
Beryllium		0.0501	mg/L	0.0010	97	70	130	2.7	20	
Cadmium		0.0509	mg/L	0.0010	102	70	130	0.6	20	
Chromium		0.0565	mg/L	0.0050	112	70	130	1.6	20	
Copper		0.0504	mg/L	0.0050	100	70	130	0.5	20	
Lead		0.0539	mg/L	0.0010	108	70	130	3.5	20	
Manganese		0.0650	mg/L	0.0010	110	70	130	1.8	20	
Nickel		0.0510	mg/L	0.0050	101	70	130	0.2	20	
Silver		0.0183	mg/L	0.0010	92	70	130	13	20	
Strontium		0.0652	mg/L	0.010	107	70	130	0.5	20	
Thallium		0.0541	mg/L	0.00050	108	70	130	2.6	20	
Zinc		0.0530	mg/L	0.010	94	70	130	1.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 10/28/16
Project: 3767-01 WK: 32
Work Order: B16101478

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E200.8**									Analytical Run: ICPMS206-B_161021A	
Lab ID:	**QCS**	3	Initial Calibration Verification Standard							10/21/16 17:23	
Antimony			0.0520	mg/L	0.050	104	90	110			
Selenium			0.0497	mg/L	0.0050	99	90	110			
Uranium			0.0203	mg/L	0.0010	101	90	110			
Method:	**E200.8**									Batch: R269110	
Lab ID:	**LRB**	3	Method Blank				Run: ICPMS206-B_161021A			10/21/16 11:17	
Antimony			ND	mg/L	8E-05						
Selenium			ND	mg/L	0.0001						
Uranium			-6E-05	mg/L							
Lab ID:	**LFB**	3	Laboratory Fortified Blank				Run: ICPMS206-B_161021A			10/21/16 16:07	
Antimony			0.0526	mg/L	0.050	105	85	115			
Selenium			0.0519	mg/L	0.0050	104	85	115			
Uranium			0.0522	mg/L	0.0010	105	85	115			
Lab ID:	**B16101478-001BMS**	3	Sample Matrix Spike				Run: ICPMS206-B_161021A			10/21/16 20:42	
Antimony			0.0511	mg/L	0.0010	101	70	130			
Selenium			0.0518	mg/L	0.0010	102	70	130			
Uranium			0.0440	mg/L	0.00030	87	70	130			
Lab ID:	**B16101478-001BMSD**	3	Sample Matrix Spike Duplicate				Run: ICPMS206-B_161021A			10/21/16 20:44	
Antimony			0.0524	mg/L	0.0010	104	70	130	2.6	20	
Selenium			0.0521	mg/L	0.0010	102	70	130	0.7	20	
Uranium			0.0464	mg/L	0.00030	92	70	130	5.5	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 10/28/16
Project: 3767-01 WK: 32
Work Order: B16101478

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: **E245.1**									Analytical Run: HGCV203-B_161021A	
Lab ID: **ICV**		Initial Calibration Verification Standard							10/21/16 10:50	
Mercury		0.000202	mg/L	1.0E-05	101	90	110			
Lab ID: **CCV**		Continuing Calibration Verification Standard							10/21/16 10:52	
Mercury		9.75E-05	mg/L	1.0E-05	98	90	110			
Method: **E245.1**									Batch: 103786	
Lab ID: **MB-103786**		Method Blank				Run: HGCV203-B_161021A			10/21/16 10:57	
Mercury		2E-06	mg/L	1E-06						
Lab ID: **LCS-103786**		Laboratory Control Sample				Run: HGCV203-B_161021A			10/21/16 11:00	
Mercury		0.000211	mg/L	1.0E-05	104	85	115			
Lab ID: **B16101516-011BMS**		Sample Matrix Spike				Run: HGCV203-B_161021A			10/21/16 11:14	
Mercury		0.00125	mg/L	1.0E-05		70	130			A
Lab ID: **B16101516-011BMSD**		Sample Matrix Spike Duplicate				Run: HGCV203-B_161021A			10/21/16 11:17	
Mercury		0.00127	mg/L	1.0E-05		70	130	1.6	30	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 10/28/16
Project: 3767-01 WK: 32
Work Order: B16101478

Analyte		Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	**E300.0**									Analytical Run: IC METROHM 1_161020A	
Lab ID:	**ICV**	2	Initial Calibration Verification Standard							10/20/16 14:12	
Chloride			2.23	mg/L	1.0	99	90	110			
Sulfate			8.84	mg/L	1.0	98	90	110			
Method:	**E300.0**									Batch: R269049	
Lab ID:	**ICB**	2	Method Blank				Run: IC METROHM 1_161020A			10/20/16 14:25	
Chloride			ND	mg/L	0.008						
Sulfate			ND	mg/L	0.06						
Lab ID:	**LFB**	2	Laboratory Fortified Blank				Run: IC METROHM 1_161020A			10/20/16 14:39	
Chloride			10.2	mg/L	1.0	102	90	110			
Sulfate			30.5	mg/L	1.0	102	90	110			
Lab ID:	**B16101496-001AMS**	2	Sample Matrix Spike				Run: IC METROHM 1_161020A			10/21/16 16:29	
Chloride			59.1	mg/L	1.0	107	90	110			
Sulfate			212	mg/L	1.0	105	90	110			
Lab ID:	**B16101496-001AMSD**	2	Sample Matrix Spike Duplicate				Run: IC METROHM 1_161020A			10/21/16 16:43	
Chloride			60.2	mg/L	1.0	109	90	110	1.8	20	
Sulfate			215	mg/L	1.0	107	90	110	1.3	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Tintina Montana Inc
Report Date: 10/28/16
Project: 3767-01 WK: 32
Work Order: B16101478

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1										Batch: 103814
Lab ID: MB-103814		Method Blank				Run: FIA202-B_161021B				10/21/16 15:45
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-103814		Laboratory Control Sample				Run: FIA202-B_161021B				10/21/16 15:46
Phosphorus, Total as P		0.199	mg/L	0.0050	100	90	110			
Lab ID: B16101478-001CMS		Sample Matrix Spike				Run: FIA202-B_161021B				10/21/16 15:56
Phosphorus, Total Dissolved as P		0.204	mg/L	0.0050	102	90	110			
Lab ID: B16101478-001CMSD		Sample Matrix Spike Duplicate				Run: FIA202-B_161021B				10/21/16 15:57
Phosphorus, Total Dissolved as P		0.204	mg/L	0.0050	102	90	110			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Work Order Receipt Checklist

Tintina Montana Inc

B16101478

Login completed by: Gina McCartney
Date Received: 10/19/2016

Reviewed by: BL2000\cindy
Received by: law

Reviewed Date: 10/20/2016
Carrier name: FedEx

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, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☐	No ☑	Not Applicable ☐
Container/Temp Blank temperature:	4.0°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

PLEASE PRINT- Provide as much information as possible.

Company Name: McClelland Lab	Project Name, PWS, Permit, Etc.: 3767-01 WK: 32	Sample Origin State: NV	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Contact Name: Mike Medina; Phone/Fax: 775-356-1300; Email: MLI@METTEST.COM		Sampler: (Please Print) Robert Johnson
Invoice Address: Tintina Resources, 200 Granville St. Suite 2560, Vancouver, BC V6C 1S4 Canada	Invoice Contact & Phone: Mr Bob Jacko 604-628-1162	Purchase Order:	Quote/Bottle Order:

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

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

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Sodium	Potassium	Chloride							SEE ATTACHED	Normal Turnaround (TAT)
1 Ynl Ex	10/18/16	09:00	Water	X	X	X	X							X	X
2															
3															
4															
5															
6															
7															
8															
9															
10															

RUSH

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

Comments:

Please Copy results to: B16101478-001
MLI@METTEST.COM
hold remaining preserved samples (frozen) until further notice.

Shipped by: Robert
Cooler ID(s):
Receipt Temp ____ °C
On Ice: Yes No
Custody Seal Intact Y N
Signature Match Y N

LABORATORY USE ONLY

Custody Record MUST be Signed

Relinquished by (print): JOE CHANEY	Date/Time: 10/18/16 9AM	Signature:	Received by (print): / Date/Time: / Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print): / Date/Time: / Signature:
Sample Disposal: Return to Client: _____ Lab Disposal: _____			Received by Laboratory: LAW Date/Time: 10/19/16 9:50 Signature:

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.

3767-01
HC-7,8

Table 2. Trace Element Parameters for Post-Humidity Cell Leachate Analysis	
Parameter	**Required Reporting Value (mg/L)[A]**
Aluminum	0.009
Antimony	0.0005
Arsenic	0.001
Barium	0.003
Beryllium	0.0008
Cadmium	0.00003
Calcium	1
Chromium	0.01
Copper	0.002
Fluoride	0.2
Iron	0.02
Lead	0.0003
Magnesium	1
Manganese	0.005
Mercury	0.000005
Nickel	0.002
Phosphorus	0.001
Selenium	0.001
Silver	0.0002
Strontium	0.02
Sulfate	1
Thallium	0.0002
Uranium	0.0002
Zinc	0.008

A: Reporting Values based on Montana Department of Environmental Quality Circular DEQ-7 Numeric Water Quality Standards, October, 2012

Asbestiform Mineral Characterization

A representative 100 to 200-gram aliquot of the YnlB Ex and Granodiorite (Ygd) composite samples should be sealed in double zip-lock bags and labeled with the composite identification (YnlBEX-comp and Ygd-comp, respectively). This sample is to be shipped to the RJ Lee Group for analysis of potential asbestiform mineral content. Please ship these samples, under chain-of-