2012 REPORT ON THE MACKENZIE AND SALAL PROPERTIES SOUTHERN BRITISH COLUMBIA LILLOOET AND KAMLOOPS MINING DISTRICT UTM ZONE 10 LATITUDE 5,627,000 LONGITUDE 472,000 NTS 092J- PEMBERTON

Owner and Operator:

Miocene Metals Limited

**310-1281 West Georgia Street,
Vancouver, BC
V6E 3J7**

Prepared by:

**Jose Sayo Garcia
Vice President for Exploration
Miocene Metals Limited**
30 October 2012

CONTENTS

LIST OF APPENDICES

LIST OF TABLES

LIST OF FIGURES

1SUMMARY

This report discusses the results of exploration activities pursued in 2011 and 2012 by Miocene Metals Limited on its Mackenzie and Salal Properties as follows;

- Salal Work accomplishments for 2011 consist of the following.

Work Done	Period Work Conducted
1. Two 2011 Drill Holes: (MSA-003 at Mud Lake and MSA-004 at Logan Ridge Area).	27 August to 10 Sept 2011
2. Prospecting, Geologic mapping and Sampling (generating 285 rock sample qualified by 28 CRM)	3rd week July – 2nd Week Nov 2011

Salal expenditures amounted to $ 659,463.88

- Mackenzie Work accomplishments conducted in 2012 consist of the following.

Work Done	Period Work Conducted
1. MMK-001 & MMK-002 (two drill holes at Till worth Ridge, site of original Mackenzie Mineralization)	4th Week June – Last Week July 2012
2. Prospecting, Geologic mapping and Sampling (Defining the limits of the Bornite, Tillworth and Breccia Cu-Au mineralized Trends – generating 111 rocks, 18 soil and 92 Silt Samples)	4th Week June – Last Week July 2012

Mackenzie expenditures amounted to $ 479,395.10

The cost of the two activities with details provided in Appendix H of this report is $ 1,138,858.98.

Results-Salal

Hole MSA-003 (figure 9 and 10), drilled in the Mud Lake area intersected 20.6 metres of 0.057% Mo, 0.46 g/t Ag and 0.035 ppm Re including 4.8 metres of 0.207% Mo, 1.02 g/t Ag and 0.109 g/t Re. The intersection was made within a 145.5 metre interval grading 0.02% Mo. The grades encountered compare favorably with the reserve grade (0.046% Mo) and cut-off grade (0.018% Mo) of the Endako molybdenum mine, which operates in central British Columbia. Based on the current understanding of the geometry of the mineralization core lengths are estimated to approximate true width. This intersection occurs under the western end of a 500 metre long area of mineralization defined by historic work and confirmed by the 2011 work program.

MSA-004, (refer to figure 8 & 10) was drilled on the flank of Logan Ridge approximately 850 metres to the west of Mud Lake. The hole intersected several zones of molybdenum mineralization with values up to 0.089% Mo over 1.0 metre, within a broader 24 metre zone of elevated values, but no sections of economic interest were encountered.

Notable achievements for sampling and mapping at Salal include both the confirmation and extension of high-grade molybdenum anomalies in all of the historical focus areas, and the identification of new areas of molybdenum mineralization.

An extensive rock channel sampling program was conducted in the Logan Ridge area where mineralization in the contact zone is exposed in outcrop over a width of 500 metres with the most intense veining occurring over an outcrop width of about 200 metres. Molybdenite mineralization occurs at the contact between fine-grained and coarse-grained quartz monzonite in quartz-sericite-pyrite veins and vein stock works, as well as molybdenite fracture coatings and more rarely as zones of disseminated molybdenite.

The work at Glacier Island confirmed the presence of anomalous molybdenum mineralization and found new mineralized outcrops that were under glacial ice cover during 1960s and 1970s era exploration.

In the Plug Glacier Toe area, a new showing was discovered which features fine-grained molybdenite bearing quartz-sericite-pyrite stockworks and veins that lie 1 kilometre east along strike from the Mud Lake area.

In the Windy Ridge Area, quartz-sericite-pyrite stockworks and veins were discovered that are similar to those discovered at Plug Glacier sited 1 kilometre south-southeast of Mud Lake. Interesting historical drill results from two holes drilled on the Windy Ridge Area led Miocene Metals to carry out reconnaissance-level prospecting. While only qualitative descriptions of the historical drill core survive, Miocene Metals confirmed mineralization on the ridge in surface samples.

It is very significant that new occurrences of molybdenum mineralization are being discovered in areas (e.g. Plug Glacier Toe and Glacier Island Areas) where glaciers have receded from 1960's and 1970's levels when the majority of work took place on the property.

Surprisingly, no sustained effort has been made to drill the widespread occurrence of molybdenum on the property; this, in spite of chip samples, which returned potentially economic grades of molybdenum mineralization over potentially minable widths (e.g. 85 metres of 0.077% Mo, 55 meters of 0.191% Mo and 30 meters of 0.084% Mo), numerous high-grade grab and float samples, and molybdenum mineralization exposed in creek valleys over vertical distances of up to 150 metres.

Results- Mackenzie

The two drill holes completed at the main MacKenzie showing intersected the down-dip projection of fracture-controlled Cu-Au-Mo mineralization that is exposed in the cliff face near the MacKenzie showing indicating the mineralization is controlled by what appears to be a single strike and dip persistent mineralized structure. Although the drilling confirmed the continuity of the structure down-dip, widths and grades encountered were less than those observed in the cliff face with drill hole MMK-001 intersecting 0.24% copper over 0.2 metres and MMK-002 intersecting 4.47% copper, 0.059 g Au/t and 595 ppm Mo over 0.36 metres within a wider interval of 4.3 m grading 0.83% copper, 0.043 g Au/t and 96 ppm Mo.

Bornite Trend

Mineralization in the westernmost Bornite Trend which has an open-ended strike length of 7.5 kilometres consists of scattered quartz-bornite-malachite ± chalcopyrite ± tetrahedrite veins and stringers up to 20 centimetres wide. These occur along the edge of the Miocene-age Bridge River pluton and within the host Coast Plutonic Complex and therefore are interpreted to be of Miocene age.

Tillworth Trend

The Tillworth trend, with an open-ended strike length of 13 kilometres, hosts the main MacKenzie showing as well as quartz-chalcopyrite ± bornite ± molybdenite veins and stringers up to 30 cm wide along strike to the northwest and southeast. At the main MacKenzie showing Cu-Au-Ag-Mo mineralization occurs in high-grade, mineralized structures ranging in thickness from 0.3 metres to 9 metres, and as disseminated chalcopyrite, bornite and molybdenite mineralization in potassically-altered Coast Range plutonic rocks. The mineralized structure is spatially associated with younger, fine-grained granodioritic and dioritic rocks of possible Miocene age similar to the age of the Bridge River Pluton

Breccia Trend

A deeply weathered, silicified, gossanous breccia and several smaller gossans located to the south-southeast define the eastern Breccia Trend, which has an open-ended 5 kilometre strike length. The breccia is exposed on the side of a mountain over an area of about 150 x 500 metres and consists of 30-50 metre wide vuggy silicified zones in contact with a north-northwest-trending dioritic dyke. These zones are characterized by intensely silicified pebble- to cobble-sized, sub-rounded to sub-angular fine-grained intrusive rock fragments cemented by a vuggy siliceous groundmass. Anastomosing veinlets with gray silica and copper-bearing sulphides cross-cut both fragments and groundmass. Streams draining this area show elevated values of copper to 108 ppm, or 2 to 3 times background and elevated levels of arsenic (to 29.5 ppm As), antimony (to 25 ppm Sb) and zinc (to 108 ppm Zn).

Orientation Soil Sampling

To establish the efficacy of soil sampling, an orientation survey was conducted on a fence line oriented perpendicular to the surface projection of the Tillworth mineralized structure. It is indicated that soil sampling will be an effective tool in locating and delineating prospective mineralized zones.

2 INTRODUCTION [1]

Miocene Metals Limited is a public company focused on exploring for and developing porphyry copper-gold-molybdenum deposits within the Cascade Magmatic Arc of south-western British Columbia (Figure 1).

The company originally acquired seven properties covering approximately 1300 km^2 in what is considered to be a poorly documented belt of prospective Miocene-age intrusive rocks that has seen little modern exploration activity. The Sunshine property subsequently has been allowed to lapse and at the same time the MacKenzie property was increased in size 8-fold.

The Cascade Arc stretches from Northern California to the Alaska Panhandle and contains a wide variety of porphyry types including copper-gold, copper-molybdenum, and copper-molybdenum-tungsten deposits that largely formed during the Miocene geological age.

The Cascade Arc shares many geological characteristics with the Miocene-age porphyry belt that stretches the length of Chile and Argentina in South America and hosts some of the world's largest porphyry copper-gold-molybdenum deposits including Chuquicamata, El Teniente and Los Bronces.

This region of southern British Columbia has a reasonably well-developed power, road and rail infrastructure and generally is within three to four hours of tide-water

[1] Text in this section is extracted from Assessment report by Smyth, Clinton P. Geo. 2010 Report. on the Salal-Mackenzie Project, Southern British Columbia

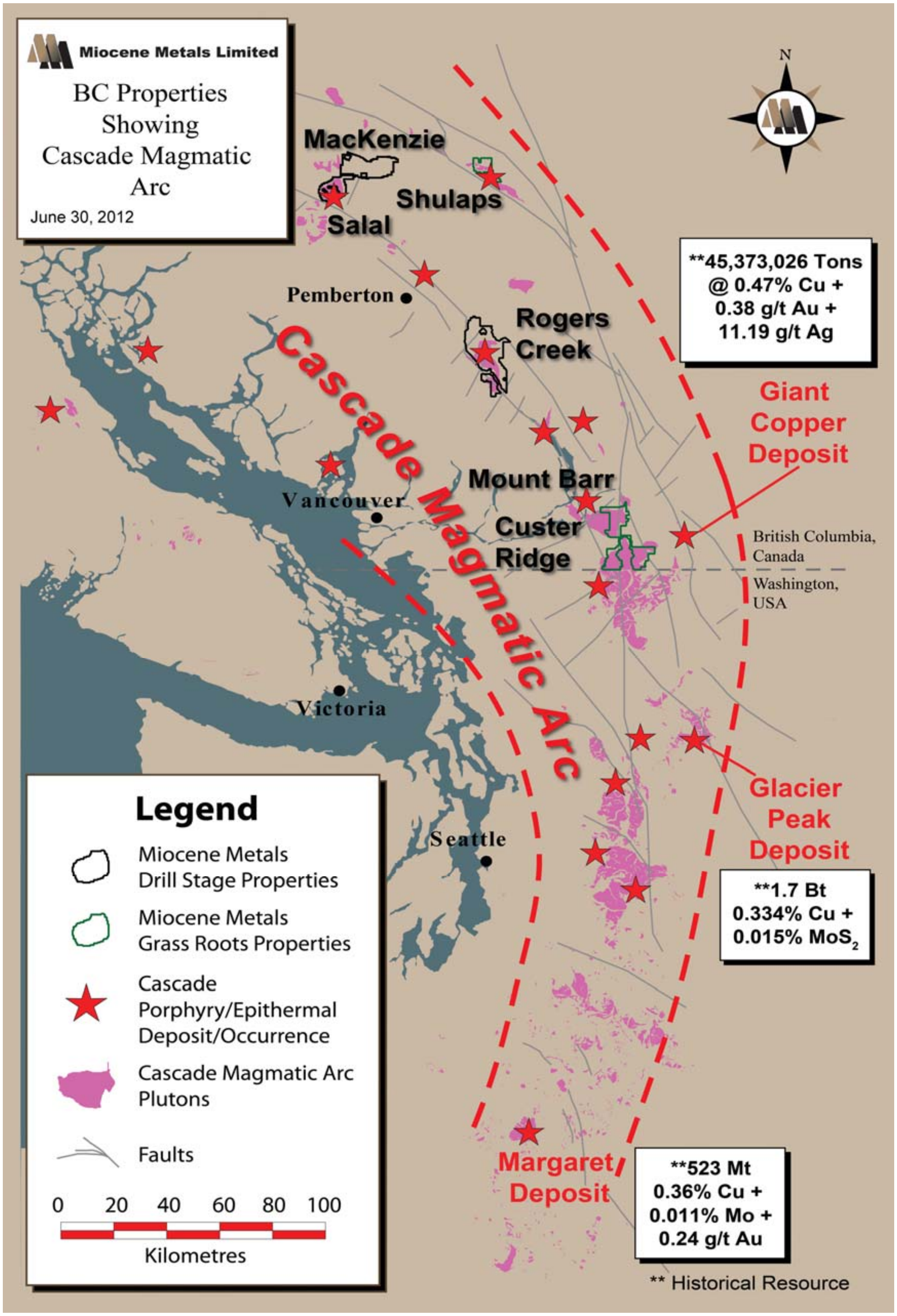


Figure 1: Location of BC Properties within Canadian Segment of Cascade Magmatic Arc

3 LOCATION AND ACCESS[2]

The Salal and Mackenzie Properties are both located about 150 kilometres due north of Vancouver, 65 kilometers northwest of Pemberton and 100 kilometers west of Lillooet in the Coast Mountains of southwest British Columbia. The Properties are located in NTS 92J/14 and NTS 92J/11, latitude 50º48'N, longitude 123º23'W. (Figure 2a)

Access is by helicopter from Pemberton or Lillooet. Road access for helicopter staging is available on the northern margin of the Property via the Bridge River/Carpenter Lake road to Gold Bridge, then south on the Hurley River Forest Service Road, west on the Bridge River Forest Service Roads on the south side of Downton Lake, and up the upper Bridge River valley.

On the south side of the property, forestry roads extend part of the way up Salal Creek from the Upper Lillooet Forest Service Road, which connects to B.C. Highway 99 via Pemberton and Pemberton Meadows.

Figure 2a: Property location with respect to the province of British Columbia

Climate is typical of the high southern Coast Mountains, with hot, dry summers and cold winters with substantial snow fall. The Exploration season extends from May through October.

Accommodations, supplies and services are available in Gold Bridge (population 41), Pemberton (population 2200), and Lillooet (population 2300), and at the Tyax Resort on Tyaughton Lake Road north of Gold Bridge. The Properties straddles the divide between the upper Bridge and Lillooet Rivers, a mountainous, glacier strewn area capped by Ochre (Red) Mountain (2541 meters). Elevations range from 1120 meters in the Bridge River Valley on the northern edge of the Property with peaks up to 2541 meters. The property covers a number of steep creek valleys, wooded slopes, steep cliffs, and rolling alpine. The tree line is at about 1800-2000 meters elevation. Alpine terrain has little vegetation and large areas covered by moraine and outwash from retreating glaciers.

Salal

The Salal molybdenum-rhenium-silver (Mo-Re-Ag) property encompasses 34 claims with a total area of 12,380.24 ha (Figure 2b) Forest service roads cross the northern property boundary providing access from Lillooet (150 road km). To the south, a forest service road passes within several kilometres of the southern property boundary, which, if extended to the property, would make Pemberton reachable in less than 80 road kilometres. Both Pemberton and Lillooet are on the provincial power grid and the BC Rail line. There are three hydro-electric power dams within about 40 kilometres to the east near the Village of Gold Bridge. The Salal property is 100% owned by Miocene Metals subject to two NSRs on optioned portions of the property.

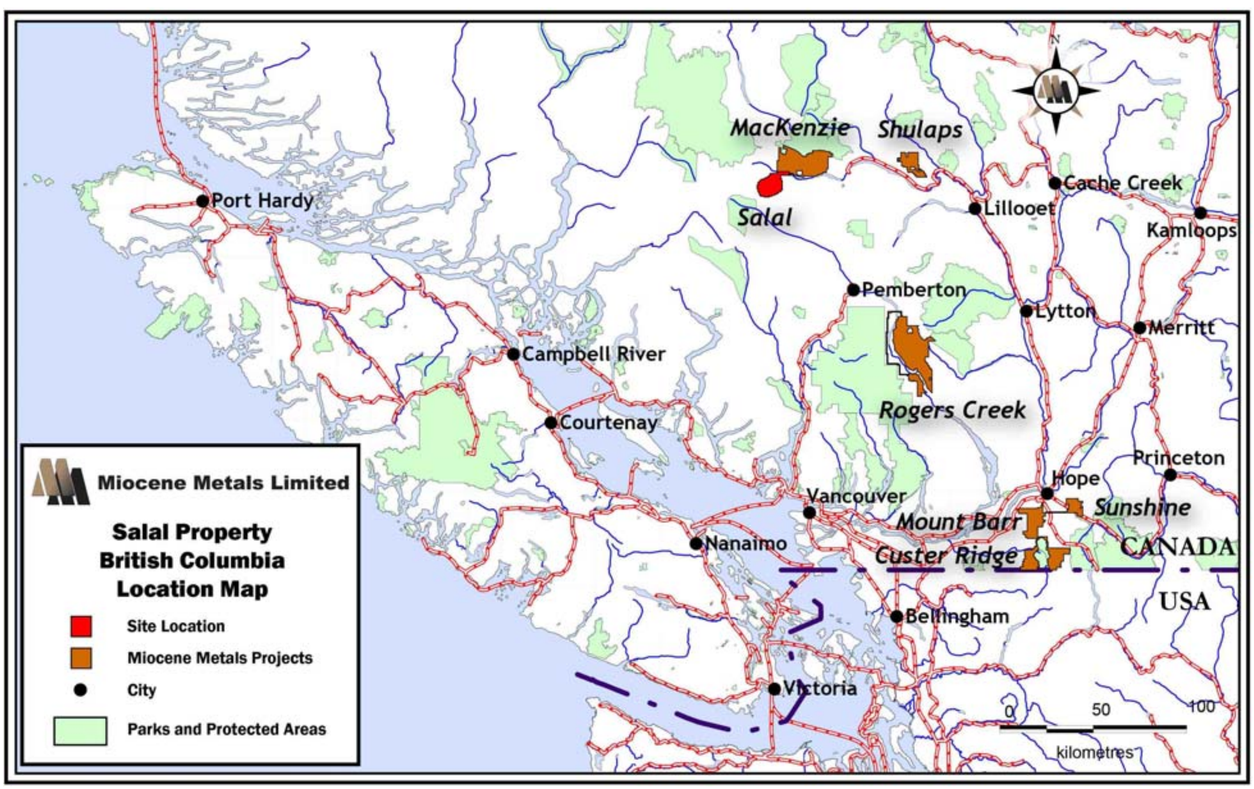


Figure 2b Project Location of Salal Property

Mackenzie

The Mackenzie property, which totals 69 claims covering 29,902.82 ha or approximately 299 km^2 (Figure 2c) is contiguous with the north-eastern boundary of Miocene's Salal property. Forest service access roads cross the northern and southern claim boundaries and link the property with Gold Bridge, which is located about 40 kilometres to the east. The property is located about 100 kilometres west of Lillooet the nearest population centre, railhead, source of high tension power and major roads. Same with Salal, the Mackenzie property is within immediate reach of critical infrastructure namely, provincial power grid, BC rail lines, and extensive network of forest service roads. The MacKenzie property was recently increased in size from 36.3 to 29,903 km^2 ha on the basis of 2011 exploration results. Miocene has a 100% ownership interest in the MacKenzie property subject to a NSR on the original MacKenzie claims.

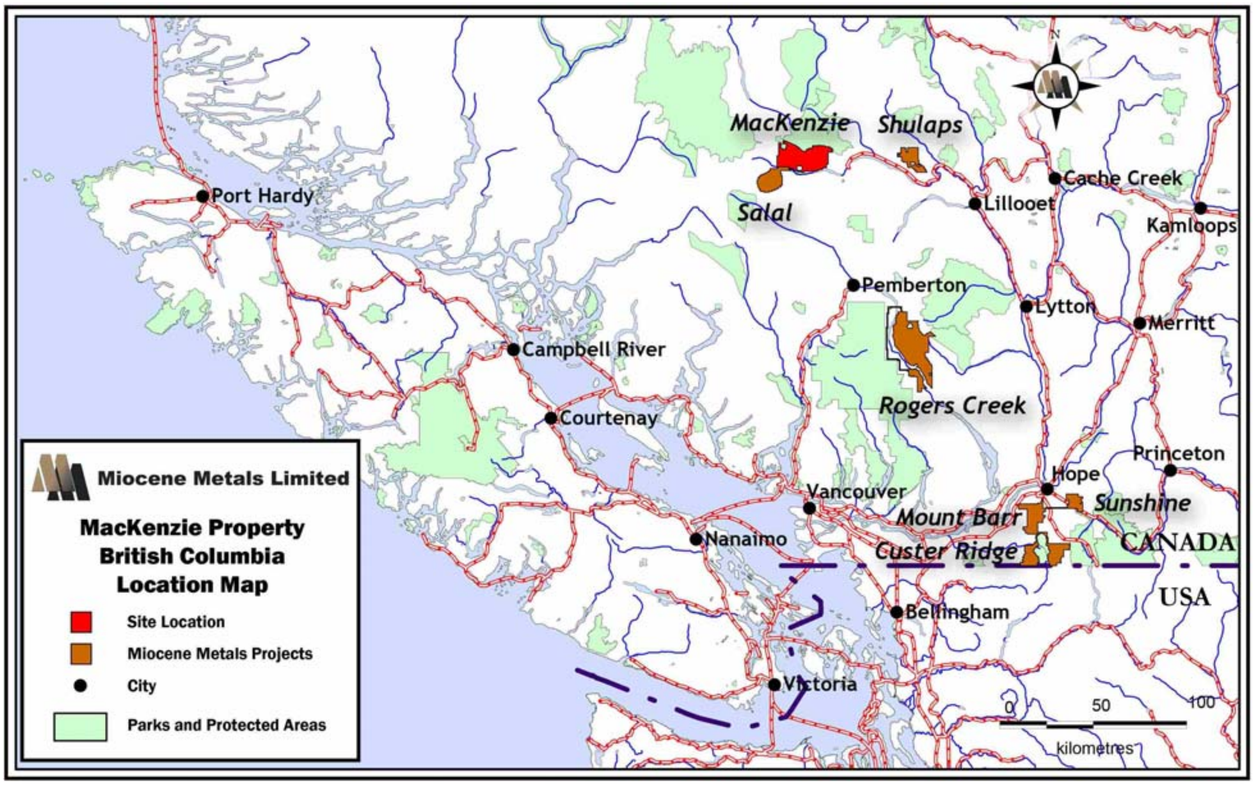


Figure 2c – Project Location of Mackenzie Property

The Mackenzie Property is located in the Dickson Range, also about 150 kilometres north of Vancouver, 65 kilometres northwest of Pemberton. The Mackenzie Property is contiguous with the Salal Property and includes claims owned 100% by Miocene and claims optioned from Kenneth Mackenzie.

[2] *Text in this section is extracted from previous ARIS report and from Miocene Metals Website updates authored by Bruce Jago Ph. D. President of Miocene Metals Limited.*

4 CLAIMS AND OWNERSHIP

The list comprising the Salal and Mackenzie properties are enumerated in Table 1a and Table 1b respectively while the claim location plots for both properties in relation to the neighboring Cresval Bridge River property are shown in Figure 3.

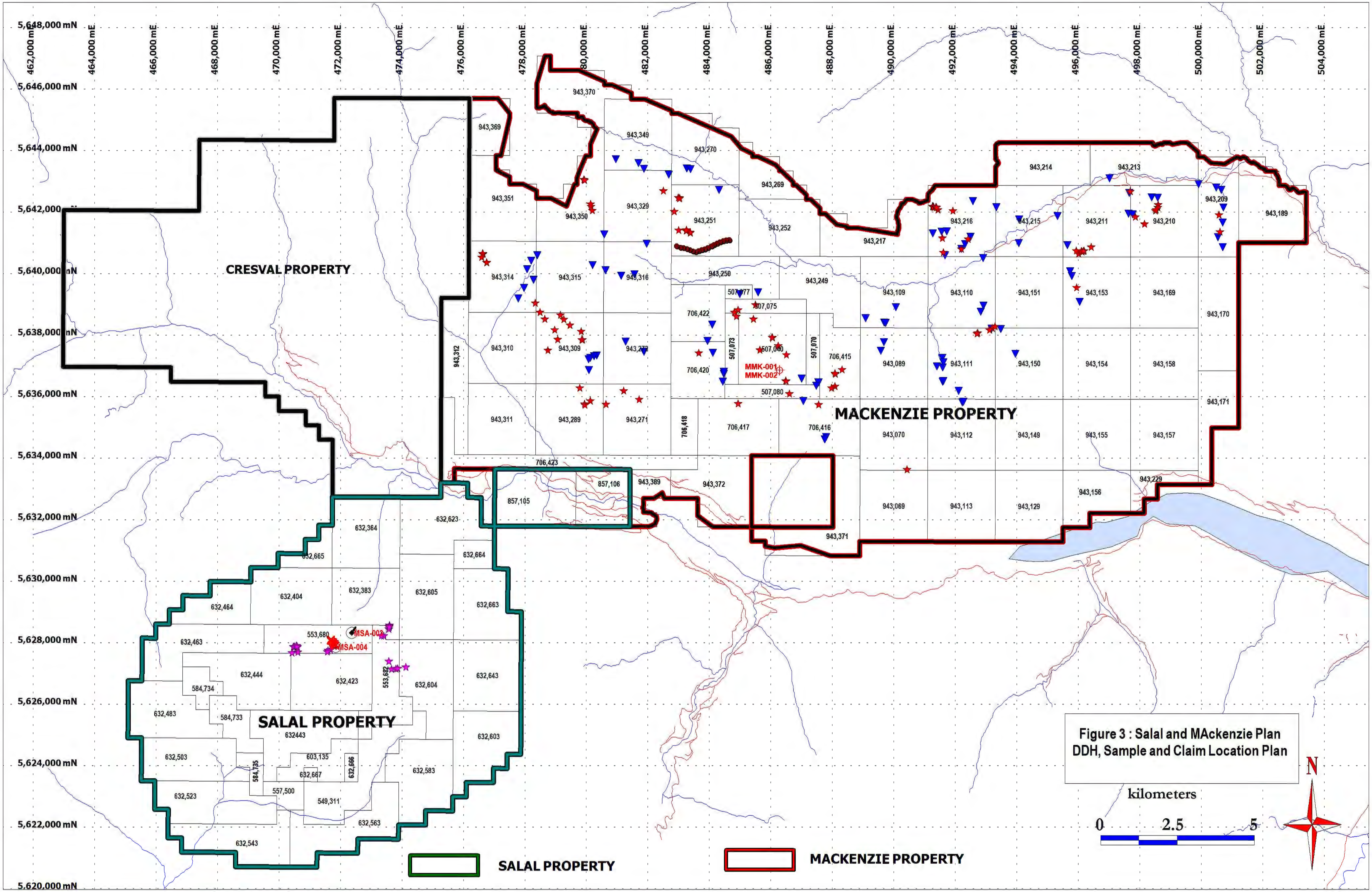
TABLE 1a: Claims Comprising the Salal Property - Valid until 10 December 2014 on approval of statement of work and corresponding Assessment report under event 5147797

	tenure number	map area (NTS)	area (hectares)	holder	recorded date	*due date on pending approval*
1	549311	092J	511.07	MML	14-Jan-2007	Valid until 10 December 2014 on approval of Statement of Work and corresponding Assessment report under event # 5147797
2	553680	092J	326.81	MML	06-Mar-2007	
3	553682	092J	347.34	MML	06-Mar-2007	
4	557500	092J	102.23	MML	23-Apr-2007	
5	584733	092J	183.93	MML	21-May-2008	
6	584734	092J	122.59	MML	21-May-2008	
7	584735	092J	81.77	MML	21-May-2008	
8	603135	092J	204.41	MML	21-Apr-2009	
9	632364	092J	510.27	MML	11-Sep-2009	
10	632383	092J	428.82	MML	11-Sep-2009	
11	632404	092J	490.08	MML	11-Sep-2009	
12	632423	092J	490.34	MML	11-Sep-2009	
13	632443	092J	490.50	MML	11-Sep-2009	
14	632444	092J	469.90	MML	11-Sep-2009	
15	632463	092J	469.81	MML	11-Sep-2009	
16	632464	092J	285.90	MML	11-Sep-2009	
17	632483	092J	449.57	MML	11-Sep-2009	
18	632503	092J	449.70	MML	11-Sep-2009	
19	632523	092J	490.71	MML	11-Sep-2009	
20	632543	092J	449.87	MML	11-Sep-2009	
21	632563	092J	490.74	MML	11-Sep-2009	
22	632583	092J	490.64	MML	11-Sep-2009	
23	632603	092J	470.10	MML	11-Sep-2009	
24	632604	092J	469.91	MML	11-Sep-2009	
25	632605	092J	490.08	MML	11-Sep-2009	
26	632623	092J	510.22	MML	11-Sep-2009	
27	632643	092J	510.75	MML	11-Sep-2009	
28	632663	092J	449.27	MML	11-Sep-2009	
29	632664	092J	122.49	MML	11-Sep-2009	
30	632665	092J	142.90	MML	11-Sep-2009	
31	632666	092J	40.88	MML	11-Sep-2009	
32	632667	092J	20.44	MML	11-Sep-2009	
33	857105	092J	489.73	MML	17-Jun-2011	*Valid until 10 Dec 2015 under event 5278371 & 5399014*
34	857106	092J	326.48	MML	17-Jun-2011	
		Totals	12,380.24			

TABLE 1b: Claims Comprising the Mackenzie Property
Valid as shown in the pertinent columns

	tenure number	map area (NTS)	area (hectares)	holder	recorded date	*due date on approval*
1	507040	092J	509.66	MML	14-Feb-2005	*Valid until 10 Dec 2015 under event 5278371 & 5399014*
2	507070	092J	101.93	MML	14-Feb-2005	
3	507073	092J	101.93	MML	14-Feb-2005	
4	507075	092J	122.29	MML	14-Feb-2005	
5	507077	092J	40.76	MML	14-Feb-2005	
6	507080	092J	142.74	MML	14-Feb-2005	
7	706415	092J	326.21	MML	16-Feb-2010	
8	706416	092J	489.51	MML	16-Feb-2010	
9	706417	092J	489.51	MML	16-Feb-2010	
10	706418	092J	163.17	MML	16-Feb-2010	
11	706420	092J	326.23	MML	16-Feb-2010	
12	706422	092J	326.11	MML	16-Feb-2010	
13	706423	092J	489.60	MML	16-Feb-2010	
14	943069	092J	510.16	MML	27-Jan-2012	Expanded Mackenzie Claims valid until 27 Jan 2013
15	943070	092J	509.93	MML	27-Jan-2012	
16	943089	092J	509.71	MML	27-Jan-2012	
17	943109	092J	509.48	MML	27-Jan-2012	
18	943110	092J	509.48	MML	27-Jan-2012	
19	943111	092J	509.71	MML	27-Jan-2012	
20	*943112*	*092J*	*509.93*	*MML*	*27-Jan-2012*	
21	*943113*	*092J*	*510.16*	*MML*	*27-Jan-2012*	
22	*943129*	*092J*	*510.17*	*MML*	*27-Jan-2012*	
23	*943149*	*092J*	*509.95*	*MML*	*27-Jan-2012*	
24	943150	092J	509.72	MML	27-Jan-2012	
25	943151	092J	509.50	MML	27-Jan-2012	
26	*943153*	*092J*	*509.51*	*MML*	*27-Jan-2012*	
27	*943154*	*092J*	*509.74*	*MML*	*27-Jan-2012*	
28	*943155*	*092J*	*509.96*	*MML*	*27-Jan-2012*	
29	*943156*	*092J*	*346.90*	*MML*	*27-Jan-2012*	
30	*943157*	*092J*	*509.96*	*MML*	*27-Jan-2012*	
31	*943158*	*092J*	*509.74*	*MML*	*27-Jan-2012*	
32	*943169*	*092J*	*509.51*	*MML*	*27-Jan-2012*	
33	*943170*	*092J*	*489.18*	*MML*	*27-Jan-2012*	
34	*943171*	*092J*	*326.32*	*MML*	*27-Jan-2012*	
35	943189	092J	509.19	MML	27-Jan-2012	
36	943209	092J	427.72	MML	27-Jan-2012	
37	943210	092J	509.25	MML	27-Jan-2012	
38	943211	092J	509.26	MML	27-Jan-2012	
39	*943213*	*092J*	*488.70*	*MML*	*27-Jan-2012*	
40	*943214*	*092J*	*427.62*	*MML*	*27-Jan-2012*	

41	943215	092J	509.26	MML	27-Jan-2012	Expanded Mackenzie Claims valid until 27 Jan 2013
42	943216	092J	509.24	MML	27-Jan-2012	
43	943217	092J	488.91	MML	27-Jan-2012	
44	*943229*	*092J*	*163.24*	*MML*	*27-Jan-2012*	
45	943249	092J	489.08	MML	27-Jan-2012	
46	943250	092J	366.78	MML	27-Jan-2012	
47	943251	092J	509.24	MML	27-Jan-2012	
48	943252	092J	488.89	MML	27-Jan-2012	
49	*943269*	*092J*	*264.73*	*MML*	*27-Jan-2012*	
50	943270	092J	468.30	MML	27-Jan-2012	
51	943271	092J	509.88	MML	27-Jan-2012	
52	943272	092J	509.66	MML	27-Jan-2012	
53	943289	092J	509.89	MML	27-Jan-2012	
54	943309	092J	509.66	MML	27-Jan-2012	
55	943310	092J	509.67	MML	27-Jan-2012	
56	943311	092J	509.89	MML	27-Jan-2012	
57	943312	092J	367.00	MML	27-Jan-2012	
58	943314	092J	509.44	MML	27-Jan-2012	
59	943315	092J	509.44	MML	27-Jan-2012	
60	943316	092J	509.43	MML	27-Jan-2012	
61	943329	092J	509.19	MML	27-Jan-2012	
62	943349	092J	508.97	MML	27-Jan-2012	
63	943350	092J	488.81	MML	27-Jan-2012	
64	943351	092J	509.19	MML	27-Jan-2012	
65	*943369*	*092J*	*244.29*	*MML*	*27-Jan-2012*	
66	*943370*	*092J*	*407.07*	*MML*	*27-Jan-2012*	
67	943371	092J	510.22	MML	27-Jan-2012	
68	943372	092J	489.70	MML	27-Jan-2012	
69	943389	092J	183.64	MML	27-Jan-2012	
		Totals	29,902.82			



Miocene Metals Limited

DRILL HOLE LOCATION MMK-001 MSA-003

52351 Tenement Claim and Number

★ ROCK ● Soil ▼ Silt

5 EXPLORATION HISTORY[3]

Salal

The Salal Property has seen an abundance of historic exploration work, particularly in relation to the many showings of molybdenite discovered in the Salal Creek drainage in 1960. Most of the work completed in the 1960s and 1970s was focused on molybdenum. The prospect was briefly re-evaluated in the 1980s for its gold potential and two drill holes were completed in 1996. Only minor field visits are documented since. A total of 16 drill holes are documented in the available records. The following includes a summary of exploration on the Salal Property based upon available assessment records and government reports.

In 1960, the first claims were staked on a prominent gossan stain by Phelps Dodge Corporation. In 1962, the claims lapsed and were staked by Pemberton Prospecting and Mineral Syndicate. In 1964, these were optioned by Norpax Nickel Mines Limited who staked additional ground and completed surface sampling and two drill holes (26.5 m and 238 m depth) in the Float Creek area. Both holes were abandoned well before their target depths because of rock slides and poor ground conditions. Surface sampling returned between 0.03 and 0.22% MoS^2, with a chip sample returning 0.13% MoS^2 over 26.52 m (Mustard et al., 1965).

In 1965, the claims were optioned by Southwest Potash Corporation (Southwest) who staked additional ground and mapping was completed along with chip sampling and blasting/trenching for 50 pound “bulk” samples. This work documented nine significant molybdenite occurrences over a 15 km arcuate trend that crudely follows the contact between an inner fine-grained core and outer coarse-grained margin to the granitic Salal Creek stock. Southwest described fine-grained molybdenite in quart-pyrite veins [dominant], in stockworks and on joints and shears and coarser-grained molybdenite disseminated in the fine-grained granite and as coatings and rosettes on fractures (Mustard et al., 1965).

Sampling in 1965 included collection of 181 “surface chip” samples, 16 “continuous chip” samples, five “random chip” samples, 23 grab samples, and six 50lb “bulk” samples (from blast trenches). They distinguished several mineralized areas including: the Float Creek area, the Float Ridge area, the Cornice Creek to Big Creek area, the Lost Creek area, the Mud Lake area, the Logan Ridge area, the Glacier Island area, the “A” Creek area and the Spread Creek area.

In 1966, Norpax Nickel Mines and Pemberton Prospecting and Mining Syndicate merged to form Salal Molybdenum Mines Limited. Southwest Potash dropped their option on the Salal claims at the end of 1966. The same year, Underhill and Underhill were contracted to create a legal survey of the EE, PLUG, and R claims (Mustard and Campbell, 1970).

In 1967, Amax completed eight diamond drill holes (SM-1 through SM-8) totaling 2,123 m on the Salal Creek intrusion. No report for this drilling is included in the records; however the holes reportedly were oriented to intersect the fine-grained/coarse grained contact and “assays of 10 foot sections from these holes ranged up to 0.14% MoS2. Two holes drilled near the bottom of Big Creek penetrated only the coarse grained phase and assays did not exceed 0.10 % MoS2” (Mustard and Wong, 1976).

[3] *Most of the text in this section is extracted from internal Miocene/Wallbridge reports authored by Mr. Joshua Bailey.*

In 1970, Cerro Mining Company of Canada Limited optioned the property and carried out silt and talus sampling along Salal Creek from Trail Creek to north of Lost Creek. Four anomalous areas were identified from samples collected west of Salal Creek. Mustard and Campbell (1971a) describe silt sampling in 1970 of all the major streams in the area of the Salal Creek stock. Assay data from this program has not been located but there are presumably the silt samples later re-analysed by BP Minerals and Utah Mines (Wong, 1984).

In 1970, Alrea Engineering Limited of Vancouver was contracted to carry out geological mapping at 1”=500’ on the southeastern portion of the Salal Creek stock, north of Cornice Creek, south of Plug and Red Mountain Glaciers, west of Tongue Glacier and East of Salal Glacier. They describe five intrusive phases comprised of pink to light grey to white equigranular to porphyritic biotite granite, differentiated mostly by grain size.

In 1970, a total field airborne magnetometer survey was completed that included 26 square miles at a flight line spacing of 1000’ (Crosby, 1971).

In 1971, approximately 40 square miles were mapped at 1”=1000’. This work compiled and extended previous mapping and includes the definitive geological map for the Salal Creek stock. Much of this work was done as part of a Ph.D. thesis at Lehigh University (Stephens, 1972).

In August to October, 1975, two diamond drill holes totalling 1,107.30 m were completed on the property by BP Minerals Ltd. The holes were drilled from a single set-up in a small gulley at the head of Float Ridge at an elevation of 2,209.8 m. The assessment report includes [incomplete] detailed drill logs but no assay results (Mustard, 1976).

In July 1976, BP Minerals contracted Phoenix Geophysics Limited to complete a four line (plus a baseline) DCIP and magnetometer survey in the Lost Creek area. Survey lines were spaced 2,400 feet apart oriented nearly due northeast (azimuth 046), the baseline cut near the center of the grid, crossing and near parallel to Lost Creek (Cartwright, 1976). From August to October, 1976, BP Minerals completed a single 882.7 m drill hole on the ridge north of Float Creek, drilling through the volcanic cap above the Salal Creek pluton. Unfortunately, drill logs in the assessment record are only provided to a depth of 340 m, near the upper contact of the fine grained phase of the Pluton (Mustard, 1977).

In 1977 and 1978, Utah Mines Ltd. explored the property under option from B.P. Minerals began exploring the property under joint venture with operator Utah Mines Ltd. New topographic maps were generated from air photos and they conducted detailed (1:5000 scale) mapping over the southern part of the entire Salal pluton (Deighton 1977, Deighton 1978).

In 1979, the B.P. Minerals-Utah Mines Joint Venture completed a 941.5 m diamond drill hole. All core except for post-mineral dykes was sampled on three meter intervals. Negative results were discussed but no assay data was included in the report (Deighton 1979).

In 1984, the Utah Mines-B.P. Minerals Joint Venture filed assessment for re-analyses of 354 stream sediment samples by 30-element ICP in order to assess the gold hosting potential of the porphyry system (Wong, 1984). Their maps show excellent coverage in all of the major drainages near Salal Creek between the Pemberton Valley and the Bridge River, including many of the drainages on the Salal Property.

In 1996, a joint venture between Verdstone Gold Corp. and Molycor Gold Corp. completed geological mapping, soil sampling and drilling in the Float Creek, Float Ridge area (Kikauka, 1996). A total of 374, 5 m chip samples were collected, Two drill holes, 366 m and 123 m, were completed and 288 core samples were taken over 1.5 m-2.3 m intervals.

In 2007 and 2008, Paget Minerals conducted several brief field visits to the Logan claims in order to confirm past accounts of mineralization. Work included mapping and collection of six samples in the Mud Lake – Logan Ridge area in the northern portion of the Salal Creek Pluton. Two samples, 350 m from Mud Lake returned 0.28% Mo and 0.86% Mo. Four samples collected from Logan Ridge returned 0.08%, 0.14%, 0.16%, and 0.16% Mo, one of these with 300 ppm W. Another sample in the east returned anomalous silver, lead and zinc (Bradford 2008, Bradford 2007). Paget later re-analyzed the pulps from these samples and three in the Mud lake area returned high grade rhenium, up to 82 g/t Re (Bradford, personal communication).

In August, 2010, Miocene contracted Canadian Mining Geophysics Ltd. (CMG) to fly gradient magnetic, radiometric and VLF airborne surveys on two grids over the entire Salal property (913 line-km's) and effectively the entire Mackenzie property (314 line-km's).

The airborne survey was complemented with prospecting, geological mapping and sampling, generating 400 grab samples which characterized several prospective areas namely.

- Float/Plug Creek Area
- Mud Lake Logan Ridge
- Glacier Island Area
- Cornice/ Big Creek Areas
- Numbered Creek Area

Two bore holes were drilled by Miocene in 2010. MSA-001 & MSA-002 sited at Float and Plug Creek areas though did not disclosed economic grades and widths had proven the large extent of the mineralized system as well as provided a better understanding of the geology and characteristic of the Mo-Cu-Re mineralization.

Mackenzie[4]

No previous record of exploration in this area has been found. Government mapping in this region is very coarse and there is no regional airborne geophysical coverage.

Copper and gold mineralization was discovered on the property in 2003 by prospector Kenneth Mackenzie (Mackenzie 2006, 2007, 2008, 2009a, b). MacKenzie identified numerous copper and gold occurrences over a several square kilometre area, including assays from one-metre chip samples that returned up to 2.2% Cu and 0.3 g/t Au.

No other records of previous exploration in this area have been found. Government mapping in this region is reconnaissance scale and there is no regional airborne Geophysical coverage.

Values obtained from chip and grab samples collected along this structure, including historic samples are tabulated in the accompanying table and their locations together with samples collected by the property vendor in 201 & 2011, two consecutive geological mapping and sampling campaigns were pursued by Miocene Metal Ltd for Mackenzie as follows:

Rock Sampling from Slim Creek[4]

[4] Text in this section is extracted from previous NI 43-101 Report by Barry McDonough, B. Sc. P. Geo of Scott Wilson Roscoe Postle Associate Inc, Dated December 31, 2010

Sample	Au_ppm	Ag_ppm	Cu_%	Mo_%	Ba_ppm	Type	Description
SC01	0.055	2.9	4.5700	0.0075	50	Grab	Aggregate from 0.2-2m, km-long structure w/ CP and Malachite.
SC02	0.297	27.5	2.1600	0.0396	20	Chip	1m chip sample, gossanous structure, malachite, quartz breccia
SC03	0.080	3.6	6.0400	0.0007	40	Grab	Randon grabs around vein in SC2, vein at 350/30
SC04	0.126	6.3	13.1000	0.0027	30	Grab	Selected sample of gossanous material over 30cm area, malachite
SC05	0.244	10.4	1.8300	0.0035	60	Chip	0.4m chip samples from discovery site (SC1), structures at 330/30
SC06	0.005	0.5	0.0784	0.0001	50	Chip	0.5m chip sample from pale siliceous dyke @180/90, malachite, limonite
SC07	0.118	4.8	0.2500	0.0141	40	Chip	3m chip sample across pink alteration structure trending 130, malachite, quartz veining
SC08	0.046	5.6	1.3500	0.0005	140	Chip	1m chip sample, gossanous structure, quartz veining, malachite in halo
SC09	0.005	1.5	0.5670	0.0021	10	Chip	0.5m chip sample across qtz fracture @ 042/15 rusty wallrock & Malachite
SC10	0.005	0.2	0.0111	0.0001	10	Chip	2.5m chip sample across another pale siliceous dyke
SC11	0.005	2.3	1.2200	0.0014	60	Float	float, malachite on fractures and diss CP, many similar boulders
SC12	0.013	0.2	0.0178	0.0004	430	Chip	1m chip sample of altered granitoid w/ pyrite beside porphyry dyke
SC13	0.006	0.2	0.0124	0.0001	290	Chip	1m chip sample of porphyry dyke
SC14	0.000	0.5	0.0411	0.0003	287	Chip	1m chip sample wallrock near mineralised area
SC15	0.000	0.5	0.0622	0.0002	514	Chip	1m chip sample from pink altered intrusive - potassic alteration
SC16	0.000	37	4.6958	0.0038	144	Grab	grab sample, black rock w/ malachite staining on all surfaces [chalcocite?]
SC16a	0.000	34.2	5.4610	0.0100	319	Grab	grab sample, black rock w/ malachite staining on all surfaces [chalcocite?]
SC19	0.060	4.2	0.4240	0.0014	80	Float	talus with diss and fracture controlled CP
SC20	0.260	16	0.9980	0.0025	130	Float	talus with disseminated CP
SC21	0.005	0.2	0.0063	0.0001	30	Grab	pegmatite dyke, minor malachite
SC22	0.005	0.3	0.0048	0.0001	110	Grab	pegmatite dyke, minor malachite
SC26	0.005	0.2	0.0088	0.0003	130	Grab	fe-stained, thinly bedded rock near black dyke
SC27						Float	float w/ 2.8 x 4 cm vug coating of native copper w/ malachite staining
SC28	0.005	0.2	0.0043	0.0001	750	Grab	thinly bedded silicified fe-stained rock
SC29	0.368	13.8	0.8010	0.0001	30	Float	talus, intrusive, quartz vein w/ bornite
SC30	0.107	6.4	1.3100	0.0006	60	Float	talus, intrusive w/ diss. CP
SC31	0.091	12.8	2.0900	0.0019	40	Float	talus, breccia w/ quartz fragments in hematite and CP matrix
SC32	0.016	2.2	0.6860	0.0026	30	Grab	o/c source of SC29,30,31. 16" chip sample cross structure at 000/30 w/ quartz, malachite, Fe stain
SC33	0.007	3.9	1.1400	0.0013	100	Float	large angular bouldrs, intrusive rock w/ diss. CP and FF CP
SC34	0.041	2.6	0.6660	0.0006	230	Float	float, white dyke stained with malachite dark copper mineral [chalcocite?]
SC46	0.005	0.2	0.0047	0.0004	40	Float	porphyry dike rock, iron stained,, fin grained pyrite.
SC47	0.005	0.2	0.0045	0.0001	150	Grab	quartz diorite
SC48	0.005	0.2	0.0016	0.0001	60	Grab	quartz diorite, fe stained
SC49	0.005	0.2	0.0028	0.0001	1530	Grab	finely laminated breccia from fracture
SC61	0.005	0.9	0.3260	0.0013	190	Float	sample taken from a large angular piece of rock float found close to SC23 and SC33. fine grained mafic rich intrusive w/ diss CP

- Alpamayo Exploration and Adventure Services Ltd. Was contracted in June 2010 to carry out rope sampling on the Mackenzie property. Sampling took place on the Miocene Metals (Mackenzie Property-West Cirque) between June 22nd and June 26th 2010. A total of 21 samples were taken by Shaun Parent, many while rappelling down the west face across a visible mineralized horizon which was inaccessible without ropes. Sampling confirms the presence of several strike persistent mineralized zone with the main zone at Tillworth ridge with lengths in excess of 1,000m.

- During late August, a drill pad was constructed on the ridge crest above the mineralized zone in preparation for drilling in 2012. Prospecting extended the copper-gold mineralized zone 120 metres to the south.

Two styles of mineralization were identified by Miocene on Mackenzie property at that time including:

1. Mineralization is hosted by multiple, parallel NNW-trending strike-persistent, shallowly dipping (~35°E) brittle structures that cross-cut foliated biotite-hornblende-quartz-diorite of the Late-Cretaceous Hurley River pluton
2. The structurally controlled mineralization mentioned above is possibly linked to a potential porphyry copper source as corroborated by the following evidence.
    a. copper-gold-molybdenum-rhenium geochemical fingerprint of the mineralization
    b. occurrence of weakly mineralized, fine-grained granodiorite dykes that are intimately associated with mineralization
    c. Patchy and vein-related potassic (potassium feldspar) alteration on the center and as selvage to the mineralized structures.

6 GEOLOGICAL AND ECONOMIC ASSSESMENT

Regional Geological Setting

The Salal and Mackenzie property is located within the Coast morpho-geological belt of British Columbia (**Error! Reference source not found.**4) and is underlain by the 8 Ma Miocene-age Salal Creek pluton of the Cascade magmatic arc.

Several publications review the geology and tectonic development of the northwest Cordillera (Nelson and Colpron, 2007; Nockleberg et al. 2005) and southwest British Columbia (Monger and Journeay, 1994). The following refers to these publications and the references therein.

The Canadian Cordillera is comprised of five morpho-geological belts that record Mesozoic accretion of the allochthonous Insular and Intermontane Superterranes to North America. The Coast Belt records widespread, dominantly Mesozoic and early Cenozoic continental arc magmatism that developed along the suture between the Insular and Intermontane superterranes during and following accretion.

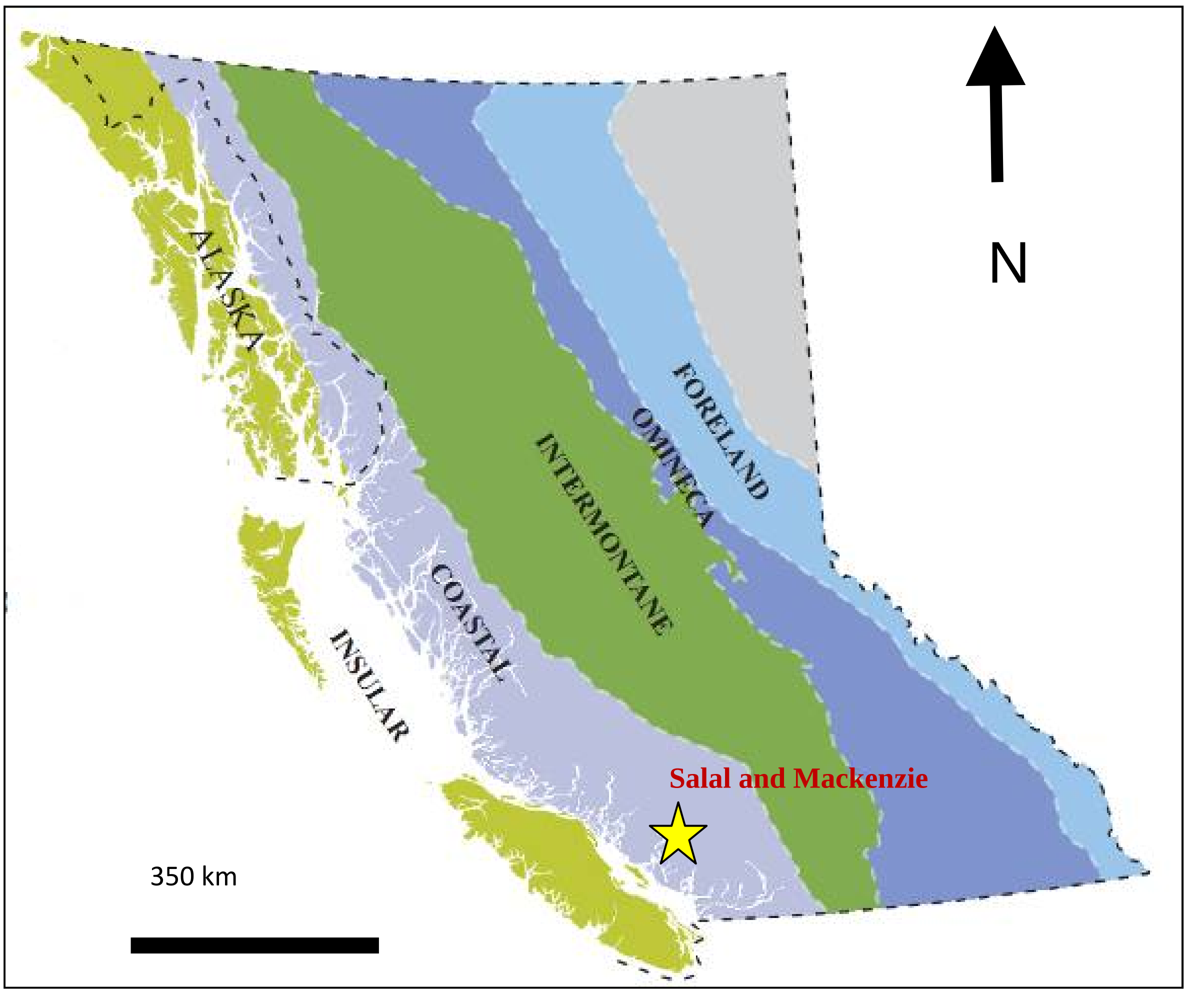


Figure 4: Geology of the Canadian Cordillera

In southwest British Columbia, mid to early southwest vergent thrust faults are cut by later northeast vergent thrust faults. These structures record Jurassic to mid-Cretaceous accretion of the Insular and Intermontane Superterranes to North America which was accompanied by metamorphism, plutonism (the Coast Belt), and major crustal thickening and uplift. Thrust faults are cut by crustal-scale orogen-parallel dextral strike-slip faults, such as the Harrison, Entiat and Fraser-Straight Creek Faults, in the Late-Cretaceous to Eocene. These record a shift to oblique plate convergence and intracontinental dextral transpression at the end of the Cretaceous. Tertiary tectonics were dominated by oblique northeast subduction of the Farallon plate beneath North America and its break-up into today's Explorer, Juan de Fuca, Gordo, Rivera, and Cocos plates.

Post-accretionary plutonism in southwest British Columbia can be divided into:

1. Extensive Late Cretaceous through Middle Eocene plutonism related to subduction of the Farallon plate beneath North America. Plutons were emplaced along active crustal-scale strike-slip structures along the length of the northwest Cordillera, dominantly along the eastern margin of the coast belt overprinting the Intermontane Superterrane. Examples include the Mission Ridge Plutonic suite which underlies Wallbridge's Shulaps and Sunshine Properties.

2. Late Eocene through Pliocene (and Present) plutonism of the Cascade magmatic arc which is related to subduction of broken remnants of the Farallon plate, including the Juan de Fuca plate, beneath North America. Cascade plutons were emplaced along the older crustal scale Eocene structures and in particular the intersection of these with much younger arrays of steep northeast trending cross-structures. The Cascade magmatic arc extends from southeast Alaska through Northern California. However, it is best understood in terms of its exposure in the Cascade Mountains of Washington where it intrudes volcanic and sedimentary rocks and is easier to identify than where it intrudes similar older crystalline rocks in the Coast Mountains of British Columbia. Examples include intrusions underlying Wallbridge's Salal, Rogers Creek, Mount Barr and Custer Ridge Properties.

PROPERTY GEOLOGY _ SALAL MACKENZIE

The property is underlain by biotite-hornblende-quartz-diorite of the 650 square kilometre-sized Hurley River pluton assigned by Murray and Journeay to the Late-Cretaceous Scuzzy plutonic suite of the Coast Batholith. The area is mapped at a scale of 1:100,000 and none of the smaller dykes or intrusions described by prospector Mackenzie are detailed on the government maps. There does appear to be any radiometric age determinations in the area. Given its location immediately northeast of and line with the Miocene age Meager Mountain and Salal plutons, it is quite permission that, in detail, the host rocks may be Cascade in age.

MINERALIZATION AND DEPOSIT TYPES - SALAL

This appears to be the first time that a land package has been consolidated over the entire Salal intrusion in spite of a 50 year exploration history, which found molybdenum occurrences along a very well-defined 15 kilometre arcuate trend. In addition, the property boasts the strongest Mo-in-stream sediment anomaly in the province when Mo-in-silt results are compared to the British Columbia Geological Survey database (Figure 5). Porphyry molybdenum mineralization at Salal is a low-fluorine sub-type as described the United States Geological Survey.

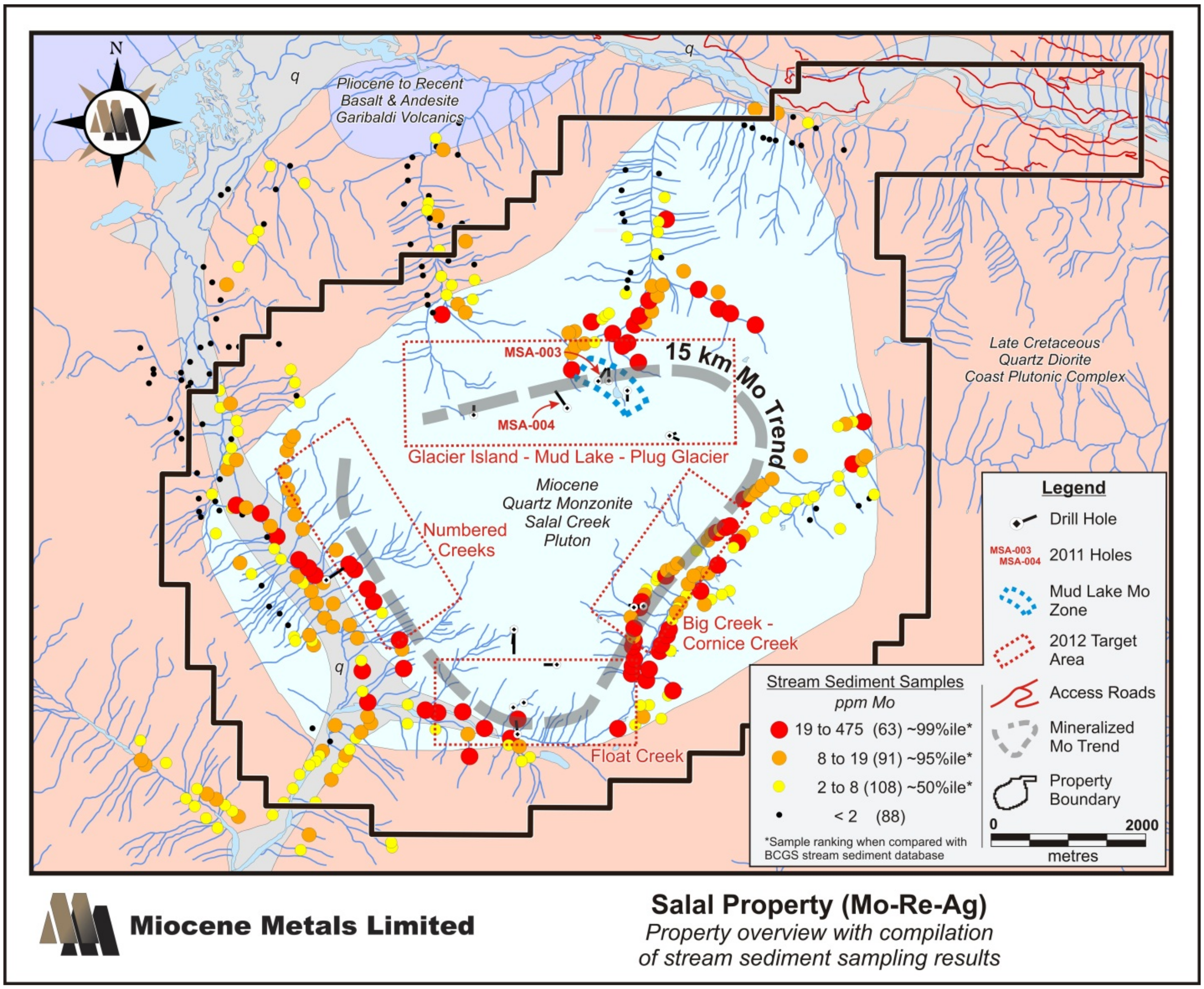


Figure 5: Map of Salal Intrusion Showing the 15-km corridor of Mo-Re-Ag Occurrences and the Distribution of Four Priority Prospecting Areas

MINERALIZATION AND DEPOSIT TYPES - MACKENZIE

The Mackenzie property is being explored for porphyry style copper and gold mineralization similar to Taseko Mine's Prosperity deposit just north of the property.

Mineralization is hosted by multiple, parallel NNW-trending strike-persistent, shallowly dipping (~35°E) brittle structures that cross-cut foliated biotite-hornblende-quartz-diorite of the Late-Cretaceous Hurley River pluton. The principal structure (Figure 7 and 6) is exposed in a continuous zone for a distance of greater than 1.0 kilometre on a steeply inclined rock face at the head of a glacial cirque. These mineralized structures are cut by ENE trending, steeply dipping mineralized fractures in several locations. At these structural intersections, mineralization widens to several metres (up to 6 metre vertical exposures) in width

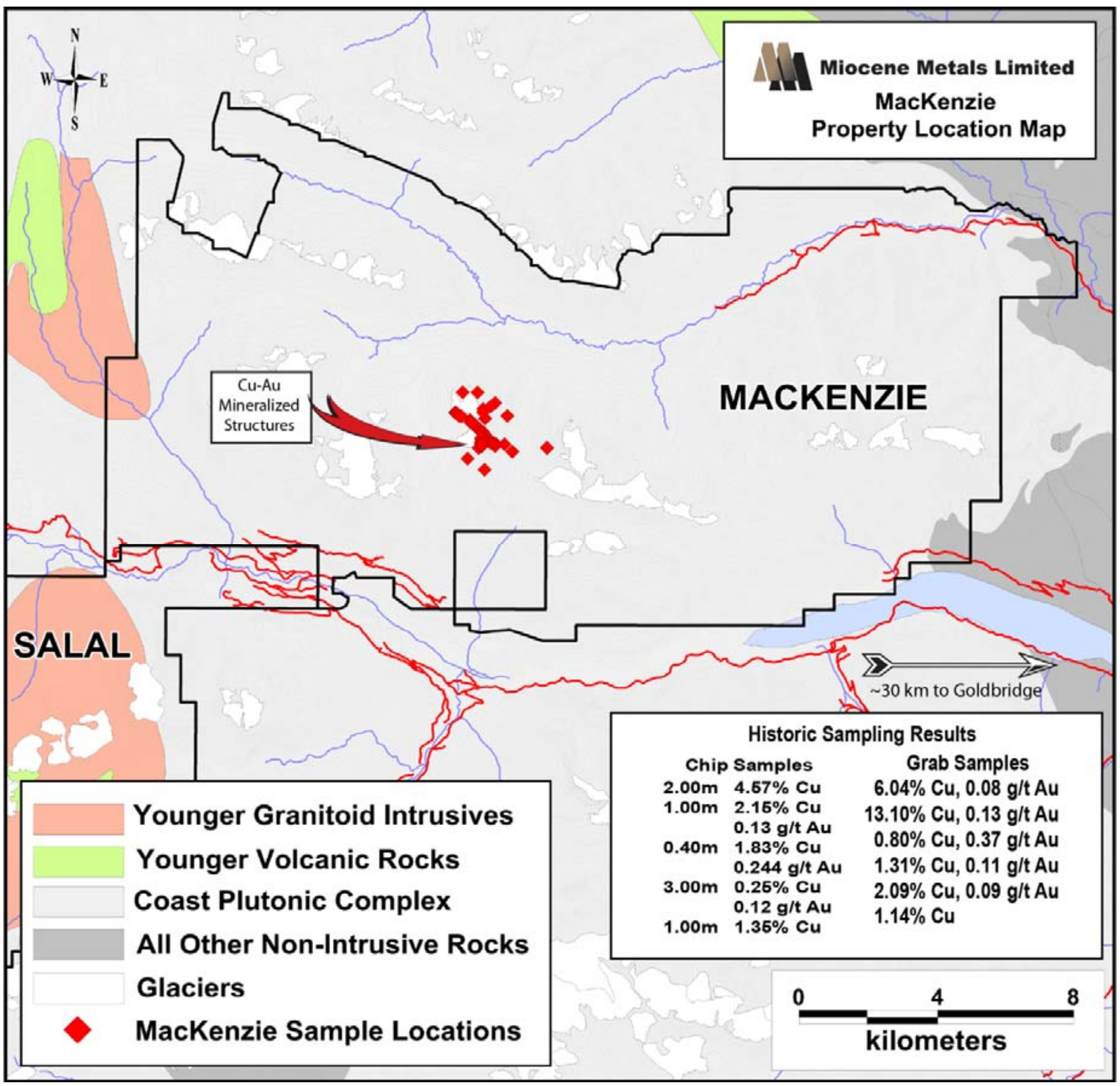


Figure 6: Mackenzie Property Location Map Showing Generalized Distribution of Rock Units, Historical Sampling Sites and Results of Historical Sampling

suggesting that mineralized "shoots" may have formed, which plunge into the hillside. Other sub-parallel NNW-trending structures also are present but access to higher elevations on the face to sample these structures is hampered by its steepness and cover by residual snow. Work to-date has discovered copper-gold mineralization over an area of about 700 x 1,200 metres.

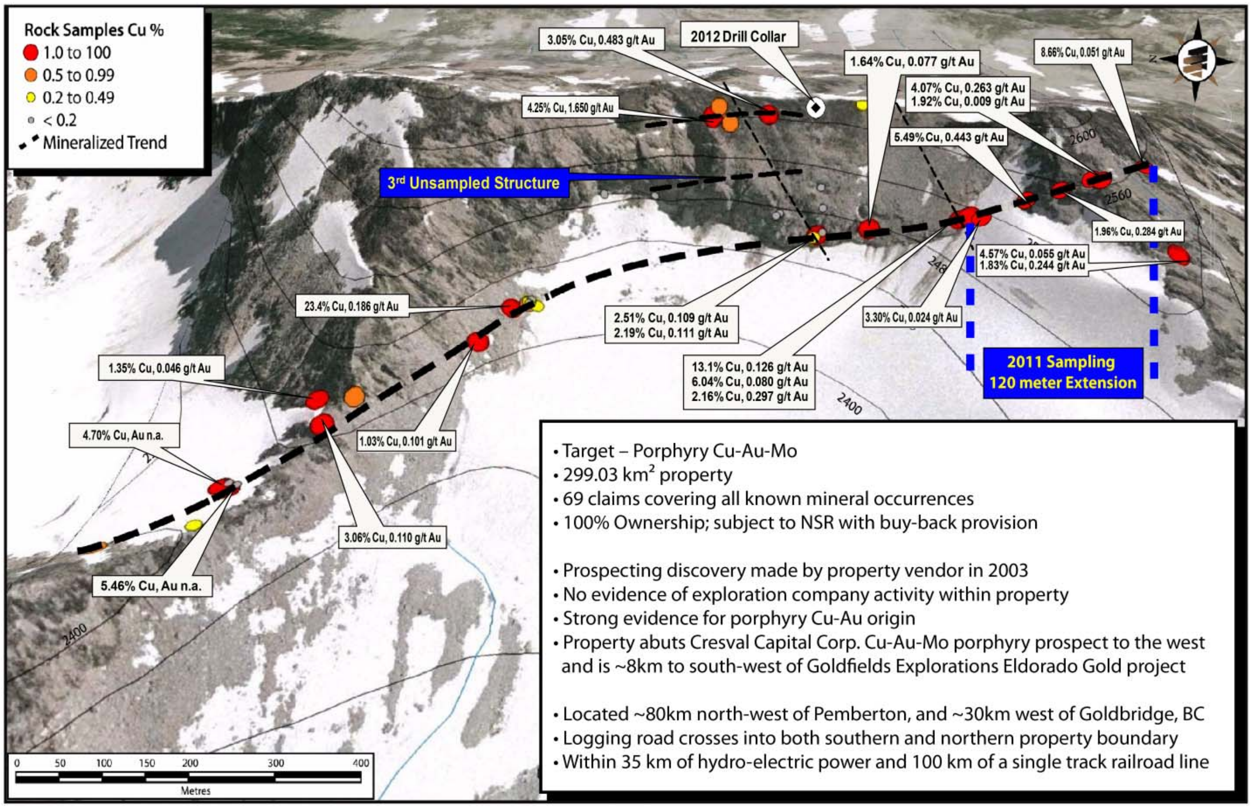


Figure 7 – Panoramic View of the Tillworth Ridge Area Showing the Surface Trace of the Mineralized Structure and the Distribution of Samples Collected in 2010 and 2011.

The origin of the mineralization is not clear at this time, but linkage with a porphyry-style system is strongly supported by the copper-gold-molybdenum-rhenium geochemical fingerprint of the mineralization and the occurrence of weakly mineralized, fine-grained granodiorite dykes that are intimately associated with mineralization and with patchy and vein-related potassic (potassium feldspar) alteration.

7 EXPLORATION PROGRAM AND RESULTS

I. Activities – Salal 2011

The technical work for Salal in 2011 focused primarily on the Mud lake-Logan Ridge area and work accomplishments consist of the following.

Work Done	Period Work Conducted
A. Prospecting, Geologic mapping and Sampling (generating 285 rock samples qualified by 28 CRM)	3rd week July – 2nd Week Nov 2011
B. Two (2) Drill Holes (MSA-003 at Mud Lake and MSA-004 at Logan Ridge Area).	27 August to 10 Sept 2011

A. Sampling and Prospecting

The numbers of samples collected are as follows:

Rock Channel Sampling at Logan Ridge Area	260 (with 24 CRM)
Grab and Float Sampling in Adjacent Target Generation Area	25 (with 4 CRM)

CRM – Certified Reference materials

Appendix B1 tabulates the rock samples collected during the period consisting of 260 rock channel samples taken from a cliff at Logan ridge qualified and assured with 24 certified reference materials and 25 grab and float samples from areas immediately adjacent to Logan Ridge. Appendix B2 represents the Certificate of Analysis from ALS Mineral Laboratory in North Vancouver.

B. Drilling

Collar data for the two drill holes in Salal are as follows:

Hole ID	Easting	Northing	Elev.	Length meters	Azimuth	Incl.	Start date	End Date
MSA-003	472366	5628318	2124	290.17	37	-48	8/27/2011	8/30/ 2011
MSA-004	471848	5627865	2177	420.62	330	-53	9/3/ 2011	9/10/ 2011
			Total meters	710.79				

Hole MSA-003, drilled in the Mud Lake area intersected 20.6 metres of 0.057% Mo, 0.46 g/t Ag and 0.035 ppm Re including 4.8 metres of 0.207% Mo, 1.02 g/t Ag and 0.109 g/t Re. The intersection was made within a 145.5 metre interval grading 0.02% Mo. (refer to figure 8 and 9). The grades encountered compare

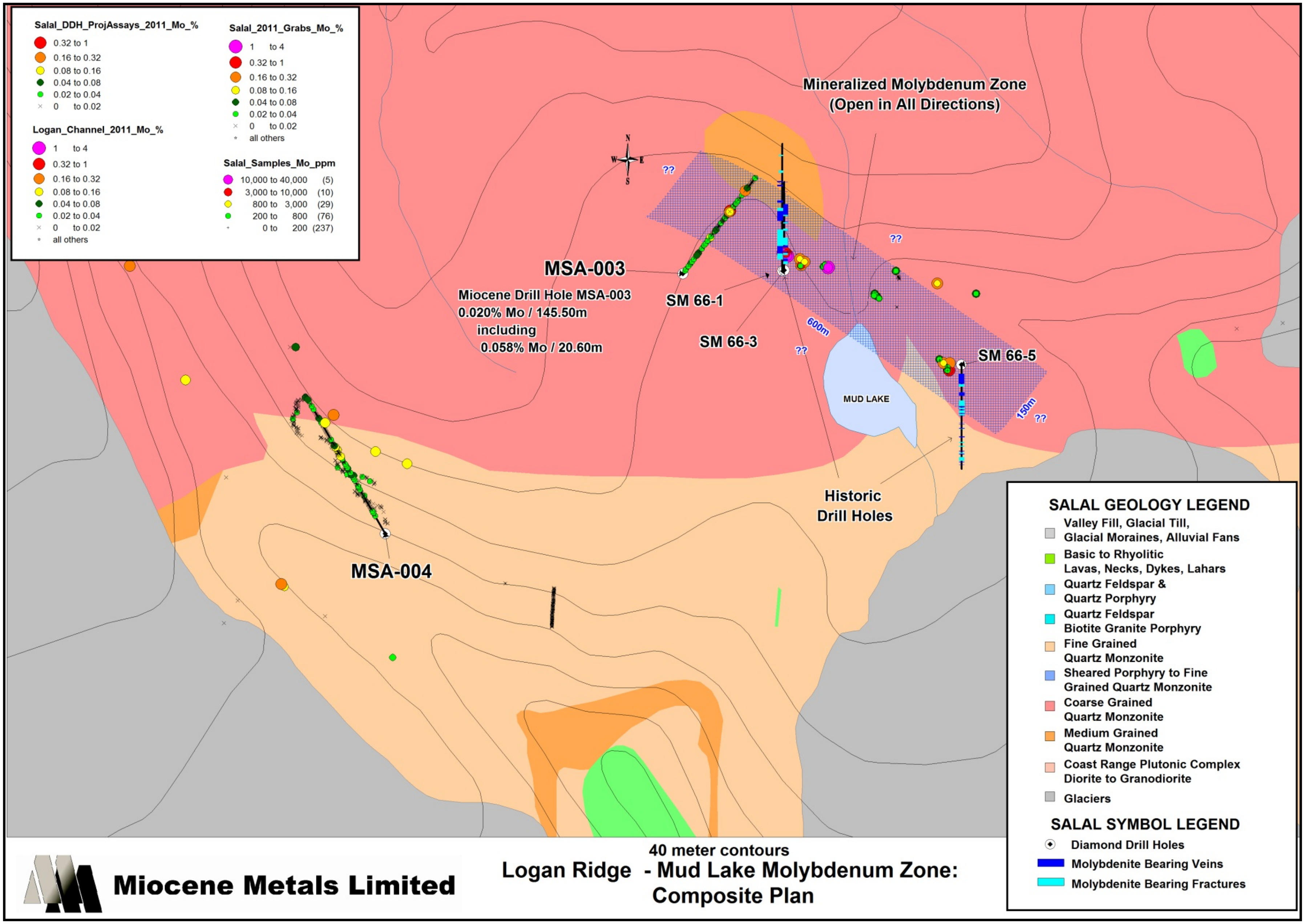


Figure 8: Location of Salal Drill Holes MSA-003 (Mud Lake) and MSA-004 (Logan Ridge)

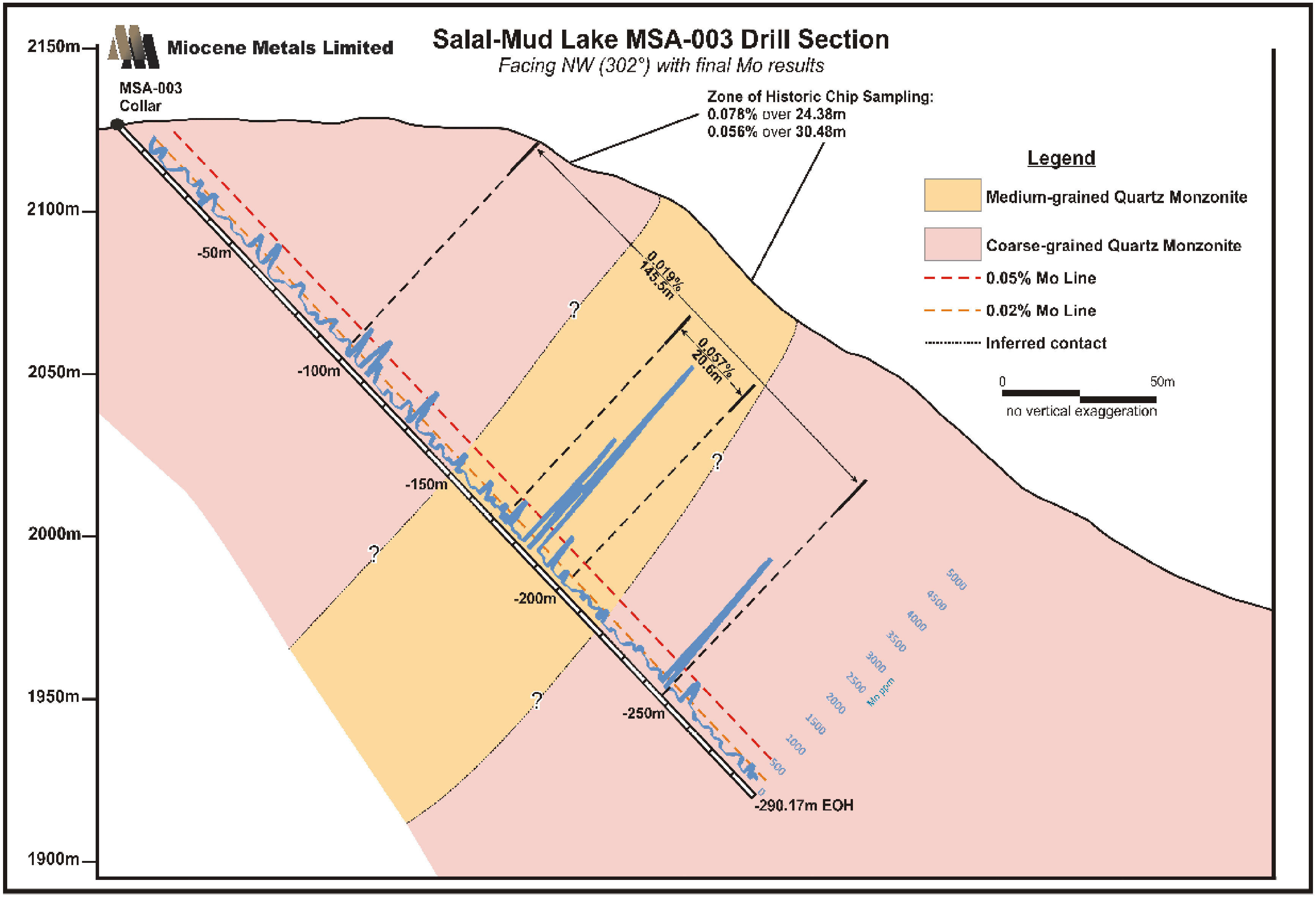


Figure 9: Salal – Mud Lake MSA-003 Drill Section

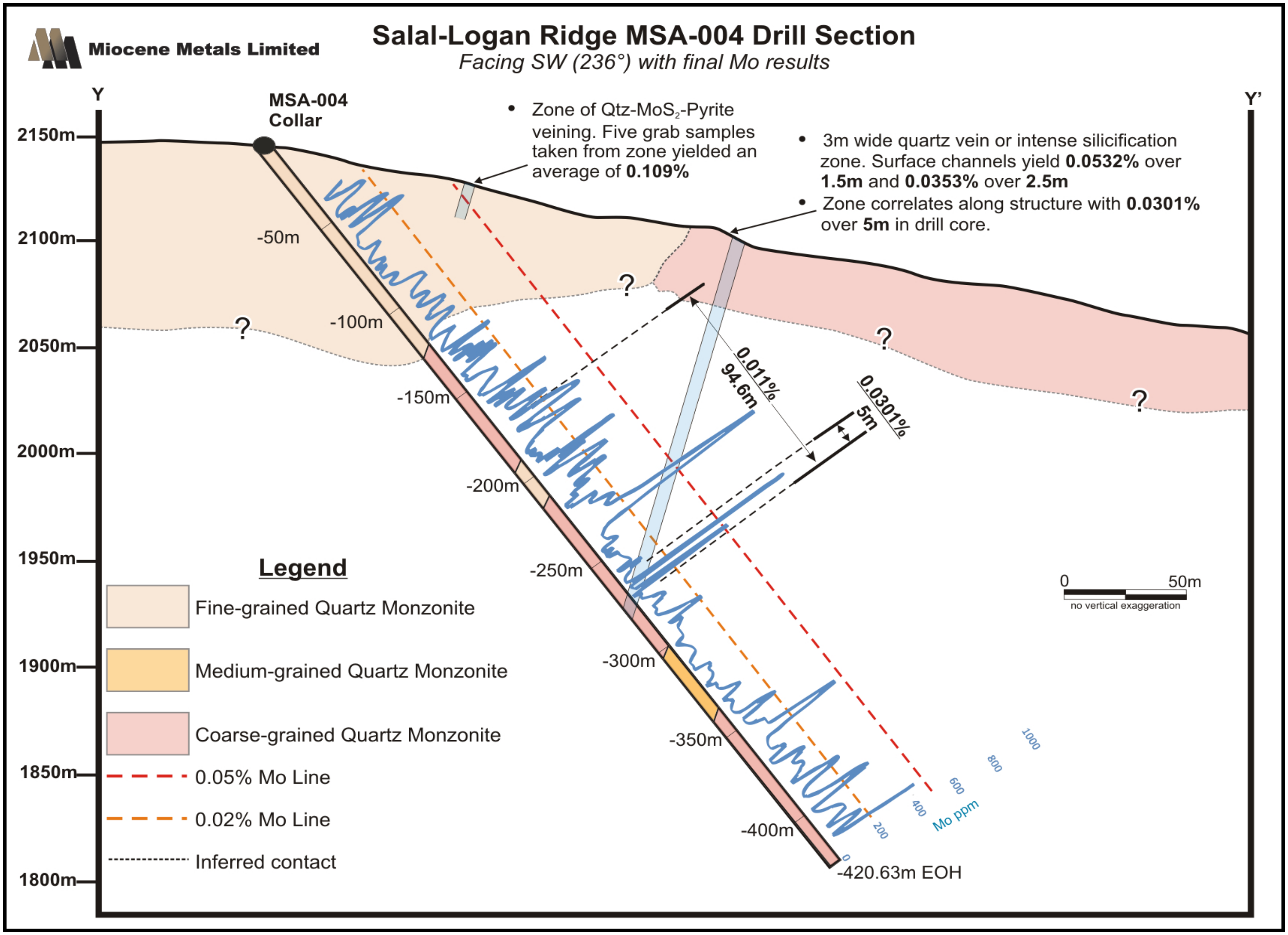


Figure 10: Salal – Logan Ridge MSA-004 Drill Section

favourably with the reserve grade (0.046% Mo) and cut-off grade (0.018% Mo) of the Endako molybdenum mine, which operates in central British Columbia. Based on the current understanding of the geometry of the mineralization core lengths are estimated to approximate true width. This intersection occurs under the western end of a 500 metre long area of mineralization defined by historic work and confirmed by this summer's work program.

MSA-004, (Figures 8 & 10) was drilled on the flank of Logan Ridge approximately 850 metres to the west of Mud Lake. The hole intersected several zones of molybdenum mineralization with values up to 0.089% Mo over 1.0 metre, within a broader 24 metre zone of elevated values, but no sections of economic interest were encountered.

II. Discussion of Results – Salal 2011

Miocene Metals completed several phases of exploration on the property, drilling in 2010 and in 2011, complemented by extensive mapping and prospecting along the 15 kilometre trend of molybdenum occurrences, as well as surface rock and channel sampling and diamond drilling (Figure 11 for property wide location of mineralized occurrences). Notable achievements of this work include both the confirmation and extension of high-grade molybdenum anomalies in all of the historical focus areas, the identification of new areas of molybdenum mineralization and the first intersection of an economically interesting zone of molybdenum mineralization by drilling on the property.

A. Mud Lake Area/ Logan Ridge Area

Target Testing Through Drilling

As mentioned above, Hole MSA-003 sited in the Mud Lake area returned 20.6 metres of 0.057% Mo, 0.46 g/t Ag and 0.035 ppm Re including 4.8 metres of 0.207% Mo, 1.02 g/t Ag and 0.109 g/t Re. The intersection was made within a 145.5 metre interval grading 0.019% Mo (Figure 9).

MSA-004 sited at Logan Ridge area returned 94.6m of 0.011% Mo including 5m of 0.031 % Mo (Figure 10).

Prospecting, Rock Sampling and Detailed Mapping

An extensive program of rock channel sampling was conducted in the Logan Ridge area where molybdenite mineralization was described in historical reports as occurring at the contact between fine-grained and coarse-grained quartz monzonite in quartz-sericite-pyrite veins and vein stock works, as well as molybdenite fracture coatings and more rarely zones of disseminated molybdenite. Work by Miocene showed that very sparse mineralization was exposed in outcrop over a width of about 500 metres with the strongest (although still fairly weak) exposed in a 50-75 metres wide zone bracketing the contact. The rationale for drilling MSA-004 was to determine in molybdenum values increased with depth.

Of several Qtz-MoS-pyrite mineralized zones on the over 200-m of rock channel sample, there is a 2.5-m zone of intense silicification at the contact which yield 0.0353% Mo with fine-grained molybdenite occurring in east-striking, poly-phase quartz-pyrite veins, stock works, and on joints (Figure 8 and 10).

B. Glacier Island Area

Approximately 2 kilometres west along strike from the Mud Lake area (Figure 8), abundant fine-grained molybdenite occurs in quartz-sericite-pyrite veins similar to those found at Mud Lake.

The work in Glacier Island area confirmed the presence of anomalous molybdenum mineralization and found new mineralized outcrops that were under glacial ice cover during 1960s and 1970s era exploration. Sampling highlights included:

- 1.155% Mo grab
- 1.115% Mo grab
- 0.290% Mo grab

C. Plug Glacier Toe Area

This new showing discovered by Miocene Metals in 2011 features fine-grained molybdenite bearing quartz-sericite-pyrite stockworks and veins that lie 1 kilometre east along strike from the Mud Lake area. Sampling highlights included:

- 0.28% Mo grab
- 0.21% Mo grab
- 0.10% Mo grab

Initial mapping and prospecting indicate this area may be an eastern extension of the Mud Lake molybdenite showing with mineralization possibly being strike persistent in between the two showings.

D. Windy Ridge area

Quartz-sericite-pyrite stockworks and veins similar to those discovered at Plug Glacier characterize this area 1 kilometre south-southeast of Mud Lake. Interesting historical drill results from two holes drilled on the ridge led Miocene Metals to carry out reconnaissance-level prospecting in 2011. While only qualitative descriptions of the historical drill core survive, Miocene Metals confirmed mineralization on the ridge in surface samples. Highlights included:

- 0.240% Mo grab
- 0.170% Mo grab

Salal molybdenum mineralization belongs to the low-fluorine class of molybdenite deposits in contrast to Climax-type, which are of the high-fluorine class. The principal differences are slightly lower-grades in the low-fluorine type (typically less than 0.2% Mo) but substantially higher potential tonnages with several hundred million tonnes being common (e.g. Thompson Creek Mine 164.6 Mt @ 0.084% Mo; Endako Mine 172.1 Mt @ 0.050). According to the USGS (USGS Open File Report 2009-1211), the low-fluorine class produces acid-neutral or slightly acid-consuming tailings and tailings typically are low in deleterious elements due to fairly simple ore and waste mineralogy.

Enrichment in rhenium is a significant feature of the low-fluorine deposit class and Salal may be one of the better examples as suggested by several very high-grade results returned from Miocene Metals samples in the Mud Lake area. Although these most likely are not representative of Re concentrations across the Salal Creek pluton, they point to a potentially significant by-product credit, as is silver.

It is very significant that new occurrences of molybdenum mineralization are being discovered in areas (e.g. Plug Glacier Toe and Glacier Island Areas) where glaciers have receded from 1960's and 1970's levels when the majority of work took place on the property.

Surprisingly, no sustained effort has been made to drill the widespread occurrence of molybdenum on the property through historical work; this, in spite of chip samples, which returned potentially economic grades of molybdenum mineralization over potentially minable widths (e.g. 85 metres of 0.077% Mo, 55 meters of 0.191% Mo and 30 meters of 0.084% Mo), numerous high-grade grab and float samples, and molybdenum mineralization exposed in creek valleys over vertical distances of up to 150 metres (Figure 11 and 12).

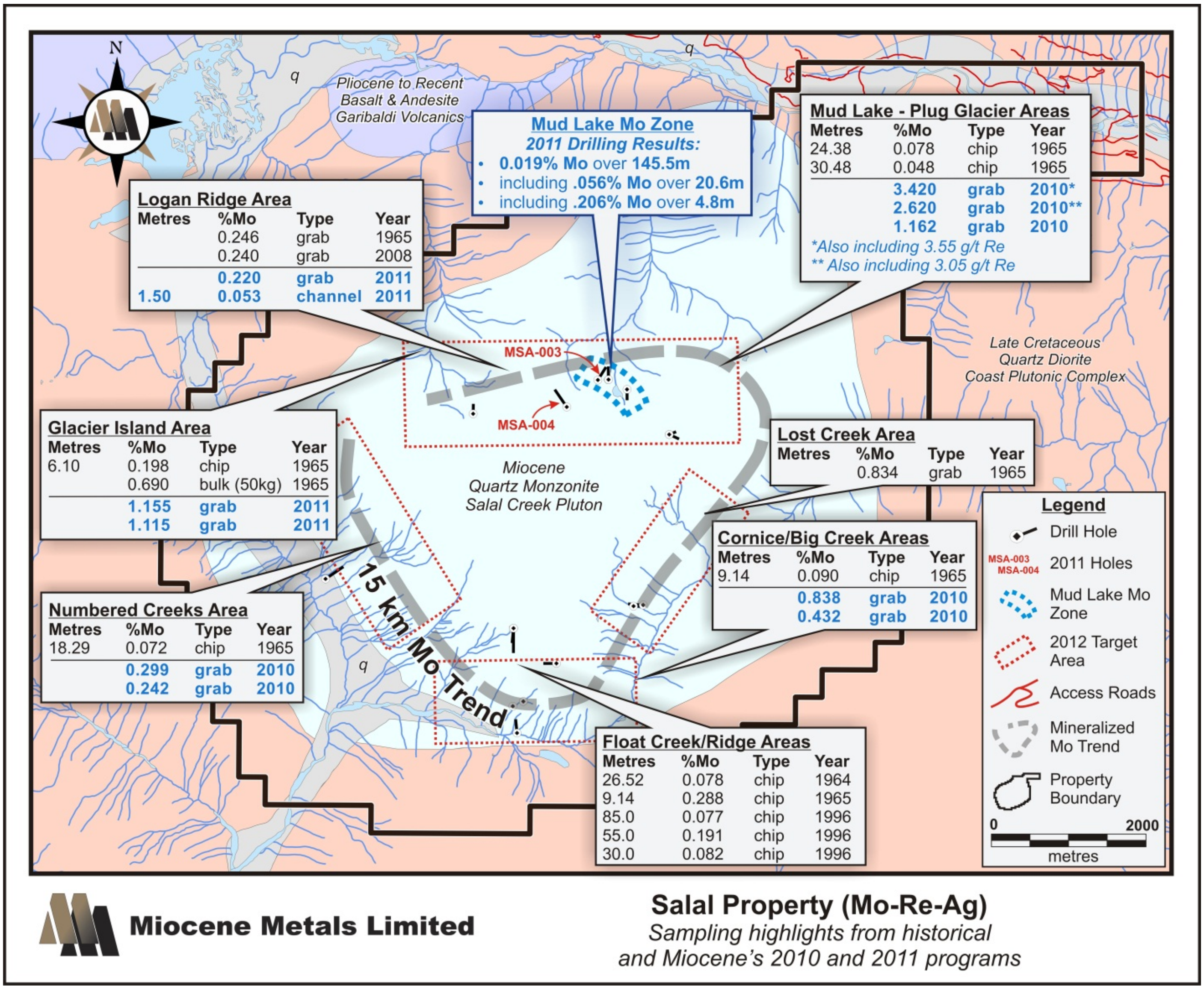


Figure 11: Salal Property Sampling Highlights from Historical Work and Miocene's 2010 and 2011 Sampling Programs

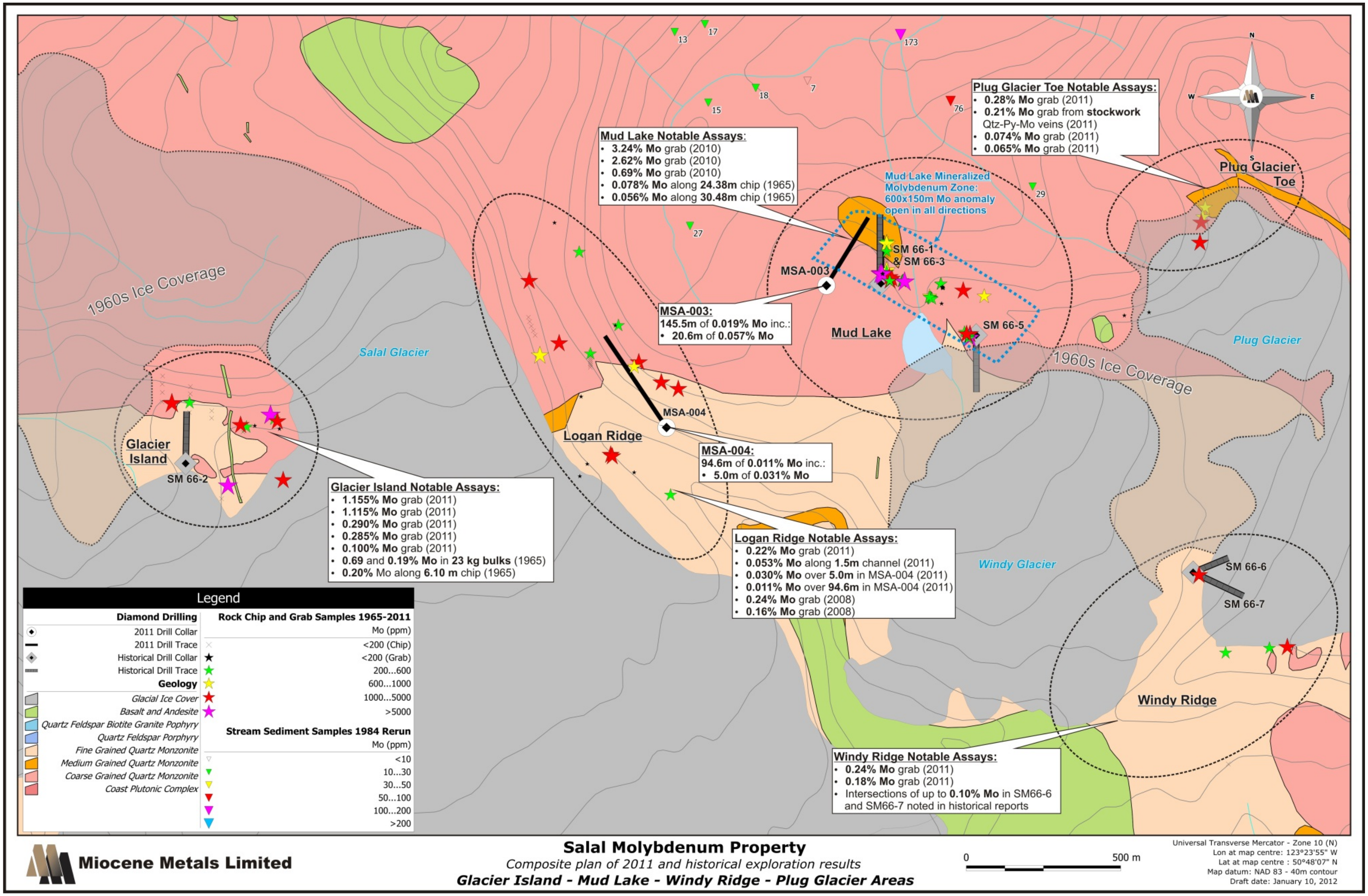


Figure 12: Summary Plot of 2011 Sample Results from Glacier Island, Logan Ridge, Mud Lake, Plug Glacier Toe and Windy Ridge

III. Activities –Mackenzie 2012

Mackenzie Work accomplishments conducted in 2012 consist of the following.

Work Done	Period Work Conducted
A. Prospecting, Geologic mapping and Sampling (Defining the limits of the Bornite, Tillworth and Breccia Trend)	4th Week June – Last Week July 2012
B. MMK-001 & MMK-002 (two drill holes at Till worth Ridge, site of original Mackenzie Mineralization)	4th Week June – Last Week July 2012

A. Mapping Sampling and Prospecting

The numbers of samples collected are as follows:

Total Samples Collected in Mackenzie during the period is as follows:	
ROCK	111 (with 12 CRM)
SILT	92 (plus 8 CRM)
SOIL	18 (plus 2 CRM)

CRM – Certified Reference materials

Appendix B1 tabulates the rock samples collected during the period consisting of 111 rock grab samples taken from various areas in Mackenzie, qualified and assured with 12 certified reference materials. Appendix B2 contains the Certificate of Analysis from ALS Mineral Laboratory in North Vancouver.

Appendix D1 tabulates the silt samples collected during the period consisting of 92 stream sediment samples taken from various areas in Mackenzie, qualified and assured with eight certified reference materials. Appendix D2 contains the Certificate of Analysis from ALS Mineral Laboratory in North Vancouver.

Appendix F1 tabulates the orientation soil samples collected across the north-northwest projection of the Tillworth Trend consisting of 18 soil along a single sampling fence qualified and assured with 2 certified reference materials. Appendix F2 contains the Certificate of Analysis from ALS Mineral Laboratory in North Vancouver.

B. DRILLING:

Collar data for the two drill holes in Mackenzie are as follows:

Hole ID	Easting	Northing	Elev.	Length meters	Azimuth	Incl.	Start date	End Date
MMK-001	472366	5628318	2587	255.1	240	-70	7/20/2012	7/31/2012
MMK-002	486280	5636836	2580	249.9	280	-70	7/25/2012	7/28/2012
		Total meters		505.0				

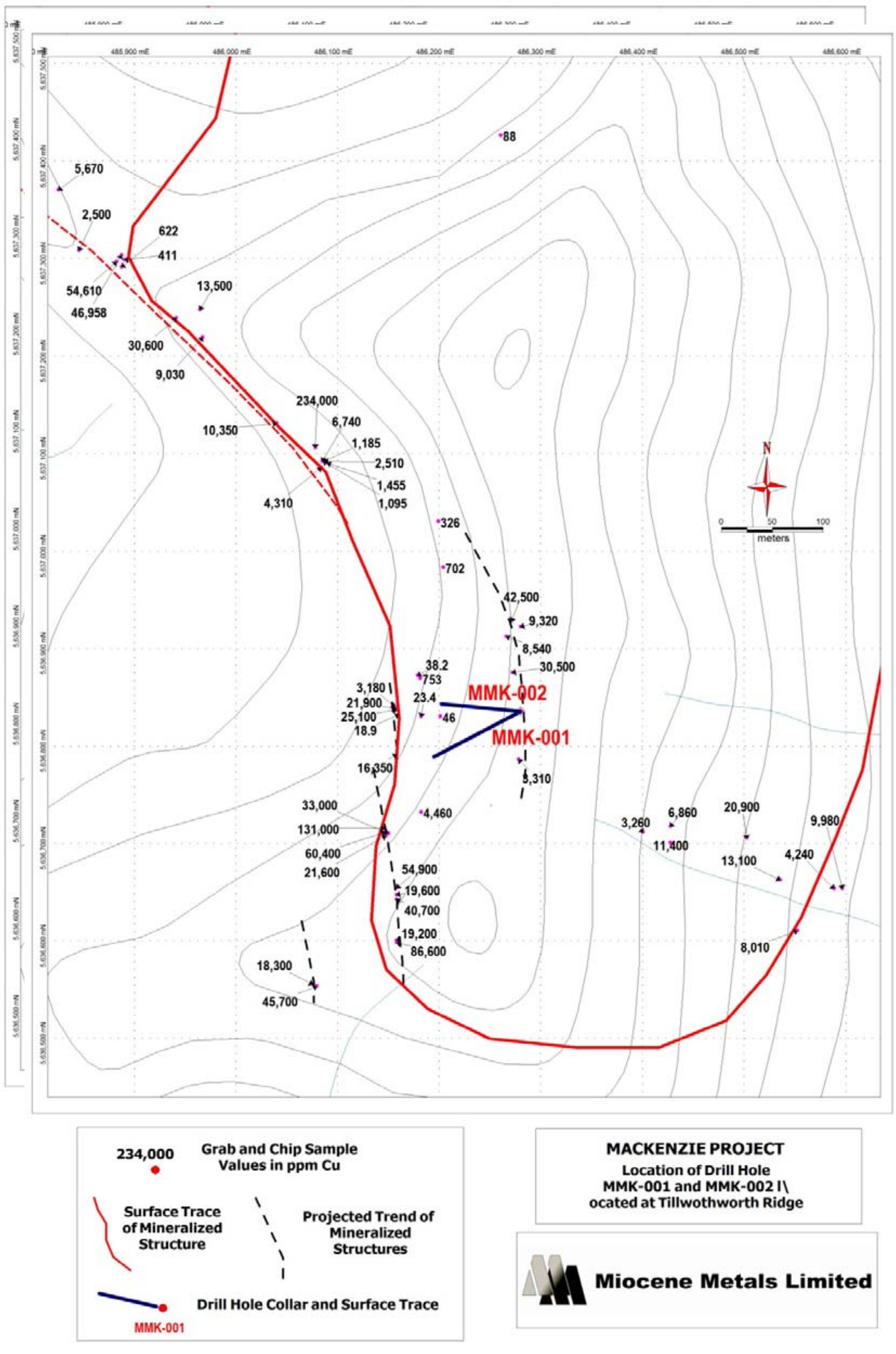


Figure 13: MacKenzie Project – Location Plot of MMK-001 and MMK-002 with Sampling Highlights

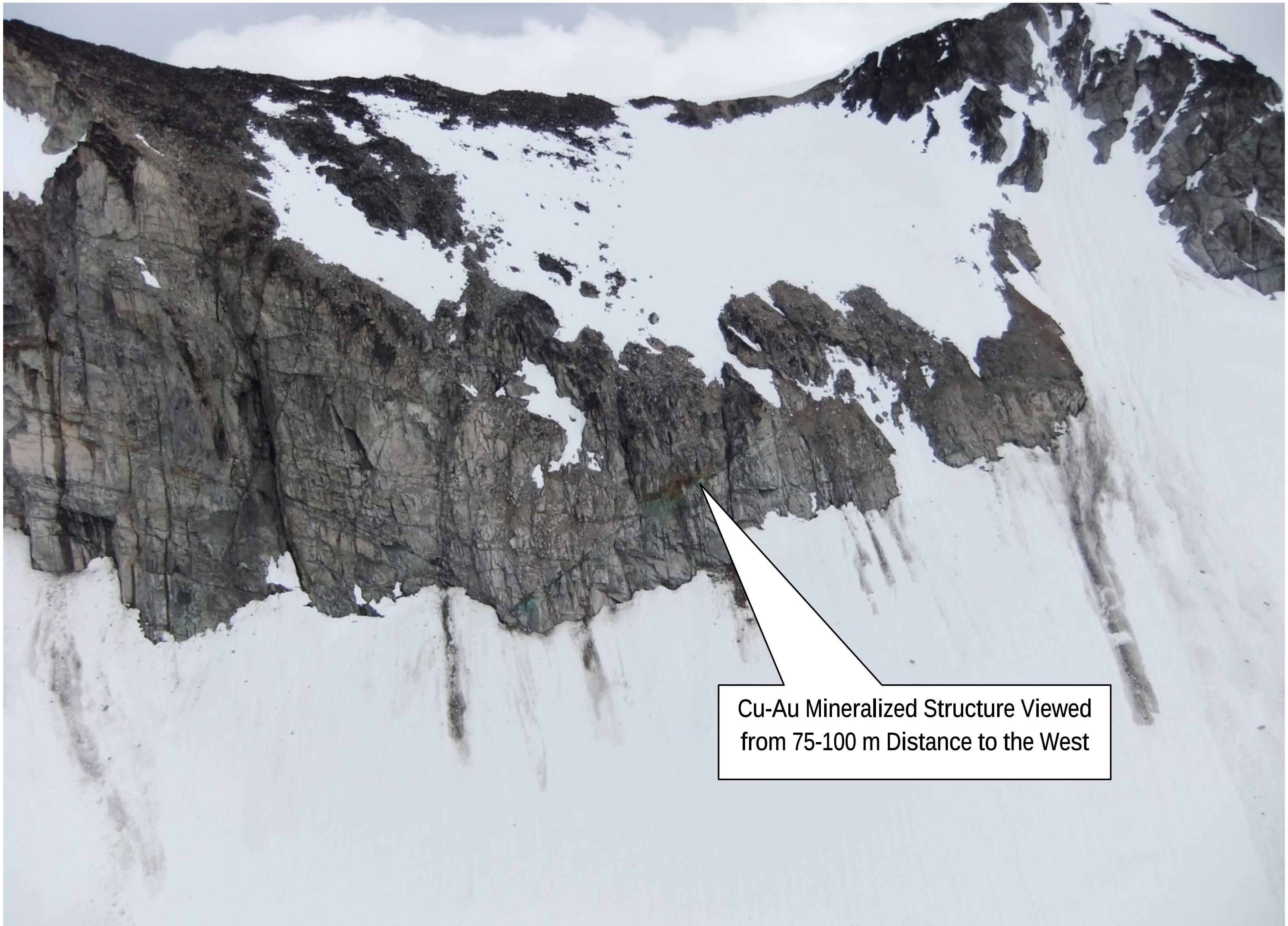


Figure 14: Panoramic view of Tillworth Ridge Looking East with Trace of Structurally-Controlled Mineralization

IV. Discussion of Results –Mackenzie 2012

A. Drilling (MMK-001 & MMK002)

The two drill holes completed at the main MacKenzie showing intersected the down-dip projection of fracture-controlled Cu-Au-Mo mineralization that is exposed in the cliff face near the MacKenzie showing indicating the mineralization is controlled by what appears to be a single strike and dip persistent mineralized structure. Although the drilling confirmed the continuity of the structure down-dip, widths and grades encountered were less than those observed in the cliff face with drill hole MMK-001 intersecting 0.24% copper over 0.2 metres and MMK-002 intersecting 4.47% copper, 0.059 g Au/t and 595 ppm Mo over 0.36 metres within a wider interval of 4.3 m grading 0.83% copper, 0.043 g Au/t and 96 ppm Mo.

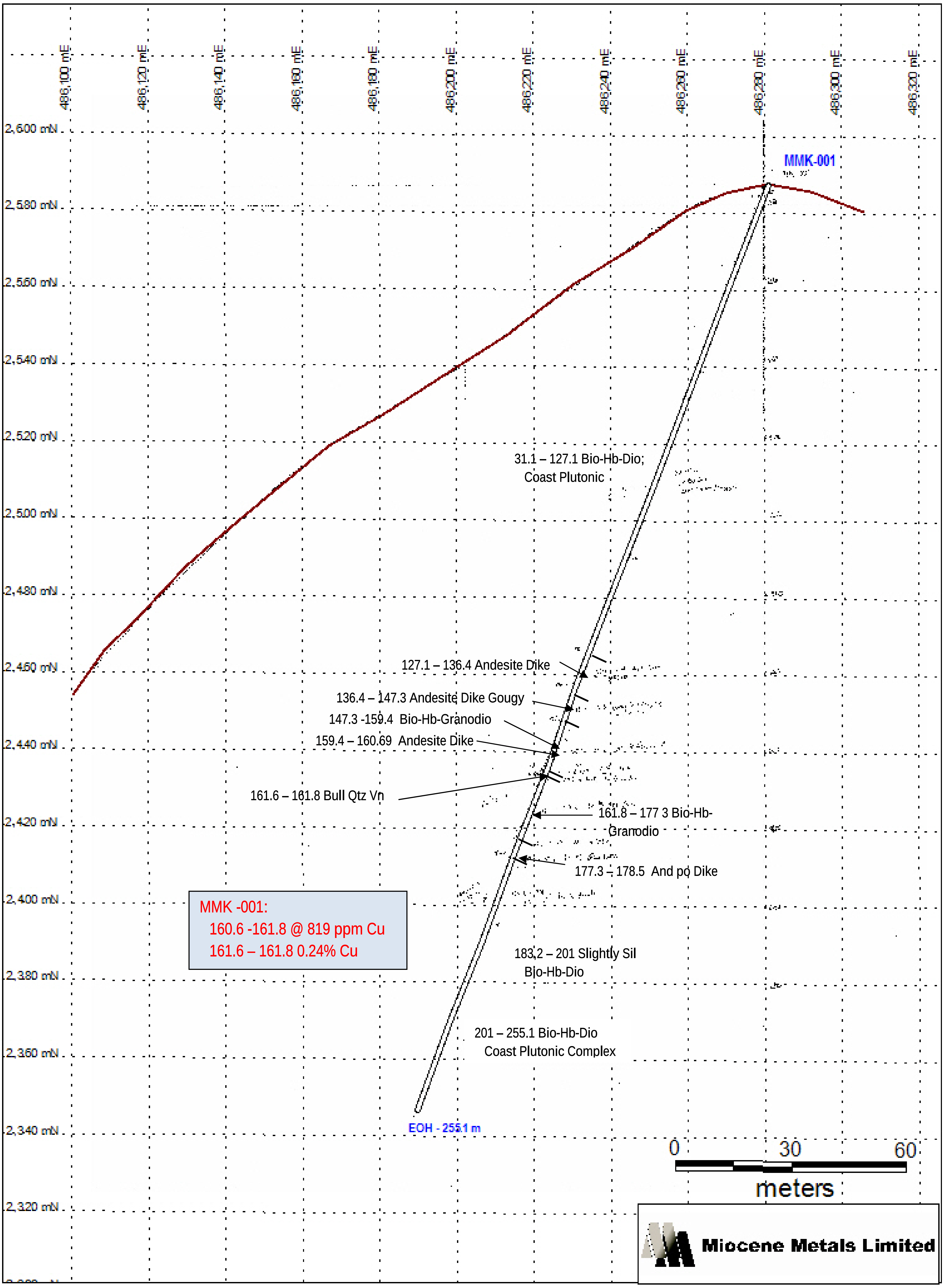


Figure 14: Assay Stratigraphy Section of MMK-001

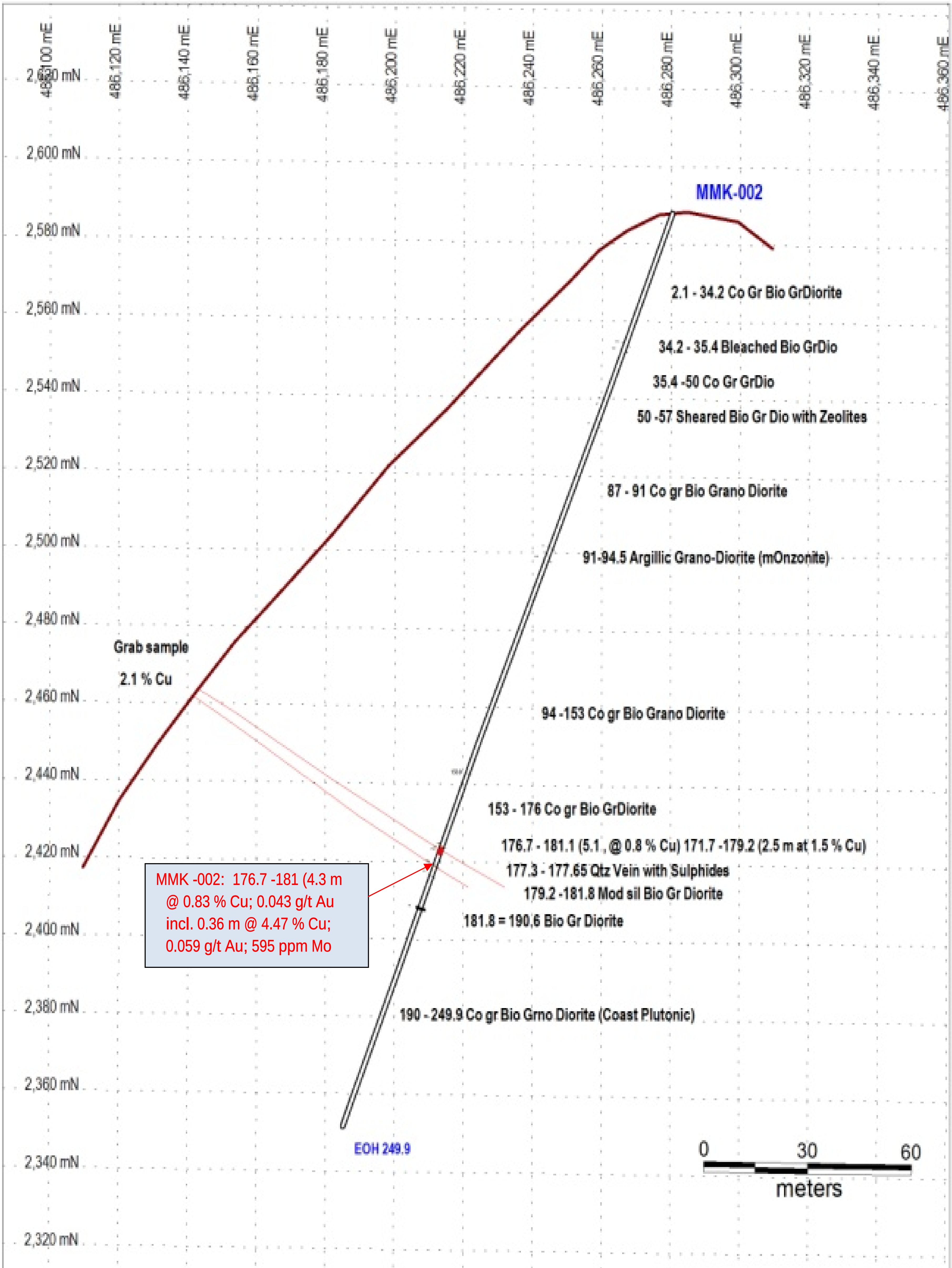


Figure 15: Assay Stratigraphy Section of MMK-002

Miocene Metals Limited

B. Prospecting through Rock Sampling and Detailed Mapping

The reconnaissance work was highly successful, identifying three Cu-Au-Ag mineralized structural trends, which from west to east were named the Bornite Trend, Tillworth Trend and Breccia Trend. The locations of the three mineralised structural trends, regional geology and rock samples are shown in Figures 17 and 18.

Bornite Trend

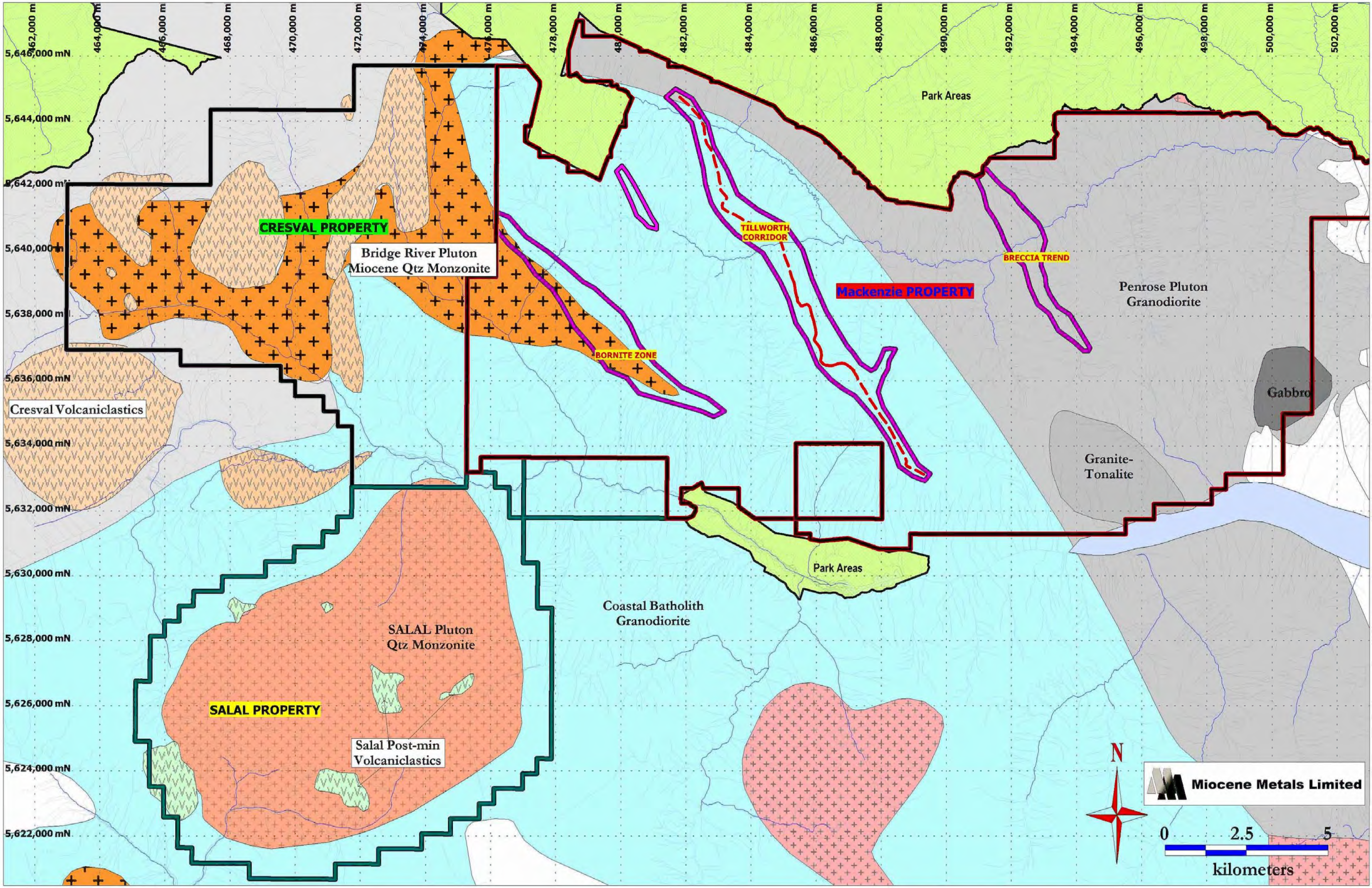
Mineralization in the westernmost Bornite Trend (See Figure 18), which has an open-ended strike length of 7.5 kilometres, consists of scattered quartz-bornite-malachite ± chalcopyrite ± tetrahedrite veins and stringers up to 20 centimetres wide. These occur along the edge of the Miocene-age Bridge River pluton and within the host Coast Plutonic Complex and therefore are interpreted to be of Miocene or perhaps slightly older age. Fourteen of the 27 grab samples (Table below) collected along the Bornite Trend during the initial reconnaissance of this area this summer have copper values in excess of 0.25% copper with values ranging up to a maximum of 4.34% Cu with gold and silver values ranging from 0.001 to 0.445 g/t Au, and from 3.34 to 4,170 g/t Ag, respectively. Grab samples collected during reconnaissance represent rocks in which mineralization is readily observable and therefore are highly selective by nature and are unlikely to represent average grades of the mineralization.

Bornite Trend: Selected* Bornite Trend Rock Sample Geochemical Analyses

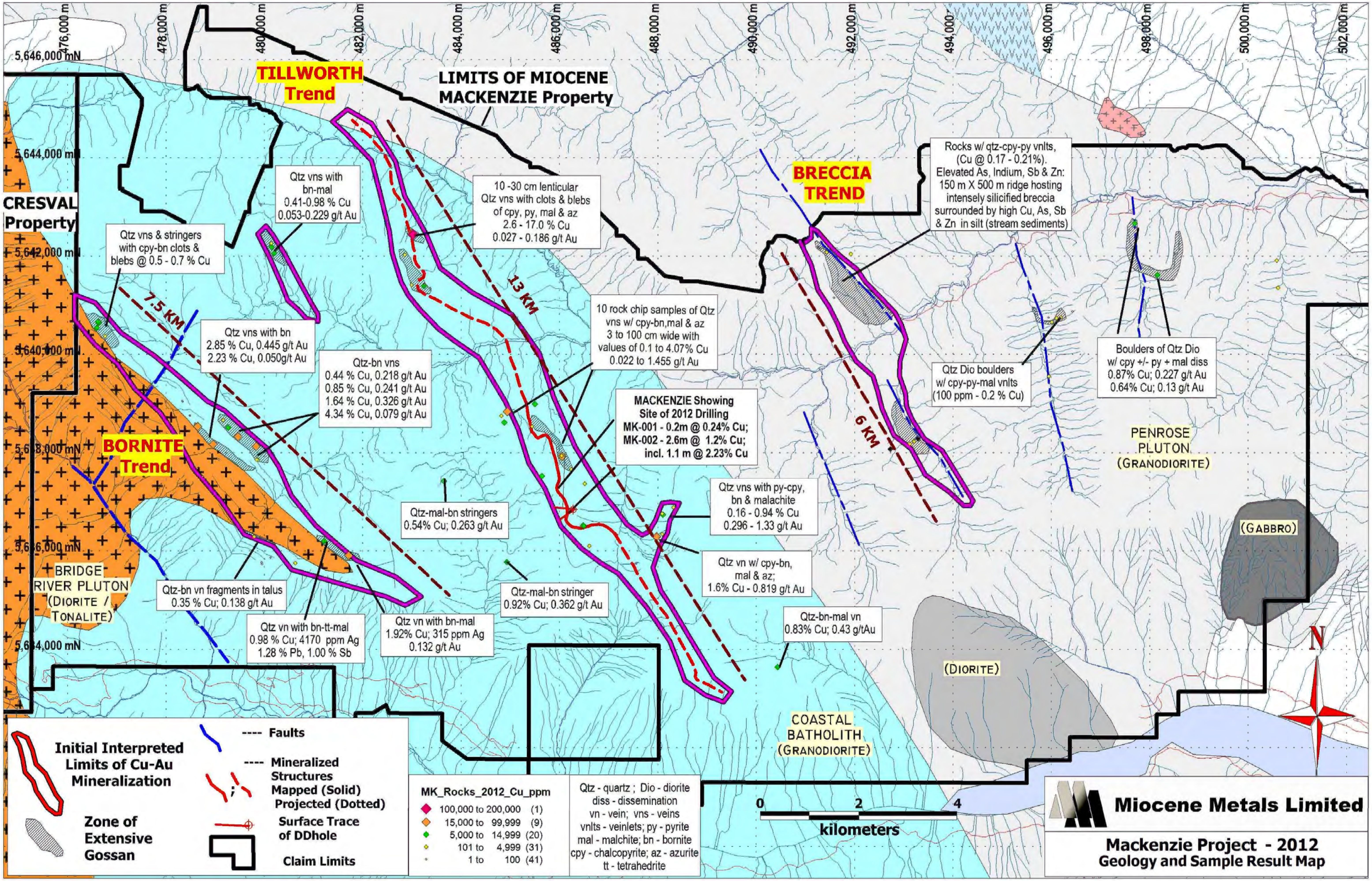
Sample ID	Location	Sample Type	Cu (%)	Au (ppm)	Ag (ppm)
M487873	Bornite Trend	Grab	4.34	0.079	60.8
N688012	Bornite Trend	Grab	2.85	0.445	31.5
N688013	Bornite Trend	Grab	2.23	0.051	32.3
M487887	Bornite Trend	Grab	1.92	0.132	315
M487879	Bornite Trend	Grab	1.64	0.326	25.1
M487886**	Bornite Trend	Grab	0.975	0.001	4,170
M487880	Bornite Trend	Grab	0.854	0.241	7.52
M487882	Bornite Trend	Grab	0.776	0.012	5.79
M487884	Bornite Trend	Grab	0.743	0.067	8.51
M487885	Bornite Trend	Grab	0.546	0.025	5.84
M487883	Bornite Trend	Grab	0.515	0.029	6.94
M487881	Bornite Trend	Grab	0.422	0.218	4.51
M487878	Bornite Trend	Grab	0.347	0.138	3.34
M487888	Bornite Trend	Grab	0.280	0.114	23.0

* results for 14 of 27 samples collected along Bornite Trend with >0.25% Cu

** Contains tetrahedrite; has elevated As, Bi, Pb, Sb and Zn contents



462,000 m
464,000 m
466,000 m
468,000 m
470,000 m
472,000 m
474,000 m
476,000 m
478,000 m
480,000 m
482,000 m
484,000 m
486,000 m
488,000 m
490,000 m
492,000 m
494,000 m
496,000 m
498,000 m
500,000 m
502,000 m
5,646,000 mN
5,644,000 mN
5,642,000 mN
5,640,000 mN
5,638,000 mN
5,636,000 mN
5,634,000 mN
5,632,000 mN
5,630,000 mN
5,628,000 mN
5,626,000 mN
5,624,000 mN
5,622,000 mN
Park Areas
CRESVAL PROPERTY
Bridge River Pluton
Miocene Qtz Monzonite
TILLWORTH CORRIDOR
BRECCIA TREND
Mackenzie PROPERTY
Penrose Pluton
Granodiorite
BORNITE ZONE
Cresval Volcaniclastics
Gabbro
Granite-
Tonalite
Park Areas
Coastal Batholith
Granodiorite
SALAL Pluton
Qtz Monzonite
SALAL PROPERTY
Salal Post-min
Volcaniclastics
N
Miocene Metals Limited
0
2.5
5
kilometers


476,000 m
478,000 m
480,000 m
482,000 m
484,000 m
486,000 m
488,000 m
490,000 m
492,000 m
494,000 m
496,000 m
498,000 m
500,000 m
502,000 m
5,646,000 mN
5,644,000 mN
5,642,000 mN
5,640,000 mN
5,638,000 mN
5,636,000 mN
5,634,000 mN
TILLWORTH Trend
LIMITS OF MIOCENE MACKENZIE Property
CRESVAL Property
BRECCIA TREND
BORNITE Trend
7.5 KM
13 KM
6 KM
Qtz vns with bn-mal 0.41-0.98 % Cu 0.053-0.229 g/t Au
10 -30 cm lenticular Qtz vns with clots & blebs of cpy, py, mal & az 2.6 - 17.0 % Cu 0.027 - 0.186 g/t Au
Rocks w/ qtz-cpy-py vnlts, (Cu @ 0.17 - 0.21%). Elevated As, Indium, Sb & Zn: 150 m X 500 m ridge hosting intensely silicified breccia surrounded by high Cu, As, Sb & Zn in silt (stream sediments)
Qtz vns & stringers with cpy-bn clots & blebs @ 0.5 - 0.7 % Cu
Qtz vns with bn 2.85 % Cu, 0.445 g/t Au 2.23 % Cu, 0.050g/t Au
Qtz-bn vns 0.44 % Cu, 0.218 g/t Au 0.85 % Cu, 0.241 g/t Au 1.64 % Cu, 0.326 g/t Au 4.34 % Cu, 0.079 g/t Au
10 rock chip samples of Qtz vns w/ cpy-bn,mal & az 3 to 100 cm wide with values of 0.1 to 4.07% Cu 0.022 to 1.455 g/t Au
MACKENZIE Showing Site of 2012 Drilling MK-001 - 0.2m @ 0.24% Cu; MK-002 - 2.6m @ 1.2% Cu; incl. 1.1 m @ 2.23% Cu
Qtz Dio boulders w/ cpy-py-mal vnlts (100 ppm - 0.2 % Cu)
Boulders of Qtz Dio w/ cpy +/- py + mal diss 0.87% Cu; 0.227 g/t Au 0.64% Cu; 0.13 g/t Au
PENROSE PLUTON (GRANODIORITE)
Qtz vns with py-cpy, bn & malachite 0.16 - 0.94 % Cu 0.296 - 1.33 g/t Au
Qtz-mal-bn stringers 0.54% Cu; 0.263 g/t Au
Qtz vn w/ cpy-bn, mal & az; 1.6% Cu - 0.819 g/t Au
(GABBRO)
BRIDGE RIVER PLUTON (DIORITE / TONALITE)
Qtz-bn vn fragments in talus 0.35 % Cu; 0.138 g/t Au
Qtz-mal-bn stringer 0.92% Cu; 0.362 g/t Au
Qtz-bn-mal vn 0.83% Cu; 0.43 g/tAu
Qtz vn with bn-tt-mal 0.98 % Cu; 4170 ppm Ag 1.28 % Pb, 1.00 % Sb
Qtz vn with bn-mal 1.92% Cu; 315 ppm Ag 0.132 g/t Au
(DIORITE)
COASTAL BATHOLITH (GRANODIORITE)
N
Initial Interpreted Limits of Cu-Au Mineralization
Zone of Extensive Gossan
---- Faults
---- Mineralized Structures Mapped (Solid) Projected (Dotted)
Surface Trace of DDhole
Claim Limits
MK_Rocks_2012_Cu_ppm
100,000 to 200,000 (1)
15,000 to 99,999 (9)
5,000 to 14,999 (20)
101 to 4,999 (31)
1 to 100 (41)
Qtz - quartz ; Dio - diorite
diss - dissemination
vn - vein; vns - veins
vnlts - veinlets; py - pyrite
mal - malchite; bn - bornite
cpy - chalcopyrite; az - azurite
tt - tetrahedrite
0 2 4
kilometers
Miocene Metals Limited
Mackenzie Project - 2012
Geology and Sample Result Map

Tillworth Trend

The Tillworth trend (Figure 18), with an open-ended strike length of 13 kilometres, hosts the main MacKenzie showing as well as quartz-chalcopyrite ± bornite ± molybdenite veins and stringers up to 30 cm wide along strike to the northwest and southeast. At the main MacKenzie showing Cu-Au-Ag-Mo mineralization occurs in high-grade, mineralized structures ranging in thickness from 0.3 metres to 9 metres, and as disseminated chalcopyrite, bornite and molybdenite mineralization in potassically-altered Coast Range plutonic rocks. The mineralized structure is spatially associated with younger, fine-grained granodioritic and dioritic rocks of possible Miocene age similar to the age of the Bridge River Pluton. Of the 38 grab samples collected along the Tillworth Trend in 2012 (tabulated below), the 26 samples with copper values ranging from 0.1% to a maximum of 17% Cu have gold and silver values from 0.001 to 1.46 g/t Au and 0.120 to 78 g/t Ag, respectively.

TILLWORTH TREND SAMPLES*

Sample ID	Location	Sample Type	Cu (%)	Au (ppm)	Ag (ppm)
M487862	Tillworth Trend	Grab	17.0	0.186	78.0
M487891	Tillworth Trend	Grab	4.07	1.46	48.7
M487861	Tillworth Trend	Grab	2.60	0.027	8.13
M487856	Tillworth Trend	Grab	1.86	0.022	2.71
M487867	Tillworth Trend	Grab	1.60	0.819	35.6
M487893	Tillworth Trend	Grab	1.334	0.584	19.3
N688020	Tillworth Trend	Grab	0.978	0.229	9.03
M487864	Tillworth Trend	Grab	0.942	0.497	10.2
M487858	Tillworth Trend	Grab	0.937	0.009	1.85
M487894	Tillworth Trend	Grab	0.917	0.362	13.7
M487895	Tillworth Trend	Grab	0.889	0.458	16.7
M487890	Tillworth Trend	Grab	0.832	0.430	8.43
N688021	Tillworth Trend	Grab	0.735	0.053	8.45
M487869	Tillworth Trend	Grab	0.628	0.064	4.01
M487854	Tillworth Trend	Grab	0.625	0.041	1.64
M487872	Tillworth Trend	Grab	0.543	0.263	4.58
M487859	Tillworth Trend	Grab	0.511	0.002	0.630
M487892	Tillworth Trend	Grab	0.445	0.274	5.25
M487853	Tillworth Trend	Grab	0.430	0.115	5.91
N688022	Tillworth Trend	Grab	0.411	0.001	0.120
N688003	Tillworth Trend	Grab	0.310	0.011	0.760
M487870	Tillworth Trend	Grab	0.267	0.080	1.46
M487871	Tillworth Trend	Grab	0.248	0.004	0.880
M487857**	Tillworth Trend	Grab	0.226	0.020	1.72
M487863	Tillworth Trend	Grab	0.162	1.33	1.53
N688001	Tillworth Trend	Grab	0.146	0.022	1.50

* results for 26 of 38 samples collected all with >0.10% Cu
** also contains 1.82% Mo

Breccia Trend

A deeply weathered, silicified, gossanous breccia and several smaller gossans located to the south-southeast define the eastern Breccia Trend, which has an open-ended 5 kilometre strike length. The breccia is exposed on the side of a mountain over an area of about 150 x 500 metres and consists of 30-50 metre wide vuggy silicified zones in contact with a north-northwest-trending dioritic dyke. These zones are characterized by intensely silicified pebble- to cobble-sized, sub-rounded to sub-angular fine-grained intrusive rock fragments cemented by a vuggy siliceous groundmass. Anastomosing veinlets with gray silica and copper-bearing sulphides cross-cut both fragments and groundmass. Streams draining this area show elevated values of copper to 108 ppm, or 2 to 3 times background and elevated levels of arsenic (to 29.5 ppm As), antimony (to 25 ppm Sb) and zinc (to 108 ppm Zn). The outcrop is deeply weathered and highly leached and very little fresh rock is exposed, but two silicified grab samples (M487778 and M487779) returned values of 0.174% Cu and 0.211% Cu respectively, with elevated levels of arsenic (693 and 419 ppm As), indium (0.108 and 0.16 ppm In), antimony (346 and 331 ppm Sb), and zinc (284 and 239 ppm Zn), respectively, typical of the geochemistry of some epithermal systems.

Grab samples (M487761 and M487775) from a highly weathered gossan located 4 kilometres to the south-southeast returned 0.215% and 0.06% Cu, respectively, whereas two samples (M487751 and M487752) from a highly weathered gossan six kilometres to the east returned 0.871 % and 0.641 % Cu, respectively.

C. Orientation Soil Sampling

To establish the efficacy of soil sampling, an orientation survey consisting of 18 samples was collected on a fence line oriented perpendicular to the surface projection of the Tillworth mineralized structure north-northwest of the main MacKenzie showing on Tillworth Mountain. B horizon soil samples were collected close to the bedrock at 100-m spacing on a ridge immediately south of Slim Creek. Figure 19 shows the plot of the soil survey indicating a positive, but not strong correlation of copper values with projected location of the mineralized structure. Figure 20a is a detailed map of the sampling site area and Figure 20b a Spidergram for the same soil sampling fence showing the lateral variation amongst Au, Ag, Cu, Pb and Zn.

In summary, it is indicated that soil sampling will be an effective tool in locating and delineating prospective mineralized zones but peak to background element contrasts may not be high.

V. COST OF THE PROGRAM

Salal expenditures for work conducted from August to September 2011 amounted to $ 659,463.88 while Mackenzie expenditures for work conducted from July to September 2012 amounted to $ 479,395.10. The cost of the two activities with details provided in Appendix H of this report is $ 1,138,858.98.

Expenditures incurred for Salal and Mackenzie are tabulated in Appendix F1 with scanned copies of major invoices and receipts which support Appendix F1 found in Appendix F2.

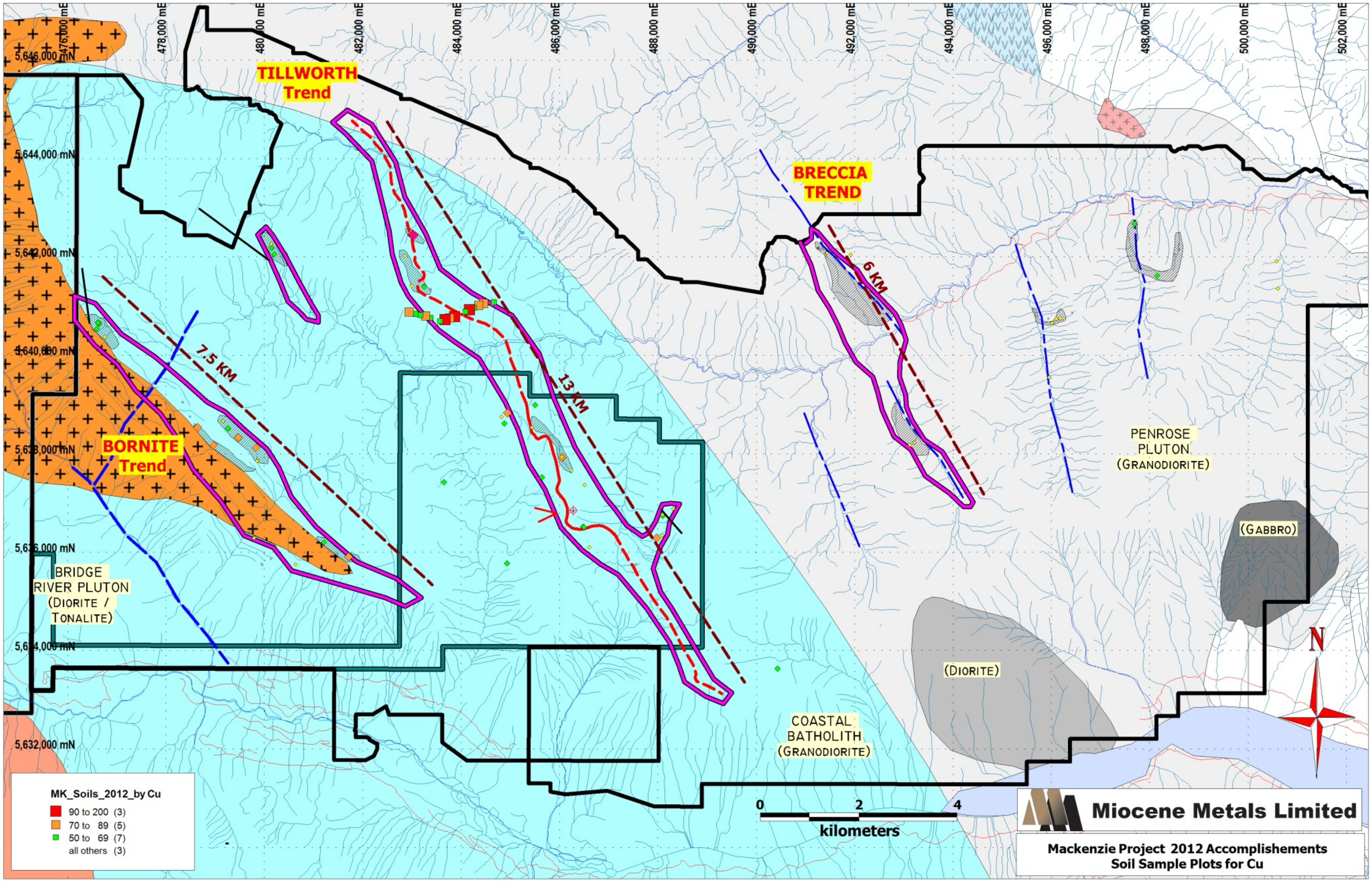


Figure 19: Location Map Showing Results of Soil Orientation Survey Conducted Across North-Northwest Projection of Tillworth Trend

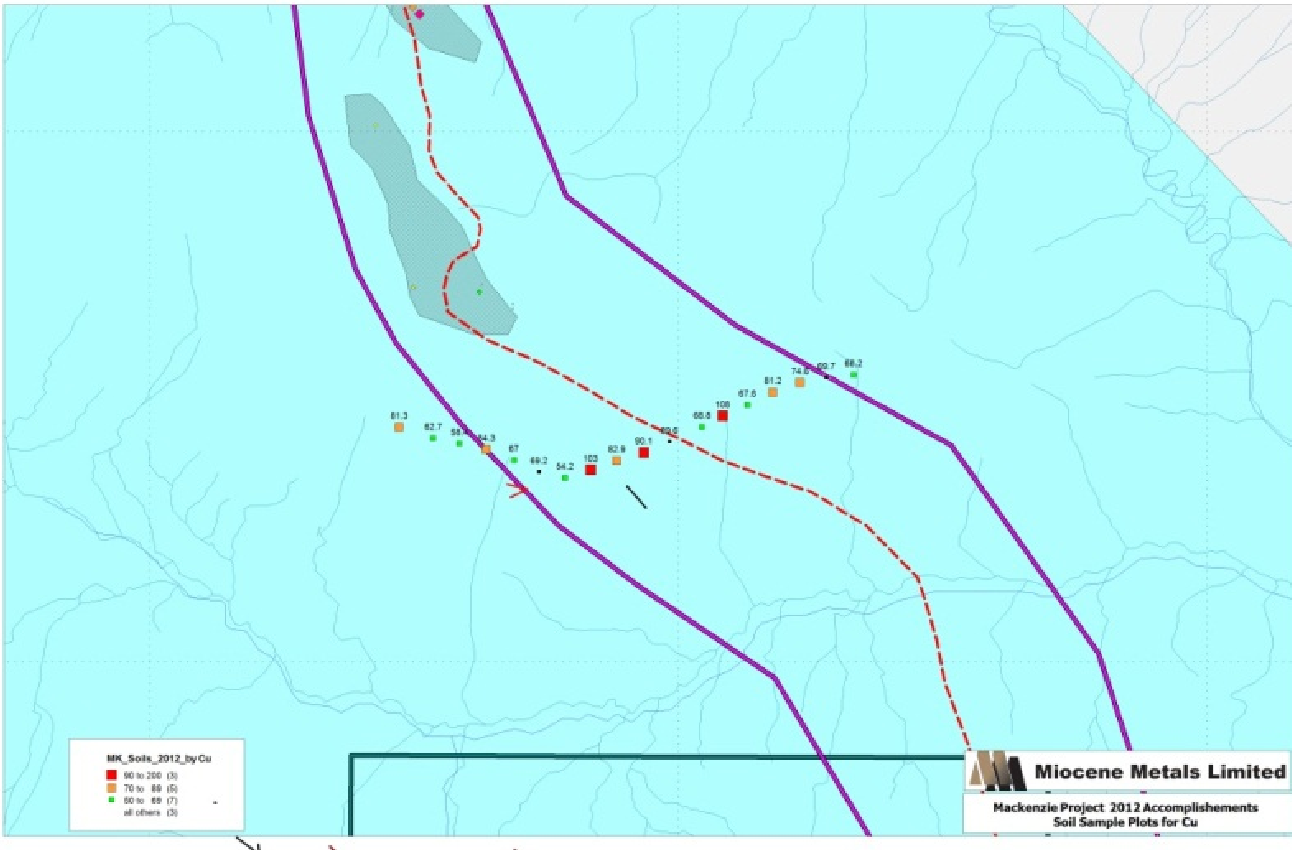


Figure 20a: Detail of Soil Orientation Survey Conducted Across the North-Northwest Projection of the Tillworth Trend

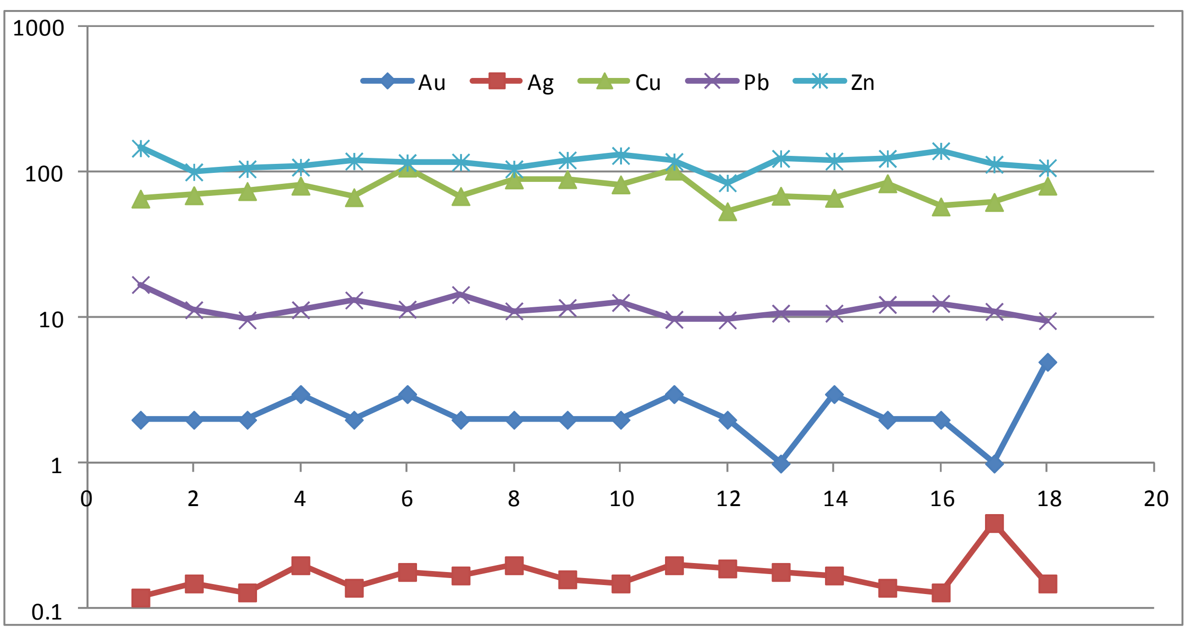


Figure 20b: Spidergram of Au, Ag, Cu, Pb and Zn Results for Soil Orientation Survey

8 CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Miocene Metals completed several phases of exploration on the Salal property including drilling in 2010 and in 2011, complemented by extensive mapping and prospecting along the 15 kilometre trend of molybdenite occurrences, and the collection of surface rock and channel samples. Notable achievements of this work include both the confirmation and extension of high-grade molybdenum anomalies in all of the historical focus areas, the identification of new areas of molybdenum mineralization previously concealed by snow and ice, and the first intersection of an economically interesting width and grade of molybdenite mineralization.

For the Mackenzie property, the two drill holes completed at the main MacKenzie showing intersected the down-dip projection of fracture-controlled Cu-Au-Mo mineralization that is exposed in the cliff face near the on Tillworth Mountain indicating the mineralization is controlled by what appears to be a single strike and dip persistent mineralized structure. The complementary tenement wide prospecting (silt-rock and soil sampling) and mapping campaign was highly successful, identifying three Cu-Au-Ag mineralized structural trends, which from west to east were named the Bornite Trend, Tillworth Trend and Breccia Trend with the western-most being of a similar age and mineralogy to extensive occurrences of copper-gold mineralization on contiguous claims held by Cresval Capital Corp.

Recommendations

Outlook - Salal

Additional work consisting of follow-up drilling for mineral resource delineation in the Mud Lake area is warranted, particularly in the context of possible improvement in the molybdenum market.

The large mineralization and alteration extent of the tenement containing the Salal intrusive complex and the better understanding of the mineralization morphology and control for economic mineralization definitely warrants further more detailed mapping and sampling on the other peripheral areas with the end view of possibly integrating all economic occurrences into a single mining project.

Outlook - Mackenzie

Work to date on Mackenzie shows very encouraging results. Drilling and prospecting have highlighted the potential of the Mackenzie area for both near surface strike and dip persistent economic mineralization and a potential porphyry copper style of mineralization particularly on the Bornite Trend along contact between Coast Batholith granodiorite and the intruding younger Bridge River pluton (Diorite-Tonalite). It will be worthwhile for Miocene to look for a major mineral development partner in addressing the testing, delineation and resource-reserve definition requirement in moving forward with the Mackenzie project.

9 References

Barry McDonough, B. Sc. P. Geo, NI 43-101 Report by Barry McDonough, B. Sc. P. Geo of Scott Wilson Roscoe Postle Associate Inc, Dated December 31, 2010

Garcia, Jose Sayo P. Geo. Report on the 2010 Drilling and Geochem Sampling / Mapping Activities for Salal Creek Project, Southern British Columbia, Lillooet Mining District UTM Zone 10 Latitude 5,627,000 - Longitude 472,000 NTS 092J- PEMBERTON **dated 01 March 2012**

Garcia, Jose Sayo P. Geo. Report on the 2011 Drill Preparation with Sampling / Mapping Activities for Mackenzie Project, Southern British Columbia, Lillooet and Kamloops Mining District UTM Zone 10 Latitude 5,627,000 - Longitude 472,000 NTS 092J- PEMBERTON **dated 08 August 2012**

Parent, Shaun ,– Alpamayo Exploration and Adventure Services Ltd. – Report on the Roped Sampling on the Mackenzie property, west Cirque Cliff for Miocene Metals Limited dated 10 August 2010

Smyth, Clinton P. Geo. 2010 Report on the Salal-Mackenzie Project, Southern British Columbia, Lillooet and Kamloops Mining District, UTM Zone 10 Latitude 5,627,000 Longitude 472,000 NTS 092J-PEMBERTON **dated 5 January 2011** (***reporting on two Airborne Geophysical Surveys)***

A

APPENDIX A: STATEMENT OF QUALIFICATIONS OF JOSE SAYO GARCIA, P. GEO

I, Jose Sayo Garcia, of Unit 213-15380 102 A Avenue, City of Surrey, in the Province of British Columbia, DO HEREBY CERTIFY:

1) THAT I am the Vice President for Exploration of Miocene Metals Limited with office at Suite 310-1281 West Georgia St., Vancouver, BC V6E 3J7

2) THAT I am a graduate of the University of the Philippines with a Bachelor of Science Degree in Geology in 1978, and a registered Geologist in the Philippines with License number 0575 issued by the Philippine Professional Regulation Commission.

3) THAT I am a Registered Professional Geologist with registration #35362 in good standing with the Association of Professional Engineers and Geoscientists of British Columbia;

4) That I conducted the data compilation and review for the 2012 Report on the Mackenzie and Salal Properties, Southern British Columbia which covers

   - Two 2011 Drill Holes (MSA-003 at Mud lake and another MSA-004 at Logan Ridge Area) and Prospecting and geological mapping at adjacent areas in the Salal property

   - Two 2102 Drill Holes (MMK-001 & MMK-002 at Till worth Ridge, site of original Mackenzie Mineralization) complemented with prospecting, geologic mapping and sampling (rocks, silts and soil) which eventually defined the limits of the Bornite, Tillworth and Breccia mineralized Trends.

   These work activities are the subject of this assessment report.

5) THAT this report pertaining Miocene Metals Limited Mackenzie & Salal excluding sections explicitly noted as extracted from other reports was written by me.

DATED at Vancouver, British Columbia, this 30 October, 2012

PROFESSIONAL
PROVINCE OF
J. S. GARCIA
35362
BRITISH COLUMBIA

30 Oct 2012

Jose Sayo Garcia
Vice President for Exploration
Miocene Metals Limited

B1.

APPENDIX B: ROCK SAMPLES COORDINATES and NOTES

B1 – Salal

The numbers of samples collected are as follows:

Rock Channel Sampling at Logan Ridge Area	260 (with 24 CRM)
Grab and Float Sampling in Adjacent Target generation area	25 (with 4 CRM)

CRM – Certified Reference materials

B2 – Mackenzie

The numbers of samples collected are as follows:

Total Samples Collected in Mackenzie during the period is as follows:	
ROCK	111 (with 12 CRM)
SILT	92 (plus 8 CRM)
SOIL	18 (plus 2 CRM)

CRM – Certified Reference materials

N3 #	Sample ID	Easting	Northing	Elev	GPS accuracy	length (cm)	width (cm)	depth (cm)	azimuth (degrees)	image file	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge
3	M486503	472015	5027819		6	0.5m					M486503	0.62	<0.001	2.02	5.72	1	170	4.92	3.51	0.07	<0.02	45.9	0.4	3	1.25	14	1.64	17.95	0.13
4	M486504	472001	5627829		6						M486504	2.80	<0.001	0.66	5.32	1.4	90	2.16	1.31	<0.01	0.08	46.6	1.4	5	1.22	3.9	2.74	17.6	0.14
5	M486505	471946	5627869		6						M486505	1.02	<0.001	0.44	5.35	0.5	160	1.94	2.08	0.05	<0.02	39	1.2	5	0.7	6.2	1.58	18.05	0.11
6	M486506	471904	5627871		5						M486506	1.26	<0.001	0.51	5.96	0.4	220	2.35	0.73	0.02	<0.02	45.9	1.1	5	0.72	3.4	1.52	19.6	0.12
7	M486507	471885	5627885		5						M486507	2.08	<0.001	1.62	5.06	1	110	2.12	2.07	0.01	0.66	35.5	1.2	5	0.64	67.6	2.28	18.1	0.12
8	M486508	471846	5627885		5						M486508	2.06	<0.001	6.44	5.66	2.7	80	2.32	7.76	0.01	6.69	47	1.7	3	0.76	403	2.37	22.7	0.1
9	M486509	471852	5627882	2188		100	5	5	355		M486509	9.00	<0.001	0.85	5.92	0.4	170	1.83	0.73	0.16	0.21	52.1	1.2	8	0.78	50.5	1.23	16.9	0.14
10	M486510	471852	5627883			100	5	4	8		M486510	4.98	<0.001	0.12	5.95	0.6	210	1.85	0.13	0.22	0.02	51	0.6	9	0.65	10.4	1.26	16.3	0.14
11	M486511	471848	5627884			97	5	5	3		M486511	6.62	<0.001	0.73	6.25	0.5	310	2.06	0.78	0.2	<0.02	49.4	0.4	12	0.8	9.6	1.08	17.35	0.15
12	M486512	471848	5627885			82	5	4	7		M486512	3.24	<0.001	0.04	6.1	0.4	300	2.12	0.14	0.38	<0.02	54.5	0.7	11	0.68	6.1	1.06	15.85	0.15
13	M486513	471848	5627886			95	5	5	355		M486513	6.22	<0.001	0.03	6.09	<0.2	310	2.18	0.04	0.4	<0.02	54.2	0.5	11	0.62	4.3	0.74	15.75	0.16
14	M486514	471848	5627889			89	5	4	1		M486514	6.90	<0.001	0.85	6.05	1.1	320	2.3	0.32	0.06	0.66	50	0.8	8	0.96	74.9	1.12	16.55	0.16
15	M486515	471848	5627890			103	4	4	353		M486515	4.42	<0.001	0.15	5.91	0.5	330	2.25	0.2	0.27	<0.02	47	0.5	9	0.71	10	0.92	16.05	0.15
16	M486516	471848	5687891			100	5	5	355		M486516	4.66	0.001	0.06	6.11	0.4	370	2.3	0.05	0.36	<0.02	51.3	0.5	10	0.66	7.2	0.92	15.8	0.16
17	M486517	471850	5687892			104	6	5	356		M486517	5.04	<0.001	0.4	5.82	0.3	290	2.69	0.21	0.21	0.3	47.6	0.6	10	0.74	69	0.98	15.7	0.16
18	M486518	471850	5687893			105	6	5			M486518	5.26	<0.001	0.51	6	0.8	240	2.13	0.6	0.1	0.02	49.2	0.5	8	0.83	15.8	1.58	18	0.18
19	M486519	471850	5687894			101	4	4	351		M486519	4.40	<0.001	0.12	6.09	0.7	280	2.25	0.13	0.27	<0.02	48.4	0.4	10	0.74	6.8	0.98	16	0.16
20	M486520	471850	5687895			100	4	5	351		M486520	4.44	<0.001	0.24	6.04	0.5	250	2.47	0.33	0.28	<0.02	47.2	0.5	8	0.74	7.7	0.99	16.15	0.16
21	M486521	471847	5687895			100	5	5	343		M486521	4.96	<0.001	0.31	6.03	0.7	280	2.01	0.3	0.32	0.03	46.7	0.5	10	0.71	9.9	0.94	15.4	0.16
22	M486522	471847	5687896			97	4	5	350		M486522	4.10	<0.001	0.04	5.99	0.6	270	2.12	0.05	0.38	<0.02	50.4	0.5	9	0.67	4.6	0.96	15.6	0.16
23	M486523	471846	5687897			95	4	5	345		M486523	4.50	<0.001	0.09	6.2	0.7	230	2.08	0.1	0.31	<0.02	52.3	0.5	9	0.74	13.7	0.87	16.35	0.15
24	M486524	471846	5687898			100	5	5	0		M486524	5.22	<0.001	0.45	6.37	0.4	300	2.22	0.33	0.19	0.51	45.9	0.7	10	0.89	52.8	1.28	17.1	0.17
25	M486525	471846	5687899			105	5	4	355		M486525	4.02	<0.001	0.46	5.78	0.6	260	4.03	0.18	0.05	0.51	40.1	0.8	7	0.93	34.8	1.07	15.05	0.17
28	M486528	471846	5687900			97	4	5	0		M486528	3.10	<0.001	0.39	6.15	0.6	170	2.32	0.31	0.25	0.76	49.1	0.6	10	0.74	36	1.1	16.75	0.16
29	M486529	471846	5687901			100	5	6	349		M486529	3.88	<0.001	0.16	5.99	0.6	150	2.38	0.12	0.21	0.02	48.3	0.5	10	0.69	8.6	0.82	16.9	0.16
30	M486530	471845	5687902			105	5	5	353		M486530	5.72	<0.001	0.35	5.92	0.6	170	2.12	0.25	0.22	0.13	48.7	0.4	9	0.65	26.7	0.75	15.7	0.15
31	M486531	471845	5627903			92	4	5	345		M486531	4.16	<0.001	0.13	6.1	0.4	170	2.29	0.16	0.26	<0.02	49.6	0.4	11	0.64	7.1	0.87	16.4	0.14
32	M486532	471831	5627901								M486532	4.52	<0.001	0.07	6.06	0.4	280	1.81	0.02	0.36	<0.02	50.8	0.5	8	0.64	8.4	0.74	14.9	0.15
33	M486533	471829	5627902								M486533	5.28	<0.001	0.08	5.8	0.3	240	2.09	0.09	0.3	<0.02	43.2	0.5	10	0.91	8	0.9	15.95	0.16
34	M486534	471829	5627903								M486534	7.30	<0.001	0.06	5.82	0.3	250	1.98	0.08	0.29	<0.02	41.6	0.5	9	0.85	4.7	0.75	15.1	0.14
35	M486535	471826	5627902								M486535	3.24	<0.001	0.15	5.73	<0.2	220	1.82	0.19	0.2	<0.02	35.8	0.4	8	0.69	6.7	1.11	15.85	0.13
36	M486536	471826	5627903								M486536	4.72	<0.001	0.04	6.15	<0.2	190	2.84	0.05	0.34	0.02	41.2	0.6	11	0.69	7.1	1.02	14.8	<0.05
37	M486537	471826	5627904								M486537	5.72	<0.001	0.36	7.4	0.7	270	2.14	0.6	0.11	<0.02	53.3	2.8	9	0.88	4.7	2.94	25.3	0.06
38	M486538	471826	5627905								M486538	6.60	<0.001	0.47	6.64	0.4	310	2.43	0.41	0.06	0.03	59.1	1.4	13	0.99	9.5	2.62	19.9	0.06
39	M486539	471825	5627905								M486539	7.32	<0.001	0.45	6.37	0.8	200	2.44	0.34	0.16	<0.02	38.7	0.8	7	0.93	19.6	2.01	16.85	<0.05
40	M486540	471825	5627906								M486540	6.32	<0.001	1.31	6.55	0.3	170	2.37	1.73	0.18	0.09	45.7	0.7	11	0.82	10.9	1.59	17.9	0.06
41	M486541	471825	5627907								M486541	8.26	0.004	0.6	6.24	<0.2	190	2.15	0.42	0.24	0.02	41.5	0.4	11	0.69	11.6	1.05	14.6	0.05
42	M486542	471829	5627908								M486542	8.80	<0.001	0.03	6.3	<0.2	180	2.35	0.03	0.36	<0.02	48.8	0.4	12	0.55	3.5	0.85	14.3	0.06
43	M486543	471828	5627909								M486543	7.76	<0.001	0.05	6.13	<0.2	180	2.1	0.04	0.33	<0.02	48.1	0.4	11	0.56	4.8	0.72	13.2	0.05
44	M486544	471829	5627910								M486544	8.62	<0.001	0.08	6.62	<0.2	210	2.3	0.06	0.32	<0.02	49.6	0.5	11	0.7	6.1	1.04	15.45	0.06
45	M486545	471842	5627910	2174		95	5	6			M486545	4.14	<0.001	0.44	5.75	0.3	200	2.51	0.36	0.12	0.47	50.7	1.1	9	0.78	14.9	0.94	16.45	0.13
46	M486546	471841	5627911			100	5	5			M486546	3.86	<0.001	0.31	6.16	0.5	210	2.34	0.31	0.14	0.3	44.6	0.7	9	0.71	29.5	0.91	16.25	0.09
47	M486547	471840	5627911			95	5	5			M486547	3.28	<0.001	0.73	5.63	<0.2	200	2.33	0.76	0.1	1.01	42.6	1.5	7	0.74	25.3	0.87	15.55	0.16
48	M486548	471839	5627912			108	5	5			M486549	4.60	<0.001	0.52	5.68	0.4	190	2.04	0.42	0.12	0.28	45	0.8	9	0.74	17.4	1.06	16.2	0.17
49	M486549	471839	5627913	2173		100	6	5			M486548	4.62	<0.001	1.52	5.83	1.9	160	1.96	2.1	0.08	0.09	50.2	1.3	6	0.93	11.6	1.11	16.65	0.18
50	M486550	471834	5627914	2173		100	5	5			M486550	4.44	<0.001	0.62	5.63	0.4	180	2	0.66	0.13	0.1	44.4	0.8	9	0.83	9.2	1.02	14.85	0.15
53	M486003	471827	5627917	2173		97	5	5			M486003	3.42	<0.001	2.71	5.15	3.5	130	1.75	4.36	0.06	0.55	41.8	1	8	1.17	77.7	1.33	15.75	0.14
54	M486004	417826	5627918	2175		95	6	5			M486004	5.70	<0.001	2.94	5.47	0.9	160	2.38	3.66	0.02	1.52	40.7	1.8	9	1.17	202	1.64	16.2	0.15
55	M486005	471821	5627919	2178		100	5	6			M486005	5.50	<0.001	0.49	5.61	0.4	170	2.14	0.38	0.14	0.05	48.5	0.8	8	0.71	13.2	0.92	15.6	0.13
56	M486006	471820	5627920			80	5	6			M486006	3.26	<0.001	7.11	5.3	3	120	1.87	7.71	0.01	0.38	42.7	1.8	7	0.95	34.7	2.56	16.1	0.15
57	M486007	471820	5627921			93	5	6			M486007	3.42	<0.001	1.68	5.73	1	160	2.27	4	0.09	0.07	39.5	1.1	6	0.82	25.7	1.74	15.4	0.14
58	M486008	471820	5627922	2180		105	5	5			M486008	5.06	<0.001	1.22	5.94	0.9	180	2.47	0.73	0.13	0.68	45.8	1	9	0.77	56.3	1.48	16.25	0.15
59	M486009	471813	5627921	2181		104	5	5			M486009	3.38	<0.001	0.81	5.95	0.3	200	2.3	0.51	0.2	0.18	45	0.4	7	0.69	30.8	0.71	14.65	0.16
60	M486010	471813	5627922			100	5	3			M486010	2.90	<0.001	0.81	6.02	0.3	180	2.74	0.58	0.25	0.46	46.3	0.4	9	0.68	61.7	0.9	14.65	0.15
61	M486011	471813	5627923			103	4	3			M486011	3.04	<0.001	0.78	6.04	0.4	180	2.52	0.69	0.2	0.05	45.1	0.3	7	0.7	25.5	0.93	15.05	0.15
62	M486012	471813	5627924			100	5	4			M486012	3.72	<0.001	0.4	5.75	<0.2	180	2.35	0.19	0.23	0.05	45.8	0.4	9	0.57	9.6	0.92	15	0.18
63	M486013	471813	5627925			97	6	3			M486013	4.38	<0.001	0.57	5.75	0.2	170	2.2	0.12	0.24	0.05	46.1	0.6	8	0.57	9.9	1.34	14.9	0.16
64	M486014	471813	5627926			70	6	6			M486014	4.88	<0.001	0.4	5.63	<0.2	170	2.46	0.09	0.27	<0.02	47.7	0.4	9	0.53	4.7	1.11	14.4	0.17
65	M486015	471812	5627927			96	4	5			M486015	7.32	0.005	0.23	5.91	1.6	190	1.75	0.23	0.2	0.03	41.7	0.4	5	0.59	11.9	0.72	15.9	0.08
66	M486016	471812	5627928			98	5	5			M486016	4.10	0.034	0.46	5.82	0.7	180	1.72	0.6	0.12	0.04	40	0.5	5	0.69	16.9	1.3	17.95	0.12
67	M486017	471812	5627929			98	5	5			M486017	4.90	0.002	0.09	5.42	0.4	180	1.99	0.44	0.3	<0.02	42.9	0.4	4	0.54	5	0.58	15.5	0.11
68	M486018	471812	5627930			90	7	4			M486018	4.84	0.005	20.4	5.07	7.5	150	1.69	71.3	0.1	0.02	30.3	0.8	7	0.62	36.6	1.98	18.05	0.11
69	M486019	471812	5627931	2176		100	5	4			M486019	5.04	0.005	24.5	4.84	14.5	110	1.48	206	0.01	0.22	37.8	1.1	4	1.21	69.8	3.06	17	0.12
70	M486020	471804	5627931	2177		102	5	5			M486020	4.68	0.003	6.97	5.69	3.4	130	1.8	10.3	0.03	2.27	45.6	0.6	6	1.13	109.5	1.62	19.5	0.12
71	M486021	471802	5627931			98	5	5			M486021	5.06	0.002	0.63	6.07	0.5	210	3.36	1.3	0.26	<0.02	45.7	0.3	5	2.61	5.2	0.64	17.2	0.07
72	M486022	471800	5627932			98	5	4			M486022	4.34	0.001	0.29	5.88	0.7	160	2.22	0.29	0.2	0.12	44.3	0.5	7	0.95	11.6	1.47	17.8	0.1
73	M486023	471800	5627933			92	5	4			M486023	4.72	0.002	0.23	6.02	0.5	170	2.47	0.21	0.29	0.02	45.1	0.3	5	1.34	5.3	0.98	17.8	0.09
74	M486024	471800	5627934			105	4	4			M486024	5.36	0.001	0.38	5.99	1.3	160	2.71	0.73	0.23	0.03	47.1	0.6	7	1.11	11.6	1.37	18.35	0.11
75	M486025	471799	5627935			99	4	4			M486025	3.32	0.001	0.22	5.74	0.5	170	3.24	1.63	0.21	<0.02	44.6	0.5	6	1.13	23.9	0.94	17.45	0.11
78	M486028	471799	5627936			105	5	4			M486028	3.90	0.001	0.09	6.1	0.5	210	6.2	0.19	0.46	<0.02	43.7	1	7	1.73	6.6	1.15	17.35	0.09
79	M486029	471796	5627937			98	5	4			M486029	5.42	0.002	0.06	5.92	0.7	170	4.43	0.1	0.26	<0.02	50.2	0.4	6	1.09	3.4	1.02	19.1	0.1
80	M486030	471795	5627938			80	6	5			M486030	4.62	0.001	0.13	5.93	0.5	160	3.73	0.11	0.33	<0.02	49.2	0.4	8	1.65	4.4	0.78	17.7	0.1
81	M486031	471795	5627939			100	5	4			M486031	4.26	0.001	0.04	5.74	0.5	160	3.41	0.17	0.33	<0.02	45.3	0.4	6	1.21	2.3	0.63	16.8	0.09
82	M486032	471805	5627940			90	6	5			M486032	4.24	<0.001	0.15	5.75	0.8	160	2.54	0.12	0.28	<0.02	43.5	0.4	6	2.3	4.2	0.72	16.75	0.1
83	M486033	471805	5627941			101	5	4			M486033	4.70	0.001	0.25	5.67	1.1	170	2.29	0.19	0.26	0.02	40.1	0.3	5	3.3	5.4	0.6	15.75	0.09
84	M486034	471802	5627942			80	5	5			M486034	5.90	0.001	0.4	6.02	0.7	180	2.95	0.43	0.26	0.11	44.7	0.5	9	1.52	18.8	1.05	17.25	0.1
85	M486035	471799	5627943			97	5	5			M486035	4.66	0.002	0.45	5.98	0.8	180	2.58	0.36	0.24	0.02	43.7	0.3	4	0.7	9.8	0.64	16.85	0.1
86	M486036	471799	5627944			107	5	5			M486036	3.48	<0.001	0.7	5.83	2	170	2.42	6.32	0.21	0.02	41.6	0.5	7	0.63	14	1.46	17.4	0.11
87	M486037	471799	5627945			93	5	4			M486037	3.22	0.001	0.04	5.94	0.6	180	2.63	0.12	0.35	<0.02	45.8	0.5	4	0.52	2.8	0.69	17.2	0.1
88	M486038	471798	5627946			95	5	5			M486038	4.42	0.001	0.03	5.59	0.6	170	2.61	0.09	0.33	<0.02	42.2	0.5	10	0.55	2.2	0.76	16.35	0.1
89	M486039	471803	5627947			98	5	4			M486039	3.64	0.002	0.55	5.74	1.2	180	2.1	0.86	0.23	0.02	39.1	0.3	4	0.62	4.9	0.65	15.85	0.08
90	M486040	471803	5627948	2168		109	4	5			M486040	4.44	0.001	0.33	6.47	1.2	190	3.87	0.59	0.3	0.02	50	0.4	6	1.17	5.1	0.61	18.2	0.1
91	M486041	471828	5627951	2162		100	7	6			M486041	9.52	0.001	0.04	5.78	0.5	170	2.5	0.16	0.32	<0.02	44.3	0.5	6	2.39	6.3	0.85	17.1	0.1
92	M486042	471828	5627952			101	6	5			M486042	5.00	0.001	0.03	5.86	0.6	180	2.39	0.06	0.35	<0.02	45.8	0.4	7	2.83	4.6	0.83	17.25	0.1
93	M486043	471830	5627953			87	6	5	352		M486043	5.36	0.002	0.06	5.81	0.2	170	2.01	0.11	0.29	<0.02	44.5	0.8	4	1.95	2.4	1.03	17.05	0.1
94	M486044	471829	5627954			130	5	5			M486044	9.20	0.001	0.08	5.83	0.3	180	1.9	0.06	0.3	<0.02	51.1	0.5	5	1.78	2.6	0.72	16.45	0.1
95	M486045	471825	5627955			97	5	5			M486045	4.20	0.001	0.2	5.33	0.5	190	2.33	0.21	0.21	0.02	40.8	0.9	5	1.83	5.1	0.59	16.4	0.1
96	M486046	471821	5627955			102	6	5			M486046	5.38	0.002	0.16	5.61	0.5	180	2.13	0.55	0.19	0.12	43.6	0.4	4	1.73	6.5	0.96	16.45	0.1
97	M486047	471821	5627956			87	6	5			M486047	5.24	0.001	0.26	5.71	0.6	180	2.56	0.32	0.24	<0.02	45.2	0.5	5	2.22	4.3	0.82	17.3	0.11
98	M486048	471825	5627958	2160		106	6	6	350		M486048	5.42	0.001	0.12	5.33	3.7	180	1.67	0.16	0.14	0.03	39.6	1.1	7	1.7	4.8	1.19	17.3	0.11
99	M486049	471803	5627957	2165		97	6	5			M486049	4.18	0.001	0.89	5.72	0.8	190	2.23	1.21	0.11	0.66	40.5	1	5	0.68	49.3	1.03	18.05	0.12
100	M486050	471802	5627958	2164		108	5	5			M486050	3.90	0.001	0.29	5.92	0.6	180	2.1	0.2	0.21	0.02	43.5	0.5	5	0.68	8.8	1.44	17.85	0.13
103	M486053	471816	5627961	2161		105	6	5	345		M486053	4.74	0.002	0.08	6.22	0.8	200	2.69	0.06	0.28	<0.02	43.7	0.5	5	1.94	4.3	0.63	16.35	0.13
104	M486054	471816	5627962			97	6	5			M486054	5.60	0.002	0.06	5.95	0.7	200	2.93	0.12	0.33	0.02	41.6	0.4	6	2.88	3.1	0.58	15.65	0.13
105	M486055	471815	5627963	2159		100	6	6			M486055	6.62	0.001	0.07	6.06	0.5	190	3.07	0.1	0.32	<0.02	42.5	0.5	6	2.83	2.2	0.71	16	0.13
106	M486056	471813	5627963	2159		98	6	6			M486056	7.24	0.001	0.28	5.75	1.1	180	2.68	0.27	0.18	0.1	41.4	0.5	6	2.08	16.7	1.25	16.8	0.13
107	M486057	471812	5627964	2159		105	6	6			M486057	6.06	0.001	0.21	5.85	0.3	180	2.07	0.18	0.16	<0.02	42.5	0.8	5	1.52	3.3	1.7	17.65	0.15
108	M486058	471808	5627964	2159		96	5	5			M486058	4.10	0.001	0.07	5.7	0.6	190	2.4	0.15	0.21	<0.02	39.9	0.5	6	2.06	2.2	0.99	16.45	0.11
109	M486059	471808	5627965			101	6	5	345		M486059	4.42	0.002	0.13	5.95	0.5	200	2.42	0.27	0.17	0.02	43.6	0.7	5	2.05	3.1	1.41	17.65	0.13
110	M486060	471807	5627966			102	5	4			M486060	5.42	0.001	0.09	5.93	0.8	190	2.94	0.16	0.33	<0.02	46.1	0.3	7	3.24	3.3	0.65	15.8	0.13
111	M486061	471794	5627963	2158		105	5	5			M486061	4.86	0.001	0.15	6.06	0.9	200	2.94	0.15	0.24	0.02	44.3	0.6	6	2.74	3.4	0.84	17.4	0.13
112	M486062	471794	5627964			105	5	5	343		M486062	5.66	0.001	0.32	6.12	0.8	190	2.46	0.8	0.15	<0.02	45.5	0.8	8	1.95	5.2	1.66	18.75	0.14
113	M486063	471793	5627965			100	6	5			M486063	5.30	0.001	0.25	5.91	0.6	180	2.31	0.46	0.09	0.03	40.9	0.4	5	1.62	4.6	1.77	18.35	0.12
114	M486064	471793	5627966	2157		101	4	5	347		M486064	4.14	0.001	1.66	5.59	0.7	180	2.11	1.35	0.05	0.05	42.4	1.1	6	1.6	9.7	1.68	18.5	0.11
115	M486065	471782	5627965	2161		103	4	5			M486065	3.56	0.001	0.61	6.05	1.4	230	2.17	0.71	0.14	0.13	40.4	0.7	7	0.75	10.4	0.77	16.95	0.11
116	M486066	471781	5627966			105	5	4	355		M486066	4.24	0.001	0.24	5.98	0.7	190	2.71	0.61	0.25	0.02	48	0.4	12	0.57	5.2	0.74	16.9	0.12
117	M486067	471781	5627967			100	5	5			M486067	4.38	0.002	1.66	5.72	1	180	2.02	3.58	0.07	0.24	40.5	1	9	0.7	50	1.72	18.1	0.11
118	M486068	471781	5627968			105	6	5			M486068	4.80	0.001	0.23	5.5	0.7	170	2.67	0.6	0.18	0.05	42	1.1	9	0.74	5.1	1.09	15.7	0.1
119	M486069	479779	5627869			96	5	5			M486069	4.60	0.002	2.31	5.86	2.1	190	2.66	0.78	0.27	0.04	43.5	0.4	10	0.6	8.3	0.7	16.55	0.11
120	M486070	479779	5627870			98	5	5	343		M486070	4.90	0.002	3.83	5.93	1.7	180	2.48	0.29	0.25	0.02	40.4	0.4	11	0.57	7.1	0.78	15.5	0.11
121	M486071	479779	5627871			89	4	4			M486071	3.52	0.001	0.12	5.57	0.6	180	2.45	0.08	0.3	<0.02	39.9	0.3	9	0.5	6	0.8	15.35	0.12
122	M486072	479780	5627872			100	5	5			M486072	4.68	0.001	0.13	6.12	0.6	200	2.61	0.12	0.3	<0.02	46.4	0.4	8	0.59	5.5	0.77	16.5	0.13
123	M486073	471779	5627973	2159		108	5	5			M486073	5.58	0.002	0.51	6.04	0.3	190	2.76	0.62	0.23	0.13	44.8	0.5	8	0.77	11.3	1.06	17.15	0.12
124	M486074	471774	5627972	2159		100	4	5			M486074	2.94	0.002	1.14	6.01	4.5	180	2.22	1.23	0.14	2.02	41.1	0.4	8	0.84	70.1	0.89	16.85	0.12
125	M486075	471774	5627973			101	4	5	343		M486075	3.52	0.003	0.57	5.79	2.3	210	2.23	0.68	0.14	0.17	40.2	0.4	8	0.66	15.4	0.69	15.45	0.1
128	M486078	471774	5627974			100	4	4			M486078	3.00	0.003	0.21	5.9	1.1	210	2.74	0.18	0.26	0.02	44.8	0.3	6	0.58	7.6	0.63	15.35	0.1
129	M486079	471773	5627975			113	5	4			M486079	4.02	0.002	2.93	5.95	1	190	3.17	3.84	0.22	1.55	44.6	0.3	9	0.61	106	0.8	16.4	0.11
130	M486080	471773	5627976			101	4	5	350		M486080	4.10	0.001	0.41	5.96	1.1	200	2.59	0.83	0.27	0.37	44.4	0.4	8	0.51	15.8	0.66	16.2	0.12
131	M486081	471773	5627977			91	4	5			M486081	2.92	0.001	0.29	5.93	0.9	200	2.45	0.17	0.25	0.02	43.5	0.5	7	0.47	4.8	0.96	16.9	0.11
132	M486082	471772	5627978	2154		103	5	5			M486082	3.78	0.001	0.22	5.92	0.5	210	2.4	0.12	0.23	<0.02	49	0.4	7	0.53	10.3	1.27	16.15	0.13
133	M486083	471765	5627978	2156		100	4	5			M486083	5.00	0.001	0.4	5.87	0.8	220	2.33	0.24	0.28	0.02	44.7	0.5	7	0.46	5.9	0.81	16.9	0.13
134	M486084	471765	5627979			90	4	4			M486084	2.40	0.002	0.4	5.58	1	240	2.19	0.43	0.2	0.03	37.7	0.5	6	0.54	8.7	0.88	15.55	0.12
135	M486085	471765	5627980			104	4	5	350		M486085	3.92	0.001	0.15	5.93	0.8	340	2.11	0.23	0.32	0.02	42.6	0.5	7	0.41	4	0.75	15.65	0.12
136	M486086	471766	5627981			105	5	5			M486086	6.24	0.001	0.06	5.95	0.5	300	2.13	0.09	0.31	<0.02	40.9	0.5	10	0.39	2.8	0.91	16.45	0.11
137	M486087	471766	5627982			102	5	5			M486087	5.66	0.001	0.03	6.27	0.3	250	2.17	0.07	0.33	0.02	47.7	0.5	10	0.44	6.3	0.81	14.75	0.07

N3 #	Sample ID	Easting	Northing	Elev	GPS accuracy	length (cm)	width (cm)	depth (cm)	azimuth (degrees)	image file	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge
138	M486088	471764	5627983			99	5	5			M486088	5.42	0.001	0.07	6.28	0.6	240	2.33	0.07	0.36	<0.02	50.5	0.5	11	0.36	5.9	0.58	13.7	0.09
139	M486089	471765	5627984			99	4	5			M486089	4.36	0.001	0.05	6.06	0.5	230	2.04	0.05	0.35	<0.02	45.5	0.5	8	0.38	4.9	0.56	13.45	0.09
140	M486090	471765	5627985			99	5	5			M486090	4.68	0.001	0.07	6.41	0.6	270	2.54	0.06	0.36	<0.02	42	0.4	14	0.41	4.1	0.66	13.45	0.09
141	M486091	471765	5627986			97	5	5			M486091	4.04	0.001	0.82	6.22	2.1	360	3.03	1.21	0.31	2.2	46	1	7	0.65	99	1.53	16.45	0.11
142	M486092	471765	5627987			98	4	5			M486092	3.52	0.001	1.49	6.12	2.9	240	2.34	2.38	0.18	3.1	42.8	0.3	6	0.67	174	1.08	14.65	0.1
143	M486093	471764	5627988	2151		100	4	5	352		M486093	3.40	0.001	0.17	6.5	1.7	300	3.52	0.14	0.47	0.04	41.6	0.9	8	0.62	10.2	1.16	15.7	0.11
144	M486094	471772	5627991	2147		101	5	5			M486094	3.96	<0.001	0.1	5.26	0.5	170	1.89	0.08	0.17	0.03	35.7	0.5	10	0.51	4.5	1.74	12.9	0.11
145	M486095	471772	5627992			98	5	5			M486095	5.18	<0.001	0.1	6.09	0.7	200	1.94	0.21	0.13	0.02	45.2	1.2	7	0.57	5	1.94	15.1	0.11
146	M486096	471773	5627993			104	5	5			M486096	5.32	<0.001	0.15	5.88	0.7	230	2.01	0.19	0.1	0.02	42.2	0.7	9	0.59	3.8	2.83	14.5	0.11
147	M486097	471773	5627994	2146		97	5	5			M486097	5.32	<0.001	0.19	5.85	0.7	240	1.88	0.36	0.13	0.11	40.6	1.4	7	0.62	7.7	2.24	14.05	0.1
148	M486098	471761	5627992	2151		105	5	5			M486098	4.92	<0.001	0.05	6.09	0.2	210	2.46	0.05	0.37	<0.02	51.1	0.5	6	0.35	3.7	0.6	13.4	0.09
149	M486099	471761	5627993	2149		93	5	6			M486099	5.10	<0.001	0.08	6.36	0.7	250	2.59	0.1	0.33	0.02	45.6	0.5	6	0.45	5.6	0.82	14.1	0.1
150	M486100	471771	5627997.5	2150		51	8	7			M486100	6.98	0.001	4.89	5.56	4.1	110	2.09	35.4	0.01	3.62	44	1.5	5	0.68	86.8	2.53	16.8	0.1
153	M486103	471771	5627998			50	8	7			M486103	6.54	0.005	5.96	5.61	3	160	2.52	18.3	0.01	5.5	49.8	1.1	6	0.86	172.5	2.06	17.4	0.05
154	M486104	471771	5627998.5			52	8	7			M486104	5.10	0.002	5.98	6.28	4	140	2.35	29.7	0.01	11.7	48.4	1.1	3	0.89	413	2.69	20.6	0.05
155	M486105	471771	5627999			50	9	7			M486105	7.94	0.002	5.31	5.25	4.1	100	1.82	16.55	<0.01	0.12	48.1	0.9	6	0.91	48.3	2.56	21.1	0.05
156	M486106	471771	5627999.5			55	12	7			M486106	10.74	<0.001	4.55	5.7	2	410	2.2	6.77	0.02	1.12	41.8	1	4	0.78	54.2	1.23	15.25	0.1
157	M486107	471770	5628000	2150		50	9	7	355		M486107	6.62	0.001	1.45	6.12	0.9	520	2.55	3.17	0.18	0.55	37.6	0.7	5	0.85	43.3	1.14	13.4	0.09
158	M486108	471765	5628001	2154		65	5	5	343		M486108	2.50	<0.001	0.1	6.1	0.6	520	2.22	0.15	0.49	0.02	45.7	0.8	5	0.43	4.6	0.77	13.15	0.1
159	M486109	471765	5628002			100	5	5			M486109	3.56	<0.001	0.11	6.22	0.8	560	2.26	0.12	0.56	0.02	45.7	1.3	9	0.43	5.6	0.85	13.2	0.1
160	M486110	471765	5628003			105	5	5			M486110	4.70	0.001	0.04	6.27	0.4	550	2.34	0.09	0.54	0.02	39.7	1	8	0.38	5.3	0.85	13.45	0.1
161	M486111	471765	5628004			90	5	4			M486111	4.68	<0.001	0.05	6.39	0.9	550	2.37	0.1	0.54	0.02	43.9	1.1	5	0.37	7	0.83	13.7	0.1
162	M486112	471765	5628005			100	5	5	355		M486112	4.80	<0.001	0.11	5.97	0.4	520	2.54	0.14	0.49	<0.02	40.1	0.7	6	0.38	6.7	0.79	13.05	0.09
163	M486113	471764	5628006			101	4	5			M486113	3.62	0.001	0.06	5.95	0.5	490	2.41	0.07	0.44	0.02	40.9	0.8	7	0.36	6.3	0.76	12.8	0.1
164	M486114	471764	5628007			100	5	5			M486114	5.18	0.001	0.13	6.25	0.2	550	2.96	0.29	0.49	0.03	50	1.3	8	0.47	9.6	1.27	16.85	0.23
165	M486115	471769	5628009			98	5	7			M486115	8.96	0.003	0.13	6.39	0.3	530	2.82	0.31	0.38	0.03	45.4	1	5	0.6	8.6	1.24	16.45	0.22
166	M486116	471765	5628010	2150		95	5	7			M486116	4.96	<0.001	0.07	6.29	0.4	510	3.04	0.27	0.28	<0.02	41.9	1.6	6	0.59	12.5	1.67	17.85	0.24
167	M486117	471765	5628010.5			50	9	8			M486117	8.16	0.001	0.05	6.5	0.3	440	2.78	1.03	0.15	<0.02	44.6	2.9	10	0.69	5.1	2.29	18.85	0.13
168	M486118	471765	5628011			52	11	7			M486118	7.36	<0.001	0.07	6.12	0.5	380	2.44	0.89	0.11	<0.02	48.7	3.3	7	0.67	3.9	2.08	20.5	0.13
169	M486119	471765	5628011.5			50	10	8			M486119	8.02	<0.001	0.05	6.51	0.5	500	3.26	0.53	0.34	0.03	52.2	1.3	7	0.6	6.5	1.38	18.05	0.17
170	M486120	471766	5628012			51	10	6			M486120	7.66	<0.001	0.1	6.31	0.8	480	2.77	0.63	0.26	0.05	45	11.1	7	0.6	7.1	2.57	18.7	0.22
171	M486121	471766	5628012.5	2150		53	10	7	0		M486121	9.62	0.001	0.08	6.46	0.4	450	2.86	1.07	0.14	<0.02	43.2	3	5	0.69	5.6	2.24	20.8	0.21
172	M486122	471759	5628013	2149		103	5	5	350		M486122	4.46	<0.001	0.04	6.49	0.2	540	3.17	0.32	0.54	0.06	45.7	1	8	0.49	3.4	1.05	16.65	0.21
173	M486123	471758	5628014	2149		99	5	5			M486123	4.18	0.001	0.04	6.26	0.8	530	3.27	0.9	0.45	0.03	45	1.4	8	0.51	5.3	1.46	17.05	0.23
174	M486124	471755	5628015	2147		220	5	5			M486124	8.00	0.001	0.04	6.26	0.7	520	3	0.1	0.45	0.03	39.2	1.3	10	0.49	4.9	1.31	17.35	0.24
175	M486125	471755	5628017			105	5	5			M486125	5.30	0.001	0.05	6.69	0.4	570	4	0.66	0.61	0.02	47.9	1.6	11	0.54	13.3	1.43	18.2	0.25
178	M486128	471754	5628018			98	5	5	356		M486128	5.72	0.001	0.06	6.53	<0.2	570	2.64	0.05	0.59	0.02	59.2	0.7	10	0.43	3.9	1.09	15.3	0.08
179	M486129	471755	5628019			145	5	4			M486129	6.78	0.002	2.57	6.8	1	480	3.08	3.71	0.27	3.48	46.7	0.9	9	0.87	170.5	1.98	17.95	0.1
180	M486130	471756	5628020			105	5	6			M486130	6.70	<0.001	0.25	6.71	0.3	540	2.73	0.09	0.46	0.02	49.9	0.8	12	0.59	10.8	1.25	16.85	0.09
181	M486131	471756	5628021			105	5	5			M486131	4.58	<0.001	0.16	6.63	<0.2	590	2.75	0.18	0.52	<0.02	50.5	1.2	9	0.56	11.3	1.53	16.5	0.12
182	M486132	471757	5628022			98	5	5			M486132	4.12	<0.001	0.11	6.45	<0.2	580	2.57	0.16	0.57	<0.02	50.9	1	11	0.43	11.8	1.29	15.95	0.14
183	M486133	NO SAMPLE									M486133																		
184	M486134	NO SAMPLE									M486134																		
185	M486135	471752	5628023	2147		108	4	6	353		M486135	4.76	<0.001	0.16	6.53	<0.2	520	3.39	0.22	0.46	<0.02	48.7	1.3	9	0.62	28	1.8	17.2	0.18
186	M486136	471752	5629024			100	5	5			M486136	5.00	0.001	0.78	6.52	<0.2	600	2.55	2.04	0.37	<0.02	43.7	1	8	0.66	15.3	1.48	16.95	0.16
187	M486137	471753	5628925			99	6	6			M486137	7.54	<0.001	0.12	6.57	<0.2	610	2.44	0.36	0.53	<0.02	53.7	1.7	20	0.62	14.4	1.48	15.95	0.16
188	M486138	471753	5628026	2146		70	5	6			M486138	4.52	0.002	0.08	6.24	0.4	590	3.2	0.1	0.48	0.03	39.8	1	9	0.55	9.7	1.02	16.5	0.26
189	M486139	471749	5628025	2147		103	5	6			M486139	7.06	<0.001	0.1	6.73	0.4	590	3.15	0.29	0.49	<0.02	46.1	2.6	11	0.57	14	1.71	19.45	0.25
190	M486140	471746	5628026	2149		100	6	6			M486140	6.56	<0.001	0.07	6.51	0.2	600	3.51	0.08	0.61	0.03	53.8	1.5	10	0.53	12.5	1.07	17.5	0.27
191	M486141	471746	5628027			100	5	6	351		M486141	7.92	<0.001	0.04	6.59	0.6	500	3.25	0.09	0.54	0.02	47.2	1.3	10	0.49	8.1	1.22	16.65	0.27
192	M486142	471746	5628028			100	5	6			M486142	6.24	0.001	0.09	6.16	0.5	410	2.85	0.18	0.4	<0.02	49.1	1.2	11	0.49	7.7	0.94	16.4	0.28
193	M486143	471746	5628029	2148		100	5	5			M486143	6.78	<0.001	0.09	6.25	0.8	430	2.97	0.29	0.28	0.11	41.8	1.9	11	0.6	6.5	1.82	18.85	0.25
194	M486144	471742	5628030	2150		110	5	7			M486144	7.76	0.001	0.1	6.53	<0.2	530	3.47	0.48	0.38	0.04	48.2	1.6	11	0.72	10.8	1.49	18.35	0.27
195	M486145	471739	5628031	2152		105	5	6	355		M486145	6.00	<0.001	1.92	6	0.9	510	3.17	4.7	0.25	0.16	40.4	1.6	8	0.76	21	1.42	16.95	0.24
196	M486146	471735	5628031.5	2155		52	8	6			M486146	3.94	0.001	0.44	6.74	0.5	560	2.29	0.74	0.41	<0.02	41.4	0.9	8	0.93	10.7	1.41	15.5	0.1
197	M486147	471736	5628032			50	8	8			M486147	6.60	<0.001	0.36	5.94	2	450	2.07	1.02	0.14	1.73	44.8	2.6	13	0.82	35	1.88	17.25	0.1
198	M486148	471736	5628032.5			55	8	8			M486148	6.60	<0.001	0.11	7.2	0.4	720	3.88	0.29	0.51	0.05	39.8	5.1	9	1.16	25.1	2.46	22.2	0.13
199	M486149	471736	5628033	2153		105	5	5			M486149	4.80	0.003	0.07	6.58	0.6	600	2.96	0.09	0.3	<0.02	46.8	1.2	13	0.72	13.6	1.4	15.9	0.12
200	M486150	NO SAMPLE									M486150																		
203	M486153	471703	5628036	2165	4	115	5	5	345		M486153	5.60	<0.001	0.35	6.14	0.5	230	2.23	0.66	0.06	0.11	47.1	1.7	11	0.69	7	1.58	17.1	0.09
204	M486154	471699	5628037	2164		180	4	5	355		M486154	4.16	0.001	3.31	6.39	1.1	390	2.37	2.37	0.06	2.32	48	0.9	10	1.04	66.7	1.75	16.15	0.11
205	M486155	471697	5628039	2160		110	4	5	350		M486155	8.04	<0.001	0.59	6.4	0.4	580	2.59	0.71	0.62	3.94	50.4	1.8	13	1.02	50.6	1.48	15.65	0.11
206	M486156	471697	5628040	2158		110	4	4			M486156	4.18	<0.001	<0.01	6.38	<0.2	630	2.03	<0.01	0.73	0.03	48.9	1.4	11	0.83	7.2	1.25	14.15	0.1
207	M486157	471694	5628041	2157		104	4	5			M486157	4.14	0.001	<0.01	6.57	<0.2	560	3.22	0.02	0.66	<0.02	48.5	1.2	10	0.72	4.6	1.03	14.85	0.1
208	M486158	471694	5628042			102	4	5			M486158	4.78	<0.001	<0.01	6.21	<0.2	510	2.17	0.01	0.6	<0.02	44.7	1.2	10	0.66	4.4	1.21	13.9	0.1
209	M486159	471695	5628043			105	4	5			M486159	4.64	0.001	<0.01	6.21	0.2	550	2.27	0.11	0.54	<0.02	47.7	1.2	12	0.77	7.8	1.31	14.1	0.1
210	M486160	471695	5628044			97	5	5	355		M486160	4.30	<0.001	0.01	6.34	<0.2	580	3.64	0.03	0.63	<0.02	51.2	1.2	9	0.85	5.8	1.03	14.6	0.1
211	M486161	471695	5628045			108	4	5			M486161	6.66	0.001	<0.01	6.46	0.2	620	3.21	0.02	0.62	0.02	49	1.4	11	0.93	6.3	1.4	14.95	0.1
212	M486162	471694	5628046			99	5	5			M486162	5.54	<0.001	<0.01	6.41	<0.2	610	2.41	<0.01	0.69	0.05	44	1.8	10	1.08	8	1.04	14.4	0.1
213	M486163	471694	5628047	2153		85	5	5			M486163	4.26	<0.001	0.14	6.64	1.7	500	2.69	0.19	0.6	0.44	47.7	1.8	9	1.35	36.2	1.73	16.4	0.11
214	M486164	471697	5628048			99	5	5			M486164	4.98	<0.001	0.05	6.52	0.2	620	2.09	0.04	0.63	0.06	54.5	1.2	10	0.85	7.2	1.2	15.35	0.1
215	M486165	471697	5628049			103	4	4			M486165	3.60	<0.001	1.53	6.41	0.7	550	2.33	2.41	0.41	0.03	48	1.1	10	0.97	9.7	1.38	15.75	0.09
216	M486166	471693	5628050	2156		101	4	5			M486166	4.54	<0.001	0.11	6.63	0.8	620	2.33	0.07	0.57	0.04	50.4	1.2	10	1.07	4.2	1.29	16.25	0.1
217	M486167	471693	5628051			75	5	5			M486167	3.22	0.003	15.5	6.11	5.7	390	2.49	23.6	0.09	1.62	41	1.2	11	1.26	200	2.93	18.5	0.1
218	M486168	471689	5628052	2156		97	5	5	353		M486168	4.12	<0.001	1.11	6.77	1.8	890	2.49	1.91	0.41	2.95	40.8	1.3	10	0.95	143.5	1.74	16.45	0.14
219	M486169	471689	5628053			100	6	5			M486169	6.08	0.001	0.1	6.81	0.3	930	2.16	0.09	0.76	0.13	45.8	1.6	11	0.48	20.8	1.51	15.95	0.11
220	M486170	471688	5628054			102	5	5			M486170	4.92	0.001	0.11	6.66	0.4	920	2.41	0.06	0.76	0.07	37.4	1.5	11	0.53	12.1	1.37	16.1	0.18
221	M486171	471688	5628055			115	5	5			M486171	5.88	0.001	0.07	6.45	<0.2	860	2.37	0.11	0.7	0.1	37.7	1.7	11	0.54	17	1.52	15.9	0.21
222	M486172	471687	5628055	2154		102	5	5			M486172	5.78	0.001	0.03	6.47	<0.2	830	2.2	0.08	0.82	0.15	37.9	1.8	9	0.42	9.5	1.37	15.35	0.21
223	M486173	471688	5628057			110	5	6	355		M486173	6.28	0.001	0.02	7.28	<0.2	600	3.39	0.15	1.3	0.12	47.4	3.6	8	0.79	14.1	2.27	18.5	0.25
224	M486174	471688	5628058			101	4	4			M486174	4.72	0.001	<0.01	6	<0.2	560	2.05	0.06	0.63	0.02	39.7	1.4	9	0.38	4.5	1.04	14	0.21
225	M486175	471689	5628059	2149		102	5	4			M486175	4.20	0.002	0.05	6.07	<0.2	600	2.28	0.45	0.56	0.02	44.6	1.5	10	0.43	10	1.34	14.7	0.21
228	M486178	471689	5628060			102	5	5			M486178	6.86	0.001	0.01	6.43	<0.2	710	2.06	0.18	0.71	0.15	38.5	3.9	13	0.45	8.4	2.23	15.4	0.2
229	M486179	471689	5628061			110	5	5			M486179	5.88	<0.001	0.26	6.57	1.1	780	2.2	0.65	0.72	0.46	39.8	2	14	0.64	23.6	1.8	15.4	0.21
230	M486180	471684	5628061			110	5	6			M486180	6.44	0.001	0.29	6.54	0.8	750	2.44	0.47	0.58	0.54	45.8	2.2	12	0.68	19.9	2.11	16.2	0.21
231	M486181	471688	5628063			101	5	6			M486181	5.32	<0.001	0.29	6.5	<0.2	710	2.03	0.44	0.57	0.3	41.5	2.3	11	0.52	26.7	1.66	15.6	0.21
232	M486182	471688	5628064			102	4	6			M486182	5.18	<0.001	1.8	6.45	1.5	550	2.33	2.3	0.32	4.22	43	1.8	10	0.83	213	2.39	15.75	0.19
233	M486183	471687	5628065			94	5	5			M486183	4.78	<0.001	0.19	5.91	<0.2	510	1.85	0.29	0.1	<0.02	40.4	4.1	11	0.65	9.3	4.15	17.7	0.21
234	M486184	471687	5628066			103	5	5	350		M486184	5.76	0.002	0.84	5.9	0.6	490	2.29	1.02	0.25	1.84	39.1	2.4	10	0.72	27.6	2.73	15.5	0.2
235	M486185	471687	5628067			104	5	5			M486185	4.90	<0.001	0.04	6.19	<0.2	650	1.75	0.1	0.42	<0.02	40.1	1.8	12	0.5	8.7	2.07	15.4	0.21
236	M486186	471687	5628068			101	5	6			M486186	5.88	0.001	<0.01	6.48	<0.2	630	1.86	0.03	0.74	0.02	54.1	1.3	9	0.33	4.7	1.26	14.5	0.2
237	M486187	471687	5628069			105	4	5			M486187	5.06	<0.001	0.12	6.22	0.5	660	1.93	0.23	0.41	0.08	38	1.4	12	0.53	8.2	1.68	14.65	0.19
238	M486188	471690	5628070			107	5	6	350		M486188	6.32	0.001	<0.01	6.26	<0.2	600	1.97	0.05	0.5	<0.02	48.1	1.8	10	0.51	3.7	1.71	15.7	0.21
239	M486189	471689	5628071			100	4	5			M486189	5.10	0.001	0.04	6.58	0.3	790	2.25	0.14	0.53	<0.02	43.2	2.8	11	0.6	10.7	2.07	16.55	0.2
240	M486190	471689	5628072			100	5	5			M486190	5.50	<0.001	<0.01	6.6	0.3	840	2.44	0.08	0.45	<0.02	45	1.7	9	0.66	4.9	1.95	16.6	0.22
241	M486191	471689	5628073	2142		102	5	5			M486191	6.18	0.001	<0.01	6.53	0.3	930	2.12	0.06	0.77	0.07	39.6	1.8	10	0.41	10.1	1.61	14.65	0.22
242	M486192	471694	5628075	2142		102	5	4			M486192	3.78	0.002	0.26	6.48	0.3	750	2.65	0.43	0.28	0.3	42.4	1.6	9	0.88	19	1.88	16.5	0.21
243	M486193	471694	5628076			102	4	4			M486193	3.82	0.001	1.26	6.57	1.8	750	3.48	0.93	0.46	3.78	35.4	1.9	8	1.08	79.1	2.02	17.8	0.2
244	M486194	471697	5628077			110	4	5			M486194	5.56	0.001	0.07	6.32	<0.2	790	1.89	0.08	0.61	0.03	38.5	1.6	9	0.57	10.9	1.25	14	0.19
245	M486195	471694	5628077			93	5	5			M486195	4.96	<0.001	0.04	6.69	<0.2	800	2.29	0.06	0.59	0.02	40	1.7	11	0.63	11.1	1.61	15.8	0.2
246	M486196	471694	5628078			106	5	5			M486196	6.86	<0.001	0.04	6.57	<0.2	810	2.22	0.1	0.66	<0.02	46.4	1.6	15	0.55	9	1.53	15.2	0.21
247	M486197	471694	5628079			100	5	5			M486197	5.54	0.001	0.05	6.49	<0.2	780	2.11	0.14	0.56	0.02	42.3	1.9	10	0.65	11.6	1.58	14.55	0.2
248	M486198	471693	5628080			100	5	5			M486198	3.82	0.001	0.22	6.42	0.3	800	2.76	0.26	0.39	<0.02	41.4	1.5	9	0.79	9.1	1.76	16.3	0.21
249	M486199	471693	5628081.5			52	4	5			M486199	5.18	<0.001	0.39	6.47	0.4	850	2.72	0.55	0.31	0.1	36.4	1.5	10	0.9	11.9	1.88	15.6	0.2
250	M486200	471693	5628082			52	9	6			M486200	5.00	0.001	0.59	5.96	0.9	570	2.47	1.29	0.04	0.02	30.1	1.7	9	0.84	8.5	1.83	20	0.19
253	M486203	471693	5628082.5			48	9	7			M486203	4.74	0.001	0.34	4.92	0.5	450	1.39	1.46	0.03	<0.02	20	1.4	10	0.69	8.5	1.92	15.65	0.2
254	M486204	471693	5628083			48	9	7			M486204	4.80	0.002	2.29	4.23	0.9	110	1.43	4.83	0.07	1.49	25.1	2.4	10	0.64	66.8	4.43	8.39	0.25
255	M486205	471693	5628083.5			54	8	6			M486205	5.28	0.002	5.25	6.34	3	420	3.28	6.09	0.01	1.84	33.4	2	10	1.52	83.7	3.19	17.7	0.2
256	M486206	471690	5628084			105	4	5			M486206	5.34	<0.001	0.44	6.1	0.2	710	2.4	0.83	0.3	0.12	46.4	1.6	10	0.69	22.2	2.09	17.9	0.05
257	M486207	471697	5628085	2137		108	4	5			M486207	3.60	<0.001	1.52	6.23	0.8	1080	1.93	0.9	0.44	0.04	36.9	1.4	10	0.71	29.4	1.81	14.9	0.09
258	M486208	471697	5628086			100	4	6			M486208	5.24	0.001	0.12	5.96	0.8	410	1.69	0.18	0.45	<0.02	58.3	0.7	7	0.45	9.9	1.02	14.95	0.12
259	M486209	NO SAMPLE									M486209																		
260	M486210	471697	5628088			105	4	5			M486210	4.04	0.001	0.14	6.04	0.3	920	2.13	0.23	0.41	<0.02	41.3	1.6	10	0.7	17.4	1.93	15.85	0.15
261	M486211	471697				99	4	6			M486211	5.06	0.001	0.16	6.34	<0.2	760	1.93	0.13	0.6	0.02	38.2	1.4	11	0.53	10.8	1.46	16.75	0.16
262	M486212	471692	5628089			101	4	5			M486212	6.20	<0.001	0.54	6.49	<0.2	800	1.85	0.94	0.59	0.6	41.7	1.4	9	0.6	44.6	1.57	15.1	0.14
263	M486213	471692	5628090			104	4	5	0		M486213	4.92	0.001	0.31	6.19	0.3	930	1.66	0.49	0.65	0.05	38.5	1.6	10	0.56	17.3	1.36	15	0.15
264	M486214	471693	5628091			95	4	5			M486214	4.02	0.001	0.07	6.35	0.2	830	1.48	0.1	0.76	0.04	40.9	1.8	11	0.44	8	1.41	14.8	0.19
265	M486215	471693	5628092			104	4	5			M486215	3.64	0.001	0.16	6.12	<0.2	840	1.72	0.29	0.64	0.06	38.7	1.3	10	0.5	9.4	1.32	14.4	0.17
266	M486216	471693	5628093			104	4	5			M486216	3.36	0.001	0.21	6.19	0.6	940	1.41	0.32	0.56	0.04	44.2	2.7	9	0.58	16.5	1.5	14.3	0.18
267	M486217	471694	5628093			101	5	4			M486217	5.48	0.001	0.11	6.01	0.2	350	1.78	0.17	0.22	<0.02	44.6	1.2	9	0.64	7.8	1.53	15.6	0.15
268	M486218	471694	5628094			100	5	4			M486218	3.84	0.001	0.03	6.52	0.3	590	1.73	0.05	0.75	0.06	50.5	1.9	9	0.44	6.3	1.33	15.45	0.16
269	M486219	471695	5628095			110	5	4			M486219	2.24	0.001	0.05	6	0.6	730	1.71	0.12	0.65	0.02	51.8	1.2	9	0.36	9.1	1.09	15.05	0.2
270	M486220	471696	5628096			105	5	3			M486220	3.74	0.001	0.08	6.26	0.3	700	1.83	0.17	0.6	0.03	40.6	1.4	10	0.4	8.8	1.24	14.6	0.17
271	M486221	471696	5628097			98	5	4			M486221	3.58	0.001	0.01	6.15	<0.2	760	1.65	0.05	0.76	<0.02	42.1	1.3	10	0.35	7.4	1.19	14.7	0.17
272	M486222	471696	5628098			102	5	4			M486222	3.82	0.001	0.05	6.5	<0.2	820	1.81	0.1	0.64	0.02	48.4	1.7	9	0.47	10.6	1.36	14.75	0.18
273	M486223	471702	5628097			97	5	4			M486223	4.84	<0.001	0.08	6.16	0.4	860	1.55	0.16	0.59	0.04	47.3	1.5	9	0.52	9.3	1.28	14.85	0.19
274	M486224	471702	5628098			105	5	5			M486224	4.14	0.001	0.02	6.43	0.5	1040	1.35	0.02	0.84	0.03	33.7	2	17	0.39	6	1.52	13.8	0.13
275	M486225	471702	5628099			103	5	5			M486225	4.16	0.001	0.09	6.68	0.2	1020	1.65	0.22	0.65	0.02	44.3	2.2	8	0.61	8.2	1.68	14.75	0.19
278	M486228	471708	5628099			99	5	5			M486228	3.48	<0.001	4.18	6.19	2.2	330	3.07	8.59	0.01	5.5	40.1	2.9	11	1.32	151.5	3.22	20.2	0.15
279	M486229	471708	5628100			92	5	5			M486229	4.86	<0.001	1.86	6.36	0.8	530	2.7	4.36	0.03	8	40	1.7	9	1.03	207	2.88	17.2	0.15
280	M486230	471708	5628101			105	5	5			M486230	4.60	<0.001	0.84	2.92	3	140	0.82	8.52	0.01	0.03	39.9	2.5	12	0.52	18.8	4.72	8.12	0.17
281	M486231	471709	5628102			75	5	6			M486231	4.20	0.002	1.02	1.53	1.4	20	0.32	5.52	0.01	0.02	16.7	1.6	10	0.45	19.5	4.71	2.32	0.14
282	M486232	471709	5628103			70	5	6	8		M486232	3.30	0.002	1.78	1.92	2.9	20	0.34	9.49	0.01	0.05	29.5	2.9	14	0.52	20	6.38	2.3	0.15
283	M486233	471709	5628104			110	5	5			M486233	5.48	0.001	0.93	6.13	1.6	660	1.75	1.1	0.47	0.09	38.8	1.8	8	0.85	23.7	1.82	15.4	0.13
284	M486234	471709	5628105	2		125	5	6			M486234	7.02	<0.001	0.75	6.3	1.4	630	1.64	1.84	0.27	0.15	37.6	1.1	10	0.82	22.8	2.16	14.85	0.14

N3 #	Sample ID	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
3	M486503	0.1	0.311	3.83	26.6	13.9	0.05	614	31.7	0.96	11.6	0.8	30	23.8	195.5	<0.002	0.6	0.11	2.7	2	10.5	22.1	1.16	0.65	11.9	0.05	1.9	2.3	4	39.6	4.8	26	1.2
4	M486504	0.1	0.298	2.67	26.4	14.5	0.06	1630	389	0.05	9.2	0.8	20	149.5	216	0.022	2.2	0.28	2.1	1	17.2	1.8	0.81	0.43	10.9	0.042	2.22	1.2	5	47.6	3.3	57	1.6
5	M486505	<0.1	0.328	3.51	22.4	12.5	0.05	329	470	0.87	11.2	0.9	30	33.1	176.5	0.029	0.87	0.05	2.8	2	20.8	18.8	1.01	0.41	12.8	0.04	1.34	4	5	285	5.6	24	1
6	M486506	0.1	0.355	3.77	26.5	18.1	0.07	422	2210	0.66	10.5	1.1	30	90.1	203	0.072	0.83	0.07	4.2	2	21.6	19.6	0.91	0.35	11.9	0.042	1.66	1.1	8	42.4	4.3	17	1.3
7	M486507	0.1	0.805	2.62	20.2	17.1	0.07	2320	1240	0.1	7.8	0.8	20	99.5	179.5	0.047	1.63	0.2	3.5	2	23.7	5.2	0.71	0.43	8.1	0.031	1.57	1	7	282	3.7	228	1.5
8	M486508	0.1	2.13	2.75	27.2	20.3	0.06	1900	445	0.05	13.1	1	30	209	219	0.033	1.56	0.18	4.1	2	27.7	1.6	1.58	0.79	12.6	0.038	2.07	4.1	7	375	4.6	1740	2.1
9	M486509	0.1	0.339	3.76	29.8	7.2	0.03	602	22.2	1.44	9	0.9	30	131.5	178.5	0.002	0.43	0.11	1.8	1	9.1	23.9	0.8	0.17	15.1	0.052	1.38	1.3	4	22.4	3.7	73	1.7
10	M486510	0.1	0.193	3.74	29.2	6.9	0.03	198	7.55	1.97	8.1	1.1	30	27.1	139.5	<0.002	0.43	0.24	2.2	1	5	35.1	0.72	<0.05	14.9	0.057	0.91	1.5	4	3	3.9	18	1.4
11	M486511	0.1	0.307	3.92	28	9	0.04	608	6.95	1.65	10.6	1.1	40	55.5	175	<0.002	0.24	0.1	2.3	1	6.2	42.8	0.94	0.11	13.3	0.065	1.35	1.1	5	11.3	4	25	1.5
12	M486512	0.1	0.057	3.64	31.1	6.6	0.04	184	2.36	2.44	9.7	1.3	50	16.2	116	<0.002	0.11	0.07	2.2	1	3.9	51	0.87	<0.05	15.3	0.062	0.58	1.8	5	0.9	4.8	15	1.5
13	M486513	0.1	0.016	3.63	30.6	5.8	0.04	187	13.55	2.61	9.9	1.2	50	16.7	114.5	<0.002	0.01	0.06	2.3	1	0.9	56.3	0.82	<0.05	14.5	0.064	0.54	2.4	5	1.3	5.6	19	1.2
14	M486514	0.1	0.127	4.53	28.4	9	0.05	1910	22.6	0.99	10.2	1.3	50	289	212	<0.002	0.41	0.21	2.3	1	5	32.2	0.89	0.34	13.3	0.059	2.22	1.1	4	24.1	3.7	192	1.3
15	M486515	0.1	0.079	3.95	26.5	6.4	0.04	401	3.94	2.17	9.6	1	60	39.4	144	<0.002	0.14	0.07	2.3	1	3.3	52.2	0.86	0.1	13.4	0.062	0.98	2.1	5	13.1	4.7	17	1.1
16	M486516	0.1	0.028	3.67	28.4	5.9	0.04	298	4.34	2.47	10.3	1.3	60	29.8	123.5	<0.002	0.03	0.06	2.3	1	1.6	63.6	0.89	<0.05	15.4	0.065	0.76	2	5	2.4	5.6	16	1.8
17	M486517	0.1	0.105	4.03	26.7	6.3	0.04	759	2.05	1.89	10.4	1.3	50	67.2	153	<0.002	0.24	0.09	2.3	1	4.4	41.7	0.88	0.13	14.5	0.063	1.14	2.1	5	7.3	4.7	104	1.3
18	M486518	0.1	0.346	3.72	27.7	8.6	0.06	598	14.1	1.12	10.1	1	50	79.3	178.5	<0.002	0.35	0.12	2.5	1	13.8	28.2	0.91	0.38	12.9	0.058	1.39	1.4	6	29.1	3.9	36	1.3
19	M486519	0.1	0.186	3.81	27.7	6.9	0.03	249	7.55	2.13	11.1	0.9	50	87.6	136	<0.002	0.1	0.11	2.2	1	3.7	45	1.1	0.06	15.3	0.058	0.87	2.2	4	3.6	5.2	16	1.3
20	M486520	0.1	0.066	3.89	26.1	6.5	0.03	281	2.53	2.35	11.7	1.1	50	39.6	135	<0.002	0.04	0.07	2.5	1	1.9	43	1.14	0.05	14.2	0.06	0.91	2.2	4	1.8	5.3	17	1.5
21	M486521	0.1	0.035	3.68	26.1	8.1	0.04	623	12.7	2.3	9.5	1	50	72.9	134.5	<0.002	0.07	0.07	2.3	1	1.4	48.7	0.86	0.07	13.1	0.061	0.83	1.8	5	1.9	4.8	28	1.2
22	M486522	0.1	0.011	3.66	28.4	6.4	0.04	191	1.21	2.56	10.4	1.1	40	15.6	116.5	<0.002	0.02	0.06	2.2	1	0.9	49.2	0.96	<0.05	14.3	0.059	0.55	2.5	5	0.7	5.8	11	1.3
23	M486523	0.1	0.034	3.98	29.4	9	0.04	258	2.56	2.38	11.1	1.1	40	21.7	134.5	<0.002	0.06	0.06	2.5	1	2.4	44.9	1.08	<0.05	14.4	0.059	0.78	3.3	4	2	6.4	21	1.3
24	M486524	0.1	0.072	4.16	25.3	9.7	0.05	576	1.33	2	11.4	1.5	50	103	170	<0.002	0.26	0.14	2.7	1	6.1	49	1.01	0.07	11.3	0.064	1.26	2.4	5	2.9	5.6	153	1.4
25	M486525	0.1	0.072	4.64	22	9	0.05	2390	3.86	1.22	9.1	1.4	40	290	209	<0.002	0.38	0.15	2.1	1	4	31.8	0.72	0.18	10.8	0.056	2.07	1.2	4	7.2	3.5	154	1.7
28	M486528	0.1	0.185	3.91	27	8.7	0.04	573	2.07	2.19	12	2.3	40	199.5	151.5	<0.002	0.15	0.1	2.5	1	3.8	35.9	1.31	0.1	11.6	0.054	0.95	3	4	2.9	7.2	215	1.9
29	M486529	0.1	0.095	3.87	26.6	9.5	0.03	293	6.89	2.15	12.7	1	40	32.8	144.5	<0.002	0.15	0.11	2.7	2	4.8	30.3	1.38	0.06	12.2	0.052	0.87	4.2	4	6.9	8.2	20	1.8
30	M486530	0.1	0.139	3.88	26.6	8.5	0.02	448	35.2	2.14	16.4	1	30	65.5	143.5	<0.002	0.03	0.09	2.5	1	1.4	34.4	1.72	0.08	11.9	0.054	0.97	5.3	3	2.5	10.5	45	1.9
31	M486531	0.1	0.101	3.84	27.1	8	0.03	191	8.76	2.24	14.2	1.2	40	25.5	140.5	<0.002	0.1	0.11	2.5	2	3.4	35	1.32	0.06	11	0.052	0.81	3.7	4	7.2	8.8	17	1.7
32	M486532	0.1	0.016	3.67	28.4	5.7	0.03	228	2.48	2.51	9.8	1.1	40	20	117	<0.002	0.02	0.05	2.2	2	0.9	49.5	0.89	<0.05	13.9	0.064	0.62	2.5	4	0.8	5.7	18	1.5
33	M486533	0.1	0.084	3.6	24.2	8.5	0.03	199	3.94	2.2	12.5	2.2	40	45.6	116.5	<0.002	0.11	0.05	2.6	2	2.6	39.1	1.25	0.07	11.8	0.059	0.68	2.3	4	1.9	5.9	17	1.7
34	M486534	0.1	0.025	3.63	24.1	7.7	0.03	235	2.39	2.28	10.4	1.2	30	23.8	116.5	<0.002	0.02	0.05	2.6	2	1.5	41.8	0.95	<0.05	10.7	0.06	0.73	1.7	4	1.6	5.3	15	1.4
35	M486535	0.1	0.127	3.47	21.1	10.1	0.04	257	14.1	1.55	6.6	0.8	30	45.3	128.5	<0.002	0.2	0.05	2	2	9.7	29.1	0.51	0.05	8.3	0.051	0.88	0.7	4	3.4	2.5	19	1.4
36	M486536	0.1	0.034	3.64	24.8	5.1	0.02	221	11.6	2.48	15	0.8	30	44.9	111.5	<0.002	0.04	0.08	2.4	1	1.5	35.3	1.61	<0.05	12.5	0.06	0.62	3.9	4	1.2	8.3	14	2
37	M486537	0.1	0.595	4.25	29.4	27.2	0.11	359	77	0.87	10.9	0.5	70	138.5	159.5	<0.002	1.83	0.08	2.9	1	37.5	26.9	0.95	0.26	9.8	0.077	1.98	0.7	13	15	3.1	13	1.2
38	M486538	<0.1	0.241	4.27	34.4	25.8	0.14	493	110.5	1.02	11.9	1.4	140	170	190	0.002	0.69	0.13	6.4	1	20.1	43.1	0.87	0.24	14.5	0.099	2.19	1.8	20	12.7	4.2	28	1.1
39	M486539	0.1	0.162	3.7	22.6	14.5	0.08	300	7.33	1.46	14.5	0.5	80	146.5	147	<0.002	0.51	0.1	3.4	1	11.8	29.6	1.58	0.1	13.5	0.08	1.24	4.3	7	7.2	7.3	36	2.2
40	M486540	0.1	0.418	4.2	26.6	12.1	0.07	886	24.3	1.25	14	1.1	40	102	168.5	0.002	0.31	0.13	2.8	1	14.8	22.7	1.29	0.4	10.7	0.06	1.91	2.1	5	92	4.8	33	1.6
41	M486541	0.1	0.129	3.78	23.8	7.5	0.04	599	14	1.99	10	0.6	30	85.7	131	<0.002	0.16	0.07	2.5	1	5.6	27.7	1.52	0.19	12.4	0.057	1.02	2.9	4	18.2	6	23	1.7
42	M486542	0.1	0.026	3.78	27.9	5.1	0.03	195	10.55	2.57	9.9	0.8	30	27.2	105	<0.002	0.03	0.05	2.6	1	1.9	33.8	1.24	<0.05	14.5	0.059	0.59	3.2	3	0.8	7.3	15	1.6
43	M486543	0.1	0.018	3.67	27.5	5.6	0.03	183	14.25	2.46	14.1	1.3	30	42	103.5	<0.002	<0.01	0.05	2.3	1	1	32.9	1.55	<0.05	14.4	0.058	0.62	4.4	4	2.1	9.8	18	1.3
44	M486544	0.1	0.043	4.05	27.9	8	0.03	190	6.52	2.55	10.4	1	30	24.3	122	<0.002	0.11	0.06	2.6	1	5.1	37.8	0.9	<0.05	12.9	0.06	0.85	2.1	5	1.9	6.2	19	1.1
45	M486545	0.1	0.191	4.13	29.1	12.4	0.04	418	39.5	1.65	9.1	0.9	40	87.8	179	0.003	0.46	0.08	2.3	1	5.9	30.9	1.08	0.09	12.8	0.05	1.44	2.4	3	20.8	5.3	121	1.2
46	M486546	0.1	0.162	4.3	25.6	9.8	0.03	804	23.7	1.88	9.7	1.3	30	98.2	134.5	<0.002	0.16	0.09	3	1	3.2	35	1.07	0.11	12.8	0.055	1.31	2.2	3	13.3	6.3	94	1.9
47	M486547	0.1	0.29	4.27	24.8	10.7	0.03	685	28.2	1.3	9.3	0.7	30	92	187	<0.002	0.37	0.09	2.1	1	6	27.7	0.92	0.1	8.5	0.048	1.73	2.1	3	16.8	4.5	280	1
48	M486548	0.1	0.226	3.94	26.8	11.1	0.04	474	25.8	1.48	9	1.2	30	66.9	170	<0.002	0.2	0.09	2.4	1	8.9	28.8	0.86	0.13	10.7	0.047	1.34	2.3	4	16.3	4.8	76	1.1
49	M486549	0.1	0.354	3.53	30	16.3	0.04	821	21.4	0.98	13.7	0.8	30	92.2	182	<0.002	0.15	0.2	2.3	2	13.1	18.4	1.3	0.4	9.8	0.048	1.6	2.8	3	20.3	6.9	38	1.3
50	M486550	0.1	0.162	3.87	26.4	12.8	0.03	349	32.6	1.7	11.6	1.3	30	45.2	156.5	0.002	0.17	0.09	2.5	1	6.1	28.8	1.13	0.14	11.9	0.048	1.21	2.7	3	12.6	6.2	30	1.2
53	M486003	0.1	0.677	3.09	24.7	15.9	0.04	932	21.3	0.88	12.3	0.7	30	41.1	179	0.002	0.29	0.17	2.5	2	11.9	16.1	1.2	0.43	11.7	0.048	1.58	1.8	4	19.3	4.7	138	1.4
54	M486004	0.1	1.54	3.82	24	13.7	0.04	1970	117.5	0.44	10.8	1.1	30	128	217	0.003	0.54	0.18	2.3	1	12.4	14.2	1.24	0.39	13.9	0.039	2.25	2.3	4	17.7	4.7	373	1.1
55	M486005	0.1	0.161	3.86	28.3	11.4	0.03	613	17.85	1.49	11.6	0.8	30	26.4	161	<0.002	0.19	0.08	2.3	1	5.7	25.5	0.9	0.12	11.7	0.049	1.29	2.3	3	20.5	6.3	21	1.2
56	M486006	0.1	2.03	2.97	25.8	19	0.05	1490	174.5	0.1	9	1.1	40	105	202	0.004	0.38	0.21	2.6	1	19.2	5.7	0.71	0.64	8.9	0.04	2.01	1.2	5	48.3	2.9	44	1.2
57	M486007	0.1	2.5	3.67	23.8	12.1	0.03	865	21.9	1.17	12.5	0.7	40	81.6	181.5	<0.002	0.26	0.14	2.3	2	8	22.1	1.06	0.33	9.4	0.049	1.67	3.2	3	6.9	5.9	38	1.4
58	M486008	0.1	0.431	3.89	26.7	12.8	0.04	972	17.9	1.31	14.7	1.1	30	98.4	181.5	<0.002	0.54	0.11	2.6	1	7.8	24.1	1.61	0.15	10.2	0.051	1.62	5.3	3	11.5	8.7	193	1.2
59	M486009	0.1	0.383	4.14	26.8	8.4	0.03	601	13.1	1.95	12.4	0.7	30	63.9	150	<0.002	0.11	0.08	2.4	2	2.2	32.1	1.49	0.1	11.4	0.056	1.19	4.6	3	7.1	7.9	60	1.2
60	M486010	0.1	0.285	3.89	27.6	7.7	0.03	1040	55.8	2.09	10.2	1	40	49	142	<0.002	0.06	0.07	2.4	1	1.8	30.8	1.36	0.08	12.2	0.057	1.05	3.2	3	3.6	6.3	116	1.2
61	M486011	0.1	0.309	4	26.5	8.6	0.03	362	20	1.99	10	0.8	40	45.2	147.5	<0.002	0.12	0.05	2.4	2	3.4	29.3	1.14	0.07	13.4	0.055	1.1	2.5	3	9.4	5.7	25	1.5
62	M486012	0.1	0.087	3.85	26.8	7.9	0.03	203	27.5	2.12	10.5	1	30	29.5	133	<0.002	0.04	<0.05	2.3	1	3.6	32.5	0.95	0.05	10.7	0.049	0.88	2.4	3	17.1	6.3	16	1.2
63	M486013	0.1	0.083	3.46	26.8	8.7	0.04	168	21	1.83	10.2	0.8	30	25.4	124.5	<0.002	0.39	<0.05	2.3	1	8.4	25.5	1.03	<0.05	10.5	0.048	0.77	3	4	2.3	6.5	17	1.2
64	M486014	0.1	0.047	3.44	28.4	8	0.03	166	1.77	2.01	12.1	0.9	20	15	116.5	<0.002	0.29	<0.05	2.2	1	6.8	26.9	1.12	<0.05	8.3	0.051	0.66	3	3	1.4	7.7	14	1.4
65	M486015	0.1	0.079	3.85	24.1	4.1	0.03	369	1.2	1.99	14.3	1.5	30	23.9	137	<0.002	0.09	0.08	2.4	1	4.4	30.7	1.23	0.06	10.1	0.054	1.01	3	3	13.1	8	19	1.5
66	M486016	0.1	0.229	3.7	23.2	6	0.04	386	20.8	1.33	15.3	0.9	30	42.8	156.5	<0.002	0.33	0.09	2.5	1	11.5	23.4	1.53	0.11	8.9	0.048	1.23	3.6	4	19.6	8.5	23	2
67	M486017	0.1	0.116	3.54	24.5	3.4	0.02	178	6.43	2.31	9	0.5	30	41.2	111.5	<0.002	<0.01	0.06	2.6	1	0.9	32.1	0.9	<0.05	10.6	0.055	0.6	1.6	3	5.4	5.6	20	1.2
68	M486018	0.1	0.817	3.17	17.1	8.4	0.04	494	317	1.12	8.5	1	30	83.9	142.5	0.009	0.31	0.17	2.7	1	17.2	18.8	0.94	2.62	9.7	0.043	1.22	1.5	7	86.8	3.9	35	1.3
69	M486019	0.1	2.42	2.52	22.1	11.2	0.04	946	360	0.13	8.4	0.2	40	118.5	165	0.011	1.08	0.36	2.8	1	21.8	5.4	1.02	8.13	13.4	0.032	1.6	1.9	5	277	3.6	86	1.2
70	M486020	0.1	2.77	3.28	25.9	10.5	0.05	1720	90.9	0.35	16.8	1	30	62.6	213	<0.002	0.36	0.25	2.7	1	14.5	9.8	1.8	0.9	12.6	0.048	2.38	2.8	4	19.7	8.4	532	1.8
71	M486021	0.1	0.149	3.83	26.1	4.8	0.03	254	23.2	2.29	10.1	0.2	30	30.5	149.5	<0.002	0.02	0.09	3.3	1	1.9	37	1.85	0.09	15.1	0.054	0.98	2.1	3	3.2	6.1	18	1.1
72	M486022	0.1	0.134	3.37	25.3	5.5	0.04	179	42.5	1.58	9.2	0.7	30	28	138.5	<0.002	0.36	0.08	3	1	11.1	24.3	1.35	<0.05	15.6	0.046	0.88	1.9	4	3.2	5.7	22	2.1
73	M486023	0.1	0.088	3.59	25.9	4.5	0.03	184	3.31	2.2	11.2	0.4	30	28	132.5	<0.002	0.21	0.07	2.9	1	5.8	29	2.51	<0.05	15.6	0.053	0.71	3.7	3	1.6	7	18	1.2
74	M486024	0.1	0.244	3.57	27.2	5.6	0.03	297	23.3	1.88	9.3	0.7	30	40.5	141	<0.002	0.1	0.1	3.7	1	8.6	26.9	1.95	0.09	16.3	0.051	0.88	2.3	4	7.7	5.8	25	2
75	M486025	0.1	0.157	3.59	25.8	5.3	0.02	154	24.2	1.98	19.5	0.3	30	21.6	139	<0.002	0.24	0.07	3.4	1	5.8	28.4	2.81	0.13	15.1	0.048	0.87	6.3	3	5.1	12.4	13	1.3
78	M486028	0.1	0.089	3.18	24.9	5.4	0.09	333	12.2	2.61	14.7	1.2	140	21.1	115	<0.002	0.02	0.09	3.8	1	1.4	78.6	2.48	<0.05	14.3	0.085	0.58	4.8	7	2	13	27	2.1
79	M486029	0.1	0.069	3.51	28.9	4.7	0.03	155	23.5	1.91	15.7	0.3	30	13.7	136.5	<0.002	0.34	0.06	3.4	1	10.2	27.4	1.99	<0.05	14.8	0.047	0.78	4	3	2.2	11	13	1.1
80	M486030	0.1	0.043	3.56	28.1	3.7	0.03	251	23.2	2.47	13.8	0.7	30	41.5	131	<0.002	0.01	0.09	3.1	1	1.4	30.1	1.8	<0.05	19.6	0.055	0.64	3.7	3	1.9	9.1	19	1.9
81	M486031	0.1	0.024	3.46	26	3.5	0.03	191	7.53	2.4	16.1	0.3	30	20.7	123	<0.002	0.01	0.07	3	1	1.8	28	2.05	<0.05	16.2	0.053	0.59	5.1	3	0.8	10.4	17	1.5
82	M486032	0.1	0.074	3.65	24.7	4.7	0.03	237	7.13	2.36	13.7	0.7	30	33.4	139	<0.002	<0.01	0.09	3	1	1	33.3	1.73	<0.05	17.3	0.054	0.81	4	3	1.2	8.8	18	2.4
83	M486033	0.1	0.057	3.61	23	4.9	0.03	214	3.27	2.32	12.4	0.3	30	27.4	139	<0.002	0.01	0.11	2.6	1	1.9	31.7	1.52	<0.05	16.4	0.053	0.87	2.8	3	1.7	6.9	18	1.6
84	M486034	0.1	0.202	3.77	26	4.7	0.03	340	6.41	2.19	12.5	1	40	40.6	143	<0.002	0.12	0.09	3	1	3.1	32.9	1.71	0.06	15.3	0.055	0.91	3.8	3	5.7	8.2	45	1.9
85	M486035	0.1	0.21	4	25	4.3	0.03	631	17.15	2.05	14.9	0.3	30	47	141.5	<0.002	0.01	0.08	2.8	1	1.8	32.2	1.23	0.06	14.7	0.053	1.01	3.8	3	7.2	9.7	27	1.3
86	M486036	0.1	0.838	3.51	24.5	5.8	0.03	438	47.3	1.77	9.1	0.9	30	37	137	<0.002	0.13	0.1	2.6	1	9	27.7	1.1	0.52	9.9	0.048	0.97	2.1	4	9.2	6.2	25	1.9
87	M486037	0.1	0.079	3.5	27.2	3.3	0.03	178	1.9	2.41	9.4	0.3	30	14.5	112	<0.002	0.04	0.06	2.8	1	3.8	33.3	1.19	<0.05	12	0.051	0.53	3.5	3	0.8	8	20	1.7
88	M486038	0.1	0.028	3.52	24.2	3.4	0.03	194	1.72	2.4	10.4	0.7	30	13.7	109.5	<0.002	0.02	0.07	2.7	1	2.5	31.1	1.16	<0.05	11.7	0.054	0.54	3	3	0.7	8.4	20	1.7
89	M486039	0.1	0.242	3.74	22.6	3.9	0.03	289	4.11	2.07	11.2	0.3	30	23.9	132.5	<0.002	0.02	0.08	2.5	1	2.1	31.8	1.29	0.06	10.9	0.053	0.99	3.2	3	6.8	7.2	20	1.5
90	M486040	0.1	0.106	3.96	28.8	4	0.03	276	4	2.59	10.5	0.2	40	22	130	<0.002	<0.01	0.08	3.3	1	1.1	36	2.03	<0.05	16	0.059	0.86	3.4	3	1.8	8.2	23	1.3
91	M486041	0.1	0.036	3.45	25.4	3.6	0.03	191	5.81	2.37	12.5	0.5	30	14.8	132.5	<0.002	0.16	0.08	3.4	1	3.3	33.8	1.62	<0.05	16.4	0.051	0.73	3.9	3	1.4	8	12	1.4
92	M486042	0.1	0.021	3.51	26.3	2.9	0.03	217	13.2	2.54	14.7	0.3	40	17.5	131	<0.002	0.02	0.09	3.1	1	1	33.6	1.63	<0.05	16.7	0.053	0.69	3.1	3	0.9	8.3	13	1.2
93	M486043	0.1	0.027	3.51	25.6	4.3	0.03	198	12.45	2.21	13.3	0.2	30	19.1	133.5	<0.002	0.12	0.07	2.6	1	5.2	31	1.37	<0.05	15.3	0.054	0.77	2.4	4	1.5	6.8	15	1.1
94	M486044	0.1	0.03	3.56	29.2	3.8	0.03	198	5.46	2.28	13.5	0.4	30	24.4	132.5	<0.002	0.08	0.07	2.6	1	3.8	31.7	1.46	<0.05	20.6	0.052	0.76	3.5	4	1.9	8.1	19	1.4
95	M486045	0.1	0.086	3.7	23.1	5	0.03	255	4.08	2.06	13.5	0.2	30	27.5	149.5	<0.002	0.03	0.09	2.6	1	5.5	31.4	1.47	0.06	14	0.05	1.09	2.9	3	5.9	7	20	1.2
96	M486046	0.1	0.121	3.42	25.3	4.9	0.03	191	49	1.68	11.1	0.2	20	17.4	143	<0.002	0.47	0.08	2.6	1	7.6	26.5	1.34	0.07	14.5	0.046	0.94	2.8	4	5.9	6.4	37	1.1
97	M486047	0.1	0.179	3.51	25.9	5.1	0.03	232	306	2.05	13.2	0.3	30	22.5	139	0.004	0.2	0.08	2.8	1	6.8	29.8	1.62	0.07	16.2	0.048	0.92	3.3	4	4	7.7	17	1.3
98	M486048	0.1	0.088	3.45	22.8	9.8	0.04	136	26.5	1.48	11.5	0.3	30	19.1	145.5	<0.002	0.35	0.1	2.6	1	13.5	25.5	1.14	<0.05	14.2	0.047	1.05	2	5	3.9	5.2	18	1.3
99	M486049	0.1	0.416	3.95	23.4	5	0.04	446	42.6	1.57	10.9	0.2	30	57.6	164	<0.002	0.57	0.1	2.7	1	11.6	27	1.16	0.18	13.5	0.049	1.36	2.8	4	17.1	5.2	177	1
100	M486050	0.1	0.176	3.52	25.1	4.9	0.04	133	3.85	1.81	11.9	0.4	40	21.3	132	<0.002	0.42	0.07	2.6	1	10.6	28.3	1.39	0.06	10.7	0.047	0.88	3.3	4	4.1	7.3	27	1.3
103	M486053	0.1	0.024	3.8	25.5	5.5	0.03	222	2.33	2.52	12.7	0.5	40	23.4	131.5	<0.002	0.03	0.09	2.6	1	1.4	36.4	1.39	<0.05	13.5	0.057	0.86	2.7	4	2.6	7.4	19	1.3
104	M486054	0.1	0.034	3.63	24.5	5.7	0.03	200	2.37	2.46	11.4	0.5	30	21.6	125.5	<0.002	0.03	0.08	2.6	1	1.3	34.9	1.27	<0.05	13	0.054	0.75	2.8	3	4.8	6.9	19	1
105	M486055	0.1	0.036	3.68	24.7	4.7	0.03	251	8.18	2.5	12.4	0.7	30	19.4	123.5	<0.002	0.04	0.09	2.7	1	1.7	32.8	1.5	<0.05	13.5	0.057	0.76	3.4	3	2.1	7.9	18	1.6
106	M486056	0.1	0.079	3.55	23.6	5.8	0.03	432	72.6	1.68	11.1	0.6	30	146.5	141.5	<0.002	0.27	0.1	2.6	1	6.5	24.7	1.34	0.08	13.6	0.049	1.16	1.8	6	14.9	5.5	49	1.1
107	M486057	0.1	0.083	3.53	24.9	6.8	0.04	247	12.55	1.54	8.9	0.9	30	27	145.5	<0.002	0.53	0.06	2.4	1	10	24.3	0.97	0.06	14.2	0.045	1.04	1.5	6	5.5	4.4	18	1
108	M486058	0.1	0.077	3.5	23.4	4.8	0.03	223	388	1.89	10.4	0.6	30	23.4	132	0.004	0.35	0.08	2.2	1	7.6	27.2	1.09	0.05	12.2	0.046	0.91	1.8	4	3.7	5	15	1.1
109	M486059	0.1	0.111	3.53	25.4	5.7	0.04	252	24.1	1.52	10	0.4	30	23.4	148.5	<0.002	0.76	0.09	2.5	1	13.4	24.3	1.14	0.05	12.8	0.044	1.06	2.1	4	11.9	5.3	14	1
110	M486060	0.1	0.042	3.66	26.5	3.8	0.03	275	4.33	2.47	12.3	0.5	40	21.4	124.5	<0.002	0.03	0.1	2.6	1	1.5	33.3	1.47	<0.05	14	0.056	0.76	3	3	5.1	7.7	17	1.3
111	M486061	0.1	0.059	3.82	25.7	7.5	0.03	189	12.35	2.15	12.1	0.7	30	16.6	145	<0.002	0.17	0.09	2.8	1	6.1	33.1	1.44	0.05	14	0.052	1.02	2.9	4	5.4	6.8	22	1.2
112	M486062	0.1	0.127	3.45	26.4	7.6	0.04	171	8.46	1.35	10.1	0.6	30	19.9	145.5	<0.002	0.69	0.09	2.7	1	14.8	21.8	1.11	0.07	14.5	0.046	1.1	1.8	4	5.2	5.4	25	1
113	M486063	<0.1	0.15	3.3	23.6	8.8	0.05	151	33.1	0.93	9.6	0.4	30	14.9	146.5	<0.002	0.68	0.08	2.7	1	17.7	17.2	1.07	0.06	13	0.04	1.09	2	5	10.4	5.6	24	0.9
114	M486064	<0.1	0.297	3.33	24.6	9.4	0.05	370	461	0.65	9.5	0.5	30	44.7	163.5	0.005	0.67	0.11	2.8	1	21.9	15	1.07	0.13	13.1	0.041	1.44	1.7	6	86.7	4.6	28	1.1
115	M486065	0.1	0.186	4.43	23.6	6.8	0.04	550	78.4	1.56	9.8	0.5	30	40.1	164.5	<0.002	0.17	0.1	2.6	1	6.1	30	0.93	0.09	7.8	0.051	1.59	1.9	4	21	5.5	55	1
116	M486066	0.1	0.138	3.83	28	4.3	0.03	248	5.21	2.09	12.7	0.5	30	21.7	124.5	<0.002	0.1	0.07	2.9	1	5.8	31.8	1.64	0.07	10.1	0.053	0.85	4.4	4	9.6	9.1	21	1.1
117	M486067	0.1	0.51	3.62	23.4	6.5	0.05	464	184	0.97	8	0.6	40	52	156	0.007	1.03	0.25	2.6	1	16.8	19	1.1	0.26	10.1	0.04	1.34	3	6	33.8	4.7	78	1.4
118	M486068	0.1	0.154	3.41	24.6	4.7	0.03	178	227	1.63	10.6	0.5	30	23.3	123	0.013	0.45	0.39	2.5	1	8.4	25	1.42	0.09	9.1	0.042	0.85	3.8	4	15.4	7.8	22	1.1
119	M486069	0.1	0.126	3.71	25.2	4.1	0.03	277	4.78	2.25	10.1	0.5	30	21.4	121	<0.002	0.15	9.16	2.6	1	3.4	32.5	1.32	0.07	11.8	0.058	0.73	2.5	3	8	6.9	34	1.1
120	M486070	0.1	0.077	3.74	23.3	4.3	0.03	251	43.9	2.24	8.2	0.6	30	21.2	117.5	<0.002	0.11	1.13	2.7	1	2.8	31.1	1.09	0.07	9.4	0.052	0.79	2.3	3	6.6	5.8	24	1.1
121	M486071	0.1	0.05	3.55	23.1	4.2	0.03	205	7.02	2.21	8.7	0.5	40	16.8	108.5	<0.002	0.09	0.09	2.5	1	2.5	31.4	0.99	<0.05	8.7	0.056	0.6	2	4	1	5.9	18	1.1
122	M486072	0.1	0.074	3.78	26.5	4.5	0.03	242	11.6	2.32	9.4	0.5	40	29.1	116.5	<0.002	0.07	0.06	3.1	1	3	33.9	1.01	<0.05	11.3	0.055	0.67	2.4	4	2.8	6.5	23	1.3
123	M486073	0.1	0.214	3.61	25.7	5.6	0.04	444	27.9	1.84	10.5	0.6	40	29.4	136	<0.002	0.3	0.07	2.8	1	9.1	27.6	1.23	0.09	11.3	0.055	0.96	2.5	4	15.3	6.6	55	1.6
124	M486074	0.1	0.978	3.94	23.5	7.6	0.04	882	4.9	1.51	12.7	0.5	30	62.8	153	<0.002	0.23	0.14	2.5	1	5.3	25.1	1.15	0.11	12.8	0.054	1.49	3.4	3	17.6	7.8	525	1.5
125	M486075	0.1	0.361	3.99	23.4	7.1	0.03	302	71.9	1.78	11.2	0.4	30	64.6	136	<0.002	0.1	0.1	2.3	1	4.5	32.6	1.5	0.08	10.4	0.049	1.24	4.1	3	5.7	7.6	68	1
128	M486078	0.1	0.077	3.7	26.1	6.6	0.03	218	15.65	2.22	7.3	0.6	30	27.7	113.5	<0.002	0.01	0.07	2.3	1	1.5	36.1	0.64	<0.05	10.2	0.054	0.76	1.4	4	2.2	5.3	35	1.1
129	M486079	0.1	0.848	3.91	25.9	5.4	0.04	1240	8.53	1.9	11.9	0.5	40	67.4	143	<0.002	0.17	0.08	2.7	1	4.6	28.9	1.26	0.28	11.5	0.056	1.17	3.6	3	8.7	7.9	423	1.4
130	M486080	0.1	0.359	3.84	25.8	5.5	0.03	278	5.87	2.17	13.9	0.5	30	26	120.5	<0.002	0.1	0.06	2.7	1	2.4	33.5	1.53	0.07	12.2	0.053	0.78	4.5	3	4.3	9.7	109	1.5
131	M486081	0.1	0.172	3.64	24.7	5.1	0.04	234	6.99	1.94	11.9	0.5	40	20.2	120	<0.002	0.38	0.05	2.5	1	7	30.7	1.31	<0.05	12.3	0.049	0.8	4.2	4	7	8.4	26	1.3
132	M486082	0.1	0.176	3.44	27.7	5.9	0.04	163	1.96	1.76	10.8	0.5	40	22.8	115.5	<0.002	0.49	0.05	2.9	1	7.6	29.5	1.1	<0.05	13.7	0.048	0.73	3.9	5	3.2	8.1	24	1.5
133	M486083	0.1	0.2	3.81	25.9	5.5	0.04	219	3.33	2.09	10.8	0.5	40	26	118.5	<0.002	0.19	0.05	2.5	1	5.9	35.7	1.06	<0.05	12.4	0.053	0.8	3.3	4	3.2	7.1	28	1.4
134	M486084	0.1	0.21	3.68	21.6	7.4	0.04	305	13.6	1.7	9.1	0.5	30	23.7	126.5	<0.002	0.3	0.06	2.2	1	7	31.6	0.92	0.06	11.4	0.049	1.05	2.6	4	3.5	5.5	32	1.4
135	M486085	0.1	0.108	3.68	24.3	5.4	0.04	189	256	2.2	9.2	0.7	40	28.1	111	0.002	0.11	0.05	2.4	1	3.9	48.5	0.97	0.05	11.5	0.054	0.62	2.5	4	1.7	6.8	39	2
136	M486086	0.1	0.064	3.63	23.3	5.6	0.04	170	4.24	2.07	11.2	0.6	40	17	107.5	<0.002	0.28	0.05	2.4	1	7.6	41.4	1.13	<0.05	12.7	0.052	0.63	3.7	5	1.8	7.9	34	1.8
137	M486087	0.1	0.05	3.86	26.6	6.8	0.05	208	1.93	2.15	10.8	1.4	60	14.6	124	<0.002	0.13	0.06	2.9	1	6	43.6	1.18	<0.05	14.7	0.057	0.68	3.2	5	1.8	8.4	27	3

N3 #	Sample ID	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
138	M486088	0.1	0.044	3.89	28.5	6.3	0.05	211	5.92	2.38	10.1	0.9	50	20.2	110.5	<0.002	0.01	0.06	2.9	1	1	45.5	1.06	<0.05	15.5	0.058	0.55	3.2	4	0.9	9.2	40	2.7
139	M486089	0.2	0.028	3.76	25.7	5.7	0.05	219	11.8	2.44	11.2	0.8	40	22.4	110	<0.002	<0.01	0.06	2.9	1	0.8	41.6	1.2	<0.05	14.8	0.06	0.49	3.4	4	0.6	9.6	29	3.1
140	M486090	0.1	0.029	3.96	23.9	6.3	0.05	227	13.95	2.48	12.2	0.8	40	20.7	112.5	<0.002	<0.01	0.06	2.8	1	0.8	48.4	1.48	<0.05	13.4	0.059	0.61	4.6	5	0.9	10	28	2.1
141	M486091	0.1	1.125	3.43	25.6	12	0.12	623	19.35	1.61	9.6	0.8	140	39.7	151.5	<0.002	0.54	0.09	3.2	1	15.1	77.1	1.02	0.1	11.9	0.088	1.33	3.2	8	4.7	8.8	601	2.3
142	M486092	0.1	2.9	4.06	24.2	9.6	0.05	767	8.48	1.59	7.4	0.5	60	56.2	162.5	<0.002	0.26	0.12	2.4	1	5.3	37.3	0.76	0.26	11.4	0.06	1.51	1.5	4	4.2	5.3	794	1.2
143	M486093	0.1	0.243	3.29	24.2	10.4	0.15	407	4.35	2.62	12	1.3	210	31.4	116.5	<0.002	0.04	0.07	3.7	1	4.1	88.1	0.99	<0.05	9.8	0.114	0.84	2.3	9	2.4	11	53	1.4
144	M486094	0.1	0.085	3	21.1	6.1	0.04	146	36.6	1.24	8	0.6	30	8.8	119	<0.002	1.22	0.05	2	1	11.1	21	0.95	<0.05	8.7	0.04	0.7	2.3	6	2.5	6.5	16	1.5
145	M486095	0.1	0.121	3.28	26.5	9.3	0.05	137	26.4	0.96	9	0.6	30	16.4	142.5	<0.002	1.25	<0.05	2.4	1	15.3	20.5	1.05	0.07	8.3	0.04	0.91	2.7	7	5	7	14	0.9
146	M486096	0.1	0.098	2.92	24.7	9	0.06	172	134	0.69	7.7	0.7	30	9.7	137.5	<0.002	1.18	0.05	2.3	1	14.5	19.5	0.84	<0.05	7.2	0.035	0.87	2.1	8	3.8	6	14	1
147	M486097	0.1	0.111	3.04	23.7	10.5	0.06	185	272	0.85	9.4	0.7	30	14	137.5	<0.002	1.12	0.07	2.5	1	14	22.3	0.94	0.06	7.9	0.044	0.9	2.3	9	4	6.1	30	1
148	M486098	0.1	0.018	3.76	29.3	5.7	0.04	201	2.48	2.45	10.8	0.6	50	14.2	107	<0.002	<0.01	0.05	2.8	1	0.6	39.4	1.26	<0.05	13.4	0.059	0.43	3.2	4	0.9	9.3	21	1.3
149	M486099	0.1	0.064	3.89	26.2	6.4	0.05	381	6.1	2.29	13	0.7	50	29.2	120	<0.002	0.09	0.06	3.1	1	2.3	42.1	1.43	<0.05	12.6	0.061	0.66	4.1	5	4	10.2	25	1.6
150	M486100	<0.1	1.75	2.69	25.5	17.3	0.07	1540	71.6	0.05	9.3	0.7	40	50	204	<0.002	2.01	0.19	2.3	1	16.7	1.7	1.17	2.15	7.5	0.05	2.05	3.4	6	46.9	4.3	920	1
153	M486103	0.1	1.955	3.04	30	18	0.07	2630	12.85	0.06	9.9	0.5	40	189	222	<0.002	1.55	0.26	1.9	1	11.9	5	0.97	2.16	7.4	0.053	2.66	2.3	5	23.5	4.2	1330	1
154	M486104	0.1	5.48	3.09	29.4	19	0.07	1980	27.2	0.06	11.3	0.2	50	126.5	242	<0.002	2.08	0.18	2.1	1	19.6	1.8	1.03	1.8	6.8	0.051	2.63	2	5	93.9	3.8	2730	1
155	M486105	<0.1	0.736	2.44	29	17.8	0.07	995	165.5	0.04	6.5	<0.2	30	69.7	188.5	0.006	1.41	0.24	2.6	1	25.4	1.3	0.6	1.97	6.9	0.044	1.83	0.6	8	44.3	2.8	54	0.9
156	M486106	<0.1	0.915	3.94	23.3	17.2	0.09	1480	320	0.34	9.1	0.7	70	185.5	204	0.009	0.33	0.16	2.7	1	16	24.3	1.01	0.52	8.9	0.063	2.36	1.4	8	66.3	3.6	321	1
157	M486107	0.1	0.865	4.1	21.1	18.4	0.08	698	98.2	1.51	9.9	0.9	100	92.5	164	<0.002	0.13	0.1	2.6	1	3	60.6	1.12	0.3	8.3	0.075	1.5	1.9	7	8.9	5.5	211	1.3
158	M486108	0.1	0.051	3.49	25.1	8	0.11	320	8.1	2.4	9.8	1.4	100	16.3	101.5	<0.002	<0.01	0.05	2.8	1	0.8	88.4	1.05	<0.05	12	0.077	0.48	2.3	8	1	10.3	44	1.1
159	M486109	0.1	0.03	3.38	25.8	7.4	0.14	296	9.05	2.44	10.1	2.3	120	16.2	98.5	<0.002	0.01	0.05	3.2	1	0.7	99.1	1.11	<0.05	10.8	0.084	0.44	2.5	10	0.7	10.3	45	1.7
160	M486110	0.1	0.024	3.49	22.1	7.3	0.12	293	5.38	2.53	10.6	1.6	110	13.4	97.6	<0.002	0.02	<0.05	2.9	1	0.8	98.9	1.14	<0.05	13.2	0.081	0.45	3.3	8	0.6	10.9	36	1.2
161	M486111	0.1	0.025	3.57	24.5	6.8	0.11	341	13.55	2.56	11.7	1.4	110	16.9	99.9	<0.002	0.02	0.05	2.8	1	0.9	105	1.31	0.06	12.3	0.082	0.5	3.6	8	0.7	11.7	45	1.1
162	M486112	0.1	0.04	3.48	22.2	6.7	0.09	370	10.1	2.46	9.5	1.2	110	17.7	101	<0.002	0.02	0.05	2.6	1	1	98.4	0.98	<0.05	10.1	0.079	0.55	2.3	8	1.3	8.3	27	1.1
163	M486113	0.1	0.031	3.57	23.3	6.2	0.09	326	25.3	2.43	9.8	1.3	90	13.3	100	<0.002	0.01	0.05	2.6	1	0.9	84.5	1.09	<0.05	11.5	0.075	0.52	2.7	8	1.5	9.4	44	1.2
164	M486114	0.1	0.101	3.57	28.4	7.3	0.1	378	5.83	2.42	11.3	3.1	110	19.5	113	<0.002	0.11	0.07	3.2	1	2.6	93.8	1	0.06	14	0.079	0.63	2.9	8	4.1	9.4	55	1.2
165	M486115	0.1	0.095	3.91	25.7	7.3	0.08	405	53.5	2.3	10.2	2.7	100	20.8	139	<0.002	0.07	0.07	3.1	2	4.9	84.9	1.03	0.09	10.5	0.071	0.91	3.5	7	12.7	6.6	32	1.1
166	M486116	0.1	0.169	4.03	23.2	8.7	0.08	305	19.4	2.03	10.2	2.2	90	17.4	148.5	<0.002	0.53	0.08	3	1	10.5	73.5	0.97	0.1	13.2	0.062	1.01	4.2	8	17	6.4	24	0.9
167	M486117	0.1	0.292	3.89	25.5	12.9	0.11	308	61.3	1.31	8.3	2.4	90	7.7	173.5	0.002	1.5	0.08	3.1	1	23.1	46.6	0.8	0.16	8	0.071	1.22	3.1	11	24.3	4.5	15	1
168	M486118	<0.1	0.296	3.55	26.6	13.9	0.1	254	1330	1.05	6.3	1.8	60	6.6	170	0.14	1.12	0.09	3.6	1	33	35.9	0.56	0.25	7.6	0.049	1.13	1.9	11	37.2	3.4	12	0.7
169	M486119	0.1	0.131	4.03	29.1	9.8	0.09	268	183.5	2.13	10.5	2.5	80	11	149	0.017	0.38	0.07	3.4	2	12.4	82.3	1.03	0.12	14.3	0.071	0.93	3.8	9	12.9	6.9	26	1.1
170	M486120	0.1	0.145	3.62	25.7	11.1	0.09	282	84.8	1.51	8.8	2.5	70	14.4	146.5	<0.002	1.39	0.06	3.1	2	16.7	57.4	0.75	0.11	9	0.066	0.89	2	9	9.5	4.9	25	0.9
171	M486121	0.1	0.231	3.72	24.1	13.6	0.1	280	107.5	1.02	8.6	2.6	70	9.3	180.5	0.002	1.03	0.07	3.5	2	28.6	43.2	0.79	0.14	7.7	0.061	1.1	1.7	10	33.6	4.3	17	0.9
172	M486122	0.1	0.036	3.77	25.9	8.4	0.11	315	6.45	2.67	10.1	2.3	100	16	109	<0.002	0.03	0.06	3.1	2	1.3	94.8	0.9	0.06	9.3	0.084	0.56	2.9	8	1.4	7.6	44	1.1
173	M486123	0.1	0.052	3.63	25.5	9.6	0.1	350	19.2	2.38	12.1	2.3	110	16.3	121.5	<0.002	0.19	0.08	3.3	2	4.9	89.9	1.27	0.1	11.7	0.082	0.63	3	8	10.5	8.8	59	1.1
174	M486124	0.1	0.053	3.52	21.6	9.6	0.1	233	60.9	2.19	11.1	2.1	100	20.4	124	<0.002	0.34	0.05	3	2	9.7	85.2	1.1	<0.05	12.8	0.074	0.65	4.9	8	2.2	9.2	38	1
175	M486125	0.1	0.063	3.65	26.7	11.5	0.14	326	43	2.69	10.8	2.7	140	14.8	121.5	<0.002	0.17	0.06	3.8	2	5.1	114.5	0.99	0.05	18.1	0.089	0.68	4.7	9	1.8	10.8	45	1.2
178	M486128	0.1	0.019	3.64	31	8.3	0.1	284	8.11	2.74	10.1	1.9	100	14.2	109	<0.002	0.02	0.07	2.9	<1	1.4	112	0.99	<0.05	11.5	0.084	0.58	1.9	8	0.8	9.2	43	1.3
179	M486129	0.1	1.24	3.94	24.7	17.9	0.13	1440	58.5	1.39	10.8	2	130	109.5	194	<0.002	0.55	0.18	2.9	<1	10.8	69.9	0.99	0.3	9.3	0.092	1.99	2.9	10	9.3	6.1	942	1.1
180	M486130	0.1	0.159	3.8	25.4	12	0.11	360	32.2	2.38	11.9	2.3	100	23.4	137	<0.002	0.12	0.09	2.9	<1	6.8	99.8	1.12	<0.05	9	0.086	0.86	1.9	9	2.7	8.1	49	1.5
181	M486131	0.1	0.132	3.79	26.6	10.3	0.12	395	7.53	2.57	10.7	2.4	130	19.6	124.5	<0.002	0.28	0.09	2.7	<1	5.5	109.5	0.9	0.07	11.1	0.091	0.75	2.3	9	5.1	8.4	59	1.5
182	M486132	0.1	0.068	3.63	26.7	7.8	0.11	314	5.19	2.59	10.6	2.4	120	19.1	113	<0.002	0.23	0.07	2.8	<1	3.1	111.5	0.94	0.05	12.5	0.087	0.64	3.2	9	2.1	9.5	41	1.1
183	M486133																																
184	M486134																																
185	M486135	0.1	0.131	3.41	24.8	13.1	0.16	460	9.26	2.35	10.9	2.5	230	15.6	134	<0.002	0.45	0.08	3.3	<1	8.8	108.5	0.82	0.08	12.3	0.108	0.97	3	12	7.6	10	50	1.1
186	M486136	0.1	0.147	3.78	23.3	12.1	0.12	365	13.4	2.21	9.6	1.7	150	25.1	147.5	<0.002	0.32	0.09	2.9	<1	11.1	102.5	0.76	0.14	12.2	0.083	1.07	1.6	10	12.3	7.9	54	1
187	M486137	0.1	0.098	3.69	28.1	8.7	0.12	383	4.69	2.51	10.7	2.6	140	16.1	125	<0.002	0.21	0.08	3	<1	5.8	113	0.98	0.12	14.3	0.09	0.8	2.8	10	14.5	9.4	45	1.7
188	M486138	0.1	0.068	3.56	21.8	10.2	0.11	354	146	2.51	9.4	2.4	130	16.2	116.5	<0.002	0.04	0.06	3.1	2	2.7	109	0.82	0.05	12.4	0.085	0.74	2.8	8	2.4	7.9	52	1
189	M486139	0.1	0.167	3.77	25.8	12.7	0.13	398	73.8	2.39	10.9	5.6	130	20.4	135	0.005	0.42	0.08	3.4	2	9.9	104.5	1.01	0.05	16	0.084	0.84	4.5	10	4.6	11.4	59	1.3
190	M486140	0.1	0.043	3.51	29.6	10.8	0.12	421	13.65	2.72	11.9	3.5	140	19.9	114	<0.002	0.04	0.07	3.7	2	1.8	124	1.12	<0.05	16.6	0.09	0.63	4	9	1.7	12.6	50	1.2
191	M486141	0.1	0.034	3.63	27	9.3	0.1	361	22.8	2.61	11.5	3.4	110	16.4	116.5	<0.002	0.04	0.07	3.3	2	1.9	98.7	1.16	0.05	16.8	0.08	0.65	3.6	7	1.5	10.4	45	1.4
192	M486142	0.1	0.137	3.74	28.3	8.7	0.06	285	31.4	2.4	9.2	4.3	70	21.2	122	<0.002	0.09	0.05	3.4	2	3.3	76.4	0.81	0.05	12.3	0.071	0.74	2.4	7	3.3	6.9	32	1.6
193	M486143	0.1	0.144	3.62	23.5	11.2	0.07	273	12.8	1.74	9.8	3.9	60	16	143.5	<0.002	0.8	0.06	2.9	2	15.2	59.3	0.89	0.05	9.7	0.063	0.98	4.1	7	4.5	5.6	54	1.2
194	M486144	0.1	0.1	3.83	26.5	12.3	0.1	291	4.07	2.41	11.5	3.8	120	14.8	138	<0.002	0.66	0.07	3.3	2	7.4	92.9	1.11	0.08	17.9	0.079	0.92	3.6	8	6.3	9.4	43	1.3
195	M486145	0.1	0.233	3.94	22.6	12.4	0.08	519	125.5	1.77	10.2	3.3	90	41.2	164	0.003	0.3	0.1	3.1	1	7.8	74.9	0.95	0.28	11.8	0.074	1.48	2.3	7	14.5	5.8	67	1.1
196	M486146	0.1	0.253	4.03	22.6	13.8	0.1	438	18.05	2.09	9.5	2.4	110	28.6	105	<0.002	0.12	0.1	2.4	1	6.3	86.4	1.01	0.14	11.2	0.082	1	2.3	10	9.1	6.9	66	1.6
197	M486147	<0.1	0.664	4.44	25.2	20.6	0.11	612	68.6	0.92	7.7	4.7	110	19	171.5	<0.002	1.09	0.13	2.6	1	23.9	37.8	0.8	0.17	10.9	0.064	1.76	6.1	9	21.8	4.7	434	0.8
198	M486148	0.1	0.334	4.29	20.3	34.8	0.32	670	7.16	1.48	8.5	2.3	470	13.3	137	<0.002	1.19	0.13	4.7	1	38.2	120.5	0.61	0.11	5.5	0.17	1.88	5.5	24	110.5	10.4	61	1.9
199	M486149	0.1	0.144	4.24	25.4	11	0.09	512	88.9	2.39	10.4	2.5	130	20.2	105.5	<0.002	0.12	0.09	2.6	1	5.3	89.3	1.15	0.07	10.9	0.085	1.18	2.3	9	11.2	7.7	45	1.1
200	M486150																																
203	M486153	0.1	0.317	4.04	27.3	12.4	0.07	489	169.5	1.11	8.2	0.9	50	33.4	129	0.005	0.78	0.11	2.4	1	23.1	24.5	1.06	0.16	12.1	0.049	1.49	2.7	6	19.4	4.3	61	1.1
204	M486154	0.1	1.545	4.86	27.1	14.4	0.08	2160	21.8	0.79	8.3	1.4	60	195	115.5	<0.002	0.48	0.19	2.3	1	8.8	31.6	0.87	0.25	11.3	0.072	2.6	1.4	6	10.7	4	549	1
205	M486155	0.1	0.782	3.51	27.4	11.8	0.14	785	56.7	2.25	9.5	1.8	140	60.6	93.5	<0.002	0.55	0.09	2.5	1	5.1	116.5	0.99	0.15	13.5	0.093	0.98	2.1	11	9.7	7.8	948	1.1
206	M486156	0.1	0.036	3.41	26.6	8.2	0.15	375	3.09	2.77	9.3	2.2	150	10.1	93.4	<0.002	0.01	0.06	2.4	1	0.9	134.5	0.89	<0.05	13	0.096	0.47	2.3	10	0.6	9	40	1.2
207	M486157	0.1	0.026	3.58	26.4	8.5	0.12	359	42.6	2.71	11.8	2.1	120	13.9	91.2	<0.002	0.04	0.06	2.5	1	1.2	113.5	1.64	<0.05	15.5	0.086	0.48	3.8	9	0.9	9.8	35	1.1
208	M486158	0.1	0.034	3.56	24.7	9.3	0.12	297	41.5	2.49	9.6	1.9	110	11.4	95.5	<0.002	0.04	0.05	2.3	1	1.9	101.5	1.05	<0.05	13.3	0.082	0.54	2.7	8	1.1	8.1	34	1.1
209	M486159	0.1	0.126	3.59	26	8.4	0.1	338	6.04	2.48	9.2	1.9	120	13.3	100.5	<0.002	0.06	0.06	2.2	1	3.2	101	0.98	0.07	13.1	0.082	0.6	2.3	8	2.2	7.3	40	1.1
210	M486160	0.1	0.05	3.56	27.8	8.6	0.12	378	2.35	2.69	9.9	1.7	130	16.4	95.8	<0.002	0.01	0.06	2.4	1	0.8	115.5	1.32	<0.05	14.5	0.086	0.56	2.6	9	0.8	9.5	41	1.1
211	M486161	0.1	0.05	3.59	26.7	9.8	0.14	415	3.35	2.58	10.3	2.1	150	16.1	103	<0.002	0.07	0.06	2.4	1	3.3	116.5	1.25	<0.05	14.5	0.094	0.61	2.3	10	1.5	8.9	43	1.1
212	M486162	0.1	0.022	3.4	23.6	9.2	0.14	426	3.49	2.68	9.4	1.8	140	14.5	97.2	<0.002	0.01	0.06	2.4	1	1.1	128	1.04	<0.05	11.6	0.089	0.53	2.7	10	0.9	10.2	53	1.1
213	M486163	0.1	0.356	3.33	25.2	16.2	0.2	636	17.15	2.46	10	2	290	37.2	87	<0.002	0.2	0.12	2.7	1	4.8	149	1.05	0.08	13	0.114	1.05	3.4	14	2.4	10.9	190	1.3
214	M486164	0.1	0.118	3.48	29.7	10.1	0.12	362	3.3	2.53	8.5	1.6	140	20.2	104	<0.002	0.1	0.06	2.3	1	5.1	119.5	0.86	<0.05	15	0.093	0.69	2.2	10	2	8.3	72	1
215	M486165	0.1	0.202	3.95	25.8	11.8	0.11	691	45.7	2.06	11.2	1.8	100	23.6	101	<0.002	0.16	0.1	2.5	1	8.4	82.7	1.22	0.18	13.8	0.086	1.19	2.3	9	7.9	8.1	77	1.2
216	M486166	0.1	0.083	3.49	25.7	9.5	0.12	365	2.93	2.31	9	1.7	150	18	118	<0.002	0.11	0.13	2.2	<1	3.9	128.5	0.91	<0.05	12.9	0.091	0.93	2	11	1.5	7.7	46	1.2
217	M486167	0.1	1.42	3.35	21.3	19.7	0.1	1500	44.1	0.63	8.5	1.9	100	213	217	<0.002	1.27	0.31	2.3	<1	12	39.1	0.87	2.22	10.1	0.076	2.89	2.2	10	20	3.7	431	1.2
218	M486168	0.1	1.92	4.08	19.9	12.2	0.15	1440	60.7	1.6	7.3	2.1	170	57.1	178	0.003	0.54	0.17	2.3	1	4.8	132.5	0.73	0.27	9.6	0.108	2.16	1.9	12	8.1	8.2	727	1
219	M486169	0.1	0.124	3.39	21.5	9.8	0.17	811	1.15	2.45	7.8	2.7	200	23.7	96.3	<0.002	0.03	0.14	2.3	<1	1.3	190.5	0.76	0.06	12.2	0.107	0.8	3.3	13	1.3	12	89	1
220	M486170	0.1	0.096	3.22	19.4	11.2	0.16	675	4.52	2.51	9.8	2.6	190	18.4	93.8	<0.002	0.05	0.13	2.9	1	2.6	196	0.95	0.06	9.7	0.108	0.76	3.6	14	1.6	10.6	74	1
221	M486171	0.1	0.081	3.33	19.7	11.7	0.17	588	6.14	2.32	9.6	3.2	190	19.6	103	<0.002	0.1	0.12	2.8	1	4	178	0.9	0.06	9	0.104	0.89	4.1	13	2.8	9.7	74	1
222	M486172	0.1	0.062	3.04	20	10.9	0.17	528	6.48	2.43	8.5	2.6	190	18.6	89.1	<0.002	0.09	0.1	2.6	1	4.6	184	0.8	<0.05	8.7	0.105	0.66	2.8	14	2.6	9.5	61	1
223	M486173	0.1	0.032	2.43	23.5	19.2	0.46	935	5.29	3.11	10.9	3.2	660	11.7	84.8	<0.002	0.06	0.1	4.6	1	2.5	309	0.66	0.1	5.3	0.243	0.64	1.7	29	1	16.8	98	1.9
224	M486174	0.1	0.031	3.32	21.8	7.6	0.12	324	10.25	2.38	9.6	1.7	120	10	87.4	<0.002	0.11	0.09	2.5	1	2	126	0.95	<0.05	9.9	0.081	0.55	2.5	9	0.9	8.1	29	1.2
225	M486175	0.1	0.08	3.38	23.8	8.6	0.14	478	5.76	2.23	11.7	2.5	150	14.2	98.1	<0.002	0.05	0.1	2.6	1	3.1	125.5	1.22	0.1	10.6	0.095	0.7	3.6	11	5.1	10.4	68	1.6
228	M486178	0.1	0.081	3.2	20.5	9.6	0.15	428	8.28	2.21	7.5	2.5	150	9.4	100	<0.002	1	0.09	2.4	1	6.3	153.5	0.74	0.06	8.6	0.086	0.66	2.4	13	4.3	8.7	52	1.1
229	M486179	0.1	0.288	3.28	21.6	10.5	0.16	883	4.61	2.15	8.1	3.2	180	17	116.5	<0.002	0.32	0.14	2.4	1	3.5	163	0.71	0.09	8	0.108	1.19	2.3	14	7.4	8.8	175	1.1
230	M486180	0.1	0.78	3.42	24.5	12.7	0.15	569	7.87	1.96	8	3	170	25.8	129.5	<0.002	0.6	0.12	2.6	1	8.5	145.5	0.74	0.09	9.9	0.098	1.17	3.4	14	9.4	8	190	1
231	M486181	0.1	0.211	3.56	23	9.5	0.13	598	13.3	2.06	6.8	2.8	150	27.3	123	<0.002	0.34	0.12	2.4	1	7.3	141.5	0.59	0.09	8.6	0.092	1.1	2.4	12	8.7	6.5	133	1.3
232	M486182	0.1	1.75	3.74	24.9	12	0.11	1360	65	1.15	6.8	2.5	100	65.8	187.5	<0.002	1.03	0.16	2.5	1	10.2	78.1	0.59	0.24	7.5	0.088	2.2	1.9	11	8.1	4	1140	1.1
233	M486183	0.1	0.156	3.08	23.2	14.6	0.1	342	215	0.67	5.1	2.8	60	23.4	156.5	<0.002	2.87	0.12	2.5	2	28.5	41.9	0.42	0.08	6.9	0.058	1.14	1.5	13	6.2	3.2	42	2.1
234	M486184	<0.1	0.521	3.26	22.6	14	0.1	1310	26.3	0.79	6.4	2	80	50.8	173.5	<0.002	1.56	0.16	2.2	1	16.4	47.6	0.53	0.19	6.6	0.064	1.72	1.3	9	34.9	3.4	489	0.9
235	M486185	0.1	0.102	3.18	22.8	10.9	0.08	239	35.3	1.63	6.2	2.5	100	11.8	114.5	<0.002	0.49	0.12	2.1	1	12.6	101.5	0.55	<0.05	8.2	0.067	0.78	1.5	10	2.9	4	50	1.2
236	M486186	0.1	0.034	3.24	30.5	7.6	0.11	398	2.28	2.58	8.3	2.3	130	12.7	81.6	<0.002	0.02	0.1	2.8	1	1.1	150.5	0.71	<0.05	11.2	0.087	0.54	2.4	10	0.9	8.3	63	1.3
237	M486187	0.1	0.114	3.56	21.5	9.7	0.09	614	48.8	1.75	7.5	2.2	90	21.4	128	<0.002	0.37	0.13	2.2	1	8.3	110	0.69	0.07	8.5	0.071	1.11	2.7	10	3.5	4.9	73	1.2
238	M486188	0.1	0.057	3.4	26.6	11.2	0.11	233	29.8	1.95	7.4	2.4	150	18.4	113	<0.002	0.48	0.1	2.7	1	9.5	124	0.67	<0.05	9	0.08	0.84	1.7	11	2.2	5.6	56	1.2
239	M486189	0.1	0.088	3.36	22.7	14.2	0.18	432	8.54	1.98	7.5	3.4	180	18.7	119.5	<0.002	0.54	0.12	2.7	1	12.5	142.5	0.67	0.06	9.6	0.097	0.89	2.3	14	3.5	8.6	72	1.2
240	M486190	0.1	0.087	3.53	24.4	12.1	0.15	530	25.9	1.85	7.7	2.7	180	11.8	135	0.002	0.54	0.11	2.6	1	12.1	132.5	0.69	<0.05	9.3	0.088	1.16	3.7	13	4.5	7.8	53	1.1
241	M486191	0.1	0.039	3.22	21.2	8.9	0.15	560	1.52	2.42	7.4	3.1	170	12	88.9	<0.002	0.11	0.11	2.2	1	3.1	180	0.68	<0.05	8.9	0.098	0.63	3.3	13	1.5	9.2	64	1.4
242	M486192	<0.1	0.258	4.16	22.3	13.7	0.14	884	8.46	1.61	7.5	2.5	150	46.9	167.5	<0.002	0.62	0.14	2.5	1	10.8	102.5	0.69	0.12	8.5	0.089	1.79	2.6	12	8.5	6.6	129	0.8
243	M486193	0.1	1.275	4.29	18.7	17.4	0.17	3130	213	1.03	8.5	2.8	170	155.5	226	0.004	0.79	0.21	2.6	1	12.8	78.1	0.82	0.37	7.6	0.097	2.95	1.8	13	17	8.1	1070	1
244	M486194	0.1	0.077	3.54	20.9	9.1	0.13	516	6.28	2.4	7.5	2.4	140	26.2	95.2	<0.002	0.02	0.1	2.2	1	1.5	152	0.66	<0.05	7.8	0.09	0.74	2	11	2.2	7.9	73	0.9
245	M486195	0.1	0.093	3.39	21.3	10.5	0.16	745	7.12	2.18	9.5	2.8	170	19.5	116.5	<0.002	0.13	0.12	2.5	1	6.9	157	0.86	<0.05	9	0.102	0.87	2.6	13	4	8.3	57	1.3
246	M486196	0.1	0.08	3.3	24.6	10.8	0.17	468	8.07	2.18	7.6	2.7	190	18.5	108	<0.002	0.09	0.1	2.6	1	7.2	162.5	0.7	0.07	6.4	0.11	0.79	1.9	14	3.9	8.1	56	1.2
247	M486197	0.1	0.076	3.35	22.6	10.4	0.16	602	4.36	2.04	7.5	2.8	170	20	112.5	<0.002	0.1	0.11	2.4	1	6.3	148	0.7	0.07	7.2	0.103	0.93	2.2	13	6.3	7.5	80	1.3
248	M486198	0.1	0.107	3.63	21.9	13.3	0.16	645	13	1.65	7.5	2.5	170	31.2	148.5	<0.002	0.28	0.11	2.6	1	14.1	121.5	0.65	0.09	8.6	0.096	1.38	2.2	14	9.5	5.9	54	0.8
249	M486199	0.1	0.213	4.06	19.5	11.7	0.15	739	40.4	1.68	7.5	2.7	170	41.8	163	<0.002	0.29	0.14	2.4	1	9.4	118.5	0.69	0.16	8.1	0.098	1.65	1.5	14	19	5.6	92	1.1
250	M486200	<0.1	0.402	4.37	17	16.8	0.14	748	16.65	0.59	5.9	1.9	130	21.5	218	<0.002	0.84	0.16	2.5	1	28.4	40.5	0.5	0.22	6.4	0.075	2.19	1.3	11	26.4	2.2	52	0.6
253	M486203	<0.1	0.237	3.8	11.6	19.1	0.09	580	27.6	0.32	5.9	1.7	90	24.4	180	<0.002	0.9	0.18	1.7	1	20	31.1	0.48	0.27	4.4	0.064	1.84	0.8	11	45.1	1.3	29	0.7
254	M486204	<0.1	0.618	1.93	13.8	21.5	0.07	771	176	0.03	4.5	2.3	20	21.6	139	0.004	3.74	0.3	1.4	1	10.8	2	0.37	0.71	2.9	0.058	1.86	1.7	9	34	1.7	419	0.6
255	M486205	0.1	2.33	3.64	18	25.4	0.18	2380	30.3	0.06	6.9	2.9	230	200	265	<0.002	0.74	0.33	2.4	1	12	12.1	0.56	1.95	5.7	0.103	3.58	0.7	15	26.7	1.9	536	1.1
256	M486206	<0.1	0.324	3.23	23.8	13.3	0.15	448	16.9	1.2	6.3	2.6	160	14.4	156	<0.002	0.74	0.07	2.3	1	17.8	93.8	0.61	0.12	9.1	0.083	1.21	3	15	6.5	6.8	65	1.1
257	M486207	0.1	0.344	3.69	18.5	11	0.12	1040	17.95	1.91	7.8	2.5	170	36.7	144.5	<0.002	0.08	0.11	2	1	2.5	154.5	0.68	0.14	6.5	0.106	1.36	1.6	13	9.2	7	60	1.2
258	M486208	0.1	0.099	3.48	32.1	5.9	0.06	390	1.81	2.4	6.3	1.6	70	12.7	109	<0.002	<0.01	0.06	2	1	1	96.3	0.65	0.05	9.7	0.07	0.67	1.5	9	1	5.9	37	1.3
259	M486209																																
260	M486210	0.1	0.152	3.38	21.3	8.2	0.13	800	4.54	1.7	7.7	2.5	150	14.7	134	<0.002	0.19	0.09	2.1	1	7.8	127	0.76	0.09	7.8	0.098	1.09	2	13	3.8	6.7	47	2
261	M486211	0.1	0.115	3.46	19.9	8.4	0.15	777	50.1	2.25	8.6	2.3	180	40.7	117	<0.002	0.15	0.07	2.2	1	6.1	155	0.75	<0.05	8.8	0.104	1.01	2.6	12	2.9	6.9	59	1
262	M486212	0.1	0.382	3.54	21.5	9.7	0.16	945	3.96	2.2	8.2	2.6	190	28.4	124.5	<0.002	0.08	0.1	2	1	2.7	163	0.82	0.09	8.4	0.113	1.19	2.5	14	4	8.3	214	1.4
263	M486213	0.1	0.104	3.27	18.8	10.3	0.18	612	4.32	2.43	7.4	2.7	210	21.8	100.5	<0.002	0.1	0.08	2	1	1.8	185	0.68	0.13	6.9	0.116	0.84	2.2	14	3.3	8.7	63	0.9
264	M486214	0.1	0.041	3.2	21.4	7.4	0.17	676	3.87	2.59	6.8	3	180	12.6	87.9	<0.002	<0.01	0.09	1.9	1	1.6	192	0.63	<0.05	7.4	0.105	0.62	2	13	2.1	8.8	55	1.2
265	M486215	0.1	0.122	3.46	20	8.4	0.14	581	3.47	2.39	6.9	2.2	160	18.5	110.5	<0.002	0.07	0.08	1.7	1	1.8	169	0.69	0.05	7.1	0.098	0.83	2	12	4	7.8	52	0.8
266	M486216	0.1	0.106	3.36	22.8	10.3	0.17	914	3.32	2.4	6.9	4.1	180	28.2	99.8	<0.002	0.03	0.09	2.1	1	1.5	159.5	0.65	0.08	7.6	0.112	0.79	1.5	14	3	8.2	54	1.1
267	M486217	0.1	0.091	3.67	24.5	7.9	0.06	309	1.99	1.58	8.5	3.7	50	22.7	138.5	<0.002	0.5	0.07	1.9	1	13	54.4	0.89	0.06	11.6	0.055	1.12	2.8	8	4.5	5.8	25	1.5
268	M486218	0.1	0.018	3.24	26.8	6.7	0.16	757	2.35	2.68	8.9	3.1	160	11.3	96.4	<0.002	0.02	0.08	2.4	1	1.4	161	0.81	<0.05	11.5	0.103	0.56	3.5	11	1.2	9.6	61	1.7
269	M486219	0.1	0.06	3.28	27.9	6.4	0.12	461	6.19	2.44	9.1	3	130	12	94.7	<0.002	<0.01	0.06	2.2	1	1.2	154	0.85	<0.05	10.6	0.085	0.57	3.3	9	2	8.2	46	1.3
270	M486220	0.1	0.06	3.6	21.9	6.2	0.12	593	25.4	2.45	7	3.1	130	25.4	102.5	<0.002	<0.01	0.08	1.7	1	1.5	154	0.64	0.07	8.3	0.086	0.74	2.2	10	15.6	6.3	38	1.3
271	M486221	0.1	0.038	3.17	22.2	6.9	0.15	581	6.62	2.61	7.6	2.8	170	10.7	90.5	<0.002	<0.01	0.06	1.9	1	1	188.5	0.71	<0.05	8.7	0.1	0.59	2.5	11	1.1	7.4	32	0.9
272	M486222	0.1	0.04	3.4	25.8	16.3	0.12	605	8.5	2.49	8.7	2.8	140	13.8	103	<0.002	<0.01	0.09	2	1	1.1	170.5	0.92	<0.05	12.1	0.088	0.74	3.2	10	1.5	8.1	36	1.2
273	M486223	0.1	0.048	3.49	23.6	7.8	0.15	572	3.91	2.4	7.9	2.7	170	15.1	107.5	<0.002	0.01	0.07	2.1	1	1.7	159.5	0.74	<0.05	9.8	0.103	0.75	1.9	13	2.3	8.5	65	1.2
274	M486224	0.1	0.012	3.11	16.4	6.7	0.19	528	3.3	2.61	6.9	3.4	200	8.8	77	<0.002	<0.01	0.07	1.8	1	1.2	206	0.67	<0.05	6.8	0.112	0.5	1.7	15	0.9	9.7	39	1.2
275	M486225	0.1	0.056	3.8	21.6	8.5	0.2	700	3.77	2.48	7.1	6	230	17.3	103.5	<0.002	0.01	0.07	1.9	1	1.6	184	0.73	0.05	8.4	0.128	0.82	1.6	17	3.1	9.2	72	1.1
278	M486228	0.1	1.245	3.22	19.4	23.9	0.2	1720	18.05	0.07	7.6	3.1	100	103.5	268	<0.002	1.84	0.49	2.3	1	14.1	8.7	0.76	1.76	5.9	0.118	3.17	1.3	17	32.4	3.2	1420	1.2
279	M486229	0.1	1.53	3.49	20.4	27.6	0.19	1560	28.5	0.13	7	2.3	100	43.4	254	<0.002	1.26	0.19	2.1	1	18.1	14.1	0.7	0.49	6.1	0.092	2.73	1.5	14	26.6	2.5	2110	0.8
280	M486230	0.1	0.203	1.28	20.1	35.6	0.06	408	197	0.04	5	2.2	40	8.5	95	<0.002	1.77	0.25	1.3	1	12.3	2.9	0.45	1.36	5.8	0.06	0.94	0.9	9	28.8	2.9	43	1
281	M486231	<0.1	0.091	0.59	8.8	25.6	0.01	257	406	0.02	4	1.4	20	11.8	44	0.002	0.58	0.39	0.5	1	3.5	1.4	0.32	0.81	3.1	0.036	0.7	0.7	5	94.4	1.5	21	0.5
282	M486232	<0.1	0.074	0.74	15.3	34.2	0.01	333	505	0.01	3.9	2.4	30	12.1	53.9	0.01	2.9	0.34	0.3	2	3.7	1.1	0.29	1.97	5	0.042	0.94	0.8	6	29.9	2	18	0.9
283	M486233	0.1	0.165	3.61	20.4	10.4	0.17	1040	31.7	1.88	8.5	2.2	220	46.4	148.5	<0.002	0.14	0.11	2.6	1	3.2	128.5	0.72	0.31	7.6	0.13	1.5	2.1	17	56.5	6.2	73	1.1
284	M486234	0.1	0.431	4.33	20.1	7	0.09	1730	22.8	1.66	7	1.8	140	48.6	169	<0.002	0.1	0.12	1.8	1	3.2	87	0.54	0.27	8.3	0.088	1.79	1.1	9	8.7	4	89	1.1

Prospecting Samples Taken From Salal Target Generation Area (page 1 of 2)

N3 #	Location	ALS_ID	Easting	Northing	Elev	GPS_ Accuracy	SampleType	Length	Geologist	Date_Sampled	RockType	Alt_Style	Alt_ Intensity	MIN1	MIN1_%	MIN2	MIN2_%	MIN3	MIN3_%	Field Description	Recvd Wt.	Au	Ag	Al	As	Ba
1	Windy Ridge	K880053	473573	5627393	2284	3	Float		Duncan McLeish	18-Sep-11	Fine-grained quartz monzonite	Silicic	moderate	Molybdenite	<1	Pyrite	1	sericite	1	Sample of QSP vein-bearing FGQM boulders around SM 66-6 and 66-7 drill pad. Boulders form part of a small lateral moraine which likely have not travelled far from source. Vein thickness up to 1cm containing 1mm scale moly veinlets as well as minor fine to medium-grained disseminated molybdenite was noted.	0.5	0.001	0.35	5.28	2.3	880
2	Windy Ridge	K880054	473659	5627145	2385	4	Outcrop		Duncan McLeish	18-Sep-11	Fine-grained quartz monzonite	Silicic and Fe gossan	weak	Molybdenite	<1	Pyrite	2	sericite	1	FGQM with 1-2 cm wide QSP vein. Pintch and swelling of veins observed. 269/35 vein orientation.	0.36	0.003	18	5.89	18.5	620
3	Windy Ridge	K880055	473801	5627160	2403	3	Outcrop		Duncan McLeish	18-Sep-11	Fine-grained quartz monzonite	Silicic and Fe gossan	intense	Molybdenite	<1	Pyrite	1	sericite	1	Strongly silicified FGQM with possible MoS2 on dominant fracture plane. Orientation 267/57.	0.34	0.002	3.45	6.48	3.1	610
4	Windy Ridge	K880056	473859	5627163	2403	3	Outcrop		Duncan McLeish	18-Sep-11	Coarse-grained quartz monzonite	Silicic	moderate	Molybdenite	<1	Pyrite	2	sericite	1	1.5 cm QSP vein with possible 1mm wide moly veinlets in anomalous section of CGQM on Windy Ridge. 264/72 vein orientation.	0.46	<0.001	0.96	5.35	4.9	480
5	Windy Ridge	K880057	474128	5627207	2448	4	Outcrop		Duncan McLeish	18-Sep-11	Fine-grained quartz monzonite	Silicic and Fe gossan	intense	Molybdenite	<1	Pyrite	3	Hematite	2	Strongly gossanous, highly silicified FGQM with abundant disseminated pyrite and minor specular hematite. Possible disseminated fine grained moly.	0.66	0.001	0.41	5.94	1.9	390
6	Logan Ridge	K880058	471672	5627772	2232	3	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic	moderate	Molybdenite	<1	Pyrite	1	sericite	1	Resample of Paget sample site #0148753. Silicified FGQM with 1mm moly veinlets. Also small lenticular 'clots' of QSP with possible Mo. 094/41 veinlet orientation.	0.74	<0.001	0.41	4.35	0.6	120
7	Logan Ridge	K880059	471591	5627748	2201	4	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	moderate	Molybdenite	<1	Pyrite	2	sericite	1	Silicified FGQM with QSP veins up to 1.5 cm thick. Minor Mo bands along margins of veins. Vein orientation 093/57.	0.4	<0.001	0.56	4.56	0.6	160
8	Logan Ridge	K880060	471567	5627709	2173	4	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	moderate	Molybdenite	<1	Pyrite	2	sericite	2	Silicified FGQM with pockets of CGQM O/C around sampling locality. Contact unclear. QSP veins up to 0.5 cm thick. Minor Mo bands along margins of veins with apple green sericite. Vein orientation 093/55.	1.34	0.001	0.92	5.64	0.4	250
9	Glacier Island	K880061	470487	5627866	2118	4	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	intense	Molybdenite	1	Pyrite	3	sericite	1	1966 program blast trench. Massive QSP alteration (vein source unclear - disseminated in lenticular QSP 'clots') with moly veinlets and fine-grained disseminated moly. Measured Mo veinlet orientations 104/61 and 087/62	1.38	0.001	5.2	5.41	3.2	120
10	Glacier Island	K880062	470468	5627872	2115	3	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	moderate	Molybdenite	1	Pyrite	2	sericite	2	1966 program blast trench. Similar to DSA028 except thinner, better defined QSP+Mo veining. Slightly less silica altered.	0.72	<0.001	0.16	5.45	2.4	540
11	Glacier Island	K880063	470514	5627870	2117	4	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	moderate	Molybdenite	1	Pyrite	3	sericite	1	1966 program blast trench. Similar to DSA028. Running out of daylight so just time for quick grab sample. Should return next year for structural measurements of vein sets and further mapping reconnaissance.	1.2	0.001	5.87	4.92	4.7	130
12	Glacier Island	K880064	470572	5627886	2116	3	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	intense	Molybdenite	1	Pyrite	4	sericite	2	1966 program blast trench. Similar to DSA028. Running out of daylight so just time for quick grab sample. Should return next year for structural measurements of vein sets and further mapping reconnaissance.	0.6	0.001	2.69	5.69	3.9	210
13	Glacier Island	K880065	470577	5627891	2118	4	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic	moderate	Molybdenite	1	Pyrite	1	sericite	1	1966 program blast trench. Similar to DSA028. Running out of daylight so just time for quick grab sample. Should return next year for structural measurements of vein sets and further mapping reconnaissance.	0.54	0.002	4.47	5.02	2.8	140
14	Glacier Island	K880066	470594	5627860	2108	4	Outcrop		Duncan McLeish	19-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	moderate	Molybdenite	1	Pyrite	2	sericite	1	1966 program blast trench. Similar to DSA028. Running out of daylight so just time for quick grab sample. Should return next year for structural measurements of vein sets and further mapping reconnaissance.	0.72	0.001	2.84	5.41	5	160
15	Plug Glacier Toe	K880067	473411	5628232	2193	4	Subcrop		Duncan McLeish	20-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	moderate	Molybdenite	<1	Pyrite	2	sericite	1	Cliffs of CGQM at base of Plug Glacier. Mostly barren CGQM but sampled a QSP vein (0.5cm) with suspect Mo. Mo vein frequency is less than one per metre. 117/61 vein orientation	0.86	0.001	0.39	7.1	1.6	360
16	Plug Glacier Toe	K880068	473576	5628454	2162	4	Outcrop		Duncan McLeish	20-Sep-11	Coarse-grained quartz monzonite	Silicic	intense	Molybdenite	1	Pyrite	4	sericite	2	Large, 5cm+ thick QSP vein with multiple suspect moly veinlets hosted in CGQM. Very coarse grained pyrite in vein. Minor apple green sericite. 120/70	0.54	0.036	7.18	3.04	173.5	70
17	Plug Glacier Toe	K880069	473593	5628566	2195	3	Outcrop		Duncan McLeish	20-Sep-11	Coarse-grained quartz monzonite	Silicic	weak	Molybdenite	<1	Pyrite	1	sericite	1	QSP veins (0.5 cm) with possible Mo along vein margins in CGQM. Minor stockwork development observed. 107/73 is dominant vein orientation	0.46	0.001	6.45	5.72	11.2	350
18	Plug Glacier Toe	K880070	473585	5628536	2191	4	Outcrop		Duncan McLeish	20-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	moderate	Molybdenite	<1	Pyrite	2	sericite	2	QSP veins (0.5 cm) with possible Mo along vein margins in CGQM. Minor stockwork development observed. 104/64 is dominant vein orientation	0.46	0.01	11.6	5.5	47.8	310
19	Plug Glacier Toe	K880071	473580	5628518	2187	3	Outcrop		Duncan McLeish	20-Sep-11	Coarse-grained quartz monzonite	Silicic and Fe gossan	moderate	Molybdenite	<1	Pyrite	2	sericite	2	Mo developed along fracture oriented 094/53. Fine-grained disseminated moly also present in surrounding CGQM.	0.7	0.113	26.6	3.39	564	80
20	Glacier Island	K880072	470606	5627696	2130	4	grab		Andrew Strain	19-Sep-11	CGQM			MoS2		Pyrite				Vein grab, approx 8cm wide zone of clay alteration with massive MoS2 in excess of 1%. Glacial polish makes sampling difficult but outcrop is a good channel candidate, approx 10m of continuous exposure with several smaller veins surrounding main zone. 85/60.	0.4	0.007	19.2	9.65	6.6	340
21	Glacier Island	K880073	470427	5627678	2138	3	grab		Andrew Strain	19-Sep-11	FGQM			MoS2		Pyrite				Vein grab, 5cm thick. 2 different vein sets, 260/70 & 87/60 intersect in sample, interesting structural feature – 260 veins do not continue through 87 vein. See photo.	0.42	0.001	0.86	4.56	3.4	230
22	Glacier Island	K880074	470564	5627904	2121	3	grab		Andrew Strain	19-Sep-11	CGQM	Sericite		MoS2		Pyrite				QPM 2-3cm wide, 10mm total MoS2 bands. 105/70. From glacier Island blast pit. Good polished outcrop, up to 20m continuous channeling possible.	0.66	0.001	0.43	4.2	4.8	310
23	Glacier Island	K880075	470565	5627904	2121	3	subcrop		Andrew Strain	19-Sep-11	CGQM	Sericite		MoS2						Subcrop / rubble beside ASA003A. Appears to be same vein as 003A. 1Cm solid MoS2, very impressive mineralization.	0.22	0.001	0.7	4.18	0.7	310
24	Glacier Island	K880078	470587	5627884	2128	3	grab		Andrew Strain	19-Sep-11	CGQM			MoS2		Pyrite				QPM 4cm. 5 mm MoS2 in 3 different bands. Roughly 105 striking, no good exposure to measure dip. Glacial polish outcrop.	0.82	0.004	2.11	2.44	0.7	80
25	Plug Glacier Toe	K880079	473331	5628222	2203	7	grab		Andrew Strain	20-Sep-11	CGQM			MoS2		Pyrite				small 1cm QPM vein with 1-2mm total MoS2. 116/68. Many parallel fractures veins with minor, 10cm wide stockwork zones developed around them in the surrounding area, approximately 20m zone. No other observed MoS2 but the area is rather cliffy and movement is restricted. Jointing at 321/28 and 250/85	0.52	0.062	28.3	5.32	18.3	690

Prospecting Samples Taken From Salal Target Generation Area (page 2 of 2)

N3 #	Location	ALS_ID	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr	Mo
1	Windy Ridge	K880053	0.97	0.15	0.06	0.07	30.3	0.5	10	1.44	15.9	1.05	13.5	<0.05	0.1	0.057	4.32	18.1	8.9	0.07	2290	1840	0.22	6.7	1	70	146	129	0.132	0.4	0.31	1.4	2	5.1	53.7	0.57	0.15	7.2	0.057	3.21	1.2	7	7.5	4.8	21	1.9	
2	Windy Ridge	K880054	1.95	1.25	0.25	0.04	40.6	2.5	6	3.44	103	2.22	18.45	0.08	0.1	0.692	3.63	25.6	14.3	0.17	1340	359	0.06	10.7	1.7	100	15.9	204	0.024	0.26	0.56	2.4	2	14.3	39.8	0.9	0.43	8.8	0.115	3.81	1.7	17	14	6.6	79	1.3	
3	Windy Ridge	K880055	1.67	2.12	0.28	0.11	39.3	0.7	6	5.13	72.2	1.8	18.1	0.08	0.1	0.361	4.26	25.1	12.8	0.21	3480	234	0.14	9.2	1.5	250	900	249	0.016	0.17	0.55	2.7	2	3	46.9	0.66	0.15	8.6	0.14	4.97	2	20	12.3	6.1	81	1.5	
4	Windy Ridge	K880056	1.58	0.09	0.23	0.22	28.2	6.8	7	2.61	28.6	2.39	15.15	0.06	0.1	0.048	3.12	15.1	12.7	0.15	346	3660	0.71	4.2	2.8	230	42.8	135	0.269	1.46	0.36	3.2	2	24.1	67.4	0.28	0.23	4.5	0.094	1.67	1.8	38	26.9	4.9	21	1.6	
5	Windy Ridge	K880057	1.5	0.36	0.01	<0.02	36.9	3.4	7	0.62	10.1	2.74	13.25	0.06	0.1	0.122	2.76	20	9.8	0.13	77	36.6	0.09	3.9	1.6	80	2.6	94.5	0.002	1.9	0.15	2.3	2	17.5	7	0.34	0.09	7	0.053	0.84	0.7	28	17.3	3.2	4	1.4	
6	Logan Ridge	K880058	1.22	0.51	0.01	0.03	24.3	0.8	5	0.52	4.2	1.49	19.7	<0.05	<0.1	0.326	2.05	14	11.3	0.05	276	1010	0.03	6.3	0.7	30	86.8	131	0.018	0.53	0.11	2.4	2	39	2.5	0.47	0.15	4.7	0.029	1.1	0.4	9	163.5	2.1	8	1	
7	Logan Ridge	K880059	1.68	0.85	<0.01	0.04	29.5	2.8	5	0.65	3.4	4.82	17.75	0.08	<0.1	0.505	2.25	17.1	15.3	0.06	445	158	0.04	5.4	0.8	20	28.4	148.5	0.004	4.42	0.12	1.5	1	30.9	3.6	0.46	0.34	4.9	0.034	1.43	0.3	6	150	2.4	20	0.8	
8	Logan Ridge	K880060	1.74	1	0.09	0.46	34.6	1.8	4	0.78	8.3	5.13	19.3	0.08	<0.1	0.414	2.71	19.8	16.9	0.09	977	42.7	0.05	4.8	1	60	182.5	178.5	<0.002	4.79	0.12	2.1	2	29.7	2.9	0.35	0.18	6.1	0.036	1.58	1.8	8	18.7	3.1	124	0.6	
9	Glacier Island	K880061	2.96	10.8	0.06	5.25	20.5	5.8	2	1.21	96.6	5.02	24.5	0.08	<0.1	4.03	2.8	10.5	31.2	0.12	4100	420	0.02	6.8	0.8	40	104	242	0.018	4.41	0.3	4.8	1	34.1	1.9	0.52	3.04	5.1	0.045	2.69	4.6	11	21.2	4.1	1280	0.5	
10	Glacier Island	K880062	2.12	0.33	0.1	0.24	34.3	3.8	4	0.76	3.7	1.77	17.45	<0.05	0.1	0.132	3.26	18.1	15.5	0.08	270	2040	1.26	9.1	1.1	40	10.1	148	0.016	1.07	0.11	3.3	2	17.5	45.6	0.74	0.15	6.6	0.056	1.35	1.8	9	6.4	4.1	20	1	
11	Glacier Island	K880063	4.79	13.9	0.04	0.2	18.7	5.1	5	0.94	8.9	5.43	20.6	0.09	<0.1	1.37	2.51	9.7	23.8	0.1	2290	197	0.02	5.2	1.1	30	79.2	221	0.008	4.37	0.28	4.3	1	25.8	2.1	0.39	4.23	3.1	0.036	2.32	0.6	8	10	2.6	75	0.7	
12	Glacier Island	K880064	3.11	6.05	0.44	4.89	33.1	1.2	5	1.18	91.7	3.59	21.2	0.07	0.1	3.41	3.22	16.8	26.1	0.11	2520	101.5	0.02	8.2	1.2	70	140.5	272	0.003	2.59	0.27	2.3	1	16.1	5.4	0.62	1	9.3	0.067	3.25	2	7	12.7	5.3	1330	0.9	
13	Glacier Island	K880065	2.6	9.62	0.15	2.16	19.35	1.2	5	1.05	157	3.77	21.6	0.07	<0.1	1.74	2.57	10.2	26.1	0.1	3570	290	0.02	6	0.8	60	234	223	0.007	2.92	0.36	1.9	1	21.3	3	0.43	1.48	4.8	0.041	2.5	1.2	7	26.1	3.8	620	0.9	
14	Glacier Island	K880066	2.46	7.83	0.06	0.32	7.98	0.9	6	1.11	15.7	4.37	23.2	<0.05	<0.1	1.41	2.78	4.4	25.8	0.1	1750	171	0.01	5.9	1	50	104.5	248	0.005	2.85	0.31	1.6	1	19.8	1.7	0.38	1.32	3.7	0.05	2.81	0.7	7	10.3	1.3	114	1.3	
15	Plug Glacier Toe	K880067	4.22	0.3	0.81	0.06	41.8	9.4	4	0.87	19.8	3.5	21.3	0.21	0.1	0.042	1.71	21.4	8.4	0.34	812	89.1	3.74	12.9	4.2	660	16.2	79.9	0.002	2.02	0.16	5.6	3	4.6	230	0.81	0.07	8.8	0.263	0.9	2.9	36	7.6	11.6	82	1.7	
16	Plug Glacier Toe	K880068	0.96	21.6	0.01	1.08	16.4	42.3	2	0.75	15.5	21.9	10.45	0.36	<0.1	0.405	1.45	8.6	13.1	0.09	823	2090	0.02	2.7	8.7	20	102	91	0.143	>10.0	0.74	0.7	4	21.1	3	0.13	7.45	1.8	0.047	1.22	9.2	22	31.1	2	57	0.5	
17	Plug Glacier Toe	K880069	2.22	2.82	<0.01	0.26	31	1.5	9	1.71	49.5	2.74	18.1	<0.05	0.1	0.333	2.79	17.7	11	0.14	532	737	0.04	10.9	1.3	80	135	176	0.265	1.2	0.31	2	2	16.9	5	0.93	0.54	3.7	0.063	2.38	1.2	9	13.8	2.9	32	0.9	
18	Plug Glacier Toe	K880070	3.88	12.45	0.16	1.82	18.6	1.8	9	4.69	56.2	2.41	17.15	<0.05	0.1	2.98	2.91	9.4	18.8	0.17	13800	651	0.06	8.5	2.2	170	866	184.5	0.065	1.4	1.31	2.4	2	12.4	13.1	0.61	1.13	4.2	0.104	3.15	1.5	19	42.7	8.3	451	1.2	
19	Plug Glacier Toe	K880071	2.32	61.9	0.4	17.15	8.52	9.8	3	1.01	200	13.7	12.75	0.2	0.1	3.07	0.72	4.7	20.2	0.05	50600	2780	<0.01	2.3	1.7	30	888	54.4	0.278	>10.0	2.94	0.6	3	29.2	3.4	0.15	4.86	1.8	0.023	1.13	2.1	25	40.3	6.6	3550	1.7	
20	Glacier Island	K880072	4.72	34.5	<0.01	0.76	27.7	0.2	2	2.08	3.2	3.26	52.4	0.05	0.1	2.85	4.29	11.2	41.6	0.14	2880	2850	0.06	20.7	0.4	30	384	325	0.166	1.19	0.39	10.4	2	65	2.6	1.82	3.46	7.8	0.118	5.82	4.6	18	96.6	2.2	100	1.5	
21	Glacier Island	K880073	1.5	1.07	0.04	<0.02	16.6	1.7	6	0.73	8.2	1.29	16.3	<0.05	<0.1	0.202	2.96	8.8	14.8	0.06	357	>10000	0.91	11.1	0.7	20	31.3	141.5	0.29	1.33	0.15	2.4	3	17.9	22.8	0.83	1.08	7.3	0.043	1.52	1.9	10	8.8	2.7	65	0.6	1.115
22	Glacier Island	K880074	1.45	0.77	0.04	<0.02	33.6	2.8	5	0.66	4.5	1.43	19.05	<0.05	0.1	0.153	2.57	17.5	18.7	0.1	256	2900	0.43	6.2	1.2	30	11.6	139	0.034	0.65	0.14	4.9	2	38.6	17.5	0.44	0.3	6.8	0.038	1.17	4.1	23	9.1	3.1	24	1.2	
23	Glacier Island	K880075	1.45	1.09	0.03	<0.02	37.1	0.6	8	0.69	5.9	0.79	18.45	<0.05	0.2	0.143	2.99	16.9	18.9	0.1	175	>10000	0.43	9.1	1.6	40	13.9	160	0.074	0.78	0.11	6.3	2	40.2	20.4	0.69	0.86	7.2	0.051	1.33	2.2	25	11.4	4.5	12	4.1	1.155
24	Glacier Island	K880078	1.23	4.51	0.01	<0.02	23.4	0.9	9	0.44	6.9	1.62	10.65	<0.05	0.1	0.327	1.33	10.7	21.7	0.08	329	1000	0.04	3.6	0.9	40	60.4	97.2	0.025	0.77	0.19	3	<1	23	1.5	0.25	0.94	2.8	0.025	0.89	0.4	9	52.6	2.5	14	2	
25	Plug Glacier Toe	K880079	1.66	7.87	0.48	1.64	33.6	8.3	5	1.34	141	3.32	15.25	0.09	0.1	0.429	3.36	16.1	14.4	0.2	1410	138.5	1.24	5.4	3	250	737	147.5	0.003	2.57	0.39	2.9	<1	9.5	126.5	0.44	0.34	5.6	0.112	1.87	1.2	23	7.3	6.4	472	2.9	

Mackenzie ROCK SAMPLING DATA SHEET p 1 of 2

	Mineralized Zone	Location	ALS_ID	Easting	Northing	Elev_m	GPS_ Accuracy	SampleType	Geologist	Date_Sampled	RockType	Sulphide_%	Au_ppm	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Ce_ppm	Co_ppm	Cr_ppm	Cs_ppm	Cu_ppm	Fe_%	Ga_ppm	Ge_ppm	Hf_ppm	In_ppm	K_%
1	Breccia Trend	MacKenzie NE	M487751	497691	5642672	1488	4	Float	SJB	June-26-12	GRDR	3	0.227	6.66	7.81	7.1	680	0.83	0.48	5.87	0.45	58.2	28.6	43	0.48	8710	4.53	18.7	0.16	0.8	0.296	1.06
2	Breccia Trend	MacKenzie NE	M487752	498153	5641617	1971	3	Float	SJB	June-26-12	GRDR	6	0.13	3.17	8.29	5	420	0.79	0.44	5.45	2.81	50.2	39.5	22	1.25	6410	7.46	19	0.13	1.1	0.229	1.69
3	Breccia Trend	MacKenzie NE	M487753	498601	5642246	1772	7	Grab	SJB	June-27-12	Structure		0.006	0.08	4.5	7	360	0.36	0.03	11.35	0.16	26.6	10.2	13	2.15	43.5	3.13	9.43	0.025	0.4	0.025	0.9
4	Breccia Trend	MacKenzie NE	M487754	498600	5642245	1772	6	Grab	SJB	June-27-12	QD		0.004	0.09	7.47	3.2	730	0.66	0.06	3.17	0.07	24.3	15.7	24	2.37	27.5	3.81	16.85	0.11	0.5	0.038	2.09
5	Breccia Trend	MacKenzie NE	M487755	498591	5642155	1819	3	Grab	SJB	June-27-12	Vein		0.005	0.04	2.36	2.5	340	0.19	0.01	18.55	0.15	33.4	12.8	7	1.85	9.1	4.29	5.55	0.05	0.2	0.015	0.74
6	Breccia Trend	MacKenzie NE	M487756	498590	5642155	1820	3	Grab	SJB	June-27-12	QD		0.008	0.1	7.93	2.3	720	0.59	0.04	3.5	0.05	27.7	17.5	31	2.11	38.8	4.33	20.3	0.11	0.7	0.058	2.1
7	Breccia Trend	MacKenzie NE	M487757	498514	5642047	1895	3	Grab	SJB	June-27-12	Unknown		0.002	0.09	8.08	8.1	630	0.53	0.05	4.96	0.14	18.75	22.7	186	1.32	39.2	4.96	17.8	0.08	1.9	0.048	0.39
8	Breccia Trend	MacKenzie NE	M487758	495940	5640751	1867	3	Float	SJB	June-28-12	GRDR	7	0.027	0.19	7.72	2.1	620	0.64	0.22	2.05	0.04	28.5	27	44	5.18	35.4	5.99	18.1	0.12	0.4	0.007	2.27
9	Breccia Trend	MacKenzie NE	M487759	496012	5640657	1908	3	Float	SJB	June-28-12	DIOR	3	0.011	0.36	10.05	9.4	120	1.94	0.06	4.54	0.07	80.3	7.5	141	2.68	376	12.85	27.6	0.22	1.5	0.013	1.42
10	Breccia Trend	MacKenzie NE	M487760	496120	5640719	2008	4	Grab	SJB	June-28-12	Vein		0.003	0.04	5.64	1.5	980	0.39	0.02	0.69	0.37	9.85	2.7	13	1.22	11.1	0.8	8.97	0.08	1	0.003	4
11	Breccia Trend	MacKenzie NE	M487761	496188	5640756	2034	4	Float	SJB	June-28-12	DIOR	4	0.022	3.03	8.18	4	430	0.73	0.37	3.09	1.15	33.4	28	47	3.36	2150	5.57	19	0.12	0.5	0.053	1.79
12	Breccia Trend	MacKenzie NE	M487762	496424	5640870	2275	3	Grab	SJB	July-04-12	GRDR	5	0.024	0.21	7.13	4.6	710	0.6	0.12	1.93	0.04	23.6	18.6	30	3.44	46.1	5.58	15.65	0.11	0.3	0.005	2.36
13	Breccia Trend	MacKenzie NE	M487763	496101	5640738	1988	4	Float	SJB	July-04-12	ANDS	4	0.012	0.24	8.91	1.6	400	0.65	0.13	5.07	0.05	15.7	20	69	2.59	253	5.11	20.5	0.11	0.8	0.031	2.35
14	Breccia Trend	MacKenzie NE	M487764	493209	5638228	1918	5	Float	SJB	July-04-12	QTZ		0.004	0.48	4.17	129.5	4010	0.46	0.09	1.24	0.56	9.24	4.8	22	5.89	701	1.45	8.93	0.07	0.1	0.012	1.66
15	Breccia Trend	MacKenzie NE	M487765	493120	5638181	1965	2	Grab	SJB	July-04-12	Vein		0.019	0.68	1.21	6.5	180	0.1	0.09	0.59	0.12	4.04	3.8	21	0.44	470	1.16	3.11	0.025	0.1	0.015	0.35
16	Breccia Trend	MacKenzie NE	M487766	493119	5638180	1965	3	Grab	SJB	July-04-12	QD		0.012	0.22	7.74	4.8	630	0.73	0.04	3.2	0.16	20.7	16.9	44	3.59	141	4.13	18.6	0.12	0.3	0.044	1.84
17	Breccia Trend	MacKenzie NE	M487767	491611	5640697	1796	4	Grab	SJB	July-05-12	PORPH		0.002	0.05	8.42	7.1	880	1.2	0.01	1.67	0.02	12.55	6.5	19	4.11	6.8	1.78	18.9	0.07	2.5	0.01	1.7
18	Breccia Trend	MacKenzie NE	M487768	491274	5642173	2507	3	Grab	SJB	July-05-12	GOSSAN		0.002	0.15	2.85	70.7	720	0.37	0.03	9.44	0.34	9.64	15.4	17	3.04	51.5	3.17	5.71	0.025	0.2	0.018	0.16
19	Breccia Trend	MacKenzie NE	M487769	491309	5642153	2490	3	Grab	SJB	July-05-12	PORPH		0.002	0.08	7.92	8.9	950	1.04	0.03	2.72	0.05	20.8	9.2	11	7.27	26.6	2.74	18.25	0.12	2.6	0.028	1.55
20	Breccia Trend	MacKenzie NE	SBR-12-001	497863	5641847	1772	4	Float	SJB	June-26-12	BSLT																					
21	Breccia Trend	MacKenzie NE	SBR-12-002	498536	5642081	1863	6	Grab	SJB	June-27-12	QD																					
22	Breccia Trend	MacKenzie NE	SBR-12-003	496167	5640741	2023	4	Grab	SJB	June-28-12	ANDS																					
23	Breccia Trend	MacKenzie NE	SBR-12-004	493292	5638287	1895	4	Float	SJB	July-04-12	PORPH																					
24	Breccia Trend	MacKenzie NE	SBR-12-005	493292	5638286	1894	5	Float	SJB	July-04-12	GAB																					
25	Breccia Trend	MacKenzie NE	SBR-12-006	493115	5638179	1981	5	Grab	SJB	July-04-12	QD																					
26	Breccia Trend	MacKenzie NE	SBR-12-007	492725	5638074	2195	4	Grab	SJB	July-04-12	Vein																					
27	Breccia Trend	MacKenzie NE	SBR-12-008	492710	5638052	2217	5	Grab	SJB	July-04-12	ANDS																					
28	Tillworth North	MacKenzie NW	N688001	482998	5641414	2492	3	Float	SJB	July-21-12	Quartz Vein		0.022	1.5	7.77	11.8	560	0.69	0.75	5.1	0.91	28.6	15.5	31	0.48	1455	3.88	28.7	0.11	0.4	0.061	1.06
29	Tillworth North	MacKenzie NW	N688002	483375	5641332	2488	3	Grab		July-21-12	Breccia		0.001	0.03	3.29	13.7	6690	0.47	0.07	7.83	0.11	25.7	17.9	11	10.4	23	3.53	10.5	0.1	0.3	0.013	0.65
30	Tillworth North	MacKenzie NW	N688003	482856	5642024	2282	3	Grab	SJB	July-21-12	Vein		0.011	0.76	8.28	3.3	570	0.8	0.11	2.52	0.44	27.6	21.2	36	4.16	3100	3.52	20.9	0.12	0.3	0.041	1.48
31	Tillworth North	MacKenzie NW	N688004	483030	5642462	2158	4	Grab	SJB	July-21-12	Quartz Vein		0.005	0.24	1.63	2.1	570	0.025	85.5	0.09	0.03	0.75	6.7	16	0.75	21.6	3	1.64	0.08	0.05	0.003	1.87
32	Tillworth North	MacKenzie NW	N688005	482499	5642695	2158	4	Float	SJB	July-21-12	Breccia		0.005	0.26	8.53	15.8	450	0.69	0.56	3.93	0.17	26.3	25.4	62	0.95	92.1	5.45	23.3	0.14	1.9	0.049	0.49
33	Tillworth North	MacKenzie NW	N688006	483374	5641349	2464	6	Grab	SJB	July-21-12	Carb Vein		0.001	0.02	3.78	10	2680	0.21	0.31	11.2	0.13	15.1	19.2	9	0.79	8	3.76	8.62	0.1	0.2	0.008	0.25
34	Tillworth South	MacKenzie NW	M487853	485439	5638533	2190	3	Grab	Andrew Strain	19/07/12	Quartz Vein		0.115	5.91	2.51	2.5	410	0.13	2.08	1.68	0.24	12.95	8	24	0.61	4300	2.9	9.39	0.09	0.1	0.079	0.33
35	Tillworth South	MacKenzie NW	M487854	485642	5637521	2444	3	Grab	Andrew Strain	19/07/12	Quartz Vein w/in sill		0.041	1.64	8.05	2.5	1840	0.78	0.28	1.82	0.8	6.65	5.3	17	2.29	6250	1.68	21.3	0.1	0.1	0.039	3.56
36	Tillworth South	MacKenzie NW	M487855	486240	5637661	2312	3	Grab	Andrew Strain	19/07/12	Quartz Vein		0.011	0.61	7.6	10	1080	0.48	66.3	4.74	1.57	20.9	28.4	22	0.66	960	4.64	28.1	0.14	0.3	0.031	1.95
37	Tillworth South	MacKenzie NW	M487856	486053	5637922	2222	3	Chip	Andrew Strain	19/07/12	Quartz Vein w/in sill		0.022	2.71	5.53	2.5	610	0.55	59.8	0.75	2.87	19.55	18.2	18	1.28	18550	3.14	13.75	0.1	0.2	0.088	1.82
38	Tillworth South	MacKenzie NW	M487857	486045	5637937	2300		Grab	Colin Bateman	19/07/12	Hb-GRDR		0.02	1.72	10.05	3.3	570	0.48	5.31	6.64	0.01	46.2	21.6	42	6.49	2260	6.93	33.8	0.2	0.5	0.158	1.82
39	Tillworth South	MacKenzie NW	M487858	486483	5636518	2387	3	Chip	Andrew Strain	20/07/12	Quartz Vein w/in sill		0.009	1.85	6.07	2.2	1690	0.54	0.64	1.29	0.83	6.02	8	11	2.28	9370	2.2	17.05	0.09	0.1	0.083	2.15
40	Tillworth North	MacKenzie NW	M487859	483247	5641395	2419	5	Grab	Andrew Strain	21/07/12	Vein		0.002	0.63	7.5	7.2	560	0.48	0.16	2.95	0.3	25.8	13.5	32	1.07	5110	3.44	21.9	0.12	0.4	0.052	1.51
41	Tillworth North	MacKenzie NW	M487860	483256	5641425	2389	3	Grab	Andrew Strain	21/07/12	Breccia		0.001	0.06	6.1	8.9	2690	0.4	0.07	7.3	0.09	20.8	14	17	2.18	70.6	3.17	15.25	0.11	0.3	0.023	0.74
42	Tillworth North	MacKenzie NW	M487861	482995	5642471	2137	3	Grab	Andrew Strain	21/07/12	Vein		0.027	8.13	0.13	3.6	40	0.025	11.6	0.05	1.28	0.31	4.7	16	0.1	26000	3.67	0.6	0.06	0.05	0.022	0.04
43	Tillworth North	MacKenzie NW	M487862	483020	5642444	2154	3	Grab	Andrew Strain	21/07/12	Vein		0.186	78	2.06	11.9	210	0.025	219	0.04	6.73	0.47	102.5	6	1.08	170000	26.2	2.15	0.43	0.05	0.003	2.47
44	Tillworth South	MacKenzie NW	M487863	488316	5636883	2353	4	Grab	Andrew Strain	22/07/12	Vein		1.33	1.53	6.9	1.4	610	0.48	11.3	1.87	0.21	26.1	15.7	40	0.74	1620	3.53	16.85	0.11	0.3	0.099	1.22
45	Tillworth South	MacKenzie NW	M487864	488100	5636740	2383	3	Grab	Andrew Strain	22/07/12	Vein		0.497	10.15	8.32	9.9	300	1.59	21.9	2.96	0.92	163.5	4.6	13	1.01	9420	1.66	22.6	0.32	2.6	0.034	1
46	Tillworth South	MacKenzie NW	M487865	488091	5636761	2359	3	Grab	Andrew Strain	22/07/12	Vein		0.296	6.11	2.25	6.4	70	0.19	461	0.78	0.07	10.65	44	16	0.56	167.5	14.15	8.08	0.25	0.1	0.027	0.62
47	Tillworth South	MacKenzie NW	M487866	488089	5636344	2326	3	Grab	Andrew Strain	22/07/12	Feldspar-Hornblende Porphyry		0.02	0.32	8.67	0.8	560	0.93	1.99	2.93	0.03	26.2	6.3	7	1.24	140.5	2.91	23.7	0.11	1	0.014	0.83
48	Tillworth South	MacKenzie NW	M487867	487975	5636288	2244	3	Float	Andrew Strain	22/07/12	Quartz Vein		0.819	35.6	7.39	2.3	1120	0.54	23.6	2.94	2.8	20.6	15.4	28	3.02	16000	3.75	20.4	0.17	0.3	0.046	1.71
49	Tillworth South	MacKenzie NW	M487868	487557	5635744	2182	3	Float	Andrew Strain	22/07/12	Breccia		0.002	0.22	3.1	11	90	0.22	0.44	13.15	0.18	11.7	19.1	8	2.56	85.7	3.61	8.6	0.09	0.1	0.007	0.28
50	Tillworth South	MacKenzie NW	M487869	486494	5636509	2387	3	Float	Andrew Strain	20/07/12	IGD		0.064	4.01	10.15	2.8	1750	0.99	1.48	2.86	1.66	35.1	19.4	27	7.74	6280	3.96	32.1	0.16	0.2	0.08	5.2
51	Tillworth South	MacKenzie NW	M487870	486605	5636099	2207	3	Float	Andrew Strain	20/07/12	Quartz Vein		0.08	1.46	4.99	3	270	0.42	2.82	2.25	0.23	7.79	4.3	14	0.56	2670	2.29	13.05	0.08	0.3	0.025	0.59
52	Tillworth South	MacKenzie NW	M487871	486511	5637371	2394	3	Float	Andrew Strain	20/07/12	Quartz Vein		0.004	0.88	1.76	2.8	510	0.13	0.75	3.39	0.29	7.74	7.4	26	1.23	2480	2.17	6.77	0.06	0.1	0.008	0.22
53	Breccia Trend	MacKenzie NE	M487772	495950	5639553	1851	4	Float	Andrew Strain	28/06/12	Vein		0.022	1.13	1.9	109	70	0.18	3	10.15	0.51	14.95	79.2	6	2.43	475	9.61	7.08	0.08	0.2	0.118	0.66
54	Breccia Trend	MacKenzie NE	M487773	491583	5641156	2088	3	Grab	Andrew Strain	05/07/12	Breccia		0.001	0.06	4.59	32	150	0.32	0.01	10.45	0.07	17.85	18.7	15	4.5	16.8	4.93	9.31	0.025	0.3	0.024	0.42
55	Breccia Trend	MacKenzie NE	M487774	500609	5641357	1638	3	Float	Andrew Strain	10/07/12	MG IGD		0.003	0.19	7.53	2.1	690	0.75	0.06	3.06	0.05	26.9	13.5	29	3.41	116.5	3.59	17.6	0.12	0.5	0.043	2.26
56	Breccia Trend	MacKenzie NE	M487775	500579	5641912	1539	3	Float	Andrew Strain	10/07/12	Granite		0.035	0.68	5.92	5.4	630	0.6	0.12	1.71	0.18	25.4	8.9	17	2.72	590	1.95	11.1	0.09	1.4	0.074	3.41
57	Breccia Trend	MacKenzie NE	M487776	492203	5640812	1672	3	Grab	Andrew Strain	11/07/12			0.001	0.08	7.76	5.7	330	0.74	0.02	4.11	0.17	23.1	16.1	36	3.41	27.3	4.22	18.55	0.12	0.3	0.045	1.7
58	Breccia Trend	MacKenzie NE	M487777	492415	5641124	1732	4	Grab	Andrew Strain	11/07/12	Breccia		0.003	0.05	4.97	14.5	100	0.38	0.01	6.58	0.1	17.1	13.5	25	3.99	23.4	3.62	10.45	0.06	0.2	0.03	0.54
59	Breccia Trend	MacKenzie NE	M487778	491434	5642075	2446	3	Grab	Andrew Strain	12/07/12	Breccia		0.063	0.78	7.25	693	210	0.49	0.1	1.96	6.93	12.75	58.5	66	4.79	1740	4.26	15.9	0.06	0.7	0.108	0.63
60	Breccia Trend	MacKenzie NE	M487779	491436	5642077	2446	3	Grab	Andrew Strain	12/07/12	Breccia		0.005	0.54	3.76	419	70	0.4	0.03	4.91	24.2	6.17	13.3	18	4.34	2110	2.65	7.31	0.025	0.3	0.167	0.22
61	Breccia Trend	MacKenzie NE	M487780	491923	5642048	2317	3	Grab	Andrew Strain	12/07/12	FG intrusive		0.005	0.27	9.19	10.6	260	0.47	0.03	5.19	0.24	17.3	26.4	56	1.02	440	8.68	19.85	0.13	0.3	0.054	0.41
62	Breccia Trend	MacKenzie NE	M487781	491260	5642184	2446							0.001	0.1	4.39	45	810	0.43	0.02	4.89	0.61	15	14.8	21	2.32	65.2	3.26	9.54	0.05	0.4	0.031	0.13
63	Breccia Trend	MacKenzie NE	M487782	491262	5642184	2446							0.001	0.17	3.95	64	1040	0.35	0.03	8.22	0.19	13.9	16	20	2.33	56.8	3.72	8.52	0.025	0.3	0.029	0.16
64	Breccia Trend	MacKenzie NE	M487783	491264	5642184	2446							0.001	0.26	2.88	113	220	0.25	0.02	10.3	0.76	8.52	16.5	15	2.39	82.9	3.75	5.68	0.025	0.2	0.014	0.13
65	Breccia Trend	MacKenzie NE	M487784	491266	5642184	2446							0.001	0.22	2.83	73.3	1140	0.25	0.02	9.6	0.52	9.83	15.2	13	2.46	74.6	3.35	5.9	0.025	0.2	0.014	0.14
66	Breccia Trend	MacKenzie NE	M487785	491268	5642184	2446							0.001	0.06	2.83	28	210	0.24	0.01	10.1	0.26	7.83	15.1	15	3.04	31	3.45	5.8	0.025	0.3	0.013	0.18
67	Breccia Trend	MacKenzie NE	M487786	491270	5642184	2446							0.002	0.05	4.23	24.8	630	0.29	0.02	7.74	0.09	11.8	14.4	17	3.47	17.7	3.64	8.57	0.025	0.3	0.017	0.25
68	Breccia Trend	MacKenzie NE	M487787	491272	5642184	2446							0.002	0.15	4.82	32	160	0.36	0.02	5.92	0.11	15.7	17.1	25	3	55.3	3.81	9.89	0.05	0.5	0.03	0.23
69	Breccia Trend	MacKenzie NE	M487788	491274	5642184	2446							0.001	0.1	3.85	34.2	1820	0.33	0.02	7.63	0.17	10.2	16.2	17	2.44	42.3	3.81	7.89	0.025	0.3	0.017	0.25
70	Breccia Trend	MacKenzie NE	M487789	491276	5642184	2317							0.002	0.16	2.68	38.2	60	0.23	0.01	9.68	0.5	6.63	15.6	10	2.51	97.1	3.33	4.9	0.025	0.2	0.012	0.11
71	Tillworth South	MacKenzie NE	M487872	483654	5637420	2216	3	Grab	Andrew Strain	24-Jul-12	Aplite sill		0.263	4.58	6.79	3.3	440	0.85	25.1	2.15	0.15	5.53	6.8	18	3.14	5430	1.61	17.45	0.08	0.3	0.057	1.36
72	Bornite Zone	MacKenzie NE	M487873	479830	5638128	2502	3	Grab	Andrew Strain	25-Jul-12	Quartz vein		0.079	60.8	2.18	0.8	100	0.3	113	0.88	0.74	6.89	4	12	0.91	43400	1.66	8.02	0.08	0.1	0.027	0.4
73	Bornite Zone	MacKenzie NE	M487874	479873	5637854	2305	3	Grab	Andrew Strain	25-Jul-12	quartz vein		0.002	0.27	5.29	3.6	140	0.68	0.3	1.24	0.02	4.1	1.5	5	0.97	162.5	0.62	15.4	0.07	0.6	0.003	3.61
74	Bornite Zone	MacKenzie NE	M487875	479849	5637860	2317	3	Grab	Andrew Strain	25-Jul-12			0.001	0.17	7.44	3.4	350	1.05	0.26	2.96	0.03	13.9	8.5	12	3.4	109	1.89	19.45	0.1	0.3	0.018	0.94
75	Bornite Zone	MacKenzie NE	M487878	479789	5636290	1837	3	Float	Andrew Strain	25-Jul-12			0.138	3.34	6.09	5.3	980	0.79	7.16	0.64	0.12	10.65	0.9	8	0.73	3470	0.72	15.85	0.09	0.6	0.009	4.12
76	Bornite Zone	MacKenzie NE	N688009	478339	5639045	2123	3	Float	SJB	25-Jul-12	Quartz Monzonite		0.001	1.57	7.3	2.1	890	1.15	0.01	1.41	0.35	16.95	1.5	5	2.32	13.6	0.55	18.25	0.07	0.2	0.003	1.73
77	Bornite Zone	MacKenzie NE	N688010	478332	5639053	2116	3.5	Grab	SJB	25-Jul-12	Breccia		0.001	0.53	8.04	3.4	690	0.74	0.1	3.31	0.12	15.5	16.2	23	4.59	40.5	3.58	20.7	0.12	0.3	0.047	0.88
78	Bornite Zone	MacKenzie NE	N688011	478487	5638754	2181	3	Grab	SJB	25-Jul-12	Aplite sill		0.001	0.65	6.18	2	100	1.18	0.04	0.72	0.12	10.75	0.7	6	1.17	17.1	0.53	18.7	0.07	1.1	0.007	3.02
79	Bornite Zone	MacKenzie NE	N688012	478645	5638534	2298	4	Grab	SJB	25-Jul-12	Quartz Vein		0.445	31.5	0.71	18.4	220	0.06	50.9	0.14	0.91	1.33	0.9	14	0.36	28500	0.63	1.57	0.09	0.05	0.003	0.62
80	Bornite Zone	MacKenzie NE	N688013	478963	5638172	2320		Float	SJB	25-Jul-12	Quartz vein		0.051	32.3	0.21	0.8	130	0.06	83.1	0.16	0.11	0.42	0.4	19	0.13	22300	0.55	0.49	0.025	0.05	0.005	0.09
81	Bornite Zone	MacKenzie NE	N688014	479072	5637863	2403	6	Grab	SJB	25-Jul-12	Tonalite		0.002	0.25	6.12	1.6	160	1.33	0.25	0.91	0.05	10.05	0.7	11	1.37	86.9	0.57	18.95	0.05	0.6	0.003	1.21
82	Bornite Zone	MacKenzie NE	N688015	478744	5637514	2415	2.5	Grab	SJB	25-Jul-12	Quartz Monzonite		0.001	0.33	8.17	1.9	630	1.18	0.27	2.32	0.07	20.1	4.9	10	1.94	69.1	1.83	22.7	0.1	0.3	0.021	1.59
83	Bornite Zone	MacKenzie NE	M487879	479465	5638327	2489	3	Grab	Andrew Strain	26-Jul-12	Quartz vein		0.326	25.1	6.86	0.8	810	0.97	11.6	1.14	0.48	14.3	4.5	11	1.68	16350	1.69	19.05	0.09	0.5	0.03	2.64
84	Bornite Zone	MacKenzie NE	M487880	479260	5638516	2449	3	Float	Andrew Strain	26-Jul-12	Quartz vein		0.241	7.52	8.15	1.6	640	0.88	12.25	2.88	0.12	24.2	14.9	22	4.68	8540	3.58	22.1	0.12	0.2	0.037	1.79
85	Bornite Zone	MacKenzie NE	M487881	479160	5638659	2352	3	Grab	Andrew Strain	26-Jul-12	IGD		0.218	4.51	6.93	0.4	1220	1.01	3.29	1.46	0.15	18.65	7.2	19	3.41	4220	2.39	18.45	0.12	0.4	0.016	2.96
86	Bornite Zone	MacKenzie NE	M487882	476635	5640639	2187	3	Float	Andrew Strain	27-Jul-12	Tonalite		0.012	5.79	7.02	2.4	1260	1.38	6.28	1.68	0.27	16.45	4.5	9	1.87	7760	1.55	19.5	0.1	0.2	0.029	1.82
87	Bornite Zone	MacKenzie NE	M487883	476640	5640652	2192	3	Float	Andrew Strain	27-Jul-12			0.029	6.94	6.61	12.5	740	1.42	5.85	1.21	0.15	13.3	2.6	10	2.97	5150	1.23	19.65	0.1	0.4	0.022	2.28
88	Bornite Zone	MacKenzie NE	M487884	476620	5640665	2194	3	Grab	Andrew Strain	27-Jul-12	Tonalite		0.067	8.51	6.61	0.8	380	1.41	6.5	1.28	0.19	13.75	3.2	9	1.81	7430	1.52	19.65	0.1	0.3	0.026	1.72
89	Bornite Zone	MacKenzie NE	M487885	476588	5640540	2216	3	Grab	Andrew Strain	27-Jul-12	Tonalite		0.025	5.84	7.2	1.3	630	1.47	3.03	1.62	0.14	15	4.2	8	1.16	5460	1.52	20.9	0.1	0.2	0.035	1.74
90	Bornite Zone	MacKenzie NE	M487886	481210	5636203	2438				28-Jul-12			0.001	4170	2.17	2670	160	0.28	1.19	0.38	559	4.34	6.7	13	3.24	9750	1.19	5.36	0.22	0.05	0.082	0.78
91	Bornite Zone	MacKenzie NE	M487887	481716	5635908	2438				28-Jul-12			0.132	315	3.35	82.2	60	0.44	18.9	6.65	24.8	8.23	13	12	3.88	19200	2.46	11.8	0.09	0.1	0.016	1.03
92	Bornite Zone	MacKenzie NE	M487888	476760	5640370	2224				29-Jul-12			0.114	23	6.92	26.6	480	1.41	2.69	1.2	2.29	16.95	3.1	8	2.19	2800	1.42	20.3	0.08	0.3	0.022	2.13
93	Bornite Zone	MacKenzie NE	M487889	476761	5640371	2225				30-Jul-12			0.005	1.62	6.13	30.6	100	0.67	0.05	5.81	0.43	28	28.4	32	7.15	195	5.93	16	0.16	0.7	0.073	0.33
94	Tillworth South	MacKenzie NE	M487890	490434	5633635	2137				31-Jul-12			0.43	8.43	6.7	2	730	0.47	3.69	3.53	3.76	14.7	18.1	19	1.69	8320	3.69	17.35	0.14	0.2	0.104	1.79
95	Tillworth South	MacKenzie NE	M487891	484938	5638833	2121				01-Aug-12			1.455	48.7	8.1	8.5	920	0.94	1.75	0.97	11.2	2.95	37	3	2.38	>10000	5.44	11.95	0.16	0.3	0.33	3.08
96	Tillworth South	MacKenzie NE	M487892	484818	5638750	2148				01-Aug-12			0.274	5.25	5.59	3	1990	0.81	23.3	0.66	0.19	12.9	2.5	12	1.02	4450	1.02	11.75	0.08	0.4	<0.005	3.11
97	Tillworth South	MacKenzie NE	M487893	484882	5638615	2204				01-Aug-12			0.584	19.25	4.91	2.9	760	0.45	46.1	1.01	0.88	15.95	7	17	0.88	>10000	2.22	10.55	0.11	0.1	0.03	1.26
98	Tillworth South	MacKenzie NE	M487894	484933	5635774	2165				01-Aug-12			0.362	13.7	10.15	3.9	1020	1.75	32.4	1.87	0.98	14.4	4.9	4	2.17	9170	1.9	25.1	0.12	0.8	0.055	3.75
99	Tillworth South	MacKenzie NE	M487895	485500	5638990	2073				01-Aug-12			0.458	16.65	3.94	2.2	490	0.43	39.1	1.29	0.46	25.4	7.4	18	1.31	8890	2.04	10.1	0.15	0.2	0.027	0.76
100	Bornite Zone	MacKenzie NE	N688016	480632	5635751	2333	4	Grab	SJB	28-Jul-12	Quartz Diorite		0.002	0.25	8.85	0.9	370	0.54	0.06	5.11	0.09	16.45	32.3	37	1.55	217	5.75	22.2	0.12	0.8	0.066	1.06
101	Bornite Zone	MacKenzie NE	N688017	479955	5635735	2127	4	Grab	SJB	28-Jul-12	Andesite Dyke		0.004	0.39	7.54	16.2	470	1.11	0.1	4.2	0.16	30.2	19	23	7.06	53.1	4.2	19.7	0.14	3	0.049	1.2
102	Bornite Zone	MacKenzie NE	N688018	479945	5635765	2118	4	Grab	SJB	28-Jul-12	GRDR		0.002	0.04	8.14	2.2	870	1.16	0.04	2.05	0.21	23.2	5.5	8	5.73	4.6	1.9	22.4	0.1	0.4	0.027	1.37
103	Bornite Zone	MacKenzie NE	N688019	480129	5635867	2176	3	Grab	SJB	28-Jul-12	Quartz Vein		0.003	0.26	1.02	0.8	120	0.27	0.17	4.78	0.11	13.5	2.8	12	0.93	67.4	0.92	4.1	0.06	0.1	0.015	0.28
104	Tillworth NW Split	MacKenzie NE	N688020	480199	5642058	2263	4	Float	SJB	29-Jul-12	Quartz Vein		0.229	9.03	4.29	3.5	540	0.44	17.6	2.11	0.24	12.65	7.6	20	3.58	9780	2.45	11.6	0.08	0.1	0.052	0.93
105	Tillworth NW Split	MacKenzie NE	N688021	480145	5642190	2286	4	Float	SJB	29-Jul-12	Quartz vein		0.053	8.45	4.73	2.2	1260	0.4	10.05	1.63	0.1	19.55	11.1	19	3.76	7350	2.51	11.8	0.1	0.1	0.037	1.51
106	Tillworth NW Split	MacKenzie NE	N688022	480138	5642262	2294	5	Float	SJB	29-Jul-12	Quartz vein		0.001	0.12	0.16	1.3	20	0.025	0.11	0.02	0.03	0.31	2.9	17	0.34	4110	0.44	0.61	0.025	0.05	0.003	0.06
107	Tillworth NW Split	MacKenzie NE	N688023	479915	5643067	2252	4	Grab	SJB	29-Jul-12	GRDR		0.001	0.09	8.18	3	580	0.94	0.06	2.31	0.04	23	10.2	25	2.56	55	2.38	19.9	0.1	0.3	0.034	1.16
108	Tillworth NW Split	MacKenzie NE	N688024	479936	5643041	2243	4	Grab	SJB	29-Jul-12	Dacite Dyke		0.001	0.04	8.77	3.6	550	1.09	0.06	1.4	0.02	32	8.5	10	3.26	25.4	3.51	19.75	0.16	1.9	0.012	1.55
109	Bornite Zone	MacKenzie NE	SBR-12-010	479950	5635730	2130	4	Grab	SJB	30-Jul-12	Tuff																					
110	Breccia Trend	MacKenzie NE	M487208	491372	5642164	2446			JSG				0.017	0.19	3.13	75.9	170	0.55	0.02	3.97	0.25	11.25	13.8	11	6.68	74.4	2.9	7.52	0.11	0.3	0.022	0.54
111	Breccia Trend	MacKenzie NE	M487209	491392	5642154	2446			JSG				0.002	0.04	5.52	33.1	130	0.48	0.01	3.87	0.33	8.92	23	13	4	47.2	3.15	11.15	0.1	0.4	0.025	0.35

Mackenzie ROCK SAMPLING DATA SHEET p 2 of 2

	Mineralized Zone	Location	ALS_ID	La_ppm	Li_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%	Nb_ppm	Ni_ppm	P_ppm	Pb_ppm	Rb_ppm	Re_ppm	S_%	Sb_ppm	Sc_ppm	Se_ppm	Sn_ppm	Sr_ppm	Ta_ppm	Te_ppm	Th_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm
1	Breccia Trend	MacKenzie NE	M487751	22.9	6.8	1.8	725	4.81	3.09	2.6	34.9	460	5.6	12.4	0.002	1.45	2.59	13.4	3	1.5	721	0.25	0.23	3.1	0.326	0.17	3	88	1.7	23	82	12.5
2	Breccia Trend	MacKenzie NE	M487752	19.1	5.9	1.8	1020	4.95	2.72	3.7	59.9	1370	3.8	48.9	0.002	0.84	0.68	32	3	2.2	497	0.44	0.23	9	0.367	0.21	3.4	255	0.8	35.4	235	18
3	Breccia Trend	MacKenzie NE	M487753	10.5	19	0.91	1330	1.41	0.64	2.2	10.7	290	3.9	36.4	0.001	0.02	0.8	7.6	1	0.5	213	0.18	0.025	4.4	0.201	0.15	2.1	72	0.6	26.3	48	6.3
4	Breccia Trend	MacKenzie NE	M487754	8.6	20.4	0.8	509	0.82	2.4	3.9	18	540	4.6	59.1	0.001	0.01	0.34	13.6	1	0.9	454	0.32	0.025	5.3	0.371	0.31	2.3	118	0.8	14.7	55	7.3
5	Breccia Trend	MacKenzie NE	M487755	12.8	9.5	3.19	2550	0.84	0.27	1.3	9.9	160	3.1	30	0.001	0.01	9.87	4.2	1	0.2	272	0.1	0.025	1.4	0.106	0.12	0.9	48	0.4	36.1	50	2.3
6	Breccia Trend	MacKenzie NE	M487756	9.9	14.7	1.63	644	1.29	2.67	4.8	19.1	620	4.3	52.7	0.001	0.01	0.39	14	2	1.1	478	0.39	0.025	5.4	0.416	0.34	2.2	137	0.8	19.5	52	9.1
7	Breccia Trend	MacKenzie NE	M487757	8	31.4	2.3	827	1.14	3.81	2.6	60	830	4.5	11.2	0.001	0.17	1	17.5	2	0.8	631	0.16	0.025	1.7	0.461	0.1	1	157	0.3	14.2	89	65.9
8	Breccia Trend	MacKenzie NE	M487758	11.2	12.8	1.89	221	10.3	1.98	2.4	23.9	580	3.9	89.2	0.032	3.89	0.22	15.9	2	0.6	387	0.21	0.41	5.6	0.313	0.62	2	144	3.5	12.6	21	6
9	Breccia Trend	MacKenzie NE	M487759	28.9	8.6	0.28	452	3.84	3.52	20.4	19.5	620	5	60.2	0.001	0.42	1.23	4.6	2	2.6	727	1.18	0.08	3.4	0.67	0.3	10.4	513	5.3	39.5	45	35.2
10	Breccia Trend	MacKenzie NE	M487760	4.9	4.1	0.24	131	1.21	1.45	0.9	3.4	150	22.2	73.3	0.001	0.01	1.09	2.3	1	0.2	259	0.14	0.025	11.1	0.07	0.32	3.4	20	1.9	3.6	38	31.2
11	Breccia Trend	MacKenzie NE	M487761	12.8	18	2.15	571	49.6	2.29	4.1	29.8	750	3.3	69.2	0.03	2.06	0.71	18.3	2	1.1	483	0.35	0.41	6.4	0.459	0.44	2.2	151	2.7	20.2	76	6.7
12	Breccia Trend	MacKenzie NE	M487762	9.6	11.6	1.45	219	10.1	1.72	2.2	18.6	390	4.4	81.9	0.015	3.16	0.28	12.7	2	0.5	345	0.18	0.19	4.8	0.283	0.52	2.7	110	16.2	11.4	20	3.8
13	Breccia Trend	MacKenzie NE	M487763	5.9	12.6	2.68	791	0.84	2.11	2.2	40.2	860	3.1	44.7	0.003	1.63	0.53	18.3	2	1.4	739	0.13	0.24	1.1	0.494	0.47	0.9	184	7.7	11.5	54	22.5
14	Breccia Trend	MacKenzie NE	M487764	4.4	48.5	0.61	251	5.51	0.05	1	7.1	90	7	52.9	0.001	0.22	751	4.8	1	0.3	131.5	0.07	0.025	4.1	0.09	0.34	2.3	49	14.5	4.2	62	2.4
15	Breccia Trend	MacKenzie NE	M487765	1.7	5.2	0.17	171	13.1	0.21	0.5	4.8	90	2.3	9.7	0.011	0.09	4.98	2.9	1	0.2	32.4	0.025	0.14	0.5	0.05	0.06	0.4	34	0.5	2.4	15	1.4
16	Breccia Trend	MacKenzie NE	M487766	7.7	16.9	1.19	639	2.62	2.29	3.5	25	650	9.3	46.2	0.001	0.04	3.11	16.1	2	1.1	379	0.24	0.31	2.5	0.395	0.36	1.3	151	1.5	13.1	73	4.2
17	Breccia Trend	MacKenzie NE	M487767	5.3	39.1	0.38	261	0.54	3.25	1.6	18.3	450	10.2	23.9	0.001	0.005	1.11	5.6	1	0.4	447	0.11	0.025	1.4	0.176	0.16	0.6	47	0.3	5.6	37	88.4
18	Breccia Trend	MacKenzie NE	M487768	3.6	46.2	3.69	745	0.65	0.03	1	18.4	310	5.9	5.8	0.001	0.07	69.4	6.9	1	0.3	409	0.06	0.025	0.7	0.162	0.13	0.4	97	4.2	10.3	66	4
19	Breccia Trend	MacKenzie NE	M487769	8.4	34.1	0.54	454	1.1	2.73	4	13	690	9.5	25.5	0.001	0.01	0.82	8.1	1	0.7	362	0.29	0.025	2.1	0.287	0.25	0.9	76	0.4	9.6	63	93.1
20	Breccia Trend	MacKenzie NE	SBR-12-001																													
21	Breccia Trend	MacKenzie NE	SBR-12-002																													
22	Breccia Trend	MacKenzie NE	SBR-12-003																													
23	Breccia Trend	MacKenzie NE	SBR-12-004																													
24	Breccia Trend	MacKenzie NE	SBR-12-005																													
25	Breccia Trend	MacKenzie NE	SBR-12-006																													
26	Breccia Trend	MacKenzie NE	SBR-12-007																													
27	Breccia Trend	MacKenzie NE	SBR-12-008																													
28	Tillworth North	MacKenzie NW	N688001	12.6	13.5	0.87	525	11.5	2.14	2.6	12.7	480	68.5	33.3	0.002	0.02	1.23	10.7	1	1	762	0.2	0.52	5.3	0.247	0.2	3.8	119	1.7	12.5	38	7
29	Tillworth North	MacKenzie NW	N688002	11	44.1	2.16	863	0.96	0.08	0.9	22	190	9.3	37.2	0.001	0.18	4.16	4.8	1	0.3	499	0.07	0.025	1.7	0.112	0.14	0.9	70	0.5	16.6	99	6.4
30	Tillworth North	MacKenzie NW	N688003	12.3	19.2	1.59	485	3.86	3.02	2.1	21	620	13.5	53.6	0.003	0.1	1.69	12.5	1	0.7	461	0.16	0.09	3.7	0.298	0.26	2.5	112	1.9	10	76	3.3
31	Tillworth North	MacKenzie NW	N688004	0.25	1.5	0.03	43	26	0.15	0.2	2.9	30	7.1	28.4	0.001	2.53	0.32	0.5	3	0.2	73	0.025	24.5	0.1	0.022	0.14	0.1	6	36	0.3	1	0.5
32	Tillworth North	MacKenzie NW	N688005	11.4	29.1	1.88	1150	0.93	2.4	3.3	33.6	860	12.9	17.8	0.001	0.01	3.27	21	1	1	616	0.25	0.23	2.1	0.495	0.22	1.2	166	0.7	17.3	99	59.5
33	Tillworth North	MacKenzie NW	N688006	6.8	23.4	3.14	1350	0.77	1.17	0.9	18.5	220	9.6	8	0.001	0.07	1.82	4	1	0.3	435	0.09	0.07	1.2	0.106	0.04	1	51	0.3	11.7	92	2.1
34	Tillworth South	MacKenzie NW	M487853	5.3	5.8	0.47	296	1.34	0.4	0.7	9.6	200	11	12.2	0.001	0.43	0.61	5.9	2	0.8	230	0.05	2.42	0.8	0.106	0.07	6.7	70	1.1	6	35	3.2
35	Tillworth South	MacKenzie NW	M487854	2.8	12.4	0.6	212	4.42	1.99	0.7	4.8	460	11.6	78.4	0.001	0.09	0.41	2.9	1	0.4	399	0.025	0.98	1.2	0.168	0.41	0.9	55	4.2	3	50	3.9
36	Tillworth South	MacKenzie NW	M487855	9.8	7.8	0.7	543	9.83	1.88	1.6	15.2	520	21.8	51.2	0.002	0.83	1.01	10.4	1	0.7	1025	0.1	36.3	2.5	0.232	0.31	1.4	143	194.5	8.1	34	6.8
37	Tillworth South	MacKenzie NW	M487856	10.2	4.6	0.28	126	30.6	2.27	0.9	3.6	220	13.4	38	0.001	1.9	0.64	2.2	3	0.4	269	0.06	35.2	3.1	0.089	0.19	1.9	37	19.3	2	43	4.7
38	Tillworth South	MacKenzie NW	M487857	18.8	26	2.28	1190	18150	1.88	4	26.5	1230	25.4	54.4	19.35	1.44	0.83	21.9	4	1.6	1110	0.22	2.9	3.7	0.588	0.8	28.9	260	4.7	18.4	137	9
39	Tillworth South	MacKenzie NW	M487858	2.9	7.2	0.48	293	107.5	2.13	0.7	5.4	280	8.9	66.6	0.085	0.03	0.31	3.4	1	0.5	289	0.025	0.67	1.2	0.111	0.35	1.5	53	3.3	2.8	38	3.5
40	Tillworth North	MacKenzie NW	M487859	10.2	13	1.27	544	43.1	2.83	2.5	17.7	630	7.8	45.6	0.042	0.06	1.72	14.3	1	0.8	503	0.18	0.16	2.6	0.313	0.24	4.7	113	1.7	12.8	48	5.9
41	Tillworth North	MacKenzie NW	M487860	9.1	25.5	2.66	940	3.3	1.86	1.7	15	450	8.1	25.3	0.002	0.07	1.2	8.9	1	0.5	383	0.12	0.025	2.8	0.22	0.11	1.5	78	1	15.5	68	5
42	Tillworth North	MacKenzie NW	M487861	0.25	2.2	0.03	64	8.04	0.02	0.1	3.5	10	2.1	1.6	0.005	2.43	0.32	0.2	3	0.2	4.3	0.025	9.37	0.1	0.003	0.02	0.4	15	183	0.2	10	0.25
43	Tillworth North	MacKenzie NW	M487862	0.25	0.5	0.01	39	103.5	0.13	0.4	8.7	40	11.8	40.4	0.008	10	0.48	0.3	24	0.1	74.3	0.025	159.5	0.1	0.019	0.19	0.6	23	14.6	0.4	82	0.25
44	Tillworth South	MacKenzie NW	M487863	12.3	13.4	1.12	472	6.62	2.95	2.1	13.9	830	4.2	25.8	0.003	0.55	1.1	13.5	2	0.8	277	0.13	13.65	3.2	0.358	0.1	2	121	10.5	12	47	3.4
45	Tillworth South	MacKenzie NW	M487864	66.7	7.8	0.58	287	2.76	4.37	2.5	4.9	200	13.5	21.7	0.002	0.15	1.75	10.5	5	0.6	375	0.41	5.88	35.1	0.123	0.14	9.9	72	1	27.5	27	55.6
46	Tillworth South	MacKenzie NW	M487865	4.1	7.5	0.37	168	67.3	0.28	0.7	16.8	170	33.4	13.5	0.01	10	0.73	3.9	10	0.4	154.5	0.025	351	0.9	0.078	0.09	1.3	55	11.9	3.1	16	1.4
47	Tillworth South	MacKenzie NW	M487866	11.6	7.6	0.75	262	2.02	3.35	1.7	4	960	8.5	25.3	0.003	0.86	0.14	5	2	0.8	800	0.11	1.55	2.6	0.248	0.18	1.1	67	2	6.8	36	36.1
48	Tillworth South	MacKenzie NW	M487867	9.4	14.1	1.47	608	2.23	2.08	1.8	17.2	650	13.9	53.5	0.001	0.38	0.55	11.4	13	0.7	565	0.12	5.38	1.7	0.3	0.29	3.6	113	21	9.4	80	3.4
49	Tillworth South	MacKenzie NW	M487868	5.5	69.8	2.18	1240	2.02	0.02	0.7	16	270	9.5	10.8	0.003	0.09	48.5	4.7	1	0.3	190.5	0.05	0.21	0.9	0.103	0.07	0.7	93	1.5	7.7	106	2.6
50	Tillworth South	MacKenzie NW	M487869	15.9	32.9	1.61	660	28.8	1.99	2.6	15.7	840	12	101.5	0.005	0.53	0.54	13.2	2	0.6	389	0.15	1.9	4.5	0.341	0.72	1.5	135	31.9	7.6	137	3.4
51	Tillworth South	MacKenzie NW	M487870	3.3	4.6	0.38	283	538	1.95	0.6	5.6	280	13.8	16.4	0.007	0.01	2.14	5.8	1	0.3	391	0.06	4.52	1.3	0.083	0.14	4.5	80	1.7	4.6	16	4.4
52	Tillworth South	MacKenzie NW	M487871	3.6	13.5	0.61	438	5.84	0.33	0.6	7.3	140	4.2	8.4	0.003	0.03	1.18	3.3	1	0.3	152	0.025	0.13	0.5	0.087	0.07	0.7	52	337	4.1	30	2.5
53	Breccia Trend	MacKenzie NE	M487772	5.6	18.2	3.79	1600	0.82	0.04	0.5	33.5	100	10	18.2	0.001	5.49	123	5.4	1	0.3	526	0.025	2.65	0.7	0.049	0.13	1	138	1.1	14.7	123	3.7
54	Breccia Trend	MacKenzie NE	M487773	7.1	36.2	4.64	1140	0.65	0.03	1.6	15.8	530	4.1	14	0.001	0.02	35.6	10.4	1	0.4	367	0.09	0.025	0.5	0.258	0.09	0.5	120	1.9	15.9	72	6.3
55	Breccia Trend	MacKenzie NE	M487774	9.7	17.1	1.17	518	2.63	2.47	4.6	15.6	530	3.9	61.5	0.001	0.03	1.17	12.2	1	1.1	379	0.37	0.025	4.6	0.366	0.41	1.8	106	1.9	17.9	50	7.9
56	Breccia Trend	MacKenzie NE	M487775	11	17.4	0.45	298	21.9	1.52	2.6	7.8	210	4.5	78.3	0.002	0.07	7.56	4.2	1	0.6	205	0.38	0.05	19.5	0.13	0.36	4.8	43	2.9	10.1	31	36
57	Breccia Trend	MacKenzie NE	M487776	8.6	21.3	1.42	738	4.34	2.1	4.1	22.3	750	8.4	40.5	0.001	0.01	4.32	14.7	2	1	355	0.33	0.025	4.5	0.439	0.3	1.8	139	6.1	13.9	66	5.5
58	Breccia Trend	MacKenzie NE	M487777	6.9	40.6	2.73	739	1.17	0.03	2	17	440	3.9	21.2	0.001	0.02	51.4	10.5	1	0.5	263	0.13	0.025	2	0.24	0.1	0.9	85	2.6	10.1	60	4.2
59	Breccia Trend	MacKenzie NE	M487778	4.6	62.9	0.62	481	2.73	0.03	1.7	37.4	420	10.6	16.1	0.005	0.68	346	17.5	3	0.8	70.9	0.11	0.06	1.3	0.37	0.3	0.9	156	2.3	8.7	284	11
60	Breccia Trend	MacKenzie NE	M487779	2.4	66.3	1.86	636	0.79	0.03	0.9	19.7	190	25.6	8	0.001	0.05	331	9.4	1	0.4	152.5	0.05	0.025	1.1	0.167	0.07	0.4	92	1.1	6.8	239	6.2
61	Breccia Trend	MacKenzie NE	M487780	7.2	16.5	3.27	1540	0.88	2.41	2.2	27.9	630	3.7	3.1	0.004	2.88	2.92	17.9	3	0.3	754	0.16	0.22	0.1	0.503	0.06	0.1	164	0.2	8.3	106	6
62	Breccia Trend	MacKenzie NE	M487781	6	55.4	1.72	695	1.1	0.03	1.7	16.3	490	4.9	5.2	0.001	0.07	45	11.6	1	0.5	517	0.11	0.05	3.4	0.274	0.07	0.8	113	2.8	12.2	62	8
63	Breccia Trend	MacKenzie NE	M487782	5.3	45.3	3.35	840	0.75	0.03	1.6	19.2	520	6.9	6.6	0.001	0.12	59.3	11.1	1	0.5	620	0.09	0.025	0.9	0.253	0.13	0.4	132	8.1	13.8	69	5.9
64	Breccia Trend	MacKenzie NE	M487783	3.5	38	4.18	950	0.49	0.02	1	17.6	280	5.1	4.3	0.001	0.11	105	6.4	1	0.3	367	0.05	0.025	0.4	0.155	0.15	0.4	102	7	9.8	78	3.9
65	Breccia Trend	MacKenzie NE	M487784	3.8	39.7	4.04	794	0.31	0.02	0.9	17.1	560	7.3	4.6	0.001	0.11	69.1	6.4	1	0.2	982	0.05	0.025	0.7	0.154	0.13	0.4	92	4	9.6	73	4
66	Breccia Trend	MacKenzie NE	M487785	3.2	37.7	4.52	726	0.39	0.01	0.9	18.3	270	5	6.1	0.001	0.05	94.5	6	1	0.2	384	0.025	0.025	0.5	0.145	0.06	0.3	87	1.8	7.7	71	4.4
67	Breccia Trend	MacKenzie NE	M487786	5.1	39.6	2.58	840	0.54	0.02	1.4	17.8	530	6.6	8.6	0.001	0.04	67.9	7.6	1	0.3	585	0.09	0.025	3	0.218	0.08	0.4	101	2.3	11	72	5.3
68	Breccia Trend	MacKenzie NE	M487787	6.6	39.2	2.21	848	1.22	0.02	2	17.1	630	5	8.2	0.001	0.07	47.4	11.9	1	0.5	511	0.11	0.11	1.7	0.335	0.07	0.5	121	2.6	11.6	68	7.9
69	Breccia Trend	MacKenzie NE	M487788	4.3	33	2.78	963	0.79	0.03	1.3	17.3	400	33.9	8.8	0.001	0.1	35	7.7	1	0.3	389	0.07	0.08	2	0.207	0.08	0.5	153	1.8	12	117	5.7
70	Breccia Trend	MacKenzie NE	M487789	2.7	38.3	4.15	694	0.28	0.02	0.8	18.3	280	6.3	3.1	0.001	0.08	84.9	5.5	1	0.2	361	0.025	0.025	0.2	0.155	0.06	0.3	92	3.1	7.4	70	5
71	Tillworth South	MacKenzie NE	M487872	2.7	16.1	0.68	239	2.19	2.94	2.3	7.6	150	8.7	32.2	0.001	0.1	0.49	6.4	5	0.8	499	0.21	0.43	7.5	0.186	0.28	3.9	36	0.9	3.1	34	5.2
72	Bornite Zone	MacKenzie NE	M487873	3.5	11.8	0.38	255	1.17	0.58	0.6	4.5	160	9.7	20	0.001	0.43	0.21	3.8	5	0.3	142	0.025	1.69	1.9	0.074	0.13	13.5	52	0.1	2.8	23	1.2
73	Bornite Zone	MacKenzie NE	M487874	1.9	12.4	0.04	163	0.17	2.08	0.8	1.7	10	19.6	74.1	0.001	0.005	0.47	0.7	0.5	0.1	66.5	0.07	0.025	4.8	0.018	0.41	1.5	9	0.1	1.6	13	14.3
74	Bornite Zone	MacKenzie NE	M487875	6.4	176.5	0.56	315	0.36	2.82	2.2	11.1	500	10.5	26.7	0.001	0.005	1.05	5.8	1	0.4	453	0.16	0.025	3.2	0.219	0.18	1.1	58	0.3	4.3	50	6.6
75	Bornite Zone	MacKenzie NE	M487878	9.2	4.4	0.03	65	0.63	2.1	0.2	0.9	10	18.5	56.9	0.001	0.13	0.24	0.3	3	0.1	314	0.025	1.06	23.3	0.026	0.31	7.7	13	0.1	0.7	8	9.7
76	Bornite Zone	MacKenzie NE	N688009	11.1	22.1	0.07	106	0.15	3.19	0.5	1.9	130	16	32.6	0.001	0.005	15	0.8	1	0.1	514	0.025	0.025	3.8	0.039	0.2	0.4	12	0.1	1.7	9	3.6
77	Bornite Zone	MacKenzie NE	N688010	6.1	32.3	1.44	622	0.34	3.19	2.3	18.5	740	6.4	19.7	0.001	0.03	6.65	11.7	1	0.6	614	0.17	0.025	2.1	0.334	0.18	1.4	120	0.3	8.4	69	3.2
78	Bornite Zone	MacKenzie NE	N688011	9.5	4.3	0.04	95	0.15	2.9	0.7	1.1	30	25.5	81.8	0.001	0.005	6.07	1	1	0.2	97.4	0.06	0.025	9	0.036	0.39	2.8	8	0.1	1.1	10	26.6
79	Bornite Zone	MacKenzie NE	N688012	0.7	1.6	0.04	66	1.75	0.1	0.2	1.3	20	8.3	15.9	0.001	0.72	2.5	0.4	18	0.1	29.6	0.025	8.07	0.4	0.01	0.08	6.7	8	0.1	1.1	6	0.25
80	Bornite Zone	MacKenzie NE	N688013	0.25	1.2	0.02	63	0.72	0.01	0.1	1	10	3.5	2.8	0.001	0.48	4.89	0.05	2	0.1	6.1	0.025	0.58	0.1	0.003	0.02	1.7	5	0.05	0.2	2	0.25
81	Bornite Zone	MacKenzie NE	N688014	10.6	8.9	0.07	66	0.25	3.45	0.6	1.1	10	11.3	30.2	0.001	0.005	1.65	0.6	1	0.2	203	0.025	0.025	8.5	0.038	0.19	1.1	10	0.1	0.6	6	9.9
82	Bornite Zone	MacKenzie NE	N688015	9.2	45.5	0.53	337	0.37	3.69	2.4	2.8	550	13.2	49.4	0.001	0.03	2.54	3.3	1	0.7	705	0.17	0.025	3.2	0.221	0.32	1.1	51	0.2	4.2	61	3
83	Bornite Zone	MacKenzie NE	M487879	7.8	18	0.3	235	19.05	2.56	1.8	3.8	200	17.5	51.1	0.005	0.42	0.14	3.4	2	0.5	210	0.22	4.53	5.1	0.074	0.27	10.2	46	2.1	5.3	32	7.8
84	Bornite Zone	MacKenzie NE	M487880	9.7	45.5	1.39	616	0.61	3.03	2.9	16	690	9.8	45.4	0.001	0.11	0.17	9.9	2	0.6	621	0.24	1.78	6.8	0.327	0.46	5.3	116	0.5	7.2	84	2.3
85	Bornite Zone	MacKenzie NE	M487881	10.7	23	0.55	350	0.45	2.21	1.5	7	340	16.1	77.6	0.001	0.07	0.1	3.4	2	0.3	370	0.08	1.13	5.1	0.153	0.44	3.3	74	0.1	2.4	51	8.1
86	Bornite Zone	MacKenzie NE	M487882	8.7	32.5	0.36	326	0.5	2.97	1.9	2.2	310	15.5	60.4	0.001	0.25	0.75	2.9	3	0.5	476	0.14	0.14	7.5	0.138	0.32	3.8	36	0.1	3.6	51	2.4
87	Bornite Zone	MacKenzie NE	M487883	7.6	103.5	0.13	204	0.48	2.78	1.9	1.7	330	18.2	74.6	0.001	0.14	21.2	2	2	0.4	307	0.14	0.34	5.5	0.108	0.41	2.7	29	0.2	2.5	38	4.3
88	Bornite Zone	MacKenzie NE	M487884	10.2	31.1	0.2	304	0.37	2.98	1.5	1.8	220	16.3	62.6	0.001	0.22	0.28	2.1	5	0.4	352	0.08	1.56	6	0.087	0.37	2	33	0.1	1.4	43	5.8
89	Bornite Zone	MacKenzie NE	M487885	8	29	0.34	315	0.42	3.25	2	2.4	330	14.7	54.9	0.001	0.15	0.8	2.4	2	0.5	500	0.12	0.24	9.7	0.137	0.33	5.2	35	0.1	3.4	48	2.8
90	Bornite Zone	MacKenzie NE	M487886	4.1	156.5	0.24	119	5.59	0.02	0.2	4.1	80	12750	33.6	0.031	0.19	10000	2.3	6	0.2	56.3	0.025	0.18	0.7	0.061	0.25	2	26	0.1	1.2	812	0.6
91	Bornite Zone	MacKenzie NE	M487887	4.8	195.5	1.01	1380	0.63	0.03	0.8	7.8	190	75.4	46	0.001	0.52	501	2.9	7	0.2	303	0.06	0.28	1.3	0.096	0.28	0.8	68	0.6	5	257	1.1
92	Bornite Zone	MacKenzie NE	M487888	9.6	32.7	0.2	313	0.34	2.99	2.2	1.8	300	56.3	67.9	0.001	0.09	110.5	2.8	2	0.5	329	0.15	0.42	5.7	0.13	0.34	3.5	35	0.5	3.4	54	4
93	Bornite Zone	MacKenzie NE	M487889	11	40.7	2.65	1180	1.16	0.04	3.2	29.1	760	7.3	12	0.004	0.15	101.5	22	2	1	162	0.17	0.025	1	0.453	0.08	0.8	177	1.9	25.2	105	11.1
94	Tillworth South	MacKenzie NE	M487890	5.9	16.7	1.33	757	60	1.33	1.3	16.4	520	10.5	33.8	0.01	0.32	0.46	12.3	4	0.8	439	0.06	3.36	1.2	0.206	0.22	2.9	129	15.1	9.8	120	4.8
95	Tillworth South	MacKenzie NE	M487891	1.3	9.2	0.45	234	2.43	3.24	0.4	21.6	90	7.8	58.7	<0.002	3.5	0.28	2.8	7	0.3	334	<0.05	4.67	0.9	0.065	0.34	0.5	34	0.5	2.8	186	5.8
96	Tillworth South	MacKenzie NE	M487892	6.5	6.3	0.21	131	19.4	2.05	0.7	2	140	17.9	36.5	0.009	0.16	0.69	2.4	2	0.2	312	0.07	3.47	2.4	0.061	0.22	1.2	29	0.5	3.1	13	9.9
97	Tillworth South	MacKenzie NE	M487893	7.5	14.5	0.84	376	0.95	1.7	1.3	8.4	430	6.8	33.9	<0.002	0.33	0.54	7.8	3	0.5	304	0.09	9.34	2.1	0.183	0.2	5.8	70	0.9	7.3	41	1.6
98	Tillworth South	MacKenzie NE	M487894	7.6	17.2	0.49	220	25.6	3.81	1.3	5.6	60	13.1	59	0.011	0.34	0.6	6.3	4	0.5	455	0.15	9.78	16.9	0.102	0.31	11.6	77	4.1	3.2	32	15.9
99	Tillworth South	MacKenzie NE	M487895	10.8	14.6	0.75	298	1.94	1.32	1.1	9	330	6.9	20.5	<0.002	0.3	0.27	6.8	4	0.4	316	0.07	7.21	3.5	0.156	0.12	4.5	59	1	6.6	40	3.4
100	Bornite Zone	MacKenzie NE	N688016	6.4	25.7	3.41	943	0.36	2.94	2.1	55	560	5.1	14.2	0.001	0.01	1.51	22.5	1	0.9	768	0.11	0.025	1.2	0.571	0.19	0.8	218	0.2	11.9	98	10.9
101	Bornite Zone	MacKenzie NE	N688017	12.6	36.4	1.53	729	1.04	2.55	6.3	35.5	1130	9.4	13.9	0.001	0.04	4.83	13.2	1	1.1	637	0.36	0.025	1.7	0.522	0.23	0.8	134	0.3	14.8	79	113.5
102	Bornite Zone	MacKenzie NE	N688018	9.3	40.4	0.33	304	0.34	3.35	4.3	4.7	590	16.9	29.9	0.001	0.005	0.87	4.9	1	0.8	558	0.41	0.025	2.5	0.232	0.2	1.2	58	0.2	5.9	99	6.2
103	Bornite Zone	MacKenzie NE	N688019	6.3	13	0.25	558	0.16	0.24	0.3	3.6	90	1.4	18.2	0.001	0.01	1.7	3.7	1	0.2	82.6	0.025	0.025	1.9	0.036	0.1	0.4	27	0.1	6.4	16	1.4
104	Tillworth NW Split	MacKenzie NE	N688020	5.9	12.4	0.72	348	1.27	1.09	1.1	8.6	350	7.1	29	0.001	0.31	0.87	7.2	3	0.7	388	0.06	2.98	1.5	0.159	0.18	2.5	89	0.6	7.7	36	2
105	Tillworth NW Split	MacKenzie NE	N688021	8.8	17.5	1	384	0.65	1.16	1.1	12.8	410	5.9	35.5	0.001	0.25	2.1	7.1	3	0.4	300	0.06	2.03	2.7	0.182	0.22	1.1	75	4.7	5.7	51	1.4
106	Tillworth NW Split	MacKenzie NE	N688022	0.25	2.5	0.03	50	5.24	0.02	0.2	3	10	0.25	3	0.001	0.01	0.34	0.4	1	0.1	3.8	0.025	0.025	0.1	0.008	0.02	0.4	7	1.3	0.3	5	0.25
107	Tillworth NW Split	MacKenzie NE	N688023	11.2	12.4	1.07	494	1.26	3.19	1.9	15.8	500	6.8	27.6	0.001	0.04	0.87	8.9	1	0.5	606	0.13	0.025	3.5	0.224	0.18	1.9	74	0.5	9.2	49	3.1
108	Tillworth NW Split	MacKenzie NE	N688024	14.7	29.7	0.9	220	1.61	2.8	3.7	11.1	1090	7.2	38.1	0.006	2.6	0.49	8.6	2	0.7	525	0.23	0.18	1.4	0.346	0.18	0.5	95	0.6	9.5	19	64.9
109	Bornite Zone	MacKenzie NE	SBR-12-010																													
110	Breccia Trend	MacKenzie NE	M487208	4.7	38.6	1.52	624	1.87	0.05	0.9	12	160	3.2	18.5	0.001	0.19	287	9.1	1	0.3	104	0.05	0.09	0.3	0.164	0.19	0.6	100	3.1	8.2	54	4.9
111	Breccia Trend	MacKenzie NE	M487209	3.8	50.8	1.53	644	0.43	0.03	1	47.4	240	3.5	12.9	0.001	0.02	103	8.3	1	0.4	135	0.06	0.025	0.6	0.169	0.1	0.4	64	0.9	6.9	63	7.5

B2.

APPENDIX B2: ROCK SAMPLES ASSAY CERTIFICATES

MACKENZIE - ROCK 1/4

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Method	CERTIFICATE COMMENTS
ME-MS61	Interference: Samples with Ca>10% on ICP-MS As. ICP-AES As results reported (2 ppm DL)
ME-MS61	Interference: Mo>400ppm on ICP-MS Cd,ICP-AES results shown.
ME-MS61	REE's may not be totally soluble in this method.

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Sample Description	Method Analyte Units LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
M487791		85	27.7	14.0	47	50.1

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

ALS Canada Ltd.

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

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Sample Description	Method Analyte Units LOR	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1
M487791		3.7	22.2	<0.002	0.05	0.75	11.7	1	0.7	271	0.24	<0.05	2.1	0.284	0.19	0.8

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
M487791		2.84	11.30	0.06	1.5	0.030	0.87	8.8	12.4	0.85	504	3.58	2.16	3.8	22.6	580

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	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
M487791		0.10	0.004	0.47	5.90	3.6	510	0.60	0.05	2.00	0.24	18.75	11.2	37	0.73	23.5

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

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Sample Description	Method / Analyte / Units / LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
M487751		88	1.7	23.0	82	12.5
M487752		255	0.8	35.4	235	18.0
M487753		72	0.6	26.3	48	6.3
M487754		118	0.8	14.7	55	7.3
M487755		48	0.4	36.1	50	2.3
M487756		137	0.8	19.5	52	9.1
M487757		157	0.3	14.2	89	65.9
M487758		144	3.5	12.6	21	6.0
M487759		513	5.3	39.5	45	35.2
M487760		20	1.9	3.6	38	31.2
M487761		151	2.7	20.2	76	6.7
M487762		110	16.2	11.4	20	3.8
M487763		184	7.7	11.5	54	22.5
M487764		49	14.5	4.2	62	2.4
M487765		34	0.5	2.4	15	1.4
M487766		151	1.5	13.1	73	4.2
M487767		47	0.3	5.6	37	88.4
M487768		97	4.2	10.3	66	4.0
M487769		76	0.4	9.6	63	93.1
M487770		161	27.8	16.3	167	30.1
M487771		83	30.8	15.3	46	42.0
M487772		138	1.1	14.7	123	3.7
M487773		120	1.9	15.9	72	6.3
M487774		106	1.9	17.9	50	7.9
M487775		43	2.9	10.1	31	36.0
M487776		139	6.1	13.9	66	5.5
M487777		85	2.6	10.1	60	4.2
M487778		156	2.3	8.7	284	11.0
M487779		92	1.1	6.8	239	6.2
M487780		164	0.2	8.3	106	6.0
M487781		113	2.8	12.2	62	8.0
M487782		132	8.1	13.8	69	5.9
M487783		102	7.0	9.8	78	3.9
M487784		92	4.0	9.6	73	4.0
M487785		87	1.8	7.7	71	4.4
M487786		101	2.3	11.0	72	5.3
M487787		121	2.6	11.6	68	7.9
M487788		153	1.8	12.0	117	5.7
M487789		92	3.1	7.4	70	5.0
M487790		81	29.8	12.5	65	41.8

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1
M487751		5.6	12.4	0.002	1.45	2.59	13.4	3	1.5	721	0.25	0.23	3.1	0.326	0.17	3.0
M487752		3.8	48.9	0.002	0.84	0.68	32.0	3	2.2	497	0.44	0.23	9.0	0.367	0.21	3.4
M487753		3.9	36.4	<0.002	0.02	0.80	7.6	1	0.5	213	0.18	<0.05	4.4	0.201	0.15	2.1
M487754		4.6	59.1	<0.002	0.01	0.34	13.6	1	0.9	454	0.32	<0.05	5.3	0.371	0.31	2.3
M487755		3.1	30.0	<0.002	0.01	9.87	4.2	1	0.2	272	0.10	<0.05	1.4	0.106	0.12	0.9
M487756		4.3	52.7	<0.002	0.01	0.39	14.0	2	1.1	478	0.39	<0.05	5.4	0.416	0.34	2.2
M487757		4.5	11.2	<0.002	0.17	1.00	17.5	2	0.8	631	0.16	<0.05	1.7	0.461	0.10	1.0
M487758		3.9	89.2	0.032	3.89	0.22	15.9	2	0.6	387	0.21	0.41	5.6	0.313	0.62	2.0
M487759		5.0	60.2	<0.002	0.42	1.23	4.6	2	2.6	727	1.18	0.08	3.4	0.670	0.30	10.4
M487760		22.2	73.3	<0.002	0.01	1.09	2.3	1	0.2	259	0.14	<0.05	11.1	0.070	0.32	3.4
M487761		3.3	69.2	0.030	2.06	0.71	18.3	2	1.1	483	0.35	0.41	6.4	0.459	0.44	2.2
M487762		4.4	81.9	0.015	3.16	0.28	12.7	2	0.5	345	0.18	0.19	4.8	0.283	0.52	2.7
M487763		3.1	44.7	0.003	1.63	0.53	18.3	2	1.4	739	0.13	0.24	1.1	0.494	0.47	0.9
M487764		7.0	52.9	<0.002	0.22	751	4.8	1	0.3	131.5	0.07	<0.05	4.1	0.090	0.34	2.3
M487765		2.3	9.7	0.011	0.09	4.98	2.9	1	0.2	32.4	<0.05	0.14	0.5	0.050	0.06	0.4
M487766		9.3	46.2	<0.002	0.04	3.11	16.1	2	1.1	379	0.24	0.31	2.5	0.395	0.36	1.3
M487767		10.2	23.9	<0.002	<0.01	1.11	5.6	1	0.4	447	0.11	<0.05	1.4	0.176	0.16	0.6
M487768		5.9	5.8	<0.002	0.07	69.4	6.9	1	0.3	409	0.06	<0.05	0.7	0.162	0.13	0.4
M487769		9.5	25.5	<0.002	0.01	0.82	8.1	1	0.7	362	0.29	<0.05	2.1	0.287	0.25	0.9
M487770		41.2	91.9	0.891	2.12	7.83	16.3	7	2.3	263	0.30	0.55	2.3	0.334	0.84	1.1
M487771		4.3	24.9	0.002	0.05	0.79	12.5	2	0.8	260	0.26	<0.05	2.2	0.275	0.20	0.9
M487772		10.0	18.2	<0.002	5.49	123.0	5.4	1	0.3	526	<0.05	2.65	0.7	0.049	0.13	1.0
M487773		4.1	14.0	<0.002	0.02	35.6	10.4	1	0.4	367	0.09	<0.05	0.5	0.258	0.09	0.5
M487774		3.9	61.5	<0.002	0.03	1.17	12.2	1	1.1	379	0.37	<0.05	4.6	0.366	0.41	1.8
M487775		4.5	78.3	0.002	0.07	7.56	4.2	1	0.6	205	0.38	0.05	19.5	0.130	0.36	4.8
M487776		8.4	40.5	<0.002	0.01	4.32	14.7	2	1.0	355	0.33	<0.05	4.5	0.439	0.30	1.8
M487777		3.9	21.2	<0.002	0.02	51.4	10.5	1	0.5	263	0.13	<0.05	2.0	0.240	0.10	0.9
M487778		10.6	16.1	0.005	0.68	346	17.5	3	0.8	70.9	0.11	0.06	1.3	0.370	0.30	0.9
M487779		25.6	8.0	<0.002	0.05	331	9.4	1	0.4	152.5	0.05	<0.05	1.1	0.167	0.07	0.4
M487780		3.7	3.1	0.004	2.88	2.92	17.9	3	0.3	754	0.16	0.22	<0.2	0.503	0.06	0.1
M487781		4.9	5.2	<0.002	0.07	45.0	11.6	1	0.5	517	0.11	0.05	3.4	0.274	0.07	0.8
M487782		6.9	6.6	<0.002	0.12	59.3	11.1	1	0.5	620	0.09	<0.05	0.9	0.253	0.13	0.4
M487783		5.1	4.3	<0.002	0.11	105.0	6.4	1	0.3	367	0.05	<0.05	0.4	0.155	0.15	0.4
M487784		7.3	4.6	<0.002	0.11	69.1	6.4	1	0.2	982	0.05	<0.05	0.7	0.154	0.13	0.4
M487785		5.0	6.1	<0.002	0.05	94.5	6.0	1	0.2	384	<0.05	<0.05	0.5	0.145	0.06	0.3
M487786		6.6	8.6	<0.002	0.04	67.9	7.6	1	0.3	585	0.09	<0.05	3.0	0.218	0.08	0.4
M487787		5.0	8.2	<0.002	0.07	47.4	11.9	1	0.5	511	0.11	0.11	1.7	0.335	0.07	0.5
M487788		33.9	8.8	<0.002	0.10	35.0	7.7	1	0.3	389	0.07	0.08	2.0	0.207	0.08	0.5
M487789		6.3	3.1	<0.002	0.08	84.9	5.5	1	0.2	361	<0.05	<0.05	0.2	0.155	0.06	0.3
M487790		6.8	22.3	0.177	0.61	1.94	10.2	2	0.8	247	0.22	0.23	2.1	0.257	0.22	0.8

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

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
M487751		4.53	18.70	0.16	0.8	0.296	1.06	22.9	6.8	1.80	725	4.81	3.09	2.6	34.9	460
M487752		7.46	19.00	0.13	1.1	0.229	1.69	19.1	5.9	1.80	1020	4.95	2.72	3.7	59.9	1370
M487753		3.13	9.43	<0.05	0.4	0.025	0.90	10.5	19.0	0.91	1330	1.41	0.64	2.2	10.7	290
M487754		3.81	16.85	0.11	0.5	0.038	2.09	8.6	20.4	0.80	509	0.82	2.40	3.9	18.0	540
M487755		4.29	5.55	0.05	0.2	0.015	0.74	12.8	9.5	3.19	2550	0.84	0.27	1.3	9.9	160
M487756		4.33	20.3	0.11	0.7	0.058	2.10	9.9	14.7	1.63	644	1.29	2.67	4.8	19.1	620
M487757		4.96	17.80	0.08	1.9	0.048	0.39	8.0	31.4	2.30	827	1.14	3.81	2.6	60.0	830
M487758		5.99	18.10	0.12	0.4	0.007	2.27	11.2	12.8	1.89	221	10.30	1.98	2.4	23.9	580
M487759		12.85	27.6	0.22	1.5	0.013	1.42	28.9	8.6	0.28	452	3.84	3.52	20.4	19.5	620
M487760		0.80	8.97	0.08	1.0	<0.005	4.00	4.9	4.1	0.24	131	1.21	1.45	0.9	3.4	150
M487761		5.57	19.00	0.12	0.5	0.053	1.79	12.8	18.0	2.15	571	49.6	2.29	4.1	29.8	750
M487762		5.58	15.65	0.11	0.3	0.005	2.36	9.6	11.6	1.45	219	10.10	1.72	2.2	18.6	390
M487763		5.11	20.5	0.11	0.8	0.031	2.35	5.9	12.6	2.68	791	0.84	2.11	2.2	40.2	860
M487764		1.45	8.93	0.07	0.1	0.012	1.66	4.4	48.5	0.61	251	5.51	0.05	1.0	7.1	90
M487765		1.16	3.11	<0.05	0.1	0.015	0.35	1.7	5.2	0.17	171	13.10	0.21	0.5	4.8	90
M487766		4.13	18.60	0.12	0.3	0.044	1.84	7.7	16.9	1.19	639	2.62	2.29	3.5	25.0	650
M487767		1.78	18.90	0.07	2.5	0.010	1.70	5.3	39.1	0.38	261	0.54	3.25	1.6	18.3	450
M487768		3.17	5.71	<0.05	0.2	0.018	0.16	3.6	46.2	3.69	745	0.65	0.03	1.0	18.4	310
M487769		2.74	18.25	0.12	2.6	0.028	1.55	8.4	34.1	0.54	454	1.10	2.73	4.0	13.0	690
M487770		5.25	14.90	0.10	0.9	0.099	3.23	12.4	13.6	1.34	646	1100	1.63	4.3	37.1	980
M487771		2.75	11.45	0.08	1.2	0.036	0.84	8.8	14.4	0.82	490	3.76	2.07	3.8	23.3	560
M487772		9.61	7.08	0.08	0.2	0.118	0.66	5.6	18.2	3.79	1600	0.82	0.04	0.5	33.5	100
M487773		4.93	9.31	<0.05	0.3	0.024	0.42	7.1	36.2	4.64	1140	0.65	0.03	1.6	15.8	530
M487774		3.59	17.60	0.12	0.5	0.043	2.26	9.7	17.1	1.17	518	2.63	2.47	4.6	15.6	530
M487775		1.95	11.10	0.09	1.4	0.074	3.41	11.0	17.4	0.45	298	21.9	1.52	2.6	7.8	210
M487776		4.22	18.55	0.12	0.3	0.045	1.70	8.6	21.3	1.42	738	4.34	2.10	4.1	22.3	750
M487777		3.62	10.45	0.06	0.2	0.030	0.54	6.9	40.6	2.73	739	1.17	0.03	2.0	17.0	440
M487778		4.26	15.90	0.06	0.7	0.108	0.63	4.6	62.9	0.62	481	2.73	0.03	1.7	37.4	420
M487779		2.65	7.31	<0.05	0.3	0.167	0.22	2.4	66.3	1.86	636	0.79	0.03	0.9	19.7	190
M487780		8.68	19.85	0.13	0.3	0.054	0.41	7.2	16.5	3.27	1540	0.88	2.41	2.2	27.9	630
M487781		3.26	9.54	0.05	0.4	0.031	0.13	6.0	55.4	1.72	695	1.10	0.03	1.7	16.3	490
M487782		3.72	8.52	<0.05	0.3	0.029	0.16	5.3	45.3	3.35	840	0.75	0.03	1.6	19.2	520
M487783		3.75	5.68	<0.05	0.2	0.014	0.13	3.5	38.0	4.18	950	0.49	0.02	1.0	17.6	280
M487784		3.35	5.90	<0.05	0.2	0.014	0.14	3.8	39.7	4.04	794	0.31	0.02	0.9	17.1	560
M487785		3.45	5.80	<0.05	0.3	0.013	0.18	3.2	37.7	4.52	726	0.39	0.01	0.9	18.3	270
M487786		3.64	8.57	<0.05	0.3	0.017	0.25	5.1	39.6	2.58	840	0.54	0.02	1.4	17.8	530
M487787		3.81	9.89	0.05	0.5	0.030	0.23	6.6	39.2	2.21	848	1.22	0.02	2.0	17.1	630
M487788		3.81	7.89	<0.05	0.3	0.017	0.25	4.3	33.0	2.78	963	0.79	0.03	1.3	17.3	400
M487789		3.33	4.90	<0.05	0.2	0.012	0.11	2.7	38.3	4.15	694	0.28	0.02	0.8	18.3	280
M487790		3.23	10.30	0.05	1.3	0.049	0.87	8.8	11.6	0.82	549	428	1.93	3.6	32.6	540

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

ALS Canada Ltd.

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

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12163500

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	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
M487751		2.58	0.227	6.66	7.81	7.1	680	0.83	0.48	5.87	0.45	58.2	28.6	43	0.48	8710
M487752		1.46	0.130	3.17	8.29	5.0	420	0.79	0.44	5.45	2.81	50.2	39.5	22	1.25	6410
M487753		1.64	0.006	0.08	4.50	7	360	0.36	0.03	11.35	0.16	26.6	10.2	13	2.15	43.5
M487754		1.40	0.004	0.09	7.47	3.2	730	0.66	0.06	3.17	0.07	24.3	15.7	24	2.37	27.5
M487755		1.54	0.005	0.04	2.36	<5	340	0.19	0.01	18.55	0.15	33.4	12.8	7	1.85	9.1
M487756		1.36	0.008	0.10	7.93	2.3	720	0.59	0.04	3.50	0.05	27.7	17.5	31	2.11	38.8
M487757		2.22	0.002	0.09	8.08	8.1	630	0.53	0.05	4.96	0.14	18.75	22.7	186	1.32	39.2
M487758		0.86	0.027	0.19	7.72	2.1	620	0.64	0.22	2.05	0.04	28.5	27.0	44	5.18	35.4
M487759		1.34	0.011	0.36	10.05	9.4	120	1.94	0.06	4.54	0.07	80.3	7.5	141	2.68	376
M487760		0.50	0.003	0.04	5.64	1.5	980	0.39	0.02	0.69	0.37	9.85	2.7	13	1.22	11.1
M487761		0.86	0.022	3.03	8.18	4.0	430	0.73	0.37	3.09	1.15	33.4	28.0	47	3.36	2150
M487762		2.10	0.024	0.21	7.13	4.6	710	0.60	0.12	1.93	0.04	23.6	18.6	30	3.44	46.1
M487763		4.06	0.012	0.24	8.91	1.6	400	0.65	0.13	5.07	0.05	15.70	20.0	69	2.59	253
M487764		1.36	0.004	0.48	4.17	129.5	4010	0.46	0.09	1.24	0.56	9.24	4.8	22	5.89	701
M487765		0.82	0.019	0.68	1.21	6.5	180	0.10	0.09	0.59	0.12	4.04	3.8	21	0.44	470
M487766		1.38	0.012	0.22	7.74	4.8	630	0.73	0.04	3.20	0.16	20.7	16.9	44	3.59	141.0
M487767		1.16	0.002	0.05	8.42	7.1	880	1.20	0.01	1.67	0.02	12.55	6.5	19	4.11	6.8
M487768		1.24	0.002	0.15	2.85	70.7	720	0.37	0.03	9.44	0.34	9.64	15.4	17	3.04	51.5
M487769		1.04	0.002	0.08	7.92	8.9	950	1.04	0.03	2.72	0.05	20.8	9.2	11	7.27	26.6
M487770		0.10	0.657	3.27	7.40	34.9	610	0.84	1.21	1.72	1.67	26.6	18.5	68	3.98	9060
M487771		0.10	0.002	0.33	5.71	3.7	500	0.70	0.05	1.94	0.20	20.2	11.1	36	0.73	25.2
M487772		1.04	0.022	1.13	1.90	109	70	0.18	3.00	10.15	0.51	14.95	79.2	6	2.43	475
M487773		1.04	0.001	0.06	4.59	32	150	0.32	0.01	10.45	0.07	17.85	18.7	15	4.50	16.8
M487774		1.94	0.003	0.19	7.53	2.1	690	0.75	0.06	3.06	0.05	26.9	13.5	29	3.41	116.5
M487775		2.70	0.035	0.68	5.92	5.4	630	0.60	0.12	1.71	0.18	25.4	8.9	17	2.72	590
M487776		0.98	0.001	0.08	7.76	5.7	330	0.74	0.02	4.11	0.17	23.1	16.1	36	3.41	27.3
M487777		1.16	0.003	0.05	4.97	14.5	100	0.38	0.01	6.58	0.10	17.10	13.5	25	3.99	23.4
M487778		1.36	0.063	0.78	7.25	693	210	0.49	0.10	1.96	6.93	12.75	58.5	66	4.79	1740
M487779		1.36	0.005	0.54	3.76	419	70	0.40	0.03	4.91	24.2	6.17	13.3	18	4.34	2110
M487780		0.88	0.005	0.27	9.19	10.6	260	0.47	0.03	5.19	0.24	17.30	26.4	56	1.02	440
M487781		0.98	0.001	0.10	4.39	45.0	810	0.43	0.02	4.89	0.61	15.00	14.8	21	2.32	65.2
M487782		1.12	0.001	0.17	3.95	64.0	1040	0.35	0.03	8.22	0.19	13.90	16.0	20	2.33	56.8
M487783		0.96	0.001	0.26	2.88	113	220	0.25	0.02	10.30	0.76	8.52	16.5	15	2.39	82.9
M487784		1.84	0.001	0.22	2.83	73.3	1140	0.25	0.02	9.60	0.52	9.83	15.2	13	2.46	74.6
M487785		0.86	<0.001	0.06	2.83	28	210	0.24	0.01	10.10	0.26	7.83	15.1	15	3.04	31.0
M487786		2.38	0.002	0.05	4.23	24.8	630	0.29	0.02	7.74	0.09	11.80	14.4	17	3.47	17.7
M487787		1.58	0.002	0.15	4.82	32.0	160	0.36	0.02	5.92	0.11	15.70	17.1	25	3.00	55.3
M487788		1.58	0.001	0.10	3.85	34.2	1820	0.33	0.02	7.63	0.17	10.20	16.2	17	2.44	42.3
M487789		2.66	0.002	0.16	2.68	38.2	60	0.23	0.01	9.68	0.50	6.63	15.6	10	2.51	97.1
M487790		0.10	0.714	2.90	5.42	12.8	510	0.56	1.07	1.81	0.65	18.35	11.0	57	0.75	7510

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

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 24-JUL-2012
This copy reported on
11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12163500

Project: 697 Mackenzie
P.O. No.: 090906
This report is for 41 Rock samples submitted to our lab in Vancouver, BC, Canada on 16-JUL-2012.
The following have access to data associated with this certificate:

PETER ANDERSEN JOSE SAYO GARCIA	SHANNON BAIRD	BRUCE JAGO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-23	Pulp Login - Rcvd with Barcode
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-MS61	48 element four acid ICP-MS	

To: MIOCENE METALS LIMITED
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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

MACKENZIE - ROCK 2/4

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 6-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12173522

Method	CERTIFICATE COMMENTS
ME-MS61	Interference: Samples with Ca>10% on ICP-MS As. ICP-AES As results reported (2 ppm DL)
ME-MS61	Interference: Mo>400ppm on ICP-MS Cd,ICP-AES results shown.
ME-MS61	REE's may not be totally soluble in this method.

ALS Canada Ltd.

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

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 6-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12173522

Sample Description	Method Analyte Units LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Cu-OG62 Cu % 0.001	Mo-OG62 Mo % 0.001
N688001		119	1.7	12.5	38	7.0		
N688002		70	0.5	16.6	99	6.4		
N688003		112	1.9	10.0	76	3.3		
N688004		6	36.0	0.3	<2	0.5		
N688005		166	0.7	17.3	99	59.5		
N688006		51	0.3	11.7	92	2.1		
N688007		83	29.1	14.6	43	55.4		
N688008		161	27.5	16.5	179	39.8		
M487853		70	1.1	6.0	35	3.2		
M487854		55	4.2	3.0	50	3.9		
M487855		143	194.5	8.1	34	6.8		
M487856		37	19.3	2.0	43	4.7	1.855	
M487857		260	4.7	18.4	137	9.0		1.815
M487858		53	3.3	2.8	38	3.5		
M487859		113	1.7	12.8	48	5.9		
M487860		78	1.0	15.5	68	5.0		
M487861		15	183.0	0.2	10	<0.5	2.60	
M487862		23	14.6	0.4	82	<0.5	17.00	
M487863		121	10.5	12.0	47	3.4		
M487864		72	1.0	27.5	27	55.6		
M487865		55	11.9	3.1	16	1.4		
M487866		67	2.0	6.8	36	36.1		
M487867		113	21.0	9.4	80	3.4	1.600	
M487868		93	1.5	7.7	106	2.6		
M487869		135	31.9	7.6	137	3.4		
M487870		80	1.7	4.6	16	4.4		
M487871		52	337	4.1	30	2.5		

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

ALS Canada Ltd.

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

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 6-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12173522

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1
N688001		68.5	33.3	0.002	0.02	1.23	10.7	1	1.0	762	0.20	0.52	5.3	0.247	0.20	3.8
N688002		9.3	37.2	<0.002	0.18	4.16	4.8	1	0.3	499	0.07	<0.05	1.7	0.112	0.14	0.9
N688003		13.5	53.6	0.003	0.10	1.69	12.5	1	0.7	461	0.16	0.09	3.7	0.298	0.26	2.5
N688004		7.1	28.4	<0.002	2.53	0.32	0.5	3	0.2	73.0	<0.05	24.5	<0.2	0.022	0.14	0.1
N688005		12.9	17.8	<0.002	0.01	3.27	21.0	1	1.0	616	0.25	0.23	2.1	0.495	0.22	1.2
N688006		9.6	8.0	<0.002	0.07	1.82	4.0	1	0.3	435	0.09	0.07	1.2	0.106	0.04	1.0
N688007		4.3	28.3	<0.002	0.04	0.86	11.4	1	0.8	255	0.25	<0.05	2.1	0.271	0.20	0.9
N688008		44.5	98.0	0.938	2.08	8.95	17.0	6	2.5	256	0.30	0.67	2.5	0.323	0.89	1.1
M487853		11.0	12.2	<0.002	0.43	0.61	5.9	2	0.8	230	0.05	2.42	0.8	0.106	0.07	6.7
M487854		11.6	78.4	<0.002	0.09	0.41	2.9	1	0.4	399	<0.05	0.98	1.2	0.168	0.41	0.9
M487855		21.8	51.2	0.002	0.83	1.01	10.4	1	0.7	1025	0.10	36.3	2.5	0.232	0.31	1.4
M487856		13.4	38.0	<0.002	1.90	0.64	2.2	3	0.4	269	0.06	35.2	3.1	0.089	0.19	1.9
M487857		25.4	54.4	19.35	1.44	0.83	21.9	4	1.6	1110	0.22	2.90	3.7	0.588	0.80	28.9
M487858		8.9	66.6	0.085	0.03	0.31	3.4	1	0.5	289	<0.05	0.67	1.2	0.111	0.35	1.5
M487859		7.8	45.6	0.042	0.06	1.72	14.3	1	0.8	503	0.18	0.16	2.6	0.313	0.24	4.7
M487860		8.1	25.3	0.002	0.07	1.20	8.9	1	0.5	383	0.12	<0.05	2.8	0.220	0.11	1.5
M487861		2.1	1.6	0.005	2.43	0.32	0.2	3	0.2	4.3	<0.05	9.37	<0.2	<0.005	0.02	0.4
M487862		11.8	40.4	0.008	>10.0	0.48	0.3	24	<0.2	74.3	<0.05	159.5	<0.2	0.019	0.19	0.6
M487863		4.2	25.8	0.003	0.55	1.10	13.5	2	0.8	277	0.13	13.65	3.2	0.358	0.10	2.0
M487864		13.5	21.7	0.002	0.15	1.75	10.5	5	0.6	375	0.41	5.88	35.1	0.123	0.14	9.9
M487865		33.4	13.5	0.010	>10.0	0.73	3.9	10	0.4	154.5	<0.05	351	0.9	0.078	0.09	1.3
M487866		8.5	25.3	0.003	0.86	0.14	5.0	2	0.8	800	0.11	1.55	2.6	0.248	0.18	1.1
M487867		13.9	53.5	<0.002	0.38	0.55	11.4	13	0.7	565	0.12	5.38	1.7	0.300	0.29	3.6
M487868		9.5	10.8	0.003	0.09	48.5	4.7	1	0.3	190.5	0.05	0.21	0.9	0.103	0.07	0.7
M487869		12.0	101.5	0.005	0.53	0.54	13.2	2	0.6	389	0.15	1.90	4.5	0.341	0.72	1.5
M487870		13.8	16.4	0.007	0.01	2.14	5.8	1	0.3	391	0.06	4.52	1.3	0.083	0.14	4.5
M487871		4.2	8.4	0.003	0.03	1.18	3.3	1	0.3	152.0	<0.05	0.13	0.5	0.087	0.07	0.7

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 6-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12173522

Sample Description	Method Analyte Units LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
N688001		3.88	28.7	0.11	0.4	0.061	1.06	12.6	13.5	0.87	525	11.50	2.14	2.6	12.7	480
N688002		3.53	10.50	0.10	0.3	0.013	0.65	11.0	44.1	2.16	863	0.96	0.08	0.9	22.0	190
N688003		3.52	20.9	0.12	0.3	0.041	1.48	12.3	19.2	1.59	485	3.86	3.02	2.1	21.0	620
N688004		3.00	1.64	0.08	<0.1	<0.005	1.87	<0.5	1.5	0.03	43	26.0	0.15	0.2	2.9	30
N688005		5.45	23.3	0.14	1.9	0.049	0.49	11.4	29.1	1.88	1150	0.93	2.40	3.3	33.6	860
N688006		3.76	8.62	0.10	0.2	0.008	0.25	6.8	23.4	3.14	1350	0.77	1.17	0.9	18.5	220
N688007		2.73	12.30	0.10	1.5	0.034	0.81	10.0	11.1	0.85	500	3.44	2.06	3.7	23.6	550
N688008		5.33	17.65	0.17	1.2	0.106	3.09	14.8	11.8	1.42	652	1080	1.61	4.5	42.2	960
M487853		2.90	9.39	0.09	0.1	0.079	0.33	5.3	5.8	0.47	296	1.34	0.40	0.7	9.6	200
M487854		1.68	21.3	0.10	0.1	0.039	3.56	2.8	12.4	0.60	212	4.42	1.99	0.7	4.8	460
M487855		4.64	28.1	0.14	0.3	0.031	1.95	9.8	7.8	0.70	543	9.83	1.88	1.6	15.2	520
M487856		3.14	13.75	0.10	0.2	0.088	1.82	10.2	4.6	0.28	126	30.6	2.27	0.9	3.6	220
M487857		6.93	33.8	0.20	0.5	0.158	1.82	18.8	26.0	2.28	1190	>10000	1.88	4.0	26.5	1230
M487858		2.20	17.05	0.09	0.1	0.083	2.15	2.9	7.2	0.48	293	107.5	2.13	0.7	5.4	280
M487859		3.44	21.9	0.12	0.4	0.052	1.51	10.2	13.0	1.27	544	43.1	2.83	2.5	17.7	630
M487860		3.17	15.25	0.11	0.3	0.023	0.74	9.1	25.5	2.66	940	3.30	1.86	1.7	15.0	450
M487861		3.67	0.60	0.06	<0.1	0.022	0.04	<0.5	2.2	0.03	64	8.04	0.02	0.1	3.5	10
M487862		26.2	2.15	0.43	<0.1	<0.005	2.47	<0.5	0.5	0.01	39	103.5	0.13	0.4	8.7	40
M487863		3.53	16.85	0.11	0.3	0.099	1.22	12.3	13.4	1.12	472	6.62	2.95	2.1	13.9	830
M487864		1.66	22.6	0.32	2.6	0.034	1.00	66.7	7.8	0.58	287	2.76	4.37	2.5	4.9	200
M487865		14.15	8.08	0.25	0.1	0.027	0.62	4.1	7.5	0.37	168	67.3	0.28	0.7	16.8	170
M487866		2.91	23.7	0.11	1.0	0.014	0.83	11.6	7.6	0.75	262	2.02	3.35	1.7	4.0	960
M487867		3.75	20.4	0.17	0.3	0.046	1.71	9.4	14.1	1.47	608	2.23	2.08	1.8	17.2	650
M487868		3.61	8.60	0.09	0.1	0.007	0.28	5.5	69.8	2.18	1240	2.02	0.02	0.7	16.0	270
M487869		3.96	32.1	0.16	0.2	0.080	5.20	15.9	32.9	1.61	660	28.8	1.99	2.6	15.7	840
M487870		2.29	13.05	0.08	0.3	0.025	0.59	3.3	4.6	0.38	283	538	1.95	0.6	5.6	280
M487871		2.17	6.77	0.06	0.1	0.008	0.22	3.6	13.5	0.61	438	5.84	0.33	0.6	7.3	140

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 6-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12173522

Sample Description	Method	WEI-21	Au-ICP21	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.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
N688001		0.84	0.022	1.50	7.77	11.8	560	0.69	0.75	5.10	0.91	28.6	15.5	31	0.48	1455
N688002		2.76	0.001	0.03	3.29	13.7	6690	0.47	0.07	7.83	0.11	25.7	17.9	11	10.40	23.0
N688003		1.42	0.011	0.76	8.28	3.3	570	0.80	0.11	2.52	0.44	27.6	21.2	36	4.16	3100
N688004		2.10	0.005	0.24	1.63	2.1	570	<0.05	85.5	0.09	0.03	0.75	6.7	16	0.75	21.6
N688005		2.00	0.005	0.26	8.53	15.8	450	0.69	0.56	3.93	0.17	26.3	25.4	62	0.95	92.1
N688006		0.32	0.001	0.02	3.78	10	2680	0.21	0.31	11.20	0.13	15.10	19.2	9	0.79	8.0
N688007		0.10	0.003	0.38	5.53	3.7	510	0.60	0.07	1.97	0.23	21.3	11.7	36	0.80	23.7
N688008		0.10	0.723	3.69	7.07	35.7	620	0.87	1.25	1.73	0.99	29.4	22.4	69	4.50	8770
M487853		0.42	0.115	5.91	2.51	2.5	410	0.13	2.08	1.68	0.24	12.95	8.0	24	0.61	4300
M487854		1.18	0.041	1.64	8.05	2.5	1840	0.78	0.28	1.82	0.80	6.65	5.3	17	2.29	6250
M487855		0.86	0.011	0.61	7.60	10.0	1080	0.48	66.3	4.74	1.57	20.9	28.4	22	0.66	960
M487856		1.30	0.022	2.71	5.53	2.5	610	0.55	59.8	0.75	2.87	19.55	18.2	18	1.28	>10000
M487857		2.12	0.020	1.72	10.05	3.3	570	0.48	5.31	6.64	<0.02	46.2	21.6	42	6.49	2260
M487858		1.24	0.009	1.85	6.07	2.2	1690	0.54	0.64	1.29	0.83	6.02	8.0	11	2.28	9370
M487859		0.74	0.002	0.63	7.50	7.2	560	0.48	0.16	2.95	0.30	25.8	13.5	32	1.07	5110
M487860		0.64	<0.001	0.06	6.10	8.9	2690	0.40	0.07	7.30	0.09	20.8	14.0	17	2.18	70.6
M487861		0.70	0.027	8.13	0.13	3.6	40	<0.05	11.60	0.05	1.28	0.31	4.7	16	0.10	>10000
M487862		1.50	0.186	78.0	2.06	11.9	210	<0.05	219	0.04	6.73	0.47	102.5	6	1.08	>10000
M487863		1.52	1.330	1.53	6.90	1.4	610	0.48	11.30	1.87	0.21	26.1	15.7	40	0.74	1620
M487864		0.32	0.497	10.15	8.32	9.9	300	1.59	21.9	2.96	0.92	163.5	4.6	13	1.01	9420
M487865		0.50	0.296	6.11	2.25	6.4	70	0.19	461	0.78	0.07	10.65	44.0	16	0.56	167.5
M487866		1.08	0.020	0.32	8.67	0.8	560	0.93	1.99	2.93	0.03	26.2	6.3	7	1.24	140.5
M487867		1.06	0.819	35.6	7.39	2.3	1120	0.54	23.6	2.94	2.80	20.6	15.4	28	3.02	>10000
M487868		1.28	0.002	0.22	3.10	11	90	0.22	0.44	13.15	0.18	11.70	19.1	8	2.56	85.7
M487869		2.66	0.064	4.01	10.15	2.8	1750	0.99	1.48	2.86	1.66	35.1	19.4	27	7.74	6280
M487870		0.88	0.080	1.46	4.99	3.0	270	0.42	2.82	2.25	0.23	7.79	4.3	14	0.56	2670
M487871		2.20	0.004	0.88	1.76	2.8	510	0.13	0.75	3.39	0.29	7.74	7.4	26	1.23	2480

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

ALS Canada Ltd.

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

To: **MIOCENE METALS LIMITED**
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 6-AUG-2012
This copy reported on 11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12173522

Project: 697 Mackenzie
P.O. No.: 090918
This report is for 27 Rock samples submitted to our lab in Vancouver, BC, Canada on 26-JUL-2012.

The following have access to data associated with this certificate:

PETER ANDERSEN JOSE SAYO GARCIA	SHANNON BAIRD	BRUCE JAGO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-23	Pulp Login - Rcvd with Barcode
LOG-21	Sample logging - ClientBarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
CRU-QC	Crushing QC Test
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
ME-MS61	48 element four acid ICP-MS	
Cu-OG62	Ore Grade Cu - Four Acid	VARIABLE
Mo-OG62	Ore Grade Mo - Four Acid	VARIABLE

To: **MIOCENE METALS LIMITED**
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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

MACKENZIE ROCK 3/4

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 11-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12181553

Method	CERTIFICATE COMMENTS
ME-MS61	Interference: Mo>400ppm on ICP-MS Cd,ICP-AES results shown.
ME-MS61	REE's may not be totally soluble in this method.

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 11-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12181553

Sample Description	Method / Analyte / Units / LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Ag-OG62 Ag ppm 1	Cu-OG62 Cu % 0.001	Pb-OG62 Pb % 0.001	Ag-GRA21 Ag ppm 5
M487872		36	0.9	3.1	34	5.2				
M487873		52	0.1	2.8	23	1.2		4.34		
M487874		9	0.1	1.6	13	14.3				
M487875		58	0.3	4.3	50	6.6				
M487876		85	32.1	14.9	45	49.3				
M487877		168	27.7	16.3	179	34.7				
M487878		13	0.1	0.7	8	9.7				
M487879		46	2.1	5.3	32	7.8		1.635		
M487880		116	0.5	7.2	84	2.3				
M487881		74	0.1	2.4	51	8.1				
M487882		36	0.1	3.6	51	2.4				
M487883		29	0.2	2.5	38	4.3				
M487884		33	0.1	1.4	43	5.8				
M487885		35	0.1	3.4	48	2.8				
M487886		26	0.1	1.2	812	0.6	>1500		1.275	4170
M487887		68	0.6	5.0	257	1.1	315	1.920		
M487888		35	0.5	3.4	54	4.0				
M487889		177	1.9	25.2	105	11.1				
N688009		12	0.1	1.7	9	3.6				
N688010		120	0.3	8.4	69	3.2				
N688011		8	0.1	1.1	10	26.6				
N688012		8	0.1	1.1	6	<0.5		2.85		
N688013		5	<0.1	0.2	2	<0.5		2.23		
N688014		10	0.1	0.6	6	9.9				
N688015		51	0.2	4.2	61	3.0				
N688016		218	0.2	11.9	98	10.9				
N688017		134	0.3	14.8	79	113.5				
N688018		58	0.2	5.9	99	6.2				
N688019		27	0.1	6.4	16	1.4				
N688020		89	0.6	7.7	36	2.0				
N688021		75	4.7	5.7	51	1.4				
N688022		7	1.3	0.3	5	<0.5				
N688023		74	0.5	9.2	49	3.1				
N688024		95	0.6	9.5	19	64.9				
N688025		84	29.1	15.5	44	55.6				
N688026		85	33.9	15.2	66	55.4				
M487208		100	3.1	8.2	54	4.9				
M487209		64	0.9	6.9	63	7.5				

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 11-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12181553

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1
M487872		8.7	32.2	<0.002	0.10	0.49	6.4	5	0.8	499	0.21	0.43	7.5	0.186	0.28	3.9
M487873		9.7	20.0	<0.002	0.43	0.21	3.8	5	0.3	142.0	<0.05	1.69	1.9	0.074	0.13	13.5
M487874		19.6	74.1	<0.002	<0.01	0.47	0.7	<1	<0.2	66.5	0.07	<0.05	4.8	0.018	0.41	1.5
M487875		10.5	26.7	<0.002	<0.01	1.05	5.8	1	0.4	453	0.16	<0.05	3.2	0.219	0.18	1.1
M487876		4.2	25.3	0.002	0.04	1.91	11.8	2	0.8	249	0.25	<0.05	2.1	0.272	0.20	1.0
M487877		45.4	101.0	0.965	2.15	8.71	17.0	7	2.4	263	0.30	0.69	2.5	0.328	0.96	1.2
M487878		18.5	56.9	<0.002	0.13	0.24	0.3	3	<0.2	314	<0.05	1.06	23.3	0.026	0.31	7.7
M487879		17.5	51.1	0.005	0.42	0.14	3.4	2	0.5	210	0.22	4.53	5.1	0.074	0.27	10.2
M487880		9.8	45.4	<0.002	0.11	0.17	9.9	2	0.6	621	0.24	1.78	6.8	0.327	0.46	5.3
M487881		16.1	77.6	<0.002	0.07	0.10	3.4	2	0.3	370	0.08	1.13	5.1	0.153	0.44	3.3
M487882		15.5	60.4	<0.002	0.25	0.75	2.9	3	0.5	476	0.14	0.14	7.5	0.138	0.32	3.8
M487883		18.2	74.6	<0.002	0.14	21.2	2.0	2	0.4	307	0.14	0.34	5.5	0.108	0.41	2.7
M487884		16.3	62.6	<0.002	0.22	0.28	2.1	5	0.4	352	0.08	1.56	6.0	0.087	0.37	2.0
M487885		14.7	54.9	<0.002	0.15	0.80	2.4	2	0.5	500	0.12	0.24	9.7	0.137	0.33	5.2
M487886		>10000	33.6	0.031	0.19	>10000	2.3	6	0.2	56.3	<0.05	0.18	0.7	0.061	0.25	2.0
M487887		75.4	46.0	<0.002	0.52	501	2.9	7	0.2	303	0.06	0.28	1.3	0.096	0.28	0.8
M487888		56.3	67.9	<0.002	0.09	110.5	2.8	2	0.5	329	0.15	0.42	5.7	0.130	0.34	3.5
M487889		7.3	12.0	0.004	0.15	101.5	22.0	2	1.0	162.0	0.17	<0.05	1.0	0.453	0.08	0.8
N688009		16.0	32.6	<0.002	<0.01	15.00	0.8	1	<0.2	514	<0.05	<0.05	3.8	0.039	0.20	0.4
N688010		6.4	19.7	<0.002	0.03	6.65	11.7	1	0.6	614	0.17	<0.05	2.1	0.334	0.18	1.4
N688011		25.5	81.8	<0.002	<0.01	6.07	1.0	1	0.2	97.4	0.06	<0.05	9.0	0.036	0.39	2.8
N688012		8.3	15.9	<0.002	0.72	2.50	0.4	18	<0.2	29.6	<0.05	8.07	0.4	0.010	0.08	6.7
N688013		3.5	2.8	<0.002	0.48	4.89	<0.1	2	<0.2	6.1	<0.05	0.58	<0.2	<0.005	0.02	1.7
N688014		11.3	30.2	<0.002	<0.01	1.65	0.6	1	0.2	203	<0.05	<0.05	8.5	0.038	0.19	1.1
N688015		13.2	49.4	<0.002	0.03	2.54	3.3	1	0.7	705	0.17	<0.05	3.2	0.221	0.32	1.1
N688016		5.1	14.2	<0.002	0.01	1.51	22.5	1	0.9	768	0.11	<0.05	1.2	0.571	0.19	0.8
N688017		9.4	13.9	<0.002	0.04	4.83	13.2	1	1.1	637	0.36	<0.05	1.7	0.522	0.23	0.8
N688018		16.9	29.9	<0.002	<0.01	0.87	4.9	1	0.8	558	0.41	<0.05	2.5	0.232	0.20	1.2
N688019		1.4	18.2	<0.002	0.01	1.70	3.7	1	0.2	82.6	<0.05	<0.05	1.9	0.036	0.10	0.4
N688020		7.1	29.0	<0.002	0.31	0.87	7.2	3	0.7	388	0.06	2.98	1.5	0.159	0.18	2.5
N688021		5.9	35.5	<0.002	0.25	2.10	7.1	3	0.4	300	0.06	2.03	2.7	0.182	0.22	1.1
N688022		<0.5	3.0	<0.002	0.01	0.34	0.4	1	<0.2	3.8	<0.05	<0.05	<0.2	0.008	0.02	0.4
N688023		6.8	27.6	<0.002	0.04	0.87	8.9	1	0.5	606	0.13	<0.05	3.5	0.224	0.18	1.9
N688024		7.2	38.1	0.006	2.60	0.49	8.6	2	0.7	525	0.23	0.18	1.4	0.346	0.18	0.5
N688025		4.3	25.5	<0.002	0.05	0.81	11.7	1	0.7	257	0.27	<0.05	2.3	0.267	0.20	1.0
N688026		8.5	28.5	0.212	0.63	2.20	11.2	3	0.9	250	0.27	0.34	2.4	0.256	0.25	1.1
M487208		3.2	18.5	<0.002	0.19	287	9.1	1	0.3	104.0	0.05	0.09	0.3	0.164	0.19	0.6
M487209		3.5	12.9	<0.002	0.02	103.0	8.3	1	0.4	135.0	0.06	<0.05	0.6	0.169	0.10	0.4

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

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 11-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12181553

Sample Description / Method / Analyte / Units / LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
M487872	1.61	17.45	0.08	0.3	0.057	1.36	2.7	16.1	0.68	239	2.19	2.94	2.3	7.6	150
M487873	1.66	8.02	0.08	0.1	0.027	0.40	3.5	11.8	0.38	255	1.17	0.58	0.6	4.5	160
M487874	0.62	15.40	0.07	0.6	<0.005	3.61	1.9	12.4	0.04	163	0.17	2.08	0.8	1.7	10
M487875	1.89	19.45	0.10	0.3	0.018	0.94	6.4	176.5	0.56	315	0.36	2.82	2.2	11.1	500
M487876	2.63	11.70	0.11	1.5	0.034	0.84	9.5	14.4	0.78	476	3.40	2.00	4.0	23.7	540
M487877	5.25	16.35	0.19	1.0	0.107	3.19	14.8	14.3	1.36	651	1105	1.63	4.9	42.0	960
M487878	0.72	15.85	0.09	0.6	0.009	4.12	9.2	4.4	0.03	65	0.63	2.10	0.2	0.9	10
M487879	1.69	19.05	0.09	0.5	0.030	2.64	7.8	18.0	0.30	235	19.05	2.56	1.8	3.8	200
M487880	3.58	22.1	0.12	0.2	0.037	1.79	9.7	45.5	1.39	616	0.61	3.03	2.9	16.0	690
M487881	2.39	18.45	0.12	0.4	0.016	2.96	10.7	23.0	0.55	350	0.45	2.21	1.5	7.0	340
M487882	1.55	19.50	0.10	0.2	0.029	1.82	8.7	32.5	0.36	326	0.50	2.97	1.9	2.2	310
M487883	1.23	19.65	0.10	0.4	0.022	2.28	7.6	103.5	0.13	204	0.48	2.78	1.9	1.7	330
M487884	1.52	19.65	0.10	0.3	0.026	1.72	10.2	31.1	0.20	304	0.37	2.98	1.5	1.8	220
M487885	1.52	20.9	0.10	0.2	0.035	1.74	8.0	29.0	0.34	315	0.42	3.25	2.0	2.4	330
M487886	1.19	5.36	0.22	<0.1	0.082	0.78	4.1	156.5	0.24	119	5.59	0.02	0.2	4.1	80
M487887	2.46	11.80	0.09	0.1	0.016	1.03	4.8	195.5	1.01	1380	0.63	0.03	0.8	7.8	190
M487888	1.42	20.3	0.08	0.3	0.022	2.13	9.6	32.7	0.20	313	0.34	2.99	2.2	1.8	300
M487889	5.93	16.00	0.16	0.7	0.073	0.33	11.0	40.7	2.65	1180	1.16	0.04	3.2	29.1	760
N688009	0.55	18.25	0.07	0.2	<0.005	1.73	11.1	22.1	0.07	106	0.15	3.19	0.5	1.9	130
N688010	3.58	20.7	0.12	0.3	0.047	0.88	6.1	32.3	1.44	622	0.34	3.19	2.3	18.5	740
N688011	0.53	18.70	0.07	1.1	0.007	3.02	9.5	4.3	0.04	95	0.15	2.90	0.7	1.1	30
N688012	0.63	1.57	0.09	<0.1	<0.005	0.62	0.7	1.6	0.04	66	1.75	0.10	0.2	1.3	20
N688013	0.55	0.49	<0.05	<0.1	0.005	0.09	<0.5	1.2	0.02	63	0.72	0.01	0.1	1.0	10
N688014	0.57	18.95	0.05	0.6	<0.005	1.21	10.6	8.9	0.07	66	0.25	3.45	0.6	1.1	10
N688015	1.83	22.7	0.10	0.3	0.021	1.59	9.2	45.5	0.53	337	0.37	3.69	2.4	2.8	550
N688016	5.75	22.2	0.12	0.8	0.066	1.06	6.4	25.7	3.41	943	0.36	2.94	2.1	55.0	560
N688017	4.20	19.70	0.14	3.0	0.049	1.20	12.6	36.4	1.53	729	1.04	2.55	6.3	35.5	1130
N688018	1.90	22.4	0.10	0.4	0.027	1.37	9.3	40.4	0.33	304	0.34	3.35	4.3	4.7	590
N688019	0.92	4.10	0.06	0.1	0.015	0.28	6.3	13.0	0.25	558	0.16	0.24	0.3	3.6	90
N688020	2.45	11.60	0.08	0.1	0.052	0.93	5.9	12.4	0.72	348	1.27	1.09	1.1	8.6	350
N688021	2.51	11.80	0.10	0.1	0.037	1.51	8.8	17.5	1.00	384	0.65	1.16	1.1	12.8	410
N688022	0.44	0.61	<0.05	<0.1	<0.005	0.06	<0.5	2.5	0.03	50	5.24	0.02	0.2	3.0	10
N688023	2.38	19.90	0.10	0.3	0.034	1.16	11.2	12.4	1.07	494	1.26	3.19	1.9	15.8	500
N688024	3.51	19.75	0.16	1.9	0.012	1.55	14.7	29.7	0.90	220	1.61	2.80	3.7	11.1	1090
N688025	2.63	10.90	0.16	1.7	0.036	0.84	10.3	12.5	0.81	486	3.55	2.08	4.0	23.1	560
N688026	3.10	11.00	0.15	1.6	0.060	0.90	11.3	12.9	0.81	545	435	1.96	4.0	36.2	560
M487208	2.90	7.52	0.11	0.3	0.022	0.54	4.7	38.6	1.52	624	1.87	0.05	0.9	12.0	160
M487209	3.15	11.15	0.10	0.4	0.025	0.35	3.8	50.8	1.53	644	0.43	0.03	1.0	47.4	240

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 11-AUG-2012
Account: MIOMIN

Project: 697 Mackenzie

CERTIFICATE OF ANALYSIS VA12181553

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	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
M487872		2.50	0.263	4.58	6.79	3.3	440	0.85	25.1	2.15	0.15	5.53	6.8	18	3.14	5430
M487873		1.18	0.079	60.8	2.18	0.8	100	0.30	113.0	0.88	0.74	6.89	4.0	12	0.91	>10000
M487874		1.16	0.002	0.27	5.29	3.6	140	0.68	0.30	1.24	0.02	4.10	1.5	5	0.97	162.5
M487875		1.18	<0.001	0.17	7.44	3.4	350	1.05	0.26	2.96	0.03	13.90	8.5	12	3.40	109.0
M487876		0.10	0.004	0.45	5.34	3.8	480	0.72	0.06	1.85	0.25	19.55	12.2	36	0.80	27.7
M487877		0.10	0.676	3.80	7.30	38.7	610	0.93	1.26	1.71	1.34	28.3	21.9	69	4.82	9260
M487878		2.62	0.138	3.34	6.09	5.3	980	0.79	7.16	0.64	0.12	10.65	0.9	8	0.73	3470
M487879		0.84	0.326	25.1	6.86	0.8	810	0.97	11.60	1.14	0.48	14.30	4.5	11	1.68	>10000
M487880		1.12	0.241	7.52	8.15	1.6	640	0.88	12.25	2.88	0.12	24.2	14.9	22	4.68	8540
M487881		1.44	0.218	4.51	6.93	0.4	1220	1.01	3.29	1.46	0.15	18.65	7.2	19	3.41	4220
M487882		1.48	0.012	5.79	7.02	2.4	1260	1.38	6.28	1.68	0.27	16.45	4.5	9	1.87	7760
M487883		1.66	0.029	6.94	6.61	12.5	740	1.42	5.85	1.21	0.15	13.30	2.6	10	2.97	5150
M487884		0.92	0.067	8.51	6.61	0.8	380	1.41	6.50	1.28	0.19	13.75	3.2	9	1.81	7430
M487885		0.76	0.025	5.84	7.20	1.3	630	1.47	3.03	1.62	0.14	15.00	4.2	8	1.16	5460
M487886		2.12	0.001	>100	2.17	2670	160	0.28	1.19	0.38	559	4.34	6.7	13	3.24	9750
M487887		0.76	0.132	>100	3.35	82.2	60	0.44	18.90	6.65	24.8	8.23	13.0	12	3.88	>10000
M487888		1.58	0.114	23.0	6.92	26.6	480	1.41	2.69	1.20	2.29	16.95	3.1	8	2.19	2800
M487889		2.34	0.005	1.62	6.13	30.6	100	0.67	0.05	5.81	0.43	28.0	28.4	32	7.15	195.0
N688009		0.70	0.001	1.57	7.30	2.1	890	1.15	0.01	1.41	0.35	16.95	1.5	5	2.32	13.6
N688010		0.82	0.001	0.53	8.04	3.4	690	0.74	0.10	3.31	0.12	15.50	16.2	23	4.59	40.5
N688011		1.26	0.001	0.65	6.18	2.0	100	1.18	0.04	0.72	0.12	10.75	0.7	6	1.17	17.1
N688012		1.36	0.445	31.5	0.71	18.4	220	0.06	50.9	0.14	0.91	1.33	0.9	14	0.36	>10000
N688013		0.80	0.051	32.3	0.21	0.8	130	0.06	83.1	0.16	0.11	0.42	0.4	19	0.13	>10000
N688014		1.24	0.002	0.25	6.12	1.6	160	1.33	0.25	0.91	0.05	10.05	0.7	11	1.37	86.9
N688015		1.68	0.001	0.33	8.17	1.9	630	1.18	0.27	2.32	0.07	20.1	4.9	10	1.94	69.1
N688016		0.78	0.002	0.25	8.85	0.9	370	0.54	0.06	5.11	0.09	16.45	32.3	37	1.55	217
N688017		0.88	0.004	0.39	7.54	16.2	470	1.11	0.10	4.20	0.16	30.2	19.0	23	7.06	53.1
N688018		0.76	0.002	0.04	8.14	2.2	870	1.16	0.04	2.05	0.21	23.2	5.5	8	5.73	4.6
N688019		1.16	0.003	0.26	1.02	0.8	120	0.27	0.17	4.78	0.11	13.50	2.8	12	0.93	67.4
N688020		0.54	0.229	9.03	4.29	3.5	540	0.44	17.60	2.11	0.24	12.65	7.6	20	3.58	9780
N688021		0.52	0.053	8.45	4.73	2.2	1260	0.40	10.05	1.63	0.10	19.55	11.1	19	3.76	7350
N688022		0.90	0.001	0.12	0.16	1.3	20	<0.05	0.11	0.02	0.03	0.31	2.9	17	0.34	4110
N688023		1.28	0.001	0.09	8.18	3.0	580	0.94	0.06	2.31	0.04	23.0	10.2	25	2.56	55.0
N688024		1.06	0.001	0.04	8.77	3.6	550	1.09	0.06	1.40	0.02	32.0	8.5	10	3.26	25.4
N688025		0.10	0.002	0.30	5.50	3.7	500	0.71	0.05	1.90	0.20	21.6	11.2	36	0.77	23.7
N688026		0.08	0.766	2.85	5.33	14.7	520	0.69	1.19	1.79	0.34	22.9	11.9	61	0.87	8030
M487208		2.42	0.017	0.19	3.13	75.9	170	0.55	0.02	3.97	0.25	11.25	13.8	11	6.68	74.4
M487209		2.14	0.002	0.04	5.52	33.1	130	0.48	0.01	3.87	0.33	8.92	23.0	13	4.00	47.2

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

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 11-AUG-2012
This copy reported on
11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12181553

Project: 697 Mackenzie
P.O. No.: 0909124
This report is for 38 Rock samples submitted to our lab in Vancouver, BC, Canada on 3-AUG-2012.
The following have access to data associated with this certificate:

PETER ANDERSEN JOSE SAYO GARCIA	SHANNON BAIRD	BRUCE JAGO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-23	Pulp Login - Rcvd with Barcode
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
ME-MS61	48 element four acid ICP-MS	
Ag-OG62	Ore Grade Ag - Four Acid	VARIABLE
Cu-OG62	Ore Grade Cu - Four Acid	VARIABLE
Pb-OG62	Ore Grade Pb - Four Acid	VARIABLE
Ag-GRA21	Ag 30g FA-GRAV finish	WST-SIM

To: MIOCENE METALS LIMITED
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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

MACKENZIE ROCK 4/4

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 8-SEP-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191684

Method	CERTIFICATE COMMENTS
ME-MS61	REE's may not be totally soluble in this method.

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 8-SEP-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191684

Sample Description	Method Analyte Units LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Cu-OG62 Cu % 0.001
M487890		129	15.1	9.8	120	4.8	
M487891		34	0.5	2.8	186	5.8	4.07
M487892		29	0.5	3.1	13	9.9	
M487893		70	0.9	7.3	41	1.6	1.335
M487894		77	4.1	3.2	32	15.9	
M487895		59	1.0	6.6	40	3.4	

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

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 8-SEP-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191684

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1
M487890		10.5	33.8	0.010	0.32	0.46	12.3	4	0.8	439	0.06	3.36	1.2	0.206	0.22	2.9
M487891		7.8	58.7	<0.002	3.50	0.28	2.8	7	0.3	334	<0.05	4.67	0.9	0.065	0.34	0.5
M487892		17.9	36.5	0.009	0.16	0.69	2.4	2	0.2	312	0.07	3.47	2.4	0.061	0.22	1.2
M487893		6.8	33.9	<0.002	0.33	0.54	7.8	3	0.5	304	0.09	9.34	2.1	0.183	0.20	5.8
M487894		13.1	59.0	0.011	0.34	0.60	6.3	4	0.5	455	0.15	9.78	16.9	0.102	0.31	11.6
M487895		6.9	20.5	<0.002	0.30	0.27	6.8	4	0.4	316	0.07	7.21	3.5	0.156	0.12	4.5

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

ALS Canada Ltd.

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

To: **MIOCENE METALS LIMITED**
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 8-SEP-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191684

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
M487890		3.69	17.35	0.14	0.2	0.104	1.79	5.9	16.7	1.33	757	60.0	1.33	1.3	16.4	520
M487891		5.44	11.95	0.16	0.3	0.330	3.08	1.3	9.2	0.45	234	2.43	3.24	0.4	21.6	90
M487892		1.02	11.75	0.08	0.4	<0.005	3.11	6.5	6.3	0.21	131	19.40	2.05	0.7	2.0	140
M487893		2.22	10.55	0.11	0.1	0.030	1.26	7.5	14.5	0.84	376	0.95	1.70	1.3	8.4	430
M487894		1.90	25.1	0.12	0.8	0.055	3.75	7.6	17.2	0.49	220	25.6	3.81	1.3	5.6	60
M487895		2.04	10.10	0.15	0.2	0.027	0.76	10.8	14.6	0.75	298	1.94	1.32	1.1	9.0	330

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

ALS Minerals
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 8-SEP-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191684

Sample Description	Method	WEI-21	Au-ICP21	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.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
M487890		0.74	0.430	8.43	6.70	2.0	730	0.47	3.69	3.53	3.76	14.70	18.1	19	1.69	8320
M487891		1.22	1.455	48.7	8.10	8.5	920	0.94	1.75	0.97	11.20	2.95	37.0	3	2.38	>10000
M487892		1.02	0.274	5.25	5.59	3.0	1990	0.81	23.3	0.66	0.19	12.90	2.5	12	1.02	4450
M487893		0.92	0.584	19.25	4.91	2.9	760	0.45	46.1	1.01	0.88	15.95	7.0	17	0.88	>10000
M487894		1.02	0.362	13.70	10.15	3.9	1020	1.75	32.4	1.87	0.98	14.40	4.9	4	2.17	9170
M487895		0.92	0.458	16.65	3.94	2.2	490	0.43	39.1	1.29	0.46	25.4	7.4	18	1.31	8890

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

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 8-SEP-2012
This copy reported on 11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12191684

Project: 697_MACKENZIE_ROCKS
P.O. No.: 090924-PROJECT 697
This report is for 6 Rock samples submitted to our lab in Vancouver, BC, Canada on 16-AUG-2012.
The following have access to data associated with this certificate:

PETER ANDERSEN JOSE SAYO GARCIA	SHANNON BAIRD	BRUCE JAGO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
ME-MS61	48 element four acid ICP-MS	
Cu-OG62	Ore Grade Cu - Four Acid	VARIABLE

To: MIOCENE METALS LIMITED
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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

C1.

APPENDIX C1: DRILL CORE LOGS

SALAL

MSA-003

MSA-004

MACKENZIE

MMK-001

MMMK-002

Quick Log Of MSA-003

FROM	TO	ROCKTYPE	LONGDESC
0	8.56	CAS	CASING
8.56	9.14	QMFG	FINE GRAINED QUARTZ MONZONITE Small zone of a fine grained, greyish rock with a 4cm wide limonite+/-Moly vein at ~65 dtca as well as 2 quartz, 3 limonite, and 2 quartz-pyrite veinlets throughout , all at varying angles and most are 2-3 mm in width. Mag susc averages 0.3 milli SI.
9.14	14.4	QMCG	COARSE GRAINED QUARTZ MONZONITE Cg, beige colorored, biotite rich, quartz monzonite. Mag susc averages ~10 milli SI. Only minor fracturing throughout. A couple thin limonite fractures and quartz fractures as wll as one 4mm wide manganese filled fracture.
14.4	16.1	QMFG	FINE GRAINED QUARTZ MONZONITE Fine Grained, silicified greyish quartz monzonite with several xenoliths of CG QMONZ throughout ranging from 5mm to 30cm in size. There is dissminated pyrite throughout the unit as well. Mag susc averages ~0.4 milli SI. There is a quartz zone from 15.65m to 16.10m that has numerous open space filling crystal growths and manganese+limonite fracturing. This unit also has several unknown vein types that have black crystals intergrown with quartz crystals within a possible carbonate matrix?? As well as several Quartz-pyrite filled fractures.
16.1	168.8	QMCG	COARSE GRAINED QUARTZ MONZONITE Cg, beige colorored, biotite rich, quartz monzonite. Mag susc averages ~9 milli SI. Only minor fracturing throughout. There are numerous sub-porphyritic versions of the QMONZ that are grey in color with quartz and plagioclase porphyroblasts up to 5mm in size. These zones are prevalent from 27-34 meters and range from 10cm to 100cm in size and appear to be pyrite rich. There is a high density of fracturing with limonite, quartz+pyrite, and manganese as well as moly+limonite from 33-37 meters. Illite+Limonite zone from 55.70 to 56.25 meters. Sampled a QSP silicified zone from 61.66 to 62.45 meters that has disseminated pyrite throughout +/- Moly as well as limonite+manganese fracturing. Illite and QSP alteration zone from 108.73 to 112 meters. 30 centimeters of core washout at ~137 meters, unknown if it was moly mineralization or not. Pervasive to semi-pervasive diaspore clay alteration of the feldspars with a higher intensity of veining possibly containing moly from approximately 140 -1 meters. There is a highd degree of fracturing from 152.50 to 158.50 lined with diaspore+chlorite, limonite and sericite+silicification associated with pyrite +/- moly +/- magnetite in veins. Intense clay (diaspore?) alteration with minor moly veining from 162 to 169 meters.
168.8	212.2	QMMG	MEDIUM GRAINED QUARTZ MONZONITE Mg, beigey orange with lesser amounts of large biotite than the CG equivalent as well as smaller feldspar crystals. There is intense sericite alteration and silicification+pyrite associated with moly from 169 to 173 meters with more intense silicification and pyrite moly from 170.4 to 172.3 meters. Intense silicification from 173.50 to 176.30 meters with a high vein/fracture density mainly of Quartz+pyrite with some manganese+magnetite. This zone is immediately followed by an intense sericite zone from 176.30 to 177.50 meters then moderate silicification and fracture densitry from 177.50 to 183.50 meters. This is followed by an intensely orangey alterd zone from 183.50 to 186 meters that contains several moly fractures with the largest being ~ 1cm in size. Pyrite is also prevalent throughout this zone. Intense silicification with several moly veins and painting from 186.70 to 194.90 meters followed by an intense zone of sericite+silicification with associated pyrite +/- moly from 194.90 to 198.00 meters. The moly veins are up to 0.25cm wide and mainly located between 186.70 and 188.10 meters as well as coarse moly disseminations in quartz around 194.80 meters. Heavy phyllic alteration from approximately 200 to 209 meters depth including quartz-silicification, sericite, pyrite. The pyrite is in high concentration disseminated throughout and coarsely fracture contolled associated with possible fine grained moly throughout as well. There are also several intense clay altered spots as well as open space filling quartz terminus crystals with pyrite throughout this zone.
212.2	290.17	QMCG	COARSE GRAINED QUARTZ MONZONITE Cg, beige colorored, biotite rich, quartz monzonite. Mag susc averages ~9 milli SI. Only minor fracturing throughout.Ground core and bad recovery from 210 to 218 meters. Several Qtz-Py +/- Moly fracture fillings from 213 to 224 meters. QSP +/- Moly zone from 215 to 216 meters with a lot of lost core, lost moly? Several coarse grained pyrite veins and fine moly fractures from 233 to 236 meters with a more heavily silicified and QSP altered zone from 235 to 236 meters. Pervasively silicified from 246 to 249 meters with numerous quartz-pyrite-clay-hematite veinlets within and around the zone. QSP zone with moderate silicification from 254 to 256 meters as well as some chalcopyrite and azurite at about 255.60 meters. Moderate patchy clay alteration and bands from 275 to 282 meters followed by a moderate to intense sericite +/- Qtz-Py zone from 282 to 283 meters. There is a Qtz-Chlorite-Pyrite zone with associated moly from 284.50 to 286.50 meters. QSP and Qtz-Chl-Py +/- moly from 288.2 to 290.17 meters.
290.17	0	EOH	END OF HOLE

Quick Log Of MSA-004			
FROM	TO	ROCKTYPE	LONGDESC
0	2.7	CAS	CASING
2.7	117	QMFG	FINE GRAINED QUARTZ MONZONITE Fg, light beigey grey quartz monzonite. The first 58 meters of the hole are highly fractured and altered with several large zones of sericite and clay alteration as well as limonite and goethite staining on fracture planes. There are Quartz-Sericite-Pyrite+/-Moly zones as well but they are harder to see due to the poor condition of the core in this zone. There are also several "washout" zones located from 33-45 meters. From 58 to 117 meters the core is much more competent and less rubbly. There are several large zones of sericite alteration located between 58 and 117 meters as well. There is high fracture and vein frequency of QSP+/-Mo veins from 58-61 m, 78-82 m, 88-92 m, and 103-117m. The contact is characterized by QSP stockworking from 115.50 to 116.50 meters and a highly siliceous QSP+Moly zone from 116.50 to 117.00 meters. The center of the contact zone is a quartz-Pyrite-Moly+/-Hematite vein approximately 5cm wide trending ~75 dtca with a 1cm Qtz-Py-Hm? Core, and a 2cm wide Qtz-Py outer band on either side along with possibly mottled or wispy moly throughout. This vein is haloed by an 8cm sericite-pyrite halo on either side of it and a 1mm wide Mo-Hm veinlet trending 60 dtca sharply contacting the lower CG Quartz monzonite.
117	170.88	QMCG	COARSE GRAINED QUARTZ MONZONITE Greyish blue tinted, Mg-Cg Quartz Monzonite,with moderate alteration of the feldspars to a green to yellowish clay, possibly kaolin subset from 117 to 131 meters and patchy afterwards. Sharp contact to the overlying Fg QMON with a 1mm wide Qtz-Py-Hm-Mo? Veinlet between them (see description above). Most feldspars are between 3-5mm in size and there is approximately 3-4% biotite that does not appear to have any major visible chloritization. Sericite haloing the veins and fractures is a lot less prevalent in the Cg compared to the Fg QMONZ.
170.88	176.48	QMFG	FINE GRAINED QUARTZ MONZONITE Fg, light grey, sub-porphyritic quartz monzonite with gradational contacts to the upper and lower Mg-Cg QMONZ. There is only minor fracturing throughout the unit. The upper contact alternates between Fg and Mg with some siliceous zones and veins that have minor Chalcopyrite in them.
176.48	194.96	QMCG	COARSE GRAINED QUARTZ MONZONITE Cg, light bluish grey Cg Quartz Monzonite, same as above with minor patchy clay alteration of feldspars.
194.96	210.3	QMFG	FINE GRAINED QUARTZ MONZONITE Fg, light grey, sub-porphyritic quartz monzonite with sharp contacts to the upper and lower Mg-Cg QMONZ. There is a high frequency of fracturing throughout with several moly veinlets associated mainly with QSP-Hm and minor quartz. There is only minor patchy kaolin alteration of the feldspars throughout.
210.3	302.95	QMCG	COARSE GRAINED QUARTZ MONZONITE Cg, light bluish grey Cg Quartz Monzonite, same as above with minor patchy clay alteration of the feldspars. There seems to be an increse in moly frequency from ~250 meters to 290 meters. There is a kaolin clay alteration of of the feldspars from ~288m to 298m and then a clay altered and siliceous zone from ~298 to 299 meters.
302.95	303.45	QMFG	FINE GRAINED QUARTZ MONZONITE PORPHYRITIC
303.45	304.23	QMCG	COARSE GRAINED QUARTZ MONZONITE
304.23	304.53	QMFG	FINE GRAINED QUARTZ MONZONITE
304.53	306	QMMG	MEDIUM GRAINED QUARTZ MONZONITE
306	306.6	QMFG	FINE GRAINED QUARTZ MONZONITE
306.6	315.94	QMMG	MEDIUM GRAINED QUARTZ MONZONITE
315.94	316.7	QMFG	FINE GRAINED QUARTZ MONZONITE
316.7	328.7	QMMG	MEDIUM GRAINED QUARTZ MONZONITE
328.7	333.9	QMFG	FINE GRAINED QUARTZ MONZONITE
333.9	335.6	QMMG	MEDIUM GRAINED QUARTZ MONZONITE Kaolinized feldspars
335.6	336.4	BX	BRECCIA Open space filling. Quartz matrix?
336.4	352.15	QMMG	MEDIUM GRAINED QUARTZ MONZONITE
352.15	355.6	QMFG	FINE GRAINED QUARTZ MONZONITE Very Silicified, possibly just a pervasively silicified version of the Fg-Mg QMONZ?
355.6	357	BX	BRECCIA Silicified Breccia
357	379.7	QMFG	FINE GRAINED QUARTZ MONZONITE Very biotite rich from 377.9 to 379.70 meters.
379.7	405.38	QMMG	MEDIUM GRAINED QUARTZ MONZONITE Highly silicified making it look like fine grained but relict grains can be seen throughout, very biotite rich as well.
405.38	420.62	QMCG	COARSE GRAINED QUARTZ MONZONITE
420.62	0	EOH	END OF HOLE

Miocene Metals Limited	PROJECT Mackenzie	DD HOLE # MMK-001	486,280 E	Date Start 20 July 2012	Core Size: NQ from collar to 163.3 m then BQ to EOH	page ______ of ______
	GEOLOGIST Joey Garcia	240 AZ ; -70^{0} ; 2587 m elev	5,636,836 N	Date Completed 31 July		

		LITHOLOGY		Essential Minerals				STRUCTURES							ALTERATION					MINERALIZATION		Economic Minerals	Sampling Info		
FROM	TO	GRAPHICAL	DESCRIPTION	BIOTITE	Hornblende	P-Spar	K-Spar	GRAPHICAL	DESCRIPTION	Breccia	Fault	Joints	Vein / Veinlets	Fill Material	GRAPHICAL	DESCRIPTION	TYPE	Intensity	Style	GRAPHICAL	DESCRIPTION	CPY	FROM	TO	Sample no.
0.0	3.1	3.1	Casing (Chuck to ground)						Distance Chuck to ground																
3.1	127.1	124.0	Bio Hb Granodiorite						Massive, Coherent							Fresh - Unaltered to 114.9					20 cm sheared vein zone (81.8 - 82.0) central 5 cm as Qtz veinlet with Bornite/ Native Cu)				
																slight argillic 114.9 - 127.1					Chl-Cly in fracs / Zeolites				
127.1	136.4	9.3	Post min Andesitic dike						Coherent /Massive; Shear HW contact							fresh									
136.4	147.3	10.9	Post min Andesitic dike						Gougy - possibly Fault zone							Argillic									
147.3	159.0	11.7	Bio Hb Granodiorite													Argillic									
159.0	159.6	0.6	Post min Andesitic dike						massive - coherent							Fresh									
159.6	161.6	2.0	Bio Hb Granodiorite						Shattered / peebly							slightly argiilic									
161.6	161.8	0.2	Bio Hb Granodiorite						Shear Zone at structural contact							5 cm central Bull qtz Vein with sulphides (py-cpy)									1% Cu (EB)
161.8	163.8	2.0	fine to md grained diorite porphyry						slight gauge in fractures							argillic - clayey					no sulphide				
163.8	177.3	13.5	Bio Hb Granodiorite																						
177.3	178.5	1.2	Post min Andesitic dike													flinty / siliceous / vuggy									
178.5	183.2	4.7	Bio Hb Granodiorite													Argillic to slight sil									
183.2	201.5	18.3	Bio Hb Granodiorite													Slight Silicification improving toward bottom									
201.5			ongoing																						
190.7	255.1	64.4	Coast Plutonic																						ppm level
	255.1																								
	EOH																								

Note & Miscellenneaous

Miocene Metals Limited

PROJECT Mackenzie	DD HOLE # MMK-002	486,280 E	Date Start 25 July 2012	Core Size: NQ from collar to EOH of 249.93 m	page ______ of ______
GEOLOGIST Joey Garcia	280 AZ ; -70^{0} ; 2580 m elev	5,636,836 N	Date Completed 28 July		

		LITHOLOGY						STRUCTURES							ALTERATION					MINERALIZATION			Sampling Info		
				Essential Minerals																		Economic Minerals			
FROM	TO	GRAPHICAL	DESCRIPTION	BIOTITE	Hornblende	P-Spar	K-Spar	GRAPHICAL	DESCRIPTION	Breccia	Fault	Joints	Vein / Veinlets	Fill Material	GRAPHICAL	DESCRIPTION	TYPE	Intensity	Style	GRAPHICAL	DESCRIPTION	CPY	FROM	TO	Sample no.
0.00	2.10	2.10	Casing (Chuck to ground)						Distance Chuck to ground																
2.10	34.21	32.11	Coarse grained Biotite Granodiorite Coastal Batholith																						
34.21	35.40	1.19	Coarse grained Biotite Granodiorite - Monzonite Coastal Batholith													Bleached (slighth pinkish tinge) - moderate fractures									
35.40	50.00	14.60	Coarse grained Biotite Granodiorite - Monzonite													Fresh to unaltered									
50.00	57.00	7.00	Coarse grained Biotite Granodiorite - Monzonite						Sheared/ traversed by zeolite clay frac sub parallel to CA							massive; unaltered									
57.00	91.00	34.00	Coarse grained Biotite Granodiorite - Monzonite													Fresh to unaltered									
91.00	94.50	3.50	Coarse grained Biotite Granodiorite - Monzonite						shattered; low RQD							slightly argilic									
94.50	153.00	58.50	Coarse grained Biotite Granodiorite - Monzonite						chl-epidote veinlet with K-spar selvage in fracture							massive; very coherent									
153.00	176.70	23.70	Co-gr Biotite Granodiorite													Slightly silicified					random specks of malachite in fracture				
176.70	177.45	0.75	Coast Plutonic - Biotite Granodiorite													Intensely silicified Zone					zone of Malachite & cpy in fracture				EB (2 % Cu)
177.45	177.81	0.36	Qtz Vn with Sulphies													Vein (Qtz), mesothermal texture (streaks-clots and blebs of cpy and py)					Clots & Blebs of Cpy-py with Malachite				EB (5% Cu)
177.81	179.31	1.50	Coast Plutonic - Bio Granodiorite													intensely Silicifed zone					Mal-Azurite in Fracs minor cpy				EB (0.6 % Cu)
179.31	181.00	1.69	Coast Plutonic - Bio Granodiorite													Mod Silicified					Minor Malchite in Fractures				EB (0.1% Cu)
181.00	190.60	9.60	Coast Plutonic - Bio Granodiorite													Slight silicification/bleaching					Qtz-Chl-hema venilet at 188m				
190.60	190.70	0.10	broken up Qtz vn; no sulphides																						
190.70	249.93	59.23	Coast Plutonic						Shattered and broken 242-EOH							Hematite in Fractures SIL-clay-CHl 220 -221m					Staning 207-209				ppm level
	249.93 EOH																								

Note & Miscellenneaous

MSA003 FROM TO Table of Sampling Intervals

From_m	To_m	L_m	Sample	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
8.60	9.14	0.54	M486401	0.96	0.009	7.82	5.83	59.3	450	3.71	17.1	0.09	1.79	28.1	2.3	7	2.16	127.5	4.33	18.15	0.16	0.1	1.69	3.43	15.1	34.9	0.22	1680	545.0	0.18	7.9	3	210	333	225	0.004	1.95	0.87	2.6	1	15.9	27.6	0.68	2.49	5.1	0.127	2.87	1.8	20	19.6	4.1	540	1.3
9.14	11.70	2.56	M486860	5.48	0.002	0.03	6.76	0.7	800	2.13	0.05	0.94	0.58	42.7	2.8	8	1.08	13.7	1.31	16.9	0.1	0.1	0.036	3.24	19.5	16.5	0.27	550	9.0	2.65	7.6	4.5	280	9.9	97	<0.002	0.01	0.14	2.8	2	1.1	219	0.78	<0.05	7.8	0.129	0.65	1.3	19	1.4	11.3	134	1.3
11.70	14.35	2.65	M486861	6.42	0.001	0.08	6.86	1.1	810	2.2	0.19	0.99	1.79	49.4	3.1	9	1.43	16.1	1.4	17.45	0.13	0.1	0.127	3.35	22.9	18.9	0.3	789	111.5	2.52	7.9	4.2	310	11.6	106	0.009	0.08	0.26	3.3	1	1.4	223	0.74	<0.05	7.8	0.146	0.78	2.3	20	2	12	493	1.6
14.35	15.35	1.00	M486402	2.22	0.003	5.44	6.58	7.2	520	5.8	9.37	0.69	38.7	44.8	2.4	8	4.01	362	2.51	19	0.16	0.1	4.08	3.86	24.3	41.9	0.24	7440	59.0	0.41	7.4	3.8	250	114.5	259	0.004	1.42	0.71	2.6	2	7.7	51.1	0.63	0.72	7.3	0.13	3.59	7.3	18	13.7	11.6	8780	1.1
15.35	16.15	0.80	M486403	1.7	0.001	4.96	5.62	15.5	350	4.85	5.79	0.63	31.8	27.6	2.9	8	2.91	462	3.19	17.5	0.15	0.1	12.4	2.8	14	68.8	0.22	13300	91.7	0.24	7.4	3.5	330	128.5	227	0.006	1.86	1.2	2.8	1	11.4	32	0.59	0.84	4.7	0.135	3.11	3.1	18	13.1	9.8	6460	1.9
16.15	18.70	2.55	M486862	5.56	0.001	0.08	6.43	0.6	800	2.14	0.4	0.95	0.06	44.5	2.8	9	1.06	15.1	1.27	16.15	0.16	0.1	0.029	3.15	20.1	15.4	0.25	526	11.5	2.6	7.1	3	280	7.7	90.3	<0.002	0.02	0.11	2.7	2	1.3	228	0.66	<0.05	7.2	0.136	0.59	1.3	19	1.1	10.1	79	1.5
18.70	21.30	2.60	M486863	6.68	0.002	0.02	6.41	0.6	820	2.12	0.09	0.96	0.03	42.4	2.6	9	1.21	15	1.31	16.3	0.13	0.1	0.047	3.19	19.2	13.1	0.24	408	48.7	2.53	7.2	3.2	250	7.8	97.1	0.006	0.08	0.12	2.8	1	1.9	226	0.68	<0.05	7.5	0.124	0.59	1.5	19	3.2	9.6	41	1.3
21.30	23.90	2.60	M486864	5.76	0.001	0.67	6.44	2	740	2.79	2.93	0.88	0.14	45.8	3	9	2.01	317	1.45	17.9	0.13	0.1	0.205	3.35	21	17.9	0.26	2190	117.5	2.25	9.1	3.2	270	19.5	102	0.013	0.25	0.19	3	2	3.5	201	0.91	0.2	11.4	0.132	0.98	3.8	18	5	11.1	142	1.5
23.90	26.50	2.60	M486865	6.16	0.001	0.21	6.64	<0.2	750	2.84	0.45	0.91	0.46	47.8	3.1	7	2.06	31.9	1.54	18.3	0.17	0.1	0.11	3.38	21.9	19	0.27	1270	61.1	2.4	9.1	3.4	320	20.6	105.5	0.007	0.26	0.16	3.5	2	4.1	203	0.87	0.08	12.5	0.137	0.96	3.1	21	5.3	12.6	196	1.7
26.50	29.00	2.50	M486866	6.28	0.002	0.48	6.92	1.2	690	3.84	1.09	0.92	4.06	47.4	3.2	9	1.71	101.5	1.81	18.6	0.18	0.1	0.489	3.23	21.4	21.8	0.28	828	70.5	2.39	9.5	3.5	300	23.9	119.5	0.005	0.41	0.18	3.5	2	4.5	199	0.94	0.11	10.8	0.147	1.21	4	20	5.8	12.2	484	1.9
29.00	30.00	1.00	M486404	1.92	0.003	0.77	7.25	7.3	550	4.41	3.11	1.15	3.06	40.6	3.8	7	1.78	116	3.11	21.1	0.17	0.1	0.43	2.63	21.2	29.1	0.4	919	362.0	2.26	10.4	4.3	480	18.9	138.5	0.03	1.4	0.22	3.8	1	8.7	231	0.79	0.37	12.2	0.201	1.47	4.8	30	8.5	11.6	259	1.6
30.00	32.00	2.00	M486867	4.98	0.001	0.01	6.69	0.8	810	2.15	0.13	0.91	0.33	54.2	2.5	9	1.1	17.4	1.36	17.2	0.17	0.1	0.057	3.38	24.2	17.1	0.24	490	53.8	2.57	8	2.9	280	8.3	96.2	0.007	0.13	0.09	2.9	2	3.9	216	0.78	<0.05	9	0.129	0.69	2.2	18	2.3	11.7	136	1.4
32.00	33.60	1.60	M486868	3.42	0.002	0.74	6.61	1.6	870	3	1.28	0.65	2.42	41.9	2.2	9	1.62	166.5	1.74	17.6	0.17	0.1	1.44	3.79	19	24.3	0.23	922	136.5	1.85	7.2	2.7	290	16.7	137.5	0.011	0.37	0.22	2.9	1	5.5	175	0.68	0.14	8.4	0.126	1.53	3.4	18	4.9	9.5	457	1
33.60	34.60	1.00	M486405	1.82	0.001	0.09	6.7	0.6	850	2.3	0.32	0.87	0.95	37.4	3.2	7	1.06	52.8	1.7	16.2	0.16	0.2	0.261	3.21	19.1	16	0.26	1340	13.0	2.34	9.7	3.4	300	12.1	98.2	<0.002	0.14	0.14	2.9	1	2.2	222	0.85	0.05	8.6	0.146	0.79	2.5	20	3.2	11.8	271	1.5
34.60	35.60	1.00	M486406	1.16	0.001	0.06	6.28	2	760	2.35	0.34	0.55	0.82	43.7	2.3	8	1.39	53.7	1.51	15.8	0.13	0.1	0.094	3.65	22	19.5	0.18	1180	312.0	1.97	7.8	3.5	190	9.4	120.5	0.03	0.13	0.18	2.4	1	5.5	142.5	0.7	0.11	8.9	0.105	0.92	2.9	14	13.4	10.1	202	1.7
35.60	36.60	1.00	M486407	1.5	0.003	0.1	6.45	2.6	760	2.45	0.33	0.51	1.33	41.9	3.5	8	1.93	105	1.74	15.9	0.15	0.1	0.046	3.45	21.7	26.6	0.24	1690	371.0	1.51	7.8	4.3	240	9.2	113	0.031	0.14	0.45	2.6	1	2.3	133.5	0.69	0.1	6.9	0.128	1.01	2.9	19	5.5	12	501	1.5
36.60	39.20	2.60	M486869	5.94	0.001	0.25	6.71	0.6	930	2.64	0.62	0.93	0.95	45.8	2.7	10	0.93	44.8	1.34	17.45	0.18	0.1	0.133	3.37	21.2	17.5	0.23	696	39.5	2.66	7.4	3.4	240	12.6	102.5	0.004	0.14	0.1	2.8	2	2.3	234	0.74	0.09	8.9	0.123	0.73	2.4	18	4.2	11	234	1.7
39.20	41.80	2.60	M486870	6.66	0.001	0.05	6.7	<0.2	860	2.1	0.11	1.11	0.27	40.9	2.8	9	0.67	10.9	1.3	16.85	0.18	0.1	0.015	2.96	18.5	12.8	0.25	561	49.6	2.85	6.9	3.2	280	7.9	82.2	0.006	0.05	0.08	2.7	2	1.2	256	0.58	<0.05	7.9	0.127	0.45	2.1	19	1.1	9.4	123	1.4
41.80	45.00	3.20	M486871	7.86	0.001	0.03	6.89	<0.2	870	2.33	0.16	1.1	0.19	45.5	2.6	8	0.71	7.1	1.24	17.4	0.19	0.1	0.033	3.27	20.8	11.4	0.24	699	70.9	2.86	7.2	3.4	270	11.3	93.7	0.007	0.05	0.07	2.8	2	1.4	255	0.61	<0.05	7.9	0.132	0.61	1.9	19	1.6	9.5	110	1.4
45.00	47.70	2.70	M486872	6.4	0.001	0.07	6.66	0.9	860	2.45	0.2	1.05	0.48	46.1	2.9	9	0.93	22.8	1.36	17.4	0.16	0.1	0.092	3.22	21.6	11.6	0.24	723	47.4	2.73	7	3.5	270	9.2	93.8	0.004	0.09	0.08	2.9	2	1.8	237	0.61	<0.05	8.6	0.126	0.64	2.2	18	1.9	9.3	163	1.4
47.70	48.70	1.00	M486408	2.44	0.001	<0.01	6.49	<0.2	800	3.15	0.09	1.11	<0.02	34.6	2.5	8	0.77	3.3	1.38	15.75	0.16	0.1	0.02	2.86	18.5	9.6	0.23	489	123.0	2.68	7.6	3.4	240	7.7	77.3	0.01	0.02	0.05	2.5	1	1	243	0.65	<0.05	8.2	0.128	0.45	2	17	1.4	7.8	66	1.2
48.70	51.20	2.50	M486873	6.38	0.001	0.04	6.66	<0.2	830	2.26	0.13	1.09	0.05	43.4	2.6	12	0.89	10.5	1.2	16.55	0.16	0.1	0.02	3.17	20.2	10.6	0.23	405	71.1	2.8	6.6	3.2	260	7.8	90.6	0.004	0.03	0.08	2.7	2	1	257	0.64	0.06	8.8	0.12	0.53	2	18	0.6	8.3	50	1.2
51.20	53.70	2.50	M486874	6.28	0.002	0.25	6.57	<0.2	840	1.81	0.59	0.96	0.24	40.4	2	11	0.7	20.4	1.3	15.05	0.08	0.1	0.041	3.16	21.1	10.4	0.23	827	47.8	2.56	7.2	3.4	280	19.4	93.1	0.003	0.12	0.1	2.4	1	1.6	226	0.6	0.07	7.8	0.13	0.72	2	19	2.2	8.9	70	0.9
53.70	55.25	1.55	M486875	6.22	0.001	0.04	6.84	<0.2	830	1.91	0.09	1.1	0.07	39.3	2.2	6	0.71	7.3	1.23	15.8	0.08	0.1	0.017	2.98	20.5	10.1	0.25	577	102.0	2.79	8	3.1	290	8.6	81.5	0.005	0.05	0.08	2.8	1	1.3	245	0.65	<0.05	7.4	0.143	0.5	1.9	19	1.2	9.4	50	1
55.25	56.25	1.00	M486409	1.62	0.003	1.03	6.36	6.3	780	2.7	1.8	0.47	9.8	38.2	2.6	8	1.84	103.5	1.76	15.95	0.15	0.1	1.18	3.93	20.3	16.8	0.21	1240	464.0	1.69	7.7	3.7	230	213	152.5	0.031	0.59	0.25	2.5	1	4.9	138.5	0.62	0.29	7.4	0.117	1.82	3.5	15	8.9	10.2	2090	1.3
56.25	58.75	2.50	M486876	3.78	0.002	0.22	6.67	<0.2	880	2.88	0.49	0.85	0.19	38.6	2.1	7	1.11	36.5	1.29	15.55	0.09	0.1	0.062	3.68	21	13.8	0.22	1090	62.9	2.45	7.4	3	250	11.7	118	0.007	0.19	0.15	2.4	1	1.8	211	0.61	0.16	13.8	0.126	1.1	3.3	18	4.4	8.2	173	0.9
58.75	61.66	2.91	M486877	6.74	0.001	0.1	6.36	<0.2	770	1.96	0.21	0.83	0.27	40.7	1.8	10	1.17	11.9	1.16	14.75	0.1	0.1	0.038	3.14	21.7	13.7	0.21	851	33.9	2.45	7	2.9	250	10.5	91.9	0.004	0.06	0.13	2.3	1	1.1	205	0.61	<0.05	10	0.118	0.8	2.1	18	4.3	8.5	114	0.8
61.66	62.45	0.79	M486410	1.68	0.003	3.04	6.92	14.9	570	4.34	7.51	0.42	4.03	33.6	2.3	8	2.09	317	5.13	23.6	0.21	<0.1	2.17	4.22	17.4	34.7	0.27	1010	741.0	0.18	8	2.9	230	56.9	272	0.079	4.55	0.61	2.8	1	25.8	28.8	0.59	3.22	8	0.118	3.14	6.3	16	61.1	7.3	1040	0.7
62.45	65.00	2.55	M486878	5.34	0.001	0.3	6.71	<0.2	870	3.04	0.46	0.91	0.92	40.7	2.2	9	1.23	51.3	1.67	15.25	0.12	0.1	0.238	3.3	21.2	13.5	0.22	924	31.8	2.48	7.4	3.4	270	13.2	107	0.004	0.11	0.15	2.5	1	1.7	221	0.65	0.08	14.8	0.129	1	3.7	18	2.4	10.4	282	1.1
65.00	67.50	2.50	M486881	7.2	0.002	0.1	6.67	<0.2	820	2.05	0.18	1.07	0.1	43.1	2.3	12	0.94	15.2	1.31	15.75	0.09	0.1	0.027	2.89	22.4	10.1	0.25	521	9.4	2.81	8.5	3	280	8.4	84	<0.002	0.03	0.08	2.8	1	1.8	239	0.77	<0.05	10	0.134	0.51	2.5	20	1.2	10.5	55	1.1
67.50	69.00	1.50	M486882	3.78	0.002	0.05	6.99	<0.2	910	2.21	0.08	1.11	0.06	47.1	2.4	7	1.05	11.4	1.29	17.1	0.1	0.1	0.017	3.18	24.8	9.6	0.24	443	42.4	2.99	8.6	3.5	280	8.5	90.4	0.004	0.03	0.08	2.7	1	1.3	256	0.77	<0.05	11.1	0.138	0.54	2.8	20	1.3	9.9	43	1
69.00	71.50	2.50	M486883	5.86	0.001	0.14	6.84	<0.2	860	2.17	0.35	1.03	0.28	44.5	2.6	8	1.22	37.3	1.67	16.2	0.11	0.1	0.125	3.06	23.7	11.9	0.24	566	66.3	2.69	8.8	3.8	280	9.2	95.6	0.008	0.12	0.11	2.7	1	1.8	238	0.78	0.09	9.8	0.136	0.67	4	19	1.9	10.3	102	1.2
71.50	74.00	2.50	M486884	6.02	0.001	0.04	6.69	<0.2	810	1.65	0.05	1.08	0.07	42.6	2.5	7	0.63	8.9	1.23	15.75	0.11	0.1	0.021	2.91	22.3	9.6	0.23	343	73.4	2.7	8	3.2	270	7.3	77.3	0.01	0.06	0.07	2.6	1	1.7	239	0.69	<0.05	7.9	0.13	0.41	1.6	18	0.5	9.9	38	1.3
74.00	76.50	2.50	M486885	6.44	0.001	0.04	6.5	<0.2	780	1.77	0.02	1.1	0.02	43.4	2.7	11	0.77	4.6	1.55	15.75	0.1	0.1	0.011	2.76	22.7	10.1	0.25	371	159.0	2.75	8.6	3.5	310	7.2	74.1	0.016	0.02	0.08	2.9	1	1.2	240	0.76	<0.05	8.9	0.136	0.38	2.7	20	0.4	10.7	37	1.5
76.50	78.10	1.60	M486886	3.74	0.002	0.16	7.64	<0.2	1250	2.78	0.41	1.02	1.78	44.8	2.2	8	0.83	45.2	1.33	17.8	0.1	0.1	0.34	3.97	24.2	14.2	0.23	785	100.0	2.81	8	3.1	250	12	105.5	0.01	0.15	0.1	2.6	1	1.3	255	0.72	0.1	10	0.134	0.9	2.2	18	2	9.9	478	1.7
78.10	78.60	0.50	M486411	1.34	0.002	1.45	6.8	0.8	650	3.21	3.91	0.66	1.36	34.8	2.3	7	1.82	131	3.11	18.15	0.1	0.1	0.764	3.67	17.8	24.6	0.23	1390	333.0	1.32	9	4.2	230	83.7	201	0.047	1.78	0.36	2.4	1	6.5	124.5	0.73	0.75	7.1	0.123	2.05	4.1	18	11	9.1	401	1.4
78.60	81.00	2.40	M486887	6.06	0.001	0.03	6.77	<0.2	840	2.15	0.03	1.08	0.06	40.6	2.5	8	0.6	9.3	1.54	16.2	0.1	0.1	0.01	3.01	21.7	9.6	0.24	368	58.4	2.83	8.5	3.6	270	8.4	81.7	0.007	0.01	0.09	2.6	1	1.1	247	0.7	<0.05	9.7	0.131	0.42	2.2	19	0.4	9.6	41	1.1
81.00	83.50	2.50	M486888	6.52	0.001	0.04	6.66	<0.2	810	2.23	0.13	1.04	0.1	41.5	2.2	6	0.6	12.2	1.13	15.8	0.1	0.1	0.015	2.99	22.1	9.8	0.22	331	28.4	2.7	8	2.9	240	7.1	82	0.004	0.03	0.07	2.5	1	1.6	233	0.72	<0.05	10.1	0.12	0.46	2.8	16	1	9.1	44	1
83.50	86.00	2.50	M486889	6.34	0.001	0.04	6.37	<0.2	840	2.72	0.04	1.07	0.04	40.9	2.5	9	0.51	7.9	1.49	15.55	0.1	0.1	0.015	2.74	21.6	9.6	0.23	314	81.1	2.66	8	3.5	260	6.6	78.6	0.008	0.05	0.07	2.4	1	1.8	246	0.7	<0.05	7.5	0.124	0.43	2	18	0.7	8.9	19	1
86.00	87.50	1.50	M486890	3.66	0.001	0.03	6.48	<0.2	820	2.31	0.04	1.01	0.04	36.4	2	7	0.47	4.1	1.23	15.7	0.09	0.1	0.026	2.97	18.8	11.3	0.21	272	47.8	2.62	7.6	2.9	250	6.5	83.6	0.005	0.07	0.06	2.3	1	3.2	230	0.62	<0.05	7.6	0.122	0.47	1.8	18	1.2	8.6	24	1
87.50	88.50	1.00	M486412	2.46	0.001	0.05	6.29	<0.2	790	2.47	0.15	1.01	0.07	39.4	2.2	9	0.56	13	1.46	16.05	0.08	0.1	0.032	3.01	20.7	11.4	0.23	393	110.0	2.65	7.5	3.8	240	8	93.5	0.012	0.08	0.06	2.4	1	3.5	230	0.55	<0.05	7.5	0.118	0.57	3	17	3.6	7.9	47	1
88.50	92.06	3.56	M486891	9.18	0.002	0.04	6.26	<0.2	870	2.32	0.05	0.78	0.05	46.5	2	5	0.75	7	1.13	16.1	0.1	0.1	0.024	3.29	24.5	10.2	0.19	334	104.5	2.48	8.8	2.6	190	8.2	98.8	0.008	0.05	0.07	2.5	1	2.8	175.5	0.83	<0.05	10.2	0.107	0.56	2.4	16	1.4	9.8	39	1.5
92.06	92.36	0.30	M486413	0.8	0.002	0.02	6.15	<0.2	800	1.78	0.04	0.79	<0.02	42.4	1.7	7	0.8	3	1.33	14.25	0.09	0.1	0.01	3.21	22.5	7.6	0.18	384	470.0	2.46	8.1	3.3	160	8.6	92	0.056	0.04	0.06	2.2	1	0.9	158	0.7	<0.05	9.6	0.098	0.52	1.8	12	0.5	8.8	49	2.8
92.36	94.00	1.64	M486892	3.76	0.002	0.08	6.34	<0.2	800	2.38	0.13	0.74	0.09	48	1.7	6	0.92	24	0.95	15.7	0.1	0.1	0.03	3.31	24.8	11	0.18	484	97.7	2.43	10.2	2.4	180	12.1	96.7	0.008	0.04	0.11	2.5	1	1.6	151	1	<0.05	12.8	0.11	0.65	3.6	14	1	10.3	80	1.9
94.00	96.00	2.00	M486893	4.32	0.002	0.38	6.07	<0.2	760	2.04	0.91	0.67	0.53	40	1.9	9	0.98	56.7	1.28	15.6	0.09	0.1	0.132	3.18	21.3	16.8	0.18	671	69.3	2.2	8.2	2.7	190	41.5	111.5	0.006	0.11	0.17	2.3	1	4.4	155.5	0.69	0.09	9.3	0.105	0.89	2.6	15	2	8.9	166	1.8
96.00	97.00	1.00	M486414	2.42	0.001	0.07	6.25	0.5	700	2.26	0.36	0.78	0.11	38.4	2.1	11	0.75	23.3	1.34	15.8	0.08	0.1	0.045	3.31	20.4	13.1	0.19	361	149.5	2.38	8.3	3.1	190	8.7	105	0.012	0.1	0.07	2.2	1	4.5	164	0.76	0.07	10.6	0.101	0.7	3.6	15	1.6	8.8	64	1.8
97.00	99.50	2.50	M486894	6.26	0.001	0.09	6.15	<0.2	760	2.26	0.57	0.77	0.33	39.6	2.2	7	1.13	21.4	1.15	15.65	0.09	0.1	0.048	3.2	20.8	14	0.19	920	116.0	2.3	10.2	5.7	190	12.2	103.5	0.011	0.15	0.12	2.5	1	2.5	173.5	1	0.25	10.5	0.106	0.78	3	15	2	10.2	128	1.8
99.50	102.10	2.60	M486895	5.64	0.001	0.09	6.37	<0.2	790	2.37	0.17	0.74	0.54	42.9	2.5	7	1.14	16.3	1.14	16	0.11	0.1	0.116	3.36	22.8	12.8	0.19	567	21.1	2.49	9.5	3.8	210	11.9	105.5	0.002	0.15	0.1	2.4	1	2.3	173	0.94	<0.05	10.4	0.106	0.79	3.1	15	1.9	10.5	141	1.6
102.10	102.60	0.50	M486415	1.14	0.002	0.05	4.65	<0.2	540	1.95	0.24	0.5	<0.02	30.8	1.5	11	0.68	24.9	1.14	11.85	0.07	0.1	0.029	2.54	16.3	10.9	0.14	275	1,470.0	1.68	6.8	2.5	140	6.9	85.8	0.053	0.22	0.06	1.8	2	5.8	113	0.61	0.07	7.8	0.071	0.6	2.8	10	2.2	6.9	37	1.1
102.60	104.60	2.00	M486896	6.92	0.001	0.04	6.29	<0.2	810	2.18	0.11	0.79	0.27	40.6	1.9	10	0.91	9.7	0.99	15.25	0.09	0.1	0.024	3.17	21.4	11.2	0.19	496	65.5	2.47	9.2	2.7	190	8.4	96.8	0.009	0.11	0.07	2.3	1	1.8	182.5	0.88	<0.05	9.9	0.102	0.68	4.3	14	1.5	9.5	67	1.4
104.60	106.35	1.75	M486897	2.98	0.001	0.04	6.29	<0.2	850	1.99	0.09	0.8	0.09	41.7	2	8	0.7	6.5	1.07	15.15	0.09	0.1	0.012	3.18	22.4	11.7	0.19	494	36.2	2.52	8.3	2.9	200	7.8	87.6	0.005	0.09	0.07	2.4	1	1.6	185.5	0.78	<0.05	10.1	0.104	0.58	2.5	16	1.3	9.5	66	1.2
106.35	107.35	1.00	M486416	2.52	0.001	0.29	6.4	1	810	2.48	0.56	0.73	0.66	40.6	2.1	8	1.29	70.4	1.57	15.75	0.09	0.1	0.431	3.53	21.7	15.9	0.21	816	86.0	2.13	9.2	3.4	200	12.6	126	0.006	0.18	0.12	2.4	1	3.1	162.5	0.87	0.06	10.5	0.109	1.18	3	16	3	9.9	233	1.4
107.35	109.73	2.38	M486898	5.44	0.002	0.1	6.55	<0.2	820	2.21	0.21	0.66	0.44	44.3	1.9	7	0.89	23.3	1.13	15.6	0.09	0.1	0.081	3.62	23.2	15.4	0.2	639	346.0	2.36	10.2	2.9	220	8.7	111.5	0.034	0.12	0.09	2.6	2	2.2	182.5	1.1	0.05	11.2	0.115	1.04	7.1	16	2.4	11.8	112	1.6
109.73	110.73	1.00	M486417	2.3	0.002	4.07	5.82	5	420	2.71	12.4	0.26	1.83	43.2	1.8	7	2.07	1110	3.4	17.5	0.09	0.1	3.53	3.21	23.7	34.5	0.19	2000	63.3	0.37	7.9	3.2	180	21.4	234	0.003	2.12	0.21	2.3	1	15.6	30.5	0.68	0.94	6.9	0.113	2.71	3	16	20.5	7	292	1.1
110.73	111.73	1.00	M486418	2.16	0.004	13.8	5.74	12.2	360	3.32	39.4	0.21	16.15	32.2	3.7	6	4.44	1325	5.51	16.3	0.11	0.1	3.45	3.12	17.5	36.4	0.2	2060	398.0	0.09	6.4	3.3	190	225	242	0.047	3.96	1.39	2	1	15.5	13.3	0.69	3.23	6.6	0.099	3.52	4.5	16	75.8	5.6	3740	0.8
111.73	114.23	2.50	M486899	6.04	0.001	0.32	6.76	<0.2	810	2.5	0.49	0.97	0.88	42.1	2.8	6	1.47	33.9	1.48	16.8	0.1	0.1	0.122	3.15	22	16.4	0.3	797	23.7	2.45	8.3	3.2	390	18.4	104.5	0.002	0.11	0.1	3	1	2.1	244	0.61	0.05	7.1	0.167	0.93	2.8	22	2.1	10.9	258	1.2
114.23	116.73	2.50	M486900	5.8	0.001	0.04	6.42	<0.2	860	1.46	0.04	0.69	0.15	48.3	1.8	6	0.97	10.7	0.95	14.85	0.1	0.1	0.015	3.46	26.3	12.2	0.17	329	23.9	2.37	7.3	2.4	180	8.6	80.4	0.002	0.02	0.09	2.3	1	0.9	166.5	0.66	<0.05	8.7	0.1	0.53	1.9	13	0.7	10.4	113	1.4
116.73	118.87	2.14	M486903	4.62	0.002	1.32	6.19	1.8	670	2.14	2.46	0.48	7.57	39.7	1.8	8	2.25	89.9	1.63	15.9	0.11	0.1	0.512	3.63	20.9	19.8	0.18	3410	17.8	1.29	7.9	2.8	190	36.1	167	0.002	0.4	0.28	2.3	1	3.6	103	0.65	0.1	9.3	0.106	2.12	3.1	14	6.8	9.3	1180	1.9
118.87	119.87	1.00	M486419	1.84	0.002	1.69	5.94	4.4	420	2.97	4.37	0.1	3.99	29.9	1.4	6	3.42	193	2.46	17.6	0.08	0.1	1.155	3.78	16.5	26.9	0.14	1620	177.0	0.49	8.3	2.2	80	18.1	207	0.018	1.3	0.55	2	1	14.8	34.5	0.73	0.78	6.5	0.076	2.51	3.9	12	17.2	5.7	643	1.3
119.87	123.00	3.13	M486904	7.04	0.002	0.04	6.55	<0.2	760	2.09	0.05	0.94	0.13	43.5	1.9	7	0.84	3.5	1.12	15.65	0.1	0.1	0.012	3.06	22.8	9.3	0.19	438	12.8	2.62	9.3	2.7	210	7.9	82.9	0.002	0.01	0.08	2.5	1	1	197.5	0.9	<0.05	10.5	0.112	0.44	2.4	15	0.7	10.3	42	1.9
123.00	126.10	3.10	M486905	7.6	0.002	0.01	6.42	<0.2	790	1.97	0.02	0.95	0.04	42.1	2.1	8	0.83	2.5	1.08	16	0.11	0.1	0.007	3.03	22.5	10.8	0.21	288	36.5	2.68	7.5	3.1	230	7.5	86.2	0.003	<0.01	0.08	2.5	1	1.3	216	0.65	<0.05	9.5	0.114	0.44	3.5	16	0.4	8.2	35	1
126.10	126.60	0.50	M486420	1.28	0.002	0.03	5.55	0.3	650	1.86	0.09	0.87	0.11	34.9	1.7	7	1.15	5.6	1.18	13.1	0.08	0.1	0.012	2.64	18.5	12	0.18	274	616.0	2.17	6.1	3.4	180	7.6	80.7	0.036	0.05	0.08	2.1	1	1.2	213	0.48	<0.05	7.4	0.089	0.46	3	11	0.6	7	37	0.9
126.60	128.60	2.00	M486906	5.1	0.001	0.03	6.35	<0.2	770	1.96	0.05	0.84	0.02	42	1.9	5	1.14	4	1.02	15.55	0.09	0.1	0.014	3.08	22.3	11.6	0.2	363	119.0	2.5	8.3	2.8	220	7.7	95	0.01	0.07	0.09	2.5	1	2.7	192.5	0.71	<0.05	9.8	0.114	0.54	2.2	15	1.5	8.6	76	1
128.60	130.60	2.00	M486907	4.46	0.001	0.03	6.46	<0.2	810	2.15	0.12	0.92	<0.02	41.7	2.2	6	1.45	4	1.14	15.8	0.09	0.1	0.022	3.12	21.9	11.7	0.22	399	11.5	2.53	8.2	3.1	230	7.7	96.5	<0.002	0.08	0.12	2.4	1	1.8	195	0.73	<0.05	9.2	0.118	0.59	2.3	17	1.9	8.9	39	1.1

C2.

APPENDIX C2: DRILL CORE FROM – TO TABLE

MSA003 FROM TO Table of Sampling Intervals

From_m	To_m	L_m	Sample	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
8.60	9.14	0.54	M486401	0.96	0.009	7.82	5.83	59.3	450	3.71	17.1	0.09	1.79	28.1	2.3	7	2.16	127.5	4.33	18.15	0.16	0.1	1.69	3.43	15.1	34.9	0.22	1680	545.0	0.18	7.9	3	210	333	225	0.004	1.95	0.87	2.6	1	15.9	27.6	0.68	2.49	5.1	0.127	2.87	1.8	20	19.6	4.1	540	1.3
9.14	11.70	2.56	M486860	5.48	0.002	0.03	6.76	0.7	800	2.13	0.05	0.94	0.58	42.7	2.8	8	1.08	13.7	1.31	16.9	0.1	0.1	0.036	3.24	19.5	16.5	0.27	550	9.0	2.65	7.6	4.5	280	9.9	97	<0.002	0.01	0.14	2.8	2	1.1	219	0.78	<0.05	7.8	0.129	0.65	1.3	19	1.4	11.3	134	1.3
11.70	14.35	2.65	M486861	6.42	0.001	0.08	6.86	1.1	810	2.2	0.19	0.99	1.79	49.4	3.1	9	1.43	16.1	1.4	17.45	0.13	0.1	0.127	3.35	22.9	18.9	0.3	789	111.5	2.52	7.9	4.2	310	11.6	106	0.009	0.08	0.26	3.3	1	1.4	223	0.74	<0.05	7.8	0.146	0.78	2.3	20	2	12	493	1.6
14.35	15.35	1.00	M486402	2.22	0.003	5.44	6.58	7.2	520	5.8	9.37	0.69	38.7	44.8	2.4	8	4.01	362	2.51	19	0.16	0.1	4.08	3.86	24.3	41.9	0.24	7440	59.0	0.41	7.4	3.8	250	114.5	259	0.004	1.42	0.71	2.6	2	7.7	51.1	0.63	0.72	7.3	0.13	3.59	7.3	18	13.7	11.6	8780	1.1
15.35	16.15	0.80	M486403	1.7	0.001	4.96	5.62	15.5	350	4.85	5.79	0.63	31.8	27.6	2.9	8	2.91	462	3.19	17.5	0.15	0.1	12.4	2.8	14	68.8	0.22	13300	91.7	0.24	7.4	3.5	330	128.5	227	0.006	1.86	1.2	2.8	1	11.4	32	0.59	0.84	4.7	0.135	3.11	3.1	18	13.1	9.8	6460	1.9
16.15	18.70	2.55	M486862	5.56	0.001	0.08	6.43	0.6	800	2.14	0.4	0.95	0.06	44.5	2.8	9	1.06	15.1	1.27	16.15	0.16	0.1	0.029	3.15	20.1	15.4	0.25	526	11.5	2.6	7.1	3	280	7.7	90.3	<0.002	0.02	0.11	2.7	2	1.3	228	0.66	<0.05	7.2	0.136	0.59	1.3	19	1.1	10.1	79	1.5
18.70	21.30	2.60	M486863	6.68	0.002	0.02	6.41	0.6	820	2.12	0.09	0.96	0.03	42.4	2.6	9	1.21	15	1.31	16.3	0.13	0.1	0.047	3.19	19.2	13.1	0.24	408	48.7	2.53	7.2	3.2	250	7.8	97.1	0.006	0.08	0.12	2.8	1	1.9	226	0.68	<0.05	7.5	0.124	0.59	1.5	19	3.2	9.6	41	1.3
21.30	23.90	2.60	M486864	5.76	0.001	0.67	6.44	2	740	2.79	2.93	0.88	0.14	45.8	3	9	2.01	317	1.45	17.9	0.13	0.1	0.205	3.35	21	17.9	0.26	2190	117.5	2.25	9.1	3.2	270	19.5	102	0.013	0.25	0.19	3	2	3.5	201	0.91	0.2	11.4	0.132	0.98	3.8	18	5	11.1	142	1.5
23.90	26.50	2.60	M486865	6.16	0.001	0.21	6.64	<0.2	750	2.84	0.45	0.91	0.46	47.8	3.1	7	2.06	31.9	1.54	18.3	0.17	0.1	0.11	3.38	21.9	19	0.27	1270	61.1	2.4	9.1	3.4	320	20.6	105.5	0.007	0.26	0.16	3.5	2	4.1	203	0.87	0.08	12.5	0.137	0.96	3.1	21	5.3	12.6	196	1.7
26.50	29.00	2.50	M486866	6.28	0.002	0.48	6.92	1.2	690	3.84	1.09	0.92	4.06	47.4	3.2	9	1.71	101.5	1.81	18.6	0.18	0.1	0.489	3.23	21.4	21.8	0.28	828	70.5	2.39	9.5	3.5	300	23.9	119.5	0.005	0.41	0.18	3.5	2	4.5	199	0.94	0.11	10.8	0.147	1.21	4	20	5.8	12.2	484	1.9
29.00	30.00	1.00	M486404	1.92	0.003	0.77	7.25	7.3	550	4.41	3.11	1.15	3.06	40.6	3.8	7	1.78	116	3.11	21.1	0.17	0.1	0.43	2.63	21.2	29.1	0.4	919	362.0	2.26	10.4	4.3	480	18.9	138.5	0.03	1.4	0.22	3.8	1	8.7	231	0.79	0.37	12.2	0.201	1.47	4.8	30	8.5	11.6	259	1.6
30.00	32.00	2.00	M486867	4.98	0.001	0.01	6.69	0.8	810	2.15	0.13	0.91	0.33	54.2	2.5	9	1.1	17.4	1.36	17.2	0.17	0.1	0.057	3.38	24.2	17.1	0.24	490	53.8	2.57	8	2.9	280	8.3	96.2	0.007	0.13	0.09	2.9	2	3.9	216	0.78	<0.05	9	0.129	0.69	2.2	18	2.3	11.7	136	1.4
32.00	33.60	1.60	M486868	3.42	0.002	0.74	6.61	1.6	870	3	1.28	0.65	2.42	41.9	2.2	9	1.62	166.5	1.74	17.6	0.17	0.1	1.44	3.79	19	24.3	0.23	922	136.5	1.85	7.2	2.7	290	16.7	137.5	0.011	0.37	0.22	2.9	1	5.5	175	0.68	0.14	8.4	0.126	1.53	3.4	18	4.9	9.5	457	1
33.60	34.60	1.00	M486405	1.82	0.001	0.09	6.7	0.6	850	2.3	0.32	0.87	0.95	37.4	3.2	7	1.06	52.8	1.7	16.2	0.16	0.2	0.261	3.21	19.1	16	0.26	1340	13.0	2.34	9.7	3.4	300	12.1	98.2	<0.002	0.14	0.14	2.9	1	2.2	222	0.85	0.05	8.6	0.146	0.79	2.5	20	3.2	11.8	271	1.5
34.60	35.60	1.00	M486406	1.16	0.001	0.06	6.28	2	760	2.35	0.34	0.55	0.82	43.7	2.3	8	1.39	53.7	1.51	15.8	0.13	0.1	0.094	3.65	22	19.5	0.18	1180	312.0	1.97	7.8	3.5	190	9.4	120.5	0.03	0.13	0.18	2.4	1	5.5	142.5	0.7	0.11	8.9	0.105	0.92	2.9	14	13.4	10.1	202	1.7
35.60	36.60	1.00	M486407	1.5	0.003	0.1	6.45	2.6	760	2.45	0.33	0.51	1.33	41.9	3.5	8	1.93	105	1.74	15.9	0.15	0.1	0.046	3.45	21.7	26.6	0.24	1690	371.0	1.51	7.8	4.3	240	9.2	113	0.031	0.14	0.45	2.6	1	2.3	133.5	0.69	0.1	6.9	0.128	1.01	2.9	19	5.5	12	501	1.5
36.60	39.20	2.60	M486869	5.94	0.001	0.25	6.71	0.6	930	2.64	0.62	0.93	0.95	45.8	2.7	10	0.93	44.8	1.34	17.45	0.18	0.1	0.133	3.37	21.2	17.5	0.23	696	39.5	2.66	7.4	3.4	240	12.6	102.5	0.004	0.14	0.1	2.8	2	2.3	234	0.74	0.09	8.9	0.123	0.73	2.4	18	4.2	11	234	1.7
39.20	41.80	2.60	M486870	6.66	0.001	0.05	6.7	<0.2	860	2.1	0.11	1.11	0.27	40.9	2.8	9	0.67	10.9	1.3	16.85	0.18	0.1	0.015	2.96	18.5	12.8	0.25	561	49.6	2.85	6.9	3.2	280	7.9	82.2	0.006	0.05	0.08	2.7	2	1.2	256	0.58	<0.05	7.9	0.127	0.45	2.1	19	1.1	9.4	123	1.4
41.80	45.00	3.20	M486871	7.86	0.001	0.03	6.89	<0.2	870	2.33	0.16	1.1	0.19	45.5	2.6	8	0.71	7.1	1.24	17.4	0.19	0.1	0.033	3.27	20.8	11.4	0.24	699	70.9	2.86	7.2	3.4	270	11.3	93.7	0.007	0.05	0.07	2.8	2	1.4	255	0.61	<0.05	7.9	0.132	0.61	1.9	19	1.6	9.5	110	1.4
45.00	47.70	2.70	M486872	6.4	0.001	0.07	6.66	0.9	860	2.45	0.2	1.05	0.48	46.1	2.9	9	0.93	22.8	1.36	17.4	0.16	0.1	0.092	3.22	21.6	11.6	0.24	723	47.4	2.73	7	3.5	270	9.2	93.8	0.004	0.09	0.08	2.9	2	1.8	237	0.61	<0.05	8.6	0.126	0.64	2.2	18	1.9	9.3	163	1.4
47.70	48.70	1.00	M486408	2.44	0.001	<0.01	6.49	<0.2	800	3.15	0.09	1.11	<0.02	34.6	2.5	8	0.77	3.3	1.38	15.75	0.16	0.1	0.02	2.86	18.5	9.6	0.23	489	123.0	2.68	7.6	3.4	240	7.7	77.3	0.01	0.02	0.05	2.5	1	1	243	0.65	<0.05	8.2	0.128	0.45	2	17	1.4	7.8	66	1.2
48.70	51.20	2.50	M486873	6.38	0.001	0.04	6.66	<0.2	830	2.26	0.13	1.09	0.05	43.4	2.6	12	0.89	10.5	1.2	16.55	0.16	0.1	0.02	3.17	20.2	10.6	0.23	405	71.1	2.8	6.6	3.2	260	7.8	90.6	0.004	0.03	0.08	2.7	2	1	257	0.64	0.06	8.8	0.12	0.53	2	18	0.6	8.3	50	1.2
51.20	53.70	2.50	M486874	6.28	0.002	0.25	6.57	<0.2	840	1.81	0.59	0.96	0.24	40.4	2	11	0.7	20.4	1.3	15.05	0.08	0.1	0.041	3.16	21.1	10.4	0.23	827	47.8	2.56	7.2	3.4	280	19.4	93.1	0.003	0.12	0.1	2.4	1	1.6	226	0.6	0.07	7.8	0.13	0.72	2	19	2.2	8.9	70	0.9
53.70	55.25	1.55	M486875	6.22	0.001	0.04	6.84	<0.2	830	1.91	0.09	1.1	0.07	39.3	2.2	6	0.71	7.3	1.23	15.8	0.08	0.1	0.017	2.98	20.5	10.1	0.25	577	102.0	2.79	8	3.1	290	8.6	81.5	0.005	0.05	0.08	2.8	1	1.3	245	0.65	<0.05	7.4	0.143	0.5	1.9	19	1.2	9.4	50	1
55.25	56.25	1.00	M486409	1.62	0.003	1.03	6.36	6.3	780	2.7	1.8	0.47	9.8	38.2	2.6	8	1.84	103.5	1.76	15.95	0.15	0.1	1.18	3.93	20.3	16.8	0.21	1240	464.0	1.69	7.7	3.7	230	213	152.5	0.031	0.59	0.25	2.5	1	4.9	138.5	0.62	0.29	7.4	0.117	1.82	3.5	15	8.9	10.2	2090	1.3
56.25	58.75	2.50	M486876	3.78	0.002	0.22	6.67	<0.2	880	2.88	0.49	0.85	0.19	38.6	2.1	7	1.11	36.5	1.29	15.55	0.09	0.1	0.062	3.68	21	13.8	0.22	1090	62.9	2.45	7.4	3	250	11.7	118	0.007	0.19	0.15	2.4	1	1.8	211	0.61	0.16	13.8	0.126	1.1	3.3	18	4.4	8.2	173	0.9
58.75	61.66	2.91	M486877	6.74	0.001	0.1	6.36	<0.2	770	1.96	0.21	0.83	0.27	40.7	1.8	10	1.17	11.9	1.16	14.75	0.1	0.1	0.038	3.14	21.7	13.7	0.21	851	33.9	2.45	7	2.9	250	10.5	91.9	0.004	0.06	0.13	2.3	1	1.1	205	0.61	<0.05	10	0.118	0.8	2.1	18	4.3	8.5	114	0.8
61.66	62.45	0.79	M486410	1.68	0.003	3.04	6.92	14.9	570	4.34	7.51	0.42	4.03	33.6	2.3	8	2.09	317	5.13	23.6	0.21	<0.1	2.17	4.22	17.4	34.7	0.27	1010	741.0	0.18	8	2.9	230	56.9	272	0.079	4.55	0.61	2.8	1	25.8	28.8	0.59	3.22	8	0.118	3.14	6.3	16	61.1	7.3	1040	0.7
62.45	65.00	2.55	M486878	5.34	0.001	0.3	6.71	<0.2	870	3.04	0.46	0.91	0.92	40.7	2.2	9	1.23	51.3	1.67	15.25	0.12	0.1	0.238	3.3	21.2	13.5	0.22	924	31.8	2.48	7.4	3.4	270	13.2	107	0.004	0.11	0.15	2.5	1	1.7	221	0.65	0.08	14.8	0.129	1	3.7	18	2.4	10.4	282	1.1
65.00	67.50	2.50	M486881	7.2	0.002	0.1	6.67	<0.2	820	2.05	0.18	1.07	0.1	43.1	2.3	12	0.94	15.2	1.31	15.75	0.09	0.1	0.027	2.89	22.4	10.1	0.25	521	9.4	2.81	8.5	3	280	8.4	84	<0.002	0.03	0.08	2.8	1	1.8	239	0.77	<0.05	10	0.134	0.51	2.5	20	1.2	10.5	55	1.1
67.50	69.00	1.50	M486882	3.78	0.002	0.05	6.99	<0.2	910	2.21	0.08	1.11	0.06	47.1	2.4	7	1.05	11.4	1.29	17.1	0.1	0.1	0.017	3.18	24.8	9.6	0.24	443	42.4	2.99	8.6	3.5	280	8.5	90.4	0.004	0.03	0.08	2.7	1	1.3	256	0.77	<0.05	11.1	0.138	0.54	2.8	20	1.3	9.9	43	1
69.00	71.50	2.50	M486883	5.86	0.001	0.14	6.84	<0.2	860	2.17	0.35	1.03	0.28	44.5	2.6	8	1.22	37.3	1.67	16.2	0.11	0.1	0.125	3.06	23.7	11.9	0.24	566	66.3	2.69	8.8	3.8	280	9.2	95.6	0.008	0.12	0.11	2.7	1	1.8	238	0.78	0.09	9.8	0.136	0.67	4	19	1.9	10.3	102	1.2
71.50	74.00	2.50	M486884	6.02	0.001	0.04	6.69	<0.2	810	1.65	0.05	1.08	0.07	42.6	2.5	7	0.63	8.9	1.23	15.75	0.11	0.1	0.021	2.91	22.3	9.6	0.23	343	73.4	2.7	8	3.2	270	7.3	77.3	0.01	0.06	0.07	2.6	1	1.7	239	0.69	<0.05	7.9	0.13	0.41	1.6	18	0.5	9.9	38	1.3
74.00	76.50	2.50	M486885	6.44	0.001	0.04	6.5	<0.2	780	1.77	0.02	1.1	0.02	43.4	2.7	11	0.77	4.6	1.55	15.75	0.1	0.1	0.011	2.76	22.7	10.1	0.25	371	159.0	2.75	8.6	3.5	310	7.2	74.1	0.016	0.02	0.08	2.9	1	1.2	240	0.76	<0.05	8.9	0.136	0.38	2.7	20	0.4	10.7	37	1.5
76.50	78.10	1.60	M486886	3.74	0.002	0.16	7.64	<0.2	1250	2.78	0.41	1.02	1.78	44.8	2.2	8	0.83	45.2	1.33	17.8	0.1	0.1	0.34	3.97	24.2	14.2	0.23	785	100.0	2.81	8	3.1	250	12	105.5	0.01	0.15	0.1	2.6	1	1.3	255	0.72	0.1	10	0.134	0.9	2.2	18	2	9.9	478	1.7
78.10	78.60	0.50	M486411	1.34	0.002	1.45	6.8	0.8	650	3.21	3.91	0.66	1.36	34.8	2.3	7	1.82	131	3.11	18.15	0.1	0.1	0.764	3.67	17.8	24.6	0.23	1390	333.0	1.32	9	4.2	230	83.7	201	0.047	1.78	0.36	2.4	1	6.5	124.5	0.73	0.75	7.1	0.123	2.05	4.1	18	11	9.1	401	1.4
78.60	81.00	2.40	M486887	6.06	0.001	0.03	6.77	<0.2	840	2.15	0.03	1.08	0.06	40.6	2.5	8	0.6	9.3	1.54	16.2	0.1	0.1	0.01	3.01	21.7	9.6	0.24	368	58.4	2.83	8.5	3.6	270	8.4	81.7	0.007	0.01	0.09	2.6	1	1.1	247	0.7	<0.05	9.7	0.131	0.42	2.2	19	0.4	9.6	41	1.1
81.00	83.50	2.50	M486888	6.52	0.001	0.04	6.66	<0.2	810	2.23	0.13	1.04	0.1	41.5	2.2	6	0.6	12.2	1.13	15.8	0.1	0.1	0.015	2.99	22.1	9.8	0.22	331	28.4	2.7	8	2.9	240	7.7	82	0.004	0.03	0.07	2.5	1	1.6	233	0.72	<0.05	10.1	0.12	0.46	2.8	16	1	9.1	44	1
83.50	86.00	2.50	M486889	6.34	0.001	0.04	6.37	<0.2	840	2.72	0.04	1.07	0.04	40.9	2.5	9	0.51	7.9	1.49	15.55	0.1	0.1	0.015	2.74	21.6	9.6	0.23	314	81.1	2.66	8	3.5	260	6.6	78.6	0.008	0.05	0.07	2.4	1	1.8	246	0.7	<0.05	7.5	0.124	0.43	2	18	0.7	8.9	19	1
86.00	87.50	1.50	M486890	3.66	0.001	0.03	6.48	<0.2	820	2.31	0.04	1.01	0.04	36.4	2	7	0.47	4.1	1.23	15.7	0.09	0.1	0.026	2.97	18.8	11.3	0.21	272	47.8	2.62	7.6	2.9	250	6.5	83.6	0.005	0.07	0.06	2.3	1	3.2	230	0.62	<0.05	7.6	0.122	0.47	1.8	18	1.2	8.6	24	1
87.50	88.50	1.00	M486412	2.46	0.001	0.05	6.29	<0.2	790	2.47	0.15	1.01	0.07	39.4	2.2	9	0.56	13	1.46	16.05	0.08	0.1	0.032	3.01	20.7	11.4	0.23	393	110.0	2.65	7.5	3.4	240	8	93.5	0.012	0.08	0.06	2.4	1	3.5	230	0.55	<0.05	7.5	0.118	0.57	3	17	3.6	7.9	47	1
88.50	92.06	3.56	M486891	9.18	0.002	0.04	6.26	<0.2	870	2.32	0.05	0.78	0.05	46.5	2	5	0.75	7	1.13	16.1	0.1	0.1	0.024	3.29	24.5	10.2	0.19	334	104.5	2.48	8.8	2.6	190	8.2	98.8	0.008	0.05	0.07	2.5	1	2.8	175.5	0.83	<0.05	10.2	0.107	0.56	2.4	16	1.4	9.8	39	1.5
92.06	92.36	0.30	M486413	0.8	0.002	0.02	6.15	<0.2	800	1.78	0.04	0.79	<0.02	42.4	1.7	7	0.8	3	1.33	14.25	0.09	0.1	0.01	3.21	22.5	7.6	0.18	384	470.0	2.46	8.1	3.3	160	8.6	92	0.056	0.04	0.06	2.2	1	0.9	158	0.7	<0.05	9.6	0.098	0.52	1.8	12	0.5	8.8	49	2.8
92.36	94.00	1.64	M486892	3.76	0.002	0.08	6.34	<0.2	810	2.38	0.13	0.74	0.09	48	1.7	6	0.92	24	0.95	15.7	0.1	0.1	0.03	3.31	24.8	11	0.18	484	97.7	2.43	10.2	2.4	180	12.1	96.7	0.008	0.04	0.11	2.5	1	1.6	151	1	<0.05	12.8	0.11	0.65	3.6	14	1	10.3	80	1.9
94.00	96.00	2.00	M486893	4.32	0.002	0.38	6.07	<0.2	760	2.04	0.91	0.67	0.53	40	1.9	9	0.98	56.7	1.28	15.6	0.09	0.1	0.132	3.18	21.3	16.8	0.18	671	69.3	2.2	8.2	2.7	190	41.5	111.5	0.006	0.11	0.17	2.3	1	4.4	155.5	0.69	0.09	9.3	0.105	0.89	2.6	15	2	8.9	166	1.8
96.00	97.00	1.00	M486414	2.42	0.001	0.07	6.25	0.5	700	2.26	0.36	0.78	0.11	38.4	2.1	11	0.75	23.3	1.34	15.8	0.08	0.1	0.045	3.31	20.4	13.1	0.19	361	149.5	2.38	8.3	3.1	190	8.7	105	0.012	0.1	0.07	2.2	1	4.5	164	0.76	0.07	10.6	0.101	0.7	3.6	15	1.6	8.8	64	1.8
97.00	99.50	2.50	M486894	6.26	0.001	0.09	6.15	<0.2	760	2.26	0.57	0.77	0.33	39.6	2.2	7	1.13	21.4	1.15	15.65	0.09	0.1	0.048	3.2	20.8	14	0.19	920	116.0	2.3	10.2	5.7	190	12.2	103.5	0.011	0.15	0.12	2.5	1	2.5	173.5	1	0.25	10.5	0.106	0.78	3	15	2	10.2	128	1.8
99.50	102.10	2.60	M486895	5.64	0.001	0.09	6.37	<0.2	790	2.37	0.17	0.74	0.54	42.9	2.5	7	1.14	16.3	1.14	16	0.11	0.1	0.116	3.36	22.8	12.8	0.19	567	21.1	2.49	9.5	3.8	210	11.9	105.5	0.002	0.15	0.1	2.4	1	2.3	173	0.94	<0.05	10.4	0.106	0.79	3.1	15	1.9	10.5	141	1.6
102.10	102.60	0.50	M486415	1.14	0.002	0.05	4.65	<0.2	540	1.95	0.24	0.5	<0.02	30.8	1.5	11	0.68	24.9	1.14	11.85	0.07	0.1	0.029	2.54	16.3	10.9	0.14	275	1,470.0	1.68	6.8	2.5	140	6.9	85.8	0.053	0.22	0.06	1.8	2	5.8	113	0.61	0.07	7.8	0.071	0.6	2.8	10	2.2	6.9	37	1.1
102.60	104.60	2.00	M486896	6.92	0.001	0.04	6.29	<0.2	810	2.18	0.11	0.79	0.27	40.6	1.9	10	0.91	9.7	1.09	15.25	0.09	0.1	0.024	3.17	21.4	11.2	0.19	496	65.5	2.47	9.2	2.7	190	8.4	96.8	0.009	0.11	0.07	2.3	1	1.8	182.5	0.88	<0.05	9.9	0.102	0.68	4.3	14	1.5	9.5	67	1.4
104.60	106.35	1.75	M486897	2.98	0.001	0.04	6.29	<0.2	850	1.99	0.09	0.8	0.09	41.7	2	8	0.7	6.5	1.07	15.15	0.09	0.1	0.012	3.18	22.4	11.7	0.19	494	36.2	2.52	8.3	2.9	200	7.8	87.6	0.005	0.09	0.07	2.4	1	1.6	185.5	0.78	<0.05	10.1	0.104	0.58	2.5	16	1.3	9.5	66	1.2
106.35	107.35	1.00	M486416	2.52	0.001	0.29	6.4	1	810	2.48	0.56	0.73	0.66	40.6	2.1	8	1.29	70.4	1.57	15.75	0.09	0.1	0.431	3.53	21.7	15.9	0.21	816	86.0	2.13	9.2	3.4	200	12.6	126	0.006	0.18	0.12	2.4	1	3.1	162.5	0.87	0.06	10.5	0.109	1.18	3	16	3	9.9	233	1.4
107.35	109.73	2.38	M486898	5.44	0.002	0.1	6.55	<0.2	820	2.21	0.21	0.66	0.44	44.3	1.9	7	0.89	23.3	1.13	15.6	0.09	0.1	0.081	3.62	23.2	15.4	0.2	639	346.0	2.36	10.2	2.9	220	8.7	111.5	0.034	0.12	0.09	2.6	2	2.2	182.5	1.1	0.05	11.2	0.115	1.04	7.1	16	11.8	11.2	112	1.6
109.73	110.73	1.00	M486417	2.3	0.002	4.07	5.82	5	420	2.71	12.4	0.26	1.83	43.2	1.8	7	2.07	1110	3.4	17.5	0.09	0.1	3.53	3.21	23.7	34.5	0.19	2000	63.3	0.37	7.9	3.2	180	21.4	234	0.003	2.12	0.21	2.3	1	15.6	30.5	0.68	0.94	6.9	0.113	2.71	3	16	20.5	7	292	1.1
110.73	111.73	1.00	M486418	2.16	0.004	13.8	5.74	12.2	360	3.32	39.4	0.21	16.15	32.2	3.7	6	4.44	1325	5.51	16.3	0.11	0.1	3.45	3.12	17.5	36.4	0.2	2060	398.0	0.09	6.4	3.3	190	225	242	0.047	3.96	1.39	2	1	15.5	13.3	0.69	3.23	6.6	0.099	3.52	4.5	16	75.8	5.6	3740	0.8
111.73	114.23	2.50	M486899	6.04	0.001	0.32	6.76	<0.2	810	2.5	0.49	0.97	0.88	42.1	2.8	6	1.47	33.9	1.48	16.8	0.1	0.1	0.122	3.15	22	16.4	0.3	797	23.7	2.45	8.3	3.2	390	18.4	104.5	0.002	0.11	0.1	3	1	2.1	244	0.61	0.05	7.1	0.167	0.93	2.8	22	2.1	10.9	258	1.2
114.23	116.73	2.50	M486900	5.8	0.001	0.04	6.42	<0.2	860	1.46	0.04	0.69	0.15	48.3	1.8	6	0.97	10.7	0.95	14.85	0.1	0.1	0.015	3.46	26.3	12.2	0.17	329	23.9	2.37	7.3	2.4	180	8.6	80.4	0.002	0.02	0.09	2.3	1	0.9	166.5	0.66	<0.05	8.7	0.1	0.53	1.9	13	0.7	10.4	113	1.4
116.73	118.87	2.14	M486903	4.62	0.002	1.32	6.19	1.8	670	2.14	2.46	0.48	7.57	39.7	1.8	8	2.25	89.9	1.63	15.9	0.11	0.1	0.512	3.63	20.9	19.8	0.18	3410	17.8	1.29	7.9	2.8	190	36.1	167	0.002	0.4	0.28	2.3	1	3.6	103	0.65	0.1	9.3	0.106	2.12	3.1	14	6.8	9.3	1180	1.9
118.87	119.87	1.00	M486419	1.84	0.002	1.69	5.94	4.4	420	2.97	4.37	0.1	3.99	29.9	1.4	6	3.42	193	2.46	17.6	0.08	0.1	1.155	3.78	16.5	26.9	0.14	1620	177.0	0.49	8.3	2.2	80	18.1	207	0.018	1.3	0.55	2	1	14.8	34.5	0.73	0.78	6.5	0.076	2.51	3.9	12	17.2	5.7	643	1.3
119.87	123.00	3.13	M486904	7.04	0.002	0.04	6.55	<0.2	760	2.09	0.05	0.84	0.13	43.5	1.9	7	0.84	3.5	1.12	15.65	0.1	0.1	0.012	3.06	22.8	9.3	0.19	438	12.8	2.62	9.3	2.7	210	7.9	82.9	0.002	0.01	0.08	2.5	1	1	197.5	0.9	<0.05	10.5	0.112	0.44	2.4	15	0.7	10.3	42	1.9
123.00	126.10	3.10	M486905	7.6	0.002	0.01	6.42	<0.2	790	1.97	0.02	0.95	0.04	42.1	2.1	8	0.83	2.5	1.08	16	0.11	0.1	0.007	3.03	22.5	10.8	0.21	288	36.5	2.68	7.5	3.1	230	7.5	86.2	0.003	<0.01	0.08	2.5	1	1.3	216	0.65	<0.05	9.5	0.114	0.44	3.5	16	0.4	8.2	35	1
126.10	126.60	0.50	M486420	1.28	0.002	0.03	5.55	0.3	650	1.86	0.09	0.87	0.11	34.9	1.7	7	1.15	5.6	1.18	13.1	0.08	0.1	0.012	2.64	18.5	12	0.18	274	616.0	2.17	6.1	3.4	180	7.6	80.7	0.036	0.05	0.08	2.1	1	1.2	213	0.48	<0.05	7.4	0.089	0.46	3	11	0.6	7	37	0.9
126.60	128.60	2.00	M486906	5.1	0.001	0.03	6.35	<0.2	770	1.96	0.05	0.84	0.02	42	1.9	5	1.14	4	1.02	15.55	0.09	0.1	0.014	3.08	22.3	11.6	0.2	363	119.0	2.5	8.3	2.8	220	7.7	95	0.01	0.07	0.09	2.5	1	2.7	192.5	0.71	<0.05	9.8	0.114	0.54	2.2	15	1.5	8.6	76	1
128.60	130.60	2.00	M486907	4.46	0.001	0.03	6.46	<0.2	810	2.15	0.12	0.92	<0.02	41.7	2.2	6	1.45	4	1.14	15.8	0.09	0.1	0.022	3.12	21.9	11.7	0.22	399	11.5	2.53	8.2	3.1	230	7.7	96.5	<0.002	0.08	0.12	2.4	1	1.8	195	0.73	<0.05	9.2	0.118	0.59	2.3	17	1.9	8.9	39	1.1

MSA003 FROM TO Table of Sampling Intervals

From_m	To_m	L_m	Sample	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
130.60	131.60	1.00	M486423	2.26	0.002	0.11	6.45	1.4	760	2.51	1.21	0.88	0.08	41.1	2.3	7	1.29	7.8	1.79	16.1	0.09	0.1	0.058	3.18	21.8	13.4	0.22	816	789.0	2.49	9.6	3.4	220	9.5	102	0.084	0.61	0.09	2.5	1	2.9	196.5	0.82	0.38	9.1	0.12	0.76	2.9	16	4.6	10.9	153	1.1
131.60	133.00	1.40	M486908	2.76	0.001	0.02	6.75	<0.2	780	2.15	0.02	0.86	0.06	45	2.2	6	1.18	2.6	1.12	16.2	0.09	0.1	0.007	3.1	24.2	13.7	0.21	739	139.0	2.65	9.7	3	220	8.1	89.1	0.012	0.01	0.09	2.6	1	1.1	199.5	0.97	<0.05	10.7	0.117	0.53	2.8	16	0.6	11.3	208	1.3
133.00	134.00	1.00	M486424	2.02	0.0005	0.03	6.69	0.5	740	2.14	0.05	0.7	0.02	42.1	2.2	7	1.44	3.3	1.46	17	0.1	0.1	0.018	3.32	22.3	15.8	0.22	559	42.5	2.24	9.7	3.5	210	9.6	111.5	0.003	0.02	0.13	2.5	1	4.4	147.5	0.84	<0.05	10.6	0.112	0.75	3.8	17	1.3	10.8	312	1.4
134.00	136.90	2.90	M486909	6.12	0.001	0.02	6.44	<0.2	780	1.86	0.02	0.93	0.06	43.5	2.1	8	1.05	2.3	1.08	15.35	0.11	0.1	0.006	2.91	23	9	0.21	418	27.2	2.55	8.3	2.9	220	7.7	82.4	0.003	0.01	0.09	2.5	1	0.9	199	0.74	<0.05	10.7	0.117	0.45	2.5	16	0.4	9.4	94	1
136.90	139.80	2.90	M486910	6.74	0.002	0.02	6.81	0.8	810	2.07	0.02	0.97	0.06	43	2.2	8	1.08	2.2	1.1	15.55	0.08	0.1	0.009	3.23	22.8	9.1	0.22	632	68.9	2.77	9.3	2.9	220	9.3	90.9	0.008	0.01	0.1	2.5	2	1	199.5	0.77	<0.05	10.6	0.13	0.57	3.5	15	0.5	10.4	121	1.3
139.80	140.80	1.00	M486425	2.64	0.002	0.03	6.63	0.4	800	1.69	0.04	1.02	0.06	37.5	2.5	7	0.88	3.3	1.44	15.5	0.08	0.1	0.016	3	19.9	8.8	0.23	565	9.9	2.68	7.8	3.3	220	8.3	84.1	<0.002	0.06	0.08	2.4	1	1.4	215	0.58	<0.05	8.1	0.122	0.49	1.8	16	0.6	8.7	104	1.2
140.80	141.80	1.00	M486426	2.38	0.002	0.02	6.68	<0.2	840	1.54	0.02	1.02	0.04	38.6	2.1	7	0.81	2.2	1.34	15.1	0.09	0.1	0.006	3.04	20.3	6.9	0.2	428	58.3	2.74	7	3.1	200	8.3	80.8	0.006	0.01	0.07	2.2	1	0.8	218	0.5	<0.05	8.2	0.108	0.45	1.5	15	0.5	8.1	78	1.3
141.80	142.80	1.00	M486427	2.08	0.002	0.05	6.55	0.3	810	2	0.3	0.83	0.85	40.5	2.3	7	1.26	7	1.53	15.9	0.09	0.1	0.061	3.28	21.4	13.5	0.22	627	26.4	2.6	8.1	3.4	220	9	100	0.003	0.14	0.1	2.4	1	2.8	206	0.59	0.09	7.7	0.116	0.75	2.7	16	2.1	9	166	1.2
142.80	143.80	1.00	M486428	1.62	0.002	0.04	6.35	<0.2	760	2.37	0.15	0.94	0.06	41	2	8	0.9	5.3	1.27	15.05	0.09	0.1	0.023	3.21	21.6	11	0.24	715	183.0	2.55	8.3	3.6	220	9.1	95	0.016	0.06	0.08	2.6	1	2	196	0.66	0.07	9.1	0.12	0.67	2.6	14	1.7	9.5	107	1.1
143.80	144.80	1.00	M486429	2.16	0.002	0.03	6.49	<0.2	820	1.69	0.05	0.89	0.14	43.6	2.1	8	0.77	18	1.35	15.7	0.09	0.1	0.021	3.22	22.9	11	0.2	578	127.5	2.64	8.8	3.3	190	8.7	83.2	0.013	0.05	0.07	2.3	1	1.6	196	0.62	<0.05	10.1	0.111	0.52	2	15	0.9	9.7	99	1.5
144.80	145.80	1.00	M486430	2.96	0.001	0.07	6.56	0.6	850	1.92	0.2	0.79	0.14	45.4	2.1	9	0.9	23.7	1.35	15.75	0.09	0.1	0.06	3.59	24.1	10.3	0.18	620	94.1	2.54	9.2	3.2	180	9.8	88.8	0.01	0.04	0.09	2.2	1	1.1	192	0.78	0.06	11.9	0.108	0.64	2.2	14	1.2	10.2	120	1.5
145.80	146.80	1.00	M486431	2.18	0.001	0.13	6.26	1.1	1120	1.91	0.32	0.43	0.14	44.2	2.3	7	1.13	61.9	1.46	14.45	0.1	0.1	0.157	3.87	23.3	17.9	0.22	894	38.2	2.12	9.6	3.7	220	25.1	116	0.004	0.08	0.15	2.3	1	1	175.5	1.06	0.05	8.2	0.121	1.31	2.1	16	2.4	11.7	159	1.3
146.80	147.80	1.00	M486432	1.82	0.002	0.18	6.26	0.7	800	1.99	0.37	0.56	0.07	40.3	2.1	6	1.12	78.9	1.34	14.4	0.1	0.1	0.172	3.56	21.2	16	0.23	903	42.0	2.23	8.7	3.4	220	11.3	114.5	0.004	0.1	0.13	2.3	1	1.3	181.5	0.87	0.06	7	0.118	1.21	1.6	16	2.9	10.8	178	1
147.80	148.80	1.00	M486433	1.28	0.002	0.77	6.12	1.5	770	5.72	3.33	0.35	0.89	36.3	1.8	7	1.31	100	2.17	15.9	0.09	0.1	0.716	4.17	19.2	24.7	0.21	831	119.0	1.39	8.2	3.8	210	20.7	169.5	0.009	0.94	0.17	2.3	1	8.2	119	0.81	0.4	5.9	0.113	1.99	2.9	16	14.4	11.6	321	1.5
148.80	149.80	1.00	M486434	1.66	0.002	2.99	6.55	3.2	740	2.65	7.47	0.68	0.96	41.2	2.1	10	1.53	182	1.96	16.5	0.1	0.1	1.065	3.64	21.7	24.2	0.21	1070	45.6	1.73	9.5	3.4	220	55.5	155.5	0.003	0.45	0.26	2.3	1	3.7	147.5	0.89	0.43	7.9	0.121	1.69	2.8	15	5.6	10.7	527	1.2
149.80	150.80	1.00	M486435	2.42	0.001	0.04	6.43	<0.2	770	2.18	0.11	0.85	0.3	44.8	2	8	0.93	18.3	1.29	15.7	0.09	0.1	0.04	3.42	23.5	11.1	0.19	583	115.5	2.56	9.3	3.1	190	9	81.7	0.019	0.03	0.09	2.3	1	0.9	187.5	0.79	<0.05	10.7	0.109	0.52	2.1	14	1	11	162	1.5
150.80	151.80	1.00	M486436	2.3	0.001	0.04	6.24	<0.2	990	2.21	0.16	0.77	0.06	45.9	2	7	0.94	5.6	1.29	15.1	0.08	0.1	0.031	3.53	24.3	12.4	0.19	550	392.0	2.34	9.5	3.3	190	9	94.2	0.042	0.08	0.08	2.3	1	2	169	0.85	0.05	10.1	0.105	0.63	2.5	14	1.3	11.1	64	1.4
151.80	152.80	1.00	M486437	3.04	0.002	0.12	6.44	0.2	1030	1.73	0.54	0.8	0.62	41.6	2.4	7	0.93	28.4	1.45	15.45	0.09	0.1	0.101	3.4	22.3	14.4	0.21	677	30.3	2.41	8.3	3.6	200	9.3	90.9	0.004	0.13	0.13	2.2	1	1.2	193.5	0.78	0.09	8	0.111	0.7	2	15	1.8	10.9	220	1.2
152.80	153.80	1.00	M486438	2.06	0.001	0.77	6.39	2.6	750	4.87	3.78	0.31	4.27	40.3	1.9	6	1.66	206	2.05	15.7	0.09	0.1	4.95	4.17	21.4	36.6	0.22	2150	94.1	1.02	8.9	2.9	210	14.8	212	0.013	0.42	0.26	2.5	1	4.3	88.9	0.82	0.14	8	0.117	2.47	2.1	17	7.5	10.9	704	1
153.80	154.80	1.00	M486439	1.82	0.001	1.1	6.39	6.1	730	2.41	6.66	0.39	1.77	37.4	2.2	7	1.45	218	2.16	15.95	0.09	0.1	1.955	3.73	19.7	30.1	0.22	1130	137.5	1.38	8.9	3.6	220	16.8	171.5	0.009	0.62	0.3	2.3	1	6.2	112	0.83	0.19	8.2	0.116	1.85	2.5	18	7.7	10.4	544	1
154.80	155.80	1.00	M486440	2.2	0.003	0.58	6.54	6	750	2.68	2.17	0.39	1.39	42.7	2.1	9	1.39	119	1.78	16.35	0.11	0.1	0.91	3.94	22.6	26.7	0.22	885	128.5	1.51	9.2	3.6	220	17.7	168	0.004	0.33	0.34	2.6	1	3.6	115.5	0.78	0.13	10.2	0.113	1.75	3.4	16	6.2	10.7	498	0.9
155.80	156.80	1.00	M486441	1.22	0.003	0.53	6.14	2.2	750	2.71	1.25	0.38	1.05	39.9	1.6	7	1.07	95.1	1.39	14.95	0.09	0.1	0.736	4.07	21	20.3	0.18	1060	77.0	1.68	9	3	180	16	158.5	0.004	0.3	0.21	2.5	1	3.1	113.5	0.92	0.13	9.7	0.094	1.56	4.1	10	4.2	9.8	346	1
156.80	157.80	1.00	M486442	2.26	0.002	0.08	6.08	0.4	660	2.55	0.37	0.71	0.19	41.9	2.2	8	0.79	8.6	1.66	16.5	0.1	0.1	0.074	3.16	21.6	15.2	0.21	640	64.3	2.27	12.8	3.5	200	8.3	103.5	0.004	0.25	0.11	2.5	1	4.9	159.5	1.28	0.05	13.4	0.112	0.75	7	15	5.6	14	143	1
157.80	158.80	1.00	M486445	2.16	0.0005	0.16	6.65	3.1	750	2.34	0.33	0.97	0.35	40.7	2	7	0.86	19.2	1.25	16.9	0.23	0.1	0.136	3.07	20.5	15	0.23	869	26.9	2.52	11	2.9	220	10.5	102	0.004	0.09	0.17	2.7	<1	1.6	201	1.2	0.05	11.8	0.122	0.78	5	16	2	13.3	182	1.1
158.80	159.80	1.00	M486446	2.42	0.0005	0.09	6.72	1.2	760	2.39	0.23	0.82	0.14	44.8	1.9	6	0.97	10	1.16	16.7	0.33	0.1	0.043	3.23	22.9	14.9	0.22	841	14.6	2.55	10.6	3	220	11.3	103	<0.002	0.05	0.13	2.8	<1	1.2	188.5	1.03	0.05	12.4	0.123	0.8	6.1	15	1.6	12.2	165	1.1
159.80	160.80	1.00	M486447	2.3	0.0005	0.07	6.84	1.2	740	2.32	0.47	0.8	0.06	44	2.2	6	0.99	9.5	1.21	17.3	0.33	0.1	0.04	3.34	22.4	17.2	0.23	748	79.4	2.45	9.8	3.2	220	9.8	111.5	0.01	0.15	0.11	2.9	<1	3.2	182	1.01	0.07	11.4	0.122	0.85	3	17	2.3	11.6	182	1.1
160.80	161.80	1.00	M486448	2.32	0.0005	0.15	7.14	0.7	720	2.74	0.68	0.96	0.15	41.9	2.3	7	1.11	38.3	1.34	18.15	0.29	0.1	0.086	3.2	21.3	19.2	0.24	1090	67.4	2.68	10.4	3.3	250	9.2	112	0.007	0.24	0.11	2.7	<1	4	225	1.08	0.09	12.5	0.131	0.82	4.2	16	3.8	12.4	232	1.1
161.80	162.80	1.00	M486449	1.52	0.0005	0.2	7.41	2.5	720	2.82	0.73	0.92	0.1	42.6	2.7	7	1.26	68.4	1.51	17.85	0.33	0.1	0.093	3.14	21.7	22.6	0.31	758	46.7	2.31	10.1	4	310	10.1	109	0.006	0.13	0.25	3.2	<1	1.6	206	0.87	0.1	11.2	0.162	0.86	4.1	20	3.8	12.2	281	1
162.80	163.80	1.00	M486450	1.58	0.0005	0.27	6.64	2.1	700	2.07	1	0.68	0.56	42.4	2	6	1.26	60	1.21	16.35	0.3	0.1	0.12	3.48	21.2	16	0.23	706	374.0	2.22	8.6	3	230	11.3	122	0.067	0.15	0.19	2.7	<1	1.9	164	0.76	0.17	8.3	0.128	1.03	2.3	15	4.4	10	303	1
163.80	164.80	1.00	M486551	2.48	0.0005	0.08	6.7	1.6	710	2.3	0.32	0.84	0.08	43.2	1.8	8	1.1	18	1.09	15.85	0.33	0.1	0.035	3.35	22.2	15.2	0.21	993	224.0	2.5	8.1	3	220	9.5	110	0.03	0.11	0.13	2.7	<1	1.7	178.5	0.76	0.08	11	0.12	0.81	3.1	14	3.1	9.8	218	1
164.80	165.80	1.00	M486552	2.4	0.0005	0.1	6.82	2.7	770	2.55	0.76	0.92	0.05	36.2	1.9	9	1.23	9.3	1.24	16.55	0.28	0.1	0.024	3.08	18.3	13.7	0.21	903	58.1	2.6	10.4	3.2	230	8.3	103	0.006	0.07	0.16	2.5	<1	1.1	199	1.13	0.08	12.1	0.121	0.74	3.6	15	1.7	11.4	211	1.1
165.80	166.80	1.00	M486553	1.74	0.0005	0.15	6.04	2.2	730	1.78	0.73	0.58	0.17	34.6	1.6	6	1.35	12.5	1.03	14.25	0.31	0.1	0.1	3	17.9	17.7	0.18	606	109.5	1.81	7.4	2.4	190	10.1	107	0.008	0.13	0.27	2.3	<1	1.1	143.5	0.67	0.1	8.5	0.105	0.85	3.3	13	2.7	8.3	246	0.8
166.80	167.80	1.00	M486554	1.38	0.0005	0.19	3.22	2	400	0.8	0.6	0.09	0.02	23.1	1.1	2	0.71	6.7	0.49	6.95	0.26	<0.1	0.062	1.79	11.9	13.2	0.09	315	202.0	0.51	4.6	1.3	90	7.5	69.3	0.039	0.08	0.24	1.1	<1	0.9	38.3	0.33	0.07	4.8	0.052	0.59	1.2	5	2.5	4.3	151	<0.5
167.80	168.80	1.00	M486555	1.98	0.0005	0.22	6.88	6	790	2.12	0.56	0.31	0.06	50.4	2.3	4	1.92	18.9	1.2	17.25	0.36	0.1	0.114	3.62	26.1	32.2	0.23	846	72.0	1.14	8.8	3	200	11.4	125	0.008	0.11	0.58	3.1	<1	2	91.4	0.82	0.1	9.9	0.125	1.19	3.1	15	5.5	10.4	363	1
168.80	170.30	1.50	M486556	3.32	0.0005	0.09	6.99	0.7	690	2.37	0.56	1.11	0.07	40	3	8	1.2	9.3	1.58	17.45	0.24	0.1	0.036	2.66	20	15.8	0.33	984	101.0	2.78	11.9	4.2	410	9.6	85.1	0.015	0.05	0.15	4.4	<1	1.6	229	1	0.09	9.6	0.194	0.61	3.7	23	1.9	13.8	200	1.4
170.30	171.30	1.00	M486557	2.6	0.0005	0.15	6.22	1.1	1780	1.54	0.9	0.58	0.25	45.5	1.7	8	0.71	15	1.11	15.2	0.28	0.1	0.109	3.72	23.4	14	0.16	500	125.5	2.11	6.3	2.8	180	11.3	101	0.012	0.15	0.1	2.3	<1	3.6	185	0.6	0.22	9.3	0.101	0.77	1.7	13	2.5	8.1	105	1.6
171.30	172.30	1.00	M486558	2.3	0.0005	7.81	6.08	4	290	2.31	36.6	0.33	1.24	49.6	2.5	10	1.18	738	4.77	16.6	0.2	0.1	3.52	3.6	26.7	25.1	0.09	650	282.0	1.33	8.4	1.9	60	84.1	173.5	0.016	4.45	0.27	2.1	1	8.7	40.7	0.85	5.73	14.2	0.062	1.78	4.5	8	9.9	8.3	312	1.8
172.30	173.30	1.00	M486559	2.26	0.0005	0.81	6.74	1	870	3.56	3.73	0.72	0.65	47.3	2.1	8	1.33	186	1.49	16.85	0.2	0.1	0.405	3.7	23.8	16.9	0.21	1340	22.5	2.24	8.8	3.4	220	20.9	132.5	0.002	0.41	0.15	2.6	<1	2.3	190.5	0.85	0.77	10.4	0.122	1.31	4.4	15	3.1	11.5	376	1
173.30	174.30	1.00	M486560	2.66	0.0005	0.18	6.32	1.1	2370	1.76	1.06	0.57	0.05	41.6	1.3	8	0.96	50.6	1.03	14.3	0.21	0.1	0.115	4.15	21.8	15	0.13	716	171.0	1.84	6.2	2.1	170	11.5	119	0.018	0.21	0.12	2	<1	2	199.5	0.61	0.08	7.8	0.089	1.1	2.3	10	2.7	8.6	70	1.4
174.30	175.30	1.00	M486561	1.92	0.0005	0.46	6	1.9	2030	1.34	1.74	0.26	1.57	41	0.9	6	0.78	109.5	0.96	13.45	0.23	0.1	0.548	4.43	22.2	15.9	0.07	512	22.1	1.44	5.2	1.3	80	13.2	134	0.002	0.26	0.14	1.5	<1	2.2	145.5	0.54	0.09	7.7	0.056	1.33	2.2	5	2.8	6	331	1.9
175.30	176.30	1.00	M486562	2.84	0.0005	0.43	6.03	7.4	300	2.27	1.06	0.24	1	48.4	0.8	9	0.91	49.1	1.12	15.15	0.22	0.1	0.248	4.12	25.4	15.4	0.06	731	583.0	1.75	8.3	1.2	50	14	162.5	0.054	0.47	0.2	2.1	<1	4	61.2	0.83	0.37	14.9	0.061	1.54	3.7	6	4.4	7.7	246	1.5
176.30	177.30	1.00	M486563	2.34	0.0005	0.19	7.9	2.9	550	6.28	0.78	1.33	0.13	43.3	4.2	9	1.43	33	2.22	21.5	0.14	0.1	0.125	2.51	21.8	26.8	0.44	1750	54.3	3.51	12	3.9	590	9.5	104.5	0.007	0.36	0.17	4.6	1	2.5	257	0.61	0.12	5.6	0.244	1.08	1.5	29	4.1	16.8	224	2.8
177.30	178.30	1.00	M486564	2.3	0.0005	0.29	6.66	5.4	570	5	1.47	0.31	0.35	43.2	1.9	7	1.09	10.9	1.69	18.1	0.12	0.1	0.304	4.54	23.8	19	0.1	443	66.9	2.07	10.1	2.2	110	14.1	148.5	0.008	1.19	0.14	2.4	1	7.8	96	0.95	0.23	11.6	0.083	2.04	5.5	8	8.3	9.2	197	1.2
178.30	179.30	1.00	M486567	2.56	0.0005	0.16	6.51	4.1	650	4.56	0.67	0.54	0.2	44.1	2.1	7	0.96	14	1.42	16.6	0.13	0.1	0.164	3.81	24.5	15.6	0.13	731	13.6	2.36	9.6	2.3	130	12.3	135	<0.002	0.8	0.11	2.3	1	5.7	133.5	0.87	0.11	11.1	0.088	1.36	5.3	9	6.4	9.7	170	1.1
179.30	180.30	1.00	M486568	2.3	0.0005	0.13	6.02	0.7	580	2.52	0.5	0.55	0.2	38.6	1.1	9	0.8	16.4	0.84	14	0.1	0.1	0.087	3.45	21.1	13.5	0.13	626	51.1	2.31	9.5	1.9	110	11.9	106.5	0.004	0.09	0.1	2.2	1	2	119	0.76	<0.05	10.1	0.085	0.89	2.7	9	3.4	8.5	176	1.6
180.30	181.30	1.00	M486569	2.46	0.0005	0.11	5.94	0.8	560	2.64	0.48	0.61	0.18	37.8	1.1	8	0.8	26.3	0.78	15.15	0.12	0.1	0.085	3.74	20.6	14.1	0.11	706	76.1	2.18	10.1	1.6	100	10.9	114.5	0.005	0.15	0.13	2.2	1	1.7	107	0.93	0.08	11	0.078	1	4.2	8	3.8	9.8	145	1.2
181.30	182.30	1.00	M486570	2.14	0.0005	0.57	6.35	2	630	2.79	1.03	0.84	0.38	36.5	1.4	8	0.93	38.8	1.04	16.45	0.14	0.1	0.095	3.63	19.5	18.6	0.15	843	9.6	2.06	12.9	2.4	140	11	122	<0.002	0.22	0.16	2.5	1	3.8	129.5	1.21	0.35	10.9	0.094	1.12	5.2	11	5.4	11.6	124	1.4
182.30	183.50	1.20	M486571	3.04	0.0005	0.24	6.44	<0.2	780	2.96	1.02	0.69	0.58	40.7	1.8	9	1.01	52.8	1.21	15.2	0.15	0.1	0.249	3.92	21.4	19.2	0.19	1040	56.1	2.05	8.5	2.6	200	11.1	136	0.007	0.3	0.13	2.5	1	3.9	143	0.74	0.2	10.2	0.11	1.35	2.8	14	7.3	10.1	229	1.2
183.50	184.50	1.00	M486572	2.56	0.001	1.72	7.13	2.8	810	3.67	8.61	0.67	1.47	42.5	1.8	6	0.96	50.7	2.78	19.8	0.15	<0.1	0.78	4.64	22.9	35.5	0.19	987	1,190.0	2.16	10.3	2.6	240	25.6	211	0.107	2.19	0.19	3.1	1	7.2	100.5	0.8	1.23	11	0.123	2.85	5.5	10	15.1	9.5	643	0.6
184.50	184.80	0.30	M486573	0.74	0.001	1.02	6.54	5	720	3.69	7.74	0.18	<0.02	32.2	1.5	5	1.14	35.8	2.55	18.35	0.13	<0.1	0.789	4.37	18.3	40.8	0.15	706	8,530.0	1.32	10.9	1.9	150	20.8	208	0.568	2.46	0.33	2.5	2	10.6	83.6	0.75	2.87	7.5	0.103	2.65	6.2	5	14.6	7.8	294	0.6
184.80	185.80	1.00	M486574	1.78	0.002	2.3	6.75	25.4	700	4.56	9.22	0.32	0.72	42.2	1.8	5	1.77	102	3.37	20.1	0.15	0.1	1.33	4.11	22.5	39.9	0.2	999	1,150.0	1.12	11.8	2.6	180	28.6	233	0.132	2.44	0.53	3.3	1	13	77.1	0.88	4.92	10	0.121	2.69	6.2	14	18	11.2	407	0.8
185.80	186.70	0.90	M486575	1.96	0.0005	0.05	5.94	1.7	670	3.11	0.27	0.49	0.13	41.3	1.3	7	0.99	29.5	0.89	15.3	0.11	0.1	0.049	3.6	22.5	17.9	0.17	637	65.5	2.14	8.3	2.4	170	8.7	116.5	0.008	0.03	0.13	2.6	1	1.7	147	0.7	0.08	9.7	0.103	1.07	3.4	11	2.6	10.3	154	1
186.70	188.10	1.40	M486576	2.86	0.0005	0.23	5.13	1.6	200	2.41	0.51	0.22	<0.02	48.7	0.4	9	0.59	13.8	0.53	12.65	0.1	0.1	0.066	3.55	26.1	11.4	0.04	206	3,230.0	1.71	12.5	1.5	30	10.8	107.5	0.062	0.26	0.08	2	1	3	55.4	1.2	0.31	14.4	0.046	0.94	5	4	1.9	10.1	69	1.8
188.10	189.60	1.50	M486577	3.14	0.0005	<0.01	5.5	<0.2	130	2.77	0.09	0.31	0.07	43.2	0.4	8	0.44	9.8	0.47	13.6	0.08	0.1	0.012	3.75	24	9.6	0.03	201	57.7	2.12	9.9	0.8	20	8.4	91.7	0.007	0.03	0.07	2	1	0.6	40.9	1.05	0.05	15.6	0.047	0.68	4.8	4	0.7	8.3	28	2
189.60	190.60	1.00	M486578	2.52	0.002	<0.01	5.58	0.6	120	3.51	0.33	0.28	0.08	44	0.5	8	0.48	7.7	0.64	13.7	0.1	0.1	0.037	3.51	24.9	10	0.03	293	88.5	2.06	13.3	0.9	20	9.5	95.7	0.004	0.11	0.07	2.2	1	1.3	41.7	1.22	0.12	13.9	0.047	0.79	5.8	5	1.2	10.9	63	2.1
190.60	191.60	1.00	M486579	2.64	0.002	0.06	5.69	2.4	170	2.66	0.29	0.22	0.11	40	0.4	10	0.55	20.2	0.5	13.9	0.1	0.1	0.036	3.9	22.5	9.9	0.03	213	120.5	1.98	9.3	0.8	30	10.6	113.5	0.005	0.06	0.1	2	1	1.3	50.6	0.98	0.07	14.8	0.046	0.98	3.1	4	1.5	7	85	1.7
191.60	192.60	1.00	M486580	2.14	0.001	0.07	5.68	2.8	120	2.61	0.25	0.25	0.03	41.4	0.4	11	0.56	19.1	0.63	13.95	0.09	0.2	0.034	3.87	22.7	9.1	0.02	213	70.2	2.09	11.8	0.9	20	10.5	107.5	0.002	0.04	0.1	2.1	1	1	43.7	1.24	0.11	14.4	0.047	0.89	4.6	4	1.3	8.9	113	2.9
192.60	193.60	1.00	M486581	2.74	0.003	0.03	5.78	1.8	150	2.51	0.17	0.28	0.06	44.3	0.4	12	0.66	12.4	0.58	13.5	0.09	0.1	0.026	3.69	25.7	8.4	0.03	257	35.9	2.12	11	0.8	30	10.1	98.4	0.002	0.03	0.08	2.1	1	0.9	44.2	1.05	<0.05	12.3	0.052	0.73	4.5	4	1.2	8.3	84	2.3
193.60	194.60	1.00	M486582	2.32	0.003	<0.01	5.82	<0.2	220	1.88	0.04	0.34	0.03	42.8	0.5	12	0.46	6.5	0.59	12.9	0.1	0.1	0.017	3.54	25	8.8	0.04	231	10.9	2.21	6	1	30	9.9	93	<0.002	0.01	0.06	1.9	1	0.5	50.7	0.54	<0.05	8.9	0.051	0.55	2	4	0.5	6.4	50	2.4
194.60	194.90	0.30	M486583	0.78	0.001	0.3	3.9	1.9	210	1.31	1.8	0.16	<0.02	24.6	0.7	13	0.49	31.6	0.97	8.48	0.08	0.1	0.319	2.46	13.8	10	0.03	221	2,490.0	1.3	4	1.1	20	10.2	75	0.33	0.63	0.11	1.2	1	1.1	46.5	0.35	0.78	6.5	0.035	0.68	1.2	2	1	4.1	76	1.5
194.90	195.90	1.00	M486584	2.36	0.005	2.28	5.43	12.8	400	3.82	8.64	0.26	1.34	36.3	1.9	9	2.17	413	3.46	16.8	0.13	0.1	3.52	3.42	20.4	49.2	0.14	1280	131.0	0.18	8.5	1.9	140	22	238	0.013	2.29	0.32	2.3	1	10.6	23.6	0.76	1.65	10.4	0.08	2.92	4.9	9	13.4	8.1	442	1.2
195.90	196.90	1.00	M486585	2.12	0.001	0.79	5.97	3.7	690	3.03	2.1	0.28	3.45	32.3	1.5	6	1.85	147.5	1.84	15.25	0.12	0.1	2.6	3.85	17.5	29.2	0.16	1390	35.4	1.09	9.6	2.2	180	20.4	182.5	0.002	0.52	0.34	2.3	1	4.4	97.7	0.94	0.31	9.1	0.102	2.42	4.8	11	8.1	9.1	756	0.9
196.90	197.90	1.00	M486586	2.46	0.003	2.56	5.42	16	290	3.18	10.6	0.1	0.48	28.8	2.1	9	2.01	141	4.05	18.4	0.16	0.1	1.045	2.91	15.9	44.2	0.15	894	50.9	0.16	8.3	2.5	110	25.7	213	0.006	3.29	0.65	2.1	1	11.8	18.7	0.76	2.62	8.2	0.088	2.58	4.4	12	14.7	5	202	0.9
197.90	198.90	1.00	M486589	2.56	0.004	1.32	5.98	13	520	3.02	4.81	0.14	0.69	32.1	2	8	1.94	100	3.46	17.8	0.11	0.1	0.837	3.79	18.1	44.5	0.18	1080	29.3	0.34	8.9	3.2	150	21.6	241	0.003	2.15	0.56	2.2	1	9.4	43.4	0.78	1.57	8.2	0.096	3	3.2	14	13.7	6.4	359	1.3

MSA003 FROM TO Table of Sampling Intervals

From_m	To_m	L_m	Sample	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
198.90	199.90	1.00	M486590	2.3	0.002	2.41	5.98	4.8	550	3.03	10.55	0.19	0.87	31.9	2.1	8	1.71	238	3.35	17.85	0.1	0.1	1.505	3.69	18.1	53.4	0.18	1140	38.6	0.63	9.5	3.3	170	23	233	<0.002	1.74	0.4	2.2	1	9.6	58.8	0.83	1.27	8.7	0.099	2.66	4.6	13	12.3	7.6	398	1
199.90	200.90	1.00	M486591	2.44	0.003	2.3	5.99	6.1	490	3.18	14.55	0.23	0.7	30.7	2.5	7	1.79	250	5.24	18.75	0.16	0.1	2.2	3.65	18.1	48.7	0.18	1140	255.0	0.11	7.6	3.7	150	24.4	261	0.021	3.8	0.39	2.5	<1	15.2	26	0.68	3.29	8	0.088	3.13	3.2	12	111.5	5.9	240	1
200.90	201.90	1.00	M486592	2.8	0.001	0.54	6.04	3.9	760	2.81	1.47	0.45	1.04	37.7	1.9	7	1.3	64.7	1.72	15.05	0.13	0.1	0.698	3.71	22.1	21.6	0.2	1560	17.5	1.74	8.6	3.6	210	18.4	151	<0.002	0.17	0.26	2.6	<1	2.2	144	0.8	0.19	9.4	0.107	1.72	2.5	13	3.7	11.3	342	1.1
201.90	202.90	1.00	M486593	1.26	0.002	1.27	5.98	8.3	730	4.39	3.23	0.51	0.53	37.2	2.1	6	1.27	143	1.86	15.4	0.14	0.1	0.393	3.65	21.8	22.9	0.19	971	13.6	1.46	8.5	3.3	190	17.8	163.5	<0.002	0.43	0.26	2.5	<1	4.3	126	0.87	0.34	9.1	0.106	1.89	2.6	13	5.2	9.5	338	1.2
202.90	203.90	1.00	M486594	1.86	0.002	1.34	5.25	9.5	520	3.36	5.18	0.23	0.55	30.4	2	7	2.06	312	2.84	16.75	0.15	<0.1	0.903	3.51	17.5	35.4	0.16	940	49.4	0.51	7.8	3	150	31	208	0.005	1.52	0.48	2.2	<1	9	53.5	0.79	0.65	8.3	0.091	2.52	6.5	12	9.7	7.5	231	0.8
203.90	204.90	1.00	M486595	2.22	0.003	2.26	5.68	7.2	290	2.85	9.45	0.1	0.53	31.1	2	7	2.49	547	4.14	19.55	0.15	<0.1	2.19	3.04	18.9	45	0.17	977	34.5	0.1	7.5	2.9	130	25	245	0.004	2.83	0.39	2.3	<1	14.5	16.6	0.75	1.79	7.2	0.093	2.84	4.6	12	14.6	4.5	230	1
204.90	205.90	1.00	M486596	2.14	0.005	7.09	4.79	16	220	2.62	44.2	0.2	0.52	23.4	5.2	9	1.39	183	10.9	16.45	0.23	0.1	3.9	2.55	13.5	56	0.14	944	54.4	0.05	6	3.7	90	53.6	208	0.004	>10.0	0.32	2	1	17	5.8	0.54	15.6	6.3	0.073	2.39	3.9	10	22	4.3	177	1
205.90	206.90	1.00	M486597	2.76	0.005	1.96	5.58	12.1	410	6.22	15.5	0.18	0.45	29.9	2.2	9	1.84	201	5.02	18.3	0.18	<0.1	1.695	3.21	17.8	59.4	0.16	918	113.0	0.09	6.6	3.1	110	31.2	247	0.009	3.54	0.56	2.2	<1	16.3	14	0.6	2.58	6.3	0.089	2.94	2.9	12	25.5	4.7	218	0.9
206.90	207.90	1.00	M486598	2.26	0.003	1.26	5.68	4.4	340	3	10.8	0.13	0.33	32.6	2	7	1.76	44.1	4.55	20.2	0.14	0.1	1.105	3.01	19.2	49.3	0.15	858	129.5	0.06	7	2.6	80	22.8	246	0.017	3.13	0.28	2.3	<1	19.8	8.7	0.71	4.28	6.8	0.089	2.83	5.2	11	13.4	3.5	172	1.1
207.90	208.90	1.00	M486599	2.24	0.001	0.87	5.98	8.7	570	3.47	5.93	0.22	0.41	35.3	3.1	7	1.82	64.9	3.39	18.35	0.14	0.1	1.135	3.73	22	52.7	0.17	869	188.0	0.51	8.1	3.2	170	21.6	240	0.019	1.85	0.27	2.5	<1	15.4	62.7	0.76	1.66	10.7	0.089	2.81	3.8	12	12.3	5.7	246	1.6
208.90	209.90	1.00	M486600	2.52	0.003	0.87	5.72	4.3	670	2.93	4.45	0.38	0.55	36.2	1.8	8	1.51	113	2.14	15.85	0.13	0.1	0.611	3.44	21.5	31.7	0.18	793	66.9	1.24	8.3	3.1	160	20.6	182.5	0.011	0.77	0.32	2.3	<1	6.6	109	0.81	0.69	8.2	0.097	1.91	2.5	12	7.2	8.2	408	1.1
209.90	210.90	1.00	M486601	1.58	0.001	0.58	6.03	7.6	660	2.56	3.01	0.25	0.41	44.6	2.7	7	1.63	60.8	2.12	16.6	0.12	0.1	0.61	3.53	23.3	36.4	0.19	933	200.0	1.17	8	3.2	170	17.6	169.5	0.012	0.84	0.45	2.5	<1	10.2	97.2	0.76	0.65	8.7	0.097	1.8	2.9	13	9.8	9.7	287	1.7
210.90	212.20	1.30	M486602	1.98	0.003	0.96	5.32	11.3	670	2.69	3.18	0.11	0.61	24.9	2.1	8	2.22	97.1	2.11	13.85	0.12	<0.1	0.632	3.57	15.4	54.3	0.14	997	133.0	0.9	6.9	3.1	160	34.4	190.5	0.009	0.72	1.06	2.1	<1	6.7	80.4	0.66	0.44	6.8	0.089	2.43	2	10	10.2	6	459	0.9
212.20	213.80	1.60	M486603	3.86	0.002	0.32	6.23	1.5	830	2.88	0.82	0.64	0.49	39.6	2	8	1.22	24.6	1.53	15.05	0.13	0.1	0.099	3.43	23	17	0.21	1720	46.1	2.15	8	3.6	200	15.9	122	0.005	0.09	0.21	2.6	<1	1.6	181	0.71	0.1	7.7	0.112	1.24	2.1	14	2.6	10.1	274	1.2
213.80	216.80	3.00	M486604	3.68	0.002	0.72	5.97	7.7	720	3.74	3.51	0.26	0.85	34.9	2.1	8	1.76	124.5	2.43	16.5	0.13	0.1	0.776	3.74	21.1	35.2	0.18	1160	70.5	1.07	8.1	3.1	160	20.9	205	0.007	0.98	0.33	2.5	<1	8.4	99.8	0.75	0.54	8.3	0.096	2.42	2.4	12	8.4	8.9	329	1.4
216.80	217.80	1.00	M486605	2.3	0.002	0.1	6.57	3.5	850	2.69	0.36	0.83	0.23	45.2	2.1	9	0.96	45.4	1.51	15.65	0.12	0.1	0.066	3.3	27	16	0.22	1140	19.9	2.4	8.4	3.8	220	9.2	103.5	0.002	0.05	0.21	2.7	1	1.3	196	0.81	<0.05	9.9	0.118	0.89	2.6	16	1.7	11	240	2.4
217.80	218.80	1.00	M486606	1.9	0.002	0.09	6.18	1.7	840	2.17	0.34	0.68	0.28	41.6	4	9	0.9	11.3	1.48	14.6	0.14	0.1	0.065	3.36	24.3	15.3	0.21	958	273.0	2.26	8	3.3	200	8.8	105	0.046	0.17	0.16	2.5	1	3.2	180	0.72	0.19	7.9	0.112	0.87	1.8	14	2.5	9.2	215	2.1
218.80	220.30	1.50	M486607	3.24	0.001	0.12	6.55	1	840	2.31	0.22	0.97	0.1	39.7	2	7	0.62	27.5	1.38	14.6	0.12	0.1	0.06	3.12	24.1	10.5	0.21	823	24.9	2.53	7.6	3.5	210	8.4	89.4	0.002	0.03	0.1	2.6	<1	1.3	214	0.71	<0.05	8.6	0.117	0.64	1.5	15	1.4	9.4	88	1.9
220.30	221.80	1.50	M486608	3.88	0.001	0.09	6.07	0.8	820	2.48	0.2	0.91	1.64	40.1	1.9	8	0.73	15.2	1.32	14.45	0.12	0.1	0.213	3.14	24.1	13.1	0.21	676	32.5	2.4	7.8	3.2	190	11.1	97.8	0.002	0.08	0.09	2.4	<1	1.5	194.5	0.73	<0.05	8.8	0.112	0.75	1.5	14	1.2	9.3	421	1.5
221.80	223.30	1.50	M486611	3.46	0.0005	0.05	6.37	0.9	850	2.33	0.05	0.98	0.03	38.1	2.2	10	0.59	11.1	1.36	14.9	0.12	0.1	0.018	3.04	22.8	10.2	0.22	553	13.7	2.65	8	3.5	220	8.7	83.6	0.002	0.04	0.11	2.5	<1	1.4	215	0.74	<0.05	8.3	0.116	0.58	1.5	15	1.1	9	62	1.3
223.30	224.30	1.00	M486612	2.74	0.0005	0.05	6.37	1.1	830	2.62	0.13	0.85	0.13	41.8	2.3	10	0.8	9.4	1.43	15.6	0.11	0.1	0.047	3.23	24.3	13.1	0.22	628	118.0	2.53	8.8	3.5	220	8.6	99.8	0.012	0.16	0.09	2.7	1	4.2	195.5	0.88	0.1	9.2	0.116	0.68	1.9	16	4	11.3	118	1.2
224.30	226.80	2.50	M486911	4.86	0.001	0.05	6.69	1.6	850	2.57	0.13	0.9	0.46	47.1	2.2	9	0.87	12.1	1.17	16.15	0.1	0.1	0.081	3.44	25.4	15.6	0.22	1020	17.8	2.48	8	3	220	9.8	99.8	<0.002	0.05	0.16	2.6	2	1.4	188	0.69	<0.05	10.6	0.123	0.77	1.6	15	2.4	9.6	228	1.2
226.80	229.30	2.50	M486912	4.92	0.001	0.32	6.8	1.9	870	2.61	0.84	0.92	0.19	38	2.1	9	0.84	123	1.33	15.75	0.1	0.1	0.094	3.37	20.5	14.6	0.22	851	13.1	2.51	8.8	3	230	9.5	107.5	<0.002	0.1	0.11	2.5	2	1.6	198	0.88	0.05	8.4	0.126	0.93	2	15	2	9.6	136	1.2
229.30	231.80	2.50	M486913	5.56	0.002	0.02	6.85	1.1	920	2.45	0.11	0.94	0.03	40.5	2.4	7	0.57	6.1	1.21	17.2	0.12	0.1	0.033	3.46	21.6	11.9	0.24	581	78.4	2.83	8.3	3.4	230	8.3	101.5	0.013	0.11	0.09	2.7	2	2.2	218	0.73	<0.05	11	0.124	0.71	2.1	17	2.7	9.7	76	1.1
231.80	233.70	1.90	M486914	4.96	0.001	0.02	7.02	0.3	910	2.01	0.08	1.08	<0.02	40.8	2	8	0.41	5.6	1.2	16.3	0.11	0.1	0.026	3.41	22.2	9.1	0.23	558	58.2	2.94	7.5	2.9	230	8.4	92.1	0.008	0.07	0.07	2.5	2	1.4	240	0.66	<0.05	8.9	0.122	0.63	1.7	17	1.6	8.7	20	1.1
233.70	234.70	1.00	M486613	3.8	0.0005	0.07	6.53	0.9	870	2.62	0.23	0.91	0.19	43.7	1.9	9	0.6	5.7	1.6	14.6	0.12	0.1	0.079	3.24	26.7	12.2	0.22	775	279.0	2.55	8.2	3.6	210	9.2	98.5	0.014	0.1	0.1	2.6	<1	1.5	219	0.77	0.17	9	0.115	0.78	2.3	15	1.5	10.8	60	1.1
234.70	235.90	1.20	M486614	2.74	0.0005	1.23	6.06	2.3	700	4.26	9.48	0.53	1.56	39.5	3.7	8	1.65	405	3.35	16.8	0.16	0.1	0.872	3.8	23.3	35.7	0.2	1480	161.5	0.97	7.7	3.5	200	24.6	204	0.017	2.04	0.27	2.6	<1	11	82.1	0.74	3.06	9	0.104	2.33	5.6	14	11.6	9.9	408	0.9
235.90	238.60	2.70	M486915	4.96	0.002	0.39	6.74	0.8	850	6.13	2.11	0.87	0.5	43.8	2.1	8	0.98	69	1.65	17.25	0.11	0.1	0.285	3.83	24.5	21.1	0.23	1100	61.6	2.18	7.9	3.2	230	14.4	148.5	0.005	0.47	0.14	2.7	2	3.6	176.5	0.65	0.32	10.8	0.119	1.42	2.6	16	4.6	10.2	172	1
238.60	241.10	2.50	M486916	7.84	0.002	0.08	6.84	1.6	880	3.06	0.32	0.88	0.08	38.5	2	8	0.92	8.9	1.27	16.55	0.11	0.1	0.073	3.53	20.8	15.3	0.22	917	34.2	2.53	8.7	2.9	230	9.7	109	0.002	0.18	0.18	2.5	2	2.3	198.5	0.88	0.05	8.2	0.121	0.94	2.3	16	3.4	10.2	103	1
241.10	243.90	2.80	M486917	6.92	0.001	0.24	6.82	2.1	900	2.85	0.39	0.74	0.15	43.3	1.7	11	1.12	13.9	1.21	17.4	0.11	<0.1	0.095	4.05	23.1	18.5	0.22	1020	79.2	2.37	7.5	3.4	210	12.4	134.5	0.006	0.23	0.27	2.6	2	2.9	171.5	0.67	0.06	8.9	0.115	1.28	3	13	5.5	9	113	1
243.90	246.60	2.70	M486918	6.82	0.001	0.07	7.11	1.4	900	2.37	0.17	0.91	0.09	33.8	1.7	7	0.84	6.9	1.08	17.55	0.11	0.1	0.058	4.04	18.6	15.8	0.28	895	31.1	2.64	7.2	3.1	250	10.1	121.5	0.002	0.07	0.15	3.1	1	1.7	193.5	0.6	<0.05	9.2	0.119	1	2.4	14	3.2	8.2	102	1.1
246.60	247.60	1.00	M486615	2.16	0.0005	0.08	6.06	0.6	750	1.98	0.27	0.51	1.68	59.1	1.8	8	0.64	10.9	1.21	14.05	0.1	0.1	0.046	4.16	33.1	12	0.17	426	3,110.0	2.17	9.1	2.6	130	11	95.3	0.123	0.26	0.08	2.8	1	1.6	122.5	0.89	1.69	13.4	0.107	0.63	24.6	11	1.2	10.8	48	2.2
247.60	249.10	1.50	M486616	3.12	0.001	0.05	5.93	0.6	250	2.69	0.57	0.41	0.05	51.8	0.9	10	0.72	17.4	0.85	14.4	0.08	0.1	0.033	3.96	28.7	7.6	0.06	255	33.8	2.33	13.3	1.3	40	11.6	97.7	0.002	0.06	0.07	2.5	<1	0.9	61.5	1.48	0.13	18	0.058	0.56	5.6	5	1.1	12.1	25	2.2
249.10	251.50	2.40	M486919	5.44	0.001	<0.01	6.65	0.4	600	2.18	0.25	0.77	0.02	43	1.5	11	0.87	6.5	0.95	15.65	0.11	0.1	0.019	3.65	24	7.8	0.12	287	58.6	2.76	8.9	2	120	9.9	91.2	0.007	0.03	0.08	2.1	2	0.9	146	0.88	<0.05	11.6	0.082	0.54	3.1	10	0.8	9.5	32	1.5
251.50	254.00	2.50	M486920	6.36	0.001	<0.01	6.75	0.5	810	2.58	0.05	0.98	<0.02	40.2	1.7	7	0.74	7.2	1.03	15.8	0.12	0.1	0.018	3.27	22.2	10.8	0.2	647	36.6	2.71	9.3	2.5	200	8.7	89.9	0.002	0.01	0.09	2.5	2	1	193.5	0.86	<0.05	9.7	0.108	0.62	3.5	14	0.8	10	95	0.9
254.00	255.00	1.00	M486617	1.86	0.0005	1.26	6.02	3.6	710	3.13	8.8	0.39	1.26	40.7	2.3	7	1.54	345	2.45	16.4	0.13	0.1	0.671	3.63	24.1	31.9	0.21	1180	59.5	1.1	10	3.7	210	16.9	183	0.006	0.92	0.47	2.8	<1	8.6	87.4	1	1.32	10	0.111	1.92	6.8	16	7.9	10.7	356	1.1
255.00	256.00	1.00	M486618	2.16	0.0005	1.43	5.83	4.7	480	3.16	7.99	0.4	1.2	40.1	2	9	1.38	333	2.93	15.15	0.13	0.1	0.664	3.47	24.6	27.7	0.12	803	569.0	0.94	7.2	2.3	100	19.3	179	0.048	1.82	0.39	2.1	<1	10.2	64.6	0.69	1.78	9.8	0.065	1.86	4.3	10	14.2	7.4	260	1.1
256.00	258.50	2.50	M486921	6.3	0.002	0.07	6.57	0.8	640	2.07	0.2	0.74	0.91	38.6	1.5	9	1.04	6.1	1.35	15.9	0.1	0.1	0.366	3.34	22	14.3	0.15	1700	64.1	2.33	8.6	2.2	140	11.4	105.5	0.003	0.08	0.17	2.1	2	1.8	141	0.77	<0.05	11.3	0.091	0.99	3.3	11	1.9	9	461	1.2
258.50	261.00	2.50	M486922	5.32	0.002	0.37	6.75	1.6	850	2.22	0.94	0.94	0.41	38.5	2	10	0.88	36.1	1.25	15.75	0.12	0.1	0.099	3.35	20.5	12.2	0.21	866	54.4	2.52	8.5	2.8	220	11.4	96.4	0.004	0.12	0.17	2.4	2	1.4	194.5	0.76	0.08	10.6	0.119	0.85	2.9	15	2.2	9.2	244	1.1
261.00	262.50	1.50	M486925	3.74	0.001	<0.01	7.12	0.5	900	2.05	0.05	1.17	<0.02	54.2	2.6	18	0.45	3.9	1.4	17	0.13	0.1	0.017	3.2	28.9	7.4	0.24	471	12.2	3.01	9.9	3.7	250	8.4	85	0.002	0.03	0.08	2.8	2	1	238	0.93	<0.05	13.7	0.13	0.52	3.6	17	0.7	11.6	21	1.3
262.50	263.50	1.00	M486619	2.78	0.0005	0.28	6.15	0.6	750	5.51	1.89	0.69	0.82	38.2	2.1	8	1.19	33.7	1.95	16	0.13	0.1	0.451	3.66	23.3	22.5	0.19	1020	89.4	1.69	8.6	3.3	190	14.4	161.5	0.014	0.58	0.13	2.5	1	5.7	135	0.88	0.57	9.9	0.099	1.5	3.9	13	6.9	10.1	279	1.2
263.50	266.00	2.50	M486926	6.36	0.001	0.05	6.75	0.9	790	2.21	0.12	0.9	0.12	44.7	2.3	8	0.72	7.1	1.18	16.15	0.11	0.1	0.024	3.41	24.4	11	0.2	542	19.6	2.61	8.8	2.8	190	10.4	95	0.003	0.05	0.12	2.6	2	1	177.5	0.81	<0.05	9.6	0.11	0.63	3.4	15	1.3	10.3	87	1.5
266.00	268.50	2.50	M486927	5.9	0.002	0.01	6.74	0.6	910	2.5	0.09	1.1	0.03	46.7	2.4	7	0.5	8.2	1.21	16.7	0.11	0.1	0.018	3.12	24.7	8.4	0.25	511	58.5	2.85	11.1	3.5	240	8	88.6	0.003	0.05	0.08	3	2	1.2	229	1.05	<0.05	10.6	0.128	0.56	4.3	16	1.1	12.9	40	1.1
268.50	271.00	2.50	M486928	5.8	0.001	0.08	6.78	0.7	850	5.27	0.48	1.03	0.13	45.3	2.3	7	0.95	16.4	1.33	16.75	0.12	0.1	0.114	3.29	24.7	13.7	0.23	747	20.0	2.5	8.8	3.3	230	9.6	108.5	0.002	0.15	0.13	2.7	2	2	201	0.78	0.09	11	0.123	0.8	3.8	15	2	10.3	121	1.2
271.00	273.50	2.50	M486929	6.32	0.001	0.01	6.84	1.7	840	1.89	0.06	1.02	<0.02	39.9	2.6	8	0.75	4.9	1.21	16.2	0.12	0.1	0.015	3.22	21.7	12.5	0.23	438	51.0	2.57	7.3	3.1	230	8.3	90.3	0.006	0.06	0.19	2.6	1	1.2	188	0.61	<0.05	9.8	0.119	0.6	2.4	16	1.7	9	25	1.3
273.50	275.00	1.50	M486930	3.38	0.001	0.03	6.49	1.9	810	1.7	0.07	0.97	0.07	42.6	2.2	7	0.85	3.8	1.16	15.4	0.11	0.1	0.026	3.22	24.1	11.1	0.21	499	4.5	2.48	7.3	2.8	200	9.3	91.5	<0.002	0.11	0.15	2.7	2	1.5	189.5	0.59	<0.05	9.9	0.117	0.69	3.4	15	1.8	8.6	38	1.5
275.00	276.00	1.00	M486620	2.7	0.001	0.82	5.96	14.6	640	3.3	2.48	0.54	1.39	42	2	9	1.5	103	2.04	14.9	0.13	0.1	1.14	3.8	26	29.5	0.18	1600	24.3	1.1	7.2	3	160	18.5	166	0.004	0.64	0.56	2.4	<1	5.9	81.9	0.64	0.43	9.1	0.098	1.85	5.7	13	6.4	8.3	497	1.2
276.00	278.00	2.00	M486931	4.3	0.001	0.07	6.7	3.4	790	2.47	0.24	0.77	0.09	41.1	2.2	7	1.24	6.5	1.31	16.6	0.11	0.1	0.059	3.61	22.9	16.6	0.22	889	9.3	2.11	9.1	3	220	10.2	112	<0.002	0.14	0.34	2.6	1	1.7	150	0.8	<0.05	9.3	0.119	0.99	3.6	16	3.6	9.6	98	1.1
278.00	280.00	2.00	M486932	4.66	0.001	0.1	6.65	2	810	2.24	0.17	0.96	0.19	37	2.2	12	0.79	6.8	1.13	16.1	0.11	0.1	0.047	3.24	19.1	12.4	0.21	877	71.2	2.41	10.1	4.5	220	9.4	90.4	0.012	0.06	0.23	2.4	1	1.1	182	0.91	<0.05	13.1	0.117	0.82	4.3	15	2.3	10.8	109	1
280.00	282.20	2.20	M486933	4.36	0.002	0.23	6.76	3.7	850	2.27	0.57	0.97	0.55	36.9	2.4	8	0.88	17.8	1.37	15.5	0.11	0.1	0.08	3.54	20	13.8	0.22	1960	90.0	2.24	10.4	3.1	210	13.1	106	0.012	0.19	0.31	2.5	2	1.3	171.5	0.94	0.09	9.8	0.12	0.99	6.1	15	3.6	10.9	389	1
282.20	283.20	1.00	M486621	1.92	0.024	1.42	6.34	56.2	660	3.24	3.64	0.3	1.97	40	2.3	8	1.63	72.7	2.86	17.7	0.13	0.1	1.155	3.86	23.7	43.1	0.2	1560	45.3	0.86	9.1	3.7	210	22.5	219	0.004	1.21	0.87	2.6	<1	13.9	73.3	0.84	0.78	9.1	0.107	2.39	8.8	14	11.9	9.8	651	1.1
283.20	284.50	1.30	M486934	3.3	0.001	0.04	7.15	1.2	890	2.33	0.08	1.04	0.07	41.4	2	7	0.81	5.6	1.12	17.05	0.13	0.1	0.046	3.67	22.2	12.9	0.23	760	15.7	2.68	8.4	2.9	200	10.4	111.5	<0.002	0.04	0.13	2.8	2	1.3	213	0.67	<0.05	10.7	0.118	0.88	3.6	15	3.6	9.7	76	1
284.50	285.50	1.00	M486622	2.5	0.0005	0.09	6.24	0.7	800	2.56	0.52	0.93	0.13	38	2	8	0.87	12.4	1.56	14.55	0.12	0.1	0.127	3.23	22.9	17.1	0.21	687	13.2	2.29	8.1	3.3	210	9.2	110.5	0.002	0.24	0.13	2.4	<1	3	185	0.74	0.16	8	0.109	0.93	3.2	14	3.8	9.1	68	1
285.50	286.50	1.00	M486623	2.38	0.0005	0.18	6.35	0.9	730	3.69	3.52	0.89	0.61	41.2	2.4	8	0.94	18.9	2.09	16.35	0.12	0.1	0.446	3.53	25.1	28.2	0.22	838	249.0	1.81	8.3	3.7	220	9.8	158.5	0.025	0.73	0.12	2.7	1	7.1	154	0.73	1.76	13.7	0.11	1.4	5	14	6.7	10.1	135	1.1
286.50	288.17	1.67	M486935	4.28	0.001	0.01	6.67	0.6	850	1.88	0.12	1.01	<0.02	39.9	2.4	11	0.45	4.6	1.21	16.1	0.1	0.1	0.026	3.21	21.6	8.6	0.22	442	8.1	2.77	7.7	3.6	230	7.9	89.1	<0.002	0.15	0.07	2.5	2	2.2	220	0.66	<0.05	11.3	0.117	0.61	3	15	2.4	8.7	15	1.2
288.17	289.17	1.00	M486624	2.92	0.0005	0.25	6.08	0.4	850	2.72	1.63	0.79	0.62	41.8	2.1	10	0.89	19.3	1.66	14.45	0.12	0.1	0.33	3.3	25.7	19	0.19	863	157.5	2.02	6.4	3.1	180	11.6	128	0.017	0.39	0.1	2.3	<1	4.2	164.5	0.54	0.54	8.3	0.099	1.1	2.8	12	3.7	8.2	201	1.1
289.17	290.17	1.00	M486625	2.5	0.0005	0.05	5.32	0.5	830	1.7	0.06	0.67	0.03	37.3	1.6	10	0.35	9.7	1.1	11.9	0.1	0.1	0.024	2.82	23.7	7.5	0.13	356	72.4	2.24	5.9	2.7	120	7.8	79.8	0.007	0.05	0.07	1.9	<1	1.3	141	0.51	0.06	6.6	0.078	0.52	1.3	9	0.8	6.6	11	1.1

MSA 004 FROM TO Table of Sampling Intervals

From_m	To_m	L_m		Sample	Litho	Comments		Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
47.30	50.30	3.00		M486733			TRUE	M486733	4.96	0.003	1.61	5.73	3.8	170	2.2	5.03	0.18	10.4	49.9	0.9	8	1	362	1.42	15.9	0.14	0.1	2.26	3.68	26.7	15.8	0.04	991	45.9	1.43	10.8	1.5	30	75.0	170.5	0.002	0.84	0.29	2.2	1	7.2	25.2	1.08	0.33	15	0.053	1.63	4.7	4	10	6.5	2010	1.4
50.30	53.30	3.00	0.00	M486734			TRUE	M486734	6.46	<0.001	0.19	6.08	1.1	200	2.4	0.3	0.24	0.34	47	0.8	8	0.8	50.1	1.02	17.1	0.35	0.1	0.199	3.72	27.4	13.6	0.04	259	7.9	2.11	11	1.5	40	31.9	138.5	<0.002	0.27	0.12	3.1	2	3.6	36.1	1.2	0.09	17.7	0.052	1.02	5.2	3	12.6	7.3	74	1.2
53.30	56.30	3.00	0.00	M486735			TRUE	M486735	5.42	0.001	0.28	5.92	3.1	200	2.07	0.63	0.17	0.42	36.8	0.6	5	1.15	36.5	1.01	15.85	0.15	0.1	0.276	3.7	22.8	48.6	0.03	216	73.5	1.86	8.7	1.3	30	67.5	147	0.003	0.32	0.16	2.7	<1	4.5	35.4	0.87	0.15	13.6	0.05	0.99	2.4	4	6.2	4.7	128	0.9
56.30	58.30	2.00	0.00	M486736			TRUE	M486736	3.74	<0.001	0.3	5.74	0.4	200	2.18	0.21	0.19	0.66	45.1	0.6	7	0.63	73.1	0.86	12.75	<0.05	0.1	0.221	3.78	26.4	11.1	0.03	263	23.7	2.07	10.5	1.4	30	38.0	129.5	<0.002	0.2	0.1	1.9	2	3.7	34.3	0.95	0.07	14.4	0.047	0.96	3.7	3	4.3	5.9	161	1
58.30	59.30	1.00	0.00	M486628	FGQM	QSP halos from 2mm to 2cm wide and fractures @ 30 and 70 dtca.	TRUE	M486628	2.66	<0.001	2.49	5.96	3.2	210	2.73	4.57	0.05	23.3	53.1	0.8	11	1	319	1.5	16.8	0.13	0.1	2.18	4.14	29.4	15.8	0.04	1420	23.0	0.68	13.6	1.5	30	270.0	233	0.002	0.98	0.22	2.6	1	7.1	20.3	1.19	0.35	16.8	0.051	2.12	13.1	4	8.4	9.2	3370	1.1
59.30	60.30	1.00	0.00	M486629	FGQM	QSP halos from 2mm to 8cm wide in a 2cm wide QP vein running 45 dtca..	TRUE	M486629	2.66	<0.001	0.15	5.79	1	200	2	0.17	0.25	0.39	45.5	1.6	8	0.52	40.3	1.68	15.2	0.14	0.1	0.18	3.46	26.2	8.2	0.03	198	17.3	1.87	9.5	0.9	20	24.6	126	<0.002	1.19	0.07	2.4	1	5.4	30.2	0.9	<0.05	14.5	0.048	0.75	5	4	1.8	6.6	99	0.8
60.30	61.30	1.00	0.00	M486630	FGQM		TRUE	M486630	2.38	<0.001	0.36	5.89	0.9	210	2.4	0.58	0.26	1.02	45	0.6	8	0.56	101	0.93	15.85	0.12	0.1	0.413	3.78	26.1	8.3	0.04	309	109.0	1.87	11	0.8	20	33.5	138.5	0.006	0.31	0.07	2.6	1	3.7	34.4	1.08	0.09	14.2	0.051	0.97	4.3	4	2.8	7.1	279	0.7
61.30	63.80	2.50	0.00	M486737			TRUE	M486737	5.52	<0.001	0.21	5.7	0.7	180	2.57	0.16	0.26	0.56	41.3	0.5	8	0.84	49.2	0.84	12.7	0.05	0.1	0.227	3.66	24	7.7	0.03	472	11.1	2.24	10.7	1.3	30	23.8	118.5	<0.002	0.1	0.08	2	2	1.6	34	1.1	<0.05	14.2	0.053	0.8	3.2	4	1.7	6.5	134	1
63.80	66.30	2.50	0.00	M486738			TRUE	M486738	6.16	<0.001	0.09	5.82	0.4	180	3.04	0.1	0.33	0.16	49.3	0.6	7	1.35	21.2	0.72	13.95	0.08	0.1	0.054	3.53	28.9	5.5	0.04	220	107.0	2.44	12	1	30	14.9	117	0.002	0.16	0.07	2.2	2	1.8	34.7	1.47	<0.05	16.1	0.053	0.62	4.6	3	2.9	10.5	29	0.9
66.30	68.80	2.50	0.00	M486739			TRUE	M486739	5.1	0.001	0.3	5.76	<0.2	180	2.39	0.59	0.26	0.69	42	0.8	8	1.29	75.4	1.13	13.95	0.07	0.1	0.252	3.56	24.6	9.5	0.04	337	13.1	2.05	11.6	1.4	30	22.5	127.5	<0.002	0.46	0.09	2.2	2	4.8	31.1	1.13	0.09	14.8	0.052	0.88	4.4	4	4.2	7.8	154	1.1
68.80	71.30	2.50	0.00	M486740			TRUE	M486740	6.28	0.001	0.13	5.72	0.2	190	2.18	0.16	0.28	0.34	45.6	0.7	7	0.65	32.6	0.61	13.45	0.07	0.1	0.059	3.83	26.4	10.7	0.03	167	127.0	2.15	11.6	0.9	30	17.5	121.5	0.002	0.11	0.08	2.1	2	1.3	37.3	1.16	<0.05	15.9	0.048	0.77	9.6	3	1.7	9.3	64	0.8
71.30	73.60	2.30	0.00	M486741			TRUE	M486741	5.4	0.003	0.53	5.76	0.8	180	2.42	0.89	0.27	0.5	44.6	1.3	8	0.55	37.7	1.03	14.8	0.07	0.1	0.172	3.64	26	8.5	0.04	224	16.4	2.08	12.6	1.5	30	28.2	123.5	<0.002	0.25	0.09	2.5	2	4.6	32.1	1.31	0.05	15.5	0.051	0.73	5.8	4	2.8	8.3	64	1.2
73.60	75.60	2.00	0.00	M486742			TRUE	M486742	5.02	<0.001	0.04	6.04	<0.2	180	2.11	0.02	0.37	0.08	54.8	0.5	5	0.46	9.9	0.55	14.5	0.09	0.1	0.007	3.69	32.3	5.1	0.03	176	12.8	2.46	10.8	1.4	30	13.2	113	<0.002	0.01	0.06	2.1	1	0.5	34.3	1.16	<0.05	17.5	0.052	0.49	3	4	0.4	9.6	32	0.9
75.60	77.60	2.00	0.00	M486743			TRUE	M486743	4.62	<0.001	0.11	5.98	<0.2	190	2.17	0.08	0.32	0.15	50.5	0.7	8	0.67	18.4	0.85	14	0.09	0.1	0.059	3.69	29.9	6.9	0.04	255	4.6	2.37	10.5	1.4	30	19.4	125	<0.002	0.11	0.08	2.1	1	2	35	1.1	<0.05	16.8	0.054	0.64	3.2	4	7.2	7.9	54	1
77.60	78.30	0.70	0.00	M486631	FGQM		TRUE	M486631	2.78	<0.001	0.53	5.73	1.2	190	2.89	0.8	0.13	1.55	45.9	1.6	11	1.18	101	1.74	16.85	0.13	0.1	0.437	3.67	26.2	10.5	0.05	744	28.1	1.21	9.8	1.5	40	32.8	179.5	<0.002	0.91	0.09	2.5	1	13.9	23	1.07	0.13	15	0.047	1.39	4.3	4	20.4	6	434	1.1
78.30	79.30	1.00	0.00	M486632	FGQM	1cm wide QP-Mo vein with 3cm halo on each side trending @ 70 dtca. <1mm Moly veinlet on up hole side of vein.	TRUE	M486632	2.32	<0.001	1.88	5.9	2.5	190	2.49	4.86	0.15	5.97	46	1.4	7	1.64	436	1.28	17.3	0.13	<0.1	1.97	3.74	26.1	12.2	0.05	1310	25.1	1.23	9.3	0.9	30	53.4	189	<0.002	0.82	0.18	2.4	1	9	22.6	1.03	1.48	15.2	0.049	1.68	5.2	4	18.9	5.9	1580	0.7
79.30	81.70	2.40	0.00	M486744			TRUE	M486744	4.98	<0.001	0.98	5.94	1	210	2.31	1.38	0.15	3.98	48.4	2	7	1.69	150	1	15.1	0.07	0.1	0.633	4	28.4	13.7	0.04	828	42.4	1.43	10.7	0.9	30	89.2	185	<0.002	0.62	0.14	2.2	1	5.8	27.5	1.26	0.19	14.7	0.05	1.72	5.8	4	4.8	8.9	987	0.7
81.70	82.70	1.00	0.00	M486633	FGQM	1.5cm wide QP-Mo vein with 2cm halo on each side trending @ 67 dtca. Small Moly wispy lenses throughout vein.	TRUE	M486633	2.58	<0.001	0.56	6.01	1.4	210	2.64	1.55	0.3	2.26	51.2	0.8	9	1.48	94	1.17	16.05	0.14	0.1	0.361	3.9	28.8	7.6	0.04	531	48.1	1.96	12.1	1.5	30	60.7	154	0.003	0.35	0.11	2.6	1	3.7	32.9	1.24	0.31	14.1	0.051	1.1	5	3	8.1	12.9	394	1.2
82.70	84.70	2.00	0.00	M486745			TRUE	M486745	4.08	0.001	0.07	6.05	<0.2	200	2.44	0.04	0.33	0.23	51.8	0.7	11	1.2	19.6	0.85	14.4	0.09	0.1	0.03	3.73	30.9	6.3	0.04	237	11.7	2.43	11.4	1.4	30	17.5	126	<0.002	0.12	0.07	2.3	1	1.6	37.2	1.36	<0.05	16.5	0.053	0.77	4.2	4	1.1	10.7	29	0.8
84.70	86.70	2.00	0.00	M486746			TRUE	M486746	4.06	<0.001	0.23	6.15	<0.2	190	2.69	0.24	0.3	0.84	56.6	0.5	7	1.81	33.5	0.8	15.75	0.11	0.1	0.163	3.66	33.8	10.2	0.04	279	0.9	2.25	12.1	0.8	40	21.1	133.5	<0.002	0.28	0.08	2.4	2	5.4	33.8	1.45	0.05	18.2	0.057	0.79	4.6	4	1.8	11.3	142	0.8
86.70	88.70	2.00	0.00	M486747			TRUE	M486747	5.64	<0.001	0.44	6.07	0.6	220	2.09	0.57	0.3	2.31	51.9	0.7	8	1.09	77.9	0.91	14.45	0.1	0.1	0.489	3.95	30.6	9.3	0.04	399	37.1	2.14	13	1.5	40	30.5	133	<0.002	0.19	0.1	2.4	1	2.1	37.5	1.44	0.1	16.3	0.055	1.03	4.9	4	2.8	12.4	420	1.2
88.70	89.70	1.00	0.00	M486634	FGQM	Most of sample sericitized due to QSP vein running ~20 dtca down the sample center.	TRUE	M486634	2.32	<0.001	13.2	5.52	7.9	180	2.44	126	0.24	5.99	44.4	0.9	8	1.37	2880	2.25	24.1	0.14	0.1	4.64	3.14	24.1	16.3	0.08	1620	6.6	0.4	10.8	1	40	103.0	218	<0.002	1.88	0.29	2.8	1	22.8	11.5	1.06	4.56	13.2	0.052	2.26	10.6	5	118.5	9.9	1520	0.8
89.70	91.00	1.30	0.00	M486748			TRUE	M486748	2.98	<0.001	1.54	5.76	0.6	300	3.42	3.27	0.31	7.82	56.9	1.2	9	1.35	139.5	1.39	15.15	0.12	0.1	1.09	3.91	32.8	10	0.06	1440	44.3	1.31	11.2	2.3	50	178.5	186	0.003	0.75	0.19	2.1	2	7.1	38.8	1.18	0.35	15.7	0.056	1.77	9.7	5	12.5	15.3	1660	1
91.00	91.50	0.50	0.00	M486635	FGQM	Most of sample is sericitized or kaolinized to a greenish clay. QSP veins prevalent throughout. 1cm wide QP+/-Mo vein in center of sample with sericite halo above and kaolin below.	TRUE	M486635	1.28	<0.001	1.2	5.58	2.4	270	2.23	6.79	0.14	1.65	57.2	1.7	7	0.95	154.5	2.6	17.95	0.15	0.1	0.784	3.14	31.5	33.9	0.06	812	30.9	1.01	7.8	1.1	40	30.7	173.5	0.002	2.19	0.13	2.5	1	13	32.9	0.84	1.3	13.7	0.046	1.5	5.2	5	25.6	13.8	487	0.8
91.50	93.50	2.00	0.00	M486749			TRUE	M486749	4.26	0.001	0.09	5.68	0.6	250	2.02	0.08	0.28	0.46	53.6	1.2	9	1.39	25.6	1.16	14.6	0.12	0.1	0.047	3.65	31.2	15.3	0.05	312	4.2	2.12	11	1.7	40	26.9	134	<0.002	0.49	0.09	2.3	2	4.1	40.5	1.13	<0.05	17.1	0.055	0.86	3.8	5	1.8	11.6	83	1
93.50	95.50	2.00	0.00	M486750			TRUE	M486750	5.24	0.001	0.08	5.87	<0.2	240	2.01	0.03	0.33	0.21	46.5	0.7	10	1.17	15.9	0.95	13.45	0.1	0.1	0.024	3.69	27	5.4	0.04	336	4.0	2.38	10.1	2	40	17.2	122.5	<0.002	0.08	0.07	2	1	1.3	41.7	1.07	<0.05	15.7	0.057	0.74	3.2	4	1	8.8	35	0.9
95.50	97.50	2.00	0.00	M486751			TRUE	M486751	4.36	<0.001	0.11	6.16	0.7	300	3	0.16	0.35	0.51	44.9	1	10	0.98	26.9	1.01	22	0.17	0.1	0.037	3.85	26.3	9.9	0.07	438	39.2	2.31	12.1	2.3	70	40.4	147.5	0.002	0.13	0.07	3.3	2	3.6	58.1	1.16	<0.05	15.5	0.067	0.86	3.9	5	1.5	12.3	107	0.9
97.50	99.50	2.00	0.00	M486752			TRUE	M486752	5.78	<0.001	0.1	6.12	0.2	270	1.9	0.07	0.35	0.16	49.8	0.7	8	1.04	22.2	1.03	14.25	0.11	0.1	0.039	3.79	29.4	7	0.05	333	7.7	2.37	9.2	1.8	40	17.0	114	<0.002	0.14	0.08	2	1	3.5	41.5	0.92	<0.05	15.9	0.057	0.75	3.2	4	1.4	8.2	46	0.9
99.50	101.50	2.00	0.00	M486755			TRUE	M486755	4.38	<0.001	0.43	6.26	<0.2	270	2.17	3.25	0.31	0.73	49.3	0.8	8	1.35	98.9	1	15.85	0.09	0.1	0.22	3.9	28.9	10	0.05	508	22.7	2.24	10.2	1.6	40	22.0	141.5	<0.002	0.25	0.08	2.2	2	3.1	43.9	1.05	0.48	16.9	0.059	0.96	3.3	4	3.1	10.2	213	1
101.50	103.65	2.15	0.00	M486756			TRUE	M486756	5.06	<0.001	0.51	5.9	0.3	390	2.29	3.19	0.3	0.74	43	1.4	10	1.31	59.1	1.37	16.05	0.09	0.1	0.264	3.78	24.9	12.6	0.06	720	75.4	1.75	10.5	2.1	50	14.6	166.5	0.002	0.58	0.1	2.2	2	7.5	46.7	1.04	0.53	14	0.056	1.32	4.2	5	10.5	9	155	1.5
103.65	104.65	1.00	0.00	M486636	FGQM	All fractures and veins in sample are 75-80 dtca. Veins are 1 cm wide.	TRUE	M486636	2.44	<0.001	1	5.6	2.3	370	2.4	4.19	0.28	4.09	44.5	4	11	1.34	68.8	2	16.8	0.14	0.1	0.661	3.95	24	15.8	0.06	1030	173.5	1.06	9.2	1.5	40	50.2	191	0.012	1.62	0.14	2.4	1	12.5	29.9	0.96	0.74	13.2	0.045	1.7	7.6	6	48.1	9.3	878	0.9
104.65	106.65	2.00	0.00	M486757			TRUE	M486757	4.52	<0.001	0.22	6.17	0.2	440	2.39	0.42	0.41	0.35	47	1	9	0.45	22.8	0.97	15.6	0.1	0.1	0.099	3.95	27.2	5.8	0.06	511	58.9	2.28	9.4	1.8	50	14.4	127	0.002	0.21	0.06	2.2	2	2.5	58	0.92	0.06	14.9	0.059	0.82	3.4	5	7.7	9.5	97	1.3
106.65	108.65	2.00	0.00	M486758			TRUE	M486758	4.9	0.001	0.09	5.94	<0.2	350	2.01	0.16	0.41	0.32	46.4	1	8	0.61	15.4	1.04	14.8	0.09	0.1	0.052	3.64	26.6	5	0.05	387	33.3	2.3	8.3	2	40	12.0	113.5	<0.002	0.16	0.07	2.1	2	2	50.2	0.83	<0.05	14.3	0.058	0.64	2.6	5	3.8	7.8	56	1.4
108.65	110.65	2.00	0.00	M486759			TRUE	M486759	4.18	<0.001	0.09	5.82	<0.2	390	1.92	0.14	0.36	0.2	45.9	0.9	8	0.68	19.1	0.87	14.85	0.08	0.1	0.048	3.73	26.2	5.3	0.05	349	28.6	2.29	8.6	1.5	50	15.6	120.5	<0.002	0.12	0.06	2	1	3.1	54.1	0.85	<0.05	15.9	0.06	0.72	3.1	5	8.2	9.3	72	1.5
110.65	113.15	2.50	0.00	M486760			TRUE	M486760	6.78	<0.001	0.18	6.05	<0.2	420	2.38	0.23	0.4	1.03	52.2	1	8	0.39	20.2	1.04	15.15	0.11	0.1	0.105	3.89	29.4	5.3	0.06	623	54.8	2.31	11.3	2	50	20.1	122	0.002	0.18	0.07	2.3	1	1.9	57.9	1.23	0.06	17.2	0.061	0.8	5.8	5	7.2	11.7	182	1.5
113.15	115.85	2.70	0.00	M486761			TRUE	M486761	6.68	<0.001	0.19	6.15	<0.2	470	2.84	0.24	0.4	1.73	47.8	1	8	0.41	25.8	0.99	15.95	0.09	0.1	0.315	4.02	26.7	6.2	0.06	633	17.4	2.22	12.5	1.8	50	20.4	132	<0.002	0.26	0.07	2.3	2	2.9	62.5	1.29	0.05	15.9	0.063	0.91	5.3	6	4.2	13.1	408	1.5
115.85	116.85	1.00	0.00	M486637	FGQM		TRUE	M486637	2	<0.001	0.34	5.8	1.1	360	2.09	1.38	0.2	0.74	46.3	3.1	10	0.7	24.5	2.17	18.5	0.14	0.1	0.359	3.77	25.2	11.5	0.07	781	180.5	0.64	7.3	1.3	40	15.1	201	0.012	1.82	0.1	2.3	1	19.1	24.2	0.7	0.17	14.1	0.047	1.85	5.7	6	23.3	6.9	164	0.7
116.85	117.85	1.00	0.00	M486638	CGQM		TRUE	M486638	2.68	<0.001	0.7	5.81	1.5	580	4.48	2.77	0.42	3.53	43.4	1.6	12	0.6	36.9	1.84	15.95	0.14	0.1	0.697	3.74	23.7	9	0.1	991	167.5	1.42	8.1	2.1	90	26.6	162	0.007	1.16	0.13	2.5	1	7.5	72.5	0.76	0.32	12	0.067	1.46	4.9	7	12.2	9.4	761	0.9
117.85	118.85	1.00	0.00	M486639	CGQM		TRUE	M486639	2.92	<0.001	0.04	5.86	1.1	660	2.42	0.06	0.59	0.41	41.5	1.3	9	0.34	5.2	0.92	15.7	0.12	0.1	0.038	3.46	22.3	6.8	0.11	519	99.4	2.32	8	1.9	100	13.8	103.5	0.003	0.12	0.06	2.5	1	1.7	118	0.73	<0.05	10.7	0.078	0.61	2.3	8	1.4	10	108	1
118.85	119.85	1.00	0.00	M486640	CGQM	There is a 3cm QSP-Mo vein that is 3cm wide running ~88 dtca with a 2-3cm wide pyrite-sericite halo on either side.	TRUE	M486640	2.82	<0.001	3.2	5.89	2.1	620	2.66	9.5	0.51	1.29	38.7	1.8	11	0.55	25.5	1.85	15.75	0.13	0.1	0.297	3.56	21.1	8.2	0.1	1210	76.1	1.77	7.4	2.2	100	37.8	141	0.003	1.16	0.1	2.3	1	5.8	92.7	0.67	0.93	10.2	0.068	1.23	4.1	8	34	8.9	383	0.9
119.85	120.85	1.00	0.00	M486641	CGQM		TRUE	M486641	2.72	<0.001	0.08	5.85	0.9	640	2.54	0.12	0.51	0.22	41.1	1	11	0.49	14.6	0.97	15.6	0.12	0.1	0.092	3.53	22.5	7.2	0.11	587	43.2	2.11	7.1	1.8	100	10.7	118.5	0.002	0.31	0.1	2.3	1	3.8	98.2	0.62	<0.05	10.3	0.07	0.83	2.4	7	4.6	8.3	75	0.9
120.85	121.85	1.00	0.00	M486642	CGQM		TRUE	M486642	2.34	<0.001	0.09	6.09	1.2	660	2.4	0.13	0.43	0.86	46.7	1.2	10	0.55	22.2	0.98	16.15	0.14	0.1	0.122	3.73	25	7.3	0.11	877	69.6	2.27	7.3	2.1	110	15.4	130.5	0.003	0.2	0.07	2.4	1	3.6	98	0.62	0.05	12.6	0.071	0.99	2.9	7	5.5	8.9	181	0.8
121.85	122.85	1.00	0.00	M486643	CGQM		TRUE	M486643	2.46	<0.001	0.11	5.89	1.6	630	2.53	0.2	0.45	0.48	42.8	2.8	10	0.62	8.1	1.1	16.55	0.12	0.1	0.053	3.68	23.5	8.2	0.1	1330	160.0	2	6.3	1.8	90	32.9	135	0.008	0.51	0.08	2.4	1	8.5	95.4	0.55	0.07	10.1	0.068	1.03	2.1	8	5.2	7.7	157	0.8
122.85	125.35	2.50	0.00	M486762			TRUE	M486762	5.76	0.001	0.38	6.32	1.1	680	2.67	0.94	0.56	2.06	46.5	1.8	11	0.57	91.4	1.53	16.95	0.11	0.1	0.409	3.7	26.1	9.1	0.12	1410	72.1	2.03	8.7	3.4	120	22.2	146	0.003	0.65	0.1	2.4	1	7.4	104.5	0.8	0.19	11.7	0.079	1.27	3.2	9	6.8	10.3	499	1.1
125.35	127.85	2.50	0.00	M486763			TRUE	M486763	5.76	<0.001	0.06	6.22	<0.2	710	2.26	0.04	0.63	0.02	42.3	1.5	11	0.29	14.8	1.05	15.9	0.09	0.1	0.033	3.53	23.7	7.3	0.12	346	14.5	2.56	8.8	2.5	120	8.4	104.5	<0.002	0.13	0.06	2.1	2	2.4	130.5	0.84	<0.05	14.3	0.083	0.56	2.8	9	1.3	9.9	14	1.1
127.85	128.85	1.00	0.00	M486644	CGQM		TRUE	M486644	3.02	<0.001	0.04	6.11	0.9	660	2.41	0.03	0.7	0.06	43.7	1.4	11	0.36	10.4	1.12	16.25	0.13	0.1	0.041	3.42	23.5	7.2	0.11	446	9.3	2.34	7.5	2.1	110	10.7	104	<0.002	0.09	0.07	2.3	1	4.4	123	0.69	<0.05	10.9	0.078	0.65	2.7	8	2.4	8.4	29	0.9
128.85	129.85	1.00	0.00	M486645	CGQM	Kaolin Clay Altered Feldspars	TRUE	M486645	2.9	<0.001	0.02	6.09	0.8	710	2.46	0.01	0.64	0.07	45.3	1.1	10	0.29	3.6	0.85	15.5	0.13	0.1	0.017	3.41	24.2	6.1	0.11	370	6.6	2.5	7.9	1.8	100	8.8	91.7	<0.002	0.03	0.12	2.4	1	1.4	120.5	0.81	<0.05	13	0.077	0.46	2.5	8	1.4	9.9	35	1
129.85	130.85	1.00	0.00	M486646	CGQM	Kaolin Clay Altered Feldspars	TRUE	M486646	3.3	<0.001	0.49	6.4	1.5	680	3.67	1.6	0.71	1.53	42.5	1.4	10	0.5	50.6	1.3	17.05	0.15	0.1	0.438	3.82	22.8	7.3	0.12	1210	126.0	1.96	8.9	2.1	110	23.8	148.5	0.007	0.49	0.11	2.5	1	5	105	0.82	0.19	10.6	0.079	1.26	3.8	8	9.6	10.1	416	1
130.85	133.35	2.50	0.00	M486764			TRUE	M486764	5.56	<0.001	0.39	6.28	<0.2	730	2.48	0.76	0.55	0.34	44.1	1.3	10	0.4	32.8	1.24	15.7	0.1	0.1	0.115	3.87	25.7	7.7	0.1	690	36.1	2.32	7.5	3	90	18.0	134	0.002	0.22	0.1	2.1	2	2.2	106	0.65	0.14	10.7	0.074	0.95	2.6	7	11.2	8.9	103	1.5
133.35	135.85	2.50	0.00	M486765			TRUE	M486765	6.14	0.001	0.03	6.29	0.2	500	2.13	0.03	0.55	0.02	47.6	1.5	9	0.62	4.4	0.96	15.6	0.09	0.1	0.01	3.63	27.6	7	0.09	299	17.7	2.62	9.4	2.3	80	10.6	113	<0.002	0.08	0.06	2.4	2	1.8	93.2	0.83	<0.05	14.1	0.076	0.59	2.7	7	1.3	9	19	2
135.85	137.30	1.45	0.00	M486766			TRUE	M486766	3.32	<0.001	0.03	6.51	<0.2	740	2.24	0.01	0.7	0.12	40.5	1.5	10	0.34	4.6	1.19	16.7	0.1	0.1	<0.005	3.41	22.1	7.6	0.12	635	9.4	2.71	10.7	3	120	9.8	100	<0.002	0.01	0.07	2.4	2	0.9	144	1.02	<0.05	14.7	0.089	0.47	2.9	9	0.5	11.5	94	2.1
137.30	138.60	1.30	0.00	M486647	CGQM	Kaolin Clay Altered Feldspars	TRUE	M486647	3.22	<0.001	0.02	6.07	1	630	2.41	0.03	0.69	<0.02	39	1.1	9	0.42	5.3	0.84	16.2	0.12	0.1	0.038	3.38	20.5	7.3	0.11	299	205.0	2.44	9.5	1.6	100	9.1	106	0.014	0.1	0.06	2.6	1	3.2	123.5	0.9	<0.05	11.8	0.077	0.55	3	9	2	10.5	11	1.7
138.60	141.25	2.65	0.00	M486767			TRUE	M486767	6.84	<0.001	0.05	6.5	<0.2	700	2.18	0.06	0.68	0.11	41	1.3	11	0.47	9.2	1.04	16.45	0.11	0.1	0.022	3.56	22.9	7.7	0.12	383	11.9	2.65	10.2	2.6	120	13.8	114	<0.002	0.08	0.06	2.4	2	1.8	137	1.03	<0.05	13.6	0.086	0.59	3.3	9	1.6	11.1	44	2
141.25	142.25	1.00	0.00	M486648	CGQM		TRUE	M486648	2.54	<0.001	0.49	6.18	1	630	3.29	1.63	0.53	1.95	38.3	1	10	0.84	53.3	1.01	17.4	0.12	0.1	0.483	4.3	20	7.6	0.11	1240	141.0	1.82	10.5	1.7	100	33.3	177.5	0.004	0.39	0.1	2.7	1	4.8	89.1	1.05	0.21	12.4	0.073	1.52	5.5	8	6.6	10.2	520	1.4
142.25	143.25	1.00	0.00	M486651	CGQM		TRUE	M486651	2.42	<0.001	1.48	5.89	1.8	530	2.93	14.25	0.56	2.61	46	1.2	9	0.67	91.6	1.57	17.25	0.14	0.1	0.804	3.62	24.9	10.2	0.12	1460	25.6	1.44	8.7	1.8	110	38.3	172	<0.002	1.06	0.11	2.6	1	6.3	75.9	0.82	1.62	11.6	0.079	1.54	3.9	8	28.6	8.9	749	1.3
143.25	144.25	1.00	0.00	M486652	CGQM	Specular Hematite in QSP-Hm-Mo vein.	TRUE	M486652	2.72	<0.001	0.61	5.9	1.6	580	3.38	4.02	0.46	6.04	43.2	1.5	18	0.55	69.9	1.31	16.2	0.12	0.1	2.06	3.62	23.2	7.6	0.11	1100	188.0	1.84	8.7	1.9	100	33.0	137	0.011	0.75	0.09	2.7	1	6	85.3	0.78	0.24	12.1	0.076	1.18	3.4	8	12.4	8.6	1550	1
144.25	145.25	1.00	0.00	M486653	CGQM		TRUE	M486653	2.46	<0.001	0.17	6.19	0.9	680	3.3	0.37	0.46	1.35	46	1.4	8	0.62	16.8	0.96	15.85	0.13	0.1	0.126	3.88	24.4	6.6	0.11	1140	90.2	2.25	8.5	1.8	110	26.9	138.5	0.006	0.35	0.08	2.4	1	2.8	109	0.82	0.08	12.5	0.079	1.2	2.5	7	6.5	8.9	411	0.9
145.25	146.25	1.00	0.00	M486654	CGQM		TRUE	M486654	2.58	<0.001	0.51	5.87	1.3	590	3.23	2.43	0.48	2.01	40.5	3.4	13	0.77	15	2.4	16.8	0.16	0.1	0.556	3.99	21.3	9.5	0.11	1120	222.0	1.35	8.3	2.1	110	29.1	188.5	0.01	1.91	0.1	2.5	1	11.3	70.2	0.81	0.37	12.2	0.068	1.71	4.1	8	14.9	8.1	549	0.8
146.25	147.25	1.00	0.00	M486655	CGQM		TRUE	M486655	2.7	<0.001	0.14	6.2	1.5	640	2.64	0.86	0.62	0.53	39.6	1.3	10	0.53	13.3	1.37	16.7	0.13	0.1	0.176	3.59	21.3	7.7	0.12	632	68.8	2.09	8.9	1.8	100	13.6	132	0.004	0.71	0.07	2.5	1	5.7	112.5	0.85	0.16	16.9	0.078	0.99	4.5	8	8.5	8.7	163	0.9
147.25	149.75	2.50	0.00	M486768			TRUE	M486768	5.74	<0.001	0.06	6.56	0.3	710	2.3	0.11	0.68	0.04	45.1	1.5	10	0.52	10.8	1.27	15.9	0.07	0.1	0.046	3.66	23	8.2	0.13	422	91.3	2.61	7.9	2.6	120	9.0	110	0.006	0.15	0.09	2.5	<1	3.1	132	0.75	<0.05	12.3	0.082	0.72	2.1	10	2.7	8.2	31	1.1
149.75	151.25	1.50	0.00	M486769			TRUE	M486769	4.14	<0.001	0.07	6.43	<0.2	720	2.27	0.13	0.69	0.17	48	1.3	8	0.49	7.4	1.17	16.15	0.1	0.1	0.064	3.68	25.6	8	0.14	544	10.1	2.54	8.6	2.1	130	10.4	112.5	<0.002	0.21	0.07	2.5	1	3.5	133.5	0.89	<0.05	11.9	0.086	0.76	1.9	10	2.2	8.5	47	1
151.25	153.00	1.75	0.00	M486770			TRUE	M486770	3.96	<0.001	0.03	6.63	<0.2	670	2.5	0.43	0.65	0.37	43.8	1.7	7	0.47	6.1	1.53	17.4	0.11	0.1	0.134	3.52	22.7	9	0.14	561	19.4	2.25	8.5	2	130	7.7	121	<0.002	0.61	0.09	2.5	1	7.6	116.5	0.83	0.17	10.2	0.086	0.77	2	10	8.6	8.7	133	1
153.00	154.00	1.00	0.00	M486656	CGQM	Stockworking of QSP+PS fractures.	TRUE	M486656	2.14	<0.001	0.06	6.33	1.1	660	2.56	0.68	0.45	0.54	38.1	2.8	12	0.55	13.5	2.06	18.4	0.14	0.1	0.385	3.83	20.9	9.8	0.13	670	13.5	1.51	7.2	2.1	120	7.5	165	<0.002	1.27	0.05	2.6	1	15.9	79.1	0.66	0.12	13.5	0.066	1.14	4.3	11	12.1	8.2	172	0.7
154.00	156.50	2.50	0.00	M486771			TRUE	M486771	6.28	<0.001	0.03	6.3	0.2	690	2.29	0.06	0.67	0.2	43.8	1.3	9	0.4	7.4	1.11	15.9	0.13	0.1	0.053	3.5	23.3	7.7	0.13	477	33.9	2.57	7.8	2.1	120	9.2	101	0.003	0.16	0.07	2.3	1	2.9	132.5	0.78	<0.05	9.3	0.08	0.62	1.8	9	1.8	8.5	86	1
156.50	159.00	2.50	0.00	M486772			TRUE	M486772	6.6	<0.001	<0.01	6.31	<0.2	670	2.11	0.02	0.67	0.13	40	1.5	10	0.34	5.2	1.1	16.1	0.12	0.1	0.017	3.27	21	8.9	0.12	297	65.2	2.55	8.6	2.1	120	7.7	90.2	0.005	0.1	0.06	2.2	1	3.8	140	0.83	<0.05	9.3	0.08	0.45	2.2	10	1	9.1	49	1.3
159.00	161.50	2.50	0.00	M486773			TRUE	M486773	6.16	<0.001	<0.01	6.52	<0.2	650	2.06	0.02	0.68	0.04	47.6	1.3	11	0.37	4.1	1.25	17.05	0.14	0.2	0.026	3.59	24.8	8.6	0.13	314	34.6	2.74	9	2.4	100	8.5	94.8	0.002	0.16	0.07	2.5	1	2.9	130	0.84	<0.05	10.4	0.084	0.45	2.4	9	0.8	9.8	30	2.8
161.50	163.50	2.00	0.00	M486774			TRUE	M486774	4.96	<0.001	0.01	6.4	<0.2	680	1.88	0.02	0.7	<0.02	48.5	1.6	12	0.37	4.4	1.06	16	0.14	0.1	0.016	3.38	26.1	9	0.13	267	8.6	2.68	7.5	2.3	110	8.2	88.1	<0.002	0.05	0.06	2.3	1	2.1	142.5	0.72	<0.05	9.3	0.084	0.43	1.4	10	0.6	9.1	16	1.3
163.50	165.40	1.90	0.00	M486777			TRUE	M486777	4.6	<0.001	0.08	6.27	<0.2	670	1.91	0.24	0.65	0.13	48.4	1.8	14	0.47	25.9	1.42	15.6	0.1	0.1	0.075	3.57	26.3	10.5	0.14	332	49.3	2.4	6.4	3.3	110	8.9	104.5	0.002	0.15	0.07	2.2	1	5.7	125.5	0.56	<0.05	8.1	0.079	0.64	1.7	9	2.1	7.3	30	1.4

MSA 004 FROM TO Table of Sampling Intervals

From_m	To_m	L_m		Sample	Litho	Comments		Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
165.40	166.40	1.00	0.00	M486657	CGQM	~30cm zone of highly fractured rubbly rock starting with a 2cm Qtz-Hm-Mo vein and with several Hm+/-Mo veinlets throughout with heavy sericite alteration.	TRUE	M486657	1.78	<0.001	0.19	5.77	1	580	2.7	0.41	0.44	0.8	38.3	1.5	7	0.75	13.2	0.94	16.25	0.11	0.1	0.173	3.86	21	10.5	0.1	684	366.0	1.94	5.4	1.5	90	14.3	135	0.022	0.43	0.07	2.2	1	6.4	90	0.47	0.1	9.8	0.059	1.14	4.5	7	5.1	6.1	198	0.7
166.40	168.60	2.20	0.00	M486778			TRUE	M486778	5.36	<0.001	0.02	6.38	<0.2	660	1.89	0.01	0.66	0.03	49.5	1.3	14	0.36	2.9	1.05	15.9	0.1	0.1	0.017	3.46	26.7	9	0.13	318	14.5	2.69	6.1	2.5	110	8.2	94.3	<0.002	0.06	0.06	2	1	2.2	130	0.51	<0.05	10.1	0.075	0.53	1.9	9	1.4	7	30	1.5
168.60	169.60	1.00	0.00	M486658	CGQM	Minor stockworking. Cpy veinlet present.	TRUE	M486658	2.4	<0.001	1.71	6.19	1.4	670	2.39	1.81	0.64	1.21	40.4	1.5	11	0.61	596	1.5	16.7	0.13	0.1	1.545	3.64	21.8	11.3	0.12	1080	163.5	1.99	6.3	2	130	33.3	130	0.009	0.67	0.08	2.5	1	7.3	109	0.58	0.17	10.2	0.073	1.09	3.7	8	5.7	7.8	352	0.9
169.60	171.10	1.50	0.00	M486779			TRUE	M486779	3.52	<0.001	0.01	6.56	<0.2	780	2.04	0.03	0.7	0.05	46.7	1.5	14	0.5	4.2	1.26	16.35	0.11	0.1	0.033	3.59	25.3	8.8	0.15	363	29.0	2.63	6.6	2.8	120	8.4	100.5	0.002	0.12	0.08	2.3	1	3.3	143	0.61	<0.05	9	0.083	0.62	1.5	10	4.4	7.9	27	1.3
171.10	172.75	1.65	0.00	M486780			TRUE	M486780	3.7	<0.001	0.95	6.33	0.5	860	1.81	2.95	0.5	2.88	43.7	1.6	16	0.7	128.5	1.7	15.95	0.1	0.1	1.17	3.97	24	11.6	0.12	817	121.5	1.61	5.8	2.4	100	22.0	145	0.007	0.92	0.11	2.3	1	8.2	89.3	0.49	0.5	7.5	0.077	1.24	1.9	9	41.7	5.7	653	1.8
172.75	174.75	2.00	0.00	M486781			TRUE	M486781	5.64	<0.001	0.04	6.43	<0.2	430	2.05	0.09	0.46	0.16	52	0.9	24	0.85	7	1	16.05	0.11	0.1	0.053	3.74	27.4	6.4	0.07	284	39.6	2.53	10.9	2.2	60	10.6	110.5	0.003	0.06	0.08	2.5	1	2	67	1.13	<0.05	13.9	0.065	0.55	4.4	6	1.2	11.1	41	2.3
174.75	176.75	2.00	0.00	M486782			TRUE	M486782	4.5	<0.001	<0.01	6.39	0.2	350	2.23	0.01	0.48	<0.02	52.6	0.9	11	0.31	1.9	0.82	16.6	0.11	0.1	0.011	3.78	27.1	6.6	0.07	177	45.9	2.6	11.4	1.5	50	9.1	104.5	0.002	0.05	0.06	2.6	1	1.2	61.5	1.17	<0.05	14.9	0.065	0.43	3.8	6	0.7	11.5	8	1.8
176.75	178.75	2.00	0.00	M486783			TRUE	M486783	4.76	<0.001	0.42	6.66	1	600	1.99	0.65	0.61	2.22	49.7	1.1	12	0.54	24.8	1.16	16.5	0.11	0.2	0.655	3.76	26.1	8	0.11	573	140.0	2.56	9	2.2	90	17.3	114.5	0.007	0.19	0.1	2.5	1	2.8	103	0.88	0.08	11.5	0.078	0.75	3	8	2.7	9.6	469	2.5
178.75	180.75	2.00	0.00	M486784			TRUE	M486784	4.78	<0.001	0.02	6.28	0.3	750	1.94	0.04	0.72	0.07	42.6	1.4	10	0.29	2.7	1	16	0.1	0.2	0.014	3.31	21.7	6.9	0.13	379	30.2	2.78	10.6	2.2	120	8.4	87.9	0.003	0.03	0.07	2.2	1	1.3	149	0.96	<0.05	10.7	0.085	0.42	2.2	9	0.9	10.4	46	2.7
180.75	182.88	2.13	0.00	M486785			TRUE	M486785	5.6	<0.001	<0.01	6.54	<0.2	740	1.86	0.02	0.69	<0.02	47.4	1.3	11	0.34	3.8	1.18	16.2	0.13	0.2	0.035	3.5	24.3	8.9	0.13	273	153.0	2.75	9.7	2.3	110	8.5	96.6	0.015	0.14	0.07	2.3	1	2.2	139	0.93	<0.05	11.6	0.084	0.48	2.5	9	1.2	11	16	2.6
182.88	184.28	1.40	0.00	M486659	CGQM	All veinlets // to eachother at ~70 dtca.	TRUE	M486659	3.62	<0.001	0.38	6.1	1.2	740	2.4	1.16	0.58	0.29	42.2	1.7	11	0.43	65.2	1.21	16.25	0.15	0.1	0.19	3.61	22.5	8.9	0.11	405	296.0	2.05	9.1	2.2	110	18.8	129.5	0.025	0.62	0.06	2.5	1	6	111.5	0.82	0.14	11.4	0.072	0.87	3.4	8	4.6	9.7	81	1.7
184.28	187.00	2.72	0.00	M486786			TRUE	M486786	6.64	<0.001	0.01	6.35	<0.2	740	1.9	0.05	0.71	0.02	45.1	1.3	11	0.36	2.4	1.01	16.55	0.11	0.2	0.026	3.51	23.2	7.7	0.13	274	22.6	2.78	10.6	2.1	120	9.3	95.4	0.002	0.08	0.06	2.3	1	2.6	145	1.08	<0.05	11.4	0.085	0.47	4.6	9	1.3	11.9	15	3.1
187.00	189.40	2.40	0.00	M486787			TRUE	M486787	6.24	<0.001	0.06	6.43	0.2	770	1.81	0.25	0.71	0.05	45.2	1.2	11	0.37	5.9	1.2	15.85	0.13	0.2	0.047	3.55	23.1	7.6	0.13	313	74.0	2.64	9.4	2.4	110	8.5	99.1	0.006	0.14	0.08	2.3	1	2.7	141.5	0.97	0.06	10.2	0.082	0.54	3.6	9	2.1	10.5	20	2.7
189.40	190.40	1.00	0.00	M486660	CGQM		TRUE	M486660	2.7	<0.001	0.04	6.23	0.7	740	2.1	0.27	0.6	<0.02	43.2	1.6	14	0.39	3	1.28	16.65	0.14	0.1	0.085	3.7	22.4	9	0.12	272	374.0	2.24	6.9	2.2	120	8.9	121.5	0.031	0.47	0.06	2.7	1	6.8	120.5	0.65	0.09	10.5	0.072	0.75	3.4	9	4	8.6	12	1.5
190.40	193.00	2.60	0.00	M486788			TRUE	M486788	6.36	<0.001	0.03	6.57	<0.2	790	1.75	0.11	0.73	<0.02	43.2	1.3	12	0.37	4.5	1.08	16.2	0.12	0.1	0.024	3.44	22.4	8.5	0.13	262	61.3	2.71	8.5	2.3	120	8.7	97.4	0.005	0.13	0.06	2.2	1	2.7	153.5	0.79	<0.05	8.9	0.083	0.51	2.6	10	1.4	9.6	12	2.3
193.00	195.00	2.00	0.00	M486789			TRUE	M486789	5.08	<0.001	0.03	6.77	0.3	820	1.84	0.13	0.73	0.1	44	1.3	13	0.46	5.6	1.11	16.55	0.13	0.1	0.092	3.52	23.3	8.9	0.13	269	30.0	2.59	7	2.2	120	8.4	107	0.003	0.18	0.07	2.3	1	4.3	148	0.65	<0.05	8.6	0.08	0.61	1.9	10	2.5	8.4	37	1.7
195.00	196.00	1.00	0.00	M486661	FGQM		TRUE	M486661	2.96	<0.001	<0.01	5.89	0.9	240	2.94	0.06	0.34	<0.02	47.4	0.9	10	0.9	3.4	0.86	16.4	0.12	0.1	0.049	3.64	25.1	6.3	0.05	230	22.9	2.28	12.5	0.8	40	10.3	126.5	0.002	0.39	0.06	3	1	4.4	32.6	1.34	<0.05	15.6	0.055	0.58	5	4	2.2	11.1	16	1.1
196.00	197.00	1.00	0.00	M486662	FGQM		TRUE	M486662	2.82	<0.001	<0.01	5.49	0.2	220	2.31	0.03	0.35	<0.02	47.8	0.7	10	0.32	2	0.7	15.55	0.17	0.1	0.031	3.74	24.9	7.2	0.05	159	69.9	2.35	11.7	0.9	30	10.3	115.5	0.005	0.15	0.06	2.8	2	2.3	33.6	1.16	<0.05	16.8	0.056	0.53	4.2	3	1.8	10.4	8	1.8
197.00	198.00	1.00	0.00	M486663	FGQM		TRUE	M486663	2.44	<0.001	<0.01	6.01	<0.2	320	2.73	0.03	0.62	<0.02	46.4	1.5	8	0.41	5.9	0.98	16.85	0.2	0.2	0.014	3.48	24.1	11.2	0.17	310	29.9	2.84	11.6	1.5	200	9.6	105.5	0.002	0.05	0.05	3.6	2	1.4	98.5	0.95	<0.05	15.2	0.12	0.55	3.2	11	0.9	11.1	21	3.2
198.00	199.00	1.00	0.00	M486664	FGQM		TRUE	M486664	2.72	<0.001	<0.01	5.94	<0.2	250	2.14	0.29	0.4	0.02	50.2	0.8	9	0.32	3.5	0.74	15	0.18	0.1	0.034	3.82	25.9	6.9	0.05	228	43.8	2.47	12.1	0.9	50	10.3	105	0.003	0.12	0.05	2.8	2	1.8	40.5	1.21	0.06	16.9	0.061	0.54	3.9	4	2	11.6	21	2.1
199.00	200.00	1.00	0.00	M486665	FGQM		TRUE	M486665	2.44	<0.001	<0.01	5.15	<0.2	250	2.27	0.17	0.32	0.12	44.5	1.7	26	0.34	4.3	0.83	14.8	0.21	0.1	0.061	3.67	23	7.5	0.05	208	77.6	2.27	12.5	1.1	30	10.0	116	0.008	0.34	0.05	2.6	2	4.3	33.6	1.27	0.05	15.6	0.054	0.64	4.5	4	2.7	9.4	43	1.5
200.00	201.00	1.00	0.00	M486666	FGQM		TRUE	M486666	3.04	0.003	<0.01	5.42	0.7	250	2.16	0.1	0.3	<0.02	48.5	1.1	10	0.4	2.4	1.13	15.2	0.21	0.1	0.095	3.61	25.6	8.6	0.05	175	59.7	2.06	11.8	1	30	9.2	124	0.005	0.65	0.05	2.7	2	6.5	31.5	1.18	<0.05	16.5	0.052	0.7	7.3	4	5.3	9.5	12	1.3
201.00	202.00	1.00	0.00	M486667	FGQM		TRUE	M486667	2.58	<0.001	<0.01	5.37	<0.2	240	2.32	0.06	0.33	<0.02	45.6	0.8	10	0.33	2.1	0.75	14.8	0.2	0.1	0.043	3.65	24.3	7.3	0.05	154	39.1	2.22	13.9	0.8	40	9.9	113.5	0.002	0.29	0.05	2.8	2	4.4	33.3	1.4	<0.05	16.4	0.054	0.61	7.2	4	11.5	11	7	2
202.00	203.00	1.00	0.00	M486668	FGQM		TRUE	M486668	2.6	<0.001	0.22	5.68	0.6	270	2.58	0.86	0.33	0.53	49.3	1.8	14	0.44	14	1.23	16.1	0.2	0.1	0.248	3.75	25.7	8.2	0.06	316	152.5	1.95	13.9	1.2	40	27.5	134	0.008	0.68	0.06	2.9	2	9.3	32.1	1.39	0.17	16.4	0.055	0.88	8.8	5	5.5	10.5	138	1.6
203.00	204.00	1.00	0.00	M486669	FGQM		TRUE	M486669	2.38	<0.001	0.05	5.61	<0.2	270	2.5	0.5	0.34	1.6	45.7	1.1	8	0.4	15	0.83	15.45	0.19	0.1	0.315	3.83	23.9	6.4	0.05	345	81.8	2.17	12	0.9	40	11.9	122	0.006	0.36	0.06	2.9	2	5.2	35.2	1.21	0.09	15.1	0.061	0.8	3.3	5	3	8.5	380	1.9
204.00	205.00	1.00	0.00	M486670	FGQM		TRUE	M486670	2.62	<0.001	0.1	5.59	<0.2	300	2.38	0.67	0.37	1.65	48.4	1.3	10	0.41	20.1	0.91	16.15	0.23	0.2	0.41	3.78	25.1	6.9	0.06	392	449.0	1.94	12	1.2	40	16.1	136.5	0.028	0.38	0.08	2.6	2	6.4	44.5	1.14	0.11	16.2	0.059	0.93	4.7	5	4.4	8.5	390	6
205.00	206.00	1.00	0.00	M486673	FGQM		TRUE	M486673	2.88	<0.001	0.14	5.74	<0.2	350	2.59	1.01	0.38	0.15	48.2	1.1	11	0.38	34.6	0.75	15.7	0.19	0.2	0.09	3.96	25.4	6.6	0.06	400	135.0	2.37	11.9	1.1	50	12.3	128.5	0.013	0.23	0.06	2.8	2	3.6	54.8	1.11	0.12	16.6	0.062	0.87	5.5	5	6.7	8.9	53	3.7
206.00	207.00	1.00	0.00	M486674	FGQM		TRUE	M486674	2.44	<0.001	0.07	5.69	0.9	290	2.58	0.86	0.35	0.4	51	1.3	10	0.5	7.6	1.09	16.45	0.21	0.1	0.337	3.96	26.5	7.7	0.06	673	270.0	1.8	11.5	1	40	13.0	154	0.018	0.62	0.08	2.6	2	8.6	35.7	1.13	0.19	16.5	0.053	1.27	3.9	5	6	9.5	142	2.8
207.00	208.00	1.00	0.00	M486675	FGQM		TRUE	M486675	2.38	<0.001	0.01	5.71	0.2	370	4.18	0.41	0.39	0.58	49.8	1.1	9	0.4	4.4	0.82	15.45	0.19	0.1	0.221	3.83	25.7	6.7	0.06	901	112.0	2.15	11.8	1	50	10.5	130.5	0.012	0.32	0.05	2.6	2	5.5	53.6	1.16	0.12	15.7	0.06	0.88	4.2	5	3.1	10.8	160	1.9
208.00	209.30	1.30	0.00	M486790			TRUE	M486790	3.18	<0.001	0.07	6.35	0.6	400	2.23	0.03	0.5	0.18	51.5	1.1	11	0.34	3.1	1.04	15.75	0.12	0.1	0.026	3.71	26.7	5.9	0.08	257	19.6	2.66	11.8	2.5	70	9.3	109	0.002	0.07	0.07	2.6	1	1.3	69.6	1.18	<0.05	13.6	0.069	0.47	3.3	7	0.7	12.4	39	2
209.30	211.80	2.50	0.00	M486791			TRUE	M486791	6.3	<0.001	0.05	7.15	<0.2	810	2.66	0.17	0.77	0.37	48	2.1	13	0.37	4.5	1.26	17.55	0.13	0.1	0.091	3.72	24.6	7.3	0.15	576	74.9	2.9	9.9	2.5	150	10.0	108.5	0.008	0.22	0.06	2.6	1	2.5	157.5	0.93	0.05	11.5	0.095	0.62	2.4	11	1.7	12	100	2.5
211.80	214.30	2.50	0.00	M486792			TRUE	M486792	4.32	<0.001	0.2	6.72	0.4	780	5.31	0.65	0.77	1.3	46.2	1.6	10	0.52	13.7	1.5	17.25	0.14	0.1	0.459	3.88	23.6	8.8	0.15	1080	139.0	2.29	9.3	2.9	140	15.5	136.5	0.008	0.42	0.09	2.4	1	5.1	128.5	0.89	0.18	10.3	0.091	1.12	3	10	4.4	11.4	352	2.5
214.30	216.80	2.50	0.00	M486793			TRUE	M486793	6.86	<0.001	0.02	6.32	<0.2	800	1.96	0.04	0.74	0.04	44.2	1.4	11	0.34	2.2	1.06	15.95	0.13	0.1	0.024	3.29	22.2	7.3	0.15	370	43.1	2.71	7.8	2.4	140	8.1	95.3	0.002	0.07	0.06	2.3	1	2.1	158.5	0.72	<0.05	10.2	0.087	0.55	2.2	10	1.2	9.7	30	2.1
216.80	219.30	2.50	0.00	M486794			TRUE	M486794	6.36	<0.001	0.19	6.63	0.4	790	1.93	0.71	0.76	0.51	45	1.5	10	0.34	13.2	1.32	16.9	0.15	0.1	0.161	3.53	23.2	7.6	0.15	380	121.0	2.76	8.1	2.8	140	11.6	101	0.008	0.15	0.07	2.5	1	2.2	157	0.79	0.09	9.3	0.092	0.56	2	11	1.8	10.1	133	2.6
219.30	221.00	1.70	0.00	M486795			TRUE	M486795	3.82	<0.001	0.09	6.55	0.4	830	2.23	0.45	0.73	0.29	43.7	1.5	10	0.49	6.8	1.5	17.2	0.13	0.1	0.204	3.94	22.5	9.3	0.16	751	62.6	2.17	7.7	2.6	140	10.5	133	0.003	0.57	0.08	2.5	1	8.8	130	0.7	0.13	9.5	0.086	1.07	2.7	11	7.2	9.1	126	1.6
221.00	222.00	1.00	0.00	M486676	CGQM		TRUE	M486676	2.96	<0.001	0.04	5.94	<0.2	810	2.67	0.2	0.69	0.11	41.9	1.9	9	0.39	3.4	1.02	16.35	0.19	0.1	0.039	3.42	21	8.7	0.15	957	177.5	2.38	9	2.4	150	15.9	103	0.024	0.17	0.07	2.7	2	2.8	168.5	0.82	0.11	9.4	0.093	0.75	2.6	10	1.8	11.4	130	1.9
222.00	223.55	1.55	0.00	M486796			TRUE	M486796	3.66	<0.001	0.09	6.81	<0.2	900	2.67	0.38	0.58	0.32	41.1	1.4	9	0.48	10.8	1.48	17.7	0.13	0.1	0.124	4.26	21	8.7	0.18	893	42.9	2.54	13	3.2	170	11.2	122	0.002	0.36	0.08	2.7	1	3.2	136.5	0.91	0.13	10.4	0.1	1.17	3.7	12	2.6	10.8	127	2
223.55	224.55	1.00	0.00	M486677	CGQM		TRUE	M486677	2.6	<0.001	<0.01	6.3	<0.2	840	3.04	0.17	0.68	0.05	41.6	1.3	7	0.4	4.3	1.12	16.55	0.19	0.1	0.101	3.72	21.3	9.6	0.16	771	90.2	2.41	9.5	2	150	10.1	120.5	0.007	0.39	0.06	2.8	2	4.6	145.5	0.93	0.08	13.8	0.094	0.89	3.5	9	3	10.9	50	2.2
224.55	225.55	1.00	0.00	M486678	CGQM		TRUE	M486678	2.7	<0.001	<0.01	5.88	<0.2	740	2.28	0.03	0.68	<0.02	40.3	1.3	9	0.3	2.4	1.09	15.35	0.21	0.1	0.03	3.29	20.7	7.6	0.13	424	14.9	2.5	9.6	2	130	9.2	88.2	<0.002	0.26	0.06	2.5	2	2.8	143.5	0.9	0.05	12.2	0.085	0.56	2.6	9	1.3	10.3	17	2.1
225.55	226.55	1.00	0.00	M486679	CGQM		TRUE	M486679	2.64	<0.001	<0.01	6.12	<0.2	800	2.11	0.02	0.79	<0.02	41.7	1.4	7	0.28	2	0.91	15.7	0.19	0.1	0.009	3.32	20.6	8	0.15	335	12.5	2.69	10.2	2	140	9.0	84.2	<0.002	0.05	0.05	2.7	2	1.4	166.5	0.98	<0.05	10.3	0.098	0.45	2.7	10	0.6	10.9	10	2.3
226.55	227.55	1.00	0.00	M486680	CGQM		TRUE	M486680	2.86	<0.001	0.06	6.33	<0.2	780	2.16	0.03	0.74	<0.02	42.6	1.6	9	0.36	2.6	1.1	16.65	0.19	0.1	0.046	3.43	22.1	9.2	0.15	270	51.5	2.6	8.6	1.9	130	9.0	99.9	0.003	0.34	0.05	2.7	2	5.6	155	0.8	<0.05	10.7	0.088	0.57	2.4	10	2.1	9.7	11	2.4
227.55	230.00	2.45	0.00	M486799			TRUE	M486799	5.86	<0.001	0.03	6.32	<0.2	780	2.29	0.04	0.75	0.13	43.8	1.5	11	0.34	3.5	1.14	16.3	0.11	0.1	0.048	3.39	22.4	8.1	0.15	568	67.6	2.68	9	2.6	140	11.3	94.7	0.006	0.07	0.06	2.4	1	2	156	0.79	<0.05	9.2	0.091	0.54	2	10	0.9	10.9	48	2.4
230.00	232.50	2.50	0.00	M486800			TRUE	M486800	7.52	<0.001	0.1	6.33	<0.2	730	2.04	0.27	0.7	0.05	44.5	1.4	12	0.36	5.4	1.28	16	0.11	0.2	0.053	3.37	22.9	8.2	0.14	517	43.7	2.55	8.7	2.6	120	10.0	96.4	0.003	0.24	0.06	2.4	1	3.2	142	0.85	0.05	9.9	0.084	0.56	2.6	10	3.4	10.5	25	2.8
232.50	235.00	2.50	0.00	M486801			TRUE	M486801	5.46	<0.001	1.2	6.22	<0.2	800	1.89	2.51	0.7	0.28	38.3	2	13	0.43	33	1.51	15.3	0.13	0.1	0.098	3.18	19.8	9.2	0.15	504	91.4	2.21	7.4	2.5	140	24.9	110	0.009	0.65	0.08	2.2	1	5.4	142	0.69	0.23	8.7	0.083	0.74	2.3	10	24.2	9.2	82	1.6
235.00	237.50	2.50	0.00	M486802			TRUE	M486802	5.9	<0.001	0.06	6.9	0.6	800	2.15	1.02	0.68	0.14	49	1.9	14	0.5	9.8	1.75	18.05	0.13	0.1	0.182	3.74	25	10.2	0.16	458	64.9	2.38	8.5	3.4	130	8.8	133	0.004	0.76	0.08	2.6	1	10.1	139	0.77	0.11	10.9	0.086	0.87	2.8	11	6.3	9.9	48	1.9
237.50	240.00	2.50	0.00	M486803			TRUE	M486803	6.34	<0.001	0.03	6.47	0.2	700	1.98	0.14	0.68	0.04	44	1.4	11	0.33	3.4	1.05	15.9	0.12	0.1	0.033	3.54	22.5	8	0.13	431	155.0	2.7	9.3	2.2	120	8.9	95.3	0.022	0.12	0.07	2.4	1	2.5	133	0.9	0.05	10.2	0.087	0.52	2.4	9	1.1	10.4	42	2.4
240.00	242.50	2.50	0.00	M486804			TRUE	M486804	6.06	<0.001	0.08	6.21	0.3	810	2.45	0.23	0.82	0.13	40.2	1.5	10	0.39	7.4	1.27	15.6	0.16	0.1	0.089	3.15	20.9	9.7	0.15	523	385.0	2.31	8.9	2.5	150	12.0	93.3	0.016	0.2	0.08	2.7	2	2.9	147.5	0.79	0.07	10.5	0.091	0.69	3.1	10	1.9	10.6	51	1.9
242.50	245.00	2.50	0.00	M486805			TRUE	M486805	5.86	<0.001	0.08	6.11	<0.2	790	2.42	1.47	0.78	0.09	40.3	1.9	10	0.49	12.6	1.27	16.55	0.17	0.1	0.144	3.53	20.6	11.8	0.14	675	48.2	2.03	8.5	2.4	150	10.0	127	<0.002	0.39	0.08	2.8	1	8	131	0.68	0.12	9.6	0.086	0.94	2.6	10	5.2	9.9	55	1.5
245.00	247.50	2.50	0.00	M486806			TRUE	M486806	6	<0.001	0.19	6.18	<0.2	820	2.16	0.04	0.76	<0.02	39.8	2.4	10	0.4	2.8	1.44	16.4	0.21	0.1	0.049	3.17	21.5	11.8	0.14	380	25.2	2.29	8.2	2.8	150	9.1	98.6	<0.002	0.25	0.06	2.7	1	6.4	150	0.73	<0.05	13.7	0.089	0.66	3.2	11	1.8	9.6	11	1.8
247.50	249.50	2.00	0.00	M486807			TRUE	M486807	4.92	<0.001	0.05	6.12	<0.2	820	2.11	0.03	0.78	<0.02	45.2	1.7	10	0.37	2.1	1.18	16.65	0.21	0.1	0.03	3.08	24.1	10.2	0.14	291	34.9	2.42	9	2.4	150	9.0	91.2	<0.002	0.13	0.06	2.9	2	3.9	155	0.77	<0.05	10.3	0.088	0.52	2.3	10	1	10.7	11	1.8
249.50	250.50	1.00	0.00	M486681	CGQM	Qtz-Moly is 1cm wide trending 50 dtca in one direction while being terminated against a QSP vein trendinmg 70 dtca in the other direction.	TRUE	M486681	2.44	<0.001	<0.01	5.79	<0.2	770	2.05	0.02	0.67	<0.02	38.3	1.5	10	0.34	2.2	1.27	15.7	0.19	0.1	0.051	3.32	20.1	10.3	0.13	252	115.0	2.34	8.9	2.4	130	8.4	94.6	0.011	0.28	0.06	2.5	2	4.3	139	0.82	<0.05	10.7	0.085	0.55	2.8	9	1.6	10.3	10	2.8
250.50	251.50	1.00	0.00	M486682	CGQM		TRUE	M486682	2.74	<0.001	<0.01	6.21	<0.2	860	2.1	0.01	0.78	<0.02	37	1.4	10	0.3	1.1	0.88	15.65	0.19	0.1	0.012	3.28	19.4	9.2	0.14	245	16.5	2.74	8.6	1.8	140	8.5	84.5	<0.002	0.05	0.05	2.3	2	1.7	164	0.73	<0.05	12.1	0.088	0.44	2.4	9	0.5	9.7	11	1.5
251.50	252.50	1.00	0.00	M486683	CGQM		TRUE	M486683	2.54	<0.001	0.01	6.3	<0.2	820	2.36	0.28	0.68	<0.02	42.2	2.5	12	0.4	3.7	1.62	16.8	0.2	0.1	0.067	3.52	22.1	11.1	0.14	334	18.7	2.35	8.4	2.5	130	9.1	110	<0.002	0.57	0.06	2.6	2	7.9	140	0.74	0.09	10.7	0.086	0.71	2.8	10	3	9	17	1.8
252.50	253.50	1.00	0.00	M486684	CGQM		TRUE	M486684	2.8	<0.001	<0.01	6.07	<0.2	720	2.37	0.3	0.61	0.02	41.6	2.4	12	0.44	5.1	1.69	16.3	0.23	0.1	0.083	3.4	22.2	12.1	0.13	372	65.7	2.05	8.7	1.8	120	7.7	123	0.002	1.04	0.06	2.6	2	11.5	122.5	0.78	0.1	9.6	0.079	0.82	2.6	11	9.8	9.2	17	1.6
253.50	254.50	1.00	0.00	M486685	CGQM		TRUE	M486685	2.76	<0.001	<0.01	6.24	<0.2	780	2.07	0.03	0.71	<0.02	41.6	2.3	14	0.36	2.3	1.52	15.7	0.2	0.2	0.051	3.28	22.5	10.3	0.15	247	15.6	2.43	8.6	2.5	150	7.8	95.9	<0.002	0.4	0.06	2.5	2	6.4	151	0.79	<0.05	10.5	0.086	0.54	3.2	10	2.5	9.8	10	5.2
254.50	255.50	1.00	0.00	M486686	CGQM		TRUE	M486686	2.74	<0.001	0.04	6.33	0.2	850	2.52	0.28	0.81	<0.02	36.8	1.5	11	0.36	6.4	1.06	15.85	0.19	0.1	0.048	3.41	19.5	10.1	0.15	295	25.4	2.6	8.7	2	140	10.6	96.4	0.002	0.23	0.05	2.3	2	3.4	165	0.8	0.07	10.4	0.089	0.59	2.8	10	4.5	9.3	13	1.6
255.50	256.50	1.00	0.00	M486687	CGQM		TRUE	M486687	2.6	0.001	0.06	6.43	<0.2	800	2.73	1.08	0.7	0.02	40.5	1.8	11	0.55	19.2	1.95	16.95	0.21	0.2	0.167	3.59	21.9	12.8	0.16	540	71.5	2.05	8.5	2.7	140	8.3	135	0.003	0.94	0.08	2.7	2	9.8	127.5	0.73	0.17	10.1	0.09	1.05	3.5	10	10.5	8.8	27	3.8
256.50	259.00	2.50	0.00	M486808			TRUE	M486808	5.74	<0.001	0.12	6.2	0.3	840	2.43	0.89	0.75	0.18	40.5	1.9	10	0.45	27.8	1.45	16.35	0.2	0.1	0.174	3.18	21.5	9.8	0.14	442	26.7	2.21	8.2	2.6	130	8.9	104.5	<0.002	0.41	0.07	2.8	1	5.3	149.5	0.72	0.08	9.8	0.086	0.72	2.4	10	7	9.5	56	1.7
259.00	261.40	2.40	0.00	M486809			TRUE	M486809	6.26	<0.001	0.05	6.5	<0.2	860	2.48	0.32	0.8	0.04	43.4	2.3	11	0.44	6.8	1.3	17.05	0.21	0.1	0.076	3.38	22.7	10.3	0.15	374	33.6	2.45	11.1	2.5	150	9.4	105.5	<0.002	0.31	0.07	3.3	2	4.5	157.5	1.02	0.06	11.5	0.095	0.63	2.8	11	4	12.3	26	2.2
261.40	262.40	1.00	0.00	M486688	CGQM		TRUE	M486688	2.56	<0.001	<0.01	6.3	<0.2	820	2.36	0.06	0.71	<0.02	37.2	1.6	9	0.44	2	1.09	16.05	0.19	0.1	0.046	3.46	19.6	11.5	0.16	303	95.9	2.5	9.1	2	130	9.0	105	0.005	0.33	0.05	2.8	2	6	149.5	0.88	<0.05	10.2	0.087	0.69	2.8	11	2.6	9.3	11	1.7
262.40	263.40	1.00	0.00	M486689	CGQM		TRUE	M486689	2.74	<0.001	0.01	6.27	<0.2	850	2.37	0.2	0.69	0.09	39.7	1.8	11	0.44	4.2	1.17	16.6	0.2	0.1	0.055	3.57	20.3	11.4	0.15	320	14.2	2.47	8.9	2.2	130	9.8	110.5	<0.002	0.27	0.05	2.7	2	6.5	145.5	0.87	<0.05	10.5	0.086	0.74	3	11	3	9.5	30	2.5
263.40	264.40	1.00	0.00	M486690	CGQM		TRUE	M486690	2.64	0.001	<0.01	6.04	<0.2	740	2.61	0.14	0.61	<0.02	46.4	1.5	11	0.43	3.2	1.04	16.15	0.24	0.1	0.047	3.6	23.7	10.8	0.14	315	138.0	2.43	9.1	2	130	9.3	114	0.007	0.34	0.05	2.6	2	5.4	131	0.88	0.06	11.7	0.081	0.71	3.8	9	2.7	10.2	13	2.6
264.40	265.40	1.00	0.00	M486691	CGQM		TRUE	M486691	2.86	<0.001	<0.01	6.04	<0.2	770	2.26	0.09	0.6	<0.02	38.4	1.8	11	0.49	2.3	1.24	16.75	0.21	0.1	0.084	3.52	20.4	11	0.13	281	74.3	2.3	8.4	2	120	8.9	120	0.003	0.46	0.05	2.4	2	8.8	128	0.81	<0.05	10.4	0.076	0.77	2.6	10	3.5	8.7	10	2.7
265.40	266.40	1.00	0.00	M486692	CGQM		TRUE	M486692	2.56	<0.001	<0.01	6.35	<0.2	740	2.79	0.15	0.64	<0.02	36.5	1.5	9	0.61	3.1	1.16	17.05	0.19	0.2	0.057	3.7	18.8	12.7	0.15	364	65.1	2.29	9.1	1.8	150	9.0	135.5	0.002	0.36	0.05	2.8	2	9.4	125.5	0.9	0.07	10.8	0.081	0.9	2.9	10	8	8.8	14	5.7
266.40	267.40	1.00	0.00	M486695	CGQM		TRUE	M486695	2.58	<0.001	<0.01	6.14	<0.2	730	2.27	0.12	0.59	<0.02	39.9	2.1	10	0.45	2.5	1.32	15.65	0.18	0.2	0.05	3.59	21.3	10.6	0.14	276	28.1	2.35	8.4	2.3	130	9.3	117.5	0.002	0.51	0.06	2.6	2	7.7	125.5	0.8	0.07	12.4	0.076	0.76	2.9	10	3.8	9.5	10	7.5
267.40	268.40	1.00	0.00	M486696	CGQM	QSP-Mt vein is ~ 2-3mm thick with a 5mm halo on either side of it trendind at ~35 dtca.	TRUE	M486696	2.7	<0.001	<0.01	6.06	<0.2	730	2.38	0.09	0.6	<0.02	44.3	1.7	9	0.43	2.6	1.25	16.65	0.19	0.1	0.085	3.53	22.6	10.9	0.14	304	16.2	2.35	9.4	1.9	140	8.4	117.5	<0.002	0.39	0.05	2.6	2	8.3	126.5	0.88	0.07	11.2	0.083	0.73	2.8	12	3.4	10	11	2
268.40	269.40	1.00	0.00	M486697	CGQM	Minor stockworking with fractures found in the fine grained zones up to 10cm wide.	TRUE	M486697	2.56	<0.001	<0.01	6.1	<0.2	520	3.06	0.75	0.5	0.03	46.7	1.4	11	0.56	5.2	1.05	16	0.18	0.1	0.078	3.82	23.1	8.3	0.11	332	11.9	2.36	12	1.7	100	10.4	127	<0.002	0.37	0.05	2.8	2	4.6	87	1.35	0.11	16.5	0.072	0.86	3.7	8	3.9	9.9	19	2.8
269.40	270.40	1.00	0.00	M486698	CGQM		TRUE	M486698	2.68	<0.001	<0.01	6.34	0.6	780	2.49	0.14	0.61	<0.02	40.5	1.8	9	0.44	6	1.33	17.3	0.07	0.1	0.068	3.3	21.4	10.4	0.14	292	43.9	2.29	10	2.8	120	10.4	110	0.003	0.59	0.06	2.6	1	9.6	131	0.84	<0.05	11.3	0.077	0.7	2.6	11	3.5	9.1	18	1.8
270.40	271.40	1	0.00	M486699	CGQM		TRUE	M486699	2.54	<0.001	<0.01	6.36	0.6	740	2.58	0.33	0.66	<0.02	38.4	1.4	10	0.43	3.9	1.06	16.35	0.08	0.1	0.054	3.43	20.4	8.1	0.13	373	893.0	2.38	11	2	120	9.1	108	0.06	0.3	0.07	2.5	1	4.7	134	0.9	0.1	18.4	0.086	0.66	3.9	9	3.8	9.6	28	2.2
271.40	272.40	1	0.00	M486700	CGQM		TRUE	M486700	2.34	0.001	0.54	6.35	1.3	570	2.68	10.05	0.6	0.38	39.8	1.7	9	0.65	143.5	2.21	17.1	0.07	0.1	0.375	3.32	20.7	11	0.12	779	15.9	1.49	9.2	1.8	120	8.4	158	0.002	1.72	0.09	2.6	1	12	82.1	0.85	0.31	11.2	0.073	1.23	4.4	9	118	8.9	120	1.6
272.40	273.40	1	0.00	M486701	CGQM		TRUE	M486701	2.36	<0.001	0.05	6.68	0.9	770	2.86	0.84	0.66	0.47	39.5	1.3	10	0.51	13.2	1.2	17.55	0.08	0.1	0.3	3.59	20.8	8.8	0.13	568	23.1	2.24	9.4	2	130	9.5	126.5	<0.002	0.39	0.07	2.6	1	7.4	125	0.82	0.08	12.2	0.082	0.93	3.1	10	5.9	10.4	125	1.5
273.40	274.40	1	0.00	M486702	CGQM	A few QSP-Hm+/-Mo veins ~ 1cm in width and trending between 75-85 dtca	TRUE	M486702	2.68	0.001	0.03	6.51	0.6	740	2.97	1.59	0.67	<0.02	39.6	1.8	9	0.42	2.4	1.1	17.05	0.09	0.1	0.049	3.36	21.4	8.7	0.13	305	32.7	2.4	9.9	2.1	120	10.2	107	0.002	0.37	0.06	2.7	1	7.1	136	0.93	0.05	11.3	0.081	0.68	3.3	10	3.2	10.6	16	1.6
274.40	275.40	1	0.00	M486703	CGQM		TRUE	M486703	2.68	<0.001	<0.01	6.46	0.8	650	2.65	0.93	0.69	<0.02	46.7	1.1	10	0.58	29.5	0.94	16.4	0.08	0.1	0.057	3.39	24.3	7.6	0.12	337	543.0	2.54	12.8	1.8	130	10.7	105.5	0.027	0.11	0.06	3	1	2.1	124.5	1.16	0.07	13.2	0.082	0.63	6.2	8	2.2	13	17	1.4
275.40	276.40	1	0.00	M486704	CGQM		TRUE	M486704	2.26	<0.001	<0.01	6.47	0.4	660	2.96	0.91	0.67	0.04	40.2	1.4	8	0.7	5.3	1.16	16.35	0.07	0.1	0.081	3.37	21.2	8.6	0.12	461	3.5	2.25	12.6	1.8	120	10.4	118	<0.002	0.42	0.07	2.8	1	6.2	121.5	1.16	0.08	12.1	0.084	0.75	3.4	9	5.8	11.3	27	1.3
276.40	277.40	1	0.00	M486705	CGQM		TRUE	M486705	1.98	<0.001	<0.01	6.39	0.8	640	2.78	0.24	0.64	<0.02	40.9	1.5	9	0.61	4	1.06	16.45	0.08	0.1	0.053	3.5	21.5	7.3	0.11	393	38.5	2.47	10.7	1.8	100	10.8	107	0.003	0.21	0.06	2.4	1	3.4	124.5	0.96	0.06	12.6	0.076	0.68	2.6	8	3.2	10.2	25	1.2

MSA 004 FROM TO Table of Sampling Intervals

From_m	To_m	L_m		Sample	Litho	Comments		Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
277.40	278.40	1	0.00	M486706	CGQM		TRUE	M486706	2.4	<0.001	0.03	6.31	0.5	720	2.52	0.49	0.75	0.05	38.5	1.3	8	0.4	8.1	1.01	16.1	0.09	0.1	0.105	3.46	20.2	7.7	0.12	428	28.1	2.45	10.1	1.8	120	12.5	99.9	0.003	0.21	0.05	2.5	1	2.6	136	0.87	0.09	11.1	0.09	0.61	2.3	9	3.2	10.8	33	1.3
278.40	280.40	2	0.00	M486707	CGQM		TRUE	M486707	5.92	<0.001	0.07	6.62	0.4	680	2.63	1.03	0.72	0.14	44.2	1.4	11	0.47	8.6	1.36	16.6	0.07	0.1	0.135	3.45	23.3	9.5	0.13	466	11.7	2.24	9.2	2.1	120	10.6	115.5	<0.002	0.45	0.08	2.4	1	6.5	130	0.76	0.15	10.4	0.083	0.74	2.9	10	9	10.5	50	1.3
280.40	282.40	2	0.00	M486708	CGQM		TRUE	M486708	4.9	0.001	<0.01	6.67	0.6	770	2.28	0.43	0.72	0.09	40.5	1.5	10	0.43	7.9	1.25	16.75	0.09	0.1	0.113	3.45	21.6	8.7	0.14	438	33.5	2.32	7.4	1.9	140	8.9	109.5	0.002	0.45	0.06	2.4	1	7	141.5	0.56	0.06	9	0.085	0.73	1.8	10	7.5	8.4	49	1.2
282.40	284.40	2	0.00	M486709	CGQM		TRUE	M486709	5.06	<0.001	<0.01	6.51	0.6	760	2.6	0.53	0.68	0.06	47	1.4	10	0.4	13.1	1.17	16.5	0.08	0.1	0.101	3.51	25	8.7	0.13	437	63.8	2.38	9	2	130	9.1	109.5	0.004	0.35	0.06	2.7	1	5.8	140	0.79	0.07	11.2	0.084	0.76	3.2	9	4.4	10.2	37	1.2
284.40	285.90	1.5	0.00	M486710	CGQM		TRUE	M486710	3.4	<0.001	0.06	6.66	0.9	700	2.76	0.59	0.64	0.67	41	1.4	12	0.49	13.9	1.39	17.35	0.09	0.1	0.359	3.7	21.8	9.1	0.13	576	28.9	2.11	11.3	1.8	120	19.3	128.5	<0.002	0.68	0.07	2.9	1	8	112.5	1.06	0.1	15	0.081	0.96	3.9	9	5.1	11.2	202	1.3
285.90	288.40	2.50	0.00	M486810			TRUE	M486810	6.58	0.002	0.07	6.25	0.4	800	2.27	0.37	0.76	0.04	39.9	1.7	10	0.38	4.3	1.39	16.3	0.2	0.1	0.061	3.33	20.2	9.1	0.14	388	20.0	2.41	9.1	2.6	140	10.5	94	<0.002	0.27	0.06	3	1	3.7	149	0.79	0.08	13.5	0.091	0.58	2.9	10	3.8	10.8	18	1.2
288.40	290.90	2.50	0.00	M486811			TRUE	M486811	6.14	0.002	0.14	6.04	0.8	740	2.25	0.18	0.7	0.52	44.1	1.6	11	0.7	12	1.2	15.25	0.17	0.1	0.037	3.77	22.2	9	0.12	926	12.4	2.13	8	2.4	110	104.0	122.5	<0.002	0.31	0.19	2.2	1	6	124.5	0.77	0.17	9.5	0.081	1.18	2.7	8	3.8	9.2	190	2.4
290.90	293.40	2.50	0.00	M486812			TRUE	M486812	5.88	0.001	0.08	6.13	0.6	680	2.92	0.09	0.77	0.14	39.6	2.4	10	0.69	7	1.48	16.9	0.22	0.1	0.058	3.48	21.2	9.7	0.12	673	39.7	2.07	8.8	2.5	120	14.0	113	<0.002	0.36	0.08	3	1	7.3	116	0.82	0.07	10.9	0.081	0.82	2.9	9	2.4	9.8	40	1.2
293.40	294.40	1	0.00	M486711	CGQM		TRUE	M486711	2.28	<0.001	0.09	6.41	1.3	590	2.41	0.9	0.66	<0.02	44.3	2.7	9	0.96	14.6	1.58	16.95	0.1	0.1	0.114	3.58	24	15.9	0.12	498	244.0	1.87	8.9	1.9	110	12.1	123.5	0.011	0.81	0.09	2.5	1	12.8	87.4	0.82	0.17	10.4	0.075	0.91	3.1	10	6.8	8.6	47	0.9
294.40	295.90	1.50	0.00	M486712	CGQM		TRUE	M486712	3.46	0.001	<0.01	6.57	0.8	670	2.42	0.04	0.83	<0.02	46.5	2.2	9	0.79	1.6	1.12	16.25	0.08	0.1	0.021	3.36	25.6	15.1	0.16	457	36.5	2.42	8.9	2	150	9.2	94.1	0.002	0.14	0.07	2.8	1	3.6	134	0.71	<0.05	12.1	0.099	0.55	2.8	11	1.8	9.5	20	1
295.90	298.40	2.50	0.00	M486813			TRUE	M486813	5.82	<0.001	0.08	6.18	<0.2	710	2.22	0.38	0.71	0.03	45.7	1.4	11	0.74	2.8	1.31	16.9	0.2	0.1	0.078	3.46	25	21.3	0.14	374	46.6	2.11	6.9	2.3	130	9.6	116	<0.002	0.31	0.09	2.9	1	9.3	121	0.52	0.17	9.1	0.079	0.77	2.4	10	4.9	7.6	16	0.9
298.40	300.90	2.50	0.00	M486814			TRUE	M486814	6.16	<0.001	0.04	6.76	<0.2	840	2.16	0.12	0.82	0.03	46.1	1.7	11	0.54	2.7	1.44	17.15	0.21	0.1	0.049	3.64	25.3	17.3	0.15	361	28.9	2.51	7.9	2.6	150	9.3	107	0.002	0.24	0.08	3	1	4.8	149	0.64	<0.05	9.1	0.092	0.67	2	10	2.8	8.9	15	1.2
300.90	303.05	2.15	0.00	M486815			TRUE	M486815	5.28	<0.001	0.13	6.28	<0.2	770	2.12	6.36	0.74	0.12	43.6	1.4	12	0.38	53.3	1.25	15.5	0.22	0.1	0.093	3.38	23.7	8.8	0.13	335	32.8	2.43	8.1	2.6	140	13.7	99.3	0.003	0.23	0.07	2.9	2	3.3	143.5	0.62	0.1	9.3	0.088	0.59	1.7	9	1.6	9	36	1.1
303.05	304.55	1.50	0.00	M486816			TRUE	M486816	4.02	<0.001	0.04	5.85	<0.2	590	2.07	0.24	0.5	0.04	37.6	1.1	11	0.4	3.8	1.07	15.15	0.17	0.1	0.073	3.55	19.9	7.3	0.08	277	43.6	2.14	8.3	1.7	70	10.5	101	0.003	0.26	0.06	2.5	1	4.4	88.3	0.8	<0.05	10.8	0.06	0.63	2.2	5	1.6	7.9	17	1.2
304.55	306.15	1.60	0.00	M486817			TRUE	M486817	3.34	0.001	0.03	6.34	<0.2	840	2.43	0.12	0.77	0.04	48.2	1.5	11	0.54	4.2	1.22	16.7	0.21	0.1	0.05	3.41	26.4	10.8	0.16	495	8.8	2.41	9.6	2.4	160	9.4	96.9	<0.002	0.1	0.07	3.3	1	2.8	145.5	0.76	<0.05	9.7	0.103	0.62	1.7	9	2	10.4	21	1.1
306.15	308.80	2.65	0.00	M486818			TRUE	M486818	6.28	0.001	0.11	6.11	<0.2	390	2.7	0.33	0.39	0.15	45.3	1	12	0.42	6.9	1.05	16.65	0.21	0.1	0.112	4.14	22.2	7.8	0.06	437	15.1	2.06	13.9	1.8	60	15.2	123.5	<0.002	0.18	0.07	3.6	2	4.2	50.6	1.46	0.06	13	0.066	0.86	5.4	5	2.9	13.2	54	1.1
308.80	311.30	2.50	0.00	M486821			TRUE	M486821	6.1	0.001	0.06	6.27	0.2	430	2.48	0.3	0.46	0.05	48.8	1.1	11	0.33	4.6	0.98	16.75	0.19	0.1	0.059	3.88	24.3	7.6	0.08	352	25.4	2.42	12.9	1.4	60	12.8	100.5	<0.002	0.18	0.06	3.6	1	2.9	52	1.31	0.05	13.1	0.069	0.62	3.5	5	3.6	13.2	20	1.3
311.30	312.80	1.50	0.00	M486713	MGQM		TRUE	M486713	3.04	<0.001	<0.01	6.01	0.8	380	2.22	0.55	0.35	<0.02	44	3	14	0.39	4.3	1.26	15.7	0.08	0.1	0.118	3.83	22.1	7.9	0.06	419	46.6	1.93	10.8	1.5	50	9.3	120.5	0.003	0.62	0.08	3	1	7.9	41.8	1.08	0.1	14.2	0.058	0.89	3.7	5	93.7	10.2	19	0.9
312.80	314.30	1.50	0.00	M486714	MGQM		TRUE	M486714	3.1	0.002	<0.01	6.06	0.6	410	2.46	0.1	0.37	<0.02	53.3	1.1	10	0.3	3.4	0.7	15.6	0.09	0.1	0.035	3.7	27	7.1	0.07	247	32.2	2.3	9.6	1.1	60	8.7	100.5	<0.002	0.14	0.05	3.1	1	3	47.3	0.93	<0.05	13.6	0.058	0.6	2.1	5	2.4	10.3	12	0.9
314.30	316.80	2.50	0.00	M486822			TRUE	M486822	7.44	<0.001	0.02	5.94	<0.2	300	2.44	0.06	0.39	<0.02	45.7	1	11	0.38	2.8	0.97	16.2	0.19	0.1	0.022	3.74	22.5	7	0.06	214	5.9	2.33	13.1	1.7	50	10.1	92.3	<0.002	0.11	0.06	3.7	1	2.5	41.3	1.45	<0.05	13.7	0.06	0.46	3.2	5	1.8	13.1	6	2.1
316.80	318.30	1.50	0.00	M486823			TRUE	M486823	3.56	0.001	0.01	6.04	<0.2	500	2.3	0.04	0.45	<0.02	46	1	10	0.3	1.9	1.01	15.95	0.18	0.1	0.023	3.7	22.6	7.9	0.08	220	11.6	2.3	11.6	1.6	70	9.7	93.1	<0.002	0.11	0.06	3.4	1	3	62.4	1.22	<0.05	12.2	0.064	0.5	2.5	6	1.4	12.5	6	2
318.30	319.80	1.50	0.00	M486824			TRUE	M486824	3.34	0.003	0.02	6.13	<0.2	490	2.32	0.14	0.43	0.05	43.7	1	11	0.32	2.5	1.09	16.4	0.18	0.1	0.05	3.76	22.1	8.4	0.07	280	7.1	2.29	11.5	1.7	70	9.4	95.6	<0.002	0.24	0.06	3.4	1	4.2	58.8	1.24	<0.05	12.5	0.063	0.54	3	5	1.7	12.3	17	1.8
319.80	321.80	2.00	0.00	M486717	MGQM		TRUE	M486717	4.72	0.001	<0.01	6.2	0.7	470	2.25	0.13	0.33	<0.02	39.5	1.5	11	0.41	2.6	0.99	16.5	0.08	0.1	0.066	3.86	19.9	8.9	0.07	224	43.3	2.02	10.3	1.2	50	8.6	114.5	<0.002	0.37	0.06	2.9	1	10.8	48.2	0.99	<0.05	12.4	0.053	0.78	2.9	7	3.5	8.4	11	1.5
321.80	323.80	2.00	0.00	M486718	MGQM		TRUE	M486718	4.64	<0.001	<0.01	6.2	0.6	450	2.88	0.26	0.34	<0.02	50	1.5	11	0.75	3.3	0.86	16.65	0.07	0.1	0.079	3.84	25.5	8.9	0.07	268	31.7	2.12	12	1.1	60	10.0	123	<0.002	0.31	0.07	3.1	1	8	46.4	1.24	<0.05	13.8	0.055	0.78	5.8	6	3.5	9.4	13	1.2
323.80	326.00	2.20	0.00	M486825			TRUE	M486825	5.4	0.001	0.03	6.52	<0.2	440	2.8	0.11	0.4	0.02	46.4	1	8	0.97	3.1	0.92	16.85	0.21	0.1	0.045	3.79	23.1	8.4	0.07	271	31.8	2.43	11.9	1.6	60	11.2	113.5	<0.002	0.17	0.08	3.6	2	4.2	56.8	1.09	<0.05	12.5	0.061	0.67	2.3	4	1.7	11.6	13	1.2
326.00	327.50	1.50	0.00	M486826			TRUE	M486826	3.88	0.001	0.03	6.12	<0.2	460	2.67	0.07	0.38	0.05	46.9	0.9	10	0.73	2.3	0.99	15.5	0.19	0.1	0.046	3.56	23.4	8.9	0.07	243	32.1	2.26	10.7	1.7	60	10.1	105.5	<0.002	0.21	0.08	3.3	1	5.3	57	1.01	<0.05	11.8	0.058	0.57	2.3	4	1.8	10.5	19	1
327.50	329.00	1.50	0.00	M486827			TRUE	M486827	3.36	<0.001	0.02	5.89	<0.2	400	1.92	0.14	0.39	0.09	50.2	1	13	0.53	2.3	0.9	15.35	0.19	0.1	0.037	3.67	25.2	8.1	0.08	245	4.6	2.3	9.4	1.5	60	10.4	92.7	<0.002	0.08	0.06	3.4	1	2.5	53.1	0.81	<0.05	12.2	0.066	0.48	1.9	5	1.1	10.9	27	1.4
329.00	331.00	2.00	0.00	M486719	FGQM		TRUE	M486719	4.54	0.001	<0.01	6.17	0.9	110	2.89	0.18	0.33	0.06	41.2	0.8	10	0.62	2.8	0.76	16.3	0.06	0.1	0.053	3.8	19.2	8	0.05	298	25.7	2.38	10.2	0.9	40	10.8	111	<0.002	0.18	0.06	2.6	1	4.5	20.7	0.93	<0.05	13.8	0.056	0.65	2.1	4	2.5	9.7	29	1.4
331.00	333.00	2.00	0.00	M486720	FGQM		TRUE	M486720	4.5	<0.001	<0.01	6.02	1.2	130	2.7	0.1	0.33	<0.02	41.2	1	8	0.48	1.5	0.71	15.5	0.07	0.1	0.026	3.74	19.1	8.4	0.04	219	19.9	2.27	10.1	0.9	50	9.8	101	<0.002	0.22	0.06	2.7	1	3.7	22.2	0.96	<0.05	12.8	0.049	0.56	2.5	4	1.9	11.2	9	1.4
333.00	335.00	2.00	0.00	M486721	FGQM		TRUE	M486721	4.4	<0.001	<0.01	6.13	1.8	370	2.95	0.06	0.34	<0.02	51.9	1.2	10	0.69	1.7	0.81	15.75	0.08	0.1	0.013	3.84	26	11.2	0.09	379	34.5	2.3	11.4	1.4	80	10.1	106	<0.002	0.09	0.1	3	1	2.4	47.7	1.06	<0.05	12.9	0.069	0.7	2.4	6	1.7	12.3	13	1.3
335.00	337.00	2.00	0.00	M486722	MGQM	There are a lot of quartz veins because it is actually a breccia zone with dark grey quartz infill from 335.6 to 336.4 meters.	TRUE	M486722	4.14	0.002	0.31	5.88	7	630	2.42	0.18	0.27	<0.02	42.8	0.9	10	1.5	5.9	0.73	14.6	0.07	0.1	0.028	3.56	22.5	22	0.08	415	69.1	2.11	9.4	1.3	80	9.3	110.5	0.004	0.19	0.27	2.5	1	2.6	73.6	0.79	<0.05	10.8	0.063	0.93	4.3	5	3.2	10	34	1.3
337.00	338.00	1.00	0.00	M486723	MGQM		TRUE	M486723	2.52	0.001	<0.01	6.3	1.1	730	2.79	0.03	0.49	<0.02	47.7	1	9	0.57	1.3	0.84	15.65	0.09	0.1	0.01	3.58	24.8	9.4	0.1	327	27.0	2.47	10	1.5	90	8.9	91.7	<0.002	0.03	0.08	2.7	1	1.5	94	0.83	<0.05	10.7	0.073	0.54	2.1	6	1.1	12	11	1.6
338.00	339.50	1.50	0.00	M486724	MGQM		TRUE	M486724	3.92	0.001	<0.01	6.12	1.4	650	2.51	0.05	0.41	<0.02	54.3	1.4	11	0.54	1	0.88	15.8	0.08	0.1	0.023	3.74	28.6	14	0.1	295	25.7	2.23	8.6	1.4	90	9.3	103.5	<0.002	0.19	0.07	2.8	1	7.1	73.8	0.72	<0.05	12.2	0.07	0.65	2.6	8	2.9	8.8	17	1.5
339.50	341.50	2.00	0.00	M486828			TRUE	M486828	5.26	<0.001	0.02	6.12	0.2	590	2.3	0.16	0.38	<0.02	37.1	0.8	15	0.38	3	0.98	16.05	0.2	0.1	0.024	3.79	18.4	7.7	0.06	231	31.6	2.17	7.9	1.9	60	9.4	103.5	<0.002	0.17	0.07	2.6	1	3.8	68.9	0.73	<0.05	10.3	0.053	0.65	2.8	4	1.6	9.9	13	1.3
341.50	343.50	2.00	0.00	M486829			TRUE	M486829	4.9	0.001	0.02	5.76	0.4	650	2.47	0.07	0.47	<0.02	42.3	1.1	11	0.41	2.2	0.94	15.05	0.2	0.1	0.023	3.4	21.4	8.7	0.09	278	18.2	2.23	9.3	1.7	80	9.2	93.5	0.002	0.1	0.06	3.1	1	3.5	82.4	0.84	<0.05	10.2	0.068	0.57	2	6	1.2	9.7	18	2
343.50	345.50	2.00	0.00	M486830			TRUE	M486830	4.24	0.001	0.05	6	<0.2	680	2.83	0.46	0.47	0.04	45.6	1.2	10	0.61	5	1.25	16.7	0.21	0.1	0.136	3.8	23.7	12.9	0.09	443	14.0	1.96	10.1	2.1	90	9.6	130.5	<0.002	0.37	0.08	3.2	1	9	76.3	0.9	0.09	10.3	0.069	0.93	2.5	6	6.5	10.1	28	1.3
345.50	347.40	1.90	0.00	M486831			TRUE	M486831	4.18	0.003	0.15	6.19	0.4	650	3.31	1.73	0.41	0.09	47.2	1.4	11	0.76	7.8	1.72	17.15	0.21	0.1	0.28	4.11	23.8	16.5	0.1	638	24.4	1.65	9.8	1.9	90	10.5	164	<0.002	0.87	0.09	3.4	2	14.4	62.9	0.92	0.17	11.5	0.069	1.38	4.5	7	11.1	10.4	49	1.2
347.40	349.40	2.00	0.00	M486725	MGQM		TRUE	M486725	5.4	0.001	0.05	6.22	2.6	720	2.88	0.57	0.49	<0.02	48.7	1.2	12	0.76	2.9	1.03	15.3	0.09	0.1	0.056	3.61	26.7	13.2	0.1	417	119.5	2.22	8.4	1.5	80	9.7	107	0.004	0.14	0.1	2.5	1	3.7	84.6	0.62	0.05	9.9	0.071	0.74	1.8	7	3.9	8.2	44	1.2
349.40	352.20	2.80	0.00	M486832			TRUE	M486832	6.4	0.001	0.1	5.95	7.4	700	2.39	0.09	0.49	0.02	41.3	1.2	9	0.8	3.9	1.12	15.15	0.19	0.1	0.037	3.61	21.1	11.7	0.1	457	16.7	2.19	9.5	1.9	90	9.8	110.5	<0.002	0.13	0.14	3.2	2	2.9	86.3	0.91	<0.05	10.2	0.069	0.77	2.6	6	2.1	10.3	32	1.2
352.20	354.70	2.50	0.00	M486833			TRUE	M486833	6.14	0.001	0.14	5.69	<0.2	150	2.47	0.68	0.29	0.06	33.1	0.7	12	0.49	5.1	0.98	16.15	0.19	0.1	0.13	3.68	15.6	8.7	0.04	339	20.5	1.86	10.4	2.1	40	12.4	119.5	<0.002	0.28	0.08	3.2	2	4.7	25.4	1.16	0.1	11.6	0.049	0.84	3.1	4	3.1	9.6	24	2
354.70	357.20	2.50	0.00	M486834			TRUE	M486834	8.38	0.001	0.24	5.85	0.2	190	2.33	1.58	0.25	0.22	38.6	0.7	11	0.46	8.5	1.1	15.85	0.19	0.2	0.205	4.14	18.1	9.4	0.04	446	50.1	1.7	10.6	1.2	50	15.9	128.5	0.002	0.38	0.08	3.2	2	4.8	28.4	1.22	0.14	12.2	0.051	0.99	3.7	3	9.4	10.4	77	3.3
357.20	359.70	2.50	0.00	M486835			TRUE	M486835	6.16	0.001	0.12	6.09	<0.2	100	3.12	0.44	0.28	0.08	36.1	0.7	10	1.2	5.7	0.92	16.55	0.17	0.1	0.134	3.73	15.9	8	0.04	475	50.2	2.07	13.6	1	30	14.2	139.5	0.003	0.32	0.12	3.7	2	5.2	18.2	1.63	0.11	13.2	0.051	0.93	4	3	6.7	11.3	44	1.7
359.70	362.20	2.50	0.00	M486836			TRUE	M486836	3.8	<0.001	0.1	5.9	<0.2	90	3.08	0.26	0.3	0.06	35.7	0.5	9	0.98	6.7	0.77	16.2	0.16	0.1	0.07	3.45	15.7	6	0.03	268	192.5	2.34	14.9	1.1	30	14.2	122	0.008	0.13	0.08	4	2	3.9	16.6	1.57	0.06	13.4	0.048	0.69	4.5	2	1.5	12.9	26	1.1
362.20	364.70	2.50	0.00	M486837			TRUE	M486837	5.72	<0.001	0.07	5.98	<0.2	80	3.1	0.29	0.29	<0.02	35	0.5	9	1.33	16	0.71	16.15	0.18	0.1	0.031	3.51	15.4	6.2	0.03	303	35.0	2.4	14.2	1	30	13.1	120	0.002	0.14	0.14	3.7	2	3	16	1.62	0.07	13.3	0.051	0.66	4.4	2	1.3	11.8	15	1
364.70	367.40	2.70	0.00	M486838			TRUE	M486838	5.82	0.001	0.14	6.04	0.5	210	2.6	0.21	0.28	0.03	38.6	0.5	13	0.6	5.8	0.85	16	0.11	0.2	0.034	3.81	19.1	6.2	0.04	259	23.1	2.35	11.4	1.8	30	13.1	129.5	0.004	0.15	0.12	3.3	<1	2.8	20.2	1.4	<0.05	13.7	0.05	0.72	3.8	3	1.4	11.7	18	2.7
367.40	369.40	2.00	0.00	M486726	FGQM		TRUE	M486726	5.18	<0.001	<0.01	6.31	0.8	100	3.53	0.91	0.31	0.04	38	0.5	11	1.66	4.6	0.66	17.2	0.06	0.1	0.075	3.83	17.7	7.5	0.04	372	31.7	2.48	15.3	0.6	30	15.0	143.5	<0.002	0.17	0.11	3.5	1	3.8	17.6	1.6	0.07	13.9	0.053	0.9	4.5	3	2.7	11	33	0.8
369.40	371.40	2.00	0.00	M486727	FGQM		TRUE	M486727	5.4	<0.001	0.32	6.01	1.1	90	3.23	2.94	0.26	0.36	37.2	0.8	11	1.41	10.4	1.29	17.85	0.08	0.1	0.31	3.54	16.3	10.6	0.04	749	63.0	1.99	15.1	0.9	30	16.8	152.5	0.002	0.72	0.14	3.4	1	6.9	13.7	1.56	0.78	13.3	0.051	1.17	4.9	2	4.6	9.5	164	0.9
371.40	373.40	2.00	0.00	M486728	FGQM		TRUE	M486728	5.14	0.001	<0.01	6.12	0.7	80	3.17	0.39	0.31	0.04	39.5	0.7	9	1.39	11.9	0.62	16.45	0.07	0.1	0.044	3.61	17.3	6.4	0.04	355	12.1	2.64	15.3	0.6	30	14.2	118.5	<0.002	0.11	0.14	3.3	1	2.5	14.2	1.52	0.12	14.3	0.058	0.61	4.2	2	1.3	10.9	31	1
373.40	374.90	1.50	0.00	M486729	FGQM		TRUE	M486729	3.76	0.001	0.02	5.87	0.6	90	3.21	0.43	0.32	0.15	35.7	0.5	10	0.33	3.2	0.66	15.4	0.07	0.1	0.083	3.39	17.6	6.3	0.03	369	17.2	2.33	13.4	0.8	30	12.3	103.5	<0.002	0.11	0.05	2.6	1	2.5	16.1	1.4	0.06	13.1	0.049	0.56	4.1	3	8.8	10.9	86	2.8
374.90	377.90	3.00	0.00	M486730	FGQM		TRUE	M486730	4.06	0.001	<0.01	5.83	0.6	110	2.67	0.37	0.26	0.03	34.2	1.7	14	0.4	4.1	0.98	15.7	0.07	0.1	0.097	3.48	17.1	7.3	0.04	296	62.0	1.99	13.1	0.8	30	10.4	120	0.003	0.55	0.05	2.9	1	8.5	17.2	1.38	0.1	13.8	0.045	0.84	14.9	3	3.8	10.4	37	2.6
377.90	380.40	2.50	0.00	M486839			TRUE	M486839	8.48	<0.001	0.05	6.16	<0.2	240	2.04	0.15	0.34	0.02	50.8	0.8	10	0.33	2.5	0.93	14.3	0.11	0.2	0.042	3.81	26.2	8.6	0.11	310	39.0	2.43	9.4	1.5	70	10.7	110	0.005	0.13	0.07	3	<1	3.7	30	1.05	<0.05	13.5	0.072	0.6	4.1	5	1.4	9.4	27	2.3
380.40	382.90	2.50	0.00	M486840			TRUE	M486840	8.84	<0.001	0.04	6.11	<0.2	200	3.07	0.05	0.3	0.05	41.1	0.8	10	0.6	2.7	0.86	16.95	0.12	0.1	0.016	3.85	19.7	7.9	0.05	281	57.0	2.5	12.5	1.7	40	10.6	123.5	0.003	0.13	0.07	3.5	1	3.6	29.6	1.56	<0.05	12.4	0.05	0.58	4.3	3	1.2	10.9	25	2.3
382.90	385.40	2.50	0.00	M486843			TRUE	M486843	5.06	0.001	0.08	5.88	0.4	110	2.84	0.21	0.26	0.05	38.6	0.9	10	1.25	2.8	0.78	16.75	0.11	0.1	0.047	3.64	17.4	7.3	0.04	362	38.8	2.46	14.2	1.4	40	12.4	146	<0.002	0.14	0.1	3.5	1	3.6	18.2	1.53	0.06	12.6	0.049	0.8	4.3	3	2.1	10.3	21	1.9
385.40	387.90	2.50	0.00	M486844			TRUE	M486844	4.84	0.001	0.06	5.99	<0.2	120	3.36	0.54	0.31	0.02	40.4	0.6	11	2.03	1.8	0.85	17.25	0.12	0.1	0.026	3.63	18.3	6.6	0.04	312	17.6	2.66	16.6	1.5	30	12.2	148.5	<0.002	0.08	0.11	3.9	1	2	17.3	1.76	0.05	13.6	0.054	0.67	5.6	3	1.5	12	14	2.1
387.90	390.40	2.50	0.00	M486845			TRUE	M486845	5.94	<0.001	0.07	5.88	<0.2	120	3.15	1.86	0.3	0.1	40.1	1.3	10	0.77	2	1.18	17.65	0.12	0.1	0.162	3.65	18.3	7.9	0.05	323	113.5	2.23	16.1	1.4	40	10.0	140	0.004	0.56	0.08	4.2	1	5.7	17	2.01	0.17	13.5	0.05	0.69	5.1	3	10	12.6	27	1.7
390.40	393.10	2.70	0.00	M486846			TRUE	M486846	5.08	0.001	0.03	5.8	<0.2	130	3.1	0.07	0.3	0.02	39.3	0.8	9	0.51	1.5	0.82	16.45	0.12	0.1	0.016	3.58	18.2	6.3	0.04	226	28.9	2.47	15.8	1.4	20	10.3	111.5	<0.002	0.1	0.07	3.7	1	2	20.4	1.97	<0.05	13.2	0.051	0.46	6.1	3	1.1	12.1	16	1.4
393.10	395.50	2.40	0.00	M486847			TRUE	M486847	5.38	<0.001	0.04	6.08	<0.2	300	2.12	0.14	0.34	0.06	43.2	0.8	10	0.41	2.5	0.94	16.15	0.12	0.1	0.04	3.81	21.4	8.2	0.07	384	17.1	2.42	10.8	1.6	40	10.8	115.5	<0.002	0.13	0.06	3.1	1	2.8	38.1	1.1	<0.05	12.4	0.061	0.52	3.2	4	1.5	9.4	41	1.4
395.50	398.00	2.50	0.00	M486848			TRUE	M486848	8.02	0.001	0.07	6.16	<0.2	360	2.03	1.22	0.37	0.02	52.4	1.3	9	0.36	2.8	1.1	16.1	0.28	0.1	0.053	3.94	26.6	8.8	0.09	407	37.2	2.34	9.7	1.8	70	10.3	119.5	<0.002	0.19	0.06	3.3	1	3.8	42.8	0.99	0.07	12.5	0.066	0.62	2.2	5	2.6	9.6	35	1.5
398.00	400.50	2.50	0.00	M486849			TRUE	M486849	5.74	0.004	0.03	5.89	0.6	220	1.94	0.28	0.28	0.07	41.5	0.8	12	0.39	2.2	0.86	16.05	0.12	0.1	0.048	3.85	19.9	9.2	0.06	285	147.5	2.08	9.4	2	40	8.6	124.5	0.002	0.13	0.09	2.9	1	7.5	27.4	0.97	<0.05	12.7	0.046	0.73	2.6	5	4.1	8.3	30	1.1
400.50	403.00	2.50	0.00	M486850			TRUE	M486850	5.94	<0.001	0.12	6	0.6	330	2.29	0.73	0.33	0.53	43.2	0.8	10	0.38	18.7	1.12	16.15	0.13	0.1	0.202	3.84	21.4	8.7	0.07	569	14.4	2.2	10	1.7	40	10.5	124	<0.002	0.25	0.06	3.1	1	4	40.4	1.11	0.1	11.5	0.057	0.7	2.4	4	3.9	9.3	194	1
403.00	405.50	2.50	0.00	M486851			TRUE	M486851	6.54	<0.001	0.04	6.11	<0.2	370	2.03	0.13	0.35	0.06	44.5	0.8	9	0.33	3.8	0.92	16	0.12	0.1	0.027	3.82	22.2	7.4	0.07	354	23.0	2.44	11	1.6	50	9.6	107.5	<0.002	0.07	0.06	3.3	1	4.1	45.4	1.11	<0.05	12.5	0.063	0.54	2.7	5	2.6	9.8	38	1.3
405.50	408.00	2.50	0.00	M486852			TRUE	M486852	5.8	0.001	0.04	6.11	<0.2	350	2.28	0.12	0.31	0.06	43.7	1.4	10	0.43	3.3	0.99	16.6	0.12	0.1	0.05	3.96	22	8	0.07	393	59.6	2.23	9.7	1.7	50	9.5	124.5	0.002	0.19	0.06	3.3	1	8.5	40.4	0.97	<0.05	12.2	0.056	0.72	2.4	5	8.6	8.6	31	1
408.00	410.50	2.50	0.00	M486853			TRUE	M486853	5.96	0.001	0.2	6.04	<0.2	370	2.34	0.59	0.38	0.21	45.1	1.1	10	0.47	4.8	1.17	16.55	0.13	0.1	0.186	3.76	22.8	11.6	0.08	594	64.5	2.12	10	1.7	50	12.3	132	0.002	0.31	0.07	3.4	1	5.4	47.1	1.02	0.08	11.5	0.059	0.85	2.5	5	9.7	9.3	90	0.9
410.50	413.00	2.50	0.00	M486854			TRUE	M486854	7.42	<0.001	0.02	5.92	<0.2	430	2.22	0.05	0.46	0.02	43.5	0.8	7	0.33	1.3	0.89	14.7	0.14	0.1	0.033	3.57	22.3	6.5	0.08	369	16.3	2.29	9.1	1.6	60	9.4	101	<0.002	0.09	0.07	2.9	1	2.9	53.4	0.9	<0.05	11.6	0.062	0.52	2	4	2.7	9.1	25	1
413.00	415.50	2.50	0.00	M486855			TRUE	M486855	3.92	<0.001	0.4	5.94	0.8	420	2.43	0.85	0.36	0.73	48.1	0.9	7	0.85	14.7	1.17	16.55	0.13	0.1	0.285	3.85	24.2	11.3	0.08	1090	84.2	1.62	9.5	1.6	60	17.1	160.5	0.007	0.34	0.1	3.1	1	11.5	47.6	0.93	0.17	12.1	0.062	1.5	3.1	5	5.5	9.1	265	1.3
415.50	418.00	2.50	0.00	M486856			TRUE	M486856	6	<0.001	0.18	6.11	0.4	470	2.48	0.34	0.39	0.06	42.7	1	8	0.59	2.7	1.07	16.75	0.13	0.1	0.061	3.82	22.2	9.2	0.09	597	17.3	2.26	9.7	1.8	60	11.3	129	<0.002	0.11	0.08	3.3	<1	8.4	54.8	0.93	<0.05	12	0.059	0.87	3	5	2.5	9.1	50	1
418.00	420.62	2.62	0.00	M486857			TRUE	M486857	5.74	<0.001	0.09	6.01	0.4	470	2.43	0.31	0.34	0.11	45.8	2.1	9	0.46	2.4	1.25	16.5	0.12	<0.1	0.099	4.07	23.8	8.8	0.08	475	180.5	2.1	8.6	1.7	70	11.2	140	0.013	0.48	0.08	3	<1	6.5	53.9	0.77	0.15	11.2	0.058	1	2.6	5	7.2	7.8	37	0.8

VA12181719

#	Analyte	Hole_ID	From_m	To_m	Length	Interval 1	Interval 2	Interval 3	Interval 4	Cu	Mo	Au
	Method											
1	N688151	MMK-002	169.7	171.7								
2	N688152	MMK-002	171.7	173.7								
3	N688153	MMK-002	173.7	174.7	1	9.3m of 0.39 % Cu, 0.024g/t Au, 45ppm Mo				115.0	0.7	0.0
4	N688154	MMK-002	174.7	175.7	1					163.5	0.8	0.0
5	N688155	MMK-002	175.7	176.7	1					305.0	0.9	0.0
6	N688156	MMK-002	176.7	177.45	0.75		4.3m of 0.823% Cu, 0.043g/t Au, 96ppm Mo	2.61m of 1.264% Cu, 0.058g/t Au, 153ppm Mo	1.11m of 2.23 % Cu, 302ppm Mo	8625.0	120.8	0.0
7	N688157	MMK-002	177.45	177.81	0.36					16092.0	214.2	0.0
8	N688158	MMK-002	177.81	179.31	1.5					8280.0	65.3	0.1
9	N688159	MMK-002	179.31	181	1.69					2382.9	12.2	0.0
10	N688160	MMK-002	181	183	2					576.0	2.3	0.0
11	N688161	MMK-002	183	185								
12	N688162	MMK-002	185	187								
13	N688163	MMK-002	187	189			-					
14	N688164	MMK-002	189	191								
15	N688165	MMK-002	191	193								
16	N688166	MMK-001	80.8	81.8								
17	N688167	MMK-001	81.8	82	0.2	0.2m of 3.94% Cu, 1.785 g/t Au				7880.0	1.0	0.4
18	N688168	MMK-001	82	83								
19	N688169	MMK-001	157.6	159.6								
20	N688170	MMK-001	159.6	160.6	1	3.2m of 373ppm Cu				108.5	1.8	0.0
21	N688171	MMK-001	160.6	161.6	1		1.2m of 819ppm Cu			513.0	2.6	0.0
22	N688172	MMK-001	161.6	161.8	0.2			0.2m of 0.24 % Cu		470.0	1.4	0.0
23	N688173	MMK-001	161.8	162.8	1					103.0	0.7	0.0
24	N688174	MMK-001	162.8	163.8								
25	N688175	STD	CDN-CM-13									
26	N688176	BLK	CDN-BL-9									

#	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
Method	WEI-21	Au-ICP21	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05
1	4.56	0.001	0.05	7.5	3	1020	0.6	0.07	1.88	0.04	15.8	6.7	15	2.59
2	4.68	0.001	0.06	7.84	3.5	1040	0.68	0.08	2.46	0.04	19.85	7.1	16	2
3	3.04	0.007	0.11	7.88	4	650	0.76	0.16	2.42	0.07	20	8.4	18	3.25
4	2.44	0.01	0.28	7.94	2.5	660	0.71	0.54	2.78	0.06	21.6	8	17	2.32
5	2.46	0.003	0.2	8.11	4.6	550	0.77	0.14	2.8	0.35	21.6	8.9	19	1.66
6	1.82	0.043	3.92	7.5	2.5	850	0.78	1.68	2.22	5.66	11.2	16.8	7	5.85
7	0.88	0.059	5.53	0.98	6.8	70	0.11	2.71	0.42	17.85	1.51	13.6	13	1.15
8	2.8	0.065	2.88	6.91	2.1	580	0.7	3.19	1.77	2.83	13.1	7.9	13	2.68
9	3.98	0.021	0.89	8.33	3	520	0.99	1.28	2.75	0.8	21.4	11.5	22	5.6
10	5.08	0.01	0.19	9	3.7	720	0.79	0.22	3.24	0.15	16.05	10.6	18	2.91
11	4.98	0.008	0.06	8.58	6.9	690	0.72	0.09	3.92	0.07	20	14.5	24	2.43
12	4.66	0.003	0.13	8.16	8	450	0.66	0.16	3.39	0.09	21.8	14.2	24	2.64
13	4.2	0.013	0.16	8.18	6.1	560	0.8	0.11	3.74	0.18	20.8	14.9	25	2.51
14	4.88	0.001	0.08	7.93	6.6	560	0.78	0.05	5.08	0.94	18.75	12.5	20	2.11
15	4.52	0.001	0.13	7.88	7.1	470	0.75	0.05	4.85	0.55	15.85	11.2	17	2.12
16	2.6	0.004	0.08	7.25	4.1	300	0.81	0.04	2.34	0.17	19.25	7.7	15	3.25
17	0.46	1.785	53.1	6.69	3.6	430	0.44	49.9	1.96	1.15	30.8	21.7	46	2.54
18	2.12	0.004	0.05	7.91	4.7	350	0.89	0.07	2.79	0.18	29.7	20.1	37	2.03
19	4.02	0.003	0.14	7.9	6	350	1	0.15	3.51	0.13	25.5	14.3	23	11.8
20	2.5	0.002	0.17	8.24	10.5	2020	2.02	0.08	4.7	0.19	159.5	28.9	54	6.42
21	1.56	0.002	0.27	8.98	9.3	750	1.15	0.54	2.36	0.22	28.6	17	24	11.9
22	0.44	0.002	0.27	7.54	8	1420	0.86	0.63	1.59	0.33	19.3	11.7	18	9.94
23	1.42	0.003	0.88	7.84	9.2	190	0.68	0.16	1.41	0.4	13.8	6.5	12	9.14
24	1.24	0.002	0.26	8.22	7.4	300	0.71	0.06	1.78	0.15	14.85	6.6	11	12.05
25	0.12	0.633	3.6	7.33	35	620	1.03	1.32	1.74	1.15	27.8	20.2	67	4.16
26	0.12	0.003	1.58	5.86	7	530	0.73	0.11	2.05	0.4	21.4	11.1	37	0.82

#	Cu	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn
Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
	0.2	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5
1	25.4	2.07	15.7	0.18	0.4	0.012	2.45	7.4	17.6	0.69	343
2	30.4	2.01	17.25	0.2	0.5	0.018	2.18	8.9	14.2	0.76	384
3	115.0	2.51	18.5	0.24	0.4	0.022	1.62	9.1	18	0.92	438
4	163.5	2.3	18.5	0.21	0.4	0.02	1.42	9.1	15	0.91	428
5	305.0	2.57	19.05	0.23	0.4	0.023	1.14	8.7	17.1	0.97	464
6	11,500.0	3.61	16.7	0.17	0.2	0.098	1.79	4.7	18.5	1.11	430
7	44,700.0	5.33	2.55	0.11	0.1	0.327	0.27	0.7	3	0.1	132
8	5,520.0	1.69	14.05	0.08	0.1	0.034	1.17	6.3	10.9	0.5	214
9	1,410.0	3.23	21.3	0.17	0.3	0.029	1.43	8.4	26.6	1.29	545
10	288.0	2.75	20.4	0.18	0.3	0.029	1.53	6.8	16.8	1.2	481
11	68.8	3.7	20.7	0.21	0.4	0.037	1.46	8.6	22.3	1.6	619
12	70.0	3.61	19.25	0.16	0.4	0.038	1.05	9.5	24.4	1.61	657
13	106.0	3.71	20.5	0.18	0.5	0.039	1.27	8.9	31.6	1.67	654
14	44.4	3.13	18.85	0.18	0.4	0.035	1.42	8.1	17.7	1.34	620
15	29.9	2.85	18.55	0.16	0.3	0.033	1.1	7	18.4	1.13	540
16	17.3	1.99	16.1	0.18	0.3	0.015	1.25	8.5	16.9	0.86	333
17	39,400.0	4.83	16.85	0.14	0.3	0.017	1.74	15.2	41.5	2.14	644
18	33.0	4.62	20.8	0.17	0.5	0.026	1.18	12.8	34.2	2.11	721
19	78.3	3.33	22.6	0.19	0.9	0.042	1.85	10.9	30.8	1.03	433
20	108.5	6.04	27	0.32	6.2	0.069	3.23	77.4	42.2	2.88	967
21	513.0	3.97	25.3	0.22	0.4	0.039	3.1	13.6	40.4	1.57	512
22	2,350.0	3.49	20.1	0.21	0.2	0.041	2.69	8.9	29.8	1.27	420
23	103.0	1.9	19.95	0.17	0.1	0.017	2.17	6.8	121	0.56	170
24	14.9	1.79	21.7	0.17	0.3	0.016	2.12	6.5	297	0.75	240
25	8,980.0	5.33	16.3	0.21	1.1	0.097	3.12	14.5	13.9	1.39	649
26	25.7	2.87	11.65	0.15	1.3	0.04	0.86	10.4	13.4	0.87	520

#	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
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	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.1	0.01	0.1	0.2	10	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.2	0.005	0.02	0.1	1	0.1	0.1	2	0.5
1	0.7	2.82	1.8	9.1	350	9.8	44.2	0.001	0.005	0.43	5.3	1	0.6	422	0.17	0.025	3	0.179	0.27	1.5	49	0.7	5.2	34	9.4
2	0.6	2.9	2.2	9.2	390	10	36.5	0.001	0.005	0.43	6.7	1	0.6	487	0.2	0.025	3.6	0.194	0.22	1.6	56	0.4	7.1	37	19.5
3	0.7	3.05	2.3	12	450	9.1	38.8	0.001	0.005	0.49	7.2	1	0.8	434	0.21	0.025	3.3	0.22	0.24	1.5	67	0.7	7.3	49	8.7
4	0.8	2.97	2.4	10.9	470	8.6	31.2	0.001	0.005	0.39	7.8	1	0.6	517	0.21	0.14	2.4	0.227	0.19	1.4	65	0.5	8.2	48	7.3
5	0.9	3.14	2.5	12	480	8.4	24.2	0.001	0.01	0.41	8.9	1	0.8	579	0.24	0.1	3.4	0.234	0.18	1.6	67	0.5	8.7	59	8.3
6	161.0	2.5	1.8	7.6	710	6.5	49.3	0.033	0.94	0.35	6.2	3	0.5	458	0.07	2.17	2	0.314	0.34	2.6	87	94.3	5.6	140	5.7
7	595.0	0.15	0.4	7	60	1.2	8.9	0.083	3.26	0.37	1	10	1	36.2	0.025	9.14	0.1	0.028	0.1	0.7	12	87.2	1.3	172	5.8
8	43.5	2.88	1.3	4.6	370	6.6	28.2	0.004	0.38	0.27	4	2	0.5	418	0.08	2.53	2	0.145	0.17	1.4	44	1.2	3.5	77	4
9	7.2	3.15	2.9	14.6	660	9.1	38.5	0.003	0.07	0.39	13.4	2	0.8	557	0.19	0.65	3	0.309	0.31	1.6	101	2.6	9.1	86	4.5
10	1.2	3.59	2	13	630	8.9	35.7	0.001	0.01	0.38	9.4	1	0.6	638	0.12	0.13	3.6	0.277	0.26	1.6	89	0.7	7.1	58	6.1
11	1.3	3.13	2.4	19	750	7.4	36.2	0.001	0.005	0.54	12.9	2	0.7	682	0.15	0.025	3.9	0.347	0.28	1.6	118	0.8	9.5	71	8.4
12	1.4	3.53	2.5	19.1	760	10.8	26.5	0.001	0.005	0.79	13.2	1	0.7	475	0.17	0.025	4.4	0.348	0.19	1.9	122	1.1	10.1	80	5.1
13	1.4	3.15	2.6	20.1	770	9.1	29.7	0.001	0.005	1.79	13.4	1	0.8	578	0.18	0.05	2.9	0.35	0.23	1.6	129	1.5	10.1	79	6.6
14	1.2	3.39	2.5	16.2	660	10.4	26.8	0.001	0.005	0.82	10.8	1	0.6	636	0.21	0.025	2.6	0.3	0.25	1.1	103	0.8	8.4	74	5.1
15	1.1	3.58	2.2	14.6	620	9.5	21.3	0.001	0.005	0.57	9.1	1	0.7	577	0.17	0.025	2.2	0.255	0.21	0.8	87	0.7	7	64	4.6
16	0.6	3.12	3.2	10.3	440	8.6	47.8	0.001	0.005	0.51	5.1	1	0.6	421	0.28	0.025	4	0.239	0.28	2.2	54	1.3	5.5	42	4.7
17	5.2	1.81	5.5	28.7	1070	14.4	65.1	0.007	1.06	0.64	4.6	6	1	156	0.37	28.8	10.4	0.587	0.35	5.3	109	13.6	6.4	93	6.6
18	1.0	2.74	5.7	26.1	970	10.5	36.6	0.001	0.005	0.48	8	1	1	453	0.34	0.11	7.1	0.53	0.25	2.9	133	4.5	9.4	99	7.6
19	0.8	2.68	4.7	22.3	1000	11.2	52.2	0.001	0.005	6.87	11.6	1	1.2	269	0.37	0.06	4.7	0.347	0.44	2	116	2.8	8.9	81	22.9
20	1.8	2.42	19.3	72	5130	18.7	80.2	0.001	0.02	9.61	17.2	2	1.6	1180	1.01	0.06	7.6	1.04	0.61	2.5	215	6.9	14.5	167	224
21	2.6	2.5	3.6	19.2	840	19.5	97.7	0.001	0.005	12.9	13.3	1	0.8	261	0.38	0.08	4.8	0.355	0.81	2.6	130	8	11.3	122	7.8
22	7.0	1.87	2.3	13.8	650	13.9	82.3	0.001	0.01	5.29	9.7	1	0.5	200	0.21	0.13	2.7	0.287	0.54	2.5	109	4.6	7.1	92	3.4
23	0.7	1.56	1.2	7.6	460	7.6	75.3	0.001	0.005	37.2	4.6	1	0.5	103	0.08	0.025	2	0.174	0.5	1.2	61	3.4	3.4	79	2.7
24	0.6	1.52	1.6	8.1	480	10	68.4	0.001	0.005	26.8	5.9	1	0.7	168	0.16	0.025	1.9	0.192	0.44	1	57	5.3	5	65	5.5
25	1,070.0	1.65	4.8	37.4	980	46.3	90.3	0.883	2.02	7.84	18.1	7	2.2	261	0.33	0.79	2.4	0.328	0.92	1.2	161	28	15.5	171	35.7
26	3.6	2.21	3.9	22.3	600	7.8	24.4	0.002	0.05	2.39	12.1	1	0.7	271	0.27	0.06	2.2	0.283	0.2	1	87	29.9	14	49	44.2

C3.

APPENDIX C3: DRILL CORE SAMPLE ASSAY CERTIFICATES

MACKENZIE CORE 1/1

ALS Minerals
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 17-AUG-2012
Account: MIOMIN

Project: 697_Mackenzie_MMK-001-002

CERTIFICATE OF ANALYSIS VA12181719

Method	CERTIFICATE COMMENTS
ME-MS61	Interference: Mo>400ppm on ICP-MS Cd,ICP-AES results shown.
ME-MS61	REE's may not be totally soluble in this method.

ALS Minerals
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 17-AUG-2012
Account: MIOMIN

Project: 697_Mackenzie_MMK-001-002

CERTIFICATE OF ANALYSIS VA12181719

Sample Description	Method Analyte Units LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Cu-OG62 Cu % 0.001
N688151		49	0.7	5.2	34	9.4	
N688152		56	0.4	7.1	37	19.5	
N688153		67	0.7	7.3	49	8.7	
N688154		65	0.5	8.2	48	7.3	
N688155		67	0.5	8.7	59	8.3	
N688156		87	94.3	5.6	140	5.7	1.150
N688157		12	87.2	1.3	172	5.8	4.47
N688158		44	1.2	3.5	77	4.0	
N688159		101	2.6	9.1	86	4.5	
N688160		89	0.7	7.1	58	6.1	
N688161		118	0.8	9.5	71	8.4	
N688162		122	1.1	10.1	80	5.1	
N688163		129	1.5	10.1	79	6.6	
N688164		103	0.8	8.4	74	5.1	
N688165		87	0.7	7.0	64	4.6	
N688166		54	1.3	5.5	42	4.7	
N688167		109	13.6	6.4	93	6.6	3.94
N688168		133	4.5	9.4	99	7.6	
N688169		116	2.8	8.9	81	22.9	
N688170		215	6.9	14.5	167	224	
N688171		130	8.0	11.3	122	7.8	
N688172		109	4.6	7.1	92	3.4	
N688173		61	3.4	3.4	79	2.7	
N688174		57	5.3	5.0	65	5.5	
N688175		161	28.0	15.5	171	35.7	
N688176		87	29.9	14.0	49	44.2	

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 17-AUG-2012
Account: MIOMIN

Project: 697_Mackenzie_MMK-001-002

CERTIFICATE OF ANALYSIS VA12181719

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	0.2	0.005	0.02	0.1
N688151		9.8	44.2	<0.002	<0.01	0.43	5.3	1	0.6	422	0.17	<0.05	3.0	0.179	0.27	1.5
N688152		10.0	36.5	<0.002	<0.01	0.43	6.7	1	0.6	487	0.20	<0.05	3.6	0.194	0.22	1.6
N688153		9.1	38.8	<0.002	<0.01	0.49	7.2	1	0.8	434	0.21	<0.05	3.3	0.220	0.24	1.5
N688154		8.6	31.2	<0.002	<0.01	0.39	7.8	1	0.6	517	0.21	0.14	2.4	0.227	0.19	1.4
N688155		8.4	24.2	<0.002	0.01	0.41	8.9	1	0.8	579	0.24	0.10	3.4	0.234	0.18	1.6
N688156		6.5	49.3	0.033	0.94	0.35	6.2	3	0.5	458	0.07	2.17	2.0	0.314	0.34	2.6
N688157		1.2	8.9	0.083	3.26	0.37	1.0	10	1.0	36.2	<0.05	9.14	<0.2	0.028	0.10	0.7
N688158		6.6	28.2	0.004	0.38	0.27	4.0	2	0.5	418	0.08	2.53	2.0	0.145	0.17	1.4
N688159		9.1	38.5	0.003	0.07	0.39	13.4	2	0.8	557	0.19	0.65	3.0	0.309	0.31	1.6
N688160		8.9	35.7	<0.002	0.01	0.38	9.4	1	0.6	638	0.12	0.13	3.6	0.277	0.26	1.6
N688161		7.4	36.2	<0.002	<0.01	0.54	12.9	2	0.7	682	0.15	<0.05	3.9	0.347	0.28	1.6
N688162		10.8	26.5	<0.002	<0.01	0.79	13.2	1	0.7	475	0.17	<0.05	4.4	0.348	0.19	1.9
N688163		9.1	29.7	<0.002	<0.01	1.79	13.4	1	0.8	578	0.18	0.05	2.9	0.350	0.23	1.6
N688164		10.4	26.8	<0.002	<0.01	0.82	10.8	1	0.6	636	0.21	<0.05	2.6	0.300	0.25	1.1
N688165		9.5	21.3	<0.002	<0.01	0.57	9.1	1	0.7	577	0.17	<0.05	2.2	0.255	0.21	0.8
N688166		8.6	47.8	<0.002	<0.01	0.51	5.1	1	0.6	421	0.28	<0.05	4.0	0.239	0.28	2.2
N688167		14.4	65.1	0.007	1.06	0.64	4.6	6	1.0	156.0	0.37	28.8	10.4	0.587	0.35	5.3
N688168		10.5	36.6	<0.002	<0.01	0.48	8.0	1	1.0	453	0.34	0.11	7.1	0.530	0.25	2.9
N688169		11.2	52.2	<0.002	<0.01	6.87	11.6	1	1.2	269	0.37	0.06	4.7	0.347	0.44	2.0
N688170		18.7	80.2	<0.002	0.02	9.61	17.2	2	1.6	1180	1.01	0.06	7.6	1.040	0.61	2.5
N688171		19.5	97.7	<0.002	<0.01	12.90	13.3	1	0.8	261	0.38	0.08	4.8	0.355	0.81	2.6
N688172		13.9	82.3	<0.002	0.01	5.29	9.7	1	0.5	200	0.21	0.13	2.7	0.287	0.54	2.5
N688173		7.6	75.3	<0.002	<0.01	37.2	4.6	1	0.5	103.0	0.08	<0.05	2.0	0.174	0.50	1.2
N688174		10.0	68.4	<0.002	<0.01	26.8	5.9	1	0.7	168.0	0.16	<0.05	1.9	0.192	0.44	1.0
N688175		46.3	90.3	0.883	2.02	7.84	18.1	7	2.2	261	0.33	0.79	2.4	0.328	0.92	1.2
N688176		7.8	24.4	0.002	0.05	2.39	12.1	1	0.7	271	0.27	0.06	2.2	0.283	0.20	1.0

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

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 17-AUG-2012
Account: MIOMIN

Project: 697_Mackenzie_MMK-001-002

CERTIFICATE OF ANALYSIS VA12181719

Sample Description	Method Analyte Units LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2	ME-MS61 P ppm 10
N688151		2.07	15.70	0.18	0.4	0.012	2.45	7.4	17.6	0.69	343	0.66	2.82	1.8	9.1	350
N688152		2.01	17.25	0.20	0.5	0.018	2.18	8.9	14.2	0.76	384	0.56	2.90	2.2	9.2	390
N688153		2.51	18.50	0.24	0.4	0.022	1.62	9.1	18.0	0.92	438	0.69	3.05	2.3	12.0	450
N688154		2.30	18.50	0.21	0.4	0.020	1.42	9.1	15.0	0.91	428	0.75	2.97	2.4	10.9	470
N688155		2.57	19.05	0.23	0.4	0.023	1.14	8.7	17.1	0.97	464	0.89	3.14	2.5	12.0	480
N688156		3.61	16.70	0.17	0.2	0.098	1.79	4.7	18.5	1.11	430	161.0	2.50	1.8	7.6	710
N688157		5.33	2.55	0.11	0.1	0.327	0.27	0.7	3.0	0.10	132	595	0.15	0.4	7.0	60
N688158		1.69	14.05	0.08	0.1	0.034	1.17	6.3	10.9	0.50	214	43.5	2.88	1.3	4.6	370
N688159		3.23	21.3	0.17	0.3	0.029	1.43	8.4	26.6	1.29	545	7.21	3.15	2.9	14.6	660
N688160		2.75	20.4	0.18	0.3	0.029	1.53	6.8	16.8	1.20	481	1.15	3.59	2.0	13.0	630
N688161		3.70	20.7	0.21	0.4	0.037	1.46	8.6	22.3	1.60	619	1.26	3.13	2.4	19.0	750
N688162		3.61	19.25	0.16	0.4	0.038	1.05	9.5	24.4	1.61	657	1.36	3.53	2.5	19.1	760
N688163		3.71	20.5	0.18	0.5	0.039	1.27	8.9	31.6	1.67	654	1.42	3.15	2.6	20.1	770
N688164		3.13	18.85	0.18	0.4	0.035	1.42	8.1	17.7	1.34	620	1.17	3.39	2.5	16.2	660
N688165		2.85	18.55	0.16	0.3	0.033	1.10	7.0	18.4	1.13	540	1.05	3.58	2.2	14.6	620
N688166		1.99	16.10	0.18	0.3	0.015	1.25	8.5	16.9	0.86	333	0.55	3.12	3.2	10.3	440
N688167		4.83	16.85	0.14	0.3	0.017	1.74	15.2	41.5	2.14	644	5.16	1.81	5.5	28.7	1070
N688168		4.62	20.8	0.17	0.5	0.026	1.18	12.8	34.2	2.11	721	1.04	2.74	5.7	26.1	970
N688169		3.33	22.6	0.19	0.9	0.042	1.85	10.9	30.8	1.03	433	0.78	2.68	4.7	22.3	1000
N688170		6.04	27.0	0.32	6.2	0.069	3.23	77.4	42.2	2.88	967	1.80	2.42	19.3	72.0	5130
N688171		3.97	25.3	0.22	0.4	0.039	3.10	13.6	40.4	1.57	512	2.57	2.50	3.6	19.2	840
N688172		3.49	20.1	0.21	0.2	0.041	2.69	8.9	29.8	1.27	420	6.95	1.87	2.3	13.8	650
N688173		1.90	19.95	0.17	0.1	0.017	2.17	6.8	121.0	0.56	170	0.67	1.56	1.2	7.6	460
N688174		1.79	21.7	0.17	0.3	0.016	2.12	6.5	297	0.75	240	0.55	1.52	1.6	8.1	480
N688175		5.33	16.30	0.21	1.1	0.097	3.12	14.5	13.9	1.39	649	1070	1.65	4.8	37.4	980
N688176		2.87	11.65	0.15	1.3	0.040	0.86	10.4	13.4	0.87	520	3.64	2.21	3.9	22.3	600

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

ALS Canada Ltd.

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

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 17-AUG-2012
Account: MIOMIN

Project: 697_Mackenzie_MMK-001-002

CERTIFICATE OF ANALYSIS VA12181719

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	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
N688151		4.56	<0.001	0.05	7.50	3.0	1020	0.60	0.07	1.88	0.04	15.80	6.7	15	2.59	25.4
N688152		4.68	0.001	0.06	7.84	3.5	1040	0.68	0.08	2.46	0.04	19.85	7.1	16	2.00	30.4
N688153		3.04	0.007	0.11	7.88	4.0	650	0.76	0.16	2.42	0.07	20.0	8.4	18	3.25	115.0
N688154		2.44	0.010	0.28	7.94	2.5	660	0.71	0.54	2.78	0.06	21.6	8.0	17	2.32	163.5
N688155		2.46	0.003	0.20	8.11	4.6	550	0.77	0.14	2.80	0.35	21.6	8.9	19	1.66	305
N688156		1.82	0.043	3.92	7.50	2.5	850	0.78	1.68	2.22	5.66	11.20	16.8	7	5.85	>10000
N688157		0.88	0.059	5.53	0.98	6.8	70	0.11	2.71	0.42	17.85	1.51	13.6	13	1.15	>10000
N688158		2.80	0.065	2.88	6.91	2.1	580	0.70	3.19	1.77	2.83	13.10	7.9	13	2.68	5520
N688159		3.98	0.021	0.89	8.33	3.0	520	0.99	1.28	2.75	0.80	21.4	11.5	22	5.60	1410
N688160		5.08	0.010	0.19	9.00	3.7	720	0.79	0.22	3.24	0.15	16.05	10.6	18	2.91	288
N688161		4.98	0.008	0.06	8.58	6.9	690	0.72	0.09	3.92	0.07	20.0	14.5	24	2.43	68.8
N688162		4.66	0.003	0.13	8.16	8.0	450	0.66	0.16	3.39	0.09	21.8	14.2	24	2.64	70.0
N688163		4.20	0.013	0.16	8.18	6.1	560	0.80	0.11	3.74	0.18	20.8	14.9	25	2.51	106.0
N688164		4.88	0.001	0.08	7.93	6.6	560	0.78	0.05	5.08	0.94	18.75	12.5	20	2.11	44.4
N688165		4.52	0.001	0.13	7.88	7.1	470	0.75	0.05	4.85	0.55	15.85	11.2	17	2.12	29.9
N688166		2.60	0.004	0.08	7.25	4.1	300	0.81	0.04	2.34	0.17	19.25	7.7	15	3.25	17.3
N688167		0.46	1.785	53.1	6.69	3.6	430	0.44	49.9	1.96	1.15	30.8	21.7	46	2.54	>10000
N688168		2.12	0.004	0.05	7.91	4.7	350	0.89	0.07	2.79	0.18	29.7	20.1	37	2.03	33.0
N688169		4.02	0.003	0.14	7.90	6.0	350	1.00	0.15	3.51	0.13	25.5	14.3	23	11.80	78.3
N688170		2.50	0.002	0.17	8.24	10.5	2020	2.02	0.08	4.70	0.19	159.5	28.9	54	6.42	108.5
N688171		1.56	0.002	0.27	8.98	9.3	750	1.15	0.54	2.36	0.22	28.6	17.0	24	11.90	513
N688172		0.44	0.002	0.27	7.54	8.0	1420	0.86	0.63	1.59	0.33	19.30	11.7	18	9.94	2350
N688173		1.42	0.003	0.88	7.84	9.2	190	0.68	0.16	1.41	0.40	13.80	6.5	12	9.14	103.0
N688174		1.24	0.002	0.26	8.22	7.4	300	0.71	0.06	1.78	0.15	14.85	6.6	11	12.05	14.9
N688175		0.12	0.633	3.60	7.33	35.0	620	1.03	1.32	1.74	1.15	27.8	20.2	67	4.16	8980
N688176		0.12	0.003	1.58	5.86	7.0	530	0.73	0.11	2.05	0.40	21.4	11.1	37	0.82	25.7

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 17-AUG-2012
This copy reported on
11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12181719

Project: 697_Mackenzie_MMK-001-002
P.O. No.: 090925
This report is for 26 Drill Core samples submitted to our lab in Vancouver, BC, Canada on 7-AUG-2012.

The following have access to data associated with this certificate:

PETER ANDERSEN JOSE SAYO GARCIA	SHANNON BAIRD	BRUCE JAGO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-32	Pulverize 1000g to 85% < 75 um
LOG-23	Pulp Login - Rcvd with Barcode
BAG-01	Bulk Master for Storage
PUL-QC	Pulverizing QC Test

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES
ME-MS61	48 element four acid ICP-MS	
Cu-OG62	Ore Grade Cu - Four Acid	VARIABLE

To: MIOCENE METALS LIMITED
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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

D1.

APPENDIX D1: SILTSAMPLES COORDINATES and NOTES

Mackenzie

MACKENZIE SILT SAMPLE DATA SHEET page 1 to 3

N3 #	Location	Project No	Mineralized Zone	ALS_ID	WOKO no	Nad83_E	Nad83_N	Elevation	Date	Sampler	GPS_ Accuracy m_	Sample Weight (kg)	Stream Width (m)	Stream Depth (m)	Stream Flow (m/s)	Stream Colour	Stream pH	Site Description
1	MacKenzie	697	Breccia Zone	M487701	VA12163501	497639	5641950	1697	26-Jun-12	Andrew Strain + Colin Bateman		0.75	1	0.1	fast	clear	5.5	Creek flows through silt-rich moss-covered talus. Sample from 4 locations over 3m on both sides of channel
2	MacKenzie	697	Breccia Zone	M487702	VA12163501	497768	5641920	1745	26-Jun-12	Andrew Strain + Colin Bateman		1.5	3	0.3	fast	clear	6	Silt taken from 5 locations over 10m – moss and silt pools
3	MacKenzie	697	Breccia Zone	M487703	VA12163501	497665	5642622	1586	26-Jun-12	Andrew Strain + Colin Bateman			4	0.2	torrent	clear	5.5	silt from 1 pool and moss in between cascades
4	MacKenzie	697	Breccia Zone	M487704	VA12163501	498385	5642479	1612	27-Jun-12	Andrew Strain + Colin Bateman			0.3	0.02	moderate	clear	6	
5	MacKenzie	697	Breccia Zone	M487705	VA12163501	498591	5642465	1592	27-Jun-12	Andrew Strain + Colin Bateman		0.5	0.2	0.01	moderate	clear	6	
6	MacKenzie	697	Breccia Zone	M487706	VA12163501	499916	5642912	1352	27-Jun-12	Andrew Strain + Colin Bateman			1	0.1	fast	clear	6	Silt taken from several pools / bars and moss from rocks and logs @ high water mark
7	MacKenzie	697	Breccia Zone	M487707	VA12163501	496047	5639083	1886	28-Jun-12	Andrew Strain + Colin Bateman	3	0.4	3	0.2	moderate	cloudy blue	5.5	3 channels. Silt from 6 locations over 15m and across width of stream
8	MacKenzie	697	Breccia Zone	M487708	VA12163501	495796	5639927	1825	28-Jun-12	Andrew Strain + Colin Bateman	3		4	0.2	fast	cloudy blue	6	Silt from 4 locations at head of bar. 50 m above confluence w/ drainage to W
9	MacKenzie	697	Breccia Zone	M487709	VA12163501	495737	5640078	1826	28-Jun-12	Andrew Strain + Colin Bateman	3		2	0.05	fast	clear	5.5	Creek flows through talus. Silt from several pools and traps. Muddy / organics, wet sample
10	MacKenzie	697	Breccia Zone	M487710	VA12163501	495649	5640926	1727	28-Jun-12	Andrew Strain + Colin Bateman	3		4	0.3	fast	cloudy	5.5	along slip-off slope at head of bar. 4 locations with varying velocity.
11	MacKenzie	697	Breccia Zone	M487711	VA12163501	495326	5641866	1532	29-Jun-12	Andrew Strain + Colin Bateman	3		4	0.3	fast	turbid	6	poor silting location – creek flows though large boulder field. Sample from side channel and moss at high water mark. Wet, sloppy sample.
12	MacKenzie	697	Breccia Zone	M487712	VA12163501	497015	5643094	1414	29-Jun-12	Andrew Strain + Colin Bateman	3		0.4	0.07	moderate	clear	5.5	silt is gossanous; lots of pumice
13	MacKenzie	697	Breccia Zone	M487713	VA12163501	493961	5637396	1911	04-Jul-12	Andrew Strain + Colin Bateman	3	3	5	0.2	moderate	clear	5.5	
14	MacKenzie	697	Breccia Zone	M487714	VA12163501	493476	5638196	1892	04-Jul-12	Andrew Strain + Colin Bateman	3	4.5	4	0.2	moderate	clear	5.5	meandering creek but current is still strong. Lots of magnetite. Taken from 4 locations across creek channel
15	MacKenzie	697	Breccia Zone	M487715	VA12163501	493188	5638204	1940	04-Jul-12	Andrew Strain + Colin Bateman	3		2	0.1	fast	clear	6	trib creek, ~100m above confluence. At base of waterfall.
16	MacKenzie	697	Breccia Zone	M487716	VA12163501	492825	5638765	1868	04-Jul-12	Andrew Strain + Colin Bateman	3		1	0.1	fast	clear	6	small trib, above confluence
17	MacKenzie	697	Breccia Zone	M487717	VA12163501	492919	5638962	1837	04-Jul-12	Andrew Strain + Colin Bateman	3		4	0.2	fast	clear	5.5	flows though steep, bouldery section. Silt from several pockets and eddies behind boulders. +++ magnetite
18	MacKenzie	697	Breccia Zone	M487718	VA12163501	491667	5640595	1730	05-Jul-12	Andrew Strain + Colin Bateman	3		2	0.1	torrent	clear	6	mouth or gnar canyon, top of large talus debris flow slope. Very high energy, silt from side pools / traps where sediment can collect.
19	MacKenzie	697	Breccia Zone	M487719	VA12163501	491269	5641303	2105	05-Jul-12	Andrew Strain + Colin Bateman	3		1	0.2	moderate	clear	6	alpine stream emerges from boulders at inflow to small tarn before entering death gnar canyon of doom. Silt from transtion from high to low energy.
20	MacKenzie	697	Breccia Zone	M487720	VA12163501	491560	5641360	2039	05-Jul-12	Andrew Strain + Colin Bateman	3		1	0.02	moderate	clear	6.5	above confluence w/ T021
21	MacKenzie	697	Breccia Zone	M487721	VA12163501	491727	5641376	2032	05-Jul-12	Andrew Strain + Colin Bateman	4		1	0.05	fast	clear	6	above confluence w/ T020
22	MacKenzie	697	Breccia Zone	M487724	VA12163501	492901	5640513	1520	09-Jul-12	Andrew Strain + Colin Bateman	3		1.5	0.5	fast	clear	6	small trib to slim creek. Silt mainly pumice and coarse intrusive, very little fine sediment
23	MacKenzie	697	Breccia Zone	M487725	VA12163501	494065	5640993	1548	09-Jul-12	Andrew Strain + Colin Bateman	3		0.5	0.1	fast	clear	6	flows over mossy boulders – all silt from submerged mos mats.
24	MacKenzie	697	Breccia Zone	M487726	VA12163501	500493	5642800	1351	10-Jul-12	Andrew Strain + Colin Bateman	3		1	0.05	fast	clear	6	VERY POOR SILT DEVELOPMENT. Series of small cascades and pools, fine magnetite in silt but only ~100g fine silt after 30mins of sifting.
25	MacKenzie	697	Breccia Zone	M487727	VA12163501	500655	5642714	1369	10-Jul-12	Andrew Strain + Colin Bateman	3		10	0.3	torrent	cloudy	6	large stream, heavy flow. Fine magnetite being carried in suspension. Very near high water mark; silt from low areas that have seen sedimentation during the peak flow in the afternoon heat (sampled in AM).
26	MacKenzie	697	Breccia Zone	M487728	VA12163501	500655	5642717	1377	10-Jul-12	Andrew Strain + Colin Bateman	3		10	0.3	torrent	cloudy	6	large stream, heavy flow. Fine magnetite being carried in suspension. Very near high water mark; silt from low areas that have seen sedimentation during the peak flow in the afternoon heat (sampled in AM).
27	MacKenzie	697	Breccia Zone	M487729	VA12163501	500720	5642150	1498	10-Jul-12	Andrew Strain + Colin Bateman	4		5	0.4	fast	cloudy	6	large stream. Abundant silt on inside of bend, in .3m of fast-moving water. Will be head of bar when water level drops.
28	MacKenzie	697	Breccia Zone	M487730	VA12163501	500700	5641654	1564	10-Jul-12	Andrew Strain + Colin Bateman	4		5	0.3	fast	Cloudy / turbid	6	large stream, heavy flow. Sample from bar in middle of stream. Crazy magnetite
29	MacKenzie	697	Breccia Zone	M487731	VA12163501	500547	5641186	1754	10-Jul-12	Andrew Strain + Colin Bateman	4		2	0.05	fast	clear	6	large creek flows over talus and branches out into 3 main channels over 200m. Sampled southermost channel. Flows over moss, trapping silt. Wet, muddy sample.
30	MacKenzie	697	Breccia Zone	M487732	VA12163501	500696	5640859	1658	10-Jul-12	Andrew Strain + Colin Bateman	3		5	0.4	fast	cloudy	6	water very high, shovel dipped into ~.3m water to collect material from slip-off slope. Probably not the greatest sample material.
31	MacKenzie	697	Breccia Zone	M487733	VA12163501	492203	5640806	1676	11-Jul-12	Andrew Strain + Colin Bateman	3		0.5	0.05	fast	slightly turbid	7	small stream at base of gully
32	MacKenzie	697	Breccia Zone	M487734	VA12163501	492322	5640960	1679	11-Jul-12	Andrew Strain + Colin Bateman	3		0.3	0.02	fast	slightly turbid	7	muddy. Small creek.
33	MacKenzie	697	Breccia Zone	M487735	VA12163501	492495	5641192	1725	11-Jul-12	Andrew Strain + Colin Bateman	4		0.3	0.01	fast	clear	7	very muddy, angular float. Silt dug from talus under stream flow
34	MacKenzie	697	Breccia Zone	M487736	VA12163501	492577	5642355	2075	12-Jul-12	Andrew Strain + Colin Bateman	3		1	0.3	fast	clear	5.5	alpine stream. Steep sided and deep, moss covered. Little silt in active channel, mainly from moss
35	MacKenzie	697	Breccia Zone	M487737	VA12163501	493336	5642161	1846	12-Jul-12	Andrew Strain + Colin Bateman	3		3	0.2	torrent	clear	5.5	very little silt, water level high, few locations with silt accumulation. Wet sample.
36	MacKenzie	697	Breccia Zone	M487738	VA12163501	494083	5641763	1509	12-Jul-12	Andrew Strain + Colin Bateman	7		1	0.05	fast	clear	5.5	in side channel of main creek.
37	MacKenzie	697	Bornite Zone	N688303	VA12181554	481879	5637458	2054	25-Jul-12	Colin Bateman								
38	MacKenzie	697	Bornite Zone	N688304	VA12181554	481280	5637792	1979	25-Jul-12	Colin Bateman								
39	MacKenzie	697	Bornite Zone	N688305	VA12181554	480335	5637340	1896	25-Jul-12	Colin Bateman								
40	MacKenzie	697	Bornite Zone	N688306	VA12181554	480247	5637313	1912	25-Jul-12	Colin Bateman								
41	MacKenzie	697	Bornite Zone	N688307	VA12181554	480125	5637262	1917	25-Jul-12	Colin Bateman								
42	MacKenzie	697	Bornite Zone	N688308	VA12181554	480076	5637210	1914	25-Jul-12	Colin Bateman								
43	MacKenzie	697	Bornite Zone	N688309	VA12181554	480086	5636857	1820	25-Jul-12	Colin Bateman								
44	MacKenzie	697	Bornite Zone	N688310	VA12181554	478407	5640593	1863	26-Jul-12	Colin Bateman								
45	MacKenzie	697	Bornite Zone	N688311	VA12181554	478201	5640421	1857	26-Jul-12	Colin Bateman								
46	MacKenzie	697	Bornite Zone	N688312	VA12181554	478072	5640146	1831	26-Jul-12	Colin Bateman								
47	MacKenzie	697	Bornite Zone	N688313	VA12181554	478278	5639800	1854	26-Jul-12	Colin Bateman								
48	MacKenzie	697	Bornite Zone	N688314	VA12181554	477967	5639541	1798	26-Jul-12	Colin Bateman								
49	MacKenzie	697	Bornite Zone	N688315	VA12181554	477779	5639188	1801	26-Jul-12	Colin Bateman								
50	MacKenzie	697	Bornite Zone	N688316	VA12181554	481570	5639980	2116	27-Jul-12	Colin Bateman								
51	MacKenzie	697	Bornite Zone	N688317	VA12181554	481137	5639933	2141	27-Jul-12	Colin Bateman								
52	MacKenzie	697	Bornite Zone	N688318	VA12181554	480623	5640113	2131	27-Jul-12	Colin Bateman								
53	MacKenzie	697	Bornite Zone	N688319	VA12181554	480209	5640281	2087	27-Jul-12	Colin Bateman								
54	MacKenzie	697	Bornite Zone	N688320	VA12181554	480582	5641272	2055	27-Jul-12	Colin Bateman								
55	MacKenzie	697	Bornite Zone	N688321	VA12181554	481964	5640972	2075	27-Jul-12	Colin Bateman								
56	MacKenzie	697	Tillworth	N688322	VA12181554	480961	5643712	2002	28-Jul-12	Colin Bateman								
57	MacKenzie	697	Tillworth	N688323	VA12181554	481697	5643596	1982	28-Jul-12	Colin Bateman								
58	MacKenzie	697	Tillworth	N688324	VA12181554	481874	5643406	2008	28-Jul-12	Colin Bateman								
59	MacKenzie	697	Tillworth	N688325	VA12181554	482682	5643218	2000	28-Jul-12	Colin Bateman								
60	MacKenzie	697	Tillworth	N688326	VA12181554	483262	5643418	1831	28-Jul-12	Colin Bateman								
61	MacKenzie	697	Tillworth	N688327	VA12181554	483386	5643389	1811	28-Jul-12	Colin Bateman								
62	MacKenzie	697	Tillworth	N688328	VA12181554	484318	5642719	1806	28-Jul-12	Colin Bateman								
63	MacKenzie	697	Breccia Zone	N688329	VA12181554	489683	5637766	1919	29-Jul-12	Colin Bateman								
64	MacKenzie	697	Breccia Zone	N688330	VA12181554	489693	5638405	1852	29-Jul-12	Colin Bateman								
65	MacKenzie	697	Breccia Zone	N688331	VA12181554	489734	5638396	1859	29-Jul-12	Colin Bateman								
66	MacKenzie	697	Breccia Zone	N688332	VA12181554	490069	5638902	1759	29-Jul-12	Colin Bateman								
67	MacKenzie	697	Breccia Zone	N688333	VA12181554	489079	5638554	1896	29-Jul-12	Colin Bateman								
68	MacKenzie	697	Breccia Zone	N688334	VA12181554	489576	5637488	1948	29-Jul-12	Colin Bateman								
69	MacKenzie	697	Breccia Zone	N688335	VA12181554	492234	5635811	2025	30-Jul-12	Colin Bateman								
70	MacKenzie	697	Breccia Zone	N688336	VA12181554	492261	5635829	2028	30-Jul-12	Colin Bateman								
71	MacKenzie	697	Breccia Zone	N688337	VA12181554	492114	5636181	1991	30-Jul-12	Colin Bateman								
72	MacKenzie	697	Breccia Zone	N688338	VA12181554	491596	5636481	1931	30-Jul-12	Colin Bateman								
73	MacKenzie	697	Breccia Zone	N688339	VA12181554	491614	5636510	1924	30-Jul-12	Colin Bateman								
74	MacKenzie	697	Breccia Zone	N688340	VA12181554	491404	5636984	1903	30-Jul-12	Colin Bateman								
75	MacKenzie	697	Breccia Zone	N688341	VA12181554	491589	5636946	1891	30-Jul-12	Colin Bateman								
76	MacKenzie	697	Breccia Zone	N688342	VA12181554	491610	5637117	1885	30-Jul-12	Colin Bateman								
77	MacKenzie	697	Breccia Zone	N688343	VA12181554	491576	5637262	1873	30-Jul-12	Colin Bateman								
78	MacKenzie	697	Tillworth	N688344	VA12181554	487004	5636582	2087	31-Jul-12	Colin Bateman								
79	MacKenzie	697	Tillworth	N688345	VA12181554	487549	5636463	2067	31-Jul-12	Colin Bateman								
80	MacKenzie	697	Tillworth	N688346	VA12181554	487551	5636468	2066	31-Jul-12	Colin Bateman								
81	MacKenzie	697	Tillworth	N688347	VA12181554	487480	5636352	2059	31-Jul-12	Colin Bateman								
82	MacKenzie	697	Tillworth	N688348	VA12181554	487064	5635857	2059	31-Jul-12	Colin Bateman								
83	MacKenzie	697	Tillworth	N688349	VA12181554	487797	5634686	2042	31-Jul-12	Colin Bateman								
84	MacKenzie	697	Tillworth	N688350	VA12181554	487750	5634602	2017	31-Jul-12	Colin Bateman								
85	MacKenzie	697	Tillworth	N688103	VA12191683	485591	5639397	1984	01-Aug-12	Colin Bateman								
86	MacKenzie	697	Tillworth	N688104	VA12191683	484992	5639338	1985	01-Aug-12	Colin Bateman								
87	MacKenzie	697	Tillworth	N688105	VA12191683	484101	5638340	2053	01-Aug-12	Colin Bateman								
88	MacKenzie	697	Tillworth	N688106	VA12191683	483939	5637811	2071	01-Aug-12	Colin Bateman								
89	MacKenzie	697	Tillworth	N688107	VA12191683	484119	5637419	2055	01-Aug-12	Colin Bateman								
90	MacKenzie	697	Tillworth	N688108	VA12191683	484475	5636734	2028	01-Aug-12	Colin Bateman								
91	MacKenzie	697	Tillworth	N688109	VA12191683	484473	5636806	2028	01-Aug-12	Colin Bateman								
92	MacKenzie	697	Tillworth	N688110	VA12191683	484441	5636488	2030	01-Aug-12	Colin Bateman								

MACKENZIE SILT SAMPLE DATA SHEET page 2 to 3

N3 #	Location	Project No	Mineralized Zone	ALS_ID	Site Geology	Notes	Au_ppm	Ag_ppm	Al_%	As_ppm	Ba_ppm	Be_ppm	Bi_ppm	Ca_%	Cd_ppm	Ce_ppm	Co_ppm	Cr_ppm	Cs_ppm	Cu_ppm	Fe_%	Ga_ppm	Ge_ppm	Hf_ppm	Hg_ppm	In_ppm
1	MacKenzie	697	Breccia Zone	M487701	intrusive talus and float at site		0.01	0.1	8.2	13.1	520	1.12	0.12	3.19	0.1	50.3	20.4	36	5.85	105.5	4.96	18.2	0.12	1.4	0.23	0.064
2	MacKenzie	697	Breccia Zone	M487702	intrusive float		0.004	0.03	7.69	5.3	440	0.93	0.04	4.16	0.05	71.6	18.7	96	2.51	25.7	7.46	16.95	0.17	1.7	4.87	0.088
3	MacKenzie	697	Breccia Zone	M487703	intrusive talus		0.003	0.03	8.17	5.1	520	0.95	0.04	3.77	0.03	48	16.2	44	2.95	30.9	4.86	16.25	0.13	1.1	0.86	0.063
4	MacKenzie	697	Breccia Zone	M487704	creek drains prominent gossan, ~500m uphill of sample. Mainly intrusive float, some gossan – quartz carbonate veining w/ very minor cpy, malachite.		0.013	0.09	7.02	10.5	470	0.91	0.09	4.2	0.06	59.3	20	67	3.03	47.9	6.19	15.45	0.13	1.4	0.05	0.068
5	MacKenzie	697	Breccia Zone	M487705	creek drains prominent gossan, ~500m uphill of sample. Mainly intrusive float, some gossan – quartz carbonate veining w/ very minor cpy, malachite.		0.005	0.04	7.35	5.1	490	0.85	0.05	3.22	0.05	50.2	19.3	73	2.48	41.8	6.64	15.65	0.14	1.2	0.04	0.066
6	MacKenzie	697	Breccia Zone	M487706	intrusive float, lots of pumice in sediment.		0.005	0.09	7.12	12.2	530	1.09	0.08	2.63	0.12	43.8	15.8	38	5.12	76.9	4.76	16.1	0.12	1.6	1.10	0.063
7	MacKenzie	697	Breccia Zone	M487707	all intrusive float. Large gossan on peak to SW		0.009	0.04	6.92	7.6	460	0.86	0.06	3.69	0.07	56	18.1	128	1.8	25	9.76	16.8	0.12	1.3	0.05	0.074
8	MacKenzie	697	Breccia Zone	M487708	intrusive float		0.025	0.05	6.94	9.4	450	0.86	0.06	3.39	0.08	55.2	21.9	192	2.76	30.7	13.4	17.15	0.17	1.5	0.30	0.07
9	MacKenzie	697	Breccia Zone	M487709	intrusive float		0.004	0.05	7.9	7.9	560	0.88	0.05	4.04	0.04	58.7	17.8	53	3.08	62.2	5.57	16.9	0.12	1.1	0.05	0.078
10	MacKenzie	697	Breccia Zone	M487710	intrusive float		0.004	0.05	7.72	7	530	0.91	0.05	3.88	0.06	57.7	17.4	94	2.26	47.9	7.66	16.25	0.15	1.1	0.27	0.081
11	MacKenzie	697	Breccia Zone	M487711			0.009	0.11	6.64	8.9	510	0.83	0.05	3.59	0.08	55.8	18.9	89	3.27	35.1	7.79	17.7	0.21	1.3	0.17	0.069
12	MacKenzie	697	Breccia Zone	M487712	intrusive float		0.007	0.09	6.65	6.2	490	0.92	0.04	3.4	0.05	45.4	13.8	41	1.5	48.5	4.27	17	0.18	0.9	0.04	0.048
13	MacKenzie	697	Breccia Zone	M487713	intrusive float. Gossan uphill (SE) or sie.	field sifted to -20 mesh; re-sifted to -100 later.	0.001	0.07	7.56	10.3	560	0.82	0.07	2.78	0.07	51.7	12.7	88	3.03	18.9	6.63	16.3	0.21	1.1	0.17	0.05
14	MacKenzie	697	Breccia Zone	M487714		field sifted to -20 mesh; re-sifted to -100 later.	0.002	0.13	5.56	13.7	410	0.57	0.08	2.15	0.06	62.1	15.6	283	2.32	15.7	16.7	14.8	0.29	1.2	8.30	0.044
15	MacKenzie	697	Breccia Zone	M487715	bull quartz and gossanous float; no visibile mineralization	field sifted to -20 mesh; re-sifted to -100 later.	0.003	0.06	7.81	9.9	620	0.87	0.05	3.16	0.08	51.9	16.3	38	3.41	29.5	4.89	17.45	0.2	0.9	0.22	0.061
16	MacKenzie	697	Breccia Zone	M487716	drains gossan. Intrusive float.	field sifted to -20 mesh; re-sifted to -100 later.	0.007	0.12	7.44	27.9	490	1.13	0.1	2.53	0.14	50	18.3	36	9.42	44.2	5.24	18.95	0.21	1.6	0.07	0.059
17	MacKenzie	697	Breccia Zone	M487717		field sifted to -20 mesh; re-sifted to -100 later.	0.003	0.1	6.45	11.8	470	0.69	0.09	2.67	0.05	64.9	14	186	2.37	13.1	11.7	15.05	0.24	1.4	0.13	0.051
18	MacKenzie	697	Breccia Zone	M487718	mixed float: intrusive, schist, volcanic, f-porph, quartz, qtz-carb-py	-100 mesh	0.003	0.12	8.14	29.5	420	0.75	0.02	3.81	0.11	40	26.5	62	8.26	64.3	8.54	18.8	0.2	1	0.24	0.067
19	MacKenzie	697	Breccia Zone	M487719	all intrusive float. Breccia/pophyry dyke uphill to N		0.004	0.14	8.04	11.7	430	0.84	0.2	4.2	0.15	41.7	22	75	3.33	54.5	6.03	19.15	0.18	1.1	0.06	0.074
20	MacKenzie	697	Breccia Zone	M487720	drains breccia/porphyry dyke area. Gossanous float, qtz/carb veining, bull qtz, minor py in propylitic altered diorite.		0.003	0.09	8.77	18.7	270	0.57	0.02	4.92	0.13	22.3	38.7	272	12.45	59	9.09	18.1	0.11	1.2	3.19	0.05
21	MacKenzie	697	Breccia Zone	M487721			0.003	0.08	8.6	18.1	300	0.67	0.03	4.08	0.11	21.6	32.7	90	10.25	70.5	8	19.9	0.18	1.2	0.08	0.057
22	MacKenzie	697	Breccia Zone	M487724			0.003	0.1	6.7	10	440	0.71	0.06	3.35	0.07	50.5	17.6	174	3.53	24.5	11.55	16.7	0.23	1.3	0.10	0.065
23	MacKenzie	697	Breccia Zone	M487725	intrusive float		0.003	0.05	7.54	6.5	540	0.82	0.06	3.35	0.07	43.8	12.6	72	2.17	34.6	5.8	16.5	0.2	0.9	0.04	0.049
24	MacKenzie	697	Breccia Zone	M487726	intrusive float		0.002	0.08	6.25	11.4	520	1.08	0.07	2.76	0.09	43.1	16.6	50	3.27	49.3	5.54	17.1	0.21	1.5	0.04	0.052
25	MacKenzie	697	Breccia Zone	M487727	intrusive float	DUPLICATE T026	0.002	0.06	7.66	5.3	450	0.82	0.04	4.05	0.06	45.5	13.7	54	1.33	17.7	5.9	15.95	0.21	1.1	1.18	0.063
26	MacKenzie	697	Breccia Zone	M487728	intrusive float	DUPLICATE T025	0.003	0.05	7.63	4.6	430	0.85	0.03	3.99	0.06	46.9	13.4	47	1.2	17	5.49	15.85	0.21	1	0.17	0.064
27	MacKenzie	697	Breccia Zone	M487729	intrusive float; some rusty pebbles. Cpy in talus uphill to W.	100m upstream of old prospector cabin	0.002	0.11	6.33	4.5	330	0.68	0.04	3.68	0.07	51.1	15.7	180	0.89	17.9	14.4	15.05	0.27	1.2	0.08	0.07
28	MacKenzie	697	Breccia Zone	M487730	intrusive float		0.002	0.06	7.37	4.3	410	0.76	0.03	3.9	0.07	45.4	13.8	69	1.16	15.2	7.11	15.4	0.18	1	0.10	0.066
29	MacKenzie	697	Breccia Zone	M487731	IGD float, gossanous frac's. Qtz-carb boulders w/ gossan; no visible sulphide		0.008	0.08	7.75	7.2	580	1	0.04	2.77	0.09	44.6	17.2	28	5.37	74.7	4.26	17.5	0.2	1.3	0.05	0.055
30	MacKenzie	697	Breccia Zone	M487732	very minor cpy fleck in IGD o/c (waterfall) just above sample		0.002	0.06	7.75	4.1	430	0.84	0.03	4.01	0.06	41.1	11.8	35	0.96	19.2	4.43	15.45	0.19	0.8	0.05	0.061
31	MacKenzie	697	Breccia Zone	M487733	diorite o/c, locally highly altered (clay/chlorite). Volcanic, qtz-carb, f.porph in float.		0.028	0.36	8.3	26.9	310	0.71	0.03	3.81	0.13	25.1	44.3	108	9.72	98.6	8.61	18.65	0.2	1.2	0.20	0.053
32	MacKenzie	697	Breccia Zone	M487734	mixed float, mainly intrusive		0.003	0.15	8.21	15.6	310	0.62	0.02	4.3	0.13	34.4	32.5	89	10.95	73.1	9.88	19.5	0.22	1.2	0.15	0.07
33	MacKenzie	697	Breccia Zone	M487735	all float gossanous qtz-carb / breccia.		0.012	0.13	9.15	23.8	1630	0.86	0.04	1.89	0.1	37.6	27.8	54	25.1	62.3	6.73	20.4	0.21	0.9	0.35	0.048
34	MacKenzie	697	Breccia Zone	M487736	varied float, mainly volcanic and intrusive. Drains back of breccia/porph dyke zone		0.008	0.11	8.26	34.3	300	0.8	0.04	3.87	0.15	34.1	32.5	102	9.68	91.6	9.87	21.4	0.25	1.5	0.21	0.07
35	MacKenzie	697	Breccia Zone	M487737	Intrusive / volcanic float.		0.004	0.11	7.96	13.1	270	0.6	0.03	4.54	0.12	29.6	32.3	101	4.12	71.1	10.8	19.7	0.22	1.2	0.06	0.064
36	MacKenzie	697	Breccia Zone	M487738			0.002	0.1	7.74	7.3	250	0.55	0.02	4.84	0.08	31.4	29.8	124	1.87	63.5	11.9	19.15	0.24	1.1	0.12	0.059
37	MacKenzie	697	Bornite Zone	N688303			0.005	0.04	6.95	2.9	320	0.69	0.18	4.24	0.1	77.4	17.9	107	1.17	26.9	10.9	17.9	0.22	1.4		0.077
38	MacKenzie	697	Bornite Zone	N688304			0.004	0.03	8.04	2.6	390	0.65	0.13	4.21	0.08	55.1	14.1	52	1.29	17.6	6.38	17.5	0.18	1		0.063
39	MacKenzie	697	Bornite Zone	N688305			0.003	0.05	7.96	4.9	480	0.94	0.23	3.06	0.22	39.6	18.1	40	3.86	63.5	5.66	21.3	0.17	0.9		0.07
40	MacKenzie	697	Bornite Zone	N688306			0.005	0.07	8.27	6.5	530	1.16	0.28	2.21	0.23	35.6	18.1	26	6.62	105	4.03	23.7	0.16	0.7		0.059
41	MacKenzie	697	Bornite Zone	N688307			0.004	0.09	8.25	8.4	480	1.2	0.3	2.13	0.22	41.9	15.9	27	7.1	86.1	4.02	22.7	0.19	0.9		0.056
42	MacKenzie	697	Bornite Zone	N688308			0.002	0.21	8.22	6.6	560	1.14	0.17	1.74	0.2	44.4	13.1	20	4.99	38.6	3.68	22.1	0.19	1		0.046
43	MacKenzie	697	Bornite Zone	N688309			0.001	0.03	7.61	3	360	0.75	0.15	4.35	0.09	65.1	14.7	58	1.16	17.7	6.84	17.3	0.19	1.1		0.075
44	MacKenzie	697	Bornite Zone	N688310			0.001	0.09	7.62	7.5	430	0.89	0.13	3.56	0.11	40.3	13.8	32	1.82	26.3	3.91	18.15	0.17	1.1		0.062
45	MacKenzie	697	Bornite Zone	N688311			0.024	0.04	7.25	4.6	540	1.15	0.13	2.07	0.06	50.5	7.4	22	2.32	36.7	3.48	17	0.19	1.2		0.03
46	MacKenzie	697	Bornite Zone	N688312			0.003	0.03	7.42	5.3	480	1.61	0.09	1.09	0.04	32.6	4.3	11	4.35	12.4	2.53	20.3	0.18	1.1		0.022
47	MacKenzie	697	Bornite Zone	N688313			0.008	0.05	7.84	3.1	460	0.99	0.15	3.38	0.07	39.6	11.2	29	1.79	32.2	4.05	17.85	0.18	0.9		0.052
48	MacKenzie	697	Bornite Zone	N688314			0.003	0.12	8.52	12.5	530	1.34	0.21	1.98	0.16	36.1	15.9	41	9.71	54.9	3.96	21.4	0.18	1.5		0.049
49	MacKenzie	697	Bornite Zone	N688315			0.002	0.07	7.73	5.7	580	1.26	0.16	2.02	0.1	43.5	10.3	30	5.12	26.9	3.64	19.95	0.18	1.1		0.041
50	MacKenzie	697	Bornite Zone	N688316			0.004	0.04	7.73	3.8	510	0.82	0.14	3.57	0.07	46.4	13.5	27	1.85	31.4	3.78	17.8	0.2	0.9		0.057
51	MacKenzie	697	Bornite Zone	N688317			0.002	0.1	7.19	4	440	0.77	0.19	3.97	0.06	63.3	14.1	69	1.08	26.9	6.67	16.4	0.21	1.2		0.063
52	MacKenzie	697	Bornite Zone	N688318			0.004	0.04	7.69	3.5	550	0.84	0.13	3.17	0.09	44.3	13.5	43	1.97	36.4	4.38	17.6	0.18	0.9		0.052
53	MacKenzie	697	Bornite Zone	N688319			0.004	0.06	7.77	5.2	490	0.8	0.12	3.8	0.12	50.9	14.9	36	2.04	28.4	4.95	17.55	0.18	1.2		0.066
54	MacKenzie	697	Bornite Zone	N688320			0.003	0.08	7.86	8.4	470	0.76	0.16	3.5	0.12	47.9	20	57	2.36	57.1	4.87	19	0.17	1.1		0.074
55	MacKenzie	697	Bornite Zone	N688321			0.003	0.09	6.65	9.1	440	0.85	0.13	2.65	0.12	45.6	14.4	45	3.09	43.4	3.99	17.95	0.16	1.2		0.06
56	MacKenzie	697	Tillworth	N688322			0.002	0.04	7.66	6	480	0.76	0.14	3.42	0.07	57.3	14.7	70	2.28	46.3	5.69	18.25	0.19	1.1		0.066
57	MacKenzie	697	Tillworth	N688323			0.003	0.05	7.36	6.7	440	1.13	0.16	2.5	0.08	50.5	14.8	63	5.86	41.5	4.37	18.55	0.18	1.2		0.066
58	MacKenzie	697	Tillworth	N688324			0.002	0.04	6.7	6.3	530	0.74	0.14	2.9	0.05	52	11.2	58	1.69	27.2	4.28	17.1	0.18	0.9		0.058
59	MacKenzie	697	Tillworth	N688325			0.002	0.03	6.49	12.5	490	0.85	0.12	2.53	0.06	40	14.1	52	3.93	37.6	3.98	18.3	0.17	1.3		0.063
60	MacKenzie	697	Tillworth	N688326			0.002	0.06	6.19	5.4	540	0.72	0.11	2.91	0.04	42.8	9.4	51	1.8	25.2	4.14	15.9	0.18	0.8		0.05
61	MacKenzie	697	Tillworth	N688327			0.003	0.07	7.35	6.3	530	0.73	0.14	3.38	0.05	64.7	11.1	66	1.36	25.6	5.2	16.3	0.22	1		0.063
62	MacKenzie	697	Tillworth	N688328			0.002	0.04	7.31	6.6	510	0.78	0.14	3.52	0.05	84.6	11.4	82	1.41	28.5	6.07	16.95	0.22	1.2		0.066
63	MacKenzie	697	Breccia Zone	N688329			0.034	0.04	8.16	5	500	0.8	0.13	3.58	0.06	46.3	11.3	43	1.89	27.1	4.83	17	0.18	0.9		0.056
64	MacKenzie	697	Breccia Zone	N688330			0.008	0.09	7.43	25.1	500	1.13	0.12	2.65	0.14	40.6	14.2	31	3.75	30.9	3.88	17.35	0.2	1.4		0.052
65	MacKenzie	697	Breccia Zone	N688331			0.011	0.06	7.59	6	490	0.66	0.12	3.46	0.06	44.7	12.5	44	2	26.5	4.68	17.6	0.16	0.9		0.055
66	MacKenzie	697	Breccia Zone	N688332			0.002	0.11	7.24	10.4	550	0.85	0.12	2.12	0.13	42.7	14.8	46	4.14	19.6	4.69	18.8	0.17	1.5		0.049
67	MacKenzie	697	Breccia Zone	N688333			0.007	0.09	7.59	14	590	1.02	0.15	2.19	0.11	32.3	14.1	29	5.67	38.7	3.52	20.4	0.15	1.5		0.052
68	MacKenzie	697	Breccia Zone	N688334			0.017	0.1	8.39	6.7	540	0.74	0.13	3.81	0.07	46.8	14.2	47	2.44	34.4	5.51	19.6	0.19	0.9		0.06
69	MacKenzie	697	Breccia Zone	N688335			0.002	0.07	7.58	8.3	630	0.73	0.13	3.15	0.08	54.6	9.6	33	1.52	25.6	3.15	17.85	0.18	0.9		0.049
70	MacKenzie	697	Breccia Zone	N688336			0.003	0.06	7.63	7.6	650	0.81	0.1	3.01	0.08	45.3	15.4	40	2.86	27.9	3.65	19.8	0.18	1		0.056
71	MacKenzie	697	Breccia Zone	N688337			0.002	0.07	7.04	10.9	530	0.85	0.08	2.53	0.06	44.3	16	62	3.06	12.7	5.83	18	0.2	1.6		0.053
72	MacKenzie	697	Breccia Zone	N688338			0.005	0.09	7.29	6.7	430	0.65	0.12	3.68	0.08	60.6	13.6	89	1.45	24.8	7.85	17.6	0.23	1.2		0.063
73	MacKenzie	697	Breccia Zone	N688339			0.005	0.11	7.71	7.1	470	0.73	0.12	3.8	0.07	59.5	13.7	69	1.61	26.2	6.51	18.8	0.21	1		0.067
74	MacKenzie	697	Breccia Zone	N688340			0.003	0.09	7.41	9.1	430	0.73	0.12	3.65	0.08	68.1	14.9	87	2.07	22.2	7.8	18.85	0.25	1.2		0.064
75	MacKenzie	697	Breccia Zone	N688341			0.003	0.06	7.87	7	520	0.68	0.18	3.56	0.06	43.6	11.2	38	1.67	24.2	4.12	18.55	0.17	0.8		0.05
76	MacKenzie	697	Breccia Zone	N688342			0.002	0.06	7.42	9.4	620	0.84	0.14	3.05	0.06	53.7	11.7	36	2.1	23.9	3.49	19.05	0.2	1		0.054
77	MacKenzie	697	Breccia Zone	N688343			0.004	0.07	7.55	15.3	610	0.83	0.05	2.28	0.08	43.2	17.2	39	8.96	27.7	4.29	20.4	0.18	1		0.059
78	MacKenzie	697	Tillworth	N688344			0.004	0.08	6.69	7.7	450	0.82	0.13	2.76	0.1	48.1	16.8	41	4.36	67.9	4.74	19.45	0.2	1.4		0.056
79	MacKenzie	697	Tillworth	N688345			0.035	0.12	7.73	9.3	500	0.79	0.14	3.45	0.12	52	17.5	49	2.92	52	5.86	20.7	0.21	1.1		0.07
80	MacKenzie	697	Tillworth	N688346			0.035	0.13	7.52	8.9	480	0.76	0.16	3.29	0.12	42.3	17.3	46	3	53.8	5.58	20.6	0.21	1.1		0.07
81	MacKenzie	697	Tillworth	N688347			0.002	0.11	7.23	6.8	420	0.65	0.09	3.57	0.08	55.8	14.7	79	1.67	28.5	8.24	17.75	0.24	0.9		0.058
82	MacKenzie	697	Tillworth	N688348			0.005	0.09	7.68	9.2	530	0.88	0.13	3.13	0.09	40.5	15.2	34	2.44	31	3.58	21.6	0.17	1.1		0.061
83	MacKenzie	697	Tillworth	N688349			0.003	0.1	7.79	15.1	480	1.04	0.11	2.87	0.11	39.2	17.1	31	3.25	48.1	4.69	23.3	0.18	1.4		0.064
84	MacKenzie	697	Tillworth	N688350			0.002	0.09	8.03	4.6	410	0.77	0.1	4.34	0.09	51.3	19.2	50	2.2	37.9	6.78	20.2	0.22	1.3		0.073
85	MacKenzie	697	Tillworth	N688103			0.002	0.07	7.65	4.1	610	0.71	0.14	4	0.08	56.6	11.8	51	0.96	31.3	5.94	17.9	0.21	1		0.06
86	MacKenzie	697	Tillworth	N688104			0.004	0.09	7.75	7.6	430	0.75	0.17	3.81	0.13	59.5	20.6	72	2.14	58.5	7.96	21.1	0.24	1.3		0.071
87	MacKenzie	697	Tillworth	N688105			0.004	0.06	8.1	3.5	510	0.79	0.12	3.45	0.08	41.6	16.1	36	1.68	48.8	4.79	19.4	0.19	1.1		0.057
88	MacKenzie	697	Tillworth	N688106			0.002	0.07	7.27	5.7	380	0.66	0.13	4.08	0.09	59.3	18.2	66	1.86	37.4	8.02	19.05	0.25	1.2		0.071
89	MacKenzie	697	Tillworth	N688107			0.003	0.1	6.61	6.2	450	0.72	0.14	3.09	0.09	42	15.5	51	1.8	60.3	5.71	18.15	0.19	1		0.06
90	MacKenzie	697	Tillworth	N688108			0.002	0.08	7.32	6	500	0.74	0.18	3.56	0.08	62.5	14.6	51	1.78	54	6.03	18.45	0.23	1.5		0.06
91	MacKenzie	697	Tillworth	N688109			0.002	0.09	7.65	7.1	520	0.79	0.13	3.05	0.13	50.4	17.4	43	2.49	52.1	5.4	19.5	0.2	1.4		0.054
92	MacKenzie	697	Tillworth	N688110			0.003	0.24	7.53	5.5	520	0.8	0.15	3.17	0.08	56.2	15.5	48	2.71	56.2	5.51	19	0.22	1.4		0.053

MACKENZIE SILT SAMPLE DATA SHEET page 3 to 3

N3 #	Location	Project No	Mineralized Zone	ALS_ID	K_%	La_ppm	Li_ppm	Mg_%	Mn_ppm	Mo_ppm	Na_%	Nb_ppm	Ni_ppm	P_ppm	Pb_ppm	Rb_ppm	Re_ppm	S_%	Sb_ppm	Sc_ppm	Se_ppm	Sn_ppm	Sr_ppm	Ta_ppm	Te_ppm	Th_ppm	Ti_%	Tl_ppm	U_ppm	V_ppm	W_ppm	Y_ppm	Zn_ppm	Zr_ppm
1	MacKenzie	697	Breccia Zone	M487701	1.58	21.9	51.3	2.1	902	4.28	2.23	6.3	28.7	1150	11.1	62.6	0.003	0.02	4.79	20.8	1	1.5	411	0.49	0.11	8.7	0.505	0.35	14.7	150	7.2	26.6	86	32.8
2	MacKenzie	697	Breccia Zone	M487702	1.36	31.1	24.2	1.97	925	2.47	2.41	5.6	24	1720	4.7	38.3	0.003	0.005	3.48	26.9	0.5	1.8	427	0.44	0.07	18.4	0.486	0.23	8.9	272	3.4	39.6	63	24.3
3	MacKenzie	697	Breccia Zone	M487703	1.51	19.2	28.7	1.87	813	2.89	2.52	4.5	21	1170	5	44.2	0.004	0.005	3.68	21.1	0.5	1.3	445	0.39	0.025	6.6	0.426	0.28	6.6	158	23.9	28.2	60	15.1
4	MacKenzie	697	Breccia Zone	M487704	1.63	24.9	14.8	1.7	854	1.88	2.08	5.4	24.5	1320	4.6	55.6	0.003	0.01	1.14	20.3	1	1.4	361	0.47	0.12	16.3	0.517	0.29	5.6	237	1.6	33.1	57	22.7
5	MacKenzie	697	Breccia Zone	M487705	1.59	24	17.5	1.89	813	1.14	2.22	5.1	23.9	990	4.3	55.1	0.006	0.01	1.13	20.2	0.5	1.2	391	0.43	0.08	9.1	0.498	0.28	3.1	255	0.9	27.8	60	19.4
6	MacKenzie	697	Breccia Zone	M487706	1.58	21.3	33.1	1.53	741	4.19	2.08	6.2	21	1090	8.8	57.2	0.003	0.03	2.13	16.6	1	1.3	360	0.51	0.07	9.7	0.465	0.34	51.5	152	2.4	23.8	70	37.2
7	MacKenzie	697	Breccia Zone	M487707	1.18	26.1	13.3	1.5	852	2.37	2.34	5.5	21.1	1440	5.9	32.7	0.005	0.02	1.65	21.3	2	1.6	428	0.43	0.05	8.3	0.47	0.2	14.3	387	9.1	29.8	66	19.6
8	MacKenzie	697	Breccia Zone	M487708	1.27	23.6	19	1.73	997	2.3	2.04	5.5	26	1340	6.5	39.6	0.004	0.02	2.39	21.5	2	1.5	384	0.46	0.11	23.1	0.557	0.25	57.6	543	1.8	32.8	80	20.1
9	MacKenzie	697	Breccia Zone	M487709	1.5	25.5	14.4	1.88	831	1.97	2.39	7.7	22.1	1480	5.9	44.9	0.002	0.01	2.13	23.3	1	1.9	438	0.66	0.06	9	0.642	0.32	6.7	207	2.5	34.7	65	13.5
10	MacKenzie	697	Breccia Zone	M487710	1.42	24.2	13.9	1.68	829	1.58	2.41	6.1	20.6	1410	5.4	38.3	0.008	0.01	2.22	21.1	2	1.5	444	0.51	0.09	13.6	0.546	0.22	7.4	304	2.1	29.7	64	13.8
11	MacKenzie	697	Breccia Zone	M487711	1.36	23.8	19.2	1.79	921	2.31	2.09	7.6	22.3	1440	5.6	37.1	0.001	0.01	2.58	23.7	2	1.8	387	0.6	0.025	18.6	0.614	0.27	11.5	293	2.6	33.5	74	20.7
12	MacKenzie	697	Breccia Zone	M487712	1.18	13.7	12	1.29	602	7.31	2.37	4.5	18.8	810	5.2	22.9	0.001	0.02	1.06	17.6	2	1.2	451	0.32	0.025	5	0.386	0.18	10.3	152	3.9	22.9	44	17.8
13	MacKenzie	697	Breccia Zone	M487713	1.43	23.2	14.2	1.2	605	1.37	2.6	5.5	17.7	1220	6.9	37.5	0.001	0.01	5.18	16.1	2	1.3	447	0.5	0.025	5.6	0.397	0.23	3.1	226	1.1	23.5	59	14.3
14	MacKenzie	697	Breccia Zone	M487714	1.08	29.5	11.1	0.98	628	2.25	1.9	5.3	23.8	1410	6.4	25.5	0.001	0.005	6.61	12.8	2	1.5	333	0.46	0.025	23.4	0.412	0.17	9.5	587	16.9	21.2	68	16.2
15	MacKenzie	697	Breccia Zone	M487715	1.47	22.1	16.4	1.54	743	1.57	2.36	7.5	19.1	1520	6.6	43.5	0.002	0.01	3.3	19.3	2	1.6	423	0.52	0.025	4.5	0.511	0.27	3.6	164	1.2	30.9	69	15.2
16	MacKenzie	697	Breccia Zone	M487716	1.38	22.2	30.6	1.64	884	4.25	2.03	8.6	25.1	1340	10.6	46.4	0.002	0.03	4.09	18.5	3	1.5	375	0.59	0.025	5.3	0.611	0.3	18.3	166	5.9	26.7	107	45
17	MacKenzie	697	Breccia Zone	M487717	1.22	30	11.6	1.15	609	1.61	2.2	6.3	20.9	1850	6.5	29.6	0.001	0.01	5.33	15	2	1.6	392	0.56	0.025	55.1	0.45	0.18	10.9	401	1.1	25.7	63	17.8
18	MacKenzie	697	Breccia Zone	M487718	0.99	15.9	22.2	2.08	1140	0.97	1.92	5.1	27.4	1770	5.3	31.8	0.001	0.04	7.85	24.4	2	1.3	447	0.3	0.025	2	0.722	0.17	1.1	315	2.2	25.7	93	17.8
19	MacKenzie	697	Breccia Zone	M487719	0.94	17.2	17.4	2.3	992	1.1	2.39	5.1	34.2	1720	6.8	15.1	0.001	0.01	2.87	26	2	1.3	487	0.33	0.11	4.2	0.554	0.17	2.9	213	1.5	26.3	90	21.9
20	MacKenzie	697	Breccia Zone	M487720	0.51	8.8	24.4	3.35	1020	0.65	1.81	2.7	92	1610	3.9	9	0.001	0.02	9.71	24.1	1	0.7	569	0.15	0.025	1	0.653	0.09	0.5	362	1.1	11.9	93	30.5
21	MacKenzie	697	Breccia Zone	M487721	0.49	8.2	24.3	2.65	1020	0.8	1.96	3.5	51	1580	3.9	6.9	0.001	0.02	6.63	24.4	2	0.8	544	0.18	0.025	0.9	0.665	0.09	0.5	305	0.5	14.1	100	31.3
22	MacKenzie	697	Breccia Zone	M487724	1.06	21.1	14	1.59	787	1.58	1.96	7.8	25	1190	5.9	28.7	0.001	0.01	3.14	20.8	2	1.9	388	0.6	0.025	4.1	0.622	0.16	3.6	468	1.4	28.6	73	20.5
23	MacKenzie	697	Breccia Zone	M487725	1.21	20.4	12.3	1.29	596	1.44	2.5	5.2	18.9	840	6.9	33.5	0.002	0.01	1.66	16.7	2	1.2	500	0.42	0.025	5	0.404	0.18	4.4	204	0.8	23	51	14.5
24	MacKenzie	697	Breccia Zone	M487726	1.38	19.9	25.5	1.56	843	4.08	2.13	7.3	22.4	910	7.8	40.8	0.002	0.02	1.15	17.2	2	1.3	375	0.49	0.025	4.8	0.493	0.26	26.6	182	2.2	24.9	70	43.2
25	MacKenzie	697	Breccia Zone	M487727	1.08	19.5	10.8	1.55	830	1.1	2.48	4	13.2	1190	4.5	22.9	0.001	0.005	1.48	24.1	2	1.2	460	0.29	0.025	5.6	0.333	0.16	5.6	204	1.7	31.1	53	15.3
26	MacKenzie	697	Breccia Zone	M487728	1.06	20.8	9.8	1.5	798	1.36	2.47	3.7	12.4	1050	4.2	22	0.001	0.005	1.36	23.5	2	1.2	459	0.26	0.025	14.5	0.311	0.14	3.3	193	1.3	30.1	51	14.7
27	MacKenzie	697	Breccia Zone	M487729	0.83	22	6.8	1.45	967	0.79	2.03	4.3	15.2	1350	3.6	15.6	0.001	0.01	1.27	22.4	2	1.3	384	0.3	0.025	9.1	0.396	0.1	5.8	579	1.1	31.4	58	16.6
28	MacKenzie	697	Breccia Zone	M487730	1	19.9	9.3	1.52	849	0.78	2.36	3.7	12.9	1060	4	21.1	0.001	0.01	1.3	23.2	2	1.2	441	0.27	0.025	8.2	0.325	0.13	2.8	256	1.3	30.3	54	13.9
29	MacKenzie	697	Breccia Zone	M487731	1.76	19.3	30.2	1.78	711	2.04	2.05	5.8	21.4	980	5.4	60.3	0.001	0.01	1.78	20.4	2	1.4	375	0.43	0.025	6.3	0.452	0.33	13.7	131	2.2	28.5	61	24.8
30	MacKenzie	697	Breccia Zone	M487732	1.03	18	7.4	1.35	737	0.5	2.59	3.1	10.4	940	4.2	19.5	0.001	0.005	1.16	22.6	2	1	478	0.22	0.025	11.4	0.249	0.13	2.5	152	0.7	28.9	44	12.3
31	MacKenzie	697	Breccia Zone	M487733	0.52	9.9	22.3	3.47	1240	1.43	1.75	3.8	74.6	1320	7.1	10.2	0.001	0.03	5.12	23.9	2	0.8	493	0.22	0.025	1.3	0.606	0.11	0.7	292	0.6	16.6	101	30.5
32	MacKenzie	697	Breccia Zone	M487734	0.51	13.8	16.7	2.82	1180	1.08	1.96	4.7	37.7	2020	4.3	12.9	0.001	0.01	8.91	29.9	3	1	536	0.51	0.025	2.3	0.705	0.09	1.3	401	0.6	22.4	108	24.6
33	MacKenzie	697	Breccia Zone	M487735	0.9	14.6	40.7	1.09	1130	2.45	1.16	5.7	36.5	1020	7.1	47.9	0.001	0.06	25.7	17.9	3	1.3	387	0.31	0.05	3.7	0.626	0.19	2.1	249	3.3	18.2	99	21.5
34	MacKenzie	697	Breccia Zone	M487736	0.57	13.2	27.9	2.82	1200	1.74	1.74	6.1	49	1820	6.3	16.3	0.001	0.03	6.63	27.2	3	1.2	476	0.34	0.025	3.7	0.859	0.12	3.2	410	2	19.7	108	42.3
35	MacKenzie	697	Breccia Zone	M487737	0.49	11.9	17.4	3.08	1320	1.19	1.86	4.9	42.2	1400	4.5	13	0.001	0.03	3.89	27.5	3	1.1	530	0.29	0.025	1.6	0.843	0.08	3.2	451	1.2	19.2	103	26.7
36	MacKenzie	697	Breccia Zone	M487738	0.46	12.7	9.5	2.93	1220	0.83	1.94	4.2	39.8	1370	3.2	12	0.001	0.01	1.69	26.3	3	1	555	0.28	0.025	1.9	0.821	0.07	1.9	539	0.9	18.9	84	21
37	MacKenzie	697	Bornite Zone	N688303	0.8	36	9.6	1.77	970	3.11	2.43	7.8	21.3	2100	7.4	19.8	0.001	0.005	0.93	23.5	1	1.5	519	0.67	0.06	26.4	0.627	0.12	8.7	377	1	29	80	21.1
38	MacKenzie	697	Bornite Zone	N688304	0.89	28.1	10.4	1.65	804	1.72	2.87	5.7	16.8	1630	7.5	22.2	0.001	0.005	0.74	21	1	1.2	605	0.48	0.05	13.5	0.461	0.14	5.4	204	0.6	22.8	65	14.4
39	MacKenzie	697	Bornite Zone	N688305	1.29	19.3	33.7	1.98	931	1.12	2.47	5.4	22	2130	15.3	37.3	0.001	0.005	0.85	19.6	1	1.2	454	0.39	0.05	22.9	0.482	0.3	8.7	175	0.7	19	112	14.9
40	MacKenzie	697	Bornite Zone	N688306	1.54	15.5	46.6	1.75	961	0.83	2.37	4.6	21.3	1190	21.1	50.9	0.001	0.01	0.65	16.5	1	1	403	0.35	0.025	5.6	0.449	0.4	10.5	131	0.7	13.5	151	12.6
41	MacKenzie	697	Bornite Zone	N688307	1.6	19.3	41.1	1.47	887	1.04	2.41	5.5	20.2	1770	21.2	58.8	0.001	0.01	0.62	16.5	1	1.1	389	0.44	0.06	13.2	0.431	0.41	11.6	134	0.8	16.6	128	15.3
42	MacKenzie	697	Bornite Zone	N688308	1.86	22.1	33.8	1.27	645	0.7	2.52	5.3	14.6	1540	20.2	64.1	0.001	0.005	1.95	11.6	1	1.1	362	0.48	0.025	14.1	0.393	0.39	5.1	112	0.8	14	133	19.9
43	MacKenzie	697	Bornite Zone	N688309	0.85	33	9.8	1.74	865	2.02	2.69	6.6	17.4	1950	7.4	20.9	0.001	0.005	0.83	23	2	1.3	570	0.57	0.025	13.5	0.53	0.12	5.6	230	1.1	26.2	70	16.6
44	MacKenzie	697	Bornite Zone	N688310	0.82	19.4	17.6	1.57	775	2.25	2.47	5.8	17.7	960	8.8	23.9	0.001	0.05	0.56	19	2	1.2	557	0.41	0.025	4	0.465	0.16	5.9	136	1.9	19.5	71	24.2
45	MacKenzie	697	Bornite Zone	N688311	1.69	26	24.5	0.67	442	1.28	2.69	5.8	10	1310	12.4	48	0.001	0.01	0.88	9.1	1	1	408	0.51	0.025	13.2	0.312	0.25	9.3	105	0.7	15.6	44	22.9
46	MacKenzie	697	Bornite Zone	N688312	2.12	16.9	53.3	0.21	313	0.64	2.8	4.1	6.1	1150	17.3	69.1	0.001	0.02	3.32	3.9	1	0.8	358	0.31	0.025	6.1	0.193	0.41	8.3	72	0.5	6.8	39	24.5
47	MacKenzie	697	Bornite Zone	N688313	1.18	19.3	15.6	1.24	586	1.11	2.81	4.8	13.5	1390	10.7	31.9	0.001	0.005	0.5	15.7	1	1	546	0.41	0.025	10.2	0.384	0.19	5.2	135	0.6	18.2	59	15.5
48	MacKenzie	697	Bornite Zone	N688314	1.79	16.4	54.7	1.11	752	1.28	2.05	5.3	24.8	1280	16.7	63.8	0.001	0.02	2.01	13.1	1	0.9	487	0.38	0.025	5.4	0.448	0.38	9.4	129	1.3	12.8	108	41.7
49	MacKenzie	697	Bornite Zone	N688315	1.62	23.5	34.5	1.02	523	0.81	2.72	5.4	16.5	1760	14.9	53.6	0.001	0.02	1.29	9.8	1	1	466	0.41	0.025	6.8	0.387	0.31	7.5	113	0.5	12.3	84	25.9
50	MacKenzie	697	Bornite Zone	N688316	1.17	22.8	14.6	1.57	622	1.7	2.65	4.9	17.2	1490	8.1	31.9	0.001	0.005	1.33	19.5	2	1.1	557	0.39	0.025	7.7	0.448	0.2	4	130	1	20	62	14.2
51	MacKenzie	697	Bornite Zone	N688317	1.13	31	8.2	1.52	712	2.29	2.52	6.6	19.1	1680	7.9	29.1	0.001	0.03	0.67	20.6	1	1.4	538	0.58	0.025	12.1	0.511	0.16	5.1	217	0.7	25.2	60	21
52	MacKenzie	697	Bornite Zone	N688318	1.42	21.9	18	1.49	667	1.61	2.62	5.3	19.3	1130	9.9	41.3	0.001	0.01	0.58	15.6	1	1.1	524	0.44	0.025	16.9	0.423	0.25	17.9	141	0.7	17.7	64	17.1
53	MacKenzie	697	Bornite Zone	N688319	1.19	24.4	15.4	1.75	743	1.72	2.65	5.6	18.9	1850	11.8	33.2	0.001	0.005	0.63	21.6	1	1.2	551	0.47	0.05	15.5	0.485	0.21	6.5	166	0.7	23.2	84	17
54	MacKenzie	697	Bornite Zone	N688320	1	20.5	21	2.05	923	2.62	2.22	5.1	28.1	1950	9.5	28.8	0.001	0.04	0.82	23.4	2	1.2	503	0.34	0.025	5.6	0.529	0.23	4.2	161	2.1	22.1	92	24.3
55	MacKenzie	697	Bornite Zone	N688321	0.99	23.2	28.7	1.45	737	2.39	1.72	5.5	21	1770	10.9	36.8	0.001	0.08	0.67	18.4	2	1.1	387	0.41	0.025	6.2	0.451	0.21	4.4	137	0.9	20.4	84	29.3
56	MacKenzie	697	Tillworth	N688322	1.09	26.7	16.9	1.55	659	3.95	2.51	5.8	21.7	1320	9.7	32.2	0.001	0.01	0.87	19.2	2	1.2	567	0.53	0.025	11	0.471	0.21	5.9	184	15.2	23.6	67	20.1
57	MacKenzie	697	Tillworth	N688323	1.43	23.7	29.1	1.52	805	2.85	2.19	6.9	23.5	1330	11.8	46.6	0.001	0.02	1.05	18.6	1	1.4	411	0.58	0.025	11	0.467	0.3	5.1	144	1.4	22.6	74	21.9
58	MacKenzie	697	Tillworth	N688324	1.27	26	19.4	1.15	501	1.56	2.68	5.5	17.8	1900	9.9	21.7	0.001	0.01	1.24	16	1	1.2	511	0.51	0.025	10.3	0.428	0.21	5	155	1	19.2	56	13.7
59	MacKenzie	697	Tillworth	N688325	1.18	18.3	33.5	1.38	579	2.23	2.41	8.3	22.8	1520	11	21.7	0.001	0.01	1.55	15.3	2	1.3	448	0.61	0.025	6.3	0.524	0.24	3.9	140	1.1	16.5	74	32.3
60	MacKenzie	697	Tillworth	N688326	1.22	21.4	13.2	0.87	459	1.23	2.75	5	13.8	1150	8.7	19.3	0.001	0.01	1.3	12.8	1	1	536	0.46	0.025	9.7	0.35	0.19	3.3	142	0.6	15.8	44	12.6
61	MacKenzie	697	Tillworth	N688327	1.21	31.9	14.5	1.27	578	1.62	2.67	6.6	16	1900	9.4	29.6	0.001	0.005	1.33	18.6	2	1.3	566	0.59	0.025	24.5	0.485	0.18	8	174	1	24.7	57	15
62	MacKenzie	697	Tillworth	N688328	1.13	40.9	12.7	1.21	580	1.71	2.66	7.2	16.4	1850	8.8	28.4	0.001	0.005	1.29	19.3	1	1.4	582	0.62	0.025	12.9	0.486	0.16	4.6	192	0.8	26.4	54	19.7
63	MacKenzie	697	Breccia Zone	N688329	1	21.6	12.6	1.25	559	2.13	2.89	4.8	14.6	1390	8.1	26.1	0.001	0.01	1.86	16.2	1	1	653	0.39	0.06	7.8	0.385	0.16	3.4	149	3.4	19.5	50	15.6
64	MacKenzie	697	Breccia Zone	N688330	1.16	22.1	26.2	1.42	842	2.63	2.32	6.5	19.3	1200	11.6	34.3	0.001	0.05	1.36	15	2	1.1	468	0.47	0.025	5.1	0.454	0.22	12.4	131	1.7	19.2	91	39.1
65	MacKenzie	697	Breccia Zone	N688331	1	20.2	13.5	1.29	568	2.18	2.72	5	15.6	1390	7.8	25.5	0.001	0.01	1.98	17.4	1	1.1	604	0.37	0.025	6.2	0.399	0.16	3.3	142	1.6	17.7	53	15.3
66	MacKenzie	697	Breccia Zone	N688332	1.44	21.2	23.1	1.24	774	2.61	2.37	6.8	21	1070	11.9	39.9	0.001	0.03	1.6	14.7	1	1.4	412	0.55	0.025	7.8	0.486	0.27	7	149	1	16.8	90	34.7
67	MacKenzie	697	Breccia Zone	N688333	1.47	15.1	30	1.4	761	2.46	2.28	6.5	20	1120	13.9	43.8	0.001	0.04	1.73	15.1	1	1.2	413	0.47	0.025	5.1	0.422	0.3	6.6	113	1.8	14.3	90	42.1
68	MacKenzie	697	Breccia Zone	N688334	1.06	21	16	1.48	658	1.68	2.99	4.8	17.6	1560	8.3	25.6	0.001	0.02	2.12	19.2	2	1.1	682	0.35	0.06	6.1	0.433	0.18	2.8	160	1.1	17.5	61	15.9
69	MacKenzie	697	Breccia Zone	N688335	1.52	23.6	11.1	1.04	500	1.36	2.92	5.6	13.4	1500	10.6	30.8	0.001	0.005	2.04	17.4	1	1.2	510	0.58	0.025	9.2	0.335	0.2	3.6	98	0.5	21	44	12.8
70	MacKenzie	697	Breccia Zone	N688336	1.58	20.8	21.1	1.66	662	1.26	2.76	5.4	23	1340	9.2	33.3	0.001	0.005	4.27	19.6	1	1.3	506	0.43	0.025	7.6	0.433	0.25	4.4	121	0.7	17.3	72	19.4
71	MacKenzie	697	Breccia Zone	N688337	1.49	19.1	21.4	1.54	735	1.82	2.53	7.4	21.4	880	9.9	40.7	0.001	0.01	1.49	17.2	2	1.4	427	0.63	0.025	7.9	0.501	0.25	9	175	0.9	19.2	77	35.7
72	MacKenzie	697	Breccia Zone	N688338	0.91	26.3	10.5	1.34	650	1.7	2.58	5.9	16.8	1770	8.1	20.4	0.001	0.005	2.8	18.7	2	1.4	574	0.53	0.025	9.5	0.459	0.13	4.2	222	1.1	21.7	55	17.1
73	MacKenzie	697	Breccia Zone	N688339	0.99	27.4	11.3	1.39	659	1.73	2.76	5.6	17.1	1750	8.9	23.1	0.001	0.005	2.8	20	1	1.4	605	0.46	0.025	10.3	0.45	0.14	5	185	1	21.1	56	14.2
74	MacKenzie	697	Breccia Zone	N688340	0.93	32	12.6	1.41	689	1.89	2.59	6.6	19	1620	8.2	22.8	0.001	0.01	2.16	18.8	2	1.5	581	0.55	0.025	8.1	0.494	0.15	6.6	231	1.3	21.6	64	20.9
75	MacKenzie	697	Breccia Zone	N688341	1.07	19	12.2	1.21	548	1.36	2.93	4.7	14.3	1390	8.3	24.2	0.001	0.005	2.37	16.9	1	1.1	616	0.39	0.025	7.1	0.366	0.16	4.1	125	0.8	17.3	49	11.8
76	MacKenzie	697	Breccia Zone	N688342	1.53	23.8	15.2	1.21	545	1.56	2.8	5.8	16.6	1850	9.8	35.2	0.001	0.005	2.38	18.6	1	1.3	475	0.54	0.025	9.5	0.373	0.23	4.3	110	0.9	20.1	52	13.8
77	MacKenzie	697	Breccia Zone	N688343	1.64	19.3	32	1.44	914	3.35	2.19	6	20.2	890	8.7	49.4	0.001	0.01	5.72	19.5	2	1.5	369	0.51	0.025	6.8	0.466	0.34	8.6	151	1.5	20.3	71	19
78	MacKenzie	697	Tillworth	N688344	1.33	22.6	26.4	1.71	754	1.64	2.06	5.9	20.9	1680	10.3	37.6	0.001	0.01	1.01	20.4	2	1.4	364	0.43	0.025	10.4	0.483	0.26	4.8	143	1.7	17	79	29.4
79	MacKenzie	697	Tillworth	N688345	1.1	24.3	25.4	1.86	809	1.96	2.42	6	21.9	1520	12.8	31	0.001	0.02	1.35	21.2	2	1.4	533	0.45	0.025	11.2	0.505	0.22	6.9	175	2.5	19.2	88	24.3
80	MacKenzie	697	Tillworth	N688346	1.08	18.3	25.9	1.85	801	2.07	2.31	5.6	21.4	1490	13.1	30.1	0.001	0.02	1.34	20.5	2	1.4	509	0.38	0.025	6.4	0.492	0.23	6.5	167	2.6	17.9	87	23.9
81	MacKenzie	697	Tillworth	N688347	0.81	24.8	10.4	1.35	623	1.63	2.56	5.3	17.2	1450	7.1	20.2	0.001	0.005	1.89	18.1	2	1.3	581	0.43	0.025	6.2	0.425	0.13	3	238	1.1	18.7	56	13.1
82	MacKenzie	697	Tillworth	N688348	1.23	17.7	22.8	1.6	651	2.96	2.5	6	20.5	1230	10.8	29	0.001	0.01	1.26	19.5	2	1.3	503	0.49	0.025	5.8	0.496	0.22	6.7	123	4.2	17.3	71	24.9
83	MacKenzie	697	Tillworth	N688349	1.13	17.6	32.6	1.75	814	3.16	2.36	6.3	21.6	1660	12	32.3	0.003	0.04	0.93	18.8	2	1.3	473	0.43	0.025	4.9	0.506	0.23	4.8	157	4.1	16.1	97	40.2
84	MacKenzie	697	Tillworth	N688350	0.87	23.3	17.5	2.13	936	2.04	2.7	5.5	22.5	2080	8	21.7	0.001	0.01	0.89	24.2	2	1.3	644	0.43	0.025	9.4	0.538	0.15	5.4	222	9.7	20.2	91	24
85	MacKenzie	697	Tillworth	N688103	0.91	25.4	8.6	1.4	655	1.86	2.87	5.8	16.1	1640	10.1	21.3	<0.002	0.01	1.15	19.9	2	1.6	654	0.4	<0.05	9.2	0.485	0.12	4	194	2.3	21.9	54	14.7
86	MacKenzie	697	Tillworth	N688104	1	26.7	19	2.21	1080	2.83	2.36	6.9	25.8	2060	10.3	29.4	<0.002	0.01	0.9	23.8	2	1.5	553	0.45	<0.05	6.9	0.659	0.18	4.1	264	1.7	23.8	105	28
87	MacKenzie	697	Tillworth	N688105	1.15	17.2	17.9	1.95	824	1.5	2.73	5.2	21.9	1640	8.4	24.7	<0.002	<0.01	0.78	19.3	2	1.2	584	0.32	<0.05	6.7	0.529	0.17	2.4	160	1	17.3	83	24
88	MacKenzie	697	Tillworth	N688106	0.98	25.2	14.3	2.16	910	2	2.53	5.7	23.2	1880	7.4	26	<0.002	<0.01	1.04	25.1	2	1.4	548	0.4	<0.05	25.1	0.602	0.14	7.4	274	1.3	25.9	81	20.1
89	MacKenzie	697	Tillworth	N688107	1.09	17.5	18.2	1.67	746	1.67	2.46	5.7	20.6	1670	8.6	16.6	<0.002	<0.01	0.99	16.9	2	1.3	486	0.4	<0.05	8.1	0.513	0.18	3.6	194	1.1	17.3	80	20
90	MacKenzie	697	Tillworth	N688108	1.31	27.3	15	1.72	777	2.65	2.64	7.7	18.6	1890	9.9	24.5	<0.002	0.01	1.02	19.6	2	1.6	534	0.56	<0.05	15.2	0.595	0.18	7	202	2.9	23.6	74	26.2
91	MacKenzie	697	Tillworth	N688109	1.32	21.8	22.6	1.96	1060	2.67	2.43	6.7	23.1	1530	10.7	30	<0.002	0.02	0.72	19.1	2	1.3	480	0.45	<0.05	7.5	0.541	0.21	5.8	178	1.9	19.8	92	32.5
92	MacKenzie	697	Tillworth	N688110	1.49	25.1	21.4	1.87	766	1.79	2.49	6	20.4	1640	9.1	38.9	<0.002	0.01	0.81	19.4	2	1.3	477	0.44	<0.05	17.1	0.5	0.22	8.8	180	1.3	21.1	79	26.7

D2.

APPENDIX D2: SILTSAMPLES CERTIFICATE OF ANALYSIS

Mackenzie

MACKENZIE SILTS 1/3

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 28-JUL-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12163501

Method	CERTIFICATE COMMENTS
ME-MS61	Interference: Mo>400ppm on ICP-MS Cd,ICP-AES results shown.
ME-MS61	REE's may not be totally soluble in this method.
Hg-CV41	Detection limits on samples requiring dilutions due to interferences or high concentration levels have been increased according to the dilution factor.

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 28-JUL-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12163501

Sample Description	Method Analyte Units LOR	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
M487701		14.7	150	7.2	26.6	86	32.8
M487702		8.9	272	3.4	39.6	63	24.3
M487703		6.6	158	23.9	28.2	60	15.1
M487704		5.6	237	1.6	33.1	57	22.7
M487705		3.1	255	0.9	27.8	60	19.4
M487706		51.5	152	2.4	23.8	70	37.2
M487707		14.3	387	9.1	29.8	66	19.6
M487708		57.6	543	1.8	32.8	80	20.1
M487709		6.7	207	2.5	34.7	65	13.5
M487710		7.4	304	2.1	29.7	64	13.8
M487711		11.5	293	2.6	33.5	74	20.7
M487712		10.3	152	3.9	22.9	44	17.8
M487713		3.1	226	1.1	23.5	59	14.3
M487714		9.5	587	16.9	21.2	68	16.2
M487715		3.6	164	1.2	30.9	69	15.2
M487716		18.3	166	5.9	26.7	107	45.0
M487717		10.9	401	1.1	25.7	63	17.8
M487718		1.1	315	2.2	25.7	93	17.8
M487719		2.9	213	1.5	26.3	90	21.9
M487720		0.5	362	1.1	11.9	93	30.5
M487721		0.5	305	0.5	14.1	100	31.3
M487722		1.1	162	28.1	16.0	166	35.7
M487723		0.9	84	30.3	15.5	45	57.3
M487724		3.6	468	1.4	28.6	73	20.5
M487725		4.4	204	0.8	23.0	51	14.5
M487726		26.6	182	2.2	24.9	70	43.2
M487727		5.6	204	1.7	31.1	53	15.3
M487728		3.3	193	1.3	30.1	51	14.7
M487729		5.8	579	1.1	31.4	58	16.6
M487730		2.8	256	1.3	30.3	54	13.9
M487731		13.7	131	2.2	28.5	61	24.8
M487732		2.5	152	0.7	28.9	44	12.3
M487733		0.7	292	0.6	16.6	101	30.5
M487734		1.3	401	0.6	22.4	108	24.6
M487735		2.1	249	3.3	18.2	99	21.5
M487736		3.2	410	2.0	19.7	108	42.3
M487737		3.2	451	1.2	19.2	103	26.7
M487738		1.9	539	0.9	18.9	84	21.0
M487739		0.9	79	28.5	14.4	43	53.7
M487740		1.0	82	33.4	13.7	63	51.1

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 28-JUL-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12163501

Sample Description	Method / Analyte / Units / LOR	ME-MS61 P ppm 10	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02
M487701		1150	11.1	62.6	0.003	0.02	4.79	20.8	1	1.5	411	0.49	0.11	8.7	0.505	0.35
M487702		1720	4.7	38.3	0.003	<0.01	3.48	26.9	<1	1.8	427	0.44	0.07	18.4	0.486	0.23
M487703		1170	5.0	44.2	0.004	<0.01	3.68	21.1	<1	1.3	445	0.39	<0.05	6.6	0.426	0.28
M487704		1320	4.6	55.6	0.003	0.01	1.14	20.3	1	1.4	361	0.47	0.12	16.3	0.517	0.29
M487705		990	4.3	55.1	0.006	0.01	1.13	20.2	<1	1.2	391	0.43	0.08	9.1	0.498	0.28
M487706		1090	8.8	57.2	0.003	0.03	2.13	16.6	1	1.3	360	0.51	0.07	9.7	0.465	0.34
M487707		1440	5.9	32.7	0.005	0.02	1.65	21.3	2	1.6	428	0.43	0.05	8.3	0.470	0.20
M487708		1340	6.5	39.6	0.004	0.02	2.39	21.5	2	1.5	384	0.46	0.11	23.1	0.557	0.25
M487709		1480	5.9	44.9	0.002	0.01	2.13	23.3	1	1.9	438	0.66	0.06	9.0	0.642	0.32
M487710		1410	5.4	38.3	0.008	0.01	2.22	21.1	2	1.5	444	0.51	0.09	13.6	0.546	0.22
M487711		1440	5.6	37.1	<0.002	0.01	2.58	23.7	2	1.8	387	0.60	<0.05	18.6	0.614	0.27
M487712		810	5.2	22.9	<0.002	0.02	1.06	17.6	2	1.2	451	0.32	<0.05	5.0	0.386	0.18
M487713		1220	6.9	37.5	<0.002	0.01	5.18	16.1	2	1.3	447	0.50	<0.05	5.6	0.397	0.23
M487714		1410	6.4	25.5	<0.002	<0.01	6.61	12.8	2	1.5	333	0.46	<0.05	23.4	0.412	0.17
M487715		1520	6.6	43.5	0.002	0.01	3.30	19.3	2	1.6	423	0.52	<0.05	4.5	0.511	0.27
M487716		1340	10.6	46.4	0.002	0.03	4.09	18.5	3	1.5	375	0.59	<0.05	5.3	0.611	0.30
M487717		1850	6.5	29.6	<0.002	0.01	5.33	15.0	2	1.6	392	0.56	<0.05	55.1	0.450	0.18
M487718		1770	5.3	31.8	<0.002	0.04	7.85	24.4	2	1.3	447	0.30	<0.05	2.0	0.722	0.17
M487719		1720	6.8	15.1	<0.002	0.01	2.87	26.0	2	1.3	487	0.33	0.11	4.2	0.554	0.17
M487720		1610	3.9	9.0	<0.002	0.02	9.71	24.1	1	0.7	569	0.15	<0.05	1.0	0.653	0.09
M487721		1580	3.9	6.9	<0.002	0.02	6.63	24.4	2	0.8	544	0.18	<0.05	0.9	0.665	0.09
M487722		940	42.3	94.0	0.896	2.09	8.30	16.6	7	2.3	257	0.30	0.68	2.3	0.340	0.88
M487723		560	4.3	25.1	0.002	0.05	0.87	12.3	2	0.8	259	0.25	<0.05	2.2	0.283	0.21
M487724		1190	5.9	28.7	<0.002	0.01	3.14	20.8	2	1.9	388	0.60	<0.05	4.1	0.622	0.16
M487725		840	6.9	33.5	0.002	0.01	1.66	16.7	2	1.2	500	0.42	<0.05	5.0	0.404	0.18
M487726		910	7.8	40.8	0.002	0.02	1.15	17.2	2	1.3	375	0.49	<0.05	4.8	0.493	0.26
M487727		1190	4.5	22.9	<0.002	<0.01	1.48	24.1	2	1.2	460	0.29	<0.05	5.6	0.333	0.16
M487728		1050	4.2	22.0	<0.002	<0.01	1.36	23.5	2	1.2	459	0.26	<0.05	14.5	0.311	0.14
M487729		1350	3.6	15.6	<0.002	0.01	1.27	22.4	2	1.3	384	0.30	<0.05	9.1	0.396	0.10
M487730		1060	4.0	21.1	<0.002	0.01	1.30	23.2	2	1.2	441	0.27	<0.05	8.2	0.325	0.13
M487731		980	5.4	60.3	<0.002	0.01	1.78	20.4	2	1.4	375	0.43	<0.05	6.3	0.452	0.33
M487732		940	4.2	19.5	<0.002	<0.01	1.16	22.6	2	1.0	478	0.22	<0.05	11.4	0.249	0.13
M487733		1320	7.1	10.2	<0.002	0.03	5.12	23.9	2	0.8	493	0.22	<0.05	1.3	0.606	0.11
M487734		2020	4.3	12.9	<0.002	0.01	8.91	29.9	3	1.0	536	0.51	<0.05	2.3	0.705	0.09
M487735		1020	7.1	47.9	<0.002	0.06	25.7	17.9	3	1.3	387	0.31	0.05	3.7	0.626	0.19
M487736		1820	6.3	16.3	<0.002	0.03	6.63	27.2	3	1.2	476	0.34	<0.05	3.7	0.859	0.12
M487737		1400	4.5	13.0	<0.002	0.03	3.89	27.5	3	1.1	530	0.29	<0.05	1.6	0.843	0.08
M487738		1370	3.2	12.0	<0.002	0.01	1.69	26.3	3	1.0	555	0.28	<0.05	1.9	0.821	0.07
M487739		520	3.9	23.2	0.002	0.04	0.75	11.3	2	0.7	241	0.24	<0.05	2.0	0.261	0.19
M487740		530	7.8	24.5	0.202	0.61	2.17	11.0	3	0.9	247	0.25	0.31	2.2	0.260	0.24

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 28-JUL-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12163501

Sample Description	Method	ME-MS61	ME-MS61	ME-MS61	ME-MS61	Hg-CV41	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61	ME-MS61
	Analyte	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.01	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2
M487701		4.96	18.20	0.12	1.4	0.23	0.064	1.58	21.9	51.3	2.10	902	4.28	2.23	6.3	28.7
M487702		7.46	16.95	0.17	1.7	4.87	0.088	1.36	31.1	24.2	1.97	925	2.47	2.41	5.6	24.0
M487703		4.86	16.25	0.13	1.1	0.86	0.063	1.51	19.2	28.7	1.87	813	2.89	2.52	4.5	21.0
M487704		6.19	15.45	0.13	1.4	0.05	0.068	1.63	24.9	14.8	1.70	854	1.88	2.08	5.4	24.5
M487705		6.64	15.65	0.14	1.2	0.04	0.066	1.59	24.0	17.5	1.89	813	1.14	2.22	5.1	23.9
M487706		4.76	16.10	0.12	1.6	1.10	0.063	1.58	21.3	33.1	1.53	741	4.19	2.08	6.2	21.0
M487707		9.76	16.80	0.12	1.3	0.05	0.074	1.18	26.1	13.3	1.50	852	2.37	2.34	5.5	21.1
M487708		13.40	17.15	0.17	1.5	0.3	0.070	1.27	23.6	19.0	1.73	997	2.30	2.04	5.5	26.0
M487709		5.57	16.90	0.12	1.1	0.05	0.078	1.50	25.5	14.4	1.88	831	1.97	2.39	7.7	22.1
M487710		7.66	16.25	0.15	1.1	0.27	0.081	1.42	24.2	13.9	1.68	829	1.58	2.41	6.1	20.6
M487711		7.79	17.70	0.21	1.3	0.17	0.069	1.36	23.8	19.2	1.79	921	2.31	2.09	7.6	22.3
M487712		4.27	17.00	0.18	0.9	0.04	0.048	1.18	13.7	12.0	1.29	602	7.31	2.37	4.5	18.8
M487713		6.63	16.30	0.21	1.1	0.17	0.050	1.43	23.2	14.2	1.20	605	1.37	2.60	5.5	17.7
M487714		16.70	14.80	0.29	1.2	8.3	0.044	1.08	29.5	11.1	0.98	628	2.25	1.90	5.3	23.8
M487715		4.89	17.45	0.20	0.9	0.22	0.061	1.47	22.1	16.4	1.54	743	1.57	2.36	7.5	19.1
M487716		5.24	18.95	0.21	1.6	0.07	0.059	1.38	22.2	30.6	1.64	884	4.25	2.03	8.6	25.1
M487717		11.70	15.05	0.24	1.4	0.13	0.051	1.22	30.0	11.6	1.15	609	1.61	2.20	6.3	20.9
M487718		8.54	18.80	0.20	1.0	0.24	0.067	0.99	15.9	22.2	2.08	1140	0.97	1.92	5.1	27.4
M487719		6.03	19.15	0.18	1.1	0.06	0.074	0.94	17.2	17.4	2.30	992	1.10	2.39	5.1	34.2
M487720		9.09	18.10	0.11	1.2	3.19	0.050	0.51	8.8	24.4	3.35	1020	0.65	1.81	2.7	92.0
M487721		8.00	19.90	0.18	1.2	0.08	0.057	0.49	8.2	24.3	2.65	1020	0.80	1.96	3.5	51.0
M487722		5.22	15.25	0.18	1.1	0.11	0.101	3.11	12.8	13.4	1.37	620	1070	1.58	4.8	38.4
M487723		2.69	11.45	0.14	1.6	0.03	0.037	0.86	9.4	13.6	0.84	486	3.75	2.05	4.2	24.2
M487724		11.55	16.70	0.23	1.3	0.1	0.065	1.06	21.1	14.0	1.59	787	1.58	1.96	7.8	25.0
M487725		5.80	16.50	0.20	0.9	0.04	0.049	1.21	20.4	12.3	1.29	596	1.44	2.50	5.2	18.9
M487726		5.54	17.10	0.21	1.5	0.04	0.052	1.38	19.9	25.5	1.56	843	4.08	2.13	7.3	22.4
M487727		5.90	15.95	0.21	1.1	1.18	0.063	1.08	19.5	10.8	1.55	830	1.10	2.48	4.0	13.2
M487728		5.49	15.85	0.21	1.0	0.17	0.064	1.06	20.8	9.8	1.50	798	1.36	2.47	3.7	12.4
M487729		14.40	15.05	0.27	1.2	0.08	0.070	0.83	22.0	6.8	1.45	967	0.79	2.03	4.3	15.2
M487730		7.11	15.40	0.18	1.0	0.10	0.066	1.00	19.9	9.3	1.52	849	0.78	2.36	3.7	12.9
M487731		4.26	17.50	0.20	1.3	0.05	0.055	1.76	19.3	30.2	1.78	711	2.04	2.05	5.8	21.4
M487732		4.43	15.45	0.19	0.8	0.05	0.061	1.03	18.0	7.4	1.35	737	0.50	2.59	3.1	10.4
M487733		8.61	18.65	0.20	1.2	0.20	0.053	0.52	9.9	22.3	3.47	1240	1.43	1.75	3.8	74.6
M487734		9.88	19.50	0.22	1.2	0.15	0.070	0.51	13.8	16.7	2.82	1180	1.08	1.96	4.7	37.7
M487735		6.73	20.4	0.21	0.9	0.35	0.048	0.90	14.6	40.7	1.09	1130	2.45	1.16	5.7	36.5
M487736		9.87	21.4	0.25	1.5	0.21	0.070	0.57	13.2	27.9	2.82	1200	1.74	1.74	6.1	49.0
M487737		10.80	19.70	0.22	1.2	0.06	0.064	0.49	11.9	17.4	3.08	1320	1.19	1.86	4.9	42.2
M487738		11.90	19.15	0.24	1.1	0.12	0.059	0.46	12.7	9.5	2.93	1220	0.83	1.94	4.2	39.8
M487739		2.49	10.70	0.15	1.5	0.03	0.033	0.80	8.5	12.0	0.77	448	3.25	1.90	3.9	23.1
M487740		3.15	10.80	0.14	1.5	0.08	0.055	0.88	9.0	12.8	0.83	542	426	1.92	3.9	35.4

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

ALS Canada Ltd.

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

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 28-JUL-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12163501

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	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
M487701		0.52	0.010	0.10	8.20	13.1	520	1.12	0.12	3.19	0.10	50.3	20.4	36	5.85	105.5
M487702		1.16	0.004	0.03	7.69	5.3	440	0.93	0.04	4.16	0.05	71.6	18.7	96	2.51	25.7
M487703		0.46	0.003	0.03	8.17	5.1	520	0.95	0.04	3.77	0.03	48.0	16.2	44	2.95	30.9
M487704		0.78	0.013	0.09	7.02	10.5	470	0.91	0.09	4.20	0.06	59.3	20.0	67	3.03	47.9
M487705		0.40	0.005	0.04	7.35	5.1	490	0.85	0.05	3.22	0.05	50.2	19.3	73	2.48	41.8
M487706		1.00	0.005	0.09	7.12	12.2	530	1.09	0.08	2.63	0.12	43.8	15.8	38	5.12	76.9
M487707		0.30	0.009	0.04	6.92	7.6	460	0.86	0.06	3.69	0.07	56.0	18.1	128	1.80	25.0
M487708		0.78	0.025	0.05	6.94	9.4	450	0.86	0.06	3.39	0.08	55.2	21.9	192	2.76	30.7
M487709		1.06	0.004	0.05	7.90	7.9	560	0.88	0.05	4.04	0.04	58.7	17.8	53	3.08	62.2
M487710		0.26	0.004	0.05	7.72	7.0	530	0.91	0.05	3.88	0.06	57.7	17.4	94	2.26	47.9
M487711		1.04	0.009	0.11	6.64	8.9	510	0.83	0.05	3.59	0.08	55.8	18.9	89	3.27	35.1
M487712		0.44	0.007	0.09	6.65	6.2	490	0.92	0.04	3.40	0.05	45.4	13.8	41	1.50	48.5
M487713		0.22	0.001	0.07	7.56	10.3	560	0.82	0.07	2.78	0.07	51.7	12.7	88	3.03	18.9
M487714		0.38	0.002	0.13	5.56	13.7	410	0.57	0.08	2.15	0.06	62.1	15.6	283	2.32	15.7
M487715		0.50	0.003	0.06	7.81	9.9	620	0.87	0.05	3.16	0.08	51.9	16.3	38	3.41	29.5
M487716		0.30	0.007	0.12	7.44	27.9	490	1.13	0.10	2.53	0.14	50.0	18.3	36	9.42	44.2
M487717		0.72	0.003	0.10	6.45	11.8	470	0.69	0.09	2.67	0.05	64.9	14.0	186	2.37	13.1
M487718		0.32	0.003	0.12	8.14	29.5	420	0.75	0.02	3.81	0.11	40.0	26.5	62	8.26	64.3
M487719		0.86	0.004	0.14	8.04	11.7	430	0.84	0.20	4.20	0.15	41.7	22.0	75	3.33	54.5
M487720		0.50	0.003	0.09	8.77	18.7	270	0.57	0.02	4.92	0.13	22.3	38.7	272	12.45	59.0
M487721		0.46	0.003	0.08	8.60	18.1	300	0.67	0.03	4.08	0.11	21.6	32.7	90	10.25	70.5
M487722		0.10	0.659	3.89	7.15	36.0	600	0.94	1.15	1.70	1.01	26.6	19.1	62	4.17	8720
M487723		0.10	0.003	0.98	5.60	4.6	500	0.74	0.05	1.95	0.42	20.5	11.4	32	0.78	24.1
M487724		0.36	0.003	0.10	6.70	10.0	440	0.71	0.06	3.35	0.07	50.5	17.6	174	3.53	24.5
M487725		0.50	0.003	0.05	7.54	6.5	540	0.82	0.06	3.35	0.07	43.8	12.6	72	2.17	34.6
M487726		0.30	0.002	0.08	6.25	11.4	520	1.08	0.07	2.76	0.09	43.1	16.6	50	3.27	49.3
M487727		0.56	0.002	0.06	7.66	5.3	450	0.82	0.04	4.05	0.06	45.5	13.7	54	1.33	17.7
M487728		0.52	0.003	0.05	7.63	4.6	430	0.85	0.03	3.99	0.06	46.9	13.4	47	1.20	17.0
M487729		0.42	0.002	0.11	6.33	4.5	330	0.68	0.04	3.68	0.07	51.1	15.7	180	0.89	17.9
M487730		0.70	0.002	0.06	7.37	4.3	410	0.76	0.03	3.90	0.07	45.4	13.8	69	1.16	15.2
M487731		0.84	0.008	0.08	7.75	7.2	580	1.00	0.04	2.77	0.09	44.6	17.2	28	5.37	74.7
M487732		0.54	0.002	0.06	7.75	4.1	430	0.84	0.03	4.01	0.06	41.1	11.8	35	0.96	19.2
M487733		0.66	0.028	0.36	8.30	26.9	310	0.71	0.03	3.81	0.13	25.1	44.3	108	9.72	98.6
M487734		0.66	0.003	0.15	8.21	15.6	310	0.62	0.02	4.30	0.13	34.4	32.5	89	10.95	73.1
M487735		0.98	0.012	0.13	9.15	23.8	1630	0.86	0.04	1.89	0.10	37.6	27.8	54	25.1	62.3
M487736		0.54	0.008	0.11	8.26	34.3	300	0.80	0.04	3.87	0.15	34.1	32.5	102	9.68	91.6
M487737		0.46	0.004	0.11	7.96	13.1	270	0.60	0.03	4.54	0.12	29.6	32.3	101	4.12	71.1
M487738		0.32	0.002	0.10	7.74	7.3	250	0.55	0.02	4.84	0.08	31.4	29.8	124	1.87	63.5
M487739		0.10	0.003	0.47	5.18	4.6	460	0.65	0.04	1.80	0.25	18.50	10.7	29	0.69	22.6
M487740		0.10	0.718	3.10	5.34	15.2	510	0.74	1.11	1.81	0.29	19.45	11.5	52	0.79	7400

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

ALS Minerals
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 28-JUL-2012
This copy reported on
11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12163501

Project: 697-Mackenzie
P.O. No.: 90905
This report is for 40 Sediment samples submitted to our lab in Vancouver, BC, Canada on 16-JUL-2012.

The following have access to data associated with this certificate:

PETER ANDERSEN ACCOUNTS PAYABLE	SHANNON BAIRD JOSE SAYO GARCIA	BRUCE JAGO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-MS61	48 element four acid ICP-MS	
Hg-CV41	Trace Hg - cold vapor/AAS	FIMS

To: MIOCENE METALS LIMITED
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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

MACKENZIE SILT 2/3

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Method	CERTIFICATE COMMENTS
ME-MS61	Interference: Mo>400ppm on ICP-MS Cd,ICP-AES results shown.
ME-MS61	REE's may not be totally soluble in this method.
Hg-CV41	Detection limits on samples requiring dilutions due to interferences or high concentration levels have been increased according to the dilution factor.

ALS Minerals
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Sample Description	Method / Analyte / Units / LOR	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
N688341		4.1	125	0.8	17.3	49	11.8
N688342		4.3	110	0.9	20.1	52	13.8
N688343		8.6	151	1.5	20.3	71	19.0
N688344		4.8	143	1.7	17.0	79	29.4
N688345		6.9	175	2.5	19.2	88	24.3
N688346		6.5	167	2.6	17.9	87	23.9
N688347		3.0	238	1.1	18.7	56	13.1
N688348		6.7	123	4.2	17.3	71	24.9
N688349		4.8	157	4.1	16.1	97	40.2
N688350		5.4	222	9.7	20.2	91	24.0

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

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Sample Description	Method / Analyte / Units / LOR	ME-MS61 P ppm 10	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02
N688341		1390	8.3	24.2	<0.002	<0.01	2.37	16.9	1	1.1	616	0.39	<0.05	7.1	0.366	0.16
N688342		1850	9.8	35.2	<0.002	<0.01	2.38	18.6	1	1.3	475	0.54	<0.05	9.5	0.373	0.23
N688343		890	8.7	49.4	<0.002	0.01	5.72	19.5	2	1.5	369	0.51	<0.05	6.8	0.466	0.34
N688344		1680	10.3	37.6	<0.002	0.01	1.01	20.4	2	1.4	364	0.43	<0.05	10.4	0.483	0.26
N688345		1520	12.8	31.0	<0.002	0.02	1.35	21.2	2	1.4	533	0.45	<0.05	11.2	0.505	0.22
N688346		1490	13.1	30.1	<0.002	0.02	1.34	20.5	2	1.4	509	0.38	<0.05	6.4	0.492	0.23
N688347		1450	7.1	20.2	<0.002	<0.01	1.89	18.1	2	1.3	581	0.43	<0.05	6.2	0.425	0.13
N688348		1230	10.8	29.0	<0.002	0.01	1.26	19.5	2	1.3	503	0.49	<0.05	5.8	0.496	0.22
N688349		1660	12.0	32.3	0.003	0.04	0.93	18.8	2	1.3	473	0.43	<0.05	4.9	0.506	0.23
N688350		2080	8.0	21.7	<0.002	0.01	0.89	24.2	2	1.3	644	0.43	<0.05	9.4	0.538	0.15

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

ALS Canada Ltd.

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

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	Hg-CV41 Hg ppm 0.01	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2
N688341		4.12	18.55	0.17	0.8	0.03	0.050	1.07	19.0	12.2	1.21	548	1.36	2.93	4.7	14.3
N688342		3.49	19.05	0.20	1.0	0.06	0.054	1.53	23.8	15.2	1.21	545	1.56	2.80	5.8	16.6
N688343		4.29	20.4	0.18	1.0	0.02	0.059	1.64	19.3	32.0	1.44	914	3.35	2.19	6.0	20.2
N688344		4.74	19.45	0.20	1.4	0.01	0.056	1.33	22.6	26.4	1.71	754	1.64	2.06	5.9	20.9
N688345		5.86	20.7	0.21	1.1	0.03	0.070	1.10	24.3	25.4	1.86	809	1.96	2.42	6.0	21.9
N688346		5.58	20.6	0.21	1.1	0.03	0.070	1.08	18.3	25.9	1.85	801	2.07	2.31	5.6	21.4
N688347		8.24	17.75	0.24	0.9	0.01	0.058	0.81	24.8	10.4	1.35	623	1.63	2.56	5.3	17.2
N688348		3.58	21.6	0.17	1.1	0.01	0.061	1.23	17.7	22.8	1.60	651	2.96	2.50	6.0	20.5
N688349		4.69	23.3	0.18	1.4	0.02	0.064	1.13	17.6	32.6	1.75	814	3.16	2.36	6.3	21.6
N688350		6.78	20.2	0.22	1.3	0.1	0.073	0.87	23.3	17.5	2.13	936	2.04	2.70	5.5	22.5

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

ALS Minerals

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: **MIOCENE METALS LIMITED**
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	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
N688341		0.60	0.003	0.06	7.87	7.0	520	0.68	0.18	3.56	0.06	43.6	11.2	38	1.67	24.2
N688342		0.62	0.002	0.06	7.42	9.4	620	0.84	0.14	3.05	0.06	53.7	11.7	36	2.10	23.9
N688343		0.54	0.004	0.07	7.55	15.3	610	0.83	0.05	2.28	0.08	43.2	17.2	39	8.96	27.7
N688344		0.62	0.004	0.08	6.69	7.7	450	0.82	0.13	2.76	0.10	48.1	16.8	41	4.36	67.9
N688345		0.78	0.035	0.12	7.73	9.3	500	0.79	0.14	3.45	0.12	52.0	17.5	49	2.92	52.0
N688346		0.72	0.035	0.13	7.52	8.9	480	0.76	0.16	3.29	0.12	42.3	17.3	46	3.00	53.8
N688347		0.38	0.002	0.11	7.23	6.8	420	0.65	0.09	3.57	0.08	55.8	14.7	79	1.67	28.5
N688348		0.62	0.005	0.09	7.68	9.2	530	0.88	0.13	3.13	0.09	40.5	15.2	34	2.44	31.0
N688349		0.48	0.003	0.10	7.79	15.1	480	1.04	0.11	2.87	0.11	39.2	17.1	31	3.25	48.1
N688350		0.82	0.002	0.09	8.03	4.6	410	0.77	0.10	4.34	0.09	51.3	19.2	50	2.20	37.9

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

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Sample Description	Method Analyte Units LOR	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
N688301		1.0	81	28.5	15.5	43	56.0
N688302		1.1	160	27.2	16.0	170	34.3
N688303		8.7	377	1.0	29.0	80	21.1
N688304		5.4	204	0.6	22.8	65	14.4
N688305		8.7	175	0.7	19.0	112	14.9
N688306		10.5	131	0.7	13.5	151	12.6
N688307		11.6	134	0.8	16.6	128	15.3
N688308		5.1	112	0.8	14.0	133	19.9
N688309		5.6	230	1.1	26.2	70	16.6
N688310		5.9	136	1.9	19.5	71	24.2
N688311		9.3	105	0.7	15.6	44	22.9
N688312		8.3	72	0.5	6.8	39	24.5
N688313		5.2	135	0.6	18.2	59	15.5
N688314		9.4	129	1.3	12.8	108	41.7
N688315		7.5	113	0.5	12.3	84	25.9
N688316		4.0	130	1.0	20.0	62	14.2
N688317		5.1	217	0.7	25.2	60	21.0
N688318		17.9	141	0.7	17.7	64	17.1
N688319		6.5	166	0.7	23.2	84	17.0
N688320		4.2	161	2.1	22.1	92	24.3
N688321		4.4	137	0.9	20.4	84	29.3
N688322		5.9	184	15.2	23.6	67	20.1
N688323		5.1	144	1.4	22.6	74	21.9
N688324		5.0	155	1.0	19.2	56	13.7
N688325		3.9	140	1.1	16.5	74	32.3
N688326		3.3	142	0.6	15.8	44	12.6
N688327		8.0	174	1.0	24.7	57	15.0
N688328		4.6	192	0.8	26.4	54	19.7
N688329		3.4	149	3.4	19.5	50	15.6
N688330		12.4	131	1.7	19.2	91	39.1
N688331		3.3	142	1.6	17.7	53	15.3
N688332		7.0	149	1.0	16.8	90	34.7
N688333		6.6	113	1.8	14.3	90	42.1
N688334		2.8	160	1.1	17.5	61	15.9
N688335		3.6	98	0.5	21.0	44	12.8
N688336		4.4	121	0.7	17.3	72	19.4
N688337		9.0	175	0.9	19.2	77	35.7
N688338		4.2	222	1.1	21.7	55	17.1
N688339		5.0	185	1.0	21.1	56	14.2
N688340		6.6	231	1.3	21.6	64	20.9

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

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Sample Description	Method / Analyte / Units / LOR	ME-MS61 P ppm 10	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02
N688301		560	4.5	26.1	<0.002	0.04	0.87	11.6	1	0.7	252	0.26	<0.05	2.3	0.261	0.20
N688302		970	44.3	85.7	0.852	2.13	8.44	16.2	6	2.2	257	0.30	0.88	2.4	0.316	0.91
N688303		2100	7.4	19.8	<0.002	<0.01	0.93	23.5	1	1.5	519	0.67	0.06	26.4	0.627	0.12
N688304		1630	7.5	22.2	<0.002	<0.01	0.74	21.0	1	1.2	605	0.48	0.05	13.5	0.461	0.14
N688305		2130	15.3	37.3	<0.002	<0.01	0.85	19.6	1	1.2	454	0.39	0.05	22.9	0.482	0.30
N688306		1190	21.1	50.9	<0.002	0.01	0.65	16.5	1	1.0	403	0.35	<0.05	5.6	0.449	0.40
N688307		1770	21.2	58.8	<0.002	0.01	0.62	16.5	1	1.1	389	0.44	0.06	13.2	0.431	0.41
N688308		1540	20.2	64.1	<0.002	<0.01	1.95	11.6	1	1.1	362	0.48	<0.05	14.1	0.393	0.39
N688309		1950	7.4	20.9	<0.002	<0.01	0.83	23.0	2	1.3	570	0.57	<0.05	13.5	0.530	0.12
N688310		960	8.8	23.9	<0.002	0.05	0.56	19.0	2	1.2	557	0.41	<0.05	4.0	0.465	0.16
N688311		1310	12.4	48.0	<0.002	0.01	0.88	9.1	1	1.0	408	0.51	<0.05	13.2	0.312	0.25
N688312		1150	17.3	69.1	<0.002	0.02	3.32	3.9	1	0.8	358	0.31	<0.05	6.1	0.193	0.41
N688313		1390	10.7	31.9	<0.002	<0.01	0.50	15.7	1	1.0	546	0.41	<0.05	10.2	0.384	0.19
N688314		1280	16.7	63.8	<0.002	0.02	2.01	13.1	1	0.9	487	0.38	<0.05	5.4	0.448	0.38
N688315		1760	14.9	53.6	<0.002	0.02	1.29	9.8	1	1.0	466	0.41	<0.05	6.8	0.387	0.31
N688316		1490	8.1	31.9	<0.002	<0.01	1.33	19.5	2	1.1	557	0.39	<0.05	7.7	0.448	0.20
N688317		1680	7.9	29.1	<0.002	0.03	0.67	20.6	1	1.4	538	0.58	<0.05	12.1	0.511	0.16
N688318		1130	9.9	41.3	<0.002	0.01	0.58	15.6	1	1.1	524	0.44	<0.05	16.9	0.423	0.25
N688319		1850	11.8	33.2	<0.002	<0.01	0.63	21.6	1	1.2	551	0.47	0.05	15.5	0.485	0.21
N688320		1950	9.5	28.8	<0.002	0.04	0.82	23.4	2	1.2	503	0.34	<0.05	5.6	0.529	0.23
N688321		1770	10.9	36.8	<0.002	0.08	0.67	18.4	2	1.1	387	0.41	<0.05	6.2	0.451	0.21
N688322		1320	9.7	32.2	<0.002	0.01	0.87	19.2	2	1.2	567	0.53	<0.05	11.0	0.471	0.21
N688323		1330	11.8	46.6	<0.002	0.02	1.05	18.6	1	1.4	411	0.58	<0.05	11.0	0.467	0.30
N688324		1900	9.9	21.7	<0.002	0.01	1.24	16.0	1	1.2	511	0.51	<0.05	10.3	0.428	0.21
N688325		1520	11.0	21.7	<0.002	0.01	1.55	15.3	2	1.3	448	0.61	<0.05	6.3	0.524	0.24
N688326		1150	8.7	19.3	<0.002	0.01	1.30	12.8	1	1.0	536	0.46	<0.05	9.7	0.350	0.19
N688327		1900	9.4	29.6	<0.002	<0.01	1.33	18.6	2	1.3	566	0.59	<0.05	24.5	0.485	0.18
N688328		1850	8.8	28.4	<0.002	<0.01	1.29	19.3	1	1.4	582	0.62	<0.05	12.9	0.486	0.16
N688329		1390	8.1	26.1	<0.002	0.01	1.86	16.2	1	1.0	653	0.39	0.06	7.8	0.385	0.16
N688330		1200	11.6	34.3	<0.002	0.05	1.36	15.0	2	1.1	468	0.47	<0.05	5.1	0.454	0.22
N688331		1390	7.8	25.5	<0.002	0.01	1.98	17.4	1	1.1	604	0.37	<0.05	6.2	0.399	0.16
N688332		1070	11.9	39.9	<0.002	0.03	1.60	14.7	1	1.4	412	0.55	<0.05	7.8	0.486	0.27
N688333		1120	13.9	43.8	<0.002	0.04	1.73	15.1	1	1.2	413	0.47	<0.05	5.1	0.422	0.30
N688334		1560	8.3	25.6	<0.002	0.02	2.12	19.2	2	1.1	682	0.35	0.06	6.1	0.433	0.18
N688335		1500	10.6	30.8	<0.002	<0.01	2.04	17.4	1	1.2	510	0.58	<0.05	9.2	0.335	0.20
N688336		1340	9.2	33.3	<0.002	<0.01	4.27	19.6	1	1.3	506	0.43	<0.05	7.6	0.433	0.25
N688337		880	9.9	40.7	<0.002	0.01	1.49	17.2	2	1.4	427	0.63	<0.05	7.9	0.501	0.25
N688338		1770	8.1	20.4	<0.002	<0.01	2.80	18.7	2	1.4	574	0.53	<0.05	9.5	0.459	0.13
N688339		1750	8.9	23.1	<0.002	<0.01	2.80	20.0	1	1.4	605	0.46	<0.05	10.3	0.450	0.14
N688340		1620	8.2	22.8	<0.002	0.01	2.16	18.8	2	1.5	581	0.55	<0.05	8.1	0.494	0.15

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

ALS Canada Ltd.

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

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	Hg-CV41 Hg ppm 0.01	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2
N688301		2.57	11.05	0.12	1.6	0.02	0.038	0.83	10.9	12.5	0.79	476	3.54	2.02	3.9	22.9
N688302		5.07	14.95	0.18	1.0	0.08	0.111	3.14	14.2	12.7	1.31	622	1055	1.61	4.4	38.4
N688303		10.90	17.90	0.22	1.4	<0.01	0.077	0.80	36.0	9.6	1.77	970	3.11	2.43	7.8	21.3
N688304		6.38	17.50	0.18	1.0	<0.01	0.063	0.89	28.1	10.4	1.65	804	1.72	2.87	5.7	16.8
N688305		5.66	21.3	0.17	0.9	<0.01	0.070	1.29	19.3	33.7	1.98	931	1.12	2.47	5.4	22.0
N688306		4.03	23.7	0.16	0.7	0.01	0.059	1.54	15.5	46.6	1.75	961	0.83	2.37	4.6	21.3
N688307		4.02	22.7	0.19	0.9	0.02	0.056	1.60	19.3	41.1	1.47	887	1.04	2.41	5.5	20.2
N688308		3.68	22.1	0.19	1.0	<0.01	0.046	1.86	22.1	33.8	1.27	645	0.70	2.52	5.3	14.6
N688309		6.84	17.30	0.19	1.1	<0.01	0.075	0.85	33.0	9.8	1.74	865	2.02	2.69	6.6	17.4
N688310		3.91	18.15	0.17	1.1	0.02	0.062	0.82	19.4	17.6	1.57	775	2.25	2.47	5.8	17.7
N688311		3.48	17.00	0.19	1.2	0.02	0.030	1.69	26.0	24.5	0.67	442	1.28	2.69	5.8	10.0
N688312		2.53	20.3	0.18	1.1	0.92	0.022	2.12	16.9	53.3	0.21	313	0.64	2.80	4.1	6.1
N688313		4.05	17.85	0.18	0.9	0.01	0.052	1.18	19.3	15.6	1.24	586	1.11	2.81	4.8	13.5
N688314		3.96	21.4	0.18	1.5	0.02	0.049	1.79	16.4	54.7	1.11	752	1.28	2.05	5.3	24.8
N688315		3.64	19.95	0.18	1.1	0.01	0.041	1.62	23.5	34.5	1.02	523	0.81	2.72	5.4	16.5
N688316		3.78	17.80	0.20	0.9	<0.01	0.057	1.17	22.8	14.6	1.57	622	1.70	2.65	4.9	17.2
N688317		6.67	16.40	0.21	1.2	<0.01	0.063	1.13	31.0	8.2	1.52	712	2.29	2.52	6.6	19.1
N688318		4.38	17.60	0.18	0.9	0.01	0.052	1.42	21.9	18.0	1.49	667	1.61	2.62	5.3	19.3
N688319		4.95	17.55	0.18	1.2	<0.01	0.066	1.19	24.4	15.4	1.75	743	1.72	2.65	5.6	18.9
N688320		4.87	19.00	0.17	1.1	0.1	0.074	1.00	20.5	21.0	2.05	923	2.62	2.22	5.1	28.1
N688321		3.99	17.95	0.16	1.2	0.08	0.060	0.99	23.2	28.7	1.45	737	2.39	1.72	5.5	21.0
N688322		5.69	18.25	0.19	1.1	0.02	0.066	1.09	26.7	16.9	1.55	659	3.95	2.51	5.8	21.7
N688323		4.37	18.55	0.18	1.2	0.13	0.066	1.43	23.7	29.1	1.52	805	2.85	2.19	6.9	23.5
N688324		4.28	17.10	0.18	0.9	0.10	0.058	1.27	26.0	19.4	1.15	501	1.56	2.68	5.5	17.8
N688325		3.98	18.30	0.17	1.3	0.05	0.063	1.18	18.3	33.5	1.38	579	2.23	2.41	8.3	22.8
N688326		4.14	15.90	0.18	0.8	0.04	0.050	1.22	21.4	13.2	0.87	459	1.23	2.75	5.0	13.8
N688327		5.20	16.30	0.22	1.0	0.08	0.063	1.21	31.9	14.5	1.27	578	1.62	2.67	6.6	16.0
N688328		6.07	16.95	0.22	1.2	0.02	0.066	1.13	40.9	12.7	1.21	580	1.71	2.66	7.2	16.4
N688329		4.83	17.00	0.18	0.9	0.02	0.056	1.00	21.6	12.6	1.25	559	2.13	2.89	4.8	14.6
N688330		3.88	17.35	0.20	1.4	0.03	0.052	1.16	22.1	26.2	1.42	842	2.63	2.32	6.5	19.3
N688331		4.68	17.60	0.16	0.9	0.02	0.055	1.00	20.2	13.5	1.29	568	2.18	2.72	5.0	15.6
N688332		4.69	18.80	0.17	1.5	0.03	0.049	1.44	21.2	23.1	1.24	774	2.61	2.37	6.8	21.0
N688333		3.52	20.4	0.15	1.5	0.03	0.052	1.47	15.1	30.0	1.40	761	2.46	2.28	6.5	20.0
N688334		5.51	19.60	0.19	0.9	0.02	0.060	1.06	21.0	16.0	1.48	658	1.68	2.99	4.8	17.6
N688335		3.15	17.85	0.18	0.9	0.02	0.049	1.52	23.6	11.1	1.04	500	1.36	2.92	5.6	13.4
N688336		3.65	19.80	0.18	1.0	0.04	0.056	1.58	20.8	21.1	1.66	662	1.26	2.76	5.4	23.0
N688337		5.83	18.00	0.20	1.6	0.01	0.053	1.49	19.1	21.4	1.54	735	1.82	2.53	7.4	21.4
N688338		7.85	17.60	0.23	1.2	0.03	0.063	0.91	26.3	10.5	1.34	650	1.70	2.58	5.9	16.8
N688339		6.51	18.80	0.21	1.0	0.03	0.067	0.99	27.4	11.3	1.39	659	1.73	2.76	5.6	17.1
N688340		7.80	18.85	0.25	1.2	0.02	0.064	0.93	32.0	12.6	1.41	689	1.89	2.59	6.6	19.0

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
Account: MIOMIN

Project: 697-Mackenzie

CERTIFICATE OF ANALYSIS VA12181554

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	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
N688301		0.10	0.005	0.28	5.39	4.2	490	0.62	0.05	1.86	0.19	22.5	11.0	36	0.78	24.2
N688302		0.10	0.721	3.61	7.05	35.3	600	0.88	1.22	1.65	1.17	28.0	19.8	66	4.28	9240
N688303		0.64	0.005	0.04	6.95	2.9	320	0.69	0.18	4.24	0.10	77.4	17.9	107	1.17	26.9
N688304		0.78	0.004	0.03	8.04	2.6	390	0.65	0.13	4.21	0.08	55.1	14.1	52	1.29	17.6
N688305		0.34	0.003	0.05	7.96	4.9	480	0.94	0.23	3.06	0.22	39.6	18.1	40	3.86	63.5
N688306		0.82	0.005	0.07	8.27	6.5	530	1.16	0.28	2.21	0.23	35.6	18.1	26	6.62	105.0
N688307		0.36	0.004	0.09	8.25	8.4	480	1.20	0.30	2.13	0.22	41.9	15.9	27	7.10	86.1
N688308		0.52	0.002	0.21	8.22	6.6	560	1.14	0.17	1.74	0.20	44.4	13.1	20	4.99	38.6
N688309		0.80	0.001	0.03	7.61	3.0	360	0.75	0.15	4.35	0.09	65.1	14.7	58	1.16	17.7
N688310		0.44	0.001	0.09	7.62	7.5	430	0.89	0.13	3.56	0.11	40.3	13.8	32	1.82	26.3
N688311		0.48	0.024	0.04	7.25	4.6	540	1.15	0.13	2.07	0.06	50.5	7.4	22	2.32	36.7
N688312		0.26	0.003	0.03	7.42	5.3	480	1.61	0.09	1.09	0.04	32.6	4.3	11	4.35	12.4
N688313		0.56	0.008	0.05	7.84	3.1	460	0.99	0.15	3.38	0.07	39.6	11.2	29	1.79	32.2
N688314		0.34	0.003	0.12	8.52	12.5	530	1.34	0.21	1.98	0.16	36.1	15.9	41	9.71	54.9
N688315		0.42	0.002	0.07	7.73	5.7	580	1.26	0.16	2.02	0.10	43.5	10.3	30	5.12	26.9
N688316		0.66	0.004	0.04	7.73	3.8	510	0.82	0.14	3.57	0.07	46.4	13.5	27	1.85	31.4
N688317		0.46	0.002	0.10	7.19	4.0	440	0.77	0.19	3.97	0.06	63.3	14.1	69	1.08	26.9
N688318		0.50	0.004	0.04	7.69	3.5	550	0.84	0.13	3.17	0.09	44.3	13.5	43	1.97	36.4
N688319		0.54	0.004	0.06	7.77	5.2	490	0.80	0.12	3.80	0.12	50.9	14.9	36	2.04	28.4
N688320		0.50	0.003	0.08	7.86	8.4	470	0.76	0.16	3.50	0.12	47.9	20.0	57	2.36	57.1
N688321		0.50	0.003	0.09	6.65	9.1	440	0.85	0.13	2.65	0.12	45.6	14.4	45	3.09	43.4
N688322		0.50	0.002	0.04	7.66	6.0	480	0.76	0.14	3.42	0.07	57.3	14.7	70	2.28	46.3
N688323		0.52	0.003	0.05	7.36	6.7	440	1.13	0.16	2.50	0.08	50.5	14.8	63	5.86	41.5
N688324		0.54	0.002	0.04	6.70	6.3	530	0.74	0.14	2.90	0.05	52.0	11.2	58	1.69	27.2
N688325		0.44	0.002	0.03	6.49	12.5	490	0.85	0.12	2.53	0.06	40.0	14.1	52	3.93	37.6
N688326		0.52	0.002	0.06	6.19	5.4	540	0.72	0.11	2.91	0.04	42.8	9.4	51	1.80	25.2
N688327		0.72	0.003	0.07	7.35	6.3	530	0.73	0.14	3.38	0.05	64.7	11.1	66	1.36	25.6
N688328		0.44	0.002	0.04	7.31	6.6	510	0.78	0.14	3.52	0.05	84.6	11.4	82	1.41	28.5
N688329		0.60	0.034	0.04	8.16	5.0	500	0.80	0.13	3.58	0.06	46.3	11.3	43	1.89	27.1
N688330		0.52	0.008	0.09	7.43	25.1	500	1.13	0.12	2.65	0.14	40.6	14.2	31	3.75	30.9
N688331		0.50	0.011	0.06	7.59	6.0	490	0.66	0.12	3.46	0.06	44.7	12.5	44	2.00	26.5
N688332		0.26	0.002	0.11	7.24	10.4	550	0.85	0.12	2.12	0.13	42.7	14.8	46	4.14	19.6
N688333		0.30	0.007	0.09	7.59	14.0	590	1.02	0.15	2.19	0.11	32.3	14.1	29	5.67	38.7
N688334		0.60	0.017	0.10	8.39	6.7	540	0.74	0.13	3.81	0.07	46.8	14.2	47	2.44	34.4
N688335		0.66	0.002	0.07	7.58	8.3	630	0.73	0.13	3.15	0.08	54.6	9.6	33	1.52	25.6
N688336		0.44	0.003	0.06	7.63	7.6	650	0.81	0.10	3.01	0.08	45.3	15.4	40	2.86	27.9
N688337		0.30	0.002	0.07	7.04	10.9	530	0.85	0.08	2.53	0.06	44.3	16.0	62	3.06	12.7
N688338		0.42	0.005	0.09	7.29	6.7	430	0.65	0.12	3.68	0.08	60.6	13.6	89	1.45	24.8
N688339		0.56	0.005	0.11	7.71	7.1	470	0.73	0.12	3.80	0.07	59.5	13.7	69	1.61	26.2
N688340		0.52	0.003	0.09	7.41	9.1	430	0.73	0.12	3.65	0.08	68.1	14.9	87	2.07	22.2

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

MACKENZIE SILT 3/3

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 16-AUG-2012
This copy reported on
11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12181554

Project: 697-Mackenzie
P.O. No.: 090923
This report is for 50 Sediment samples submitted to our lab in Vancouver, BC, Canada on 3-AUG-2012.

The following have access to data associated with this certificate:

PETER ANDERSEN JOSE SAYO GARCIA	BRUCE JAGO	ACCOUNTS PAYABLE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-MS61	48 element four acid ICP-MS	
Hg-CV41	Trace Hg - cold vapor/AAS	FIMS

To: MIOCENE METALS LIMITED
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 31-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191683

Method	CERTIFICATE COMMENTS
ME-MS61	REE's may not be totally soluble in this method.

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 31-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191683

Sample Description	Method Analyte Units LOR	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5
N688101		77	0.6	8.9	85	14.4
N688102		84	26.6	14.8	43	56.6
N688103		194	2.3	21.9	54	14.7
N688104		264	1.7	23.8	105	28.0
N688105		160	1.0	17.3	83	24.0
N688106		274	1.3	25.9	81	20.1
N688107		194	1.1	17.3	80	20.0
N688108		202	2.9	23.6	74	26.2
N688109		178	1.9	19.8	92	32.5
N688110		180	1.3	21.1	79	26.7

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

ALS Minerals
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 31-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191683

Sample Description	Method / Analyte / Units / LOR	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02	ME-MS61 U ppm 0.1
N688101		15.7	59.3	0.085	0.28	0.61	6.4	2	3.1	731	0.36	0.17	4.1	0.221	0.43	0.7
N688102		4.2	25.3	<0.002	0.05	0.92	11.3	2	0.8	260	0.26	<0.05	2.3	0.272	0.19	1.0
N688103		10.1	21.3	<0.002	0.01	1.15	19.9	2	1.6	654	0.40	<0.05	9.2	0.485	0.12	4.0
N688104		10.3	29.4	<0.002	0.01	0.90	23.8	2	1.5	553	0.45	<0.05	6.9	0.659	0.18	4.1
N688105		8.4	24.7	<0.002	<0.01	0.78	19.3	2	1.2	584	0.32	<0.05	6.7	0.529	0.17	2.4
N688106		7.4	26.0	<0.002	<0.01	1.04	25.1	2	1.4	548	0.40	<0.05	25.1	0.602	0.14	7.4
N688107		8.6	16.6	<0.002	<0.01	0.99	16.9	2	1.3	486	0.40	<0.05	8.1	0.513	0.18	3.6
N688108		9.9	24.5	<0.002	0.01	1.02	19.6	2	1.6	534	0.56	<0.05	15.2	0.595	0.18	7.0
N688109		10.7	30.0	<0.002	0.02	0.72	19.1	2	1.3	480	0.45	<0.05	7.5	0.541	0.21	5.8
N688110		9.1	38.9	<0.002	0.01	0.81	19.4	2	1.3	477	0.44	<0.05	17.1	0.500	0.22	8.8

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

ALS Minerals
ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 31-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191683

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	Fe	Ga	Ge	Hf	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
	Units	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
	LOR	0.01	0.05	0.05	0.1	0.005	0.01	0.5	0.2	0.01	5	0.05	0.01	0.1	0.2	10
N688101		3.98	19.35	0.15	0.5	0.090	2.37	13.3	10.5	0.65	683	173.5	2.81	7.3	16.2	820
N688102		2.59	11.05	0.13	1.7	0.030	0.85	10.0	13.9	0.81	474	3.78	2.08	4.1	22.6	560
N688103		5.94	17.90	0.21	1.0	0.060	0.91	25.4	8.6	1.40	655	1.86	2.87	5.8	16.1	1640
N688104		7.96	21.1	0.24	1.3	0.071	1.00	26.7	19.0	2.21	1080	2.83	2.36	6.9	25.8	2060
N688105		4.79	19.40	0.19	1.1	0.057	1.15	17.2	17.9	1.95	824	1.50	2.73	5.2	21.9	1640
N688106		8.02	19.05	0.25	1.2	0.071	0.98	25.2	14.3	2.16	910	2.00	2.53	5.7	23.2	1880
N688107		5.71	18.15	0.19	1.0	0.060	1.09	17.5	18.2	1.67	746	1.67	2.46	5.7	20.6	1670
N688108		6.03	18.45	0.23	1.5	0.060	1.31	27.3	15.0	1.72	777	2.65	2.64	7.7	18.6	1890
N688109		5.40	19.50	0.20	1.4	0.054	1.32	21.8	22.6	1.96	1060	2.67	2.43	6.7	23.1	1530
N688110		5.51	19.00	0.22	1.4	0.053	1.49	25.1	21.4	1.87	766	1.79	2.49	6.0	20.4	1640

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 31-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191683

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-ICP21 Au ppm 0.001	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
N688101		0.12	0.320	0.67	7.46	3.3	1700	1.29	0.31	2.37	0.24	26.7	8.8	21	0.64	1830
N688102		0.12	0.002	0.45	5.26	3.6	490	0.71	0.07	1.81	0.28	20.7	10.6	34	0.79	27.0
N688103		0.50	0.002	0.07	7.65	4.1	610	0.71	0.14	4.00	0.08	56.6	11.8	51	0.96	31.3
N688104		0.58	0.004	0.09	7.75	7.6	430	0.75	0.17	3.81	0.13	59.5	20.6	72	2.14	58.5
N688105		0.72	0.004	0.06	8.10	3.5	510	0.79	0.12	3.45	0.08	41.6	16.1	36	1.68	48.8
N688106		0.64	0.002	0.07	7.27	5.7	380	0.66	0.13	4.08	0.09	59.3	18.2	66	1.86	37.4
N688107		0.60	0.003	0.10	6.61	6.2	450	0.72	0.14	3.09	0.09	42.0	15.5	51	1.80	60.3
N688108		0.66	0.002	0.08	7.32	6.0	500	0.74	0.18	3.56	0.08	62.5	14.6	51	1.78	54.0
N688109		0.30	0.002	0.09	7.65	7.1	520	0.79	0.13	3.05	0.13	50.4	17.4	43	2.49	52.1
N688110		0.38	0.003	0.24	7.53	5.5	520	0.80	0.15	3.17	0.08	56.2	15.5	48	2.71	56.2

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

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 31-AUG-2012
This copy reported on
11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12191683

Project: 697_MACKENZIE_ROCKS
P.O. No.: 090926-PROJECT 697
This report is for 10 Sediment samples submitted to our lab in Vancouver, BC, Canada on 16-AUG-2012.
The following have access to data associated with this certificate:

PETER ANDERSEN ACCOUNTS PAYABLE	SHANNON BAIRD JOSE SAYO GARCIA	BRUCE JAGO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-MS61	48 element four acid ICP-MS	

To: MIOCENE METALS LIMITED
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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

E1.

APPENDIX E1: SOILSAMPLES COORDINATES and NOTES

Mackenzie

Result of Orientation Soil Sampling at Mackenzie Area (Orientation Line Across Tillworth Trend)

N3 #	Location	Sample_Location_ID	ALS_ID	Easting	Northing	Elev_m	SampleType	Geologist	Date_Sampled	Analyte	Recvd Wt.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U	V	W	Y	Zn	Zr
1	MacKenzie NW	697S001	M487951	484663	5641083	2160	Soil	AS	29-Jul-12	M487951	0.38	0.002	0.12	8.7	8.8	680	1.17	0.29	1.17	0.14	33.1	12.3	33	7.61	66.2	3.54	23.4	0.13	1.6	0.03	0.048	1.62	16.8	44.2	0.82	1470	2.16	1.98	6.4	17.6	1670	17	84.8	<0.002	0.04	6.61	12.6	2	1.1	288	0.45	<0.05	6.5	0.507	0.44	2.9	110	1.9	10.3	147	47.9
2	MacKenzie NW	697S002	M487952	484559	5641072	2165	Soil	AS	29-Jul-12	M487952	0.36	0.002	0.15	8.85	6.3	480	1.08	0.25	1.53	0.14	37.4	16.4	47	4.63	69.7	4.4	21.4	0.15	1.4	0.07	0.053	1.21	18.2	40.6	1.69	912	1.91	1.71	6.7	26.3	1790	11.4	47	<0.002	0.04	2.34	16.5	2	1.1	303	0.42	0.06	5.3	0.526	0.29	2.4	129	1.6	14.9	101	41.4
3	MacKenzie NW	697S003	M487953	484460	5641053	2182	Soil	AS	29-Jul-12	M487953	0.46	0.002	0.13	9.85	4.5	550	1.04	0.1	0.93	0.07	39.9	21.3	46	9.79	74.6	5.12	27.2	0.16	0.6	0.02	0.059	2.32	11.4	47.4	2.49	854	2.51	1.79	4	28.9	920	9.7	70.3	<0.002	<0.01	3.66	19.3	2	1	264	0.25	<0.05	4.3	0.617	0.48	2.3	185	2.8	8.8	106	9.5
4	MacKenzie NW	697S004	M487954	484357	5641017	2181	Soil	AS	29-Jul-12	M487954	0.30	0.003	0.2	8.8	6.4	410	0.96	0.15	1.06	0.15	38.7	15.7	48	8.43	81.2	4.19	22	0.15	1.2	0.03	0.054	1.63	18.6	51.2	1.47	863	1.92	1.31	6.1	25.3	1440	11.4	67.6	<0.002	0.03	10.35	15.4	2	1	209	0.4	<0.05	7.6	0.538	0.42	2.8	134	4	11.9	109	34.6
5	MacKenzie NW	697S005	M487955	484261	5640969	2177	Soil	AS	29-Jul-12	M487955	0.48	0.002	0.14	9.18	6	520	1.01	0.14	1.49	0.15	43.5	20.4	50	8.71	67.6	4.86	22.9	0.16	1.1	0.01	0.061	1.71	17.1	50.9	1.95	1020	1.51	1.76	6.3	27.6	1160	13.3	54.4	<0.002	<0.01	11	18.4	2	1.1	298	0.41	<0.05	7.3	0.625	0.5	2.8	159	3.8	14.7	120	27.6
6	MacKenzie NW	697S006	M487956	484168	5640928	2178	Soil	AS	29-Jul-12	M487956	0.38	0.003	0.18	8.44	5.6	480	0.96	0.16	1.76	0.12	35.3	21	47	6.02	108.0	4.9	22	0.17	0.9	0.01	0.06	1.36	14.1	43.1	2.31	974	1.3	1.64	5.4	29.7	1170	11.5	38	<0.002	<0.01	2.89	19.2	2	1.1	312	0.34	<0.05	5.7	0.569	0.36	2.7	154	1.6	14.9	117	22.1
7	MacKenzie NW	697S007	M487957	484090	5640887	2169	Soil	AS	29-Jul-12	M487957	0.36	0.002	0.17	8.75	4.1	620	1.19	0.19	2.35	0.09	39.5	19.4	41	4.08	68.8	4.9	22.5	0.15	1.6	0.02	0.064	1.49	17.6	34.2	2.08	1170	1.99	2.22	7.2	25.1	1440	14.5	50.3	<0.002	0.01	0.85	18.3	2	1.2	408	0.45	<0.05	10.8	0.59	0.39	3.6	144	1.1	17	118	50.4
8	MacKenzie NW	697S008	M487958	483966	5640830	2153	Soil	AS	29-Jul-12	M487958	0.38	0.002	0.2	8.72	5.1	500	1.04	0.16	1.99	0.09	37.9	18.8	47	4.28	89.6	4.95	21.4	0.17	1.1	0.4	0.057	1.2	16.3	37.2	2.12	729	1.46	1.99	6.1	26.5	1120	11.2	39.1	<0.002	<0.01	1.39	18.3	2	1.1	367	0.4	<0.05	6.2	0.589	0.28	2.7	145	1.1	15.5	106	28
9	MacKenzie NW	697S009	M487959	483869	5640790	2146	Soil	AS	29-Jul-12	M487959	0.48	0.002	0.16	9.7	9.6	440	1.07	0.15	1.12	0.05	27.8	20.6	49	7.18	90.1	5.27	24.3	0.15	0.8	0.66	0.054	1.17	12.1	44.5	1.85	606	1.77	1.98	5.3	28.2	1330	11.8	50.2	<0.002	<0.01	1.43	16.4	2	1.1	266	0.34	<0.05	6.4	0.618	0.36	2.7	167	1.3	9.4	122	17.6
10	MacKenzie NW	697S010	M487960	483767	5640759	2147	Soil	AS	29-Jul-12	M487960	0.34	0.002	0.15	9.09	7.3	520	1.27	0.19	1.71	0.09	39.1	19.9	45	4.99	82.9	5.07	23.3	0.19	1.4	0.02	0.059	1.32	17.7	44.5	2.03	1100	1.8	1.81	6.7	26.6	1750	12.8	62.3	<0.002	0.03	0.76	18.3	2	1.1	334	0.46	<0.05	7.2	0.575	0.33	4.1	146	1.1	15.2	131	39.4
11	MacKenzie NW	697S011	M487961	483669	5640725	2149	Soil	AS	29-Jul-12	M487961	0.42	0.003	0.2	8.65	7.9	460	1.06	0.16	2.29	0.11	47.4	22.9	92	3.14	103.0	5.27	23.3	0.19	1.7	0.02	0.067	1.08	20.7	31.5	2.38	803	1.36	1.86	9.5	44.9	1730	9.8	28.2	<0.002	0.01	0.83	20.2	2	1.3	389	0.55	<0.05	6.4	0.684	0.24	2.8	165	0.9	16.5	119	54.3
12	MacKenzie NW	697S012	M487962	483571	5640694	2151	Soil	AS	29-Jul-12	M487962	0.30	0.002	0.19	8.28	5.4	430	0.86	0.13	2.15	0.09	34.4	14.4	40	2.6	54.2	4.54	20.5	0.15	1	0.06	0.059	0.96	15.6	27	1.6	637	1.92	1.75	5	20.1	1820	9.7	32.9	<0.002	0.03	0.67	17.9	2	1	367	0.34	<0.05	5.5	0.498	0.21	2.6	130	0.7	15.5	85	25.7
13	MacKenzie NW	697S013	M487963	483473	5640716	2162	Soil	AS	29-Jul-12	M487963	0.32	0.001	0.18	8.74	5.7	520	1.09	0.15	1.99	0.12	36.4	18.9	50	3.6	69.2	4.81	21.6	0.16	1.3	0.03	0.057	1.1	16	32.2	1.96	1110	2.05	1.8	6.4	27	1590	10.8	45.6	<0.002	0.03	0.86	17.8	2	1.1	359	0.42	<0.05	6.1	0.573	0.27	2.8	142	0.9	15	125	35.8
14	MacKenzie NW	697S014	M487964	483379	5640761	2174	Soil	AS	29-Jul-12	M487964	0.36	0.003	0.17	8.27	6.2	500	1.02	0.15	1.92	0.07	33.9	19.1	54	3.69	67.0	5.17	22.4	0.16	1.3	0.06	0.064	1.02	14.8	37.2	2.02	891	1.75	1.64	6.4	28.8	2210	10.8	44	<0.002	0.04	0.84	17.5	2	1.1	327	0.4	<0.05	5.4	0.601	0.23	2.5	146	0.9	14	120	35.9
15	MacKenzie NW	697S015	M487965	483274	5640801	2180	Soil	AS	29-Jul-12	M487965	0.40	0.002	0.14	8.28	6.4	470	1.14	0.19	1.63	0.11	37.1	18.3	46	4.47	84.3	4.58	21.5	0.14	1.4	0.03	0.056	1.31	15.3	35.5	1.87	1070	2.13	1.77	6.8	25.5	1930	12.4	52.2	<0.002	0.03	0.79	16.6	2	1.1	315	0.46	<0.05	6.3	0.545	0.31	2.6	133	1	13.9	125	42.9
16	MacKenzie NW	697S016	M487966	483172	5640824	2187	Soil	AS	29-Jul-12	M487966	0.34	0.002	0.13	8.5	5.3	560	1.2	0.19	2.32	0.09	41.9	20.4	55	3.54	58.4	5.27	24.2	0.17	1.6	0.02	0.065	1.19	19.4	33.8	2.05	1370	1.98	2.03	8	27.1	1930	12.6	61.3	<0.002	0.02	0.8	19.2	2	1.3	405	0.52	<0.05	7.7	0.664	0.29	3	156	0.9	16.7	141	49.7
17	MacKenzie NW	697S017	M487967	483073	5640844	2195	Soil	AS	29-Jul-12	M487967	0.30	0.001	0.39	8.25	5.1	420	0.84	0.19	2.03	0.09	33	17.1	43	3.31	62.7	5.1	23.6	0.19	1.2	0.05	0.062	0.94	14.3	31.4	1.85	765	2.02	1.64	5.6	24.5	2050	11.1	39.9	<0.002	0.02	0.76	18.2	2	1.1	328	0.37	<0.05	5.3	0.594	0.22	3	151	0.8	14.9	114	32.4
18	MacKenzie NW	697S018	M487968	482944	5640885	2203	Soil	AS	29-Jul-12	M487968	0.32	0.005	0.15	8.1	5.2	420	0.94	0.16	2.27	0.1	39.2	19.5	46	3.89	81.3	5.43	21.3	0.16	1	0.03	0.061	1.01	15.9	35.6	2.22	857	1.82	1.49	5.3	26.1	1470	9.6	53.1	<0.002	0.05	0.66	19.5	2	1.1	320	0.34	<0.05	6.5	0.605	0.27	3.3	161	0.9	16.3	108	24.8

E2.

APPENDIX E2: SOILSAMPLES CERTIFICATE OF ANALYSIS

Mackenzie

MACKENZIE SOIL 1/1

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 30-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191685

Method	CERTIFICATE COMMENTS
ME-MS61	Interference: Mo>400ppm on ICP-MS Cd,ICP-AES results shown.
ME-MS61	REE's may not be totally soluble in this method.

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 30-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191685

Sample Description	Method Analyte Units LOR	ME-MS61 U ppm 0.1	ME-MS61 V ppm 1	ME-MS61 W ppm 0.1	ME-MS61 Y ppm 0.1	ME-MS61 Zn ppm 2	ME-MS61 Zr ppm 0.5	Cu-OG62 Cu % 0.001
M487951		2.9	110	1.9	10.3	147	47.9	
M487952		2.4	129	1.6	14.9	101	41.4	
M487953		2.3	185	2.8	8.8	106	9.5	
M487954		2.8	134	4.0	11.9	109	34.6	
M487955		2.8	159	3.8	14.7	120	27.6	
M487956		2.7	154	1.6	14.9	117	22.1	
M487957		3.6	144	1.1	17.0	118	50.4	
M487958		2.7	145	1.1	15.5	106	28.0	
M487959		2.7	167	1.3	9.4	122	17.6	
M487960		4.1	146	1.1	15.2	131	39.4	
M487961		2.8	165	0.9	16.5	119	54.3	
M487962		2.6	130	0.7	15.5	85	25.7	
M487963		2.8	142	0.9	15.0	125	35.8	
M487964		2.5	146	0.9	14.0	120	35.9	
M487965		2.6	133	1.0	13.9	125	42.9	
M487966		3.0	156	0.9	16.7	141	49.7	
M487967		3.0	151	0.8	14.9	114	32.4	
M487968		3.3	161	0.9	16.3	108	24.8	
M487969		1.2	93	37.7	15.5	86	63.5	1.295
M487970		1.0	84	30.0	15.2	43	59.4	

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 30-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191685

Sample Description	Method / Analyte / Units / LOR	ME-MS61 P ppm 10	ME-MS61 Pb ppm 0.5	ME-MS61 Rb ppm 0.1	ME-MS61 Re ppm 0.002	ME-MS61 S % 0.01	ME-MS61 Sb ppm 0.05	ME-MS61 Sc ppm 0.1	ME-MS61 Se ppm 1	ME-MS61 Sn ppm 0.2	ME-MS61 Sr ppm 0.2	ME-MS61 Ta ppm 0.05	ME-MS61 Te ppm 0.05	ME-MS61 Th ppm 0.2	ME-MS61 Ti % 0.005	ME-MS61 Tl ppm 0.02
M487951		1670	17.0	84.8	<0.002	0.04	6.61	12.6	2	1.1	288	0.45	<0.05	6.5	0.507	0.44
M487952		1790	11.4	47.0	<0.002	0.04	2.34	16.5	2	1.1	303	0.42	0.06	5.3	0.526	0.29
M487953		920	9.7	70.3	<0.002	<0.01	3.66	19.3	2	1.0	264	0.25	<0.05	4.3	0.617	0.48
M487954		1440	11.4	67.6	<0.002	0.03	10.35	15.4	2	1.0	209	0.40	<0.05	7.6	0.538	0.42
M487955		1160	13.3	54.4	<0.002	<0.01	11.00	18.4	2	1.1	298	0.41	<0.05	7.3	0.625	0.50
M487956		1170	11.5	38.0	<0.002	<0.01	2.89	19.2	2	1.1	312	0.34	<0.05	5.7	0.569	0.36
M487957		1440	14.5	50.3	<0.002	0.01	0.85	18.3	2	1.2	408	0.45	<0.05	10.8	0.590	0.39
M487958		1120	11.2	39.1	<0.002	<0.01	1.39	18.3	2	1.1	367	0.40	<0.05	6.2	0.589	0.28
M487959		1330	11.8	50.2	<0.002	<0.01	1.43	16.4	2	1.1	266	0.34	<0.05	6.4	0.618	0.36
M487960		1750	12.8	62.3	<0.002	0.03	0.76	18.3	2	1.1	334	0.46	<0.05	7.2	0.575	0.33
M487961		1730	9.8	28.2	<0.002	0.01	0.83	20.2	2	1.3	389	0.55	<0.05	6.4	0.684	0.24
M487962		1820	9.7	32.9	<0.002	0.03	0.67	17.9	2	1.0	367	0.34	<0.05	5.5	0.498	0.21
M487963		1590	10.8	45.6	<0.002	0.03	0.86	17.8	2	1.1	359	0.42	<0.05	6.1	0.573	0.27
M487964		2210	10.8	44.0	<0.002	0.04	0.84	17.5	2	1.1	327	0.40	<0.05	5.4	0.601	0.23
M487965		1930	12.4	52.2	<0.002	0.03	0.79	16.6	2	1.1	315	0.46	<0.05	6.3	0.545	0.31
M487966		1930	12.6	61.3	<0.002	0.02	0.80	19.2	2	1.3	405	0.52	<0.05	7.7	0.664	0.29
M487967		2050	11.1	39.9	<0.002	0.02	0.76	18.2	2	1.1	328	0.37	<0.05	5.3	0.594	0.22
M487968		1470	9.6	53.1	<0.002	0.05	0.66	19.5	2	1.1	320	0.34	<0.05	6.5	0.605	0.27
M487969		580	11.4	30.0	0.253	0.92	3.64	12.6	4	1.4	264	0.27	0.45	2.7	0.285	0.29
M487970		540	4.3	25.5	<0.002	0.03	0.81	12.8	2	0.8	268	0.25	<0.05	2.2	0.285	0.20

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

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 30-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191685

Sample Description	Method Analyte Units LOR	ME-MS61 Fe % 0.01	ME-MS61 Ga ppm 0.05	ME-MS61 Ge ppm 0.05	ME-MS61 Hf ppm 0.1	Hg-CV41 Hg ppm 0.01	ME-MS61 In ppm 0.005	ME-MS61 K % 0.01	ME-MS61 La ppm 0.5	ME-MS61 Li ppm 0.2	ME-MS61 Mg % 0.01	ME-MS61 Mn ppm 5	ME-MS61 Mo ppm 0.05	ME-MS61 Na % 0.01	ME-MS61 Nb ppm 0.1	ME-MS61 Ni ppm 0.2
M487951		3.54	23.4	0.13	1.6	0.03	0.048	1.62	16.8	44.2	0.82	1470	2.16	1.98	6.4	17.6
M487952		4.40	21.4	0.15	1.4	0.07	0.053	1.21	18.2	40.6	1.69	912	1.91	1.71	6.7	26.3
M487953		5.12	27.2	0.16	0.6	0.02	0.059	2.32	11.4	47.4	2.49	854	2.51	1.79	4.0	28.9
M487954		4.19	22.0	0.15	1.2	0.03	0.054	1.63	18.6	51.2	1.47	863	1.92	1.31	6.1	25.3
M487955		4.86	22.9	0.16	1.1	0.01	0.061	1.71	17.1	50.9	1.95	1020	1.51	1.76	6.3	27.6
M487956		4.90	22.0	0.17	0.9	0.01	0.060	1.36	14.1	43.1	2.31	974	1.30	1.64	5.4	29.7
M487957		4.90	22.5	0.15	1.6	0.02	0.064	1.49	17.6	34.2	2.08	1170	1.99	2.22	7.2	25.1
M487958		4.95	21.4	0.17	1.1	0.40	0.057	1.20	16.3	37.2	2.12	729	1.46	1.99	6.1	26.5
M487959		5.27	24.3	0.15	0.8	0.66	0.054	1.17	12.1	44.5	1.85	606	1.77	1.98	5.3	28.2
M487960		5.07	23.3	0.19	1.4	0.02	0.059	1.32	17.7	44.5	2.03	1100	1.80	1.81	6.7	26.6
M487961		5.27	23.3	0.19	1.7	0.02	0.067	1.08	20.7	31.5	2.38	803	1.36	1.86	9.5	44.9
M487962		4.54	20.5	0.15	1.0	0.06	0.059	0.96	15.6	27.0	1.60	637	1.92	1.75	5.0	20.1
M487963		4.81	21.6	0.16	1.3	0.03	0.057	1.10	16.0	32.2	1.96	1110	2.05	1.80	6.4	27.0
M487964		5.17	22.4	0.16	1.3	0.06	0.064	1.02	14.8	37.2	2.02	891	1.75	1.64	6.4	28.8
M487965		4.58	21.5	0.14	1.4	0.03	0.056	1.31	15.3	35.5	1.87	1070	2.13	1.77	6.8	25.5
M487966		5.27	24.2	0.17	1.6	0.02	0.065	1.19	19.4	33.8	2.05	1370	1.98	2.03	8.0	27.1
M487967		5.10	23.6	0.19	1.2	0.05	0.062	0.94	14.3	31.4	1.85	765	2.02	1.64	5.6	24.5
M487968		5.43	21.3	0.16	1.0	0.03	0.061	1.01	15.9	35.6	2.22	857	1.82	1.49	5.3	26.1
M487969		4.09	11.90	0.14	1.8	0.09	0.074	1.00	11.0	15.7	0.93	666	554	2.03	4.1	35.1
M487970		2.65	11.55	0.09	1.7	0.03	0.033	0.86	9.8	14.8	0.82	495	3.47	2.07	3.8	21.6

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

ALS Minerals

ALS Canada Ltd.

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

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 30-AUG-2012
Account: MIOMIN

Project: 697_MACKENZIE_ROCKS

CERTIFICATE OF ANALYSIS VA12191685

Sample Description	Method	WEI-21	Au-ICP21	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.	Au	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu
	Units	kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	0.02	0.001	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2
M487951		0.38	0.002	0.12	8.70	8.8	680	1.17	0.29	1.17	0.14	33.1	12.3	33	7.61	66.2
M487952		0.36	0.002	0.15	8.85	6.3	480	1.08	0.25	1.53	0.14	37.4	16.4	47	4.63	69.7
M487953		0.46	0.002	0.13	9.85	4.5	550	1.04	0.10	0.93	0.07	39.9	21.3	46	9.79	74.6
M487954		0.30	0.003	0.20	8.80	6.4	410	0.96	0.15	1.06	0.15	38.7	15.7	48	8.43	81.2
M487955		0.48	0.002	0.14	9.18	6.0	520	1.01	0.14	1.49	0.15	43.5	20.4	50	8.71	67.6
M487956		0.38	0.003	0.18	8.44	5.6	480	0.96	0.16	1.76	0.12	35.3	21.0	47	6.02	108.0
M487957		0.36	0.002	0.17	8.75	4.1	620	1.19	0.19	2.35	0.09	39.5	19.4	41	4.08	68.8
M487958		0.38	0.002	0.20	8.72	5.1	500	1.04	0.16	1.99	0.09	37.9	18.8	47	4.28	89.6
M487959		0.48	0.002	0.16	9.70	9.6	440	1.07	0.15	1.12	0.05	27.8	20.6	49	7.18	90.1
M487960		0.34	0.002	0.15	9.09	7.3	520	1.27	0.19	1.71	0.09	39.1	19.9	45	4.99	82.9
M487961		0.42	0.003	0.20	8.65	7.9	460	1.06	0.16	2.29	0.11	47.4	22.9	92	3.14	103.0
M487962		0.30	0.002	0.19	8.28	5.4	430	0.86	0.13	2.15	0.09	34.4	14.4	40	2.60	54.2
M487963		0.32	0.001	0.18	8.74	5.7	520	1.09	0.15	1.99	0.12	36.4	18.9	50	3.60	69.2
M487964		0.36	0.003	0.17	8.27	6.2	500	1.02	0.15	1.92	0.07	33.9	19.1	54	3.69	67.0
M487965		0.40	0.002	0.14	8.28	6.4	470	1.14	0.19	1.63	0.11	37.1	18.3	46	4.47	84.3
M487966		0.34	0.002	0.13	8.50	5.3	560	1.20	0.19	2.32	0.09	41.9	20.4	55	3.54	58.4
M487967		0.30	0.001	0.39	8.25	5.1	420	0.84	0.19	2.03	0.09	33.0	17.1	43	3.31	62.7
M487968		0.32	0.005	0.15	8.10	5.2	420	0.94	0.16	2.27	0.10	39.2	19.5	46	3.89	81.3
M487969		0.08	1.245	4.62	6.02	19.7	590	0.88	2.13	1.78	0.92	22.3	13.6	53	1.00	>10000
M487970		0.08	0.003	0.34	5.78	4.2	510	0.85	0.06	1.91	0.21	20.5	10.9	33	0.78	25.7

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

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

ALS Minerals

To: MIOCENE METALS LIMITED
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

Finalized Date: 30-AUG-2012
This copy reported on 11-OCT-2012
Account: MIOMIN

CERTIFICATE VA12191685

Project: 697_MACKENZIE_ROCKS
P.O. No.: 090936-PROJECT 697
This report is for 20 Soil samples submitted to our lab in Vancouver, BC, Canada on 16-AUG-2012.

The following have access to data associated with this certificate:

PETER ANDERSEN ACCOUNTS PAYABLE	SHANNON BAIRD JOSE SAYO GARCIA	BRUCE JAGO

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both
LOG-23	Pulp Login - Rcvd with Barcode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Cu-OG62	Ore Grade Cu - Four Acid	VARIABLE
Au-ICP21	Au 30g FA ICP-AES Finish	ICP-AES
ME-MS61	48 element four acid ICP-MS	
Hg-CV41	Trace Hg - cold vapor/AAS	FIMS
ME-OG62	Ore Grade Elements - Four Acid	ICP-AES

To: MIOCENE METALS LIMITED
ATTN: JOSE SAYO GARCIA
1281 WEST GEORGIA STREET
SUITE 310
VANCOUVER BC V6E 3J7

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

F1.

APPENDIX F1: STATEMENT OF EXPENSES

SALAL

Mackenzie

SUMMARY OF EXPENDITURES FOR SALAL PROJECT IN 2011

Description	Cost	unit Cost	Unit		Period
1. Drilling	152,921.41	$215.14 /m	710.8 m		Aug to Sept
2. Helicopter (Air Transport)	151,933.35	$ 2100 / wet hours	73 wet hours		Aug to Sept
3. Landbase Transport	31,161.43	Vehicle Rental (trucks) and personnel Travel			Aug to Sept
4. Geochem (Assaying)	28,016.73	260 rock channels, 25 Grab with adequate			Aug to Sept
5. Explo Management	31,125.01	$ 750 / day	41.5 days		Jose Sayo Garcia
6. Salary and Wages (Labor)		Rate/ day		# of Days	Position
Alex Filler	2,533.65	150		17	Sampler
GeoReference	1,797.69	450		4	Drafting
Joshua Lindgren	14,490.00	240		61	Sr. Technical Assisstant
Julius Grznar	2,100.00	150		14	Sampler
Andrew Strain	17,675.00	310		57	Sr. Technical Assisstant
Consultants	1,255.35	630		2	Wall Bridge DataBase Mngnt
Martine Girard	8,880.00	220		41	Camp Cook
Bruce Frank	4,614.87	180		26	Camp Custodian
Guillaume Vassas	12,050.53	200		60	Bull Cook _OFA 3
Duncan McLesih	26,000.00	325		110	Sr, Field Assistant
Shannon Baird	54,457.83	315		173	Project Geologist
7. Logistics (Field Supplies and Support)	118,451.03	one lot (Accomodation, Fuel, Safety Gear, Equipment rentals, Site Field Supplies, Sire Office Supplies, First Aide Kit and Training) in Aug to Sept			
	659,463.88				

SUMMARY OF EXPENDITURES FOR SALAL PROJECT IN 2011

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Quarter	Account	Sub-account
696	635	20110817	PJ	13876A	Robertson Mfg. Ltd.	3,245.98	PJ0332	August	Q3	Salal	Drilling
696	635	20110817	PJ	13876B	Robertson Mfg. Ltd.	3,364.02	PJ0332	August	Q3	Salal	Drilling
696	635	20110819	GJ	Mobiliztn	Lyncorp Drilling mobilization	7,500.00	GJ0340	August	Q3	Salal	Drilling
696	635	20110831	PJ	MIO-002	Lyncorp Drilling Services	42,212.25	PJ0364	August	Q3	Salal	Drilling
696	635	20110930	PJ	01/11/1969	UTM Exploration Services Ltd.	13,795.79	PJ0376	September	Q3	Salal	Drilling
696	635	20110930	PJ	MIO-003	Lyncorp Drilling Services	60,827.37	PJ0381	September	Q3	Salal	Drilling
696	635	20111121	PJ	MIO-004	Lyncorp Drilling Services	21,976.00	PJ0428	November	Q4	Salal	Drilling
					1. Drilling	**152,921.41**					

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Quarter	Account	Sub-account
696	651	20110831	PJ	Inv#016841	Blackcomb Aviation	318.50	PJ0355	August	Q3	Salal	Helcopters
696	651	20110831	PJ	Inv#016821	Blackcomb Aviation	5,165.00	PJ0342	August	Q3	Salal	Helcopters
696	651	20110831	PJ	Inv#016892	Blackcomb Aviation	14,337.70	PJ0355	August	Q3	Salal	Helcopters
696	651	20110831	GJ	Inv#016936	Blackcomb Aviation	22,614.00	GJ0416	August	Q3	Salal	Helcopters
696	651	20110831	PJ	Inv#016865	Blackcomb Aviation	32,282.65	PJ0355	August	Q3	Salal	Helcopters
696	651	20111025	PJ	Inv#017042	Blackcomb Aviation	49,383.50	PJ0397	October	Q4	Salal	Helcopters
696	651	20111031	PJ	Inv#017247	Blackcomb Aviation	698.00	PJ0419	October	Q4	Salal	Helcopters
696	651	20111031	PJ	Inv#017151	Blackcomb Aviation	25,477.00	PJ0419	October	Q4	Salal	Helcopters
696	651	20111130	PJ	boardtrip	Blackcomb Aviation	3,053.00	PJ0453	November	Q4	Salal	Helcopters
					2. Helicopter (Air Transport)	**151,933.35**					

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Quarter	Account	Sub-account
696	650	20110131	PJ	JAN11 EXP	Shannon Baird	179.97	PJ0192	January	Q1	Salal	Travel
696	650	20110331	GJ	Garcia cor	correction of gl allocation	217.47	GJ0225	March	Q1	Salal	Travel
696	650	20110831	PJ	AUG11 EXP	Duncan McLeish	514.32	PJ0350	August	Q3	Salal	Travel
696	650	20110831	PJ	AUG11 EXP	Samuel Tyler	685.12	PJ0342	August	Q3	Salal	Travel
696	650	20110930	PJ	SEPT2711EX	Duncan McLeish	71.44	PJ0378	September	Q3	Salal	Travel
696	650	20111014	PJ	OCT11EXP	Duncan McLeish	66.53	PJ0389	October	Q4	Salal	Travel
696	650	20111231	PJ	01/12/2011	Shannon Baird	498.24	PJ0464	December	Q4	Salal	Travel
696	654	20110415	PJ	11-006	Jose Sayo Garcia	72.72	PJ0241	April	Q2	Salal	Vehicle Rental
696	654	20110502	CD	01/05/2011	Geordy Rentals Inc.	2,841.95	CD0142	May	Q2	Salal	Vehicle Rental
696	654	20110510	PJ	MAY62011	Variable Rentals	1,571.88	PJ0252	May	Q2	Salal	Vehicle Rental
696	654	20110524	PJ	MAY052011	TD VISA	1,890.27	PJ0259	May	Q2	Salal	Vehicle Rental
696	654	20110530	PJ	LOCKS	Variable Rentals	196.17	PJ0269	May	Q2	Salal	Vehicle Rental
696	654	20110531	PJ	2011MM-46	Wallbridge Mining Company Limi	321.20	PJ0284	May	Q2	Salal	Vehicle Rental
696	654	20110601	CD	01/06/2011	Geordy Rentals Inc.	1,559.30	CD0148	June	Q2	Salal	Vehicle Rental
696	654	20110610	PJ	JUNE32011	Variable Rentals	1,094.03	PJ0280	June	Q2	Salal	Vehicle Rental
696	654	20110701	CD	01/07/2011	Geordy Rentals Inc.	1,559.30	CD0149	July	Q3	Salal	Vehicle Rental
696	654	20110712	PJ	01/07/2011	Variable Rentals	943.13	PJ0301	July	Q3	Salal	Vehicle Rental
696	654	20110801	CD	01/08/2011	Geordy Rentals Inc.	1,559.30	CD0150	August	Q3	Salal	Vehicle Rental
696	654	20110811	PJ	Inv#006742	Black Hot Wheels	183.38	PJ0327	August	Q3	Salal	Vehicle Rental
696	654	20110811	PJ	01/08/2011	Variable Rentals	600.00	PJ0327	August	Q3	Salal	Vehicle Rental
696	654	20110815	PJ	AUG152011	Jose Sayo Garcia	429.50	PJ0341	August	Q3	Salal	Vehicle Rental
696	654	20110817	PJ	Inv#006804	Black Hot Wheels	465.38	PJ0332	August	Q3	Salal	Vehicle Rental
696	654	20110831	PJ	Inv#007028	Black Hot Wheels	112.80	PJ0350	August	Q3	Salal	Vehicle Rental
696	654	20110831	PJ	Inv#006887	Black Hot Wheels	133.05	PJ0350	August	Q3	Salal	Vehicle Rental
696	654	20110831	PJ	Inv#006946	Black Hot Wheels	209.27	PJ0350	August	Q3	Salal	Vehicle Rental
696	654	20110831	PJ	AUG312011	Jose Sayo Garcia	1,551.04	PJ0366	August	Q3	Salal	Vehicle Rental
696	654	20110831	PJ	AUG11 EXP	Duncan McLeish	2,799.00	PJ0350	August	Q3	Salal	Vehicle Rental
696	654	20110901	CD	01/09/2011	Geordy Rentals Inc.	1,559.30	CD0151	September	Q3	Salal	Vehicle Rental
696	654	20110907	PJ	01/09/2011	Variable Rentals	410.00	PJ0348	September	Q3	Salal	Vehicle Rental
696	654	20110926	PJ	SEPT152011	Joshua Lindgren	30.75	PJ0368	September	Q3	Salal	Vehicle Rental
696	654	20110927	PJ	Inv#007189	Black Hot Wheels	114.03	PJ0369	September	Q3	Salal	Vehicle Rental
696	654	20110928	PJ	Inv#007119	Black Hot Wheels	1,124.97	PJ0372	September	Q3	Salal	Vehicle Rental
696	654	20110930	PJ	SEPT3011EX	Duncan McLeish	66.92	PJ0388	September	Q3	Salal	Vehicle Rental
696	654	20110930	PJ	SEPT3011EX	Alexander Teasdale Filler	132.18	PJ0379	September	Q3	Salal	Vehicle Rental
696	654	20110930	PJ	Inv#002997	Budget Car & Truck Rental	500.00	PJ0381	September	Q3	Salal	Vehicle Rental
696	654	20110930	PJ	Inv#002999	Budget Car & Truck Rental	1,050.17	PJ0381	September	Q3	Salal	Vehicle Rental
696	654	20110930	PJ	SEPT2711EX	Duncan McLeish	1,150.95	PJ0378	September	Q3	Salal	Vehicle Rental
696	654	20111001	CD	01/10/2011	Geordy Rentals Inc.	1,559.30	CD0152	October	Q4	Salal	Vehicle Rental
696	654	20111012	PJ	Inv#031380	Ron Ridley Rentals Ltd.	975.00	PJ0382	October	Q4	Salal	Vehicle Rental
696	654	20111231	PJ	01/12/2011	Shannon Baird	162.10	PJ0464	December	Q4	Salal	Vehicle Rental
					3. Landbase Transport	**31,161.43**					

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Quarter	Account	Sub-account
696	615	20110110	PJ	Inv#475136	Janwill Petrographics	1,116.00	PJ0178	January	Q1	Salal	Geology
696	630	20110331	PJ	Inv2232812	ALS Canada	334.56	PJ0228	March	Q1	Salal	GeoChemical
696	630	20110527	PJ	Inv2294833	ALS Canada	279.75	PJ0265	May	Q2	Salal	GeoChemical
696	630	20110527	PJ	Inv2294835	ALS Canada	291.60	PJ0265	May	Q2	Salal	GeoChemical
696	630	20110531	PJ	Inv3105119	CDN Resource Laboratories Ltd.	168.85	PJ0281	May	Q2	Salal	GeoChemical
696	630	20110729	PJ	Inv#310774	CDN Resource Laboratories Ltd.	88.00	PJ0325	July	Q3	Salal	GeoChemical
696	630	20110729	PJ	Inv2343849	ALS Canada	210.00	PJ0325	July	Q3	Salal	GeoChemical
696	630	20110831	PJ	Inv#310913	CDN Resource Laboratories Ltd.	236.00	PJ0350	August	Q3	Salal	GeoChemical
696	630	20110831	PJ	03B-15455	Deakin Industries	280.00	PJ0350	August	Q3	Salal	GeoChemical
696	630	20110831	PJ	AUG212011	Pemberton Valley Hardware	286.81	PJ0350	August	Q3	Salal	GeoChemical
696	630	20110831	PJ	03A-17474	Deakin Industries	454.25	PJ0350	August	Q3	Salal	GeoChemical
696	630	20110921	PJ	Inv2390594	ALS Canada	210.00	PJ0367	September	Q3	Salal	GeoChemical
696	630	20111025	PJ	Inv2392225	ALS Canada	2,954.72	PJ0397	October	Q4	Salal	GeoChemical
696	630	20111031	PJ	Inv2418098	ALS Canada	3,631.61	PJ0414	October	Q4	Salal	GeoChemical
696	630	20111130	PJ	Inv2438150	ALS Canada	1,146.17	PJ0437	November	Q4	Salal	GeoChemical
696	630	20111231	PJ	Inv2472759	ALS Canada	1,879.03	PJ0464	December	Q4	Salal	GeoChemical
696	630	20111231	PJ	Inv2472750	ALS Canada	3,473.75	PJ0464	December	Q4	Salal	GeoChemical
696	630	20111231	PJ	Inv2472755	ALS Canada	5,265.33	PJ0464	December	Q4	Salal	GeoChemical
696	630	20111231	PJ	Inv2472753	ALS Canada	5,710.30	PJ0464	December	Q4	Salal	GeoChemical
					4. Geochem (Assaying)	**28,016.73**					

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Quarter	Account	Sub-account
696	661	20110331	GJ	Garcia cor	correction of gl allocation	857.15	GJ0225	March	Q1	Salal	Consulting Services-Exploration management
696	661	20110415	GJ	Garcia cor	correction to proper gl	642.86	GJ0227	April	Q2	Salal	Consulting Services-Exploration management
696	661	20110415	GJ	Garcia cor	correction to proper gl	2,250.00	GJ0227	April	Q2	Salal	Consulting Services-Exploration management
696	661	20110430	PJ	11-007	Jose Sayo Garcia	1,500.00	PJ0257	April	Q2	Salal	Consulting Services-Exploration management
696	661	20110731	PJ	JULY312011	Jose Sayo Garcia	750.00	PJ0328	July	Q3	Salal	Consulting Services-Exploration management
696	661	20110815	PJ	AUG152011	Jose Sayo Garcia	5,625.00	PJ0341	August	Q3	Salal	Consulting Services-Exploration management
696	661	20110831	PJ	AUG312011	Jose Sayo Garcia	10,500.00	PJ0366	August	Q3	Salal	Consulting Services-Exploration management
696	661	20110921	PJ	SEPT152011	Jose Sayo Garcia	9,000.00	PJ0367	September	Q3	Salal	Consulting Services-Exploration management
					5. Explo Management	**31,125.01**	750	41.50			

SUMMARY OF EXPENDITURES FOR SALAL PROJECT IN 2011

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Quarter	Account	Sub-account
696	660	20110831	PJ	AUG312011	Alexander Teasdale Filler	1,650.00	PJ0350	August	Q3	Salal	Consulting Services-Geological
696	660	20110914	PJ	SEPT32011	Alexander Teasdale Filler	450.00	PJ0357	September	Q3	Salal	Consulting Services-Geological
696	660	20111031	GJ	WCB Q3/11	amt owing re contractors	433.65	GJ0451	October	Q4	Salal	Consulting Services-Geological
696	660	20110115	PJ	Inv#110111	GeoReference Online Ltd.	1,150.05	PJ0182	January	Q1	Salal	Consulting Services-Geological
696	660	20110131	PJ	Inv#110113	GeoReference Online Ltd.	647.64	PJ0190	January	Q1	Salal	Consulting Services-Geological
696	660	20110731	PJ	JULY312011	Joshua Lindgren	2,205.00	PJ0328	July	Q3	Salal	Consulting Services-Geological
696	660	20110815	PJ	AUG152011	Joshua Lindgren	4,725.00	PJ0341	August	Q3	Salal	Consulting Services-Geological
696	660	20110831	PJ	Inv2011008	Joshua Lindgren	5,040.00	PJ0350	August	Q3	Salal	Consulting Services-Geological
696	660	20110926	PJ	SEPT152011	Joshua Lindgren	2,205.00	PJ0368	September	Q3	Salal	Consulting Services-Geological
696	660	20111110	CD	OCT312011	Joshua Lindgren	315.00	CD0257	November	Q4	Salal	Consulting Services-Geological
696	660	20110831	PJ	AUG312011	Julius Grznar	1,650.00	PJ0350	August	Q3	Salal	Consulting Services-Geological
696	660	20110914	PJ	SEPT32011	Julius Grznar	450.00	PJ0357	September	Q3	Salal	Consulting Services-Geological
696	660	20110815	PJ	AUG152011	Strain Exploration Services Lt	1,750.00	PJ0341	August	Q3	Salal	Consulting Services-Geological
696	660	20110831	PJ	AUG312011	Strain Exploration Services Lt	5,250.00	PJ0346	August	Q3	Salal	Consulting Services-Geological
696	660	20110920	PJ	SEPT152011	Strain Exploration Services Lt	3,150.00	PJ0363	September	Q3	Salal	Consulting Services-Geological
696	660	20110930	PJ	SEPT302011	Strain Exploration Services Lt	5,250.00	PJ0379	September	Q3	Salal	Consulting Services-Geological
696	660	20111019	PJ	OCT152011	Strain Exploration Services Lt	1,925.00	PJ0395	October	Q4	Salal	Consulting Services-Geological
696	660	20111031	PJ	OCT312011	Strain Exploration Services Lt	350.00	PJ0412	October	Q4	Salal	Consulting Services-Geological
696	660	20110331	GJ	banked day	w/o GeoR Online banked day bal	386.60	GJ0222	March	Q1	Salal	Consulting Services-Geological
696	660	20110331	PJ	2011MM-39	Wallbridge Mining Company Limi	613.75	PJ0225	March	Q1	Salal	Consulting Services-Geological
696	660	20111031	PJ	2011MM-58	Wallbridge Mining Company Limi	96.25	PJ0417	October	Q4	Salal	Consulting Services-Geological
696	660	20111231	PJ	2011MM-66	Wallbridge Mining Company Limi	96.25	PJ0471	December	Q4	Salal	Consulting Services-Geological
696	662	20110430	PJ	11-1240	Intrepid Geophysics Ltd.	62.50	PJ0248	April	Q2	Salal	Consulting Services-Geophysical
696	639	20110815	PJ	AUG152011	Martine Girard	1,440.00	PJ0341	August	Q3	Salal	Cook/cleaner
696	639	20110831	PJ	AUG312011	Martine Girard	3,840.00	PJ0342	August	Q3	Salal	Cook/cleaner
696	639	20110920	PJ	SEPT152011	Martine Girard	3,600.00	PJ0363	September	Q3	Salal	Cook/cleaner
696	505	20110820	PR	P/R: Aug20	2 Pay Aug20, 2011	2,223.45	PR1039	August	Q3	Salal	Wages - Casual Labour
696	505	20110827	PR	P/R: Aug27	2 Pay Aug27, 2011	1,195.71	PR1040	August	Q3	Salal	Wages - Casual Labour
696	505	20110903	PR	P/R: Sep03	2 Pay Sep03, 2011	1,195.71	PR1041	September	Q3	Salal	Wages - Casual Labour
Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Quarter	Account	Sub-account
696	663	20110101	GJ	S.Baird	S. Baird Roundup course	125.00	GJ0143	January	Q1	Salal	Professional Development
696	500	20110415	PR	P/R: Apr15	2 Pay Apr15, 2011	358.72	PR1021	April	Q2	Salal	Wages - Geology
696	500	20110422	PR	P/R: Apr22	2 Pay Apr22, 2011	807.49	PR1022	April	Q2	Salal	Wages - Geology
696	500	20110430	PR	P/R: Apr30	2 Pay Apr30, 2011	537.71	PR1023	April	Q2	Salal	Wages - Geology
696	500	20110507	PR	P/R: May07	2 Pay May07, 2011	1,881.90	PR1024	May	Q2	Salal	Wages - Geology
696	670	20110530	PJ	MAY1111EXP	Shannon Baird	618.39	PJ0267	May	Q2	Salal	Professional Fees
696	500	20110630	GJ	S Baird	June 18 banked time	288.46	GJ0301	June	Q2	Salal	Wages - Geology
696	500	20110716	PR	P/R: Jul16	2 Pay Jul16, 2011	474.10	PR1034	July	Q3	Salal	Wages - Geology
696	500	20110723	PR	P/R: Jul23	2 Pay Jul23, 2011	948.21	PR1035	July	Q3	Salal	Wages - Geology
696	500	20110730	PR	P/R: Jul30	2 Pay Jul30, 2011	4,041.23	PR1036	July	Q3	Salal	Wages - Geology
696	500	20110731	GJ	estimate	WCB BC accrual for July 2011	1,309.39	GJ0422	July	Q3	Salal	Wages - Geology
696	500	20110731	GJ	S Baird	Shannon July banked time	576.92	GJ0335	July	Q3	Salal	Wages - Geology
696	500	20110806	PR	P/R: Aug06	2 Pay Aug06, 2011	3,504.01	PR1037	August	Q3	Salal	Wages - Geology
696	510	20110806	PR	P/R: Aug06	2 Pay Aug06, 2011	410.27	PR1037	August	Q3	Salal	Wages - Vacation & Stat. Holiday
696	500	20110813	PR	P/R: Aug13	2 Pay Aug13, 2011	5,534.33	PR1038	August	Q3	Salal	Wages - Geology
696	500	20110820	PR	P/R: Aug20	2 Pay Aug20, 2011	6,897.85	PR1039	August	Q3	Salal	Wages - Geology
696	500	20110827	PR	P/R: Aug27	2 Pay Aug27, 2011	6,806.16	PR1040	August	Q3	Salal	Wages - Geology
696	500	20110831	GJ	Aug 28-31	record Aug payroll pd in Sept	683.00	GJ0361	August	Q3	Salal	Wages - Geology
696	500	20110831	GJ	S Baird	banked time	1,153.84	GJ0365	August	Q3	Salal	Wages - Geology
696	500	20110903	PR	P/R: Sep03	2 Pay Sep03, 2011	6,009.63	PR1041	September	Q3	Salal	Wages - Geology
696	500	20110910	PR	P/R: Sep10	2 Pay Sep10, 2011	5,110.84	PR1042	September	Q3	Salal	Wages - Geology
696	500	20110917	PR	P/R: Sep17	2 Pay Sep17, 2011	4,974.64	PR1043	September	Q3	Salal	Wages - Geology
696	500	20110924	PR	P/R: Sep24	2 Pay Sep24, 2011	4,974.64	PR1044	September	Q3	Salal	Wages - Geology
696	500	20110930	GJ	S.Baird	banked Sept time	1,730.76	GJ0383	September	Q3	Salal	Wages - Geology
696	500	20110930	GJ	Sept.costs	accrue Sept. payroll costs	751.78	GJ0377	September	Q3	Salal	Wages - Geology
696	500	20111001	PR	P/R: Oct01	2 Pay Oct01, 2011	3,770.44	PR1045	October	Q4	Salal	Wages - Geology
696	500	20111008	PR	P/R: Oct08	2 Pay Oct08, 2011	3,007.38	PR1046	October	Q4	Salal	Wages - Geology
696	500	20111015	PR	P/R: Oct15	2 Pay Oct15, 2011	4,076.35	PR1047	October	Q4	Salal	Wages - Geology
696	500	20111022	PR	P/R: Oct22	2 Pay Oct22, 2011	501.33	PR1048	October	Q4	Salal	Wages - Geology
696	500	20111029	PR	P/R: Oct29	2 Pay Oct29, 2011	308.89	PR1049	October	Q4	Salal	Wages - Geology
696	500	20111105	PR	P/R: Nov05	2 Pay Nov05, 2011	926.65	PR1050	November	Q4	Salal	Wages - Geology
696	500	20111119	PR	P/R: Nov19	2 Pay Nov19, 2011	1,005.99	PR1052	November	Q4	Salal	Wages - Geology
696	500	20111130	GJ	S Baird	Oct & Nov vacation accrual	225.68	GJ0485	November	Q4	Salal	Wages - Geology
696	500	20111130	GJ	S.Baird	Oct banked time	1,730.76	GJ0484	November	Q4	Salal	Wages - Geology
696	510	20111130	GJ	S.Baird	Oct banked time	432.69	GJ0484	November	Q4	Salal	Wages - Vacation & Stat. Holiday
696	510	20111130	GJ	S.Baird	Stat days banked time adjstmen	432.69	GJ0484	November	Q4	Salal	Wages - Vacation & Stat. Holiday
696	500	20111203	GJ	Dec.3	vacation accrual	34.62	GJ0506	December	Q4	Salal	Wages - Geology
696	500	20111203	PR	P/R: Dec03	2 Pay Dec03, 2011	758.21	PR1054	December	Q4	Salal	Wages - Geology
696	500	20111210	GJ	Dec.10	vacation accrual	17.31	GJ0507	December	Q4	Salal	Wages - Geology
696	500	20111210	PR	P/R: Dec10	2 Pay Dec10, 2011	1,301.26	PR1055	December	Q4	Salal	Wages - Geology
696	500	20111217	GJ	Dec. 17	vacation accrual	60.58	GJ0508	December	Q4	Salal	Wages - Geology
696	500	20111217	PR	P/R: Dec17	2 Pay Dec17, 2011	1,033.45	PR1056	December	Q4	Salal	Wages - Geology
696	640	20111219	PJ	DEC1111EXP	Duncan McLeish	168.00	PJ0457	December	Q4	Salal	Drafting
696	500	20111224	GJ	Dec.24	vacation accrual	8.65	GJ0509	December	Q4	Salal	Wages - Geology
696	500	20111224	PR	P/R: Dec24	2 Pay Dec24, 2011	147.63	PR1057	December	Q4	Salal	Wages - Geology
696	664	20110831	PJ	AUG31 2011	Guillaume Vassas	2,880.00	PJ0344	August	Q3	Salal	Camp Cook/medic
696	664	20110915	PJ	SEPT152011	Guillaume Vassas	2,770.00	PJ0371	September	Q3	Salal	Camp Cook/medic
696	664	20111001	GJ	G.Vassas	service provider to employee	5,580.00	GJ0392	October	Q4	Salal	Camp Cook/medic
696	508	20111008	PR	P/R: Oct08	2 Pay Oct08, 2011	820.53	PR1046	October	Q4	Salal	Camp Cook/medic
						145,854.92					

Amount	Rate/ day	# days	# of Days	Name of Employee	
2,533.65	150	17	17	Alex Filler	Sampler
1,797.69	450	4	4	GeoReference	Drafting
14,490.00	240	60	61	Joshua Lindgren	Sr. Technical Assisstant
2,100.00	150	14	14	Julius Grznar	Sampler
17,675.00	310	57	57	Andrew Strain	Sr. Technical Assisstant
1,255.35	630	2	2	Consultants	Wall Bridge DataBase Mngnt
8,880.00	220	40	41	Martine Girard	Camp Cook
4,614.87	180	26	26	Bruce Frank	Camp Custodian
12,050.53	200	60	60	Guillaume Vassas	Bull Cook _OFA 3
26,000.00	325	80	110	Duncan McLesih	Sr, Field Assistant
54,457.83	315	173	173	Shannon Baird	Project Geologist
145,854.92					

SUMMARY OF EXPENDITURES FOR SALAL PROJECT IN 2011

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Quarter	Account	Sub-account
696	649	20110101	GJ	S.Baird	S. Baird Vancouver hotel	790.06	GJ0143	January	Q1	Salal	Accomodation
696	649	20110415	PJ	11-006	Jose Sayo Garcia	65.29	PJ0241	April	Q2	Salal	Accomodation
696	649	20110430	PJ	Inv#000655	Country Meadows Bed & Breakfas	24.29	PJ0248	April	Q2	Salal	Accomodation
696	649	20110817	PJ	AUG1111	Shannon Baird	79.00	PJ0332	August	Q3	Salal	Accomodation
696	649	20110831	PJ	AUG312011	Jose Sayo Garcia	320.00	PJ0366	August	Q3	Salal	Accomodation
696	652	20110630	PJ	CL622161	A C Petroleum Sales	99.75	PJ0298	June	Q2	Salal	Fuel
696	652	20110731	PJ	In26886222	Esso	211.04	PJ0331	July	Q3	Salal	Fuel
696	652	20110815	PJ	AUG152011	Jose Sayo Garcia	26.51	PJ0341	August	Q3	Salal	Fuel
696	652	20110817	PJ	Inv#048510	A C Petroleum Sales	47.10	PJ0332	August	Q3	Salal	Fuel
696	652	20110831	PJ	Inv#048771	A C Petroleum Sales	50.00	PJ0342	August	Q3	Salal	Fuel
696	652	20110831	PJ	AUG2011EXP	Shannon Baird	114.07	PJ0362	August	Q3	Salal	Fuel
696	652	20110831	PJ	AUG11 EXP	Duncan McLeish	214.29	PJ0350	August	Q3	Salal	Fuel
696	652	20110831	PJ	Inv#048687	A C Petroleum Sales	230.39	PJ0342	August	Q3	Salal	Fuel
696	652	20110831	PJ	Inv#048780	A C Petroleum Sales	380.18	PJ0342	August	Q3	Salal	Fuel
696	652	20110831	PJ	Inv#048676	A C Petroleum Sales	1,242.92	PJ0342	August	Q3	Salal	Fuel
696	652	20110831	PJ	In27169205	Esso	1,351.25	PJ0355	August	Q3	Salal	Fuel
696	652	20110831	PJ	CL622832	A C Petroleum Sales	6,350.73	PJ0354	August	Q3	Salal	Fuel
696	652	20110915	PJ	SEPT152011	Guillaume Vassas	47.63	PJ0371	September	Q3	Salal	Fuel
696	652	20110915	PJ	Inv#048998	A C Petroleum Sales	53.62	PJ0360	September	Q3	Salal	Fuel
696	652	20110927	PJ	Inv#049004	A C Petroleum Sales	44.45	PJ0369	September	Q3	Salal	Fuel
696	652	20110930	PJ	In27466913	Esso	134.34	PJ0381	September	Q3	Salal	Fuel
696	652	20110930	PJ	Inv#049217	A C Petroleum Sales	144.68	PJ0388	September	Q3	Salal	Fuel
696	652	20110930	PJ	CL567815	Cool Creek Agencies Ltd.	1,539.34	PJ0381	September	Q3	Salal	Fuel
696	652	20110930	PJ	CL623164	A C Petroleum Sales	4,063.07	PJ0381	September	Q3	Salal	Fuel
696	652	20111031	PJ	In27732035	Esso	176.99	PJ0417	October	Q4	Salal	Fuel
696	652	20111031	PJ	CL623514	A C Petroleum Sales	438.27	PJ0412	October	Q4	Salal	Fuel
696	652	20111031	PJ	CL568990	Cool Creek Agencies Ltd.	3,065.77	PJ0410	October	Q4	Salal	Fuel
696	652	20111231	PJ	01/12/2011	Shannon Baird	19.91	PJ0464	December	Q4	Salal	Fuel
696	653	20110131	PJ	JAN11 EXP	Shannon Baird	48.30	PJ0192	January	Q1	Salal	Meals
696	653	20110331	GJ	Garcia cor	correction of gl allocation	35.14	GJ0225	March	Q1	Salal	Meals
696	653	20110415	PJ	11-006	Jose Sayo Garcia	14.66	PJ0241	April	Q2	Salal	Meals
696	653	20110430	PJ	11-007	Jose Sayo Garcia	55.62	PJ0257	April	Q2	Salal	Meals
696	653	20110815	PJ	AUG152011	Jose Sayo Garcia	40.62	PJ0341	August	Q3	Salal	Meals
696	653	20110815	PJ	AUG152011	Joshua Lindgren	103.76	PJ0341	August	Q3	Salal	Meals
696	653	20110817	PJ	AUG1111	Shannon Baird	179.94	PJ0332	August	Q3	Salal	Meals
696	653	20110831	PJ	AUG2011EXP	Shannon Baird	71.43	PJ0362	August	Q3	Salal	Meals
696	653	20110831	PJ	Inv2011008	Joshua Lindgren	111.72	PJ0350	August	Q3	Salal	Meals
696	653	20110831	PJ	AUG11 EXP	Duncan McLeish	259.05	PJ0350	August	Q3	Salal	Meals
696	653	20110831	PJ	AUG312011	Jose Sayo Garcia	385.41	PJ0366	August	Q3	Salal	Meals
696	653	20110921	PJ	SEPT152011	Jose Sayo Garcia	49.53	PJ0367	September	Q3	Salal	Meals
696	653	20110926	PJ	SEPT152011	Joshua Lindgren	124.18	PJ0368	September	Q3	Salal	Meals
696	653	20110930	PJ	01/09/2011	Guillaume Vassas	31.28	PJ0381	September	Q3	Salal	Meals
696	653	20110930	PJ	SEPT2711EX	Duncan McLeish	339.02	PJ0378	September	Q3	Salal	Meals
696	653	20111012	PJ	01/10/2011	Guillaume Vassas	9.75	PJ0382	October	Q4	Salal	Meals
696	653	20111110	CD	OCT312011	Joshua Lindgren	29.75	CD0257	November	Q4	Salal	Meals
696	653	20111231	PJ	01/12/2011	Shannon Baird	30.39	PJ0464	December	Q4	Salal	Meals
696	656	20110731	PJ	01/07/2611	Pemberton Valley Supermarket	483.71	PJ0329	July	Q3	Salal	Groceries
696	656	20110812	PJ	AUG42011	Pemberton Valley Supermarket	56.35	PJ0330	August	Q3	Salal	Groceries
696	656	20110812	PJ	AUG32011	Pemberton Valley Supermarket	71.99	PJ0330	August	Q3	Salal	Groceries
696	656	20110815	PJ	AUG152011	Jose Sayo Garcia	121.53	PJ0341	August	Q3	Salal	Groceries
696	656	20110818	PJ	AUG11 2011	Pemberton Valley Supermarket	68.88	PJ0335	August	Q3	Salal	Groceries
696	656	20110818	PJ	AUG52011	Pemberton Valley Supermarket	83.07	PJ0335	August	Q3	Salal	Groceries
696	656	20110818	PJ	AUG82011	Pemberton Valley Supermarket	124.25	PJ0335	August	Q3	Salal	Groceries
696	656	20110818	PJ	AUG112011	Pemberton Valley Supermarket	502.02	PJ0335	August	Q3	Salal	Groceries
696	656	20110831	PJ	AUG252011	Pemberton Valley Supermarket	63.06	PJ0350	August	Q3	Salal	Groceries
696	656	20110831	PJ	AUG222011	Pemberton Valley Supermarket	90.40	PJ0342	August	Q3	Salal	Groceries
696	656	20110831	PJ	AUG232011	Pemberton Valley Supermarket	107.41	PJ0350	August	Q3	Salal	Groceries
696	656	20110831	PJ	01/08/2711	Pemberton Valley Supermarket	108.54	PJ0350	August	Q3	Salal	Groceries
696	656	20110831	PJ	AUG21 11	Pemberton Valley Supermarket	380.94	PJ0350	August	Q3	Salal	Groceries
696	656	20110831	PJ	AUG172011	Pemberton Valley Supermarket	1,117.68	PJ0342	August	Q3	Salal	Groceries
696	656	20110831	PJ	01/08/2010	Pemberton Valley Supermarket	1,139.71	PJ0342	August	Q3	Salal	Groceries
696	656	20110913	PJ	SEPT311	Pemberton Valley Supermarket	76.38	PJ0353	September	Q3	Salal	Groceries
696	656	20110914	PJ	SEPT102011	Pemberton Valley Supermarket	105.99	PJ0357	September	Q3	Salal	Groceries
696	656	20110920	PJ	SEPT152011	Martine Girard	305.71	PJ0363	September	Q3	Salal	Groceries
696	656	20110927	PJ	SEPT172011	Pemberton Valley Supermarket	321.19	PJ0369	September	Q3	Salal	Groceries
696	656	20110927	PJ	SEPT22011	Pemberton Valley Supermarket	1,238.13	PJ0369	September	Q3	Salal	Groceries
696	656	20110927	PJ	01/08/2611	Pemberton Valley Supermarket	1,564.56	PJ0369	September	Q3	Salal	Groceries
696	656	20110927	PJ	SEPT82011	Pemberton Valley Supermarket	1,580.91	PJ0369	September	Q3	Salal	Groceries
696	656	20110928	PJ	Inv#007216	Black Hot Wheels	111.38	PJ0372	September	Q3	Salal	Groceries
696	656	20110930	PJ	SEPT20 11	Pemberton Valley Supermarket	22.47	PJ0375	September	Q3	Salal	Groceries
696	656	20110930	PJ	SEPT202011	Pemberton Valley Supermarket	52.24	PJ0375	September	Q3	Salal	Groceries
696	656	20110930	PJ	SEPT262011	Pemberton Valley Supermarket	118.87	PJ0375	September	Q3	Salal	Groceries
696	656	20110930	PJ	SEPT3011EX	Duncan McLeish	352.51	PJ0388	September	Q3	Salal	Groceries
696	656	20110930	PJ	SEPT142011	Pemberton Valley Supermarket	564.99	PJ0375	September	Q3	Salal	Groceries
696	656	20110930	PJ	SEPT242011	Pemberton Valley Supermarket	1,361.58	PJ0375	September	Q3	Salal	Groceries
696	656	20111014	PJ	OCT72011	Pemberton Valley Supermarket	52.27	PJ0389	October	Q4	Salal	Groceries
696	656	20111014	PJ	OCT711	Pemberton Valley Supermarket	540.23	PJ0389	October	Q4	Salal	Groceries
696	665	20110101	GJ	Mountview	Mountainview storage #13941	107.50	GJ0160	January	Q1	Salal	Site Facilities
696	665	20110107	PJ	Inv#013941	Mountainview Storage Ltd.	842.50	PJ0175	January	Q1	Salal	Site Facilities
696	665	20110430	PJ	Inv#014310	Mountainview Storage Ltd.	248.99	PJ0248	April	Q2	Salal	Site Facilities
696	665	20110501	PJ	Inv#014428	Mountainview Storage Ltd.	248.99	PJ0249	May	Q2	Salal	Site Facilities
696	665	20110531	CD	MAY31 2011	Scott Latimmer	841.00	CD0136	May	Q2	Salal	Site Facilities
696	665	20110601	PJ	Inv#014496	Mountainview Storage Ltd.	248.99	PJ0268	June	Q2	Salal	Site Facilities
696	665	20110630	CD	JUNE302011	Scott Latimmer	841.00	CD0137	June	Q2	Salal	Site Facilities
696	665	20110712	PJ	Inv#014633	Mountainview Storage Ltd.	248.99	PJ0301	July	Q3	Salal	Site Facilities
696	665	20110731	CD	JULY312011	Scott Latimmer	841.00	CD0138	July	Q3	Salal	Site Facilities
696	665	20110801	PJ	Inv#111185	Mountainview Storage Ltd.	248.99	PJ0317	August	Q3	Salal	Site Facilities
696	665	20110818	PJ	Inv#067499	BC Communications Inc.	204.68	PJ0335	August	Q3	Salal	Site Facilities
696	665	20110831	PJ	AUG11 EXP	Duncan McLeish	11.49	PJ0350	August	Q3	Salal	Site Facilities

SUMMARY OF EXPENDITURES FOR SALAL PROJECT IN 2011

696	665	20110831	CD	AUG312011	Scott Latimmer		841.00	CD0139	August	Q3	Salal	Site Facilities
696	665	20110831	PJ	Inv#025194	Emerald Electric		2,100.00	PJ0352	August	Q3	Salal	Site Facilities
696	665	20110906	PJ	Inv#014013	Mountainview Storage Ltd.		248.99	PJ0343	September	Q3	Salal	Site Facilities
696	665	20110930	CD	SEPT302011	Scott Latimmer		841.00	CD0140	September	Q3	Salal	Site Facilities
696	665	20111001	PJ	Inv#015192	Mountainview Storage Ltd.		248.99	PJ0373	October	Q4	Salal	Site Facilities
696	665	20111001	GJ	Lattimer	May payment is last month rent		841.00	GJ0307	October	Q4	Salal	Site Facilities
696	665	20111031	PJ	Inv#001815	Bridge River Indian Band		2,360.00	PJ0412	October	Q4	Salal	Site Facilities
696	665	20111109	CD	Lattimer	cheq# 1 Nov Rent		841.00	CD0001	November	Q4	Salal	Site Facilities
696	666	20110731	GJ	S.Baird	accrue July costs posted inAug		152.25	GJ0414	July	Q3	Salal	Site Office Expense
696	666	20110831	PJ	AUG212011	Pemberton Valley Supermarket		15.22	PJ0350	August	Q3	Salal	Site Office Expense
696	666	20110831	PJ	AUG312011	Jose Sayo Garcia		63.95	PJ0366	August	Q3	Salal	Site Office Expense
696	666	20110831	PJ	01/08/2011	Shaw Cable		93.06	PJ0355	August	Q3	Salal	Site Office Expense
696	666	20110831	PJ	AUG2011EXP	Shannon Baird		744.53	PJ0362	August	Q3	Salal	Site Office Expense
696	666	20110831	PJ	Inv#001761	Northern Trailer		900.00	PJ0350	August	Q3	Salal	Site Office Expense
696	666	20110831	PJ	21427-01	Signal Systems		2,427.00	PJ0352	August	Q3	Salal	Site Office Expense
696	666	20110921	PJ	SEPT152011	Jose Sayo Garcia		180.00	PJ0367	September	Q3	Salal	Site Office Expense
696	666	20110927	PJ	Inv#068234	BC Communications Inc.		437.92	PJ0369	September	Q3	Salal	Site Office Expense
696	666	20110927	PJ	Inv#068235	BC Communications Inc.		852.04	PJ0369	September	Q3	Salal	Site Office Expense
696	666	20110930	PJ	SEPT302011	Strain Exploration Services Lt		220.91	PJ0379	September	Q3	Salal	Site Office Expense
696	667	20110426	PJ	01/04/2111	TD VISA		596.13	PJ0239	April	Q2	Salal	Site Office Supplies
696	667	20110729	PJ	JULY262011	Pemberton Valley Hardware		1,490.28	PJ0325	July	Q3	Salal	Site Office Supplies
696	667	20110731	PJ	01/07/2711	Pemberton Valley Hardware		14.98	PJ0329	July	Q3	Salal	Site Office Supplies
696	667	20110731	PJ	JULY302011	Pemberton Valley Hardware		21.99	PJ0334	July	Q3	Salal	Site Office Supplies
696	667	20110731	PJ	01/07/2911	Pemberton Valley Hardware		47.97	PJ0329	July	Q3	Salal	Site Office Supplies
696	667	20110731	PJ	JULY132011	Pemberton Valley Hardware		51.93	PJ0331	July	Q3	Salal	Site Office Supplies
696	667	20110731	PJ	01/07/3011	Pemberton Valley Hardware		129.50	PJ0329	July	Q3	Salal	Site Office Supplies
696	667	20110731	PJ	01/07/2811	Pemberton Valley Hardware		201.63	PJ0329	July	Q3	Salal	Site Office Supplies
696	667	20110815	PJ	AUG152011	Jose Sayo Garcia		430.94	PJ0341	August	Q3	Salal	Site Office Supplies
696	667	20110815	PJ	AUG152011	Joshua Lindgren		1,637.29	PJ0341	August	Q3	Salal	Site Office Supplies
696	667	20110817	PJ	AUG122011	Andrea Anions		31.33	PJ0332	August	Q3	Salal	Site Office Supplies
696	667	20110817	PJ	AUG1111	Shannon Baird		2,511.26	PJ0332	August	Q3	Salal	Site Office Supplies
696	667	20110818	PJ	AUG112011	Pemberton Valley Hardware		136.90	PJ0335	August	Q3	Salal	Site Office Supplies
696	667	20110818	PJ	AUG102011	Pemberton Valley Hardware		209.46	PJ0335	August	Q3	Salal	Site Office Supplies
696	667	20110818	PJ	AUG82011	Pemberton Valley Hardware		927.95	PJ0335	August	Q3	Salal	Site Office Supplies
696	667	20110818	PJ	AUG62011	Pemberton Valley Hardware		2,123.37	PJ0335	August	Q3	Salal	Site Office Supplies
696	667	20110830	PJ	AUG122011	Pemberton Valley Hardware		1,106.67	PJ0339	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	Inv#007590	Pemberton Valley Hardware	-	14.99	PJ0359	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG20 11	Pemberton Valley Hardware		15.68	PJ0342	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG312011	Pemberton Valley Hardware		22.99	PJ0350	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	01/08/2811	Pemberton Valley Hardware		28.56	PJ0352	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	01/08/2711	Pemberton Valley Hardware		33.95	PJ0352	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	01/08/3011	Pemberton Valley Hardware		73.23	PJ0352	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG22 11	Pemberton Valley Hardware		78.42	PJ0342	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	Inv#075220	Valley Chainsaw & Recreational		98.30	PJ0350	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG192011	Pemberton Valley Hardware		99.99	PJ0342	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG172011	Pemberton Valley Hardware		100.38	PJ0342	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG312011	Jose Sayo Garcia		105.00	PJ0366	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	01/08/2611	Pemberton Valley Hardware		117.77	PJ0352	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG222011	Pemberton Valley Hardware		120.00	PJ0342	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG242011	Pemberton Valley Hardware		127.43	PJ0350	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG19 11	Pemberton Valley Hardware		277.67	PJ0342	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	01/08/2411	Pemberton Valley Hardware		355.68	PJ0352	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	03B-15455	Deakin Industries		359.00	PJ0350	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	Inv#006045	Westcoast Canvas Products Ltd.		375.00	PJ0342	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	03A-17479	Deakin Industries		387.00	PJ0350	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG1711	Pemberton Valley Hardware		533.97	PJ0346	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	Inv#006978	Pemberton Valley Hardware		852.41	PJ0359	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	AUG11 EXP	Duncan McLeish		978.09	PJ0350	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	03A-17260	Deakin Industries		1,110.99	PJ0349	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	A55106/1	Pemberton Valley Hardware		1,326.65	PJ0359	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	Inv#050284	Pemberton Valley Hardware		1,494.30	PJ0359	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	SEPT52011	TD VISA		1,956.12	PJ0359	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	Inv#006041	Westcoast Canvas Products Ltd.		2,075.00	PJ0345	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	Inv#052618	Pemberton Valley Hardware		2,910.04	PJ0359	August	Q3	Salal	Site Office Supplies
696	667	20110831	PJ	Inv#006043	Westcoast Canvas Products Ltd.		6,075.00	PJ0345	August	Q3	Salal	Site Office Supplies
696	667	20110909	PJ	SEPT42011	Pemberton Valley Hardware		139.03	PJ0351	September	Q3	Salal	Site Office Supplies
696	667	20110913	PJ	SEPT811	Pemberton Valley Hardware		10.99	PJ0353	September	Q3	Salal	Site Office Supplies
696	667	20110913	PJ	SEPT 811	Pemberton Valley Hardware		145.00	PJ0353	September	Q3	Salal	Site Office Supplies
696	667	20110913	PJ	SEPT211	Pemberton Valley Hardware		171.55	PJ0353	September	Q3	Salal	Site Office Supplies
696	667	20110914	PJ	SEPT1111	Pemberton Valley Hardware		78.46	PJ0357	September	Q3	Salal	Site Office Supplies
696	667	20110915	PJ	SEPT152011	Guillaume Vassas		30.00	PJ0371	September	Q3	Salal	Site Office Supplies
696	667	20110920	PJ	SEPT152011	Martine Girard		217.25	PJ0363	September	Q3	Salal	Site Office Supplies
696	667	20110921	PJ	SEPT152011	Jose Sayo Garcia		73.12	PJ0367	September	Q3	Salal	Site Office Supplies
696	667	20110926	PJ	SEPT152011	Joshua Lindgren		144.10	PJ0368	September	Q3	Salal	Site Office Supplies
696	667	20110927	PJ	AUG262011	Pemberton Valley Supermarket		8.28	PJ0369	September	Q3	Salal	Site Office Supplies
696	667	20110927	PJ	Inv#076097	Valley Chainsaw & Recreational		43.90	PJ0369	September	Q3	Salal	Site Office Supplies
696	667	20110927	PJ	Inv#049049	A C Petroleum Sales		63.38	PJ0369	September	Q3	Salal	Site Office Supplies
696	667	20110927	PJ	Inv#075952	Valley Chainsaw & Recreational		112.70	PJ0369	September	Q3	Salal	Site Office Supplies
696	667	20110927	PJ	Inv#075927	Valley Chainsaw & Recreational		304.95	PJ0369	September	Q3	Salal	Site Office Supplies
696	667	20110927	PJ	03B-21646	Deakin Industries		639.00	PJ0369	September	Q3	Salal	Site Office Supplies
696	667	20110927	PJ	Inv#075950	Valley Chainsaw & Recreational		797.42	PJ0369	September	Q3	Salal	Site Office Supplies
696	667	20110927	PJ	Inv#075972	Valley Chainsaw & Recreational		859.80	PJ0369	September	Q3	Salal	Site Office Supplies
696	667	20110930	PJ	SEPT172011	Pemberton Valley Hardware		11.99	PJ0375	September	Q3	Salal	Site Office Supplies
696	667	20110930	PJ	01/09/2011	Guillaume Vassas		25.98	PJ0381	September	Q3	Salal	Site Office Supplies
696	667	20110930	PJ	SEPT262011	Pemberton Valley Hardware		25.99	PJ0375	September	Q3	Salal	Site Office Supplies
696	667	20110930	PJ	SEPT26 11	Pemberton Valley Hardware		27.99	PJ0375	September	Q3	Salal	Site Office Supplies
696	667	20110930	GJ	PV Hardwar	accrue field supplies		52.99	GJ0386	September	Q3	Salal	Site Office Supplies
696	667	20110930	PJ	01/09/3011	Pemberton Valley Hardware		351.58	PJ0391	September	Q3	Salal	Site Office Supplies
696	667	20110930	GJ	PV Hardwar	accrue field supplies		369.60	GJ0386	September	Q3	Salal	Site Office Supplies
696	667	20110930	PJ	SEPT3011EX	Duncan McLeish		409.52	PJ0388	September	Q3	Salal	Site Office Supplies
696	667	20111001	GJ	PV Hardwar	accrue field supplies		369.60	GJ0386	October	Q4	Salal	Site Office Supplies
696	667	20111001	GJ	PV Hardwar	accrue field supplies		52.99	GJ0386	October	Q4	Salal	Site Office Supplies
696	667	20111012	PJ	01/10/2011	Guillaume Vassas		324.60	PJ0382	October	Q4	Salal	Site Office Supplies

SUMMARY OF EXPENDITURES FOR SALAL PROJECT IN 2011

696	667	20111021	PJ	SEPT1411	Pemberton Valley Hardware	52.99	PJ0396	October	Q4	Salal	Site Office Supplies
696	667	20111021	PJ	58685/1	Pemberton Valley Hardware	369.60	PJ0396	October	Q4	Salal	Site Office Supplies
696	667	20111021	PJ	SEPT82011	Pemberton Valley Hardware	800.00	PJ0396	October	Q4	Salal	Site Office Supplies
696	667	20111021	PJ	57136/1	Pemberton Valley Hardware	2,917.14	PJ0396	October	Q4	Salal	Site Office Supplies
696	667	20111025	PJ	OCT52011	Pemberton Valley Hardware	89.98	PJ0397	October	Q4	Salal	Site Office Supplies
696	667	20111027	PJ	Ck# 000535	DEAK01 Cancel: Inv: #03B-21646	639.00	PJ0401	October	Q4	Salal	Site Office Supplies
696	668	20110118	PJ	Inv#001799	Outbound Communications	359.00	PJ0181	January	Q1	Salal	Safety Gear
696	668	20110224	PJ	Inv6709100	Spectrum Telecom Group Ltd.	40.00	PJ0198	February	Q1	Salal	Safety Gear
696	668	20110630	PJ	Inv#065827	BC Communications Inc.	221.82	PJ0313	June	Q2	Salal	Safety Gear
696	668	20110811	PJ	Inv#067190	BC Communications Inc.	221.82	PJ0327	August	Q3	Salal	Safety Gear
696	668	20110815	PJ	AUG152011	Jose Sayo Garcia	721.05	PJ0341	August	Q3	Salal	Safety Gear
696	668	20110831	PJ	AUG11 EXP	Duncan McLeish	125.00	PJ0350	August	Q3	Salal	Safety Gear
696	668	20110831	PJ	Inv#067673	BC Communications Inc.	225.00	PJ0342	August	Q3	Salal	Safety Gear
696	668	20110915	PJ	Inv#068121	BC Communications Inc.	441.00	PJ0360	September	Q3	Salal	Safety Gear
696	668	20110927	PJ	SEPT15EXP	Bruce C. Frank	118.99	PJ0369	September	Q3	Salal	Safety Gear
696	668	20111012	PJ	Inv#069049	BC Communications Inc.	220.50	PJ0382	October	Q4	Salal	Safety Gear
696	668	20111025	PJ	OCT32011	Pemberton Valley Hardware	142.89	PJ0397	October	Q4	Salal	Safety Gear
696	668	20111025	PJ	OCT42011	Pemberton Valley Hardware	409.75	PJ0397	October	Q4	Salal	Safety Gear
696	668	20111031	PJ	21559-01	Signal Systems	857.50	PJ0424	October	Q4	Salal	Safety Gear
696	668	20111130	PJ	Inv#069266	BC Communications Inc.	28.56	PJ0446	November	Q4	Salal	Safety Gear
696	668	20111130	PJ	Inv#069267	BC Communications Inc.	261.80	PJ0446	November	Q4	Salal	Safety Gear
696	669	20110530	PJ	Inv#005558	George Boeriu	663.25	PJ0269	May	Q2	Salal	Safety Training & Development
696	673	20110831	PJ	Inv#029562	Sabre Rentals	400.00	PJ0350	August	Q3	Salal	Equipment rental
696	673	20110927	PJ	Inv#031695	Sabre Rentals	390.00	PJ0369	September	Q3	Salal	Equipment rental
696	673	20110927	PJ	Inv#031274	Sabre Rentals	2,390.00	PJ0369	September	Q3	Salal	Equipment rental
696	673	20111031	PJ	29562A	Sabre Rentals	400.00	PJ0414	October	Q4	Salal	Equipment rental
696	673	20111031	PJ	31274A	Sabre Rentals	5,213.00	PJ0414	October	Q4	Salal	Equipment rental
696	673	20111110	PJ	NOV11 EXP	Duncan McLeish	3,600.00	PJ0416	November	Q4	Salal	Equipment rental
696	679	20110930	PJ	Inv#000001	John Belhumer	1,050.00	PJ0391	September	Q3	Salal	First Nation Exp
					7. Logistics (Field Supplies and Support)	118,451.03					
					TOTAL	**659,463.88**					

SUMMARY OF EXPENDITURES incurred in Mackenzie-Salal 2012				
DESCRIPTION	TOTAL COST	Unit	Unit Cost	Period
1. DRILLING	**111,661.40**	505 m	221.11	July-Aug
2. Helicopter (Air Transport)	**111,923.54**	57.8 hrs	1937 /wet hr	July-Aug
3. Landbase Transport	**18,444.25**	44 day with 2 units	210 /day	July Aug
4. Geochem (Assaying)	**11,115.47**	111 Rocks, 92 Silts, 18 soil with adequate CRMs		
5. Explo Management (Jose Sayo Garcia)	**47,625.00**	63.5 days	750.00	Jan-Sept
6. Salary and Wages (Labor)		days	rate /day	months
Peter Andersen - Database Svcs	**6,762.50**	11.0	630.00	Jan-Mar
Joshua Lindgren - Camp Logistic Officer	**17,855.62**	48.0	375.00	Apr-Sept
Martin St. Pierre - Geophysic Consultant	**525.00**	1.0	525.00	March-Apr
Bruce Frank - Camp Custodian	**7,268.56**	30.5	240.00	July-Aug
Martine Girard - Camp Cook	**5,726.56**	26.0	220.00	July-Aug
Shannon Baird - Project Geologist	**50,553.84**	145.0	350.00	Jan-Aug
Student Trainee #1 and # 2	**1,994.22**	10.0	200.00	June only
Colin Bateman - Filed Technician	**6,625.80**	27.5	240.00	June -July
Andrew Strain - Sr. Filed Technician	**10,578.80**	30.5	350.00	June-Aug
Alar Soever - Consultant	**3,867.92**	5.0	800.00	Sept
John Belhumer - COMREL	**8,744.66**	17.5	500.00	Mar-May-June to Sept
7. Logistics (Field Supplies and Support)	**58,121.96**	one lot (Groceries, Site/ Field Expenses, Safety Gear, Camp Supplies, et. Al.)		July and Aug
TOTAL	**479,395.10**			

SUMMARY OF EXPENDITURES INCURRED in MACKENZIE Project 2012

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Account	Sub-account
697	635	20120731	PJ	Inv#004333	MBI Pacific Drilling Products	883.98	PJ0632	July	Mackenzie	Drilling
697	635	20120731	PJ	Inv#000698	Radius Drilling Corp.	56,465.95	PJ0630	July	Mackenzie	Drilling
697	635	20120731	PJ	Inv#000675	Radius Drilling Corp.	41,306.41	PJ0630	July	Mackenzie	Drilling
697	635	20120814	PJ	698B	Radius Drilling Corp.	13,775.32	PJ0631	August	Mackenzie	Drilling
697	635	20120827	PJ	Inv#000703	Radius Drilling Corp.	- 1,879.28	PJ0635	August	Mackenzie	Drilling
697	635	20120830	PJ	Inv#004357	MBI Pacific Drilling Products	274.38	PJ0636	August	Mackenzie	Drilling
697	635	20120831	PJ	Inv#001075	Foraco Canada Ltd.	640.00	PJ0637	August	Mackenzie	Drilling
697	635	20120831	GJ	Radius crd	lordco parts parts for Radius	194.64	GJ0773	August	Mackenzie	Drilling
					1. DRILLING	111,661.40	**221.11**	$ cost / m		505 meters

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Account	Sub-account
697	651	20120730	PJ	Inv#018199	Blackcomb Aviation	3,799.50	PJ0621	July	Mackenzie	Helcopters
697	651	20120731	PJ	Inv#103807	Northern Air Support (2012) Lt	8,225.00	PJ0629	July	Mackenzie	Helcopters
697	651	20120731	PJ	Inv#103801	Northern Air Support (2012) Lt	34,825.00	PJ0629	July	Mackenzie	Helcopters
697	651	20120731	PJ	Inv#103792	Northern Air Support (2012) Lt	37,076.00	PJ0627	July	Mackenzie	Helcopters
697	651	20120731	PJ	Inv#018235	Blackcomb Aviation	4,356.00	PJ0625	July	Mackenzie	Helcopters
697	651	20120831	PJ	Inv#103816	Northern Air Support (2012) Lt	23,642.04	PJ0637	August	Mackenzie	Helcopters
					2. Helicopter (Air Transport)	111,923.54	1,936.39	$ cost / hr		57.8 hrs

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Account	Sub-account
696	654	20120501	GJ	May	Ron Ridley Truck rentals (3)	1,192.13	GJ0653	May	Salal	Vehicle Rental
697	654	20120501	GJ	May	Ron Ridley Truck rentals (3)	1,788.21	GJ0653	May	Mackenzie	Vehicle Rental
696	654	20120508	PJ	MAY22012	Shannon Baird	854.40	PJ0556	May	Salal	Vehicle Rental
697	650	20120508	PJ	MAY22012	Shannon Baird	48.00	PJ0556	May	Mackenzie	Travel
697	654	20120508	PJ	MAY22012	Shannon Baird	1,281.60	PJ0556	May	Mackenzie	Vehicle Rental
696	654	20120509	PJ	MAY112EXP	Duncan McLeish	113.12	PJ0558	May	Salal	Vehicle Rental
697	650	20120509	PJ	MAY112EXP	Duncan McLeish	324.12	PJ0558	May	Mackenzie	Travel
696	650	20120510	PJ	MAY212EXP	Pearce Luck	13.68	PJ0562	May	Salal	Travel
697	650	20120510	PJ	MAY12EXP	Kristy Nay	61.29	PJ0562	May	Mackenzie	Travel
697	654	20120528	PJ	Inv#009501	Black Hot Wheels	181.07	PJ0567	May	Mackenzie	Vehicle Rental
697	654	20120630	PJ	Inv#009843	Black Hot Wheels	141.10	PJ0599	June	Mackenzie	Vehicle Rental
697	654	20120630	PJ	Inv#009841	Black Hot Wheels	199.54	PJ0599	June	Mackenzie	Vehicle Rental
697	654	20120630	PJ	Inv#033932	Ron Ridley Rentals Ltd.	1,800.00	PJ0595	June	Mackenzie	Vehicle Rental
697	654	20120704	PJ	Inv#034358	Ron Ridley Rentals Ltd.	1,800.00	PJ0596	July	Mackenzie	Vehicle Rental
697	654	20120704	PJ	Inv#034356	Ron Ridley Rentals Ltd.	1,800.00	PJ0596	July	Mackenzie	Vehicle Rental
697	654	20120705	PJ	Inv#009984	Black Hot Wheels	27.13	PJ0598	July	Mackenzie	Vehicle Rental
697	650	20120731	PJ	01/07/3112	Joshua Lindgren	56.63	PJ0627	July	Mackenzie	Travel
697	654	20120803	PJ	Inv#034714	Ron Ridley Rentals Ltd.	1,800.00	PJ0626	August	Mackenzie	Vehicle Rental
697	654	20120918	CR	ICBC	ICBC refund	- 355.00	CR0046	September	Mackenzie	Vehicle Rental
697	654	20120918	PJ	Inv#035174	Ron Ridley Rentals Ltd.	2,143.48	PJ0647	September	Mackenzie	Vehicle Rental
697	654	20120918	PJ	Inv#035172	Ron Ridley Rentals Ltd.	3,943.03	PJ0647	September	Mackenzie	Vehicle Rental
697	654	20120930	SJ	Credit	Ron Ridley Rentals Ltd.	- 1,086.00	SJ0008	September	Mackenzie	Vehicle Rental
697	654	20120930	PJ	Inv#035325	Ron Ridley Rentals Ltd.	316.72	PJ0651	September	Mackenzie	Vehicle Rental
					3. Landbase Transport	18,444.25	210.00	$ cost per day		44 days with two vehicles

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Account	Sub-account
697	630	20120730	PJ	Inv2664311	ALS Canada	1,693.23	PJ0621	July	Mackenzie	GeoChemical
697	630	20120731	PJ	Inv2664318	ALS Canada	1,758.65	PJ0627	July	Mackenzie	GeoChemical
697	630	20120809	PJ	Inv2675552	ALS Canada	1,124.74	PJ0628	August	Mackenzie	GeoChemical
697	630	20120831	PJ	Inv2698503	ALS Canada	881.33	PJ0639	August	Mackenzie	GeoChemical
697	630	20120831	PJ	Inv2696784	ALS Canada	372.56	PJ0639	August	Mackenzie	GeoChemical
697	630	20120831	PJ	Inv2686086	ALS Canada	1,164.40	PJ0637	August	Mackenzie	GeoChemical
697	630	20120831	PJ	Inv2684031	ALS Canada	2,199.59	PJ0637	August	Mackenzie	GeoChemical
697	630	20120831	PJ	Inv2683798	ALS Canada	1,650.01	PJ0637	August	Mackenzie	GeoChemical
697	630	20120918	PJ	Inv2696983	ALS Canada	270.96	PJ0647	September	Mackenzie	GeoChemical
					4. Geochem (Assaying)	**11,115.47**				111 rock, 92 Silt and 18 soil with adequate CRMs

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Account	Sub-account
696	661	20120131	PJ	JAN312012	Jose Sayo Garcia	750.00	PJ0495	January	Salal	Consulting Services-Exploration management
697	661	20120131	PJ	JAN312012	Jose Sayo Garcia	1,500.00	PJ0495	January	Mackenzie	Consulting Services-Exploration management
696	661	20120215	PJ	FEB152012	Jose Sayo Garcia	1,500.00	PJ0510	February	Salal	Consulting Services-Exploration management
697	661	20120215	PJ	FEB152012	Jose Sayo Garcia	1,500.00	PJ0510	February	Mackenzie	Consulting Services-Exploration management
696	661	20120229	PJ	FEB292012	Jose Sayo Garcia	1,500.00	PJ0516	February	Salal	Consulting Services-Exploration management
697	661	20120229	PJ	FEB292012	Jose Sayo Garcia	750.00	PJ0516	February	Mackenzie	Consulting Services-Exploration management
696	661	20120321	PJ	MAR152012	Jose Sayo Garcia	750.00	PJ0527	March	Salal	Consulting Services-Exploration management
697	661	20120321	PJ	MAR152012	Jose Sayo Garcia	750.00	PJ0527	March	Mackenzie	Consulting Services-Exploration management
696	661	20120331	PJ	MAR312012	Jose Sayo Garcia	1,500.00	PJ0533	March	Salal	Consulting Services-Exploration management
697	661	20120331	PJ	MAR312012	Jose Sayo Garcia	750.00	PJ0533	March	Mackenzie	Consulting Services-Exploration management
696	661	20120420	PJ	APRIL1512	Jose Sayo Garcia	1,500.00	PJ0545	April	Salal	Consulting Services-Exploration management
697	661	20120420	PJ	APRIL1512	Jose Sayo Garcia	1,500.00	PJ0545	April	Mackenzie	Consulting Services-Exploration management
696	661	20120430	PJ	APR302012	Jose Sayo Garcia	1,125.00	PJ0551	April	Salal	Consulting Services-Exploration management
697	661	20120430	PJ	APR302012	Jose Sayo Garcia	750.00	PJ0551	April	Mackenzie	Consulting Services-Exploration management
696	661	20120528	PJ	MAY152012	Jose Sayo Garcia	1,500.00	PJ0567	May	Salal	Consulting Services-Exploration management
697	661	20120528	PJ	MAY152012	Jose Sayo Garcia	3,000.00	PJ0567	May	Mackenzie	Consulting Services-Exploration management
697	661	20120619	PJ	JUNE152012	Jose Sayo Garcia	2,625.00	PJ0584	June	Mackenzie	Consulting Services-Exploration management
697	661	20120630	PJ	01/06/3012	Jose Sayo Garcia	2,250.00	PJ0595	June	Mackenzie	Consulting Services-Exploration management
697	661	20120718	PJ	JULY1512	Jose Sayo Garcia	6,000.00	PJ0614	July	Mackenzie	Consulting Services-Exploration management
697	661	20120731	PJ	01/07/3112	Jose Sayo Garcia	6,000.00	PJ0627	July	Mackenzie	Consulting Services-Exploration management
697	661	20120815	PJ	AUG1512	Jose Sayo Garcia	3,000.00	PJ0634	August	Mackenzie	Consulting Services-Exploration management
697	661	20120831	PJ	AUG312012	Jose Sayo Garcia	2,250.00	PJ0639	August	Mackenzie	Consulting Services-Exploration management
697	661	20120918	PJ	SEPT1512	Jose Sayo Garcia	2,250.00	PJ0648	September	Mackenzie	Consulting Services-Exploration management
697	661	20120930	PJ	01/09/3012	Jose Sayo Garcia	2,625.00	PJ0653	September	Mackenzie	Consulting Services-Exploration management
					5. Explo Management	47,625.00	750.00			63.5 days

SUMMARY OF EXPENDITURES INCURRED in MACKENZIE Project 2012

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Account	Sub-account
697	660	20120131	PJ	2012MM-67	Wallbridge Mining Company Limi	875.00	PJ0499	January	Mackenzie	Consulting Services-Geological
696	660	20120229	PJ	2012MM-72	Wallbridge Mining Company Limi	1,172.50	PJ0522	February	Salal	Consulting Services-Geological
697	660	20120229	PJ	2012MM-72	Wallbridge Mining Company Limi	2,515.00	PJ0522	February	Mackenzie	Consulting Services-Geological
696	660	20120331	PJ	2012MM-76	Wallbridge Mining Company Limi	335.00	PJ0537	March	Salal	Consulting Services-Geological
697	660	20120331	PJ	2012MM-76	Wallbridge Mining Company Limi	1,865.00	PJ0537	March	Mackenzie	Consulting Services-Geological
696	660	20120430	GJ	April time	estimate April time costs	335.00	GJ0646	April	Salal	Consulting Services-Geological
697	660	20120430	GJ	April time	estimate April time costs	837.50	GJ0646	April	Mackenzie	Consulting Services-Geological
697	660	20120531	PJ	2012MM-82	Wallbridge Mining Company Limi	167.50	PJ0574	May	Mackenzie	Consulting Services-Geological
697	660	20120630	PJ	01/06/3012	Joshua Lindgren	1,500.00	PJ0597	June	Mackenzie	Consulting Services-Geological
697	660	20120718	PJ	JULY1512	Joshua Lindgren	3,750.00	PJ0614	July	Mackenzie	Consulting Services-Geological
697	660	20120731	PJ	01/07/3112	Joshua Lindgren	6,000.00	PJ0627	July	Mackenzie	Consulting Services-Geological
696	660	20120731	PJ	2012MM-91	Wallbridge Mining Company Limi	167.50	PJ0630	July	Salal	Consulting Services-Geological
697	660	20120731	PJ	2012MM-91	Wallbridge Mining Company Limi	167.50	PJ0630	July	Mackenzie	Consulting Services-Geological
697	660	20120815	PJ	AUG1512	Joshua Lindgren	2,625.00	PJ0634	August	Mackenzie	Consulting Services-Geological
697	660	20120831	PJ	2012MM-93	Wallbridge Mining Company Limi	837.50	PJ0643	August	Mackenzie	Consulting Services-Geological
697	660	20120930	GJ	WCB BC	Q3 WCB BC reconciliation	295.62	GJ0821	September	Mackenzie	Consulting Services-Geological
697	660	20120930	PJ	2012MM-96	Wallbridge Mining Company Limi	1,172.50	PJ0654	September	Mackenzie	Consulting Services-Geological
697	662	20120331	PJ	MIO2012-1	St Pierre Geoconsultant Inc.	125.00	PJ0531	March	Mackenzie	Consulting Services-Geophysical
697	662	20120430	PJ	MIO2012-2	St Pierre Geoconsultant Inc.	400.00	PJ0551	April	Mackenzie	Consulting Services-Geophysical
697	505	20120707	PR	P/R: Jul07	2 Pay Jul07, 2012	1,135.53	PR1085	July	Mackenzie	Wages - Casual Labour
697	505	20120714	PR	P/R: Jul14	2 Pay Jul14, 2012	1,362.63	PR1086	July	Mackenzie	Wages - Casual Labour
697	505	20120721	PR	P/R: Jul21	2 Pay Jul21, 2012	1,362.63	PR1087	July	Mackenzie	Wages - Casual Labour
697	505	20120728	PR	P/R: Jul28	2 Pay Jul28, 2012	1,590.29	PR1088	July	Mackenzie	Wages - Casual Labour
697	505	20120804	PR	P/R: Aug04	2 Pay Aug04, 2012	1,590.29	PR1089	August	Mackenzie	Wages - Casual Labour
697	505	20120811	PR	P/R: Aug11	2 Pay Aug11, 2012	227.19	PR1090	August	Mackenzie	Wages - Casual Labour
697	508	20120721	PR	P/R: Jul21	2 Pay Jul21, 2012	1,635.82	PR1087	July	Mackenzie	Wages - cook
697	508	20120728	PR	P/R: Jul28	2 Pay Jul28, 2012	1,909.01	PR1088	July	Mackenzie	Wages - cook
697	508	20120804	PR	P/R: Aug04	2 Pay Aug04, 2012	1,909.01	PR1089	August	Mackenzie	Wages - cook
697	508	20120811	PR	P/R: Aug11	2 Pay Aug11, 2012	272.72	PR1090	August	Mackenzie	Wages - cook
696	500	20120107	PR	P/R: Jan07	2 Pay Jan07, 2012	316.27	PR1059	January	Salal	Wages - Geology
697	500	20120107	PR	P/R: Jan07	2 Pay Jan07, 2012	632.54	PR1059	January	Mackenzie	Wages - Geology
696	500	20120107	GJ	Jan. 7	vacation accrual	17.31	GJ0512	January	Salal	Wages - Geology
697	500	20120107	GJ	Jan. 7	vacation accrual	34.62	GJ0512	January	Mackenzie	Wages - Geology
696	500	20120114	PR	P/R: Jan14	2 Pay Jan14, 2012	855.28	PR1060	January	Salal	Wages - Geology
697	500	20120114	PR	P/R: Jan14	2 Pay Jan14, 2012	632.55	PR1060	January	Mackenzie	Wages - Geology
696	500	20120114	GJ	Jan. 14	vacation accrual	17.31	GJ0513	January	Salal	Wages - Geology
697	500	20120114	GJ	Jan. 14	vacation accrual	34.62	GJ0513	January	Mackenzie	Wages - Geology
696	500	20120121	PR	P/R: Jan21	2 Pay Jan21, 2012	1,394.27	PR1061	January	Salal	Wages - Geology
697	500	20120121	PR	P/R: Jan21	2 Pay Jan21, 2012	316.27	PR1061	January	Mackenzie	Wages - Geology
696	500	20120121	GJ	Jan15-21	vacation accrual	17.31	GJ0525	January	Salal	Wages - Geology
697	500	20120121	GJ	Jan15-21	vacation accrual	17.31	GJ0525	January	Mackenzie	Wages - Geology
696	500	20120128	PR	P/R: Jan28	2 Pay Jan28, 2012	1,034.82	PR1062	January	Salal	Wages - Geology
697	500	20120128	PR	P/R: Jan28	2 Pay Jan28, 2012	991.82	PR1062	January	Mackenzie	Wages - Geology
696	500	20120128	GJ	Jan22-28	vacation accrual	17.31	GJ0535	January	Salal	Wages - Geology
697	500	20120128	GJ	Jan22-28	vacation accrual	34.62	GJ0535	January	Mackenzie	Wages - Geology
696	500	20120131	GJ	Shannon	Dec. banked time	576.92	GJ0549	January	Salal	Wages - Geology
697	500	20120131	GJ	Shannon	Dec. banked time	288.46	GJ0549	January	Mackenzie	Wages - Geology
696	500	20120131	GJ	adjustment	WCB BC owing at Jan 31 2012	- 18.05	GJ0551	January	Salal	Wages - Geology
697	500	20120131	GJ	adjustment	WCB BC owing at Jan 31 2012	- 14.48	GJ0551	January	Mackenzie	Wages - Geology
696	500	20120204	PR	P/R: Feb04	2 Pay Feb04, 2012	316.27	PR1063	February	Salal	Wages - Geology
697	500	20120204	PR	P/R: Feb04	2 Pay Feb04, 2012	1,149.96	PR1063	February	Mackenzie	Wages - Geology
696	500	20120204	GJ	Jan26-Feb4	vacation accrual	17.31	GJ0544	February	Salal	Wages - Geology
697	500	20120204	GJ	Jan26-Feb4	vacation accrual	43.27	GJ0544	February	Mackenzie	Wages - Geology
696	500	20120211	PR	P/R: Feb11	2 Pay Feb11, 2012	316.27	PR1064	February	Salal	Wages - Geology
697	500	20120211	PR	P/R: Feb11	2 Pay Feb11, 2012	1,983.49	PR1064	February	Mackenzie	Wages - Geology
696	500	20120211	GJ	Feb.5-11	vacation accrual	17.31	GJ0550	February	Salal	Wages - Geology
697	500	20120211	GJ	Feb.5-11	vacation accrual	69.23	GJ0550	February	Mackenzie	Wages - Geology
696	500	20120218	PR	P/R: Feb18	2 Pay Feb18, 2012	1,030.71	PR1065	February	Salal	Wages - Geology
697	500	20120218	PR	P/R: Feb18	2 Pay Feb18, 2012	630.12	PR1065	February	Mackenzie	Wages - Geology
696	500	20120218	GJ	feb12-18	vacation accrual	17.31	GJ0579	February	Salal	Wages - Geology
697	500	20120218	GJ	feb12-18	vacation accrual	34.62	GJ0579	February	Mackenzie	Wages - Geology
696	500	20120225	PR	P/R: Feb25	2 Pay Feb25, 2012	1,389.09	PR1066	February	Salal	Wages - Geology
697	500	20120225	PR	P/R: Feb25	2 Pay Feb25, 2012	945.19	PR1066	February	Mackenzie	Wages - Geology
696	500	20120225	GJ	Feb19-25	vacation accrual	17.31	GJ0580	February	Salal	Wages - Geology
697	500	20120225	GJ	Feb19-25	vacation accrual	51.92	GJ0580	February	Mackenzie	Wages - Geology
696	500	20120303	PR	P/R: Mar03	2 Pay Mar03, 2012	1,073.70	PR1067	March	Salal	Wages - Geology
697	500	20120303	PR	P/R: Mar03	2 Pay Mar03, 2012	630.11	PR1067	March	Mackenzie	Wages - Geology
697	500	20120303	GJ	Feb26-Mar3	vacation accrual	51.92	GJ0581	March	Mackenzie	Wages - Geology
696	500	20120310	PR	P/R: Mar10	2 Pay Mar10, 2012	336.44	PR1068	March	Salal	Wages - Geology
697	500	20120310	PR	P/R: Mar10	2 Pay Mar10, 2012	1,102.72	PR1068	March	Mackenzie	Wages - Geology
696	500	20120310	GJ	Mar. 4-10	vacation accrual	8.65	GJ0583	March	Salal	Wages - Geology
697	500	20120310	GJ	Mar. 4-10	vacation accrual	60.58	GJ0583	March	Mackenzie	Wages - Geology
696	500	20120317	PR	P/R: Mar17	2 Pay Mar17, 2012	1,789.50	PR1069	March	Salal	Wages - Geology
696	500	20120324	PR	P/R: Mar24	2 Pay Mar24, 2012	1,789.50	PR1070	March	Salal	Wages - Geology
696	500	20120331	PR	P/R: Mar31	2 Pay Mar31, 2012	1,789.50	PR1071	March	Salal	Wages - Geology
697	500	20120331	PR	P/R: Mar31	2 Pay Mar31, 2012	1,260.25	PR1071	March	Mackenzie	Wages - Geology
697	500	20120331	GJ	Mar.25-31	vacation accrual	69.23	GJ0604	March	Mackenzie	Wages - Geology
696	500	20120407	PR	P/R: Apr07	2 Pay Apr07, 2012	1,431.60	PR1072	April	Salal	Wages - Geology
697	500	20120407	PR	P/R: Apr07	2 Pay Apr07, 2012	315.06	PR1072	April	Mackenzie	Wages - Geology
697	500	20120407	GJ	Apr1-7	vacation accrual	34.62	GJ0610	April	Mackenzie	Wages - Geology
696	500	20120414	PR	P/R: Apr14	2 Pay Apr14, 2012	1,072.38	PR1073	April	Salal	Wages - Geology
696	500	20120421	PR	P/R: Apr21	2 Pay Apr21, 2012	357.73	PR1074	April	Salal	Wages - Geology
697	500	20120421	PR	P/R: Apr21	2 Pay Apr21, 2012	357.73	PR1074	April	Mackenzie	Wages - Geology
696	500	20120428	PR	P/R: Apr28	2 Pay Apr28, 2012	357.73	PR1075	April	Salal	Wages - Geology
697	500	20120428	PR	P/R: Apr28	2 Pay Apr28, 2012	357.73	PR1075	April	Mackenzie	Wages - Geology
696	500	20120505	PR	P/R: May05	2 Pay May05, 2012	315.06	PR1076	May	Salal	Wages - Geology
697	500	20120505	PR	P/R: May05	2 Pay May05, 2012	630.12	PR1076	May	Mackenzie	Wages - Geology

SUMMARY OF EXPENDITURES INCURRED in MACKENZIE Project 2012

696	500	20120505	GJ	Apr29-May5	vacation accrual	17.31	GJ0647	May	Salal	Wages - Geology
697	500	20120505	GJ	Apr29-May5	vacation accrual	34.62	GJ0647	May	Mackenzie	Wages - Geology
697	500	20120512	PR	P/R: May12	2 Pay May12, 2012	315.06	PR1077	May	Mackenzie	Wages - Geology
697	500	20120512	GJ	May 6-12	vacation accrual	17.31	GJ0657	May	Mackenzie	Wages - Geology
697	500	20120526	PR	P/R: May26	2 Pay May26, 2012	1,023.95	PR1079	May	Mackenzie	Wages - Geology
697	500	20120526	GJ	May 20-26	vacation accrual	56.25	GJ0667	May	Mackenzie	Wages - Geology
697	500	20120609	PR	P/R: Jun09	2 Pay Jun09, 2012	945.19	PR1081	June	Mackenzie	Wages - Geology
697	500	20120609	GJ	June3-9	vacation accrual	51.92	GJ0683	June	Mackenzie	Wages - Geology
697	500	20120616	PR	P/R: Jun16	2 Pay Jun16, 2012	945.19	PR1082	June	Mackenzie	Wages - Geology
697	500	20120616	GJ	June10-16	vacation accrual	51.92	GJ0691	June	Mackenzie	Wages - Geology
696	500	20120623	PR	P/R: Jun23	2 Pay Jun23, 2012	358.10	PR1083	June	Salal	Wages - Geology
697	500	20120623	PR	P/R: Jun23	2 Pay Jun23, 2012	1,436.90	PR1083	June	Mackenzie	Wages - Geology
697	500	20120630	PR	P/R: Jun30	2 Pay Jun30, 2012	3,980.79	PR1084	June	Mackenzie	Wages - Geology
697	500	20120630	GJ	June24-30	vacation accrual	69.23	GJ0706	June	Mackenzie	Wages - Geology
697	500	20120707	PR	P/R: Jul07	2 Pay Jul07, 2012	3,593.02	PR1085	July	Mackenzie	Wages - Geology
697	500	20120707	GJ	July1-7	vacation accrual	69.23	GJ0724	July	Mackenzie	Wages - Geology
697	500	20120714	PR	P/R: Jul14	2 Pay Jul14, 2012	4,744.26	PR1086	July	Mackenzie	Wages - Geology
697	500	20120714	GJ	July 7-14	vacation accrual	86.54	GJ0729	July	Mackenzie	Wages - Geology
697	500	20120721	PR	P/R: Jul21	2 Pay Jul21, 2012	5,288.31	PR1087	July	Mackenzie	Wages - Geology
697	500	20120721	GJ	S Baird	July banked time	576.92	GJ0734	July	Mackenzie	Wages - Geology
697	500	20120721	GJ	July15-21	vacation accrual	86.54	GJ0735	July	Mackenzie	Wages - Geology
697	500	20120728	PR	P/R: Jul28	2 Pay Jul28, 2012	5,607.04	PR1088	July	Mackenzie	Wages - Geology
697	500	20120728	GJ	S Baird	banked days July 22-28	576.92	GJ0737	July	Mackenzie	Wages - Geology
697	500	20120728	GJ	July 22-28	vacation accrual	86.54	GJ0739	July	Mackenzie	Wages - Geology
697	500	20120804	PR	P/R: Aug04	2 Pay Aug04, 2012	5,607.04	PR1089	August	Mackenzie	Wages - Geology
697	500	20120804	GJ	banked tim	Shannon banked time	576.92	GJ0747	August	Mackenzie	Wages - Geology
697	500	20120804	GJ	Jul29-Aug4	vacation accrual	86.54	GJ0745	August	Mackenzie	Wages - Geology
697	500	20120811	PR	P/R: Aug11	2 Pay Aug11, 2012	589.78	PR1090	August	Mackenzie	Wages - Geology
697	500	20120818	GJ	Aug12-18	Shannon banked time	288.46	GJ0759	August	Mackenzie	Wages - Geology
697	510	20120107	PR	P/R: Jan07	2 Pay Jan07, 2012	316.27	PR1059	January	Mackenzie	Wages - Vacation & Stat. Holiday
697	510	20120107	GJ	Jan. 7	vacation accrual	17.31	GJ0512	January	Mackenzie	Wages - Vacation & Stat. Holiday
696	510	20120407	PR	P/R: Apr07	2 Pay Apr07, 2012	357.90	PR1072	April	Salal	Wages - Vacation & Stat. Holiday
697	510	20120407	PR	P/R: Apr07	2 Pay Apr07, 2012	315.07	PR1072	April	Mackenzie	Wages - Vacation & Stat. Holiday
697	510	20120407	GJ	Apr1-7	vacation accrual	17.31	GJ0610	April	Mackenzie	Wages - Vacation & Stat. Holiday
697	510	20120707	PR	P/R: Jul07	2 Pay Jul07, 2012	1,125.37	PR1085	July	Mackenzie	Wages - Vacation & Stat. Holiday
697	510	20120707	GJ	July1-7	vacation accrual	17.31	GJ0724	July	Mackenzie	Wages - Vacation & Stat. Holiday
697	514	20120930	GJ	allocate	Alar Soever time for July	3,867.92	GJ0822	September	Mackenzie	Wages-Supervisory
					6. Salary and Wages (Labor)	**111,758.82**				

		# of days	Rate Per day	
Peter Andersen	6,762.50	11.0	630	Jan-Mar
Joshua Lindgren	17,855.62	48.0	375	Apr-Sept
Martin St. Pierre	525.00	1.0	525	March-Apr
Bruce Frank	7,268.56	30.5	240	July-Aug
Martine Girard	5,726.56	26.0	220	July-Aug
Shannon Baird	50,553.84	145.0	350	Jan-Aug
Student Trainee #1 and # 2	1,994.22	10.0	200	June only
Colin Bateman	6,625.80	27.5	240	June -July
Andrew Strain	10,578.80	30.5	350	June-Aug
Alar Soever	3,867.92	5.0	800	Sept
6. Salary and Wages (Labor)	**111,758.82**			

696	679	20120331	PJ	01/03/2012	John Belhumer	750.00	PJ0531	March	Salal	First Nation Exp
697	679	20120331	PJ	01/03/2012	John Belhumer	750.00	PJ0531	March	Mackenzie	First Nation Exp
696	679	20120529	PJ	Inv#000002	John Belhumeur	287.50	PJ0568	May	Salal	First Nation Exp
697	679	20120529	PJ	Inv#000002	John Belhumeur	1,408.75	PJ0568	May	Mackenzie	First Nation Exp
697	679	20120531	PJ	Inv#000003	John Belhumeur	2,912.68	PJ0580	May	Mackenzie	First Nation Exp
697	679	20120630	GJ	WCB BC	WCB BC owing on J.Belhumeur	135.48	GJ0720	June	Mackenzie	First Nation Exp
697	679	20120731	PJ	Inv#000004	John Belhumeur	500.25	PJ0625	July	Mackenzie	First Nation Exp
697	679	20120930	GJ	J Belhumeu	accrue Sept. meeting costs	2,000.00	GJ0829	September	Mackenzie	First Nation Exp
					John Belhumer	8,744.66	17.50	500	Mar-May-June to Sept	

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Account	Sub-account
697	680	20120116	PJ	01/02/2012	Kenneth MacKenzie	75,000.00	PJ0475	January	Mackenzie	Option Agreement Payments-Land Acquisition
697	700	20120131	PJ	JAN302012	TD Visa	10,509.24	PJ0494	January	Mackenzie	Land Management (title searching, registry, maps, etc.)
696	680	20120228	PJ	2012MM-71	Wallbridge Mining Company Limi	17,500.00	PJ0511	February	Salal	Option Agreement Payments-Land Acquisition
696	680	20120229	PJ	2012MM71	Wallbridge Mining Company Limi	1,500.00	PJ0518	February	Salal	Option Agreement Payments-Land Acquisition
696	680	20120301	PJ	01/03/2012	George Owsiacki	5,000.00	PJ0507	March	Salal	Option Agreement Payments-Land Acquisition
696	680	20120301	PJ	01/03/2012	Garry Payie	5,000.00	PJ0507	March	Salal	Option Agreement Payments-Land Acquisition
696	700	20120331	PJ	APR62012	TD Visa	10.00	PJ0538	March	Salal	Land Management (title searching, registry, maps, etc.)
697	700	20120331	PJ	Inv#001559	McLean & Kerr	2,280.00	PJ0541	March	Mackenzie	Land Management (title searching, registry, maps, etc.)
697	700	20120331	PJ	APR62012	TD Visa	710.00	PJ0538	March	Mackenzie	Land Management (title searching, registry, maps, etc.)
696	705	20120430	PJ	APR302012	TD Visa	810.40	PJ0551	April	Salal	Recording fees
697	700	20120827	CD	AUG712	TD Visa	500.00	CD0385	August	Mackenzie	Land Management (title searching, registry, maps, etc.)
					NO CLAIMS	**118,819.64**				

SUMMARY OF EXPENDITURES INCURRED in MACKENZIE Project 2012

Acct#	sub-acct #	Date	JRL	Reference	Description	Amount	JRNL #	Month	Account	Sub-account
696	665	20120201	PJ	Inv#015698	Mountainview Storage Ltd.	68.75	PJ0484	February	Salal	Site Facilities
697	665	20120201	PJ	Inv#015698	Mountainview Storage Ltd.	55.00	PJ0484	February	Mackenzie	Site Facilities
696	665	20120301	PJ	Inv#015808	Mountainview Storage Ltd.	91.67	PJ0514	March	Salal	Site Facilities
697	665	20120301	PJ	Inv#015808	Mountainview Storage Ltd.	91.66	PJ0514	March	Mackenzie	Site Facilities
696	665	20120401	PJ	Inv#015918	Mountainview Storage Ltd.	82.50	PJ0526	April	Salal	Site Facilities
697	665	20120401	PJ	Inv#015918	Mountainview Storage Ltd.	82.50	PJ0526	April	Mackenzie	Site Facilities
696	668	20120420	PJ	Inv#752885	GPS City Canada	334.86	PJ0547	April	Salal	Safety Gear
697	668	20120420	PJ	Inv#752885	GPS City Canada	334.86	PJ0547	April	Mackenzie	Safety Gear
696	669	20120430	PJ	APR302012	Shannon Baird	149.75	PJ0551	April	Salal	Safety Training & Development
696	665	20120430	PJ	APR302012	Shannon Baird	409.00	PJ0551	April	Salal	Site Facilities
697	649	20120430	PJ	APR302012	Shannon Baird	369.53	PJ0551	April	Mackenzie	Accomodation
697	668	20120430	PJ	APR302012	Shannon Baird	107.83	PJ0551	April	Mackenzie	Safety Gear
697	669	20120430	PJ	APR302012	Shannon Baird	149.75	PJ0551	April	Mackenzie	Safety Training & Development
697	665	20120430	PJ	Inv#075175	Insta Space Storage Ltd.	200.00	PJ0551	April	Mackenzie	Site Facilities
696	665	20120501	PJ	Inv#016035	Mountainview Storage Ltd.	82.50	PJ0548	May	Salal	Site Facilities
696	665	20120501	CD	01/05/2012	Candace Crossan	833.33	CD0333	May	Salal	Site Facilities
697	665	20120501	PJ	Inv#016035	Mountainview Storage Ltd.	82.50	PJ0548	May	Mackenzie	Site Facilities
697	665	20120501	CD	01/05/2012	Candace Crossan	833.34	CD0333	May	Mackenzie	Site Facilities
696	667	20120508	PJ	03B-24729	Deakin Industries	392.33	PJ0557	May	Salal	Site Office Supplies
697	665	20120508	PJ	Inv#075782	Insta Space Storage Ltd.	200.00	PJ0557	May	Mackenzie	Site Facilities
697	666	20120508	PJ	MAY32012	Pemberton Valley Bldg Centre	94.12	PJ0557	May	Mackenzie	Site Office Expense
697	666	20120508	PJ	17978/1	Pemberton Valley Bldg Centre	19.41	PJ0557	May	Mackenzie	Site Office Expense
697	667	20120508	PJ	03B-24729	Deakin Industries	392.32	PJ0557	May	Mackenzie	Site Office Supplies
696	653	20120509	PJ	MAY112EXP	Duncan McLeish	43.31	PJ0558	May	Salal	Meals
697	653	20120509	PJ	MAY112EXP	Duncan McLeish	10.60	PJ0558	May	Mackenzie	Meals
697	669	20120509	PJ	MAY112EXP	Duncan McLeish	155.00	PJ0558	May	Mackenzie	Safety Training & Development
697	669	20120509	PJ	MAY112EXP	Duncan McLeish	155.00	PJ0558	May	Mackenzie	Safety Training & Development
696	653	20120510	PJ	MAY212EXP	Pearce Luck	32.11	PJ0562	May	Salal	Meals
697	653	20120510	PJ	MAY12EXP	Kristy Nay	12.37	PJ0562	May	Mackenzie	Meals
696	667	20120515	PJ	MAY72012	McElhanney	764.70	PJ0564	May	Salal	Site Office Supplies
697	667	20120515	PJ	MAY72012	McElhanney	1,019.60	PJ0564	May	Mackenzie	Site Office Supplies
696	669	20120517	PJ	01/05/2012	BC ATV Training	487.29	PJ0566	May	Salal	Safety Training & Development
697	669	20120517	PJ	01/05/2012	BC ATV Training	649.73	PJ0566	May	Mackenzie	Safety Training & Development
696	668	20120528	PJ	03B-24792	Deakin Industries	134.87	PJ0567	May	Salal	Safety Gear
696	666	20120528	PJ	In10591813	SGS Minerals Services	162.33	PJ0567	May	Salal	Site Office Expense
697	668	20120528	PJ	03B-24792	Deakin Industries	179.81	PJ0567	May	Mackenzie	Safety Gear
697	666	20120528	PJ	Inv#001800	Route 99 Motorsports Ltd.	2,320.84	PJ0567	May	Mackenzie	Site Office Expense
697	668	20120529	PJ	1806074441	Aurora Telenet (Canada) Inc.	158.33	PJ0571	May	Mackenzie	Safety Gear
696	667	20120531	PJ	MAY72012	McElhanney	- 764.70	PJ0579	May	Salal	Site Office Supplies
697	652	20120531	PJ	CL625706	A C Petroleum Sales	70.00	PJ0574	May	Mackenzie	Fuel
697	668	20120531	PJ	MAY312012	Jose Sayo Garcia	32.52	PJ0578	May	Mackenzie	Safety Gear
697	666	20120531	GJ	ICBC	accrue ICBC exp. on visa	295.00	GJ0681	May	Mackenzie	Site Office Expense
697	666	20120531	GJ	Staples	accrue May cost till Inv.rec.d	200.00	GJ0679	May	Mackenzie	Site Office Expense
697	667	20120531	PJ	MAY72012	McElhanney	- 1,019.60	PJ0579	May	Mackenzie	Site Office Supplies
696	665	20120601	PJ	Inv#016154	Mountainview Storage Ltd.	68.75	PJ0570	June	Salal	Site Facilities
696	665	20120601	CD	01/06/2012	Candace Crossan	833.34	CD0335	June	Salal	Site Facilities
697	665	20120601	PJ	Inv#016154	Mountainview Storage Ltd.	55.00	PJ0570	June	Mackenzie	Site Facilities
697	665	20120601	CD	01/06/2012	Candace Crossan	833.33	CD0335	June	Mackenzie	Site Facilities
697	652	20120613	PJ	In29718368	Esso	48.99	PJ0582	June	Mackenzie	Fuel
697	666	20120613	PJ	JUNE62012	TD VISA	290.00	PJ0582	June	Mackenzie	Site Office Expense
697	673	20120619	PJ	JUNE1512	Joshua Lindgren	89.28	PJ0585	June	Mackenzie	Equipment rental
697	653	20120619	PJ	JUNE1512	Joshua Lindgren	94.34	PJ0585	June	Mackenzie	Meals
697	668	20120619	PJ	JUNE1512EX	Shannon Baird	424.13	PJ0584	June	Mackenzie	Safety Gear
697	667	20120627	PJ	03B-25581	Deakin Industries	523.10	PJ0589	June	Mackenzie	Site Office Supplies
697	667	20120627	PJ	Inv2643614	ALS Canada	77.00	PJ0589	June	Mackenzie	Site Office Supplies
697	652	20120630	PJ	01/06/3012	Shannon Baird	21.11	PJ0612	June	Mackenzie	Fuel
697	652	20120630	PJ	In29963324	Esso	633.56	PJ0603	June	Mackenzie	Fuel
697	652	20120630	PJ	CL629220	A C Petroleum Sales	282.65	PJ0599	June	Mackenzie	Fuel
697	656	20120630	PJ	01/06/2912	Pemberton Valley Supermarket	122.62	PJ0605	June	Mackenzie	Groceries
697	656	20120630	PJ	01/06/2312	Pemberton Valley Supermarket	64.78	PJ0605	June	Mackenzie	Groceries
697	656	20120630	PJ	JUNE202012	Pemberton Valley Supermarket	32.64	PJ0605	June	Mackenzie	Groceries
697	656	20120630	PJ	01/06/2812	Pemberton Valley Supermarket	47.06	PJ0595	June	Mackenzie	Groceries
697	656	20120630	PJ	01/06/2612	Pemberton Valley Supermarket	96.05	PJ0595	June	Mackenzie	Groceries
697	656	20120630	PJ	01/06/2512	Pemberton Valley Supermarket	328.60	PJ0595	June	Mackenzie	Groceries
697	656	20120630	PJ	01/06/2012	Pemberton Valley Supermarket	79.02	PJ0595	June	Mackenzie	Groceries
697	656	20120630	PJ	01/06/1912	Pemberton Valley Supermarket	42.25	PJ0595	June	Mackenzie	Groceries
697	656	20120630	PJ	JUNE1812	Pemberton Valley Supermarket	120.64	PJ0591	June	Mackenzie	Groceries
697	653	20120630	PJ	01/06/3012	Shannon Baird	162.61	PJ0612	June	Mackenzie	Meals
697	653	20120630	PJ	JUNE3012EX	Andrew Strain	39.80	PJ0602	June	Mackenzie	Meals
697	653	20120630	PJ	JUNE3012EX	Colin Bateman	40.25	PJ0602	June	Mackenzie	Meals
697	653	20120630	PJ	01/06/3012	Joshua Lindgren	82.29	PJ0597	June	Mackenzie	Meals
697	668	20120630	PJ	JUNE3012EX	Andrew Strain	89.29	PJ0602	June	Mackenzie	Safety Gear
697	668	20120630	PJ	23496-01	Signal Systems	450.00	PJ0602	June	Mackenzie	Safety Gear
697	666	20120630	PJ	Inv#111816	Carney's Waste Systems	110.00	PJ0602	June	Mackenzie	Site Office Expense
697	666	20120630	PJ	Inv#062012	Variable Rentals	105.00	PJ0599	June	Mackenzie	Site Office Expense
697	666	20120630	PJ	01/06/2912	Desjardins Card Services	206.30	PJ0599	June	Mackenzie	Site Office Expense
697	666	20120630	PJ	01/06/3012	Jose Sayo Garcia	97.35	PJ0595	June	Mackenzie	Site Office Expense
697	666	20120630	PJ	Inv#001867	Route 99 Motorsports Ltd.	198.00	PJ0591	June	Mackenzie	Site Office Expense
697	666	20120630	GJ	Variable	reallocate to proper project	- 105.00	GJ0723	June	Mackenzie	Site Office Expense
697	666	20120630	GJ	ICBC	invoice received	- 295.00	GJ0709	June	Mackenzie	Site Office Expense
697	666	20120630	GJ	Staples	invoice received	- 200.00	GJ0709	June	Mackenzie	Site Office Expense
697	667	20120630	PJ	Inv#834046	Napa	3.69	PJ0602	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	01/06/3012	Joshua Lindgren	111.98	PJ0597	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	Inv#834622	Napa	2.09	PJ0595	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	03B-25530	Deakin Industries	275.00	PJ0593	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	20869/1	Pemberton Valley Bldg Centre	230.27	PJ0591	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	20802/1	Pemberton Valley Bldg Centre	52.97	PJ0591	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	20679/1	Pemberton Valley Bldg Centre	82.91	PJ0591	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	20018/1	Pemberton Valley Bldg Centre	22.99	PJ0591	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	19976/1	Pemberton Valley Bldg Centre	117.34	PJ0591	June	Mackenzie	Site Office Supplies
697	667	20120630	PJ	Inv#833277	Napa	34.97	PJ0591	June	Mackenzie	Site Office Supplies
696	665	20120701	CD	01/07/2012	Candace Crossan	833.33	CD0336	July	Salal	Site Facilities
697	665	20120701	CD	01/07/2012	Candace Crossan	833.33	CD0336	July	Mackenzie	Site Facilities
697	665	20120703	PJ	Inv#016265	Mountainview Storage Ltd.	275.00	PJ0592	July	Mackenzie	Site Facilities
697	667	20120704	PJ	21093/1	Pemberton Valley Bldg Centre	25.96	PJ0596	July	Mackenzie	Site Office Supplies
697	668	20120705	PJ	R2869	Canada Wide Communications	199.00	PJ0598	July	Mackenzie	Safety Gear
697	667	20120705	PJ	21139/1	Pemberton Valley Bldg Centre	137.40	PJ0598	July	Mackenzie	Site Office Supplies
697	666	20120711	CR	ICBC	refund of ATV not registered	- 159.00	CR0044	July	Mackenzie	Site Office Expense
697	667	20120713	PJ	21405/1	Pemberton Valley Bldg Centre	43.57	PJ0606	July	Mackenzie	Site Office Supplies
697	656	20120717	PJ	JULY92012	Pemberton Valley Supermarket	254.86	PJ0613	July	Mackenzie	Groceries

SUMMARY OF EXPENDITURES INCURRED in MACKENZIE Project 2012

697	656	20120717	PJ	JULY912	Pemberton Valley Supermarket		483.97	PJ0613	July	Mackenzie	Groceries
697	656	20120717	PJ	JULY102012	Pemberton Valley Supermarket		39.31	PJ0613	July	Mackenzie	Groceries
697	667	20120717	PJ	21548/1	Pemberton Valley Bldg Centre		73.79	PJ0613	July	Mackenzie	Site Office Supplies
697	667	20120717	PJ	Inv#010100	Black Hot Wheels		27.13	PJ0613	July	Mackenzie	Site Office Supplies
697	652	20120718	PJ	1207092LX	Petrovalue Products Canada Inc		19,394.62	PJ0615	July	Mackenzie	Fuel
697	652	20120718	PJ	JULY1512	Shannon Baird		51.04	PJ0614	July	Mackenzie	Fuel
697	653	20120718	PJ	JULY1512	Joshua Lindgren		37.80	PJ0614	July	Mackenzie	Meals
697	653	20120718	PJ	JULY1512	Jose Sayo Garcia		83.96	PJ0614	July	Mackenzie	Meals
697	653	20120718	PJ	JULY1512	Shannon Baird		71.72	PJ0614	July	Mackenzie	Meals
697	668	20120718	PJ	JULY1512	Joshua Lindgren		260.00	PJ0614	July	Mackenzie	Safety Gear
697	668	20120718	PJ	Inv#075396	BC Communications Inc.		199.00	PJ0614	July	Mackenzie	Safety Gear
697	665	20120718	PJ	Inv#077082	Insta Space Storage Ltd.		200.00	PJ0614	July	Mackenzie	Site Facilities
697	666	20120718	PJ	JULY1512	Jose Sayo Garcia		46.81	PJ0614	July	Mackenzie	Site Office Expense
697	652	20120723	PJ	Inv#000437	A C Petroleum Sales		23.90	PJ0617	July	Mackenzie	Fuel
697	652	20120723	PJ	Inv#000430	A C Petroleum Sales		23.90	PJ0617	July	Mackenzie	Fuel
697	652	20120723	PJ	Inv#000423	A C Petroleum Sales		74.95	PJ0617	July	Mackenzie	Fuel
697	652	20120723	PJ	Inv#000415	A C Petroleum Sales		70.79	PJ0617	July	Mackenzie	Fuel
697	666	20120723	PJ	01/07/2012	Shaw Cable		68.80	PJ0617	July	Mackenzie	Site Office Expense
697	667	20120723	PJ	21872/1	Pemberton Valley Bldg Centre		22.99	PJ0617	July	Mackenzie	Site Office Supplies
697	668	20120724	PJ	R2869	Canada Wide Communications	-	199.00	PJ0618	July	Mackenzie	Safety Gear
697	656	20120727	PJ	JULY72012	Pemberton Valley Supermarket		89.42	PJ0620	July	Mackenzie	Groceries
697	656	20120727	PJ	JULY12012	Pemberton Valley Supermarket		67.35	PJ0620	July	Mackenzie	Groceries
697	666	20120730	PJ	03B-26057	Deakin Industries		158.75	PJ0621	July	Mackenzie	Site Office Expense
697	666	20120730	PJ	Inv#010210	Black Hot Wheels		27.13	PJ0621	July	Mackenzie	Site Office Expense
697	667	20120730	PJ	22279/1	Pemberton Valley Bldg Centre		6.28	PJ0621	July	Mackenzie	Site Office Supplies
697	667	20120730	PJ	22129/1	Pemberton Valley Bldg Centre		50.37	PJ0621	July	Mackenzie	Site Office Supplies
697	667	20120730	PJ	21874/1	Pemberton Valley Bldg Centre		5.49	PJ0621	July	Mackenzie	Site Office Supplies
697	667	20120730	PJ	21799/1	Pemberton Valley Bldg Centre		157.31	PJ0621	July	Mackenzie	Site Office Supplies
697	652	20120731	SJ	inv#120720	Blackcomb Aviation	-	3,160.00	SJ0003	July	Mackenzie	Fuel
697	652	20120731	PJ	In30297114	Esso		1,808.93	PJ0630	July	Mackenzie	Fuel
697	652	20120731	PJ	CL629521	A C Petroleum Sales		7,056.28	PJ0627	July	Mackenzie	Fuel
697	656	20120731	PJ	JULY52012	Pemberton Valley Supermarket		48.40	PJ0629	July	Mackenzie	Groceries
697	656	20120731	PJ	JULY412	Pemberton Valley Supermarket		190.30	PJ0627	July	Mackenzie	Groceries
697	656	20120731	PJ	JULY32012	Pemberton Valley Supermarket		296.11	PJ0627	July	Mackenzie	Groceries
697	656	20120731	PJ	01/07/2812	Pemberton Valley Supermarket		1,317.09	PJ0627	July	Mackenzie	Groceries
697	656	20120731	PJ	JULY252012	Pemberton Valley Supermarket		11.90	PJ0627	July	Mackenzie	Groceries
697	656	20120731	PJ	01/07/2512	Pemberton Valley Supermarket		307.08	PJ0627	July	Mackenzie	Groceries
697	656	20120731	PJ	01/07/2212	Pemberton Valley Supermarket		558.20	PJ0627	July	Mackenzie	Groceries
697	656	20120731	PJ	01/07/3112	Shannon Baird		12.78	PJ0627	July	Mackenzie	Groceries
697	656	20120731	PJ	JULY1612	Pemberton Valley Supermarket		2,582.95	PJ0625	July	Mackenzie	Groceries
697	653	20120731	PJ	01/07/3112	Joshua Lindgren		33.24	PJ0627	July	Mackenzie	Meals
697	653	20120731	PJ	01/07/3112	Jose Sayo Garcia		18.05	PJ0627	July	Mackenzie	Meals
697	653	20120731	PJ	01/07/3112	Shannon Baird		19.03	PJ0627	July	Mackenzie	Meals
697	636	20120731	PJ	Inv#001775	Hazelwood Construction Service		766.44	PJ0630	July	Mackenzie	Road Work & Maintenance
697	665	20120731	PJ	1806074562	Aurora Telenet (Canada) Inc.		475.00	PJ0633	July	Mackenzie	Site Facilities
697	665	20120731	PJ	Inv#050768	Sabre Rentals		1,183.50	PJ0630	July	Mackenzie	Site Facilities
697	666	20120731	PJ	01/07/3112	Joshua Lindgren		12.25	PJ0627	July	Mackenzie	Site Office Expense
697	666	20120731	PJ	Inv#015199	Initial Print & Copy Center		140.00	PJ0624	July	Mackenzie	Site Office Expense
697	667	20120731	PJ	01/07/3112	Joshua Lindgren		19.98	PJ0627	July	Mackenzie	Site Office Supplies
697	667	20120731	PJ	01/07/2012	Desjardins Card Services		177.81	PJ0627	July	Mackenzie	Site Office Supplies
697	667	20120731	PJ	Inv#837004	Napa		63.56	PJ0624	July	Mackenzie	Site Office Supplies
696	665	20120801	CD	01/08/2012	Candace Crossan		833.33	CD0337	August	Salal	Site Facilities
697	665	20120801	PJ	Inv#016376	Mountainview Storage Ltd.		275.00	PJ0622	August	Mackenzie	Site Facilities
697	665	20120801	CD	01/08/2012	Candace Crossan		833.34	CD0337	August	Mackenzie	Site Facilities
697	673	20120803	PJ	Inv#004208	UGO Transport Rentals		800.00	PJ0623	August	Mackenzie	Equipment rental
697	667	20120803	PJ	22656/1	Pemberton Valley Bldg Centre		18.98	PJ0626	August	Mackenzie	Site Office Supplies
697	665	20120809	PJ	Inv#077820	Insta Space Storage Ltd.		400.00	PJ0628	August	Mackenzie	Site Facilities
697	653	20120815	PJ	AUG1512	Joshua Lindgren		150.34	PJ0634	August	Mackenzie	Meals
697	666	20120815	PJ	AUG1512	Joshua Lindgren		366.83	PJ0634	August	Mackenzie	Site Office Expense
697	666	20120815	PJ	AUG1512	Jose Sayo Garcia		349.49	PJ0634	August	Mackenzie	Site Office Expense
697	652	20120831	PJ	CL629819	A C Petroleum Sales		290.79	PJ0641	August	Mackenzie	Fuel
697	653	20120831	PJ	AUG31EXP	Shannon Baird		51.12	PJ0639	August	Mackenzie	Meals
697	668	20120831	PJ	23788-01	Signal Systems		725.00	PJ0637	August	Mackenzie	Safety Gear
697	668	20120831	PJ	Inv#076439	BC Communications Inc.		188.02	PJ0637	August	Mackenzie	Safety Gear
697	668	20120831	PJ	Inv#076093	BC Communications Inc.		99.50	PJ0637	August	Mackenzie	Safety Gear
697	668	20120831	GJ	BC Comm	coded to MacK s/b Shulaps	-	99.50	GJ0782	August	Mackenzie	Safety Gear
697	668	20120831	GJ	BC Comm	coded to MacK s/b Shulaps	-	188.02	GJ0782	August	Mackenzie	Safety Gear
697	668	20120831	GJ	Signal	coded to MacK s/b Shulaps	-	725.00	GJ0782	August	Mackenzie	Safety Gear
697	668	20120831	GJ	Signal	coded to MacK s/b Shulaps	-	225.00	GJ0782	August	Mackenzie	Safety Gear
697	668	20120831	GJ	Signal	accrue Aug. costs		225.00	GJ0780	August	Mackenzie	Safety Gear
697	665	20120831	PJ	AUG31EXP	Shannon Baird		42.00	PJ0639	August	Mackenzie	Site Facilities
697	665	20120831	GJ	Crossan	coded to MacK s/b Shulaps	-	833.34	GJ0782	August	Mackenzie	Site Facilities
697	665	20120831	GJ	MountainV	coded to MacK s/b Shulaps	-	275.00	GJ0782	August	Mackenzie	Site Facilities
697	665	20120831	GJ	Insta Spc	coded to MacK s/b Shulaps	-	400.00	GJ0782	August	Mackenzie	Site Facilities
697	665	20120831	GJ	Baird exp	coded to MacK s/b Shulaps	-	42.00	GJ0782	August	Mackenzie	Site Facilities
697	666	20120831	GJ	Garcia	coded to MacK s/b Shulaps	-	349.49	GJ0782	August	Mackenzie	Site Office Expense
697	666	20120831	GJ	Lindgren	coded to MacK s/b Shulaps	-	366.83	GJ0782	August	Mackenzie	Site Office Expense
697	667	20120831	GJ	PV Hardwar	coded to MacK s/b Shulaps	-	18.98	GJ0782	August	Mackenzie	Site Office Supplies
696	665	20120901	CD	01/09/2012	Candace Crossan		833.33	CD0338	September	Salal	Site Facilities
697	668	20120901	GJ	Signal	accrue Aug. costs	-	225.00	GJ0780	September	Mackenzie	Safety Gear
697	665	20120901	CD	01/09/2012	Candace Crossan		833.33	CD0338	September	Mackenzie	Site Facilities
697	652	20120918	SJ	inv#120910	Petrovalue Products Canada Inc	-	2,181.20	SJ0005	September	Mackenzie	Fuel
697	666	20120918	PJ	Inv#078632	Insta Space Storage Ltd.		400.00	PJ0647	September	Mackenzie	Site Office Expense
697	652	20120930	SJ	120910CR	Petrovalue Products Canada Inc		569.51	SJ0006	September	Mackenzie	Fuel
697	666	20120930	PJ	01/09/3012	Jose Sayo Garcia		82.55	PJ0653	September	Mackenzie	Site Office Expense
697	667	20120930	PJ	SEPT3012EX	Bruce Jago		3.99	PJ0651	September	Mackenzie	Site Office Supplies
					7. Logistics (Field Supplies and Support)		58,121.96				
					Total		**479,395.10**				

F2.

APPENDIX F2: SCANNED COPIES OF MAJOR INVOICES AND RECEIPTS

SALAL

Mackenzie

INSERT VARIOUS MAJOR INVOICES AND RECEIPTS