GEOLOGICAL AND GEOCHEMICAL REPORT
on the
GD PROPERTY

Omineca Mining Division, British Columbia, Canada
centered at
54° 45’ North, 126° 10’ West
on NTS Sheet 093L/16E

Prepared for:

Altiplano Minerals Limited
1280 - 885 West Georgia Street
Vancouver, BC, Canada, V6C 3E8

Prepared by:
Derrick Strickland, P.Geo., MBA

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1 SUMMARY

This report summarizes recent 2012 exploration work performed on the GD mineral claims of which Altiplano Minerals Limited of Vancouver, BC owns a 100% interest.

The GD property (the “Property”) is located 30 kilometres northeast of the town of Topley (on Highway 16) in central British Columbia. The GD Property comprises eleven claims totalling 4161.83 hectares. Access to the GD property is by the main GranIsle Highway and many logging and placer trails that branch out from this main highway.

The GD Property is within the Stikine Terrane, a part of the Intermontane tectonic belt. The Stikine Terrane itself is composed of Carboniferous to Middle Jurassic island-arc volcanic and sedimentary rocks plus several related plutonic suites. The GD Property itself is principally underlain by Mesozoic layered rocks; the most widespread being clastic volcanic and sedimentary rocks of the Jurassic-aged Hazelton Group. These are intruded by plutonic rocks of various ages such as the quartz monzonites of the Lower Jurassic ‘Topley Intrusive Suite’.

This region is known for large porphyry copper, copper/gold, and copper/molybdenum deposits some of which having been developed as producing mines notably the GranIsle and Bell Copper Mines. Mineral deposit types present in the region are classified as porphyry and epigenetic, characterized by disseminated, vein, and breccia hydrothermal systems.

During 2012, Altiplano Minerals Ltd. carried out limited geological mapping, prospecting, and soil geochemical surveys over portions of the GD Property. Several continuous rock chip samples returned elevated values of copper and molybdenite. In general, wide spread copper mineralization in exposed outcrop was observed extending from Tachek Creek north to Tachek Creek south, a distance of 1125 metres.

The field program consisted of the collection of 18 continuous rock chip samples and 175 soil samples collected from seven 1000 meter lines spaced at 200 meter intervals extending south of the 2010 grids. Soil samples were collected at 50 meter stations. Two soil sample sites were revisited at which horizon pits were dug beside the original sample locations and samples taken at 20cm intervals to depths of 71 cm and 49 cm respectively. Additional fieldwork consisted of geological mapping and prospecting.

A program of three-dimensional (3D) induced polarization and magnetic geophysical surveys centered on previous percussion drilling performed by Noranda Exploration Company in 1969 is recommended. In addition, further geological mapping and continuous rock chip sampling in Tachek Creek north and south is recommended. A second phase drill program will be recommended depending on the results of the Phase 1 programme.

2 INTRODUCTION

This report highlights information obtained from a May, 2012 geological and geochemical exploration program carried out on the GD mineral claims by Rio Minerals Ltd. on behalf of Altiplano Minerals Corporation, the 100% owner of the GD property. This exploration program re-evaluated previously reported anomalous zones and new areas for potential precious and base metal values. This report was prepared for assessment credit in the Province of British Columbia.

The property has been staked to cover the known extent of previously identified widespread copper mineralization - less molybdenite and anomalous gold (Carter, 1990). Mineralization typically occurs within fractures and faulted zones with rare weakly mineralized (trace chalcopyrite) quartz and quartz-carbonate veinlets. The copper mineralization for the most part is hosted within Early to Middle Jurassic Spike Peak Intrusive Suite rocks (granitic quartz monzonite).

The field program consisted of the collection of 18 continuous rock chip samples and seven soil sample lines spaced 200 meters apart were added to the south of the 2010 soil sample grids. Soil samples were collected on 50 metre centres for a total of 175 soil samples. Additional fieldwork consisted of geological mapping and prospecting.

Porphyry type deposits typically contain stockworks of quartz veinlets, quartz veins, closely spaced fractures, and breccias containing pyrite and chalcopyrite with lesser molybdenite, bornite and magnetite and occur in large zones of economically bulk-mineable mineralization (Panteleyev, A. (1995). The GD property has wide-spread copper mineralization (pyrite, chalcopyrite, magnetite, molybdenite and bornite) and generally fractured controlled copper mineralization and is consistent with a porphyry copper/molybdenite type environment.

The objectives of the 2012 exploration program were to compile previous geological work and validate previously reported exploration work.

In the preparation of this report, the author utilized British Columbia and Federal Government geological maps, geological reports and claim maps. Information was also obtained from British Columbia Government websites such as Mineral Titles Online (www.mtonline.gov.bc.ca), the Map Place (www.em.gov.bc.ca/mining/Geolsurv/MapPlace), as well as the mineral assessment work reports from the GD Property area that have been historically filed by various companies. Several reports that had been filed with SEDAR (www.sedar.com) were also reviewed

3 GD PROPERTY DESCRIPTION AND LOCATION

The GD Property is located in central British Columbia (Figure 1), approximately 15 kilometres south of the villages of Topley Landing and GranIsle (on the west shore of Babine Lake) and 30 kilometres northeast of the town of Topley (on Highway 16) off the GranIsle Highway. The GD Property is located within the Omineca Mining Division in British Columbia. The claims cover an area of 4161.83 hectares centred at latitude 54° 45' N and longitude 126° 10' W entirely within NTS map sheet 093L. The corresponding UTM co-ordinates (NAD 83) for the centre of the GD Property are: 680500 East; and 6070100 North.

Altiplano Minerals Ltd. ("Altiplano") owns a 100% interest in the eleven claims (Figure 2) that comprise the GD Property. The eleven claims, their respective expiry dates, and areas are listed in Table 1.

Table 1: GD Property Information

Tenure Number	Claim Name	Owner	Map Number	Expiry Date	Area (ha)
558121	GD-1	245861 (100%)	093L	2013/Jul/11	466.54
558123	GD-2	245861 (100%)	093L	2013/Jul/11	466.75
602703	GD-3	245861 (100%)	093L	2013/Jul/11	373.07
789022	GD-4	245861 (100%)	093L	2013/Jul/11	466.43
789082	GD-5	245861 (100%)	093L	2013/Jul/11	317.39
790382	GD-6	245861 (100%)	093L	2013/Jul/11	447.68
790442	GD-7	245861 (100%)	093L	2013/Jul/11	447.95
790462	GD-8	245861 (100%)	093L	2013/Jul/11	298.77
829102	GD-9	245861 (100%)	093L	2013/Jul/11	37.33
829122	GD-10	245861 (100%)	093L	2013/Jul/11	373.14
829142	GD-11	245861 (100%)	093L	2013/Jul/11	466.79

The author undertook a search of the tenure data on the British Columbia government's Mineral Titles Online (MTO) web site which confirms the geospatial locations of the claims boundaries.

4 ACCESSIBILTY, CLIMATE, INFRASTRUCTURE & PHYSIOGRAPHY

ACCESS

The main access to the GD Property is by road along the GranIsle Highway approximately thirty-five kilometres northeast from the town of Topley on Highway 16 (Figures 1 & 2). The GranIsle Highway passes through the centre of the GD Property. A B.C. Hydro high-tension electric transmission line follows the GranIsle Highway and cuts through the GD Property. Abundant water is available for exploration and mining from Tachek Creek and its tributaries. Crew lodgings are available in Topley Landing/GranIsle and Houston.

CLIMATE

The climate of the region is typical of central British Columbia with winter temperatures averaging -15°C in January as well as moderate snowfall with a typical snow pack of 1.0 to 1.6 m. Winter conditions can be expected from October to April. A pleasant summer climate is characterized by average temperatures of 20°C and little precipitation; June rainfall is on average less than 0.5 cm.

INFRASTRUCTURE & LOCAL RESOURCES

People in this central region of British Columbia are generally employed in the forestry and tourism industries and approximately 230 people work at the nearby Huckleberry Mine and live in the Houston area. People in the area are generally supportive of potential mining employment and a local labour force and equipment for mining and exploration is available in nearby Smithers (~65 km west) and Houston (~50 km west), or Prince George (~200 km southeast).

Two operating mines are found in the region:

1. Huckleberry, Cu-Mo, Au Porphyry Mine: operated by Imperial Metals Corp., is approximately 125 road kilometres from Houston or 150 km from Topley. Most of the mine's work force live in the nearby communities of Houston, Smithers, Topley and Burns Lake.

2. Endako, Mo Porphyry Mine: approximately 100 km east-southeast of Topley and serviced by the towns of Fraser Lake and Prince George, B.C.

Figure 1: Regional Location Map of the GD Property

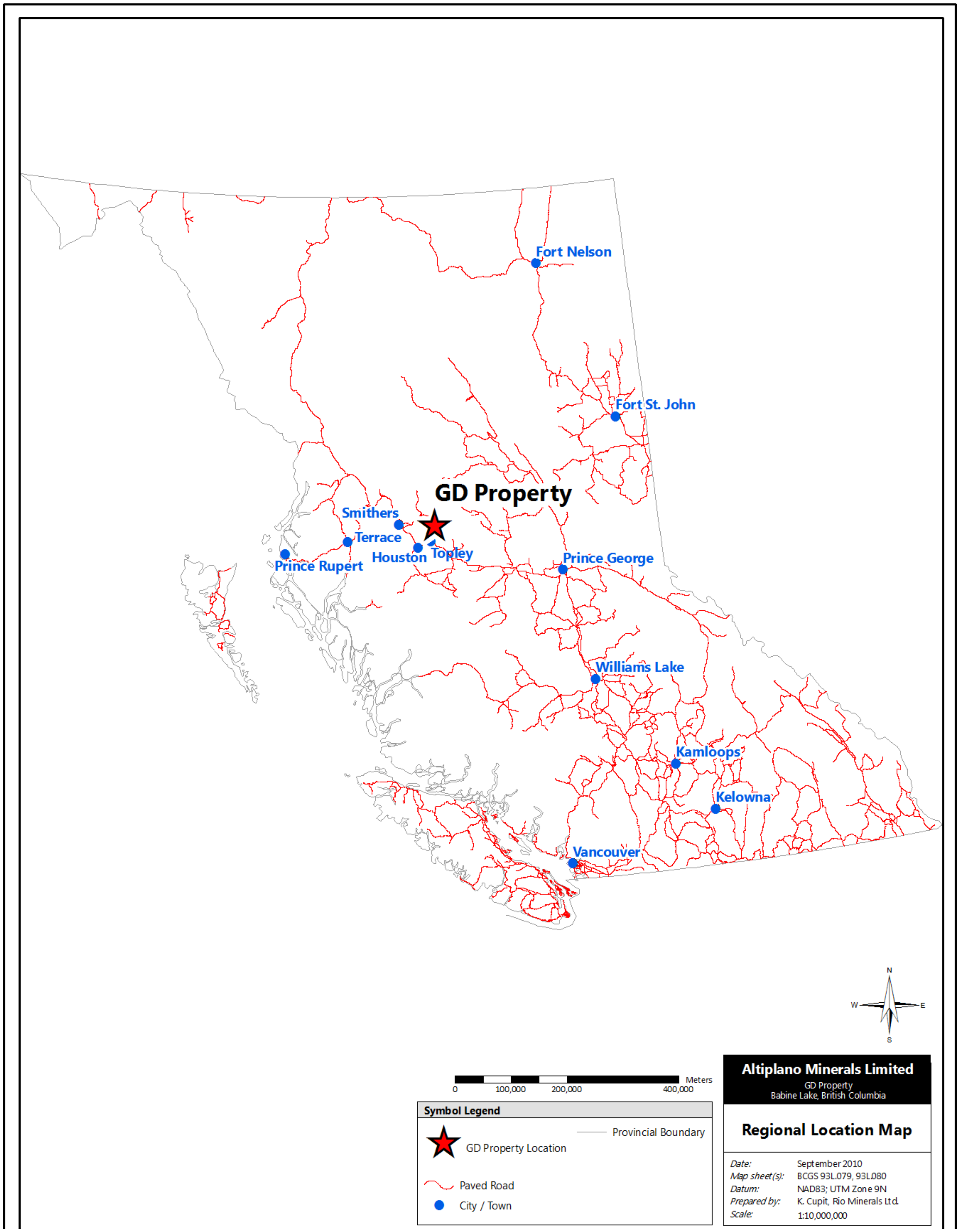
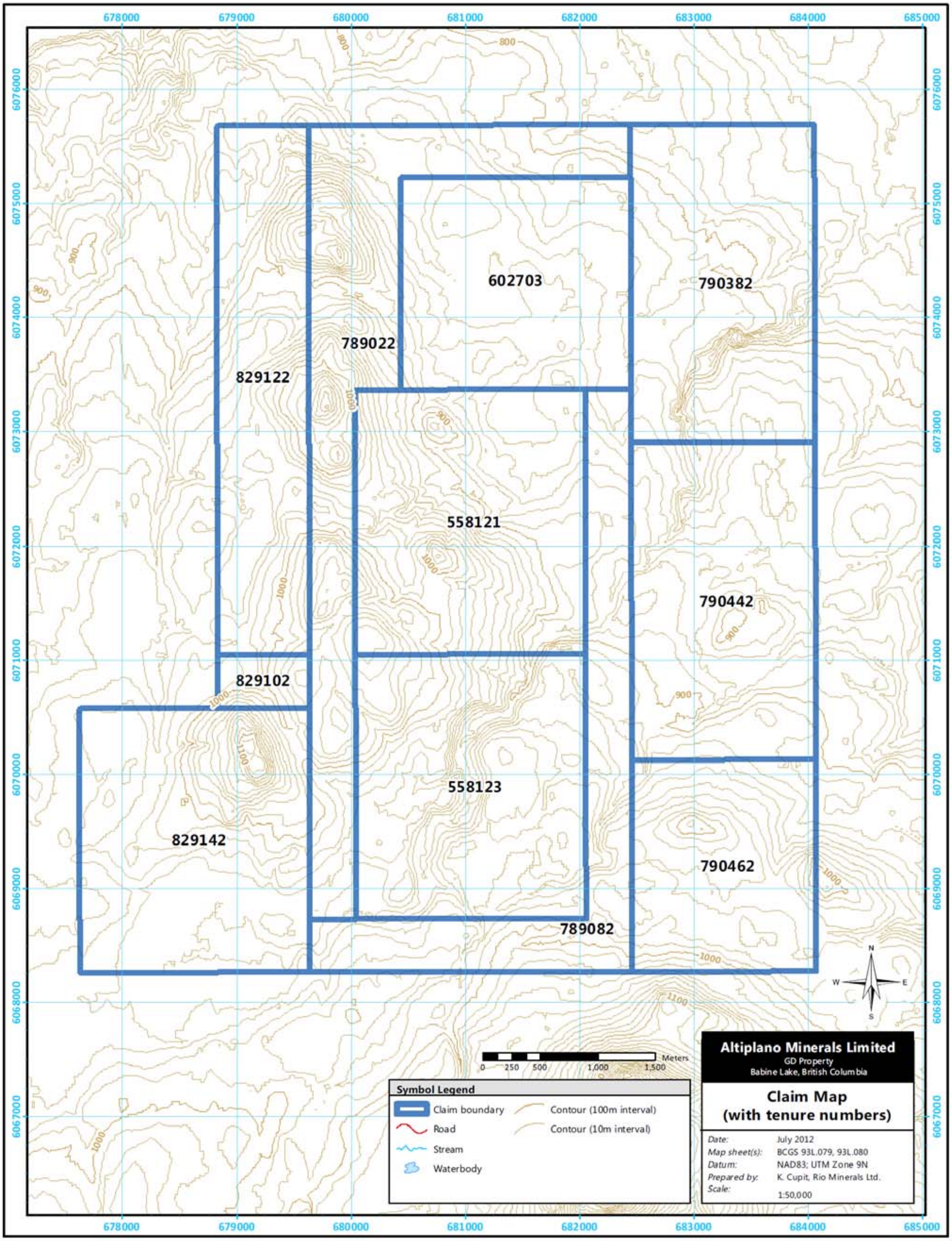


Figure 2: Claim Map for the GD Property



PHYSIOGRAPHY & VEGETATION

Tachek Creek flows in a valley transecting the GD Property from southwest to the northeast flowing generally easterly into Babine Lake and is flanked by rounded mountains with moderate relief. The topography on the GD Property is generally flat with elevations of approximately 800 metres; the elevation reaches a maximum of 1300 metres on Shoulder Mountain to the south. Tachek Creek valley was apparently a major pre- and inter-glacial valley that has been filled by layers of till and glacial outwash sands and gravels. The post glacial channel of Tachek Creek and a parallel creek to the east have cut down through this glacial fill into bedrock. Vegetation consists mainly of dense mixed forest of pine, spruce, and cedar on the gravel flats with poplar dominant on southern slopes and spruce, willow, aspen, and devils-club on northern slopes.

5 EXPLORATION HISTORY OF THE GD PROPERTY AREA

The Babine Lake area surrounding the GD Property has been historically known for hosting a significant number of porphyry style mineral occurrences and deposits. The most notable deposits are the Cu-Au-Ag of the GranIsle (1966-1982) and the Bell Mines (1972-1992) which where owned and operated by Noranda's Babine Mining Division, both mines are now closed but some mining infrastructure still exists at the Bell mine.

Records exist documenting that the specific area of the GD Property has been actively explored by prospectors and mining companies since the mid to late 1960's (Figure 4). Some of the current GD Property has been formerly called the "Gold Dust" claims and/or the "Len" claims. Copper and molybdenum mineralization was discovered by local prospectors in Tachek Creek in the central part of the present claim group. The GD Property area is thickly covered by glacial tills/deposits and the best chance for outcrop examination remains incised creeks and rivers and has hindered exploration follow-up of the original discovery. Since the original prospecting discoveries numerous exploration companies have conducted further work in and around the current claim boundaries. The following is a brief summary of known work on and in the immediate area of the GD Property. In the earliest filed reports, the current GD claims were originally staked and held by both Noranda Exploration and Tro-Buttle Exploration Ltd.

BC Minfile records also document several mineral showings located in and around the GD Property. These include, by Minfile number and name:

093L 144	"Tachi" -	Chalcopyrite, Pyrite, Molybdenite, Magnetite
093L 212	"Donna" -	Chalcopyrite, Magnetite
093L 213	"FG" -	Chalcopyrite
093L 225	"Pro" -	Chalcopyrite, Pyrite, Molybdenite
093L 242	"Jill" -	Chalcopyrite, Pyrite
093L 307	"Chris" -	Calcite & Limestone
093L 315	"Gold Dust" -	Chalcopyrite, Pyrite, Molybdenite

Figure 3 is a compilation map of the BC Minfile showings that have been recorded on the GD Property. All BC Minfile records can be accessed at http://minfile.gov.bc.ca/.

The following is a brief summary of the historically exploration work as recorded within the BC Assessment Reports on the GD Property area:

- *1968/69 Noranda Exploration Limited*

Mineralization was recognized by prospectors in Tachek Creek and Noranda staked 170 claims to further test the area. In 1968 and 1969 and work included: geological mapping, geochemical (soil and silt sampling) and geophysical surveys (both induced polarization and magnetic surveying), road building, 1,725 metres of percussion drilling and 1,015 metres of diamond drilling (Noranda Exploration Report, 1969). According the Noranda Report the best assays obtained in the drill program were hole 32 (3.1 metres of 2,497 ppm (0.25%) Cu) and 31 (3.1 meters of 0.62 % Cu and 0.11 MoS_2)

- *1968/69 Tro-Buttle Exploration Ltd.*

A soil survey was undertaken intended to aid in the definition of a porphyry environment. A total of 47 line-miles were blazed, picketed and flagged and 1267 soil samples were collected (Dirom, 1969). Several anomalous copper and molybdenum values were found, but appeared discontinuous. Tro-Buttle reported in its report one soil sample with 4.65% molybdenum and another sample with 29 ppm copper.

- *1970 Taseko Mines Limited*

Taseko Mines Limited completed 3 diamond drill holes totalling 320 metres – reference in another BC Assessment Report. No report filed for Taseko has been found, but this drilling was first reported by Carter, 1988. No assays were given in Carter's report

- *1970 Tro-Buttle Exploration Ltd.*

A further geochemical survey was mounted to follow up the anomalies discovered in 1969 and complete coverage of the claims held at that time (Alrae Engineering Ltd., 1970). A further 24 line-miles of flagged lines were established and 680 new soil samples were collected. Additional anomalous copper values were identified. Alrae Engineering Ltd reported in its report that there were numerous samples with copper over 90 ppm, however the results are intermittent.

- *1972 Twin Peak Resources Ltd. & Cobre Exploration Ltd.*

In 1972, a geophysical survey was conducted over the Tachek Creek and current claim area. The porphyry copper occurrence of the Smithers-Babine Lake area contain varying amounts of disseminated magnetite associated with biotite alteration such that an airborne magnetic survey was undertaken (Woolverton, 1973). Several areas of magnetic highs were identified.

- *1973 Perry, Knox, Kaufman Inc.*

Geoterrex carried out 11 km of IP survey and identified two anomalous zones that were recommended for follow-up drill testing (Lloyd, 1973).

- *1973 Amoco Canada Petroleum Company Limited*

On claims immediately north of the present GD Property in 1973, Amoco Canada Petroleum Co. Ltd. carried out geochemistry, geophysics and 500 metres of diamond drilling in 3 holes (BC Minfile 093L 315).

- *1982 Dancer Energy and Resources Limited*

Limited prospecting and geological mapping was conducted on claims in the general area of the present GD Property in 1977 with further work in 1982 completing soil geochemical survey over the northern part of the present claims. Target zones were identified by ground magnetometer surveys and induced polarization surveys and subsequently drilled. The drilling encountered sporadic copper and molybdenite mineralization related to a quartz monzonite intrusive (Plicka, 1982).

- *1987/88 Gerard Auger*

Field work included prospecting, geological mapping, and the collection of rock samples for geochemical analysis (Carter, 1988). Carter reported

"low copper values (126-214 ppm), molybdenum values of up to 1675 ppm (0.17%) and one gold value of 1270 ppb. Samples collected from both quartz veins and host rocks (GD-7-11) yielded silver values to 2.2 ppm, gold in the 0.5 - 1.0 ppb range, 9 -23 ppm arsenic. 1 - 24 ppm bismuth, and copper values of up to 473 ppm. Previous percussion and diamond drilling of a 1 km^2 area east of the exposures in Tachek Creek indicated widespread copper and molybdenum mineralization."

- *1990 Nick Carter*

Follow-up work, including diamond drill testing, to define possible copper/molybdenum porphyry targets was proposed (Carter, 1990). Detailed rock sampling and geological mapping was undertaken during this phase of the GD Property's exploration history. Carter reported:

"*samples GD89-8 to -11. contain higher overall molybdenum values (up to 169 ppm) and one copper value of 3543 ppm in.the southernmost exposure area. A gold value of 117 ppb was obtained from GD89-8 which also contained .334 ppm copper and 169 molybdenum".*

- *1991 Nick Carter*

A 12.5 km VLF-EM survey was carried out (Carter, 1991). No clear anomalies were identified. Prospecting during the geophysical surveying did identify several new anomalous copper values.

- *1992 Nick Carter*

Sampling of previous diamond drill cores and percussion hole cuttings recovered from previous programs on the Gold Dust II mineral claim indicates low grade, but apparently widespread, copper values. These historic results were accompanied by anomalous gold values (Carter, 1992). Carter stated in his report:

"*diamond drill cores shows better copper values in the Noranda inclined holes drilled in the area of the northern bedrock exposure in Tachek Creek. Hole 2, drilled on an east azimuth, intersected a 30.5 metres section grading 0.16% copper below better grade surface samples GD-2 and GD89-7. Gold values in this section were low, averaging 0.05 g/t or 50 ppb. Values of 0.143% and 0.195% copper were obtained from two core samples from hole 4. Gold values of 0.11 and 0.16 g/t (110 and 160 ppb) may be considered weakly anomalous. ICP analyses shows elevated K, Mg, Mo and As values. Results obtained from Taseko diamond drill holes were generally low. A few anomalous gold values were indicated with the best range of values were contained in hole TK-1 (0.05 - 0.14 g/t or 50 - 140 ppb). Copper values were less than 0.10% but these samples contain elevated K, Mo, Fe and Zn values. Better copper and molybdenum values in percussion holes were obtained from Noranda hole 32, confirming earlier results. Weakly anomalous gold values were also indicated, accompanied by slightly enhanced As and Ag values*."

- *1993 Cominco Ltd.*

Cominco conducted an Induced Polarization/Resistivity survey on the property adjacent to the original "Gold Dust" claims to follow-up some of the previous alteration and samples, suggesting the presence of a Cu-Mo porphyry system.

- *1995-1999 Hudson Bay Exploration*

Hudson Bay Exploration began prospecting and following up Cominco Ltd.'s targets in 1995 and 1996. In 1997 Hudson Bay Exploration conducted a program of line cutting (19 km), ground electromagnetic ("EM") and magnetic surveys (16 km), and collected 68 samples for

geochemical analysis. The ground EM defined two parallel conductors but all soil samples assayed at background levels. No outcrops are evident in the area and drift covered is considered to be extensive. Work in 1998 included a further 16 km of geophysical surveying and line-cutting. In 1999 seven diamond drill holes were completed; the drill holes contained minor sulphides and minor epithermal alteration products. Dunning (2000) stated in his report:
"Out of the 7 diamond drill holes completed in the Babine Lake area, only drill hole LEN-004 yielded any significant and/or anomalous values base and precious metal values. From 74.68m (245 ft) to 111.46m (365.7 ft) (36.79 or 120.7 ft) there was visible sulphide mineralization, which graded 07% Cu, 0.052% Ph, 0.200% Zn, 0.393% Mn, 0.131% As, and 6.38 gpt Ag. This large interval also included 10.21m (33.5 ft) grading 09% Cu, 0.121% Pb, 0.427% Zn, 0.719% Mn, 0.329% As, and 14.39 gpt Ag."

- *2006 NXA Inc.*

An exploration program of 15 km of line-cutting, Induced Polarization ("IP") and Magnetic geophysical surveys, reconnaissance prospecting and geochemical soil surveying was undertaken in 2006 by NXA Inc. IP data collected during the work program indicated that the possible zones of mineralization have a geophysical signature consisting of low magnetic susceptibility and low resistivity (high conductivity). An analysis by NXA indicated that the historical drilling was generally eastward may not have tested the current geophysical signatures.

It appears that further work was not completed until Altiplano's recent acquisition of the GD Property claims.

- *Altiplano Minerals Limited*

Between July 17 to August 2, 2010 Altiplano Minerals Limited, undertook a field program consisting of trenching, prospecting/rock sampling, geological mapping (in the Tachek Creek north and south areas plus detailed mapping of the trenches) and soil sampling. Overall, fieldwork conducted collected 84 chip samples from the trenches, 2 float rock samples, 2 grab rock samples from outcrop, and 520 soil samples.

Figure 3: Mineral Showings

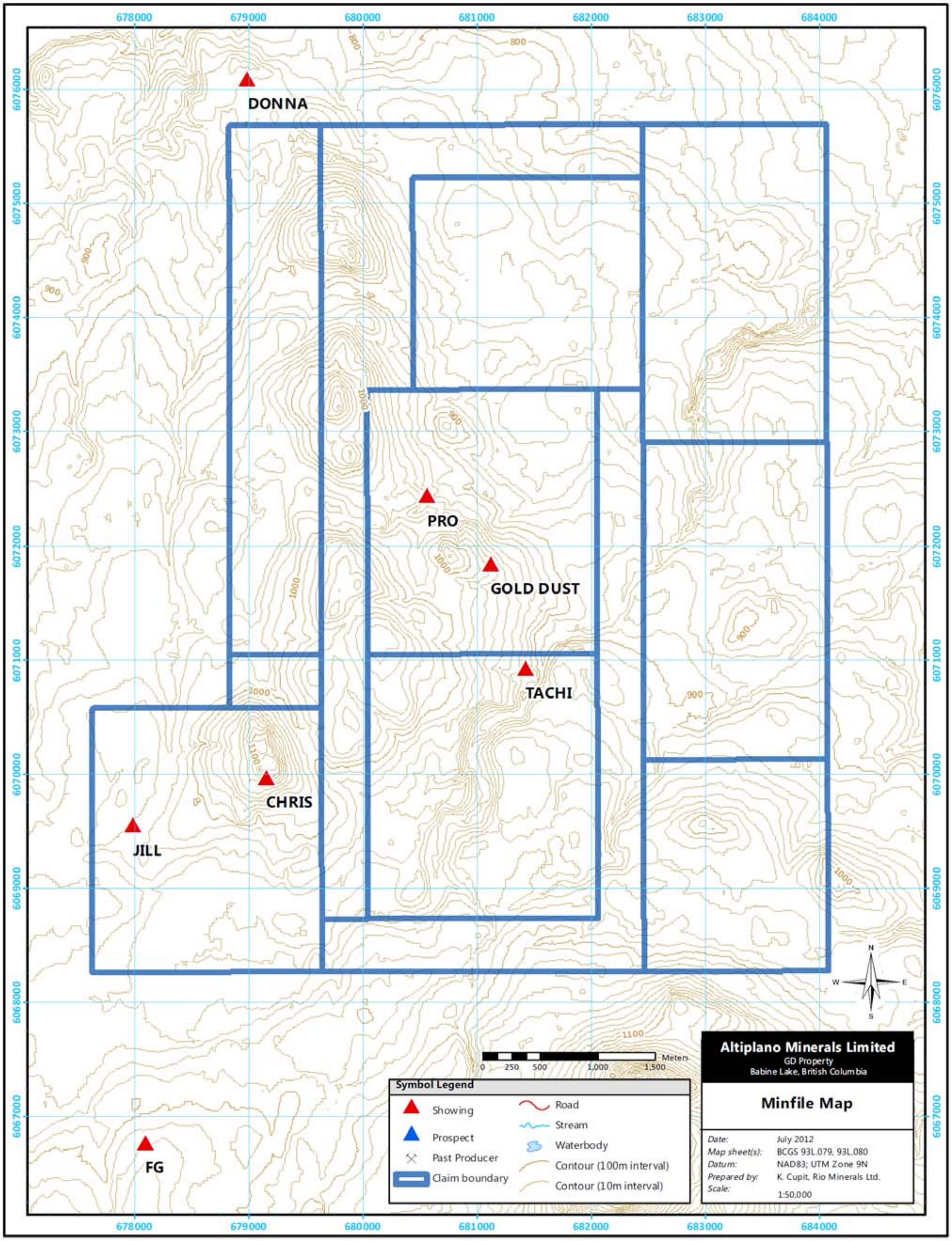
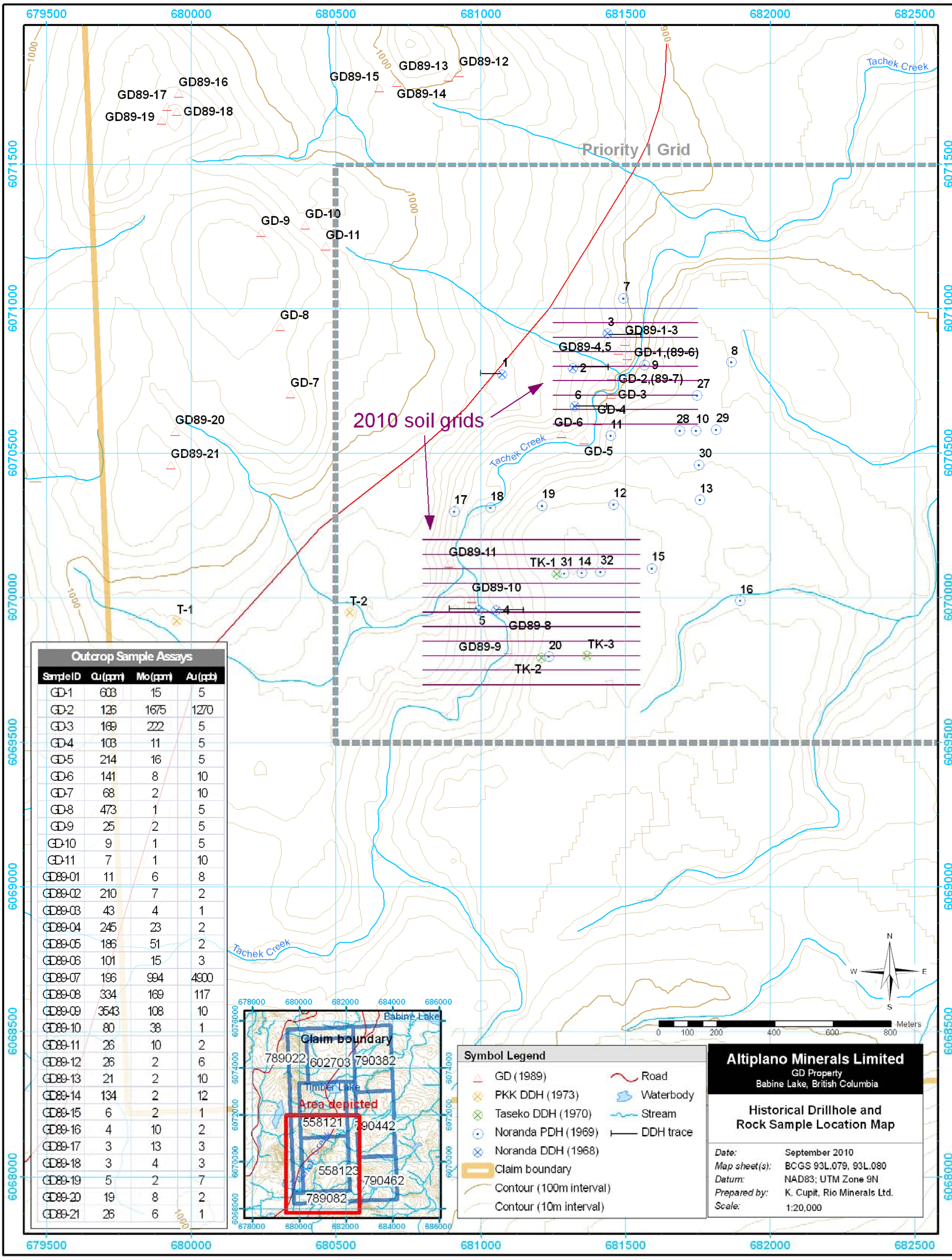


Figure 4: Non-Trench Samples and Historical Drilling



Outcrop Sample Assays

Sample ID	Cu (ppm)	Mo (ppm)	Au (ppb)
GD-1	603	15	5
GD-2	126	1675	1270
GD-3	169	222	5
GD-4	103	11	5
GD-5	214	16	5
GD-6	141	8	10
GD-7	68	2	10
GD-8	473	1	5
GD-9	25	2	5
GD-10	9	1	5
GD-11	7	1	10
GD89-01	11	6	8
GD89-02	210	7	2
GD89-03	43	4	1
GD89-04	245	23	2
GD89-05	186	51	2
GD89-06	101	15	3
GD89-07	196	994	4900
GD89-08	334	169	117
GD89-09	3543	108	10
GD89-10	80	38	1
GD89-11	26	10	2
GD89-12	26	2	6
GD89-13	21	2	10
GD89-14	134	2	12
GD89-15	6	2	1
GD89-16	4	10	2
GD89-17	3	13	3
GD89-18	3	4	3
GD89-19	5	2	7
GD89-20	19	8	2
GD89-21	26	6	1

6 GEOLOGICAL SETTING

6.1 Regional Geology

The Babine Lake area is considered to be within the Intermontane tectonic belt, and on west side of Babine Lake where the GD Property is located, this area is considered part of the Stikine (Volcanic Arc) Terrane. The Stikine Terrane itself is composed of Carboniferous to Middle Jurassic island-arc volcanic and sedimentary rocks plus several related plutonic suites. Extensive glacial deposits of variable thickness mask much of the bedrock in the region which is considered to be principally underlain by Mesozoic layered rocks; the most widespread being clastic volcanic and sedimentary rocks of the Jurassic-aged Hazelton Group. These are intruded by plutonic rocks of various ages including Lower Jurassic ‘Topley Intrusive Suite’, ‘Omineca Intrusions’ of early Cretaceous age, late Cretaceous rhyolite porphyry stocks and granodiorite porphyries, and ‘Babine Intrusions’ of early Tertiary age. A simplified map of the regional geology can be found in Figure 5 with the corresponding Map Legend illustrated in Figure 6.

This area of the Stikine Terrane consists of the following groups (MacIntyre et al., 1987):

- Hazelton Group (Early to Middle Jurassic): andesitic volcanic and volcaniclastic rocks and related marine sedimentary rocks
- Takla Group (Middle to Late Triassic): augite basalt, andesite, and related marine sedimentary rocks.
- Asitka Group (Carboniferous to Permian): island arc metavolcanic rocks and limestones.

These rock groups are then cut by what is interpreted to be the Late Triassic to Early Jurassic Topley Intrusive Suite which is considered to be co-magmatic with the volcanic successions (MacIntyre et al., 2001). Structurally, the GD Property area is part of basin-and-range type horst and graben structures and a variety of the known Stikine Terrane groups can be found. The GD Property area rocks appear to be primarily units from the previously noted Hazelton Group rocks. The Hazelton Group is further subdivided into four formations by MacIntyre et al. (1987 and 2001):

Smithers Formation:	• sandstones, siltstones, felsic tuffs
Nilkitkwa Formation:	(a) red epiclastics and amygdaloidal flows
	(b) rhyolitic volcanic rocks
	(c) conglomerates, tuffs, siltstones
	(d) argillites, cherty limestones
Saddle Hill Formation:	(a) pyroxene basalt flows
	(b) basaltic tuffs
	(c) tuffaceous sandstones
	(d) ash flow tuffs
Telkwa Formation:	(a) polymictic conglomerates
	(b) porphyritic andesites
	(c) fragmental volcanic rocks
	(d) phyllitic maroon tuffs

Notably, the Nilkitkwa Formation is known to host several types of mineralization, including mesothermal Au-Ag veins, Cu-Zn-Ag massive sulphide and the porphyry style deposits typical of the region.

7 Local Geology

The rocks of both the Hazelton and Takla groups are exposed in several places on the GD Property, particularly along the Tachek Creek. The local outcrop occurrences consists of dark green augite porphyry flows breccia and tuffs with minor dark grey shales. The rocks of the Hazelton and Takla groups were intruded by the Topley monzonite of Early Jurassic age and again by 'Babine'-type porphyry of Upper Cretaceous 77 Ma.

Rocks of the Asitka, Takla, and lower Hazelton groups are intruded by pink-coloured granitic rocks that make up the Topley Intrusive Suite (Schiarizza and MacIntyre 1999). This suite, as first defined by Carter (1981) during the historic work, includes quartz diorite to granodiorite intrusions that are Late Triassic to Early Jurassic in age. In the GD Property area, the Topley Intrusive Suite includes a possible multi-phase 'Tachek' stock, which is well exposed in uplifted fault blocks both southwest and southeast of Topley Landing it is clearly noted that the Intrusive Suite requires age-dating to determine whether this is truly "Topley" or the identical looking "Spike Peak" Intrusive Suite – commonly restricted to the eastern side of Babine Lake (MacIntyre et al., 2001). Volcanic rocks of similar ages to these Intrusions occur throughout the Babine porphyry copper district in western Nechako Project area within Map sheet 093L/16 - a Babine-type porphyry is the primary exploration target in the area.

The Babine porphyry is primarily a quartz-biotite-feldspar porphyry of granodiorite composition and is the host rock in the Bell Copper and GranIsle mines. The Topley Intrusives can be monzonites and they often vary from quartz monzonite to monzonite; sporadic mineralization of chalcopyrite and molybdenite was historically encountered in Topley monzonites; none of the intrusion has been found to contain economic grade to date.

7.1 GD Property Geology

Principal lithologies within the claim area include chlorite and sericite schists which are exposed north of the GranIsle highway. These are variably deformed and feature north-trending, steeply dipping schistosities. Intercalated with the schists and bordering them on the west are mainly massive andesites (greenstones) which are locally weakly schistose.

Apparently argillaceous siltstones are part of this principally volcanic sequence, and underlie the drift-covered area between the Topley granitic rocks and the GranIsle highway - power lines on the GD Property claims. These rocks are not exposed but were intersected by 3 historic holes drilled in 1973 by Amoco. Topley granitic rocks are exposed in two areas along Tachek Creek. In the northernmost portions of the GD Property area, light grey to pink granodiorites and quartz monzonites feature steeply dipping west-northwest and east-northeast fractures. Crowded texture quartz-hornblende-biotite-feldspar porphyry dykes, 2-10 metres wide intrude the granitic rocks and trend west-northwest parallel to one of the principal fracture directions in the granitic rocks. A radiometric age of 176 Ma was obtained from one of these porphyry dykes (Carter, 1981).

The oldest rocks underlying the property are chloritic/sericitic schists and greenstone of the Early Permian to Middle Triassic Asitka and/or Takla Groups. The schists are variably deformed and feature north-trending, steeply dipping schistosities. Intercalated with the schists and bordering them on the west are mainly massive andesites (greenstones) which are locally weakly schistose. Chlorite and sericite schists in the northern parts of the claims contain numerous quartz veins ranging in width from several centimetres to 0.5 metres. The veins, which occupy northerly trending planes of schistosity, commonly pinch and swell but appear to be continuous along strike. Locally, the veins border on pegmatite with some potassium feldspar, but generally they are milky white with some possible manganese staining. Argillaceous siltstones are included in this volcanic and metamorphic sequence of rocks, and underlie the drift-cover area between the Spike Peak Intrusive Suite (granitic quartz monzonite) and the Granisle highway-power line on the claims. These rocks are not exposed but were intersected by 3 historic diamond drill holes in 1973 (Amoco Canada Petroleum Company).

Intrusions of Late Triassic to Early Jurassic Topley Intrusive Suite rocks are exposed in the south-east corner of the property. These intrusive rocks were not looked at during the 2010 exploration program. Topley intrusive rocks are described as medium to coarse grained biotite-hornblende-plagioclase granodiorite to quartz diorite (Macintyre et al., 2001).

Intrusions of Early to Middle Jurassic Spike Peak Intrusive Suite (generally granitic quartz monzonite) are exposed in two areas along Tachek Creek (north, south) and host most of the copper mineralization on the GD property. In Tachek Creek north, light grey to pink granodiorite to quartz monzonite feature steeply dipping west-northwest and east-northeast fractures. Crowed texture quartz-hornblende-biotite-feldspar porphyry dykes, 2-10 metres wide, intrude the granitic rocks and trend west-northwest, parallel to one of the principal fracture directions within the granitic rocks. A radiometric age of 176 Ma was obtained from one of these porphyry dykes (Carter, 1981). Basic dykes, moderately to strongly magnetic and up to over 4 metres wide, were also noted cutting granitic rocks in Tachek Creek. These dykes, believed to be of post-mineral or Tertiary age, have chilled margins and some occupy the northerly trending fracture set. The southern exposure area in Tachek Creek features variably weathered, mineralized granitic rock cut by the fractures with the same orientation as those in the northern area. The contact between the granitic rocks and the volcanic-sedimentary sequence is not exposed and is based largely on data obtained from 1973 drilling.

The youngest rocks on the property are Lower to Middle Jurassic Hazelton Group volcanic rocks that unconformable overlie older rocks. The volcanic rocks include green andesite and maroon basalt and generally outcrop to the west of the GranIsle highway.

Detailed Geology (Tachek Creek North/South)

The oldest rocks exposed in Tachek Creek north and south are intrusive rocks of the Middle Jurassic Spike Peak Intrusive Suite (Quartz Monzonite Phase granodioritic intrusive rocks). The intrusive rock typically seen in the north and south regions is quartz monzonite (granitic) in composition. This quartz monzonite unit is generally medium grained, weakly magnetic, moderately dark grey, pinkish to salmon coloured weathering. A greenish tinge to the intrusive rock is a result of alteration minerals consisting of chlorite/epidote and a patchy pinkish colour may be a result of potassium feldspar alteration. Estimated percentages of minerals within the quartz monzonite include approximately 80% feldspar, 15% quartz, and 5% biotite (estimated percentages of light colour minerals are very subjective since no staining for potassium feldspar was done so different types of feldspar are grouped as feldspar in general). The Spike Peak Intrusive Suite is cut by many younger (Early-Middle Jurassic?) porphyry and diabase dykes.

In Tachek Creek north two types of dykes were seen in areas mapped. Firstly, the diabase dyke is most common and it is generally fine grained, moderately to strongly magnetic and medium to dark grey, greenish in colour. Secondly, the quartz-hornblende-biotite-feldspar porphyry dyke with approximately 40% feldspar is generally dark grey- black in colour.

In Tachek Creek south two types of dykes intrude the quart monzonite and a third dyke (andesitic) intrudes what is thought to be a feldspar-hornblende-quartz eye porphyry dyke (dyke or possible small stock). First and most common is the feldspar-hornblende-quartz eye porphyry dyke. This dyke is feldspar rich and pinkish red in colour. A greenish tinge is due to chloritized hornblende. Estimated mineral concentrations include 85% feldspar, 12% hornblende, and 3% quartz eyes. Secondly, a crowed porphyry dyke with 65% feldspar, 30% quartz, and 5% biotite was observed and is a dark grey colour. Thirdly, an andesitic to mafic dyke intrudes the feldspar-hornblende-quartz eye porphyry dyke. This andesitic dyke is fine grained, weakly magnetic and grey, greenish in colour. Noticeable absent, where mapped, in the south Tachek Creek region are the common diabase dykes.

Alteration (Tachek Creek North/South)

Alteration on the GD property is related to fracture and fault controlled zones of mineralization. Three types of alteration occur on the property and are listed in order of abundance:

1) Chlorite and epidote are component minerals in propylitic alteration. Propylitic alteration was recognized in Tachek Creek north and south. Weak to moderate zones of propylitic alteration tend to be strongest to the southwest. Outcrops are noticeably altered to dark green to epidote green especially along fault planes and faulted zones.
2) Argillic/Sericite altered feldspars in intrusive quartz monzonites are associated with gossanous zones located along major fault zones. These zones usually contain high concentration of sulphides and strong iron staining (limonite), specular hematite which tend to mask most alterations. Alteration was generally observed to be weak to moderate argillic/sericite and observed in the north and south regions of Tachek Creek.
3) Patchy zones of weak potassic alteration were recognized in Tachek Creek north but secondary biotite (component mineral in potassic alteration) was not observed. Minerals associated with the weak potassic alteration in Tachek Creek north include magnetite and potassium feldspar.

Pinkish zeolite and weak, very narrow barren calcite veinlets are rather common near faulted regions.

Structure (Tachek Creek North/South)

Many structural elements were mapped in the Tachek Creek north and south zones. These include faults, fractures, dykes, and rare veinlets.

Numerous faults were mapped in Tachek Creek north and south within the granitic quartz monzonite intrusive unit. Four types of faulting were recognized and are listed below in order of importance:

1) **Oblique-slip faults** are most common at both Tachek Creek north and south and display both a dip-slip and strike-slip component. These faults result from a combination of shearing and tension produced by compressional forces. At Tachek Creek north the oblique-slip faults generally trend approximately east-west with moderately steep and steep dips to the south and north. Other less common trends include northwest-southeast with a moderate dip to the southwest and northeast-southwest with a moderate dip to the southeast. At Tachek Creek south the oblique-slip faults again trend approximately east-west and are vertical or dip steeply to the north. One other less common trend is northeast-southwest with a fairly steep dip to the northwest.

2) **Strike-slip faults** were mapped in both Tachek Creek north and south. These faults are caused by shearing forces. In the north a strike-slip fault trends northeast-southwest and

dips moderately steeply to the southeast. This fault displaces (left-lateral) a narrow diabase dyke approximately 0.6 metres. At Tachek Creek south strike-slip faults generally trend northeast-southwest and dip moderately and steeply to the northwest.

3) **Normal faults** were mapped in both Tachek Creek north and south. These faults are caused by tensional forces and results in extension. In the north, two normal fault trend approximately east-west with a moderate and steep dips to the south. One other normal fault also trends approximately east-west and dips steeply north. In the south Tachek Creek zone a normal fault trends almost north-south and dips moderately east.

4) **Reverse faults** were mapped at Tachek Creek north. This fault motion is caused by compressional forces and results in shortening. One reverse fault trends approximately north-south and dips steeply to the west. The other fault trends northeast-southwest dipping moderately to steeply southeast.

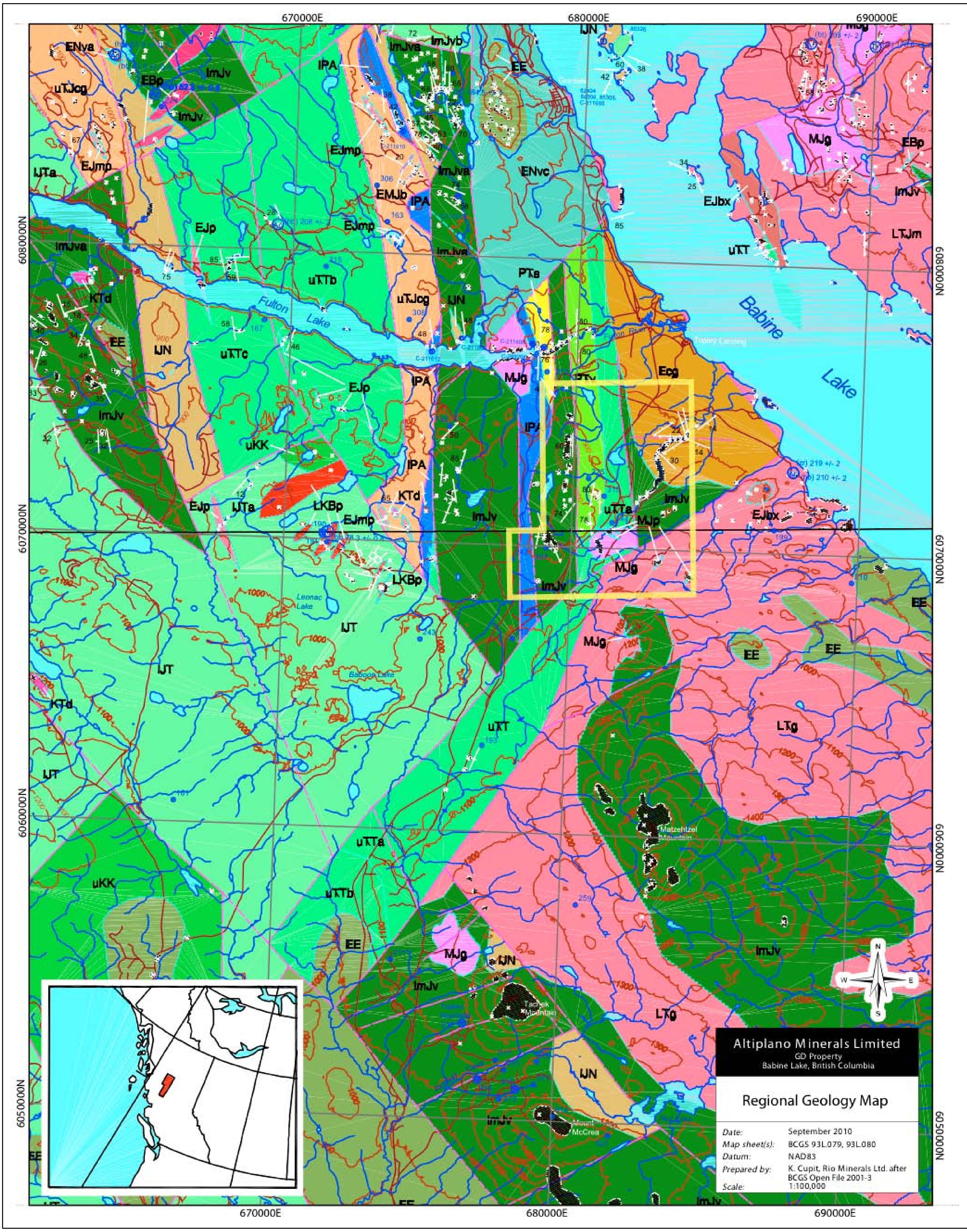
Fractures are abundant within the quartz monzonite unit in both Tachek Creek north and south. Fracturing was mapped as weak to strong and generally the quartz monzonite intrusive is moderately fractured. Strong fracturing and gouge typically occur marginal to fault zones. Fractures are not all mineralized but the mineralized fractures generally contain weak to strong malachite and trace chalcopyrite. In the north region of Tachek Creek, mineralized fractures generally trend northeast-southwest and dip moderately to steeply southeast however, some fractures dip northwest. Other mineralized fractures trend approximately east-west and dip moderately to steeply north. A few mineralized fractures trend northwest-southeast and dip steeply to the southeast or are vertical. In Tachek Creek south mineralized fractures, in order of abundance, trend northeast-southwest, approximately east-west and north-south.

Dykes are common at Tachek Creek north and south and are generally 30 cm to greater than 4 metres wide. Dyke contacts are generally sharp in contact with quartz monzonite and have chilled margins. Dyke swarms have been mapped but are not as common as individual dykes. In Tachek Creek north, the diabase dykes are most common and are up to approximately 4 metres in width where mapped. They generally trend east-west and dip moderately to the north. Other diabase dykes trend northwest-southeast and dip moderately to the southwest and northeast-southwest dipping moderately to the northwest. Two quartz-hornblende –biotite-feldspar porphyry dykes were mapped in the north zone and are 0.8 to 2 metres wide. They trend generally east-west and dip 56º to the south. One other porphyry trends northwest-southeast and is vertical. In the south Tachek Creek zone, a crowded feldspar-quartz-biotite porphyry dyke approximately 7 metres wide trends northeast-southwest and dips moderately to the northwest. A second dyke approximately over 40 metres wide is composed of feldspar-hornblende-quartz eye porphyry. This dyke trends northwest-southeast and dips rather steeply to the northeast. An andesite dyke approximately 5 metres wide intrudes the feldspar-hornblende-quartz eye porphyry dyke. This andesitic dyke trends northeast-southwest and dips steeply northwest.

Mineralized veinlets are rare in the quartz monzonite unit. Two veinlets were mapped at Tachek Creek north. All veinlets trend along fault planes and are 2-3 centimetres wide. A narrow quartz veinlet (3 cm wide) trends approximately north-south along a reverse fault plane and dips steeply to the west. A second quartz-carbonate veinlet trends approximately east-west along an oblique-slip fault plane dipping moderately to steeply north. No veinlets were mapped at Tachek Creek south.

In general, the quartz monzonite intrusive unit that host copper mineralization at the GD property is moderately deformed by faulting and fracturing leaving open spaces for mineral deposition.

Figure 5: Regional Geology of the GD Property Area



Lithology Legend

Figure 6: Regional Geology Map Legend

EOCENE

EE — *Endako Group: dark grey, aphyric, amygdaloidal and vesicular basalt flows, minor flow top breccia; bladed plagioclase phyric andesite*

EO — *Ootsa Lake Group: undivided felsic volcanic rocks*

ENv — *Newman Formation: hornblende±biotite-feldspar phyric andesite to dacite flows, breccia and lahar; minor basalt; extrusive equivalent of the Babine Intrusions; isotopic ages 54-50 Ma; ENva. massive, sheet to columnar jointed flows; may include subvolcanic plugs and necks; ENvb. volcanic breccia; ENvc. stratified lahar and volcanic conglomerate; ENvd. fine-grained feldspar phyric andesite or basalt.*

Ecg — *heterolithic boulder to pebble conglomerate, poorly sorted; basal conglomerate to the Newman Formation*

BABINE INTRUSIONS

EBq — *quartz-biotite-plagioclase porphyritic granodiorite to quartz monzonite*

EBp — *biotite±hornblende-plagioclase porphyritic granodiorite; 54-60 Ma Ar-Ar isotopic ages*

EBg — *biotite-hornblende granodiorite to quartz diorite; equigranular to sub-porphyritic*

PALEOCENE TO EOCENE

PEs — *sandstone, siltstone, conglomerate, shale, coaly shale, coal; interbedded tuff, tuffaceous siltstone and fanglomerate; continental, fluvial origin; polymictic; clasts of feldspar and hornblende porphyry, rhyolite, chert, argillite. Eocene palynomorphs*

LATE CRETACEOUS or TERTIARY

KTd — *hornblende±biotite diorite to quartz diorite; minor gabbro; fine to coarse grained*

LATE CRETACEOUS

BULKLEY INTRUSIONS

LKBq — *quartz-biotite-plagioclase porphyritic quartz monzonite, quartz phyric subvolcanic rhyodacite to rhyolite*

LKBp — *biotite-hornblende-plagioclase porphyritic granodiorite to quartz diorite; medium to coarse-grained; 4-8 millimetre biotite "books" common; 78 Ma Ar-Ar and K-Ar isotopic ages at Lennac Lake*

LKBd — *hornblende diorite to gabbro; 83 Ma Ar-Ar isotopic age at the Dorothy prospect*

UPPER CRETACEOUS

KASALKA GROUP

uKK — *hornblende-plagioclase phyric andesite to dacite flows, volcanic breccia and lahar; medium to coarse grained; locally contains clasts of biotite-plagiolcase porphyritic granodiorite of the Bulkley Intrusions*

LOWER TO UPPER CRETACEOUS

SUSTUT GROUP

uKT — *Tango Creek Formation: chert pebble conglomerate, fluvial; locally cross-bedded and channeled; minor quartz sandstone, siltstone and hematitic tuffaceous beds*

SKEENA GROUP

lKS — *undivided Skeena Group; sandstone, siltstone, shale, mudstone, pebble conglomerate*

lKRs — *Red Rose Formation: medium to thick-bedded quartzo-feldspathic sandstone, siltstone, chert-pebble conglomerate; local red weathering siltstone and mudstone interbeds; fluvial to fluvial-deltaic, common detrital muscovite; lower Albian to Cenomanian; in part correlative with the Tango Creek Formation*

mKr — *flow banded feldspar phyric to aphyric rhyolite to rhyodacite, submarine flows, flow breccia and subvolcanic domes*

lKRv — *Rocky Ridge Formation: subaerial to subaqueous augite-plagioclase phyric alkaline basalt to basaltic andesite, plagioclase phyric greenish grey andesite to dacite; dark grey aphyric basalt, green to maroon mafic lapilli tuff, volcanic breccia, minor interbedded shale, siltstone, sandstone and chert pebble conglomerate locally with angular rhyolitic clasts; shale contains Albian macrofossils; 104-108 Ma isotopic ages*

lKsh — *Kitsumkalum shale: black shale with interbedded sandstone, siltstone; locally concretionary and pyritic; Hauterivian to Albian*

lKcg — *Hanawald conglomerate: chert-pebble conglomerate; minor interbedded quartz sandstone and siltstone; fluvial deltaic; locally cross-bedded*

lKK — *Kitsuns Creek Formation: feldspathic and volcanic sandstone, siltstone, shale, mudstone, locally carbonaceous to coal bearing; minor polymictic volcanic clast conglomerate; fluvial to fluvial-deltaic; Berriasian to Hauterivian*

lKv — *undivided felsic and intermediate volcanic rocks; a. biotite-hornblende-plagioclase phyric rhyodacite to dacite flows, subvolcanic intrusions, locally welded; 134 Ma isotopic age*

EARLY CRETACEOUS

EKg — *biotite±hornblende granodiorite to quartz diorite; 104 Ma K-Ar age at Trail Peak*

EKp — *biotite-plagioclase porphyritic quartz monzonite, monzonite and rhyodacite; pink weathering; 124 Ma Ar-Ar age estimate at Wedge Mountain*

MIDDLE TO UPPER JURASSIC

BOWSER LAKE GROUP

uJTC — *Trout Creek Formation: polymicitic pebble to boulder conglomerate containing chert, quartz, volcanic and granitic clasts; minor interbedded wacke, siltstone, shale and coal; fluvial-deltaic to shallow marine; locally contains Upper Oxfordian macrofossils*

muJA — *Ashman Formation: feldspathic wacke to dark grey, thin-bedded siltstone and shale; coarse-grained, shallow water marine facies containing latest Bathonian to early Oxfordian ammonites and bivalves*

EARLY TO MIDDLE JURASSIC

SPIKE PEAK INTRUSIVE SUITE

EMJb — *basalt dikes; possible feeders to Saddle Hill volcanics; strong epidote alteration typical*

MJd — *hornblende diorite to quartz diorite; medium grained, greenish grey, locally foliated (178 Ma)*

MJg — *biotite-hornblende granodiorite to quartz monzonite; medium to coarse grained; grey to salmon weathering (179-176 Ma)*

MJp — *Tachek Creek Phase: biotite-hornblende-plagioclase porphyritic granodiorite to quartz diorite, (178-176 Ma)*

GD Property Claim Boundary

LOWER TO MIDDLE JURASSIC

HAZELTON GROUP

mJS — *Smithers Formation: marine, shallow-water feldspathic sandstone, siltstone, feldspathic wacke; locally glauconitic and limy; minor ash, crystal and lapilli tuff, volcanic breccia, volcanic-pebble conglomerate, limestone; very fossiliferous; early Bajocian to early Bathonian*

lmJr — *white weathering, flow banded feldspar phyric dacite to rhyolite domes, flows and extrusive breccia; part of Saddle Hill volcanic succession*

lmJv — *Saddle Hill volcanics: undivided subaerial to submarine basalt, andesite, dacite and rhyolite flows, tuffs and related volcaniclastic rocks; lmJva. maroon to greenish grey weathering feldspar phyric lapilli, crystal and ash tuff, volcanic breccia, lahar, tuffaceous mudstone, siltstone and conglomerate, grey ash flow tuff and feldspar phyric dacite to rhyolite domes and flows, locally contains angular clasts of flow banded rhyolite and pink weathering Topley intrusions (Wright Bay facies); lmJvb. brown weathering, green to greenish grey feldspar phyric basaltic flows, volcanic breccia, aquagene tuff, hyaloclastite, peperite breccia,locally amygdaloidal and pillowed; local flow banded rhyolite domes and interbeds of limy siltstone and limestone containing Toarcian macrofossils; intense epidote and chlorite alteration in places; lmJvc. green, brown and maroon weathering mafic and felsic volcanic clast conglomerate, feldspathic wacke, dark grey siltstone, chert, lapilli tuff; lmJvd. thick bedded, hornblende-augite-plagioclase phyric amygdaloidal andesite flows with trachytic texture defined by bladed plagioclase phenocrysts to 3 centimetres (Wedge Mountain facies); Toarcian to Aalenian, 184 to 174 Ma isotopic ages*

lJA — *Nilkitkwa Formation, Ankwell Member: subaqueous greenstone, basalt breccia, flows, tuffs, interbedded Toarcian sedimentary rocks*

lJN — *Nilkitkwa Formation: shallow to deep marine feldspathic wacke, siltstone and conglomerate; well-bedded; contains upper Sinemurian to Toarcian macrofossils*

lJT — *Telkwa Formation: undivided maroon air fall tuffs, feldspar phyric andesite flows and volcanic breccia, amygdaloidal basalt flows, related epiclastic and volcaniclastic rocks; Sinemurian; a. andesitic lapilli, crystal and ash tuff, maroon to greenish grey, medium to thick bedded, minor feldspar phyric andesite flows; b. dark grey to maroon amygdaloidal basalt flows and flow top breccia*

UPPER TRIASSIC TO LOWER JURASSIC

uTJcg — *polymictic pebble to boulder conglomerate, brown, maroon and red weathering, poorly-sorted, matrix supported, contains rounded to subrounded augite-plagioclase phyric basalt, limestone, chert and granitic clasts; locally contains brown siltstone rip up clasts; clasts derived from Takla and Asitka groups; interbedded with maroon to red weathering feldspathic wacke and siltstone*

LATE TRIASSIC TO EARLY JURASSIC

TOPLEY INTRUSIVE SUITE

EJbx — *Nose Bay intrusive breccia; clasts of Topley intrusive suite and Takla volcanics in a greenish grey, chloritic basalt matrix*

EJmp — *megacrystic feldspar porphyry dikes; probably comagmatic with porphyritic flows in the upper Takla volcanic succession; may also be comagmatic with megacrystic flows in the Saddle Hill volcanic succession*

EJp — *biotite-hornblende-plagioclase porphyritic granodiorite; 194 Ar-Ar isotopic age*

LTJm — *granodiorite to monzonite, fine-grained, equigranular to feldspar porphyritic; pink to salmon weathering*

LTJT — *undivided granitic rocks*

LTg — *biotite-hornblende-plagioclase granodiorite, quartz diorite; medium to coarse grained; equigranular to megacrystic; equant feldspar phenocrysts to 3 centimetres, grey to pink weathering; 218 Ma U-Pb isotopic age*

UPPER TRIASSIC

TAKLA GROUP

uTT — *undivided pyroxene phyric basalt, andesite, marine sedimentary rocks; uTTa. siltstone, mudstone, minor limestone, dark grey to black, graphitic and calcareous, medium-bedded (=Dewar Peak Formation); uTTb. pyroxene-plagioclase and pyroxene-hornblende-plagioclase phyric basalt to andesite flows, volcanic breccia and volcanic conglomerate, thick bedded, green to greenish grey, 208 Ar-Ar isotopic age (=Savage Mountain Formation); uTTc. graphitic siltstone, feldspathic wacke, argillaceous limestone, siliceous mudstone, chert-limestone clast conglomerate, andesite lapilli tuff; medium to thin bedded, brown and dark grey weathering (=Moosevale Formation); mainly Norian in age*

PERMIAN TO TRIASSIC

PTs — *medium bedded chert, siltstone, limestone, graphitic phyllite, chlorite schist; Middle Triassic radiolarians in chert (may be lower Takla Group)*

PTv — *metavolcanic rocks; chlorite and chlorite-sericite phyllite and schist, minor argillaceous limestone, graphitic schist; moderate to strong foliation; in whole or in part deformed Takla and/or Asitka Group volcanics*

LOWER PERMIAN

ASITKA GROUP

lPA — *massive, grey, bioclastic limestone; argillaceous, thin bedded, recrystallized limestone with chert nodules; Sakmarian and Artinskian conodonts*

SYMBOLS

Stratigraphic contact
- defined
- approximate
- inferred

Fault contact
- defined
- approximate
- inferred

Anticline

Syncline

Bedding: overturned

Bedding: inclined, vertical

Slaty cleavage, schistosity: inclined, vertical

Joints: inclined, vertical

Minor fold axis

Flow banding

Fossil location: age determined (with GSC number)
- macrofossil, condonts, radiolarian — C-208798

Field station

Mineral occurrence with MINFILE number (prefix 93M or 93L)
- past producer (abandoned mine) — 038
- developed prospect
- prospect
- showing

Stratabound Sulphide Zone

Isotopic age locality (age in millions of years before present)
- U-Pb zircon
- Ar-Ar (hb=hornblende; bt=biotite; wr=whole rock)

Area of outcrop

Roads

Railway

Basic dykes, weakly magnetic and up to 1 metre wide, were also noted cutting the granitic rocks in this exposure area. These dykes, believed to be of post-mineral or Tertiary age, have chilled margins and occupy the northerly trending fracture set. The southern exposure area in Tachek Creek features variably weathered granodiorite cut by the fractures with the same orientation as those in the northern area. The contact between the granitic rocks and the volcanic-sedimentary sequence is not exposed and is based largely on data obtained from 1973 drilling.

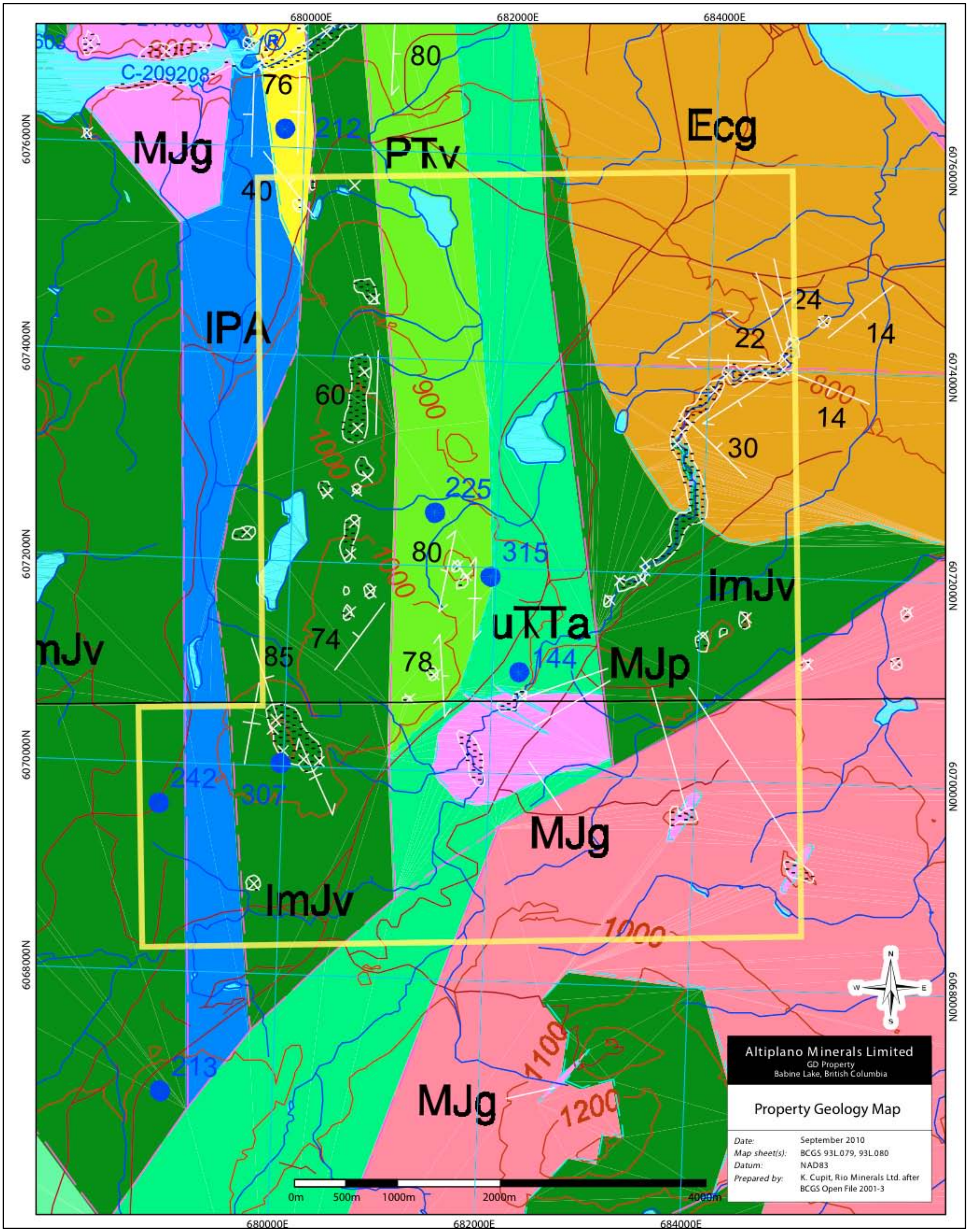
Chlorite and sericite schists in the northern parts of the claims contain numerous quartz veins ranging in width from several centimetres to 0.5 metre. The veins, which occupy northerly trending planes of schistosity, commonly pinch and swell but appear to be continuous along strike. Locally, the veins border on pegmatite with some K-feldspar, but generally they are milky white with some possible manganese staining.

Deposits with volcanogenic massive sulphide affinities and containing precious metals values include Topley-Richfield-10 km north of Topley, the Red prospect-5 km northeast of the dormant GranIsle Mine, and the Fireweed silver-lead-zinc prospect-12 km west of the Bell Copper mine.

Mineralized veinlets are very rare in the quartz monzonite unit, likely owing to limited outcrop exposure. Altiplano has noted two slightly mineralized veinlets along Tachek Creek north. Both veinlets trend along fault planes and are only 2-3 centimetres wide. A narrow quartz veinlet (3 cm wide) trends approximately north-south along a reverse fault plane and dips steeply to the west and contained chalcopyrite. A second quartz-carbonate veinlet trends approximately east-west along an oblique-slip fault plane dipping moderately to steeply north and contained both malachite and chalcopyrite. No similar veinlets were mapped along Tachek Creek south.

In general, it is interpreted that the quartz monzonite intrusive units (whether they be Topley or Spike Peak) host the copper mineralization at the GD Property and the intrusive is moderately deformed by faulting and fracturing leaving open spaces for mineral deposition.

Figure 7: GD Property Geology



8 DEPOSIT TYPES

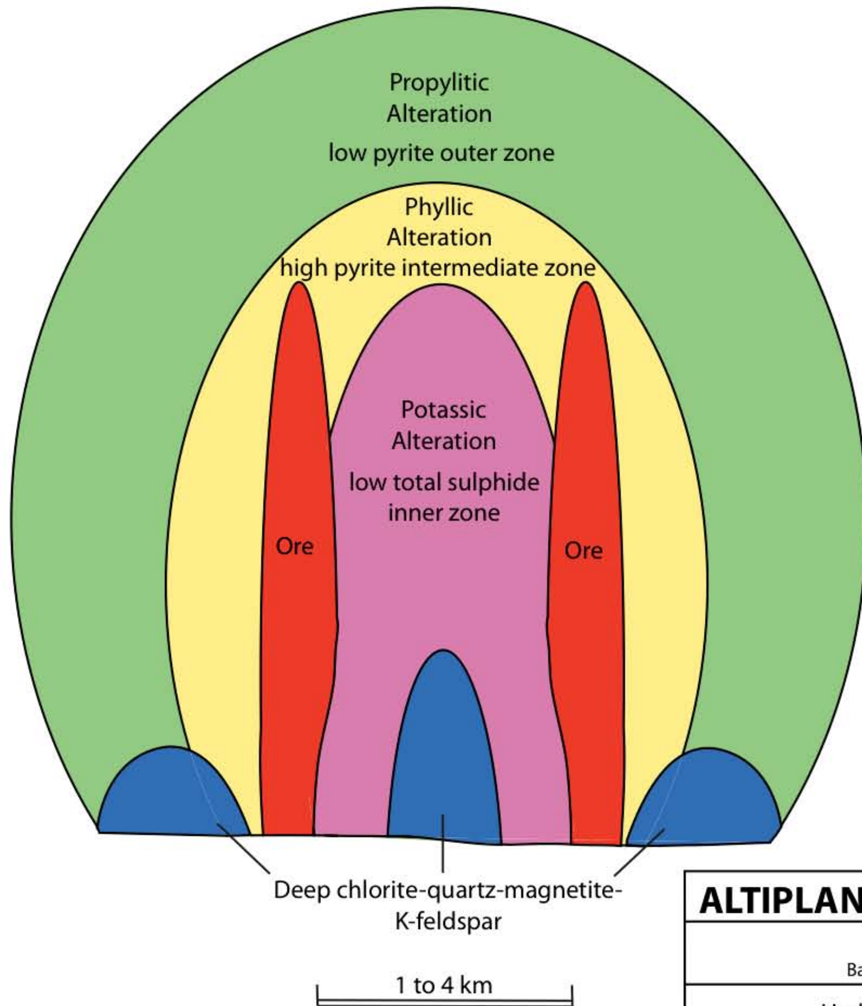
This region is known for its potential for large porphyry copper, copper/gold and copper/molybdenum deposits some of which having been developed as producing mines such as the GranIsle and Bell Copper Mines. Mineral deposit types present in the region are classified as porphyry and epigenetic characterized by disseminated, vein and breccia hydrothermal systems. A simplified model of a porphyry system deposit (Lowell & Guilbert, 1970 is illustrated in Figure 8.

These porphyry systems are of bulk-mineable nature are well-recognized and commercially exploited in British Columbia. They are often comprised of large zones of hydrothermally altered porphyritic intrusion and wall-rock containing quartz veins and stockworks, sulphide-bearing veinlets; fractures and lesser disseminations. Multiple emplacements of successive intrusive phases are commonly recognized in this type of deposit, and dykes and breccias of pre, intra, and post-mineralization may modify the stocks shape. Fracturing generally provides the focal point for ore-grade vein stockworks.

Mineralization is often dominated by pyrite with lesser chalcopyrite, molybdenite, bornite, and magnetite. Disseminated sulphide minerals may be present but are generally minor. Ore minerals are chalcopyrite; molybdenite, lesser bornite and chalcocite. Associated supergene zones carry secondary sulphides including chalcocite and covellite. Native copper and copper oxide, carbonate, and sulphate minerals are often also recognized.

The main ages of mineralization recognized from similar deposit studies in British Colombia are Triassic/Jurassic (210-180 Ma) and Cretaceous/Tertiary (85-45 Ma). Calc-alkaline porphyry copper-molybdenum deposits are similar in style and setting and probably genetically related to several other types of deposits, including skarn Cu, porphyry Au, and low-sulphidation type Au-Ag deposits. (From the BC Mineral Deposit profile - Panteleyev, 1995).

Figure 8: Porphyry Deposit Model



ALTIPLANO MINERALS LIMITED

GD PROJECT
Babine Lake, British Columbia

Hydrothermal alteration and
sulphide mineralization zoning patterns in the
Lowell-Guilbert model of porphyry copper deposits
(After Lowell and Guilbert, 1970)

9 MINERALIZATON

Copper mineralization and related secondary copper oxide minerals and other sulphides observed on the GD claims include, in order of abundance; malachite, chalcopyrite, magnetite, pyrite, molybdenite, azurite, and bornite. These minerals are consistent with a widespread copper/molybdenite porphyry system on the GD claims. The mineralized porphyry system extends, in areas mapped, from Tachek Creek north to Tachek Creek south, a north-south distance of approximately 1125 metres.

Copper mineralization is hosted almost exclusively within Early to Middle Jurassic Spike Peak Intrusive Suite quartz monzonite rocks. Three types of controls on copper mineralization were observed within the quartz monzonite intrusive rocks on the GD claims:

1) Fracture controlled copper mineralization consisting of malachite and chalcopyrite is most common on the GD claims. Less common are fractures containing molybdenite and azurite that were mapped in Tachek Creek north and to a lesser extent in Tachek Creek south. Magnetite is common in Tachek Creek north (disseminated/along fractures) and is a common constituent of potassic alteration zones in porphyry deposits such as Island Copper Mine, British Columbia. High concentrations of magnetite are common in gold-rich porphyry deposits. The hydrothermal deposition in fracture fillings indicate the presence of base metals thus there is a possibility of porphyry type deposition
2) Fault controlled copper mineralization consisting of chalcopyrite, malachite, molybdenite, azurite and associated magnetite was observed in both north and south Tachek Creek but is most common in the northern regions of Tachek Creek north. Numerous faulting on the GD property has localized high concentrations of copper mineralization along fault planes extending up to approximately 2 metres into the quartz monzonites on either side of the fault plane. These zones are typically gossanous and contain trace to 2% disseminated chalcopyrite, weak to strong malachite (to a lesser extent azurite), and trace-1% molybdenite. High concentrations of blebby magnetite are common within these faulted zones. Pinkish zeolite and very weak calcite fill fractures near strongly faulted zones.
3) Dykes and dyke swarms usually occur in zones of weakness produced by earlier faulting and tend to concentrate copper mineralization. Here copper mineralization and sulphides (chalcopyrite, pyrite, molybdenite, and malachite) increase marginal to porphyry and diabase dykes. These dykes have sharp contacts and chill margins. Trace amounts of copper mineralization consisting of malachite and chalcopyrite were seen in diabase and crowded porphyry dykes as disseminations and along fractures.

Two types of rare mineralized veinlets were mapped at Tachek Creek north. Firstly, a single quartz-chlorite veinlet approximately three centimetres wide contained trace chalcopyrite. The quartz ranges in texture from massive white quartz to vuggy-drusy quartz. Secondly, a single vuggy-drusy quartz carbonate veinlet mineralized with malachite and chalcopyrite was mapped and is two centimetres wide. Semi-massive to massive chalcopyrite stringers and blebs about 1-2 centimetres wide were observed in float within Tachek Creek north.

Other deposit types in the area include narrow veins with base and precious metal values, which commonly occur marginal to known porphyry deposits, and disseminated copper mineralization in Hazelton Group volcanic rocks. Deposits with volcanogenic massive sulphide affinities and containing precious metal values include Topley-Richfield-10 kilometres north of

Topley, the Red prospect-5 kilometres northeast of the dormant GranIsle Mine, and the Fireweed silver-lead-zinc prospect-12 kilometres west of the Bell Copper mine.

10 2012 EXPLORATION PROGRAM

From May 17 to May 25, 2012, Rio Minerals Limited and Apex Geoscience Ltd. on behalf of Altiplano Minerals Limited executed a field program of continuous rock chip sampling on trenches excavated in 2010 (Tachek Creek North and South), extended the 2010 soil grid, and performed spot checks and horizon sampling of several previously noted anomalous areas.

The field program consisted of the collection of 18 continuous rock chip samples and 175 soil samples. The soi samples were collected from seven 1000 meter lines spaced at 200 meter intervals extending south of the 2010 grids. Samples were collected at 50 meter stations. Two soil sample sites were revisited. Horizon pits were dug beside the original sample locations and samples taken at 20cm intervals to depths of 71cm and 49 cm respectively. Additional fieldwork consisted of geological mapping and prospecting.

Houston, B.C. served as the operations base for the entire duration of the program. The field crew for the 2012 exploration program was supplied by Rio Minerals Limited of Vancouver, B.C. and APEX Geoscience from Edmonton, Alberta and consisted of the following personnel: Philo Schoeman, Andrew Molnar, and Lyle Gregory.

Philo Schoeman conducted geological fieldwork with the assistance of Andrew Molnar and Lyle Gregory. Geological fieldwork encompassed investigating the previously sampled trenches with a focus on structure, alteration, and mineralisation. Check sampling was done by collecting 2 continuous rock chip samples per 2010 trench. Figures 9 and 10 indicate the re-sampling of the 2010 trenches with the results obtained. Figure 11 indicates the boulder sample collected and other boulders located during a mapping exercise to try and locate the Pro (093L 225) showing indicated on claim 558121. An attempt was made to locate the Jill (093L 242) showing, on claim 829142, to the southwest of the Chris (093L 307) showing, but traverses of 400 m by 200 m did not produce any outcrops in a relatively flat, till covered forest, either side of a logging dirt road.

Figure 9: Re-Sampling

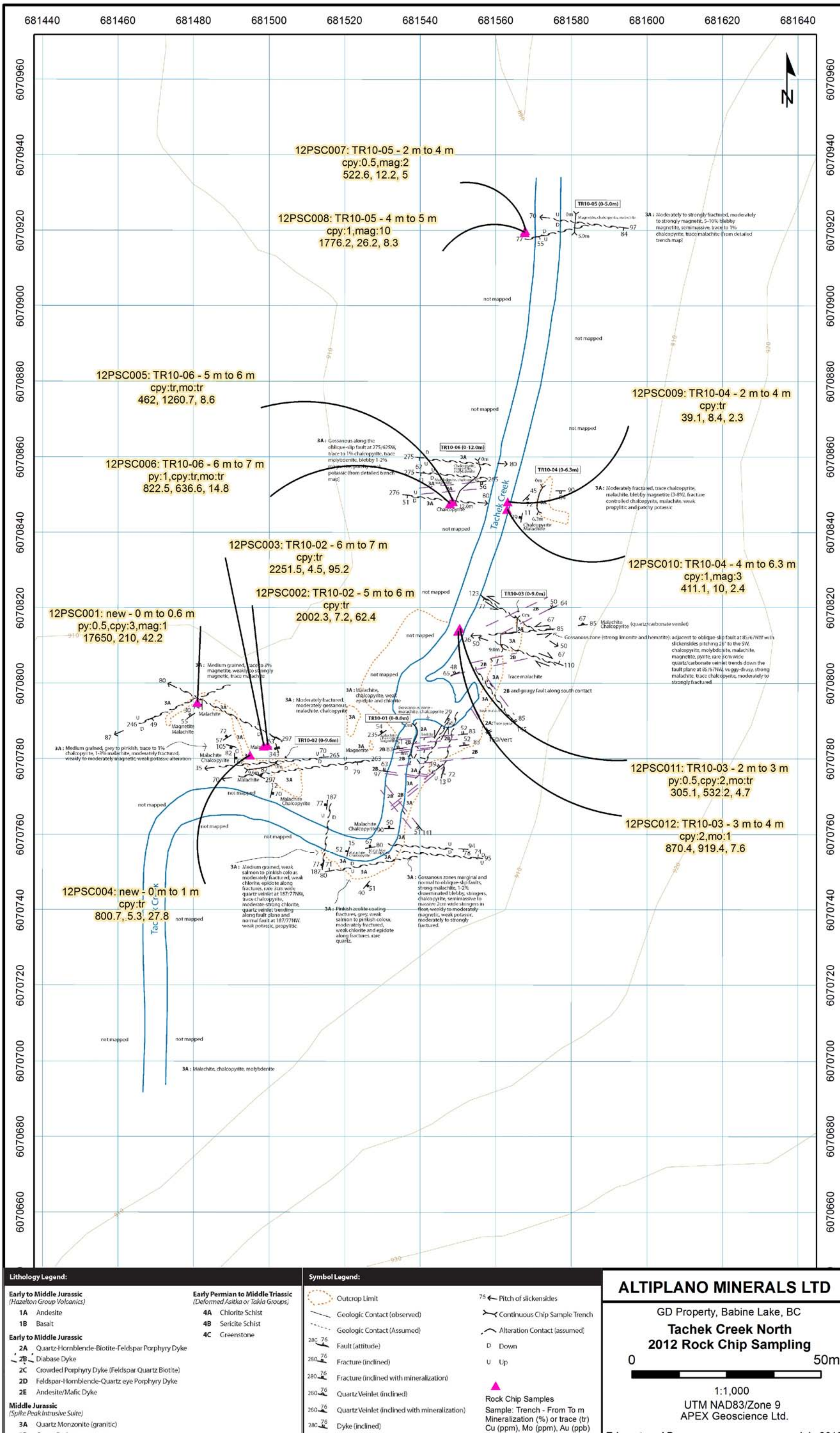


Figure 10: Re-Sampling

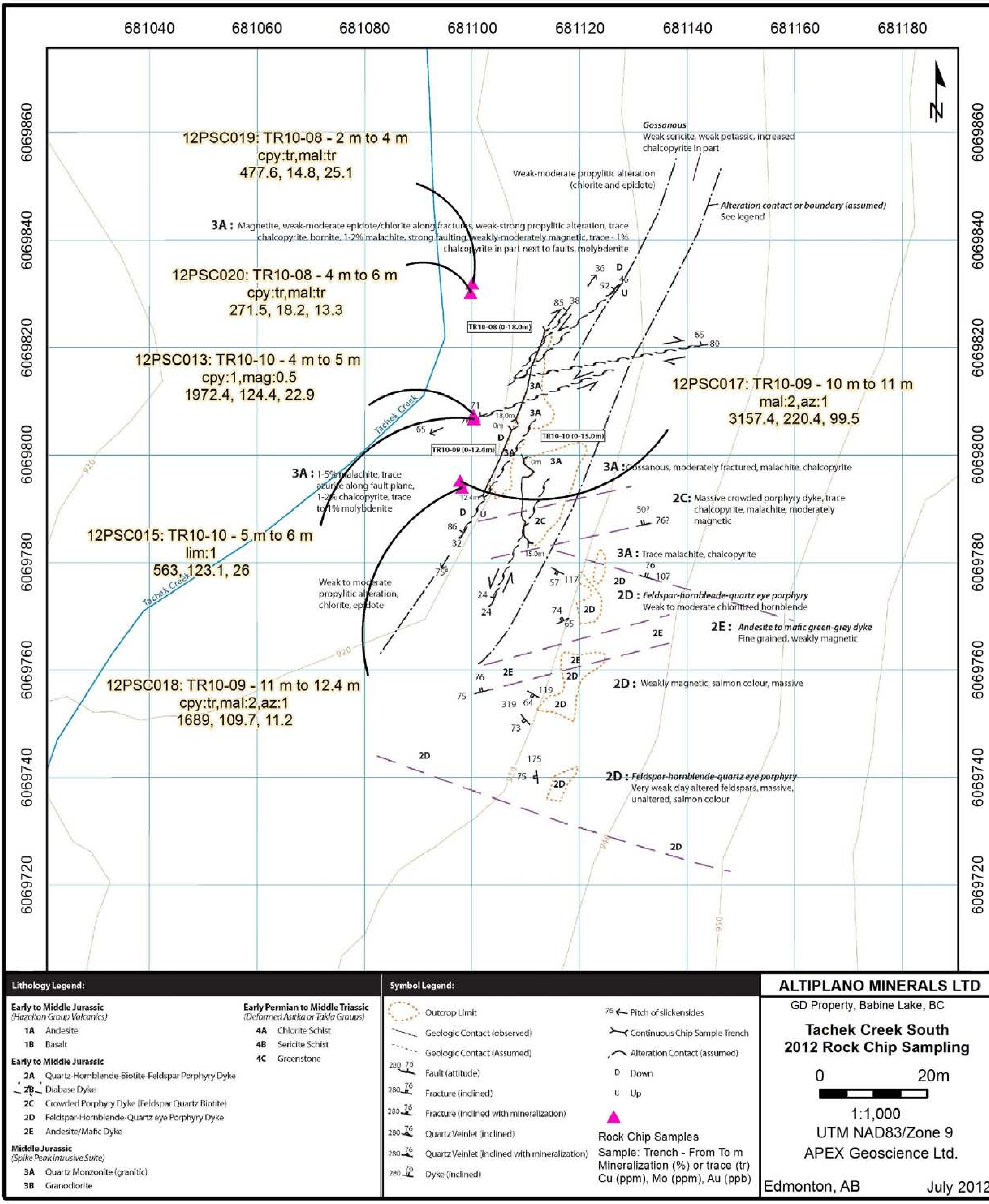
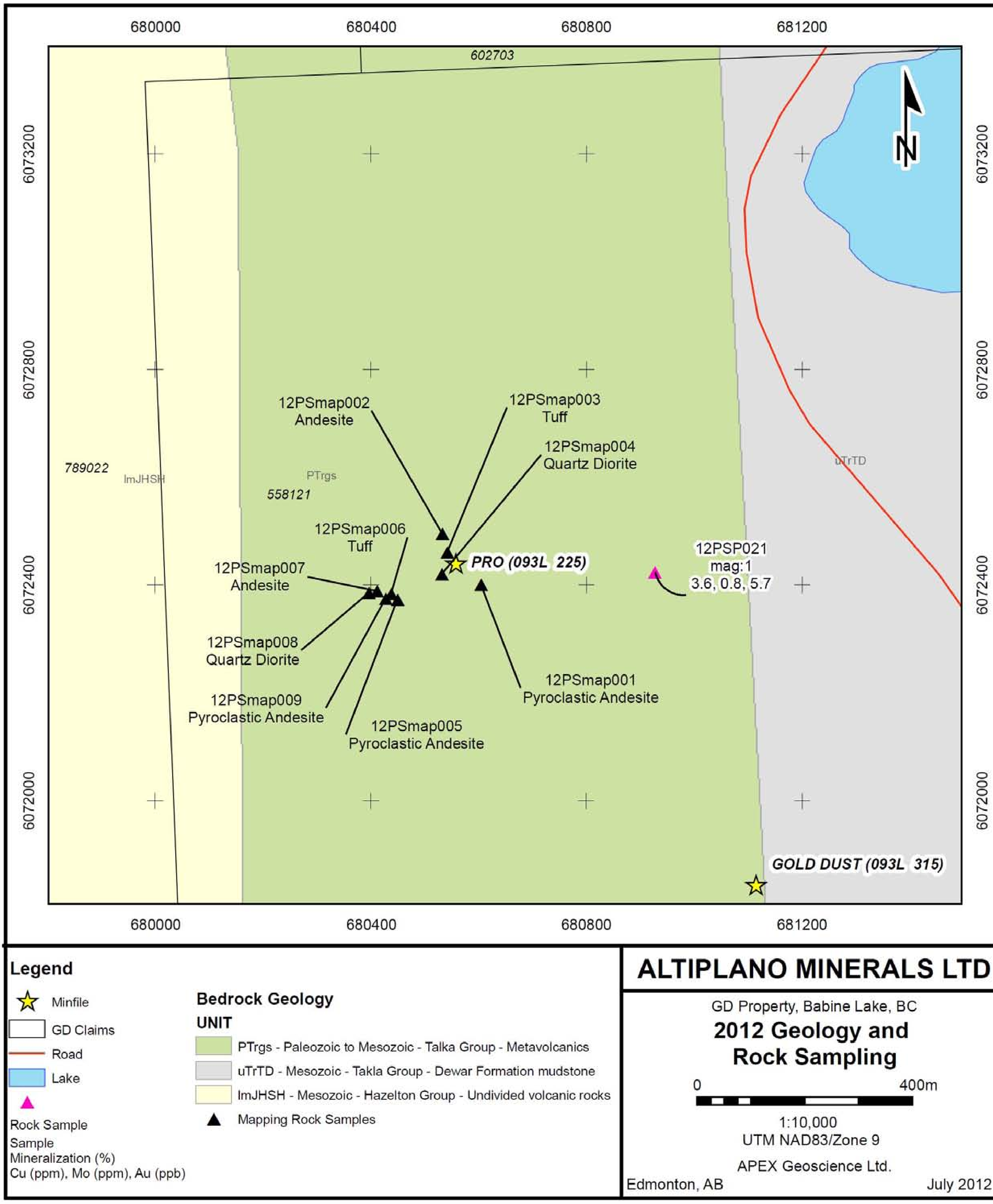


Figure 11: Sampling and Mapping



10.1 GEOCHEMICAL SURVEY RESULTS

A total of 18 continuous rock chip samples were collected from 8 chipped trenches in 2010 (TR10-02 to 06, TR10-08 to 10), (Figures 9 and 10). Detailed descriptions and structural measurements in Appendix 2). TR10-01 was submerged due to high water levels following spring melt. TR10-07 and TR10-11 were not re-sampled due to low values for Cu, Mo and Au obtained during the 2010 rock chip sampling program.

The development of the natural drainage by Tachek Creek has resulted in the exposed sidewalls available for rock chip sampling being at a relatively small intersection angle with the mineralised structures, ranging from 2° to 54° (Table 2) instead of the 90°, which is the preferred angle for sampling rock outcrop by means of continuous rock chip sampling. This small intersection angle results in mineralised intersections being very narrow when true thicknesses are calculated.

Table 2. Comparison of trench strike and mineralised structure strike.

2010 Trench ID	Strike of Trench line	Strike of Main Fol/Min event	Difference (angle of intersection)
TR10-02	255	257	2
TR10-03	031	085	54
TR10-04	005	045	40
TR10-05	005	041	36
TR10-06	230	275	45
TR10-08	011	042	31
TR10-09	351	032	40
TR10-10	352	047	55

Two samples were taken from altered, malachite stained fractures, 12PSC001 from some distance west of TR10-02 (Figure 9) and 12PSC004 from a gossanous fracture directly west of TR10-02 (Figure 9). The second sample appears to be on strike of the mineralised structure tested by the 2010 prospector’s sample: GD10-439041 which could be parallel to the main foliation developed in the area.

Tachek Creek south-east returned some of the highest copper and gold assays, where sampled. In continuous rock chip sample trench TR10-09 copper assayed 2403.7 ppm and gold assayed 70.9 ppb over 12.4 metres. Molybdenite assays were particularly strong in trench TR10-06 with 591.9 ppm over 12.0 metres at Tachek Creek north.

Continuous chip sample trenching has confirmed widespread copper with less molybdenite extending from Tachek Creek north to south. Since most of the property is covered by overburden rock sampling was only carried out in exposed outcrop.

10.2 Mapping: Pro 093L 225 showing on claim 558121

A traverse was walked from the large road material quarry, west of the highway to GranIsle, to a position that was indicated by the MINFILE records for the Pro (093L 225) showing. One chip sample was taken from a quartz vein occurring in a chloritic schist boulder en-route to locate the Pro (093L 225) showing indicated on claim 558121 by the MINFILE records, BC (Figure 8). Several boulders with descriptions as captured in Appendix 2 were located on traverses 400 m by 200 m straddling this MINFILE position. No outcrop was located with the characteristics as described in the MINFILE records for this particular showing.

10.3 Mapping: Jill 093L 242 showing on claim 829142

An attempt was made to locate the Jill (093L 242) showing, on claim 829142, southwest of the Chris 093L 307 showing, however several traverses of 400 m by 200 m did not produce any outcrop in a relatively flat, till covered forest either side of a logging dirt road. A relatively small road material excavation west of the road and a fairly deep incision down to the next terrace of till to the east of the road did not expose any outcrop.

10.4 GEOCHEMISTRY

Seven soil sample lines of approximately 1000 meters in length (Figures 12 to 14) were established. A total of 175 conventional B-horizon soil samples were collected every 50 metres with 200 metre line spacing. The results of the 2012 soil geochemistry program are listed below. The soil sample results are focused on copper (ppm), molybdenite (ppm), and gold (ppb). Other mineral results can be found in Appendix 3.

Five values of greater than 20 ppb gold were returned, which were all one-station values. The, exception being line 68450N were there are two stations of elevated gold (Figure 12). This could be a possible trend were elevated gold values cross two sample lines (line 68250N and 68450N) and trend north- northeast.

Although the copper values in soil (Figure 13) did not display any substantial elevated values, there is a weak trend with values greater than 30 ppm which can be seen on four sample lines 68250N, 68450N, 68650N, and 68850N. This trend is also coincident with the gold trend.

Molybdenite did not display any values of substance (Figure 14).

Four soil horizon samples and one duplicate sample were taken at soil location 69850N, 81425E. Three horizon samples and one duplicate sample were taken at soil location 69950N, 81425E to follow-up on anomalous values received in 2010. Table 3 displays the different depth the samples were taken and the suffix used in the labelling of the sample for the two different locations. Little variation is seen in the results as the samples depth increases (Table 4). However, the copper value in horizon A at station 69850N, 81425E is approx. 50% less than the coppers at the same station.

On line 69450N, in addition to the conventional B-horizon soil, 21 conventional A-horizon soils were collected (Figure 15 to 17) for comparison.

Figure 15 illustrates the gold values in the two horizons. Station 69450N/81300E displays a sample value where the A-horizon value is 29.1 ppb Au which is significantly higher than the B – horizon at 0.09 ppb Au.

Station 69450N/81450E displays a sample where the B-horizon has a value of 12.7 ppb Au which is significantly higher than the A -horizon (0.03 ppb Au).

Figure 16 shows the copper values in the two horizons. At station 69450N/81350E the B-horizon has a value of 71.2 ppm Cu, which is significantly higher than the A -horizon (9.2 ppm). The molybdenite values did not display any values of substance on the soil (Figure 17).

Based on the data set, only minor, inconclusive geochemical patterns were recognized.

Figure 12: Gold In Soils

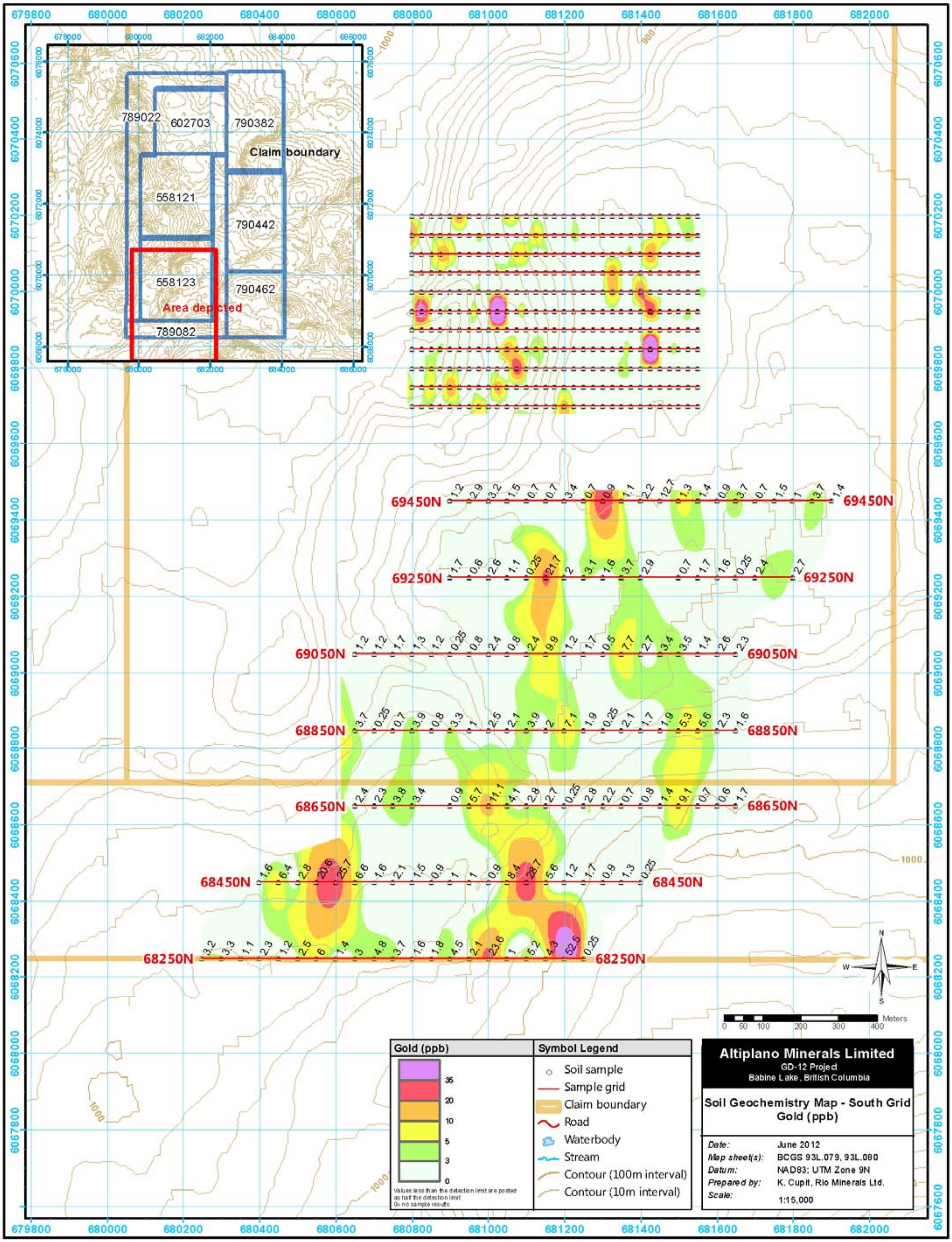


Figure 13: Copper In Soils

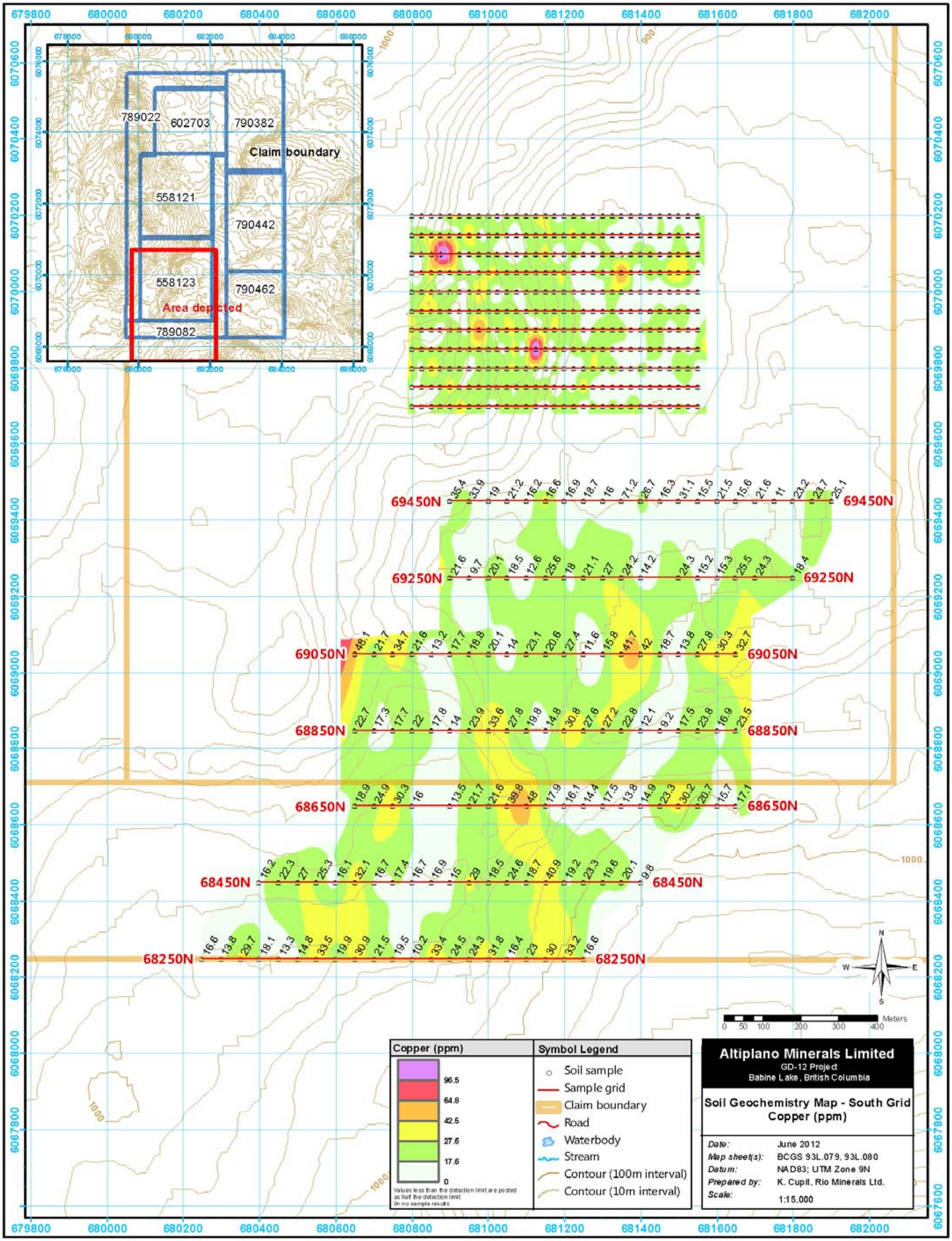
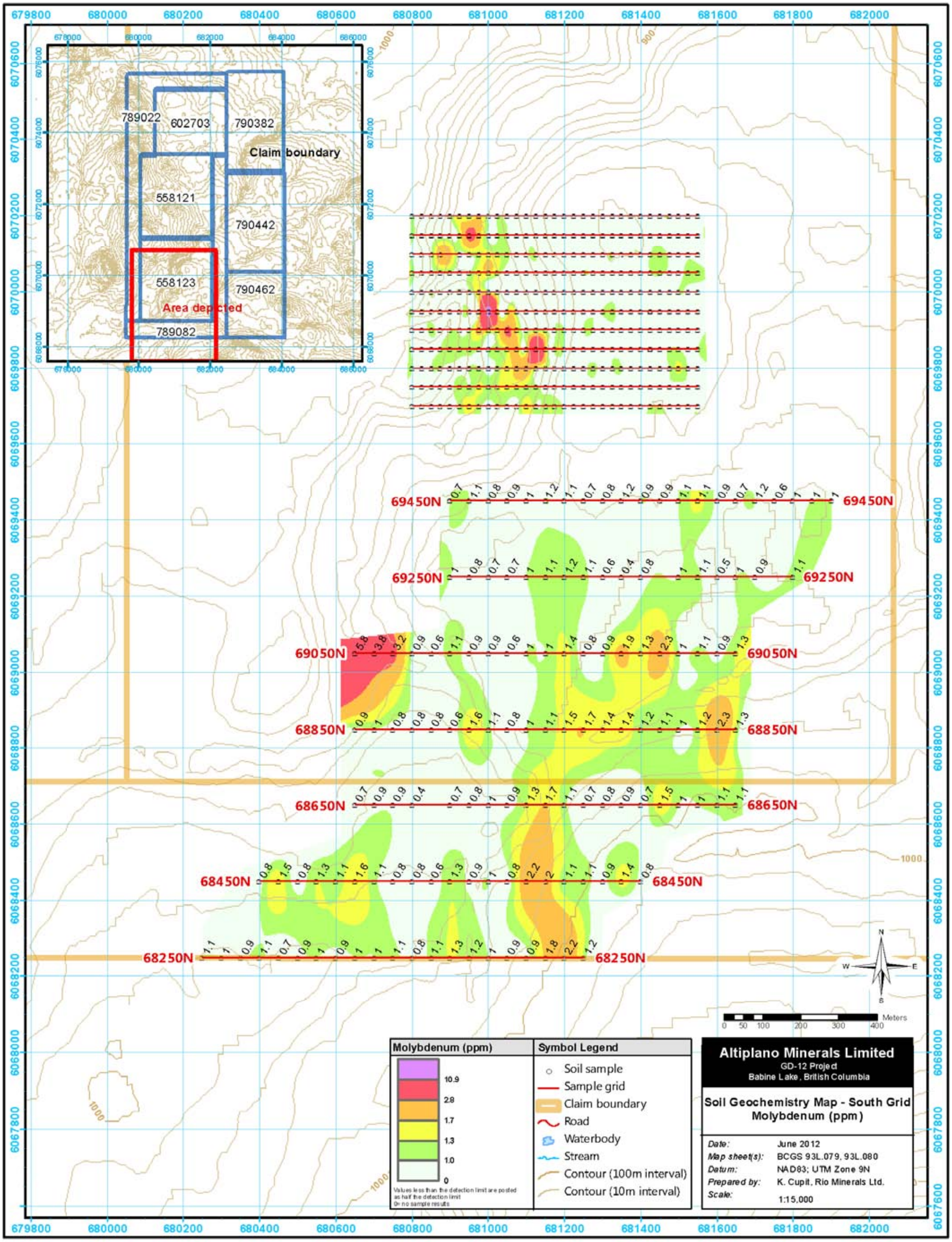


Figure 14: Molybdenum In Soils



The following table displays the horizon soil sample identifiers and depths:

Table 3 Horizon Sample

Horizon sample location 1			
NAD 83	69850N	81425E	Horizon Width
Surface to A			0-13cm
A	13-14cm		1cm
B	14-35cm		20cm
C	35-56cm		20cm
D	56-71cm		15cm
Duplicate sample taken in original sample hole.			Dup
Horizon sample location 2			
NAD 83	69950N	81425E	Horizon Width
Surface to A			0-6cm
A	6-7cm		1cm
B	7-28cm		20cm
C	28-49cm		20cm
Duplicate sample taken in original sample hole.			Dup

Table 4. Horizon and Duplicate sample site analytical results

	Method	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	As	Au
Station	Unit	PPM	PPM	PPM	PPB
69850N-81425E A	Soil	0.6	14.6	5.3	0.6
69850N-81425E B	Soil	0.8	24.1	6.1	1.8
69850N-81425E C	Soil	0.6	27.3	5.6	36.8
69850N-81425E D	Soil	0.5	25.8	5.6	1.6
69850N 81425E-2010	Soil	0.5	23.3	4.8	0.3
69850N-81425E Dup	Soil	0.6	26.3	5.6	4.1
69950N-81425E A	Soil	0.9	11	5.3	0.8
69950N-81425E B	Soil	0.5	15.6	5.8	2.2
69950N-81425E C	Soil	0.5	18.6	6.1	1.4
69950N 81425E-2010	Soil	0.5	14.9	5.1	0.4
69950N-81425E Dup	Soil	0.4	16.2	5.6	2

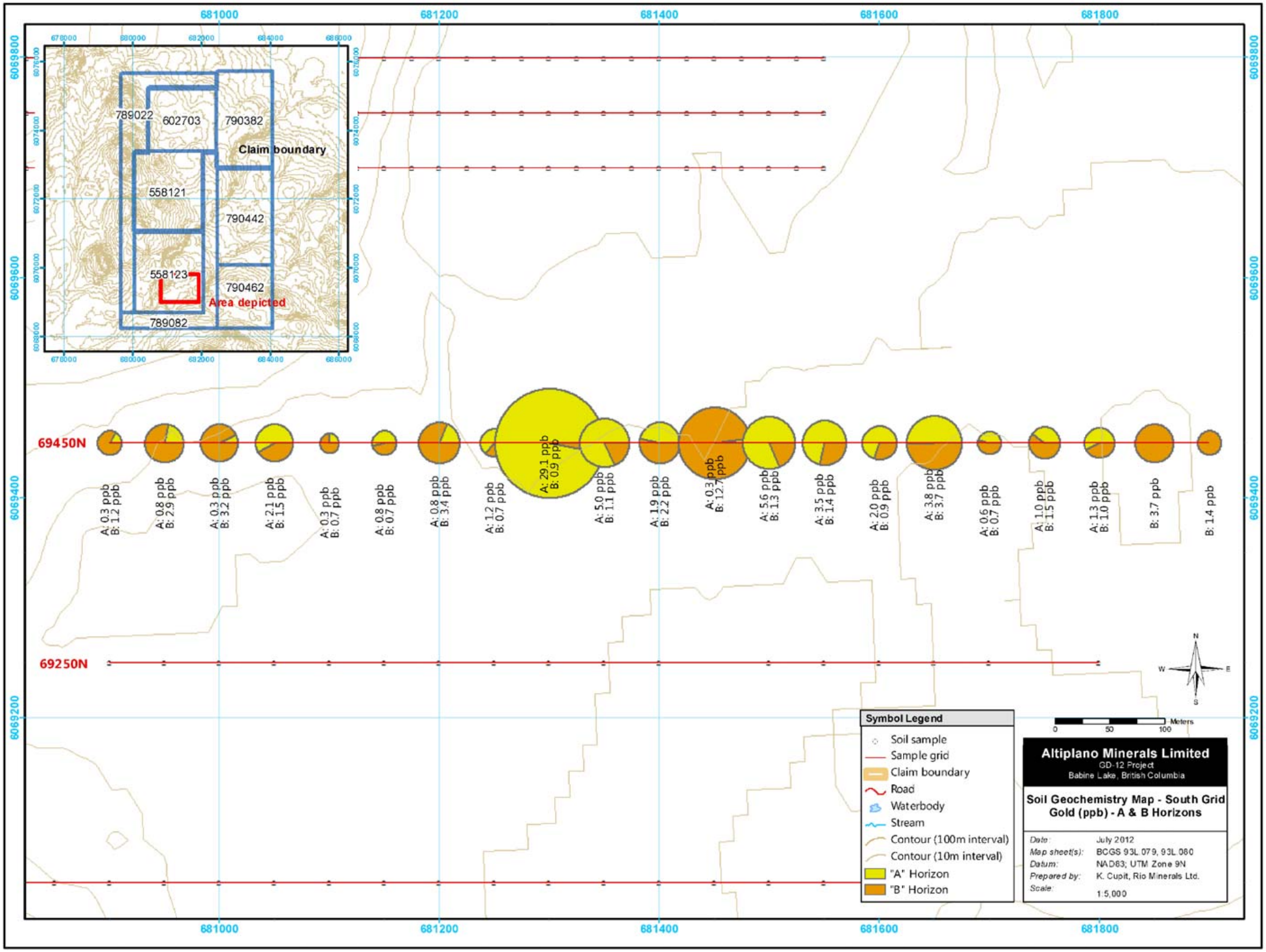


Figure 15: Gold In A&B Horizons

Figure 16: Copper In A&B Horizons

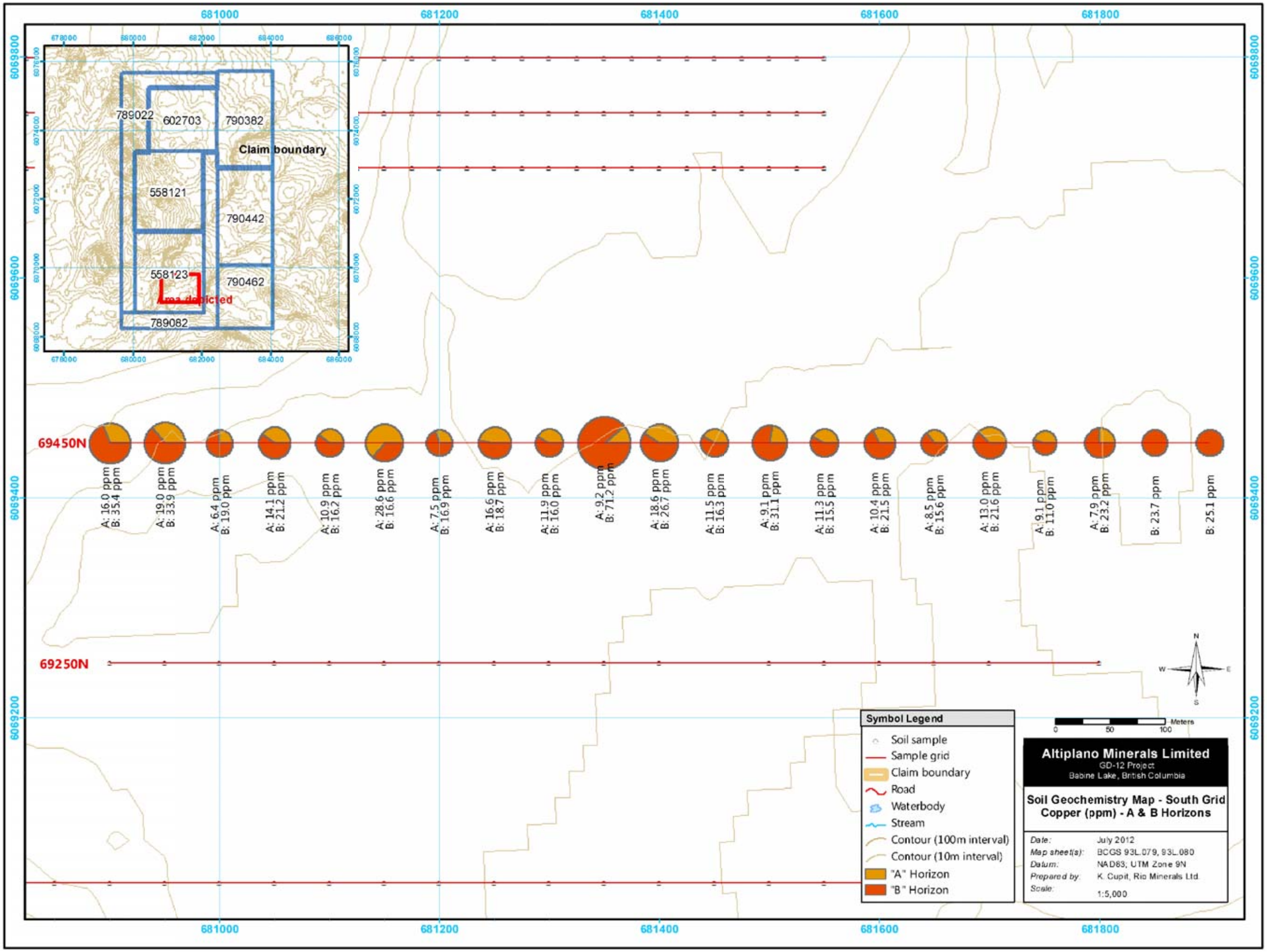
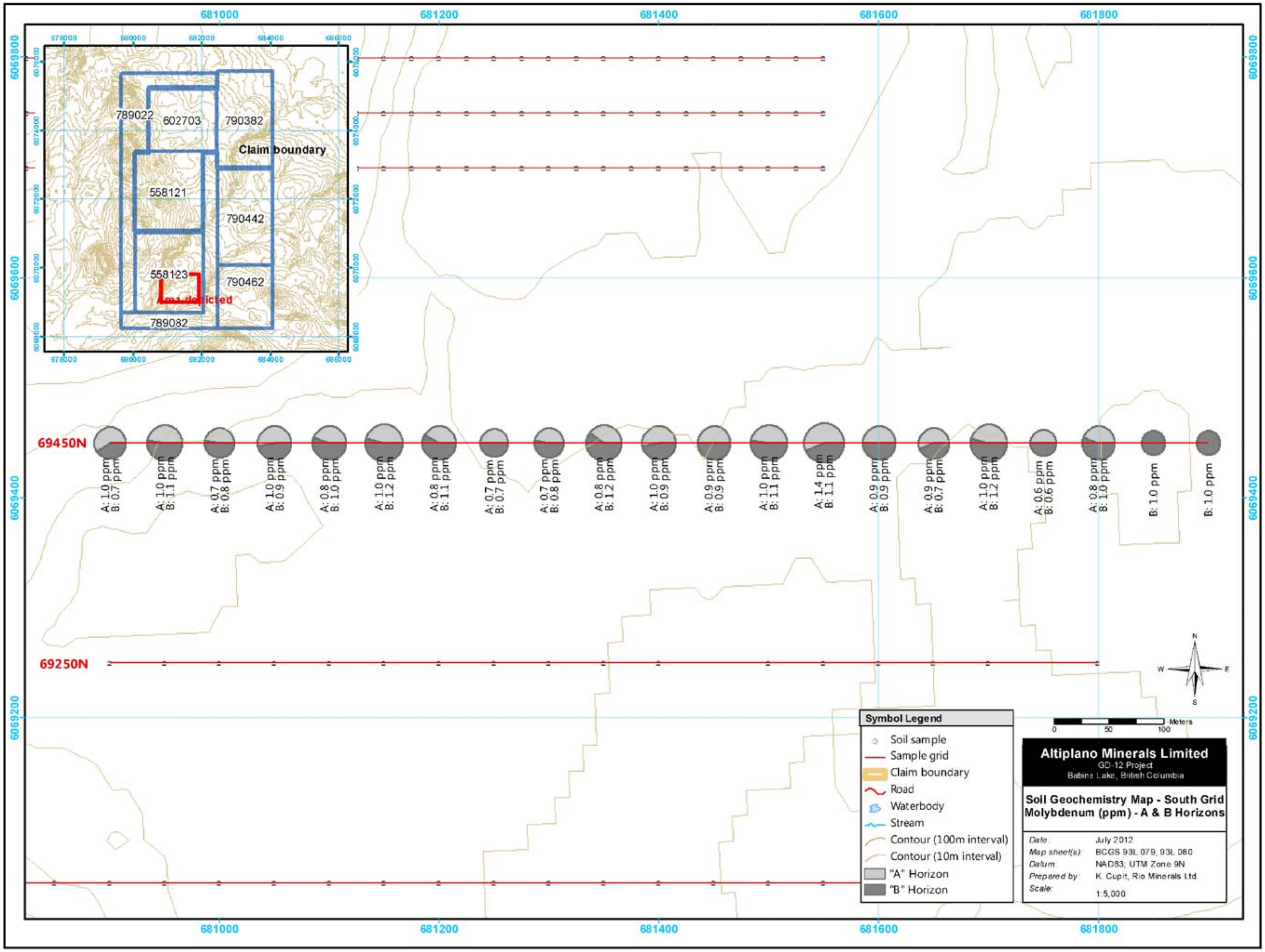


Figure 17: Molybdenum In A&B Horizons



11 SAMPLING METHOD AND APPROACH

Two continuous existing sample intervals from the 2010 trenches were selected with the most elevated values for Cu, Mo, and Au, and were re-sampled by continuous rock chip sampling. The 2010 aluminum sampling tags were identified and the original sample numbers were reconciled with the specific interval sampled in 2012.

Trench TR10-01 was submerged under high spring melt water levels; similarly the latter part of TR10-08 and the start of TR10-09 were inaccessible.

Rock samples were collected by Philo Schoeman. Rock sampling consisted of continuous rock chip sampling across widths of mineralized intrusive rock, except in the cases where chip grabs from rock outcrop or loose grabs (from subcrop, float) was sampled.

Rock chip samples and sample tags were placed in plastic bags weighing at least 2 to 3 kilograms and sealed with cable ties. Sample numbers ranging from 12PSC001 to 12PSC020 were assigned, aluminum tags and flagging tape were left at each sampling interval.

Witness rock chips and site photographs were taken for later viewing. GPS readings were taken of the sample localities with the NAD83 datum and the UTM grid reference. Considerable drift in these readings were observed within the relative narrow, deep ravine and recalculated with the aid of the 2010 detailed trench position sketches (Malahoff, 2010). When the 2012 re-sampling is plotted on the 2010 mapping (Figures 9 & 10), slight drift is observed off the 2010 indicated positions.

The single hard rock sample collected from the boulder on claim 558121 was put into the same batch, given sample number 12PSP021, sealed with a cable tie, sample tag inside, and the field position marked with flagging tape and aluminum tag, GPS co-ordinates taken, witness sample collected and site photograph taken.

One coarse blank and one pulp standard were inserted in the sampling stream (sample 12PSC014: coarse blank, sample 12PSC016: pulp standard) for quality assurance purposes.

All rock sample sites were marked with labelled metal tags and flagging tape. Samples and tags were placed in poly-ore bags having individual weights of at least 2 kilograms, and zap-strapped. Sample locations were recorded by GPS, given a UTM grid designation using the NAD 83 datum, and photographed. All rock samples were taken directly to Acme Analytical Laboratories in Smithers, BC for homogenization, and then sent by Acme to Vancouver, BC where they were analyzed for 36-element ICP-MS with a Group 1DX2 analysis. See appendix B for details on analytical methods and procedures. A witness sample of each rock sample was retained and is available for viewing.

Soil samples were taken by Andrew Molnar and Lyle Gregory on east-west lines (Appendix D) from a depth of between 35-40 cm. Soil sample locations were recorded by GPS, and given a UTM grid designation using the NAD 83 datum. Soil sample stations were placed every 50 metres with line spacings of 200 metres. The soil samples were placed in marked paper sample bags, placed in poly-ore bags, sealed, and hand-delivered to Acme Analytical Laboratories of Smithers, British Columbia for Group 1DX2-31 element ICP analysis. Results of the 2012 soil geochemical survey are presented in Appendix D and section 9.1 (Geochemical Survey Results).

12 ADJACENT PROPERTIES

There are no properties directly adjacent to the GD Property claims.

13 INTERPRETATION AND CONCLUSIONS

During the field programme in May 2012, continuous rock chip re-sampling of several trenches in the Tachek Creek North and South areas have confirmed the 2010 values obtained in both areas, located one more anomalous area, and confirmed the width of the mineralised zone directly west of trench TR10-02 indicated by an anomalous 2010 prospector's sample in the Tachek North area.

Continuous rock chip re-sampling in both the Tachek North and South areas intersected relatively high copper values over the selected 2 meter intervals and anomalous molybdenum values, especially in Tachek Creek North where 949 ppm molybdenum was intersected over 2 meters sampled. The Tachek Creek North area also yielded the highest gold value of 78.8 ppb over 2 meters sampled.

Geological mapping performed in 2010 (Figures 9-10) in Tachek Creek north and south has confirmed the presence of widespread copper mineralization (malachite, chalcopyrite, azurite, and rare bornite) with less molybdenite in exposed outcrops. The intrusive rocks in these regions were found to be moderately fractured with abundant faulting that left open spaces for copper mineralization to fill. The copper mineralization is generally fractured, less fault controlled. Geological mapping has increased the understanding of the distribution of rock types and the major structures that affect these rock types.

The 2012 soil grid was continued south from the 2010 southern most soil grid in an attempt to test the area for copper mineralization.

The assay values for gold from the coarse blank rock sample was below detection limit indicating that proper cleaning protocols were being adhered to in the sampling preparation process. The gold values obtained for the standard pulp rock sample inserted into the sampling stream was 4.329 g/t for the Aqua Regia digestion (over with more than 2 standard deviations of the certified value) and 3.479 g/t for the fire assay fusion analysis (more than 2 standard deviations under) compared to the certified value of 3.89 ± 0.15 g/t. A re-assay was requested for the fire assay fusion analysis and an improved value of 3.965 g/t was obtained, well within 1 standard deviation.

Tachek Creek North: The highest values for copper in the Tachek Creek North area in trenches were obtained from 2010 trench TR10-02, where sampling along a mineralised structure returned an average of 2127 ppm copper along 2 m of strike. The highest values for molybdenum in the Tachek Creek North area were obtained in 2010 trench TR10-03 where sampling across a mineralised structure at an angle of intersection of 54 degrees yielded an average of 949 ppm molybdenum over 2 m sampled. The 2010 trench TR10-03 also returned the highest gold value in the Tachek Creek North area with an average of 78.8 ppb gold over 2 m sampled. The fire assay for these gold values confirmed the ICP values obtained for gold.

A sample collected west of trench TR10-02 intersected high copper values of 1.76% and relatively low molybdenum values of 210 ppm over 60 cm sampled (12PSC001). A sample to follow-up on a prospector's sample of 2010 (GD10-439041), directly west of trench TR10-02, intersected 800 ppm copper and 5.3 ppm molybdenum over 1 m sampled (12PSC004).

The gold assay values obtained for these two samples were 42.2 ppb and 27.8 ppb respectively.

Tachek Creek South: The highest values for copper in the Tachek South area were obtained from 2010 trench TR10-09, yielding an average of 2019 ppm copper over 2.4 m sampled. The highest molybdenum values were also obtained in 2010 trench TR10-03, having an average of 165 ppm molybdenum over 2.4 m sampled. The highest gold assay values were obtained in 2010 trench TR10-03 having an average of 55.4 ppb gold over 2.4 m sampled. The fire assay for these gold values confirmed the ICP obtained gold values obtained

Table 5.. Highlights of Geochemical analyses.

Sample Id	Mo ppm ICP	Cu ppm ICP	Au ppb ICP	Au ppb FA
12PSC001	210.0	17650	42.2	37 / 38
12PSC002	7.2	2002.3	62.4	57
12PSC003	4.5	2251.5	95.2	87
12PSC005	1260.7	462.0	8.6	5
12PSC008	26.2	1776.2	8.3	7
12PSC013	124.4	1972.4	22.9	25
12PSC017	220.4	3157.4	99.5	106
12PSC018	109.7	1689.0	11.2	19

Mapping: Pro 093L.225 showing

The single boulder sampled collected in the Pro 093L 225 showing area was un-mineralised with respect to copper, molybdenum, and gold.

14 RECOMMENDATIONS

It is recommended that further work to be conducted on the GD property include the following:

1) The GD property requires a three dimensional induced polarization (IP) and magnetic geophysical survey centered on previously drilled percussion holes 14, 31 and 32 (Noranda Exploration Company, 1969). Also, IP and magnetic geophysical surveys should cover new Cu, Mo, Au anomalies found in the 2010 exploration program. The IP method chosen must be able to penetrate thick overburden.

2) A second phase drill program will be recommended depending on the results of phase 2.

3) Complete the outcrop-scale mapping (1:500) of Tachek Creek north and south focusing on structure and controls on mineralization.

4) Complete the continuous chip sampling of all mineralized intrusive rock at Tachek Creek north and possible new areas in the south.

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16 CERTIFICATE OF AUTHOR

I Derrick Strickland, of 910-475 Howe Street t, in the City of Vancouver in the Province of British Columbia do hereby certify that:

1. I am a Consulting Geologist working in Vancouver, British Columbia.
2. I hold a Bachelor of Science in Geology (1993)
3. I have been employed in the mineral exploration industry since 1987 and have practiced my profession since graduation.
4. The information for this report has been taken from government and old geological reports and work undertaken by Altiplano Minerals
5. I am a member in good standing with Association of Professional Engineers, Geoscientist of British Columbia.
6. The assessment costs presented in this report are true and accurate to the best of my knowledge.

DATED at Vancouver, British Columbia, this 10 th day of July, 2012

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Derrick Strickland, P.Geo. MBA

Appendix 1
Statement of Costs

Statement of Costs

Description	May 17-May25, 2012	Cost
Time Charges:		
Field crew	22 mandays @ $450/day	$ 9,900
Geologist/assistant	07 mandays @ $650/day	$ 4,550
	Sub total:	$ 14,450
Expenses:		
4x4 vehicle rental	16.0 @ $110/day	$ 1,760
Food	29 @ $50/day	$ 1,450
Accomodation		$ 2,109
Travel		$ 906
Supplies and Rentals	Radios, etc.	$ 600
Fuel		$ 1,092
Assays and shipping	21 rock, 175 soil	$ 4,538
Report	-	$ 4,250
Cosumables		$ 317
	Subtotal:	$ 17,022
Total Expenditures		$ 31,472

Appendix 2

Altiplano Minerals Ltd

GD Property, Babine Lake, BC, Canada
Mapping: Pro 093L 225 showing
Date: May 2012
Area: Claim: 558121

Mapping ID	Date	X_Nad83z9	Y_Nad83z9	Lithology	Grain Size	Alt Int	Alt Type	Magnetism	Relief	Description
12PSmap001	20-May-12	680604	6072403	Pyroclastic andesite	por	mnr	chl	str	mod	Boulder in stream, 3m X 6m, dark green, fine grained, magnetic, coarse "grained" pyroclastic texture on weath surface: pyroclastic andesite?
12PSmap002	20-May-12	680532	6072498	Andesite	f-med	mnr	chl	none	mod	Boulder, 1m X 2m, dark grey/green, non magnetic, poorly foliated, fine to med grained, possible andesite?
12PSmap003	20-May-12	680542	6072461	Tuff	crs	-	-	none	low	Rounded boulder, 0.5m in diam, med brown matrix/groundmass, abundant white plag, non magnetic, no sulphs, clear pyroclastic texture on weathered surface: tuff?
12PSmap004	20-May-12	680533	6072423	Quartz diorite	m-crs	-	-	mod	low	Boulder, light grey, med to coarse grained, mod magnetic, plag feldspar >65%, q ~20%, <<amph, low biotite, poss quartz diorite?
12PSmap005	20-May-12	680446	6072378	Pyroclastic andesite	por	mnr	chl	mod	low	Slightly rounded boulder, gunmetal dark grey, coarse grained, mod to strong magnetic, very little quartz, poss basalt?
12PSmap006	20-May-12	680427	6072380	Tuff	por	-	-	none	low	Slightly rounded boulder, dark brown matrix with angular fragments of subordinate plag, hornblende and large brown alt fragments, non mag, poss tuff?
12PSmap007	20-May-12	680408	6072389	Andesite	fine	mnr	chl	none	low	Angular slab, slightly foliated, 0.5m X 0.5m, fine grained, non mag, Fe stained, low biotite, low amphibole, poss andesite
12PSmap008	20-May-12	680436	6072384	Quartz diorite	med	mnr	epi	none	low	Well rounded boulder, dark grey, med grained, non mag, trace pyrrhotite, feldspars (>65%), q (<15%), <<amph, poss quartz andesite?
12PSmap009	20-May-12	680396	6072388	Pyroclastic andesite	por	mod	epi	mod	low	Angular boulder, dull green matrix with 10 to 12mm magnetic min, pyroclastic texture on weath surface, poss tuff/ignimbrite?

Altiplano Minerals Ltd

GD Property, Babine Lake, BC, Canada

Rock Chip Trench Resampling Description Sheet

Date: May 2012

Area: Tachek Creek North

Sample ID	Date	X_Nad83z9	Y_Nad83z9	Lithology	2010 Traverse	2010 Sample Nr	Chip_From	Chip_To	Grain Size	Alt Int	Alt Type	Veining	Magnetism	Relief	Strike	Dip	Structure	% Py	% Cpy	% Other	Cu_2010 ppm	Mo_2010 ppm	Au_2010 ppb	Cu_2012 ppm	Mo_2012 ppm	Au_2012 ppb ICP	Au_2012 ppb FA
12PSC001	17-May-12	681481	6070795	Quartz monzonite	none	none	0	0.6	por	mod	k	none	str	low	181	74	fol	0.5	3	mag,1	new	new	new	17650.0	210.0	42.2	37 / 38
Granitic q monzo (q<20%, felds equal >70, <<biot, <<amphi), mod pink potassic alt, narrow frac, 3% cpy, 0.5% py, malachite stain, trace azurite, mod to strong mag, prev sampled & mapped, prob Noranda, 60cm wide, low relief.																											
12PSC002	17-May-12	681500	6070784	Quartz monzonite	TR10-02	GD10-723464	5	6	por	mnr	k	mod	weak	high	259	58	fol		tr		1708	4.5	57.4	2002.3	7.2	62.4	57
Q monzo (q<20%, felds equal >70%, 5% amphi), weak potassic alt, mag parrallel to thin fracs, trace cpy, trace mal, mod limonite stain throughout, main fol: 259/58W, TR10-02, 5-6m, sample nr GD10-723464																											
12PSC003	17-May-12	681499	6070783	Quartz monzonite	TR10-02	GD10-723465	6	7	por	mod	k	stock	weak	mod	262	68	fol		tr		2583	5	75.4	2251.5	4.5	95.2	87
Q monzo (q<20%, felds equal >70%, 2% amphi), 2 sets of intersecting fracs (main: 172/68W, weak: 162/60E), carb on less prom set, weak potassic alt, weak to mod mag, trace cpy & mal, mod limonite stain throughout, TR10-02, 6-7m, sample nr GD10-723465																											
12PSC004	17-May-12	681494	6070786	Quartz monzonite	none	none	0	1	por	mod	k	none	mod	low	258	48	fol		tr		707.5	126.9	74.6	800.7	5.3	27.8	22
Granitic Q monzo (q<20%, felds equal >70%, 5% amphi), 2 sets of intersecting fracs (main fol: 258/48NW minor: 184/62W, mod potassic alt, mod mag, trace mal, mod limonite stain, SW of TR10-02, on strike southwest of prospectors sample: GD10-439041																											
12PSC005	17-May-12	681549	6070848	Quartz monzonite	TR10-06	GD10-723489	5	6	por	mnr	k	none	mod	high	190	40	fol		tr	mo,tr	442.8	977.7	2	462.0	1260.7	8.6	5
Q monzo (q<20%, felds equal >70%, 2% amphi), weak potassic alt, mod mag, trace cpy, trace mol, weak limonite on frac planes, main fol 190/40W, TR10-06, 5-6m, sample nr GD10-723489																											
12PSC006	17-May-12	681548	6070848	Quartz monzonite	TR10-06	GD10-723490	6	7	por	mnr	k	mod	weak	high	168	60	fol	1	tr	mo,tr	189.9	849.8	0.5	822.5	636.6	14.8	13
Q monzo (q<20%, felds equal >70%, <5% amphi), some potassic alt, weak mag, trace cpy, trace mol, more limonite on frac planes, main fol: 168/60W, minor frac: 104/64SW , TR10-06, 6-7m, sample nr GD10-723490																											
12PSC007	18-May-12	681568	6070920	Quartz monzonite	TR10-05	GD10-723482	2	4	crs	mnr	k	none	str	high	324	38	fol		0.5	mag,2	806.9	39.5	1.1	522.6	12.2	5.0	<2
Q monzo (q<20%, felds equal >70%, ~5% amphi), fragm of Q, horn, biot, feldsp porphyry dyke present, weak potassic alt, mag in patches along frac planes with slicken sides, strong mag, trace to 0.5% cpy, main fol: 324/38E, TR10-05, 2-4m, sample nr GD10-723482																											
12PSC008	18-May-12	681568	6070920	Quartz monzonite	TR10-05	GD10-723483	4	5	por	mnr	k	none	str	high	322	50	fol		1	mag,10	2039	19.2	6.4	1776.2	26.2	8.3	7
Q monzo to granodiorite (q>20%, felds equal >70%, ~5% amphi), maybe weak potassic alt, amphibole increasing N, blebs of strong (10%) mag along frac planes, 1% cpy, main fol: 323/50E, TR10-05, 4-5m, sample nr GD10-723483																											
12PSC009	18-May-12	681563	6070848	Quartz monzonite	TR10-04	GD10-723479	2	4	crs	mod	k	none	mod	high	44	78	fol		tr		36.7	5.5	20.5	39.1	8.4	2.3	<2
Q monzo (q<20%, felds equal >70%, ~5% amphi), biotite books not seen, mod potassic alt, amph appears dull, prob altered, 5% mag in blebs/patches, carb veneer along frac planes, trace cpy, mod mag, wide shear zone sampled at oblique angle along cliff face, main fol: 044/78S, TR10-04, 2-4m, sample nr GD10-723479																											
12PSC010	18-May-12	681563	6070846	Quartz monzonite	TR10-04	GD10-723480	4	6.3	crs	mnr	k,prop	none	mod	high	21	80	fol		1	mag,3	787.9	9.5	1.2	411.1	10.0	2.4	<2
Q monzo (q<20%, felds equal >70%, ~5% amphi), patches of propyl alt, amph dull & altered, 3% mag in patches, 1% cpy in patches, 3% mag in patches, trace malachite, main fol: 021/80S, TR10-04, 4-6.3m, sample nr GD10-723480																											
12PSC011	18-May-12	681551	6070815	Quartz monzonite	TR10-03	GD10-723471	2	3	crs	mod	k	stock	weak	high	235	58	fol	0.5	2	mag,tr,mo,tr	723.7	908.8	5.2	305.1	532.2	4.7	12
Q monzo (q<20%, felds equal >70%, ~5% amphi), mod potassic alt, rel strongly frac in places, strong lim/hema staining on frac planes, well dev boxwork stock, patches of mag, 1-2% cpy in patches, weak mag in patches, trace maroon staining assoc with sulphs, trace to 0.5% mol in patches, main fol: 235/58NW, TR10-03, 2-3m, sample nr GD10-723471																											
12PSC012	18-May-12	681550	6070814	Quartz monzonite	TR10-03	GD10-723472	3	4	por	mnr	k	none	none	high	252	68	fol		2	mo,1	758.7	1115	6.9	870.4	919.4	7.6	6
Q monzo (q<20%, felds equal >70%, ~5% amphi), prob weak potassic alt, mal staining on well dev slickensides on fault plane: 252/68NW, plunge 30SW, q&carb veining on 3cm fault fill, strong mal on vuggy fault fill, main fol parallel to fault: 252/68NW, TR10-03, 3-4m, sample nr GD10-723472																											

Altiplano Minerals Ltd
GD Property, Babine Lake, BC, Canada
Rock Chip Trench Resampling Description Sheet
& Mapping on Pro 093L 225 showing
Date: May 2012
Area: Tachek Creek South

Sample ID	Date	X_Nad83z9	Y_Nad83z9	Lithology	2010 Traverse	2010 Sample Nr	Chip_From	Chip_To	Grain Size	Alt Int	Alt Type	Veining	Magnetism	Relief	Strike	Dip	Structure	% Py	% Cpy	% Other	Cu_2010 ppm	Mo_2010 ppm	Au_2010 ppb	Cu_2012 ppm	Mo_2012 ppm	Au_2012 ppb ICP	Au_2012 ppb FA
12PSC013	19-May-12	681100	6069808	Quartz monzonite	TR10-10	GD10-723419	4	5	crs	mod	prop	none	weak	high	224	48	fol		1	mag,0.5	2566.3	134.1	71.6	1972.4	124.4	22.9	25
Q monzo (q<20%, felds equal >70%, ~5% amphi), mod propyll alt, frac planes has 1% mal staining, mod mag, trace cpy, main fol: 224/58NW, frac: 212/54NW with 0.5% mag on it, minor frac: 314/65NE, TR10-10, 4-5m, sample nr GD10-723419																											
12PSC014	19-May-12			blank																	-	-	-	1.1	5.9	<0.5	<2
Coarse blank inserted																											
12PSC015	19-May-12	681100	6069807	Quartz monzonite	TR10-10	GD10-723420	5	6	crs	mod	prop	none	mod	high	218	76	fol			lim,1	1033.3	123.4	22.2	563.0	123.1	26.0	28
Q monzo (q<20%, felds equal >70%, ~5% amphi), mod propyll alt (epidote alt) increasing S, mod mag decreasing S, 1% lim/gossan staining & 0.5% cpy on 112/73SW, main fol: 218/76NW, TR10-10, 5-6m, sample nr GD10-723420																											
12PSC016	19-May-12			standard																	-	-	-	6.4	398.9	4329.3	3479 / 3965
Standard inserted																											
12PSC017	19-May-12	681098	6069795	Quartz monzonite	TR10-09	GD10-723413	10	11	por	mod	prop	none	weak	high	238	52	fol			mal,2,az,1	3681.3	218.3	85	3157.4	220.4	99.5	106
Granitic Q monzo (q<20%, felds equal >70%, ~5% amphi), mod propyll alt, weakly mag, trace cpy, clearly vis biotite books, 2% mal & 1% azurite on 176/72NW, epidote on 350/78NE, weak to mod mag (poss spec hem) on frac planes, main fol: 138/52NW, TR10-09, 10-11m, sample nr GD10-723413																											
12PSC018	19-May-12	681098	6069794	Quartz monzonite	TR10-09	GD10-723414	11	12.4	crs	mod	prop	none	weak	high	214	85	fol		tr	mal,2,az,1	1983	132	36.4	1689.0	109.7	11.2	19
Q monzo (q<20%, felds equal >70%, <1% biot, ~5% amphi), mod propyll alt, weak mag, mag & cpy on frac planes, abundant mal (2%) & azurite (1%) with spec hema on prom frac 150/42SW, mod mal, low azurite & carb on frac: 258/87NW, strong lim/gossan zone increasing S to fault @ 12m with orient of 214/85NW, slicken sides plunging 50 SW (map has 75 SW), main fol: 214/85 NW, slicken sides plunge 50 SW, TR10-09, 11-12.4m, sample nr GD10-723414																											
12PSC019	19-May-12	681100	6069832	Quartz monzonite	TR10-08	GD10-723497	2	4	por	mod	prop	none	weak	high	214	78	fol		tr	mal,tr	873.3	32.6	126.6	477.6	14.8	25.1	34
Q monzo (q<20%, felds equal >70%, <5% amphi), mod potassic? / propyll alt (amph (hornblende alt)), weak mag, no biotite observed, low mag on main fol (214/78NW), epidote & carb + chl on main fol, spec hema on second frac 158/050SW, trace malachite on limited dev frac plane, main fol: 214/78NW, TR10-08, 2-4m, sample nr GD10-723497																											
12PSC020	19-May-12	681100	6069830	Quartz monzonite	TR10-08	GD10-723498	4	6	por	mod	prop,k	none	weak	high	220	82	fol		tr	mal,tr	236.3	15.1	10.8	271.5	18.2	13.3	9
Granitic Q monzo (q<20%, felds equal >70%, ~5% amphi), no biot observed, mod potassic? / propyll alt (amph (hornblende alt)), weak mag, trace cpy, epidote, carb & chlor on main fol, carb & epidote on 126/32SW, main fol: 220/82NW, slicken sides plunge 50S (map has 36N), TR10-08, 4-6m, sample nr GD10-723498																											
12PSP021	20-May-12	680928	6072424	Quartz Vein	none	none			fine	str	si	high qtz	str	low						mag,1	new	new	new	3.6	0.8	5.7	<2
Boulder of chloritic schist, 20cm fuggy (manganese coating) milky qv xcutting fol, mag increases towards contact with qv, also euhedral soft ox min increasing towards contact, immediate contact area hi in mag with amorphous choc brown min with light green streak																											

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Submitted By:	Temporary Email Distribution
Receiving Lab:	Canada-Smithers
Received:	May 25, 2012
Report Date:	June 13, 2012
Page:	1 of 2

CERTIFICATE OF ANALYSIS SMI12000020.1

CLIENT JOB INFORMATION

Project:	GD-12
Shipment ID:	
P.O. Number	12327
Number of Samples:	21

SAMPLE DISPOSAL

DISP-PLP	Dispose of Pulp After 90 days
DISP-RJT	Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	21	Crush, split and pulverize 250 g rock to 200 mesh			SMI
1DX2	21	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
3B01	21	Fire assay fusion Au by ICP-ES	30	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Rio Minerals Ltd.
910 - 475 Howe Street
Vancouver BC V6C 2B3
Canada

CC:

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 13, 2012

CERTIFICATE OF ANALYSIS SMI12000020.1

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
G1-SMI	Prep Blank	<0.01	<0.1	2.6	3.3	51	<0.1	3.7	4.5	601	2.05	1.2	3.8	6.5	66	<0.1	<0.1	0.1	40	0.54	0.084
G1-SMI	Prep Blank	<0.01	0.1	2.6	3.3	49	<0.1	3.5	4.3	594	2.07	<0.5	2.8	6.7	67	<0.1	<0.1	<0.1	41	0.56	0.087
12psc001	Rock	2.08	210.0	>10000	3.3	48	2.2	6.4	11.8	262	4.56	<0.5	42.2	2.3	58	<0.1	0.3	4.7	58	1.83	0.110
12psc002	Rock	2.40	7.2	2002	2.9	16	0.8	4.9	12.7	175	1.93	0.7	62.4	2.3	27	<0.1	0.1	0.3	36	0.27	0.067
12psc003	Rock	2.70	4.5	2251	3.1	15	0.9	5.6	11.1	190	2.32	0.6	95.2	2.2	35	<0.1	0.1	0.4	42	0.34	0.067
12psc004	Rock	2.55	5.3	800.7	3.0	22	0.2	7.2	8.0	180	2.65	1.9	27.8	2.1	31	<0.1	<0.1	0.6	40	0.43	0.070
12psc005	Rock	1.80	1261	462.0	4.3	24	0.3	5.9	6.6	244	3.61	3.0	8.6	2.3	37	<0.1	0.4	1.7	83	0.45	0.105
12psc006	Rock	2.51	636.6	822.5	5.2	26	0.4	6.1	26.3	211	3.27	4.0	14.8	2.0	51	<0.1	0.3	2.5	51	0.48	0.109
12psc007	Rock	2.86	12.2	522.6	3.0	11	0.2	5.6	3.5	150	2.97	3.4	5.0	1.4	39	<0.1	0.3	1.1	37	0.44	0.083
12psc008	Rock	2.82	26.2	1776	3.2	11	0.6	9.4	7.1	156	3.96	1.7	8.3	1.6	41	<0.1	0.3	0.9	57	0.49	0.082
12psc009	Rock	3.07	8.4	39.1	1.7	21	<0.1	4.3	4.4	217	1.87	2.4	2.3	2.0	28	<0.1	0.1	0.2	37	2.07	0.069
12psc010	Rock	3.25	10.0	411.1	1.4	20	<0.1	7.7	9.2	217	3.90	1.2	2.4	2.4	33	<0.1	0.2	0.6	67	0.87	0.081
12psc011	Rock	2.93	532.2	305.1	5.6	18	0.7	4.9	8.7	150	3.36	5.1	4.7	2.0	37	<0.1	0.4	2.4	48	0.62	0.107
12psc012	Rock	3.26	919.4	870.4	6.6	23	0.8	6.1	16.8	178	3.50	9.2	7.6	1.8	37	<0.1	0.5	2.9	50	0.41	0.107
12psc013	Rock	3.96	124.4	1972	5.2	74	0.8	11.3	7.4	388	2.40	1.0	22.9	2.8	438	<0.1	0.2	0.9	60	0.53	0.090
12psc014	Rock	<0.01	1.1	5.9	3.4	51	<0.1	3.4	4.7	649	2.22	<0.5	<0.5	7.2	68	<0.1	<0.1	<0.1	43	0.58	0.087
12psc015	Rock	4.08	123.1	563.0	5.4	53	0.7	8.3	8.2	306	2.00	1.2	26.0	2.7	199	<0.1	0.2	1.2	41	0.57	0.088
12psc016 (STD)	Rock	<0.01	6.4	398.9	171.5	62	44.6	31.4	10.6	130	3.90	492.1	4329	0.7	34	0.6	121.3	29.3	18	0.26	0.024
12psc017	Rock	3.26	220.4	3157	3.6	46	0.5	11.4	11.1	313	1.99	0.6	99.5	2.7	40	<0.1	0.1	0.6	52	0.49	0.084
12psc018	Rock	3.71	109.7	1689	3.8	56	0.5	11.2	11.1	384	2.62	<0.5	11.2	2.8	57	<0.1	0.1	2.3	47	0.45	0.082
12psc019	Rock	3.05	14.8	477.6	3.0	59	0.3	9.4	14.4	515	2.48	1.0	25.1	3.3	81	<0.1	0.2	3.2	55	0.55	0.087
12psc020	Rock	2.50	18.2	271.5	1.8	67	0.1	8.0	14.1	495	2.72	0.8	13.3	3.3	87	<0.1	0.1	1.0	62	0.57	0.079
12psp021	Rock	1.07	0.8	3.6	7.0	24	<0.1	0.7	1.7	647	1.14	0.7	5.7	0.2	93	0.1	0.1	<0.1	9	2.00	0.082

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 13, 2012

CERTIFICATE OF ANALYSIS SMI12000020.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	3B
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Au
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppb
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	2
G1-SMI	Prep Blank	14	16	0.56	189	0.128	1	1.00	0.095	0.54	<0.1	<0.01	2.6	0.3	<0.05	5	<0.5	<0.2	<2
G1-SMI	Prep Blank	15	11	0.57	196	0.132	1	0.99	0.098	0.55	<0.1	<0.01	2.6	0.3	<0.05	5	<0.5	<0.2	<2
12psc001	Rock	10	9	1.13	49	0.085	2	1.55	0.081	0.09	1.2	<0.01	3.4	<0.1	1.49	11	10.1	1.1	37
12psc002	Rock	7	11	0.61	50	0.042	<1	0.96	0.088	0.12	0.4	<0.01	2.9	<0.1	0.28	7	0.6	<0.2	57
12psc003	Rock	8	12	0.70	59	0.062	<1	0.87	0.074	0.14	0.5	<0.01	2.8	<0.1	0.34	7	1.3	<0.2	87
12psc004	Rock	12	44	0.62	57	0.019	1	0.84	0.095	0.12	0.2	<0.01	3.2	<0.1	0.12	7	<0.5	<0.2	22
12psc005	Rock	8	12	0.95	96	0.101	1	1.01	0.070	0.17	0.6	<0.01	3.8	<0.1	0.27	9	1.3	0.4	5
12psc006	Rock	7	10	0.83	50	0.065	1	0.95	0.093	0.11	0.6	<0.01	3.4	<0.1	1.26	8	1.2	0.3	13
12psc007	Rock	5	16	0.62	76	0.075	2	0.97	0.081	0.19	1.1	<0.01	3.5	<0.1	0.13	7	<0.5	<0.2	<2
12psc008	Rock	5	22	0.79	72	0.115	<1	0.98	0.100	0.15	2.1	<0.01	4.5	<0.1	0.20	8	0.9	0.2	7
12psc009	Rock	11	12	0.57	35	0.008	<1	0.59	0.082	0.08	0.5	<0.01	3.1	<0.1	<0.05	6	<0.5	<0.2	<2
12psc010	Rock	11	18	1.18	35	0.020	1	1.28	0.100	0.15	0.3	<0.01	4.4	<0.1	<0.05	12	<0.5	<0.2	<2
12psc011	Rock	7	10	0.65	39	0.029	<1	0.85	0.081	0.07	6.9	<0.01	2.6	<0.1	1.16	7	1.2	0.3	12
12psc012	Rock	8	10	0.80	41	0.028	2	1.01	0.079	0.07	3.5	<0.01	2.8	<0.1	1.68	8	1.6	0.4	6
12psc013	Rock	9	26	1.16	125	0.078	<1	1.36	0.079	0.13	0.2	<0.01	5.4	<0.1	0.06	8	<0.5	<0.2	25
12psc014	Rock	16	10	0.60	197	0.144	<1	1.08	0.100	0.56	0.1	<0.01	2.9	0.3	<0.05	5	<0.5	<0.2	<2
12psc015	Rock	10	27	1.02	61	0.052	<1	1.25	0.082	0.09	0.2	<0.01	4.4	<0.1	0.22	7	0.6	<0.2	28
12psc016 (STD)	Rock	4	123	0.39	51	0.040	<1	0.86	0.085	0.03	2.3	1.42	1.4	0.7	1.55	6	12.5	33.2	3479
12psc017	Rock	13	34	1.14	44	0.055	<1	1.41	0.064	0.11	0.2	<0.01	5.3	<0.1	0.14	8	1.0	<0.2	106
12psc018	Rock	9	34	1.25	35	0.053	<1	1.45	0.078	0.08	0.5	<0.01	4.7	<0.1	0.34	8	0.9	0.3	19
12psc019	Rock	8	26	1.24	52	0.099	<1	1.44	0.069	0.09	1.2	<0.01	4.5	<0.1	<0.05	9	<0.5	0.4	34
12psc020	Rock	9	24	1.33	53	0.093	<1	1.72	0.072	0.11	0.8	<0.01	5.7	<0.1	<0.05	9	<0.5	<0.2	9
12psp021	Rock	3	8	0.23	78	0.072	<1	0.60	0.011	0.11	0.1	<0.01	2.1	<0.1	<0.05	3	<0.5	<0.2	<2

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 13, 2012

QUALITY CONTROL REPORT SMI12000020.1

Method		WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
Analyte		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
MDL		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																					
12psc002	Rock	2.40	7.2	2002	2.9	16	0.8	4.9	12.7	175	1.93	0.7	62.4	2.3	27	<0.1	0.1	0.3	36	0.27	0.067
REP 12psc002	QC																				
12psc012	Rock	3.26	919.4	870.4	6.6	23	0.8	6.1	16.8	178	3.50	9.2	7.6	1.8	37	<0.1	0.5	2.9	50	0.41	0.107
REP 12psc012	QC		923.3	870.3	6.5	23	0.8	6.2	16.6	181	3.47	9.3	9.9	1.8	39	<0.1	0.4	3.0	50	0.42	0.106
Core Reject Duplicates																					
12psc011	Rock	2.93	532.2	305.1	5.6	18	0.7	4.9	8.7	150	3.36	5.1	4.7	2.0	37	<0.1	0.4	2.4	48	0.62	0.107
DUP 12psc011	QC	<0.01	512.5	299.5	5.5	17	0.6	4.4	7.9	152	3.16	4.7	4.4	2.1	38	<0.1	0.4	2.3	49	0.63	0.106
Reference Materials																					
STD DS8	Standard		14.6	118.2	133.8	339	1.9	42.2	8.4	659	2.63	27.6	122.4	7.7	72	2.5	5.7	7.1	44	0.77	0.087
STD DS9	Standard		14.0	115.3	135.9	329	1.9	42.4	8.1	617	2.46	27.3	127.9	7.2	76	2.5	5.8	7.3	42	0.78	0.088
STD OXC88	Standard																				
STD OXG99	Standard																				
STD OXC88 Expected																					
STD OXG99 Expected																					
STD DS9 Expected			12.84	108	126	317	1.83	40.3	7.6	575	2.33	25.5	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819
STD DS8 Expected			13.44	110	123	312	1.69	38.1	7.5	615	2.46	26	107	6.89	67.7	2.38	5.7	6.67	41.1	0.7	0.08
BLK	Blank																				
BLK	Blank																				
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
Prep Wash																					
G1-SMI	Prep Blank	<0.01	<0.1	2.6	3.3	51	<0.1	3.7	4.5	601	2.05	1.2	3.8	6.5	66	<0.1	<0.1	0.1	40	0.54	0.084
G1-SMI	Prep Blank	<0.01	0.1	2.6	3.3	49	<0.1	3.5	4.3	594	2.07	<0.5	2.8	6.7	67	<0.1	<0.1	<0.1	41	0.56	0.087

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www.acmelab.com

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910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 13, 2012

QUALITY CONTROL REPORT SMI12000020.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	3B
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Au
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppb
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	2
Pulp Duplicates																			
12psc002	Rock	7	11	0.61	50	0.042	<1	0.96	0.088	0.12	0.4	<0.01	2.9	<0.1	0.28	7	0.6	<0.2	57
REP 12psc002	QC																		73
12psc012	Rock	8	10	0.80	41	0.028	2	1.01	0.079	0.07	3.5	<0.01	2.8	<0.1	1.68	8	1.6	0.4	6
REP 12psc012	QC	8	10	0.80	41	0.029	1	1.02	0.082	0.07	3.4	<0.01	2.9	<0.1	1.68	8	1.5	0.4	
Core Reject Duplicates																			
12psc011	Rock	7	10	0.65	39	0.029	<1	0.85	0.081	0.07	6.9	<0.01	2.6	<0.1	1.16	7	1.2	0.3	12
DUP 12psc011	QC	7	10	0.66	42	0.031	<1	0.88	0.089	0.08	6.6	<0.01	2.9	<0.1	1.01	8	1.1	0.3	3
Reference Materials																			
STD DS8	Standard	17	133	0.66	301	0.128	3	1.00	0.094	0.44	3.4	0.23	2.9	5.8	0.17	5	6.4	5.7	
STD DS9	Standard	15	131	0.66	318	0.123	3	1.04	0.088	0.41	3.3	0.21	2.7	5.7	0.17	5	6.4	5.5	
STD OXC88	Standard																		197
STD OXG99	Standard																		900
STD OXC88 Expected																			203
STD OXG99 Expected																			932
STD DS9 Expected		13.3	121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	0.2	2.5	5.3	0.1615	4.59	5.2	5.02	
STD DS8 Expected		14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	0.192	2.3	5.4	0.1679	4.7	5.23	5	
BLK	Blank																		<2
BLK	Blank																		<2
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2	
Prep Wash																			
G1-SMI	Prep Blank	14	16	0.56	189	0.128	1	1.00	0.095	0.54	<0.1	<0.01	2.6	0.3	<0.05	5	<0.5	<0.2	<2
G1-SMI	Prep Blank	15	11	0.57	196	0.132	1	0.99	0.098	0.55	<0.1	<0.01	2.6	0.3	<0.05	5	<0.5	<0.2	<2

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1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Submitted By:	Temporary Email Distribution
Receiving Lab:	Canada-Smithers
Received:	May 25, 2012
Report Date:	June 18, 2012
Page:	1 of 2

CERTIFICATE OF ANALYSIS SMI12000020.2

CLIENT JOB INFORMATION

Project:	GD-12
Shipment ID:	
P.O. Number	12327
Number of Samples:	21

SAMPLE DISPOSAL

DISP-PLP	Dispose of Pulp After 90 days
DISP-RJT	Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	21	Crush, split and pulverize 250 g rock to 200 mesh			SMI
1DX2	21	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
3B01	21	Fire assay fusion Au by ICP-ES	30	Completed	VAN
7AR	2	1:1:1 Aqua Regia digestion ICP-ES analysis	0.4	Completed	VAN

ADDITIONAL COMMENTS

Version 2 : 7AR-Cu included.

Invoice To: Rio Minerals Ltd.
910 - 475 Howe Street
Vancouver BC V6C 2B3
Canada

CC:

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.

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Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 18, 2012

CERTIFICATE OF ANALYSIS SMI12000020.2

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
G1-SMI	Prep Blank	<0.01	<0.1	2.6	3.3	51	<0.1	3.7	4.5	601	2.05	1.2	3.8	6.5	66	<0.1	<0.1	0.1	40	0.54	0.084
G1-SMI	Prep Blank	<0.01	0.1	2.6	3.3	49	<0.1	3.5	4.3	594	2.07	<0.5	2.8	6.7	67	<0.1	<0.1	<0.1	41	0.56	0.087
12psc001	Rock	2.08	210.0	>10000	3.3	48	2.2	6.4	11.8	262	4.56	<0.5	42.2	2.3	58	<0.1	0.3	4.7	58	1.83	0.110
12psc002	Rock	2.40	7.2	2002	2.9	16	0.8	4.9	12.7	175	1.93	0.7	62.4	2.3	27	<0.1	0.1	0.3	36	0.27	0.067
12psc003	Rock	2.70	4.5	2251	3.1	15	0.9	5.6	11.1	190	2.32	0.6	95.2	2.2	35	<0.1	0.1	0.4	42	0.34	0.067
12psc004	Rock	2.55	5.3	800.7	3.0	22	0.2	7.2	8.0	180	2.65	1.9	27.8	2.1	31	<0.1	<0.1	0.6	40	0.43	0.070
12psc005	Rock	1.80	1261	462.0	4.3	24	0.3	5.9	6.6	244	3.61	3.0	8.6	2.3	37	<0.1	0.4	1.7	83	0.45	0.105
12psc006	Rock	2.51	636.6	822.5	5.2	26	0.4	6.1	26.3	211	3.27	4.0	14.8	2.0	51	<0.1	0.3	2.5	51	0.48	0.109
12psc007	Rock	2.86	12.2	522.6	3.0	11	0.2	5.6	3.5	150	2.97	3.4	5.0	1.4	39	<0.1	0.3	1.1	37	0.44	0.083
12psc008	Rock	2.82	26.2	1776	3.2	11	0.6	9.4	7.1	156	3.96	1.7	8.3	1.6	41	<0.1	0.3	0.9	57	0.49	0.082
12psc009	Rock	3.07	8.4	39.1	1.7	21	<0.1	4.3	4.4	217	1.87	2.4	2.3	2.0	28	<0.1	0.1	0.2	37	2.07	0.069
12psc010	Rock	3.25	10.0	411.1	1.4	20	<0.1	7.7	9.2	217	3.90	1.2	2.4	2.4	33	<0.1	0.2	0.6	67	0.87	0.081
12psc011	Rock	2.93	532.2	305.1	5.6	18	0.7	4.9	8.7	150	3.36	5.1	4.7	2.0	37	<0.1	0.4	2.4	48	0.62	0.107
12psc012	Rock	3.26	919.4	870.4	6.6	23	0.8	6.1	16.8	178	3.50	9.2	7.6	1.8	37	<0.1	0.5	2.9	50	0.41	0.107
12psc013	Rock	3.96	124.4	1972	5.2	74	0.8	11.3	7.4	388	2.40	1.0	22.9	2.8	438	<0.1	0.2	0.9	60	0.53	0.090
12psc014	Rock	<0.01	1.1	5.9	3.4	51	<0.1	3.4	4.7	649	2.22	<0.5	<0.5	7.2	68	<0.1	<0.1	<0.1	43	0.58	0.087
12psc015	Rock	4.08	123.1	563.0	5.4	53	0.7	8.3	8.2	306	2.00	1.2	26.0	2.7	199	<0.1	0.2	1.2	41	0.57	0.088
12psc016 (STD)	Rock	<0.01	6.4	398.9	171.5	62	44.6	31.4	10.6	130	3.90	492.1	4329	0.7	34	0.6	121.3	29.3	18	0.26	0.024
12psc017	Rock	3.26	220.4	3157	3.6	46	0.5	11.4	11.1	313	1.99	0.6	99.5	2.7	40	<0.1	0.1	0.6	52	0.49	0.084
12psc018	Rock	3.71	109.7	1689	3.8	56	0.5	11.2	11.1	384	2.62	<0.5	11.2	2.8	57	<0.1	0.1	2.3	47	0.45	0.082
12psc019	Rock	3.05	14.8	477.6	3.0	59	0.3	9.4	14.4	515	2.48	1.0	25.1	3.3	81	<0.1	0.2	3.2	55	0.55	0.087
12psc020	Rock	2.50	18.2	271.5	1.8	67	0.1	8.0	14.1	495	2.72	0.8	13.3	3.3	87	<0.1	0.1	1.0	62	0.57	0.079
12psp021	Rock	1.07	0.8	3.6	7.0	24	<0.1	0.7	1.7	647	1.14	0.7	5.7	0.2	93	0.1	0.1	<0.1	9	2.00	0.082

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Project: GD-12
Report Date: June 18, 2012

CERTIFICATE OF ANALYSIS SMI12000020.2

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	3B	7AR
	Analyte	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Au	Cu
	Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppb	%
	MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	2	0.001
G1-SMI	Prep Blank	14	16	0.56	189	0.128	1	1.00	0.095	0.54	<0.1	<0.01	2.6	0.3	<0.05	5	<0.5	<0.2	<2	N.A.
G1-SMI	Prep Blank	15	11	0.57	196	0.132	1	0.99	0.098	0.55	<0.1	<0.01	2.6	0.3	<0.05	5	<0.5	<0.2	<2	N.A.
12psc001	Rock	10	9	1.13	49	0.085	2	1.55	0.081	0.09	1.2	<0.01	3.4	<0.1	1.49	11	10.1	1.1	37	1.765
12psc002	Rock	7	11	0.61	50	0.042	<1	0.96	0.088	0.12	0.4	<0.01	2.9	<0.1	0.28	7	0.6	<0.2	57	N.A.
12psc003	Rock	8	12	0.70	59	0.062	<1	0.87	0.074	0.14	0.5	<0.01	2.8	<0.1	0.34	7	1.3	<0.2	87	N.A.
12psc004	Rock	12	44	0.62	57	0.019	1	0.84	0.095	0.12	0.2	<0.01	3.2	<0.1	0.12	7	<0.5	<0.2	22	N.A.
12psc005	Rock	8	12	0.95	96	0.101	1	1.01	0.070	0.17	0.6	<0.01	3.8	<0.1	0.27	9	1.3	0.4	5	N.A.
12psc006	Rock	7	10	0.83	50	0.065	1	0.95	0.093	0.11	0.6	<0.01	3.4	<0.1	1.26	8	1.2	0.3	13	N.A.
12psc007	Rock	5	16	0.62	76	0.075	2	0.97	0.081	0.19	1.1	<0.01	3.5	<0.1	0.13	7	<0.5	<0.2	<2	N.A.
12psc008	Rock	5	22	0.79	72	0.115	<1	0.98	0.100	0.15	2.1	<0.01	4.5	<0.1	0.20	8	0.9	0.2	7	N.A.
12psc009	Rock	11	12	0.57	35	0.008	<1	0.59	0.082	0.08	0.5	<0.01	3.1	<0.1	<0.05	6	<0.5	<0.2	<2	N.A.
12psc010	Rock	11	18	1.18	35	0.020	1	1.28	0.100	0.15	0.3	<0.01	4.4	<0.1	<0.05	12	<0.5	<0.2	<2	N.A.
12psc011	Rock	7	10	0.65	39	0.029	<1	0.85	0.081	0.07	6.9	<0.01	2.6	<0.1	1.16	7	1.2	0.3	12	N.A.
12psc012	Rock	8	10	0.80	41	0.028	2	1.01	0.079	0.07	3.5	<0.01	2.8	<0.1	1.68	8	1.6	0.4	6	N.A.
12psc013	Rock	9	26	1.16	125	0.078	<1	1.36	0.079	0.13	0.2	<0.01	5.4	<0.1	0.06	8	<0.5	<0.2	25	N.A.
12psc014	Rock	16	10	0.60	197	0.144	<1	1.08	0.100	0.56	0.1	<0.01	2.9	0.3	<0.05	5	<0.5	<0.2	<2	N.A.
12psc015	Rock	10	27	1.02	61	0.052	<1	1.25	0.082	0.09	0.2	<0.01	4.4	<0.1	0.22	7	0.6	<0.2	28	N.A.
12psc016 (STD)	Rock	4	123	0.39	51	0.040	<1	0.86	0.085	0.03	2.3	1.42	1.4	0.7	1.55	6	12.5	33.2	3479	0.039
12psc017	Rock	13	34	1.14	44	0.055	<1	1.41	0.064	0.11	0.2	<0.01	5.3	<0.1	0.14	8	1.0	<0.2	106	N.A.
12psc018	Rock	9	34	1.25	35	0.053	<1	1.45	0.078	0.08	0.5	<0.01	4.7	<0.1	0.34	8	0.9	0.3	19	N.A.
12psc019	Rock	8	26	1.24	52	0.099	<1	1.44	0.069	0.09	1.2	<0.01	4.5	<0.1	<0.05	9	<0.5	0.4	34	N.A.
12psc020	Rock	9	24	1.33	53	0.093	<1	1.72	0.072	0.11	0.8	<0.01	5.7	<0.1	<0.05	9	<0.5	<0.2	9	N.A.
12psp021	Rock	3	8	0.23	78	0.072	<1	0.60	0.011	0.11	0.1	<0.01	2.1	<0.1	<0.05	3	<0.5	<0.2	<2	N.A.

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 18, 2012

QUALITY CONTROL REPORT SMI12000020.2

	Method	WGHT	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
	Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
	MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																					
12psc002	Rock	2.40	7.2	2002	2.9	16	0.8	4.9	12.7	175	1.93	0.7	62.4	2.3	27	<0.1	0.1	0.3	36	0.27	0.067
REP 12psc002	QC																				
12psc012	Rock	3.26	919.4	870.4	6.6	23	0.8	6.1	16.8	178	3.50	9.2	7.6	1.8	37	<0.1	0.5	2.9	50	0.41	0.107
REP 12psc012	QC		923.3	870.3	6.5	23	0.8	6.2	16.6	181	3.47	9.3	9.9	1.8	39	<0.1	0.4	3.0	50	0.42	0.106
12psc016 (STD)	Rock	<0.01	6.4	398.9	171.5	62	44.6	31.4	10.6	130	3.90	492.1	4329	0.7	34	0.6	121.3	29.3	18	0.26	0.024
REP 12psc016 (STD)	QC																				
Core Reject Duplicates																					
12psc011	Rock	2.93	532.2	305.1	5.6	18	0.7	4.9	8.7	150	3.36	5.1	4.7	2.0	37	<0.1	0.4	2.4	48	0.62	0.107
DUP 12psc011	QC	<0.01	512.5	299.5	5.5	17	0.6	4.4	7.9	152	3.16	4.7	4.4	2.1	38	<0.1	0.4	2.3	49	0.63	0.106
Reference Materials																					
STD DS8	Standard		14.6	118.2	133.8	339	1.9	42.2	8.4	659	2.63	27.6	122.4	7.7	72	2.5	5.7	7.1	44	0.77	0.087
STD DS9	Standard		14.0	115.3	135.9	329	1.9	42.4	8.1	617	2.46	27.3	127.9	7.2	76	2.5	5.8	7.3	42	0.78	0.088
STD GC-7	Standard																				
STD GC-7	Standard																				
STD OXC88	Standard																				
STD OXG99	Standard																				
STD OXC88 Expected																					
STD OXG99 Expected																					
STD DS9 Expected			12.84	108	126	317	1.83	40.3	7.6	575	2.33	25.5	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819
STD DS8 Expected			13.44	110	123	312	1.69	38.1	7.5	615	2.46	26	107	6.89	67.7	2.38	5.7	6.67	41.1	0.7	0.08
STD GC-7 Expected																					
BLK	Blank																				
BLK	Blank																				
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank																				
Prep Wash																					
G1-SMI	Prep Blank	<0.01	<0.1	2.6	3.3	51	<0.1	3.7	4.5	601	2.05	1.2	3.8	6.5	66	<0.1	<0.1	0.1	40	0.54	0.084
G1-SMI	Prep Blank	<0.01	0.1	2.6	3.3	49	<0.1	3.5	4.3	594	2.07	<0.5	2.8	6.7	67	<0.1	<0.1	<0.1	41	0.56	0.087

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 18, 2012

QUALITY CONTROL REPORT SMI12000020.2

Method		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	3B	7AR
Analyte		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Au	Cu
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppb	%
MDL		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	2	0.001
Pulp Duplicates																				
12psc002	Rock	7	11	0.61	50	0.042	<1	0.96	0.088	0.12	0.4	<0.01	2.9	<0.1	0.28	7	0.6	<0.2	57	N.A.
REP 12psc002	QC																		73	
12psc012	Rock	8	10	0.80	41	0.028	2	1.01	0.079	0.07	3.5	<0.01	2.8	<0.1	1.68	8	1.6	0.4	6	N.A.
REP 12psc012	QC	8	10	0.80	41	0.029	1	1.02	0.082	0.07	3.4	<0.01	2.9	<0.1	1.68	8	1.5	0.4		
12psc016 (STD)	Rock	4	123	0.39	51	0.040	<1	0.86	0.085	0.03	2.3	1.42	1.4	0.7	1.55	6	12.5	33.2	3479	0.039
REP 12psc016 (STD)	QC																			0.036
Core Reject Duplicates																				
12psc011	Rock	7	10	0.65	39	0.029	<1	0.85	0.081	0.07	6.9	<0.01	2.6	<0.1	1.16	7	1.2	0.3	12	N.A.
DUP 12psc011	QC	7	10	0.66	42	0.031	<1	0.88	0.089	0.08	6.6	<0.01	2.9	<0.1	1.01	8	1.1	0.3	3	N.A.
Reference Materials																				
STD DS8	Standard	17	133	0.66	301	0.128	3	1.00	0.094	0.44	3.4	0.23	2.9	5.8	0.17	5	6.4	5.7		
STD DS9	Standard	15	131	0.66	318	0.123	3	1.04	0.088	0.41	3.3	0.21	2.7	5.7	0.17	5	6.4	5.5		
STD GC-7	Standard																			0.554
STD GC-7	Standard																			0.555
STD OXC88	Standard																		197	
STD OXG99	Standard																		900	
STD OXC88 Expected																			203	
STD OXG99 Expected																			932	
STD DS9 Expected		13.3	121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	0.2	2.5	5.3	0.1615	4.59	5.2	5.02		
STD DS8 Expected		14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	0.192	2.3	5.4	0.1679	4.7	5.23	5		
STD GC-7 Expected																				0.555
BLK	Blank																		<2	
BLK	Blank																		<2	
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank																			<0.001
Prep Wash																				
G1-SMI	Prep Blank	14	16	0.56	189	0.128	1	1.00	0.095	0.54	<0.1	<0.01	2.6	0.3	<0.05	5	<0.5	<0.2	<2	N.A.
G1-SMI	Prep Blank	15	11	0.57	196	0.132	1	0.99	0.098	0.55	<0.1	<0.01	2.6	0.3	<0.05	5	<0.5	<0.2	<2	N.A.

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Submitted By:	Temporary Email Distribution
Receiving Lab:	Canada-Smithers
Received:	June 15, 2012
Report Date:	June 19, 2012
Page:	1 of 2

CERTIFICATE OF ANALYSIS SMI12000020R.1

CLIENT JOB INFORMATION

Project:	GD-12
Shipment ID:	
P.O. Number	12327
Number of Samples:	2

SAMPLE DISPOSAL

DISP-PLP	Dispose of Pulp After 90 days
DISP-RJT	Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
3B01	2	Fire assay fusion Au by ICP-ES	30	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Rio Minerals Ltd.
910 - 475 Howe Street
Vancouver BC V6C 2B3
Canada

CC:

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 19, 2012

CERTIFICATE OF ANALYSIS SMI12000020R.1

	Method	**3B**
	Analyte	**Au**
	Unit	**ppb**
	MDL	**2**
12PSC001	Rock	38
12PSC016 (STD)	Rock	3965

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 19, 2012

QUALITY CONTROL REPORT SMI12000020R.1

	Method	**3B**
	Analyte	**Au**
	Unit	**ppb**
	MDL	**2**
Reference Materials		
STD OXC88	Standard	203
STD OXG99	Standard	961
STD OXC88 Expected		203
STD OXG99 Expected		932
BLK	Blank	<2
BLK	Blank	<2

Appendix 3

2012 Soil Data

Name	Easting _NAD8	Northing_ NAD83	Soil_Ho rizon	Mo_ ppm	Mo_ ppm	Cu_ ppm	Cu_ ppm	Pb_ ppm	Zn_ ppm	Ag_ ppm	Ni_p pm	Co_ ppm	Mn_ ppm	Fe_ pct	As_ ppm	U_p pm	Au_ ppb	Au_ ppb	Th_ ppm	Sr_ ppm	Cd_ ppm	Sb_ ppm	Bi_p pm	V_p pm	Ca_ pct	P_p ct	La_ ppm	Cr_ ppm	Mg_ pct	Ba_ ppm	Ti_p ct	B_p pm	Al_p ct	Na_ pct	K_p ct	W_p pm	Hg_ ppm	Sc_ ppm	Tl_p pm	S_p ct	Ga_ ppm	Se_ ppm	Te_ ppm
69700N 80800E	680800	6069700	Normal	0.7		18		7.4	44	0.1	13	7.9	287	2.6	12	0.4	1.1		1.2	25	0.1	1.1	0.1	50	0.2	0	7	16	0.3	116	0	2	1.1	0	0	0.1	0	3.3	0.1	0.1	3	0.3	0.1
69700N 80825E	680825	6069700	Normal	0.8		9.8		7.6	52	0.1	15	8.3	604	2.9	9.3	0.3	2.3		1	25	0.2	0.9	0.1	46	0.2	0.1	6	15	0.3	163	0	2	1.2	0	0.1	0.1	0	3.4	0.1	0.1	3	0.3	0.1
69700N 80850E	680850	6069700	Normal	0.9		17		7	62	0.1	12	7.5	385	2.7	9	0.3	2.3		0.9	22	0.2	0.9	0.1	50	0.2	0.1	6	13	0.3	149	0	2	1	0	0.1	0.1	0	2.9	0.1	0	3	0.6	0.1
69700N 80875E	680875	6069700	Normal	0.8		21		7.2	63	0.1	17	8.3	403	2.9	12	0.4	0.8		1	20	0.2	1.1	0.1	52	0.2	0.1	6	15	0.3	134	0	2	1.1	0	0.1	0.1	0	3.3	0.1	0	3	0.3	0.1
69700N 80900E	680900	6069700	Normal	0.8		18		7.6	61	0.1	14	8.2	431	2.9	14	0.4	1.6		1.1	25	0.2	1.1	0.1	48	0.3	0.1	6	13	0.3	107	0	1	0.9	0	0.1	0.1	0	3.6	0.1	0	3	0.3	0.1
69700N 80925E	680925	6069700	Normal	1.1		33		7.7	68	0.1	16	9.4	536	3.1	13	0.4	2.8		1.2	28	0.2	1.1	0.1	51	0.3	0.1	7	15	0.3	141	0	1	1.1	0	0.1	0.1	0	4.1	0.1	0	3	0.3	0.1
69700N 80950E	680950	6069700	Normal	1.5		21		7.2	68	0.1	15	9.6	1183	2.8	10	0.6	1.5		0.9	49	0.2	0.7	0.1	49	0.5	0.1	7	16	0.5	148	0	4	1.1	0	0	0.1	0.1	3.4	0.1	0	3	0.3	0.1
69700N 80975E	680975	6069700	Normal	1.1		21		7.4	76	0.1	15	9.5	750	2.9	11	0.7	9		1	36	0.4	0.9	0.1	57	0.4	0.1	9	17	0.4	159	0	2	1.1	0	0	0.1	0.1	4	0.1	0	4	0.3	0.1
69700N 81000E	681000	6069700	Normal	0.9		16		7	69	0.1	14	9.3	1155	2.9	9.2	0.6	2		1.1	38	0.2	0.7	0.1	55	0.5	0.1	8	19	0.5	167	0	3	1.1	0	0	0.1	0	3.6	0.1	0	4	0.6	0.1
69700N 81025E	681025	6069700	Normal	1		18		7.1	67	0.1	14	9.2	779	2.6	9	0.7	1.2		1	39	0.2	0.7	0.1	53	0.5	0.1	8	19	0.4	158	0	2	1.1	0	0	0.1	0.1	4.1	0.1	0	4	0.5	0.1
69700N 81050E	681050	6069700	Normal	0.9		21		7.9	62	0.1	14	7.9	526	3	12	0.4	1.4		1.2	31	0.1	1.1	0.1	57	0.4	0.1	7	15	0.4	148	0	2	1	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
69700N 81075E	681075	6069700	Normal	0.8		18		7.2	83	0.1	15	8.7	380	3	12	0.4	2		1.2	15	0.1	1	0.1	57	0.2	0.2	6	15	0.3	131	0	2	1.5	0	0	0.1	0	3.3	0.1	0	4	0.6	0.1
69700N 81100E	681100	6069700	Normal	1.6		24		7.1	59	0.1	16	8.9	441	2.9	12	0.4	1.6		1.4	31	0.2	1	0.1	47	0.3	0.1	9	14	0.3	145	0	2	1.1	0	0	0.1	0.1	4.7	0.1	0	3	0.7	0.1
69700N 81125E	681125	6069700	Normal	1		17		6.2	46	0.1	11	6.4	402	2.5	8.4	0.4	1.7		1	25	0.1	0.8	0.1	50	0.3	0	6	13	0.3	235	0	1	1.2	0	0	0.1	0	3.5	0.1	0	4	0.5	0.1
69700N 81150E	681150	6069700	Normal	1.2		13		8.3	60	0.1	12	8.7	601	3.2	13	0.3	1.2		0.8	17	0.2	1	0.1	68	0.2	0	5	16	0.3	135	0	2	1.2	0	0.1	0.1	0	2.6	0.1	0	4	0.3	0.1
69700N 81175E	681175	6069700	Normal	1.2		21		7	53	0.1	13	7.5	466	3	12	0.4	2.3		1	26	0.1	1.1	0.1	58	0.3	0.1	7	15	0.3	140	0.1	0.5	1.1	0	0	0.1	0	4	0.1	0	3	0.6	0.1
69700N 81200E	681200	6069700	Normal	0.9		22		7.9	63	0.1	16	9.1	272	3.1	13	0.3	14		1	16	0.1	1.1	0.1	60	0.2	0.1	5	15	0.3	137	0	2	1.5	0	0	0.1	0	2.7	0.1	0	4	0.5	0.1
69700N 81225E	681225	6069700	Normal	0.6		24		7.1	61	0.1	16	8.1	366	2.9	12	0.4	1.6		1	15	0.1	1	0.1	57	0.2	0.1	5	15	0.3	122	0	2	1.4	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
69700N 81250E	681250	6069700	Normal	0.8		12		8.8	53	0.1	8.8	5.3	281	2.6	9.4	0.3	1		0.9	19	0.1	0.7	0.1	53	0.2	0.1	5	13	0.2	110	0	2	1.1	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
69700N 81275E	681275	6069700	Normal	0.7		22		7.1	52	0.1	15	8	290	2.8	12	0.3	0.8		0.9	14	0.1	1	0.1	60	0.1	0.1	5	14	0.3	132	0	1	1.6	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69700N 81300E	681300	6069700	Normal	0.9		14		7.5	51	0.1	9.4	6.3	517	2.7	8.9	0.3	1.1		0.8	14	0.1	1	0.1	57	0.1	0.1	5	13	0.2	143	0	2	1.1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69700N 81325E	681325	6069700	Normal	0.7		23		7.2	69	0.1	14	8.2	228	2.9	11	0.4	0.8		1.1	14	0.2	0.9	0.1	59	0.1	0.1	6	15	0.3	151	0	2	1.5	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69700N 81350E	681350	6069700	Normal	0.8		16		7.2	69	0.1	13	7.7	256	2.7	9.5	0.3	1.2		1.3	14	0.1	0.8	0.1	51	0.1	0.1	6	15	0.3	128	0	0.5	1.6	0	0	0.1	0	2.6	0.1	0	5	0.3	0.1
69700N 81375E	681375	6069700	Normal	0.8		26		6.9	56	0.1	14	7	334	2.8	11	0.4	2.3		1	15	0.1	1	0.1	55	0.2	0.1	5	14	0.3	113	0	1	1.4	0	0	0.1	0.1	3.1	0.1	0	4	0.3	0.1
69700N 81400E	681400	6069700	Normal	0.7		18		6.8	63	0.1	12	7.2	262	2.7	10	0.4	0.3		1	16	0.1	0.9	0.1	58	0.2	0.1	5	14	0.3	151	0	2	1.3	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
69700N 81425E	681425	6069700	Normal	1		7.4		5.9	33	0.1	6.2	3.3	137	1.9	6.9	0.2	0.3		0.6	13	0.1	0.6	0.1	51	0.1	0	4	10	0.2	84	0	1	0.8	0	0	0.1	0	1.5	0.1	0	4	0.3	0.1
69700N 81450E	681450	6069700	Normal	1		18		7.7	66	0.1	13	7.5	321	3	11	0.4	1.7		1.2	15	0.1	1	0.1	62	0.2	0.1	6	16	0.3	147	0	2	1.4	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
69700N 81475E	681475	6069700	Normal	0.8		14		6.8	66	0.1	13	6.9	208	2.7	11	0.3	0.7		0.8	15	0.2	1	0.1	58	0.1	0.1	4	13	0.3	110	0	2	1.2	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
69700N 81500E	681500	6069700	Normal	0.4		19		8.8	45	0.1	10	4.8	173	1.7	4.1	0.4	0.8		0.6	39	0.1	0.5	0.1	43	0.5	0	7	13	0.3	290	0	2	1.5	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
69700N 81525E	681525	6069700	Normal	0.8		14		7.7	75	0.1	11	6.8	331	2.6	8.4	0.3	0.7		1.1	14	0.2	0.8	0.1	54	0.2	0.2	5	13	0.2	123	0	2	1.2	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
69700N 81550E	681550	6069700	Normal	0.9		15		7	52	0.1	10	6.8	329	2.7	9.2	0.4	1.3		0.9	20	0.1	0.8	0.1	57	0.2	0.1	5	13	0.2	119	0	1	1.2	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
69750N 80800E	680800	6069750	Normal	0.8		15		8.4	98	0.1	13	8.2	687	2.9	10	0.3	3.8		0.9	18	0.2	0.9	0.1	58	0.2	0.2	5	14	0.3	126	0	1	1.3	0	0	0.1	0	2.7	0.1	0	4	0.5	0.1
69750N 80825E	680825	6069750	Normal	0.9		17		7.9	76	0.1	14	7.5	383	2.8	11	0.3	0.9		0.9	14	0.1	0.9	0.1	59	0.1	0.1	5	14	0.2	109	0	1	1.2	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
69750N 80850E	680850	6069750	Normal	0.8		17		7.2	63	0.1	14	7.3	295	2.6	9	0.4	8.8		1.1	20	0.1	0.9	0.1	53	0.2	0.1	5	15	0.3	190	0	1	1.3	0	0.1	0.1	0	3.1	0.1	0	4	0.3	0.1
69750N 80875E	680875	6069750	Normal	0.7		20		7.6	56	0.1	14	7.2	231	2.8	10	0.4	0.3		1.2	22	0.1	1	0.1	57	0.2	0.1	7	15	0.3	178	0	1	1.3	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1
69750N 80900E	680900	6069750	Normal	0.8		31		8.4	59	0.1	18	9.4	484	3.1	13	0.5	18		1.6	33	0.1	1.1	0.1	56	0.3	0	11	16	0.4	183	0.1	1	1.1	0	0.1	0.1	0.1	5.3	0.1	0	4	0.3	0.1
69750N 80925E	680925	6069750	Normal	1.3		17		7.6	66	0.1	16	8.8	548	3	12	0.3	0.3		0.8	21	0.2	0.8	0.1	52	0.3	0.1	5	15	0.3	125	0	2	1.2	0	0.1	0.1	0	3.1	0.1	0	4	0.3	0.1
69750N 80950E	680950	6069750	Normal	1		22		7.3	69	0.1	15	9	505	2.9	11	0.3	0.8		1	21	0.2	0.9	0.1	53	0.2	0.1	5	15	0.3	137	0	2	1.1	0	0	0.1	0	3.3	0.1	0	3	0.3	0.1
69750N 80975E	680975	6069750	Normal	1.4		23		8.2	86	0.1	13	9.5	839	2.9	11	0.3	0.3		0.8	22	0.4	0.8	0.1	54	0.3	0.1	5	15	0.3	171	0	2	1	0	0.1	0.1	0	2.9	0.1	0	4	0.3	0.1
69750N 81000E	681000	6069750	Normal	1.1		22		8.5	73	0.1	18	10	775	2.9	12	0.7	0.7		1.1	37	0.3	0.8	0.1	50	0.4	0.1	9	18	0.4	170	0	2	1.1	0	0	0.1	0.1	4.2	0.1	0	4	0.3	0.1
69750N 81025E	681025	6069750	Normal	1.3		21		7.9	76	0.1	17	11	946	2.9	11	0.7	14		1	40	0.4	0.8	0.1	52	0.5	0.1	8	19	0.4	180	0	2	1.1	0	0	0.1	0.1	3.9	0.1	0	4	0.3	0.1
69750N 81050E	681050	6069750	Normal	1.4		20		8	78	0.1	16	11	1317	2.9	12	0.7	2.8		1	36	0.3	0.7	0.1	56	0.4	0.1	8	20	0.4	171	0	2	1.1	0	0.1	0.1	0.1	4	0.1	0	3	0.3	0.1
69750N 81075E	681075	6069750	Normal	1.4		19		7.5	74	0.1	15	10	745	2.9	11	0.6	0.7		0.9	35	0.2	0.8	0.1	56	0.4	0.1	8	19	0.4	151	0	2	1.1	0	0	0.1	0.1	3.8	0.1	0	3	0.3	0.1
69750N 81100E	681100	6069750	Normal	1.2		27		7.4	57	0.1	16	8.3	449	2.9	12	0.4	1.1		1.3	30	0.1	1	0.1	54	0.4	0.1	8	16	0.3	163	0	2	1.1	0	0	0.1	0.1	4.4	0.1	0	3	0.3	0.1
69750N 81125E	681125	6069750	Normal	1.1		24		7.5	53	0.1	16	7.9	392	3	12	0.4	1.2		1.2	33	0.1	0.9	0.1	57	0.4	0.1	7	17	0.3	202	0	1	1.2	0	0	0.1	0.1	4.4	0.1	0	4	0.3	0.1
69750N 81150E	681150	6069750	Normal	0.8		27		7.5	54	0.1	17	7.9	439	3	13	0.4	0.8		1.3	30	0.2	1	0.1	53	0.4	0.1	10	16	0.3	168	0	2	1	0	0	0.1	0.1	4.9	0.1	0	3	0.3	0.2
69750N 81175E	681175	6069750	Normal	0.8		12		7.5	54	0.1	14	7.6	206	3	10	0.3	0.3		1	16	0.1	0.8	0.1	60	0.2	0.1	5	16	0.3	163	0	1	1.4	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
69750N 81200E	681200	6069750	Normal	0.7		19		9.3	60	0.2	11	7.8	438	2.7	9.3	0.3	3		0.8	14	0.1	0.9	0.1	58	0.1	0.1	4	15	0.2	103	0	2	1.1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69750N 81225E	681225	6069750	Normal	0.9		15		7.1	67	0.1	18	9.9	459	3	13	0.3	0.3		1.1	15	0.1	1	0.1	54	0.2	0.1	5	15	0.3	75	0	2	1.3	0	0	0.1	0	2.9	0.1	0	3	0.3	0.1
69750N 81250E	681250	6069750	Normal	0.8		33		6.7	65	0.1	15	8	288	2.9	12	0.3	1.3		1	14	0.1	0.9	0.1	55	0.2	0.1	5	15	0.3	126	0	2	1.5	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
69750N 81275E	681275	6069750	Normal	0.9		9.3		7.3	55	0.1	7.1	6.1	885	2.4	6.5	0.2	0.3		0.7	13	0.1	0.6	0.1	49	0.1	0.1	4	12	0.1	107	0	2	1	0	0	0.1	0	1.6	0.1	0	4	0.3	0.1
69750N 81300E	681300	6069750	Normal	0.7		12		6.5	70	0.1	12	6.8	398	2.5	7.8	0.3	0.3		0.7	13	0.2	0.7	0.1	53	0.1	0.1	4	14	0.2	162	0	1	1.3	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
69750N 81325E	681325	6069750	Normal	0.7		12		7.1	53	0.1	9.7	6.5	442	2.5	7.7	0.3	0.3		0.8	12	0.1	0.7	0.1	52	0.1	0.1	4	13	0.2	104	0	1	1.1	0	0	0.1	0	2	0.1	0	4	0.3	0.1
69750N 81350E	681350	6069750	Normal	0.9		15		7.6	72	0.1	12	7.6	855	2.8	11	0.3	0.3		0.7	17	0.1	0.8	0.1	55	0.2	0.1	5	15	0.2	129	0	1	1.3	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
69750N 81375E	681375	6069750	Normal	0.8		13		7.1	49	0.1	9.2	5.7	568	2.4	8	0.3	1.5		0.6	19	0.2	0.7	0.1	49	0.2	0.1	5	13	0.2	138	0	1	1.1	0	0	0.1	0	2.1	0.1	0	4	0.3	0.1
69750N 81400E	681400	6069750	Normal	0.8		14		6.9	56	0.1	14	7.3	320	2.8	11	0.3	0.3		0.9	17	0.1	0.8	0.1	53	0.2	0.1	4	14	0.3	146	0	2	1.3	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1

2012 Soil Data

Name	Easting_NAD8	Northing_NAD83	Soil_Horizon	Mo_ppm	Mo_ppm	Cu_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm	Au_ppb	Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Te_ppm
69750N 81425E	681425	6069750	Normal	0.4		16		7.1	54	0.1	10	5.6	194	1.6	3.8	0.3	0.3		0.7	23	0.1	0.5	0.1	41	0.2	0	5	13	0.2	197	0	2	1.2	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
69750N 81450E	681450	6069750	Normal	0.6		14		7.9	31	0.1	14	5.6	132	1.5	5.2	0.3	1.2		0.8	13	0.1	0.7	0.1	42	0.1	0	5	15	0.3	133	0	3	1.9	0	0	0.1	0.1	2.8	0.1	0	5	0.3	0.1
69750N 81475E	681475	6069750	Normal	0.9		11		7	70	0.1	11	7	263	2.5	8	0.3	0.9		1	14	0.1	0.7	0.1	52	0.1	0.1	5	14	0.2	123	0	2	1.4	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69750N 81500E	681500	6069750	Normal	0.8		14		7.4	67	0.1	12	7.3	392	2.7	10	0.3	0.3		0.9	14	0.1	0.8	0.1	56	0.1	0.1	5	14	0.2	141	0	1	1.3	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
69750N 81525E	681525	6069750	Normal	0.9		16		7.1	69	0.1	14	8.3	249	2.8	11	0.3	1.6		1.1	13	0.1	0.8	0.1	57	0.1	0.1	5	16	0.3	110	0	2	1.5	0	0	0.2	0	2.8	0.1	0	4	0.3	0.1
69750N 81550E	681550	6069750	Normal	0.6		8.2		4.7	33	0.2	7	3.7	138	1.4	3	0.2	0.3		0.4	16	0.1	0.3	0.1	35	0.1	0	4	10	0.2	113	0	2	1	0	0	0.1	0	1.7	0.1	0	4	0.3	0.1
69800N 80800E	680800	6069800	Normal	1		28		8.5	80	0.1	17	9.1	446	3.2	13	0.4	0.7		1	15	0.2	1.1	0.1	62	0.2	0.1	5	16	0.3	118	0	2	1.5	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
69800N 80825E	680825	6069800	Normal	0.7		16		4.5	44	0.1	9.9	5.1	286	2	4.9	0.3	0.7		0.8	19	0.1	0.5	0.1	45	0.2	0	7	14	0.3	127	0	0.5	1.1	0	0	0.1	0	2.5	0.1	0	3	0.3	0.1
69800N 80850E	680850	6069800	Normal	1		35		10	59	0.1	15	8.8	382	3.1	14	0.4	5.7		1.2	16	0.2	1.1	0.1	59	0.2	0.1	5	17	0.3	118	0	2	1.3	0	0	0.1	0	3.5	0.1	0	4	0.3	0.1
69800N 80875E	680875	6069800	Normal	1		23		6.8	61	0.1	17	9.4	271	2.9	12	0.3	0.8		1	16	0.1	0.8	0.1	58	0.2	0.1	5	17	0.3	147	0	2	1.5	0	0	0.1	0	3	0.1	0	4	0.3	0.1
69800N 80900E	680900	6069800	Normal	0.9		25		7.7	63	0.1	13	8.2	419	2.8	12	0.3	2.6		1	23	0.2	1.1	0.1	59	0.3	0.1	7	14	0.3	123	0	2	1	0	0.1	0.1	0	3.7	0.1	0	3	0.3	0.1
69800N 80925E	680925	6069800	Normal	0.9		23		7.6	71	0.1	19	10	599	3.1	13	0.4	1.3		1.3	31	0.2	1.2	0.1	51	0.4	0.1	8	16	0.4	138	0	1	1	0	0.1	0.1	0	4.5	0.1	0	3	0.3	0.1
69800N 80950E	680950	6069800	Normal	1		14		7.2	59	0.1	11	8.1	544	2.7	9.1	0.3	0.3		0.8	16	0.2	0.9	0.1	56	0.2	0.1	5	15	0.2	110	0	2	1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
69800N 80975E	680975	6069800	Normal	1		23		7.2	59	0.1	14	8.8	453	2.8	11	0.3	1.4		0.9	18	0.2	1	0.1	58	0.2	0.1	6	17	0.3	114	0	3	1.1	0	0	0.1	0	3	0.1	0	4	0.3	0.1
69800N 81000E	681000	6069800	Normal	0.9		27		6.7	69	0.1	19	8.8	453	2.9	12	0.3	1		1.1	20	0.3	1	0.1	52	0.2	0.1	6	17	0.3	122	0	2	1.2	0	0	0.1	0	3.5	0.1	0	4	0.3	0.1
69800N 81025E	681025	6069800	Normal	1.1		21		7.4	110	0.1	14	8.9	672	2.8	11	0.3	0.8		1.1	18	0.3	0.9	0.1	56	0.2	0.1	6	16	0.3	149	0	2	1.2	0	0.1	0.1	0	3.1	0.1	0	4	0.3	0.1
69800N 81050E	681050	6069800	Normal	1.6		27		9.5	101	0.1	16	10	1020	3.3	13	0.6	0.3		1.1	34	0.3	0.8	0.1	57	0.3	0.1	8	21	0.4	240	0	2	1.4	0	0.1	0.1	0	4.2	0.1	0	4	0.3	0.4
69800N 81075E	681075	6069800	Normal	1.9		26		9.1	88	0.1	18	10	1204	3.1	12	0.6	30		1.1	40	0.3	0.8	0.1	53	0.5	0.1	9	19	0.4	262	0	2	1.2	0	0.1	0.1	0	4.5	0.1	0	4	0.3	0.1
69800N 81100E	681100	6069800	Normal	2.6		25		8.3	65	0.1	16	10	842	2.9	11	0.5	2.5		1	37	0.3	0.8	0.1	50	0.4	0.1	8	17	0.4	184	0	2	1.1	0	0	0.1	0.1	3.9	0.1	0	4	0.3	0.1
69800N 81125E	681125	6069800	Normal	1.3		25		8	65	0.1	18	10	909	3	16	0.4	1.9		1.4	44	0.2	1	0.1	49	0.8	0.1	9	17	0.4	215	0	2	1	0	0	0.1	0.1	4.9	0.1	0	3	0.3	0.1
69800N 81150E	681150	6069800	Normal	1.1		15		6.4	53	0.1	13	7.6	432	2.6	8.6	0.3	0.8		0.9	14	0.2	0.8	0.1	53	0.2	0	5	14	0.3	137	0	2	1.1	0	0.1	0.1	0	2.7	0.1	0	4	0.3	0.1
69800N 81175E	681175	6069800	Normal	0.7		20		7.6	61	0.1	14	8.5	516	2.8	11	0.3	0.9		1	25	0.2	1	0.1	53	0.3	0.1	7	15	0.3	143	0	2	1	0	0	0.1	0	3.6	0.1	0	3	0.3	0.1
69800N 81200E	681200	6069800	Normal	0.7		11		6.7	55	0.1	11	7	287	2.4	6.7	0.3	0.3		0.8	15	0.2	0.7	0.1	52	0.2	0.1	5	14	0.2	189	0	2	1.1	0	0	0.1	0	2.2	0.1	0	4	0.3	0.1
69800N 81225E	681225	6069800	Normal	0.9		15		7.1	68	0.1	13	7.8	353	2.7	8.6	0.3	0.3		0.8	15	0.2	0.7	0.1	56	0.2	0.1	5	15	0.2	116	0	2	1.4	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
69800N 81250E	681250	6069800	Normal	0.9		17		7	60	0.1	14	9.1	564	2.7	11	0.3	0.3		0.7	16	0.1	0.9	0.1	56	0.2	0.1	4	15	0.3	111	0	1	1.3	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69800N 81275E	681275	6069800	Normal	1.1		30		7.2	72	0.1	14	8.4	430	2.9	11	0.3	0.9		0.9	15	0.1	0.9	0.1	60	0.2	0.1	5	16	0.3	115	0	2	1.5	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
69800N 81300E	681300	6069800	Normal	0.8		19		7.8	59	0.1	13	7.6	335	2.7	11	0.3	2.2		1	13	0.1	0.9	0.1	55	0.2	0.1	5	16	0.3	104	0	2	1.4	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
69800N 81325E	681325	6069800	Normal	1		21		6.5	59	0.1	16	9	280	3	12	0.3	0.3		1	13	0.1	0.9	0.1	57	0.1	0.1	5	16	0.3	148	0	2	1.5	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
69800N 81350E	681350	6069800	Normal	1		14		6.3	45	0.1	11	6.3	326	2.4	8.9	0.3	5.4		0.7	23	0.1	0.9	0.1	50	0.2	0.1	4	13	0.2	121	0	1	1.1	0	0	0.1	0	2.2	0.1	0	3	0.3	0.1
69800N 81375E	681375	6069800	Normal	0.8		14		7	50	0.1	10	6.8	382	2.5	8.1	0.3	1.2		0.8	17	0.1	0.8	0.1	55	0.2	0.1	5	15	0.2	135	0	2	1.1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
69800N 81400E	681400	6069800	Normal	0.9		19		6.5	55	0.1	12	5.8	189	2.6	9.5	0.3	0.7		0.7	14	0.1	0.7	0.1	58	0.1	0.1	4	16	0.3	112	0	2	1.4	0	0	0.1	0.1	2.6	0.1	0	5	0.3	0.1
69800N 81425E	681425	6069800	Normal	0.5		15		5.3	36	0.1	9.8	4.5	117	1.6	4	0.2	1.9		0.6	13	0.1	0.4	0.1	38	0.1	0	5	13	0.2	115	0	2	1.2	0	0	0.1	0	2.1	0.1	0	4	0.3	0.1
69800N 81450E	681450	6069800	Normal	0.8		13		7.4	60	0.1	11	6.9	333	2.7	9.9	0.3	2.6		0.8	20	0.2	0.8	0.1	58	0.2	0.1	5	14	0.2	120	0	2	1.2	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69800N 81475E	681475	6069800	Normal	1		15		7	74	0.1	12	7.8	346	2.8	10	0.3	0.3		1	16	0.1	0.8	0.1	59	0.2	0.1	6	15	0.2	123	0	2	1.4	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69800N 81500E	681500	6069800	Normal	1.4		25		7.8	86	0.3	13	14	1344	2.8	8.3	0.5	0.8		0.8	22	0.3	0.6	0.1	55	0.2	0.1	7	16	0.3	188	0	2	1.6	0	0	0.2	0.1	3.2	0.1	0	5	0.3	0.1
69800N 81525E	681525	6069800	Normal	0.9		24		6.8	56	0.1	13	7.6	594	2.6	9.1	0.3	0.3		0.5	26	0.2	0.9	0.1	55	0.4	0	7	15	0.3	173	0	2	1.2	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
69800N 81550E	681550	6069800	Normal	0.7		12		6.6	75	0.1	8.8	7.1	443	2.4	6.6	0.2	1.1		0.6	17	0.4	0.7	0.1	55	0.2	0.1	4	14	0.2	132	0	2	0.9	0	0	0.1	0	2.1	0.1	0	4	0.3	0.1
69850N 80800E	680800	6069850	Normal	0.9		22		6.5	74	0.2	15	8.5	283	2.9	11	0.3	1.7		1	15	0.1	0.8	0.1	61	0.2	0.1	5	17	0.3	149	0.1	2	1.6	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
69850N 80825E	680825	6069850	Normal	0.6		20		7.2	58	0.1	13	8.1	375	2.8	11	0.4	1.3		1.2	18	0.1	1	0.1	60	0.2	0.1	9	17	0.3	127	0.1	1	1.2	0	0	0.1	0	4	0.1	0	4	0.3	0.1
69850N 80850E	680850	6069850	Normal	0.9		18		6.7	51	0.1	13	7	476	2.5	8.5	0.3	1.7		0.9	20	0.1	0.8	0.1	54	0.2	0.1	6	15	0.3	136	0	2	1.2	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69850N 80875E	680875	6069850	Normal	1		21		7.2	59	0.1	18	8.9	360	3	12	0.3	3.3		1	19	0.1	1	0.1	59	0.2	0.1	5	17	0.3	155	0	2	1.4	0	0	0.1	0	3	0.1	0	4	0.3	0.1
69850N 80900E	680900	6069850	Normal	1.3		23		7.5	65	0.1	15	8.8	587	2.9	11	0.4	1.1		1	24	0.2	1.2	0.1	61	0.3	0.1	7	18	0.4	154	0.1	3	1.1	0	0.1	0.2	0	3.7	0.1	0	4	0.3	0.1
69850N 80925E	680925	6069850	Normal	1.1		21		8	62	0.1	15	9.1	602	2.8	11	0.4	0.7		1.1	24	0.3	1.1	0.1	60	0.3	0.1	7	18	0.4	101	0.1	3	1	0	0.1	0.1	0	3.6	0.1	0	3	0.3	0.3
69850N 80950E	680950	6069850	Normal	1.1		22		6.9	59	0.2	15	8.1	462	2.7	11	0.4	2.2		0.8	25	0.2	1	0.1	55	0.4	0.1	7	16	0.3	136	0	3	1.1	0	0.1	0.1	0	3.4	0.1	0	4	0.3	0.1
69850N 80975E	680975	6069850	Normal	1		25		8	70	0.1	15	9.4	515	3	13	0.4	0.9		1	25	0.2	1.1	0.1	62	0.3	0.1	8	19	0.4	141	0.1	2	1.3	0	0.1	0.1	0	3.9	0.1	0	4	0.3	0.1
69850N 81000E	681000	6069850	Normal	1		20		7	71	0.1	16	7.7	450	2.8	9.6	0.6	0.8		0.7	28	0.2	0.7	0.1	54	0.4	0.1	7	18	0.4	209	0	2	1.2	0	0.1	0.1	0	3.7	0.1	0	4	0.3	0.1
69850N 81025E	681025	6069850	Normal	1.2		18		7.6	79	0.1	15	9.7	617	3.1	11	0.5	1.1		1.2	28	0.1	0.8	0.1	62	0.3	0.1	7	21	0.4	150	0	2	1.3	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1
69850N 81050E	681050	6069850	Normal	1.5		19		8	86	0.1	16	11	677	3.2	12	0.4	18		1.2	27	0.2	1	0.1	65	0.3	0.1	7	20	0.4	145	0	2	1.3	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1
69850N 81075E	681075	6069850	Normal	2.2		28		8.6	85	0.1	17	11	1097	3.2	13	0.8	5.8		1.2	43	0.3	0.8	0.1	63	0.5	0.1	10	21	0.5	234	0	2	1.4	0	0.1	0.1	0.1	4.8	0.1	0	4	0.3	0.1
69850N 81100E	681100	6069850	Normal	1.2		24		7.8	63	0.1	17	9.5	673	2.9	12	0.4	2		1.1	35	0.2	1	0.1	57	0.5	0.1	9	17	0.4	163	0.1	2	1	0	0.1	0.1	0	4.4	0.1	0	3	0.3	0.1
69850N 81125E	681125	6069850	Normal	7.5		128		8.7	76	0.3	17	13	868	3.2	12	0.4	5.8		1.1	37	0.3	0.8	0.2	58	0.5	0.1	8	18	0.3	208	0	2	1.3	0	0.1	0.1	0	4.4	0.1	0	4	0.3	0.3
69850N 81150E	681150	6069850	Normal	1.7		21		6.2	53	0.1	15	7.7	355	2.6	9.6	0.5	2.6		1.2	34	0.1	0.8	0.1	54	0.5	0.1	9	16	0.3	172	0.1	2	1.1	0	0.1	0.1	0.1	4.5	0.1	0	3	0.3	0.1
69850N 81175E	681175	6069850	Normal	1.2		20		7.6	79	0.1	14	7.9	486	2.6	9.9	0.4	0.9		1.2	23	0.4	0.9	0.1	53	0.3	0.1	8	16	0.4	179	0	2	1.2	0	0.1	0.1	0	4.6	0.1	0	3	0.3	0.3
69850N 81200E	681200	6069850	Normal	0.9		16		7.6	54	0.1	12	8	528	2.7	11	0.3	0.3		0.9	23	0.2	1.1	0.1	57	0.3	0	5	14	0.3	124	0	2	1	0	0.1	0.1	0	3.4	0.1	0	4	0.3	0.1
69850N 81225E	681225	6069850	Normal	0.8		23		7.8	54	0.1	15	8.2	299	2.6	13	0.3	1.7		1	20	0.1	1.1	0.1	56	0.2	0.1	5	17	0.4	190	0	2	1.3	0	0	0.1	0.1	3.7	0.1	0	4	0.3	0.5
69850N 81250E	681250	6069850	Normal	0.9		18		7.2	69	0.1	14	8.6	365	2.6	11	0.3	0.3		0.9	16	0.1	1	0.1	55	0.1	0.1	5	14	0.3	143	0	2	1.3	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1

2012 Soil Data

Name	Easting _NAD8	Northing_ NAD83	Soil_Ho rizon	Mo_ ppm	Mo_ ppm	Cu_ ppm	Cu_ ppm	Pb_ ppm	Zn_ ppm	Ag_ ppm	Ni_p pm	Co_ ppm	Mn_ ppm	Fe_ pct	As_ ppm	U_p pm	Au_ ppb	Au_ ppb	Th_ ppm	Sr_ ppm	Cd_ ppm	Sb_ ppm	Bi_p pm	V_p pm	Ca_ pct	P_p ct	La_ ppm	Cr_ ppm	Mg_ pct	Ba_ ppm	Ti_p ct	B_p pm	Al_p ct	Na_ pct	K_p ct	W_p pm	Hg_ ppm	Sc_ ppm	Tl_p pm	S_p ct	Ga_ ppm	Se_ ppm	Te_ ppm
69850N 81275E	681275	6069850	Normal	0.7		26		6.9	54	0.1	14	7.2	509	2.3	8.5	0.3	0.3		0.9	18	0.1	0.8	0.1	49	0.2	0.1	6	14	0.3	119	0	1	1.2	0	0	0.1	0	2.9	0.1	0	3	0.3	0.1
69850N 81300E	681300	6069850	Normal	0.9		22		7.2	51	0.1	17	8.1	214	2.5	10	0.3	0.3		0.9	14	0.1	0.9	0.1	51	0.1	0.1	4	15	0.3	120	0	1	1.5	0	0	0.1	0	2.7	0.1	0	4	0.3	0.2
69850N 81325E	681325	6069850	Normal	0.9		17		7.5	49	0.1	11	6.5	497	2.5	8.6	0.3	0.3		0.7	19	0.1	0.9	0.1	55	0.1	0.1	5	13	0.2	124	0	1	1.1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69850N 81350E	681350	6069850	Normal	0.9		14		6.9	46	0.1	11	7.1	205	2.3	8.6	0.3	0.3		1	15	0.1	0.7	0.1	49	0.1	0.1	5	14	0.2	105	0	0.5	1.5	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69850N 81375E	681375	6069850	Normal	0.8		14		7.9	64	0.1	8.2	6.8	718	2.4	7.5	0.2	0.3		0.5	14	0.2	0.8	0.1	54	0.1	0.1	5	12	0.2	121	0	1	1	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
69850N 81400E	681400	6069850	Normal	0.7		9.7		7.4	52	0.2	6.3	3.3	150	1.7	4.1	0.3	0.8		0.6	18	0.1	0.6	0.1	44	0.1	0	4	11	0.2	108	0	0.5	1	0	0	0.1	0	2	0.1	0	5	0.3	0.1
69850N 81425E	681425	6069850	Normal	0.5		23		7.2	46	0.1	13	5.9	197	1.7	4.8	0.3	115		0.7	17	0.1	0.6	0.1	40	0.2	0	5	13	0.4	154	0	2	1.3	0	0	0.1	0	2.5	0.1	0	4	0.3	0.2
69850N 81450E	681450	6069850	Normal	0.8		21		6.2	41	0.1	13	7.5	259	2.3	9.1	0.3	0.3		1.1	18	0.1	0.9	0.1	52	0.2	0	5	15	0.4	114	0.1	1	1.2	0	0	0.1	0	3.2	0.1	0	4	0.3	0.2
69850N 81475E	681475	6069850	Normal	1		14		7.2	62	0.1	13	7.9	212	2.6	9.6	0.3	0.3		0.9	15	0.1	0.9	0.1	59	0.1	0.1	4	16	0.3	150	0	2	1.5	0	0	0.1	0	2.6	0.1	0	4	0.3	0.2
69850N 81500E	681500	6069850	Normal	1		18		6.2	63	0.2	14	6.2	296	2.6	9.3	0.3	0.3		0.8	16	0.1	0.7	0.1	55	0.2	0.1	5	15	0.3	98	0	1	1.6	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
69850N 81525E	681525	6069850	Normal	0.8		14		7.2	73	0.1	12	6.7	239	2.5	9.1	0.3	0.3		0.8	14	0.1	0.8	0.1	58	0.1	0.1	6	14	0.2	118	0	1	1.3	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
69850N 81550E	681550	6069850	Normal	1		23		10	54	0.1	16	8.4	350	2.8	11	0.3	0.3		0.9	18	0.1	1	0.1	57	0.2	0.1	4	15	0.3	146	0	2	1.3	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
69900N 80800E	680800	6069900	Normal	0.8		36		6.2	45	0.1	14	7	255	2.1	7.2	0.4	0.6		1	22	0.1	0.8	0.1	53	0.2	0	10	15	0.4	194	0.1	2	1.4	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1
69900N 80825E	680825	6069900	Normal	0.7		17		5.3	42	0.1	13	6.4	242	2.1	7.8	0.3	0.3		1	21	0.1	0.7	0.1	45	0.2	0	6	13	0.3	127	0	2	1.1	0	0	0.1	0	2.5	0.1	0	3	0.3	0.1
69900N 80850E	680850	6069900	Normal	1.1		18		8	58	0.1	14	8.7	314	3	12	0.3	0.3		1	14	0.1	1	0.1	66	0.1	0.1	5	17	0.3	108	0.1	2	1.5	0	0	0.1	0	3	0.1	0	4	0.3	0.4
69900N 80875E	680875	6069900	Normal	0.8		14		7.5	55	0.1	8.8	5.3	432	2	5	0.3	1		0.8	17	0.1	0.7	0.1	44	0.2	0	6	12	0.2	117	0	2	1	0	0	0.1	0	2.4	0.1	0	3	0.3	0.1
69900N 80900E	680900	6069900	Normal	1		23		7.3	62	0.2	15	8.9	360	2.8	11	0.3	0.3		0.9	17	0.1	1.1	0.1	60	0.2	0.1	4	16	0.3	142	0.1	2	1.3	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
69900N 80925E	680925	6069900	Normal	0.9		20		7.3	60	0.1	17	8.9	455	2.8	13	0.4	1.3		1.2	32	0.1	1	0.1	53	0.3	0.1	8	17	0.4	132	0.1	2	1.1	0	0.1	0.1	0	4.4	0.1	0	3	0.3	0.1
69900N 80950E	680950	6069900	Normal	1		22		7	56	0.1	16	8.6	373	2.9	12	0.4	2.5		1.3	33	0.1	1	0.1	54	0.3	0.1	9	17	0.4	132	0.1	2	1.1	0	0.1	0.1	0	4.8	0.1	0	3	0.3	0.1
69900N 80975E	680975	6069900	Normal	2.2		66		8.5	70	0.2	17	9.6	529	2.8	11	0.4	1.6		0.7	27	0.5	1	0.2	56	0.2	0.1	7	18	0.3	122	0	2	1.3	0	0.1	0.1	0	3.7	0.1	0	4	0.3	0.1
69900N 81000E	681000	6069900	Normal	2.1		26		8.9	77	0.1	17	10	1115	2.8	12	0.7	0.8		0.9	47	0.4	0.8	0.1	54	0.5	0.1	8	19	0.4	184	0	2	1.1	0	0.1	0.1	0	4.1	0.1	0	3	0.3	0.1
69900N 81025E	681025	6069900	Normal	1.8		20		7.3	68	0.1	15	8.1	390	2	6.8	0.6	0.3		0.9	47	0.4	0.6	0.1	46	0.6	0.1	7	17	0.4	150	0	2	1.1	0	0.1	0.1	0.1	3.9	0.1	0.1	3	0.3	0.1
69900N 81050E	681050	6069900	Normal	3.1		29		9.4	68	0.1	16	11	1046	3.1	13	0.8	0.6		1.1	56	0.2	0.8	0.1	58	0.5	0.1	9	21	0.5	205	0	2	1.4	0	0.1	0.1	0	4.7	0.1	0.1	4	0.3	0.1
69900N 81075E	681075	6069900	Normal	1.6		26		9.2	71	0.1	16	12	1104	3.1	13	0.8	0.3		1	45	0.3	0.8	0.1	57	0.4	0.1	9	20	0.5	209	0	2	1.3	0	0	0.1	0.1	4.7	0.1	0	4	0.3	0.1
69900N 81100E	681100	6069900	Normal	0.9		23		6.4	52	0.1	14	8.1	421	2.6	11	0.4	0.3		1	36	0.2	0.8	0.1	48	0.5	0.1	7	16	0.4	152	0.1	2	1	0	0.1	0.1	0	3.9	0.1	0.1	3	0.3	0.1
69900N 81125E	681125	6069900	Normal	1		22		7.8	63	0.1	15	10	575	2.9	12	0.4	1.6		1.3	33	0.2	1.1	0.1	58	0.4	0.1	9	18	0.4	132	0.1	2	1	0	0.1	0.1	0.1	4	0.1	0	3	0.3	0.2
69900N 81150E	681150	6069900	Normal	1		24		8.2	62	0.1	20	9.1	406	3	11	0.4	1.4		1.4	38	0.2	0.9	0.1	54	0.4	0.1	8	17	0.4	168	0.1	2	1.1	0	0.1	0.1	0.1	4.7	0.1	0	3	0.3	0.1
69900N 81175E	681175	6069900	Normal	1		28		7	51	0.1	15	8.3	367	2.8	12	0.4	0.3		1.2	25	0.1	1.2	0.1	59	0.3	0.1	8	17	0.4	125	0.1	2	1	0	0.1	0.1	0	4	0.1	0	3	0.3	0.1
69900N 81200E	681200	6069900	Normal	1		22		6.9	53	0.1	14	7.8	535	2.5	9.7	0.3	1.3		1	28	0.1	1	0.1	52	0.3	0.1	8	16	0.4	116	0.1	2	1	0	0.1	0.1	0	3.6	0.1	0	3	0.3	0.1
69900N 81225E	681225	6069900	Normal	0.7		26		7	53	0.1	12	7.2	435	2.5	10	0.4	0.3		1.1	22	0.2	1.1	0.1	56	0.2	0	6	16	0.3	145	0.1	0.5	1.1	0	0.1	0.1	0	3.3	0.1	0	3	0.3	0.1
69900N 81250E	681250	6069900	Normal	1		12		8.1	66	0.1	7.9	7.6	1374	2.4	6.8	0.3	0.3		0.4	28	0.3	0.8	0.1	55	0.3	0.1	5	12	0.2	151	0	2	0.9	0	0	0.1	0	1.9	0.1	0.1	4	0.3	0.1
69900N 81275E	681275	6069900	Normal	1		19		7.4	57	0.1	14	7.1	209	2.8	11	0.3	0.3		0.8	17	0.1	0.8	0.1	58	0.1	0.1	5	16	0.3	122	0	2	1.4	0	0	0.1	0	2.9	0.1	0	4	0.3	0.2
69900N 81300E	681300	6069900	Normal	0.6		26		5.3	41	0.1	12	5.9	210	2.4	8.3	0.3	1.3		1	19	0.1	0.7	0.1	51	0.2	0	8	16	0.3	136	0.1	1	1.1	0	0	0.1	0	3.7	0.1	0	3	0.3	0.1
69900N 81325E	681325	6069900	Normal	0.9		23		6.3	72	0.1	17	7.9	229	3	9.8	0.3	0.9		0.8	17	0.1	0.7	0.1	64	0.2	0.1	5	19	0.3	140	0	2	1.8	0	0	0.1	0	3.4	0.1	0	5	0.3	0.1
69900N 81350E	681350	6069900	Normal	0.9		22		5.9	58	0.1	16	7.5	203	2.7	9.2	0.3	1.3		1	14	0.1	0.6	0.1	56	0.2	0.1	5	17	0.3	135	0	1	1.6	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
69900N 81375E	681375	6069900	Normal	0.9		13		6.1	60	0.1	9.8	5.8	158	2.5	7.7	0.3	1.1		0.8	12	0.1	0.6	0.1	55	0.1	0.1	5	14	0.2	110	0	2	1.2	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
69900N 81400E	681400	6069900	Normal	0.7		18		6.1	57	0.1	11	7	277	2.5	8.6	0.3	0.3		0.9	13	0.1	0.7	0.1	52	0.2	0.1	6	15	0.3	118	0	2	1.2	0	0	0.1	0	3	0.1	0	3	0.3	0.1
69900N 81425E	681425	6069900	Normal	0.8		19		6.4	55	0.1	12	6.7	220	2.6	9.4	0.3	1.3		1.1	17	0.1	0.7	0.1	57	0.2	0.1	7	16	0.2	122	0	1	1.3	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
69900N 81450E	681450	6069900	Normal	0.7		24		6	65	0.1	15	6.7	310	2.6	8.7	0.4	1.2		0.9	18	0.1	0.7	0.1	54	0.2	0.1	9	18	0.3	160	0	2	1.5	0	0	0.1	0	4	0.1	0	4	0.3	0.1
69900N 81475E	681475	6069900	Normal	0.7		12		4.9	45	0.1	10	4.5	146	2	5.1	0.3	0.3		0.7	14	0.1	0.4	0.1	47	0.1	0.1	5	14	0.2	104	0	0.5	1.3	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
69900N 81500E	681500	6069900	Normal	0.8		19		5.6	58	0.1	13	6.1	339	2.4	7.1	0.3	1.6		0.9	20	0.1	0.6	0.1	54	0.2	0.1	7	16	0.3	164	0.1	3	1.4	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
69900N 81525E	681525	6069900	Normal	0.6		14		4.7	81	0.1	13	5.6	316	2.2	5.4	0.4	1.3		0.9	21	0.1	0.5	0.1	53	0.3	0.1	7	17	0.3	114	0.1	2	1.3	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
69900N 81550E	681550	6069900	Normal	0.7		17		7.4	87	0.1	12	8.3	499	3	11	0.3	0.6		0.9	19	0.2	0.7	0.1	61	0.2	0.2	6	16	0.2	166	0.1	2	1.3	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
69950N 80800E	680800	6069950	Normal	1		26		7.4	55	0.1	13	8.3	595	2.8	12	0.4	0.3		0.8	33	0.2	0.8	0.1	57	0.5	0.1	8	17	0.3	166	0.1	3	1.1	0	0.1	0.1	0	4.1	0.1	0	3	0.3	0.1
69950N 80825E	680825	6069950	Normal	1		28		7.2	59	0.1	14	8.5	686	2.9	11	0.4	48		0.7	30	0.2	0.9	0.1	61	0.4	0.1	8	18	0.3	171	0.1	2	1.2	0	0.1	0.1	0	3.7	0.1	0	3	0.3	0.1
69950N 80850E	680850	6069950	Normal	0.9		28		7.1	64	0.1	15	8.7	448	2.9	12	0.3	0.8		0.7	24	0.2	1	0.1	61	0.3	0.1	9	20	0.3	157	0.1	3	1.2	0	0.1	0.1	0	3.9	0.1	0	4	0.3	0.1
69950N 80875E	680875	6069950	Normal	0.7		25		6.8	65	0.1	19	9.5	546	2.9	11	0.4	1		1.3	33	0.2	0.8	0.1	53	0.4	0.1	9	18	0.3	154	0.1	2	1.1	0	0.1	0.1	0.1	4.8	0.1	0	3	0.3	0.1
69950N 80900E	680900	6069950	Normal	0.8		18		6.3	51	0.1	14	7.6	317	2.6	9.6	0.3	1.9		0.9	18	0.1	0.8	0.1	57	0.2	0.1	6	16	0.3	112	0.1	2	1.2	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
69950N 80925E	680925	6069950	Normal	0.7		13		5.7	59	0.1	12	6.6	361	2.5	6.9	0.2	0.7		0.7	16	0.1	0.6	0.1	60	0.2	0	5	15	0.2	161	0	0.5	1.2	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
69950N 80950E	680950	6069950	Normal	0.7		21		6.5	53	0.1	16	8.7	423	2.8	12	0.3	0.8		1	24	0.2	0.9	0.1	55	0.3	0.1	7	17	0.3	140	0	2	1.1	0	0.1	0.1	0	4.2	0.1	0	3	0.3	0.1
69950N 80975E	680975	6069950	Normal	0.9		24		6.8	60	0.1	18	8.4	451	2.9	11	0.4	1.3		1.2	30	0.1	0.8	0.1	55	0.4	0.1	8	18	0.3	142	0.1	2	1.2	0	0.1	0.1	0	4.8	0.1	0	3	0.3	0.1
69950N 81000E	681000	6069950	Normal	13		22		7.5	66	0.1	16	9.3	660	2.8	12	0.5	1.8		0.9	43	0.2	0.7	0.1	52	0.6	0.1	8	18	0.4	179	0	2	1.2	0	0.1	0.1	0.1	4.4	0.1	0	3	0.3	0.1
69950N 81025E	681025	6069950	Normal	1.5		23		6.2	67	0.1	16	9.7	789	2.9	10	0.5	121		1.1	36	0.2	0.6	0.1	56	0.5	0.1	8	18	0.4	156	0.1	3	1.1	0	0	0.1	0	4.2	0.1	0	4	0.3	0.1
69950N 81050E	681050	6069950	Normal	1.4		25		6.7	71	0.1	16	10	937	3	9.7	0.6	0.3		1	37	0.2	0.6	0.1	62	0.5	0.1	8	20	0.4	160	0.1	3	1.1	0	0	0.1	0	4	0.1	0	4	0.3	0.1
69950N 81075E	681075	6069950	Normal	0.8		20		6.3	62	0.1	18	9	624	2.8	9.6	0.3	0.3		1.1	31	0.2	0.7	0.1	48	0.5	0.1	8	14	0.4	149	0.1	2	1	0	0	0.1	0	4.2	0.1	0	3	0.3	0.1
69950N 81100E	681100	6069950	Normal	0.8		18		6.2	46	0.1	14	7.4	454	2.5	8.8	0.4	0.6		1	27	0.1	0.6	0.1	49	0.4	0.1	8	14	0.3	145	0.1	2	1.1	0	0	0.1	0	4.1	0.1	0	3	0.3	0.1

Name	Easting _NAD8	Northing_ NAD83	Soil_Ho rizon	Mo_ ppm	Mo_ ppm	Cu_ ppm	Cu_ ppm	Pb_ ppm	Zn_ ppm	Ag_ ppm	Ni_p pm	Co_ ppm	Mn_ ppm	Fe_ pct	As_ ppm	U_p pm	Au_ ppb	Au_ ppb	Th_ ppm	Sr_ ppm	Cd_ ppm	Sb_ ppm	Bi_p pm	V_p pm	Ca_ pct	P_p ct	La_ ppm	Cr_ ppm	Mg_ pct	Ba_ ppm	Ti_p ct	B_p pm	Al_p ct	Na_ pct	K_p ct	W_p pm	Hg_ ppm	Sc_ ppm	Tl_p pm	S_p ct	Ga_ ppm	Se_ ppm	Te_ ppm
69950N 81125E	681125	6069950	Normal	0.8		24		6.3	54	0.1	15	8.4	466	2.7	10	0.4	0.6		1.1	30	0.2	0.7	0.1	55	0.4	0.1	9	17	0.3	158	0.1	2	1	0	0.1	0.1	0.1	4.6	0.1	0	3	0.3	0.1
69950N 81150E	681150	6069950	Normal	0.9		24		7.1	57	0.1	15	8.5	541	2.9	11	0.4	1.7		1.2	25	0.2	0.9	0.1	56	0.4	0.1	8	16	0.3	154	0.1	4	1.1	0	0.1	0.1	0.1	4.7	0.1	0	3	0.3	0.2
69950N 81175E	681175	6069950	Normal	0.9		26		7.4	58	0.1	17	9.1	590	3	12	0.4	1		1.3	27	0.3	0.9	0.1	56	0.4	0.1	9	17	0.3	160	0.1	2	1.1	0	0.1	0.1	0.1	5.1	0.1	0	3	0.3	0.1
69950N 81200E	681200	6069950	Normal	0.7		25		7.1	61	0.1	17	9.5	616	3	12	0.4	0.9		1.3	31	0.2	0.8	0.1	56	0.5	0.1	9	17	0.3	159	0.1	2	1.1	0	0.1	0.1	0.1	5.1	0.1	0	3	0.3	0.1
69950N 81225E	681225	6069950	Normal	0.9		23		6.7	54	0.1	14	7.6	382	2.8	11	0.3	1.1		1	23	0.2	0.9	0.1	57	0.3	0.1	6	15	0.3	117	0.1	2	1	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
69950N 81250E	681250	6069950	Normal	0.8		16		6.5	68	0.1	12	7.4	514	2.6	7.6	0.3	0.3		0.7	19	0.2	0.6	0.1	59	0.2	0.1	7	17	0.2	153	0.1	4	1.3	0	0.1	0.1	0	2.9	0.1	0	5	0.3	0.1
69950N 81275E	681275	6069950	Normal	0.9		13		6.9	69	0.1	9.5	6	507	2.8	8	0.3	0.3		0.8	13	0.2	0.7	0.1	60	0.1	0.1	6	15	0.2	108	0.1	3	1.2	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
69950N 81300E	681300	6069950	Normal	1		14		6.5	75	0.1	14	8.1	358	2.9	9.6	0.3	0.7		0.9	16	0.1	0.7	0.1	59	0.2	0.1	6	16	0.2	107	0	2	1.4	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69950N 81325E	681325	6069950	Normal	1.2		21		7	59	0.1	14	7.4	295	2.9	9.8	0.3	2.3		1	16	0.1	0.8	0.1	61	0.2	0.1	6	17	0.3	115	0.1	1	1.3	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
69950N 81350E	681350	6069950	Normal	0.5		11		4.9	37	0.1	9.4	4.2	124	1.5	3.5	0.3	0.9		0.6	19	0.1	0.4	0.1	40	0.2	0	6	13	0.2	103	0.1	2	1.1	0	0	0.1	0	2.2	0.1	0	4	0.3	0.1
69950N 81375E	681375	6069950	Normal	0.5		12		5.6	36	0.1	7.9	4.2	177	1.2	2.9	0.3	1.5		0.4	20	0.1	0.2	0.1	37	0.3	0	6	13	0.2	122	0	2	1.2	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69950N 81400E	681400	6069950	Normal	0.5		16		5.5	44	0.1	13	5.4	324	2.1	6.1	0.4	1.7		1.2	28	0.1	0.5	0.1	50	0.4	0.1	8	17	0.3	121	0.1	1	1.1	0	0.1	0.1	0	3.8	0.1	0	4	0.3	0.1
69950N 81425E	681425	6069950	Normal	0.5		15		5.8	38	0.1	10	5	202	1.9	5.1	0.4	29		1	26	0.1	0.6	0.1	42	0.2	0	7	14	0.3	139	0.1	2	0.9	0	0	0.1	0	3.1	0.1	0	3	0.3	0.1
69950N 81450E	681450	6069950	Normal	0.7		23		6	49	0.1	12	6.1	337	2	6.2	0.3	2.5		1.1	26	0.1	0.8	0.1	43	0.2	0.1	6	14	0.3	164	0	1	1.2	0	0	0.1	0	2.7	0.1	0	3	0.3	0.1
69950N 81475E	681475	6069950	Normal	0.4		17		7.9	28	0.1	8.7	3.8	108	1.5	4.4	0.4	1.7		0.6	21	0.1	0.5	0.1	36	0.2	0	7	12	0.3	154	0	2	1.3	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69950N 81500E	681500	6069950	Normal	0.8		22		6.6	61	0.1	12	6.7	244	2.5	8.8	0.4	2		0.8	16	0.1	0.9	0.1	51	0.2	0.1	6	15	0.3	139	0	2	1.4	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
69950N 81525E	681525	6069950	Normal	0.8		18		8.2	70	0.1	11	7.2	374	2.7	11	0.4	3.1		1	24	0.2	1	0.1	52	0.2	0.1	5	14	0.3	126	0	2	1.2	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69950N 81550E	681550	6069950	Normal	0.5		12		6	54	0.1	9.4	5.5	380	1.6	3.4	0.3	1		0.6	20	0.1	0.4	0.1	40	0.2	0	5	13	0.3	114	0	2	1	0	0	0.1	0	2.4	0.1	0	3	0.3	0.1
70000N 80800E	680800	6070000	Normal	0.8		22		8.9	63	0.1	11	8.2	669	2.7	10	0.3	1.7		0.9	25	0.2	1	0.1	54	0.3	0.1	6	15	0.4	131	0.1	3	1	0	0.1	0.1	0	3.7	0.1	0	3	0.3	0.1
70000N 80825E	680825	6070000	Normal	0.8		24		10	63	0.1	14	8	465	2.8	11	0.4	1		0.8	26	0.2	1	0.1	55	0.3	0.1	7	16	0.4	130	0.1	2	1	0	0.1	0.1	0	3.5	0.1	0	3	0.3	0.1
70000N 80850E	680850	6070000	Normal	1		28		8.5	64	0.1	17	9.2	412	3.1	12	0.4	2.1		1.4	33	0.2	1	0.1	54	0.3	0.1	7	17	0.4	155	0	2	1.2	0	0.1	0.1	0	4.6	0.1	0	4	0.3	0.1
70000N 80875E	680875	6070000	Normal	0.8		17		8.3	69	0.1	15	7.8	438	2.8	11	0.3	0.5		1	23	0.2	0.9	0.1	51	0.2	0.1	6	16	0.3	163	0	2	1.2	0	0.1	0.1	0	3.5	0.1	0	4	0.3	0.1
70000N 80900E	680900	6070000	Normal	0.6		24		7.4	57	0.1	17	8	339	2.9	11	0.4	2.6		1.2	31	0.1	1.1	0.1	49	0.3	0.1	9	17	0.3	154	0	2	1.2	0	0.1	0.1	0	4.4	0.1	0	4	0.3	0.1
70000N 80925E	680925	6070000	Normal	0.8		16		8.1	50	0.1	17	8.1	283	2.8	11	0.4	0.3		1.2	22	0.1	1	0.1	52	0.2	0.1	6	16	0.3	156	0	2	1.4	0	0.1	0.1	0	3.4	0.1	0	4	0.3	0.1
70000N 80950E	680950	6070000	Normal	0.9		20		7.8	60	0.1	17	8.9	346	3	11	0.4	1.2		1.4	27	0.1	1	0.1	54	0.2	0.1	8	17	0.3	124	0.1	2	1.2	0	0	0.1	0	4.3	0.1	0	4	0.3	0.1
70000N 80975E	680975	6070000	Normal	1.7		43		8.4	61	0.1	18	9.1	500	2.9	11	0.9	2.7		1.5	43	0.1	1	0.1	53	0.4	0.1	10	18	0.4	144	0.1	2	1.1	0	0.1	0.1	0.1	4.7	0.1	0	4	0.3	0.1
70000N 81000E	681000	6070000	Normal	1.5		24		7.6	79	0.1	15	8.9	795	2.7	11	0.5	1.4		1.1	38	0.4	0.8	0.1	49	0.4	0.1	7	16	0.4	184	0	2	1.1	0	0.1	0.1	0	3.8	0.1	0	3	0.3	0.1
70000N 81025E	681025	6070000	Normal	0.8		12		6.9	64	0.1	13	7.5	325	2.6	7	0.4	0.6		1	16	0.1	0.6	0.1	51	0.2	0.1	5	15	0.3	127	0.1	2	1.4	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70000N 81050E	681050	6070000	Normal	0.8		20		7.2	61	0.1	15	8.7	477	2.6	9.2	0.4	0.3		1.2	20	0.1	0.8	0.1	50	0.2	0.1	6	13	0.3	128	0.1	2	1.3	0	0.1	0.1	0	3.5	0.1	0	4	0.3	0.1
70000N 81075E	681075	6070000	Normal	0.9		16		7.7	68	0.1	13	7.5	582	2.5	8.6	0.3	0.8		0.9	19	0.1	0.7	0.1	52	0.2	0.1	5	15	0.2	108	0.1	2	1.2	0	0.1	0.1	0	3	0.1	0	4	0.3	0.1
70000N 81100E	681100	6070000	Normal	0.7		20		6.8	56	0.1	16	7.9	275	2.7	11	0.3	1		1.1	17	0.1	0.9	0.1	55	0.2	0.1	5	15	0.3	142	0.1	2	1.3	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
70000N 81125E	681125	6070000	Normal	0.7		21		6.6	51	0.1	14	7.1	374	2.3	9.4	0.4	1.9		1.2	29	0.2	0.9	0.1	46	0.3	0.1	8	14	0.4	115	0.1	1	1	0	0.1	0.1	0	3.8	0.1	0	3	0.3	0.1
70000N 81150E	681150	6070000	Normal	0.6		23		7.9	64	0.1	13	7.8	545	2.6	9.6	0.4	1.5		1	27	0.5	1	0.1	52	0.3	0.1	7	15	0.3	139	0.1	2	1	0	0.1	0.1	0	3.6	0.1	0	3	0.3	0.1
70000N 81175E	681175	6070000	Normal	0.7		22		7.8	58	0.1	13	7.3	515	2.6	10	0.4	1.9		1.1	30	0.2	1	0.1	49	0.4	0.1	7	14	0.3	139	0.1	2	1	0	0.1	0.1	0	3.9	0.1	0	3	0.3	0.1
70000N 81200E	681200	6070000	Normal	0.8		26		8.2	57	0.1	14	8.1	455	2.7	12	0.4	1.5		1.2	30	0.1	1.2	0.1	56	0.3	0	9	16	0.4	150	0.1	2	1	0	0.1	0.1	0	4.7	0.1	0	4	0.3	0.1
70000N 81225E	681225	6070000	Normal	0.6		16		4.5	57	0.1	13	5	185	1.9	4.1	0.3	1.4		0.8	20	0.1	0.5	0.1	41	0.2	0.1	5	13	0.3	107	0.1	2	1.2	0	0	0.1	0	2.4	0.1	0	3	0.3	0.1
70000N 81250E	681250	6070000	Normal	0.6		14		5.3	63	0.1	10	4.5	339	1.8	4.7	0.3	2.2		0.9	20	0.1	0.5	0.1	41	0.2	0.1	6	12	0.3	143	0	2	1.2	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
70000N 81275E	681275	6070000	Normal	0.5		11		5.5	40	0.1	7.4	3.4	552	1.4	3	0.2	1.3		0.5	22	0.2	0.4	0.1	32	0.2	0.1	5	11	0.2	118	0	0.5	1	0	0	0.1	0	2.1	0.1	0	3	0.3	0.1
70000N 81300E	681300	6070000	Normal	0.5		15		5.7	43	0.1	9.6	5	171	1.8	4	0.3	1.6		0.9	24	0.1	0.5	0.1	45	0.2	0	7	16	0.3	141	0.1	2	1.1	0	0	0.1	0	3.1	0.1	0	3	0.3	0.1
70000N 81325E	681325	6070000	Normal	0.8		29		7.4	54	0.1	14	7	254	2.6	11	0.4	13		1.1	22	0.2	1	0.1	55	0.2	0.1	6	17	0.3	145	0.1	1	1.3	0	0	0.1	0	3.8	0.1	0	3	0.3	0.1
70000N 81350E	681350	6070000	Normal	0.8		22		7	52	0.1	13	6.8	170	2.3	9.3	0.3	1.8		1	17	0.1	0.9	0.1	46	0.1	0	5	14	0.3	119	0	2	1.2	0	0	0.1	0	2.7	0.1	0	3	0.3	0.1
70000N 81375E	681375	6070000	Normal	0.5		16		5.3	44	0.1	12	5.2	155	1.7	4	0.3	1		0.9	18	0.1	0.5	0.1	39	0.2	0	6	13	0.3	143	0.1	0.5	1.1	0	0	0.1	0	2.3	0.1	0	3	0.3	0.1
70000N 81400E	681400	6070000	Normal	0.5		12		5.4	38	0.1	8.4	4.4	154	1.5	3.8	0.3	24		0.8	22	0.1	0.5	0.1	39	0.2	0	5	11	0.3	128	0	2	0.9	0	0	0.1	0	2.1	0.1	0	3	0.3	0.1
70000N 81425E	681425	6070000	Normal	0.3		15		7	34	0.1	9.8	5.4	232	1.6	4.5	0.4	0.3		1	26	0.1	0.5	0.1	42	0.3	0.1	7	13	0.3	136	0.1	1	1	0	0	0.1	0	2.9	0.1	0	3	0.3	0.1
70000N 81450E	681450	6070000	Normal	0.4		12		6.7	28	0.1	8.4	4.2	135	1.2	3.2	0.3	1.2		0.8	22	0.1	0.3	0.1	34	0.3	0	5	10	0.3	138	0	0.5	1.1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
70000N 81475E	681475	6070000	Normal	0.6		11		5.8	52	0.1	8.2	5	169	1.9	5	0.3	1.7		0.7	18	0.1	0.5	0.1	45	0.2	0	5	11	0.2	105	0	1	1	0	0	0.1	0	2.2	0.1	0	4	0.3	0.1
70000N 81500E	681500	6070000	Normal	1		14		7.6	57	0.1	8.5	6.1	595	2.4	7.7	0.3	1.3		0.5	19	0.2	0.8	0.1	50	0.2	0.1	5	12	0.2	150	0	0.5	1	0	0	0.1	0	1.9	0.1	0	4	0.3	0.1
70000N 81525E	681525	6070000	Normal	0.9		14		8.2	69	0.1	10	7.2	657	2.6	9.3	0.3	0.3		0.8	23	0.3	0.8	0.1	54	0.2	0.1	4	14	0.2	138	0.1	2	1.1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
70000N 81550E	681550	6070000	Normal	0.8		13		5.7	47	0.1	9.8	4.7	158	2	5.6	0.3	3.1		0.6	18	0.2	0.6	0.1	48	0.2	0.1	5	12	0.2	116	0	1	1	0	0	0.1	0	2.1	0.1	0	4	0.3	0.1
709000N 81250E	681250	6070900	Normal	1.7		138		19	256	0.1	17	11	2910	3	12	0.6	4.8		1	37	0.3	1.2	0.1	54	0.6	0.1	8	17	0.5	295	0	2	0.9	0	0.1	0.2	0.1	4.5	0.1	0	3	0.7	0.1
709000N 81275E	681275	6070900	Normal	0.9		59		9.5	72	0.2	14	8.2	943	2.4	10	0.9	2.7		0.9	35	0.3	1	0.1	46	0.5	0.1	9	15	0.4	214	0	2	1	0	0	0.1	0.1	5.1	0.1	0	3	0.5	0.1
709000N 81300E	681300	6070900	Normal	0.8		26		8.8	89	0.1	9.4	7.3	717	2.4	6.9	0.4	1.3		0.7	27	0.4	1.1	0.1	50	0.4	0.1	6	14	0.3	205	0	2	0.8	0	0.1	0.1	0	3	0.1	0	3	0.3	0.1
709000N 81325E	681325	6070900	Normal	0.8		16		9.2	73	0.1	9.9	7.6	670	2.6	8.4	0.3	0.9		0.7	26	0.2	0.8	0.1	56	0.2	0.1	5	15	0.2	235	0	1	1.2	0	0	0.2	0	2.5	0.1	0	4	0.3	0.1
709000N 81350E	681350	6070900	Normal	0.8		19		8.3	79	0.2	11	7.5	532	2.8	9.3	0.3	1.9		0.9	24	0.2	1	0.1	57	0.3	0.2	5	15	0.3	242	0	2	1.2	0	0.1	0.1	0	2.7	0.1	0	4	0.3	0.1
709000N 81375E	681375	6070900	Normal	1.1		21		9.1	64	0.1	15	8.9	374	3.2	13	0.4	4		1	14	0.1	1.2	0.1	62	0.2	0.1	5	16	0.4	117	0	1	1.3	0	0	0.2	0	3.4	0.1	0	4	0.3	0.1
709000N 81400E	681400	6070900	Normal	0.8		13		8.8	80	0.1	14	8.4	359	3.2	13	0.4	0.3		0.9	16	0.2	1.1	0.1	62	0.2	0.1	5	16	0.3	140	0	0.5	1.3	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1

2012 Soil Data

Name	Easting _NAD8	Northing_ NAD83	Soil_Ho rizon	Mo_ ppm	Mo_ ppm	Cu_ ppm	Cu_ ppm	Pb_ ppm	Zn_ ppm	Ag_ ppm	Ni_p pm	Co_ ppm	Mn_ ppm	Fe_ pct	As_ ppm	U_p pm	Au_ ppb	Au_ ppb	Th_ ppm	Sr_ ppm	Cd_ ppm	Sb_ ppm	Bi_p pm	V_p pm	Ca_ pct	P_p ct	La_ ppm	Cr_ ppm	Mg_ pct	Ba_ ppm	Ti_p ct	B_p pm	Al_p ct	Na_ pct	K_p ct	W_p pm	Hg_ ppm	Sc_ ppm	Tl_p pm	S_p ct	Ga_ ppm	Se_ ppm	Te_ ppm
709000N 81425E	681425	6070900	Normal	1		12		8.7	71	0.1	9.7	7.1	347	2.7	9.2	0.3	0.3		0.8	14	0.1	0.9	0.1	54	0.2	0.1	4	14	0.2	114	0	1	1	0	0	0.1	0	2.2	0.1	0	4	0.3	0.1
709000N 81450E	681450	6070900	Normal	1		16		8.7	88	0.2	9.9	8.3	438	3	9.2	0.3	1.5		0.8	17	0.3	1	0.1	69	0.2	0.1	5	17	0.3	206	0	1	1.3	0	0	0.2	0	2.9	0.1	0	6	0.3	0.1
709000N 81475E	681475	6070900	Normal	0.9		12		10	91	0.1	9.5	7.6	631	3	8.7	0.3	0.3		0.7	12	0.4	1.1	0.1	65	0.2	0.1	4	15	0.3	116	0	1	1	0	0	0.2	0	2.3	0.1	0	4	0.3	0.1
709000N 81500E	681500	6070900	Normal	1		14		9.5	88	0.2	14	11	569	3.3	9.8	0.3	2.1		0.7	18	0.2	0.8	0.1	71	0.2	0.1	4	23	0.4	143	0	2	1.4	0	0	0.2	0	3	0.1	0	6	0.3	0.1
709000N 81525E	681525	6070900	Normal	1.4		12		9.8	77	0.1	11	7.9	479	3	8.5	0.3	0.3		0.8	19	0.3	0.9	0.1	62	0.2	0.1	4	15	0.3	127	0	2	1.1	0	0.1	0.1	0	2.8	0.1	0	4	0.3	0.1
709000N 81550E	681550	6070900	Normal	3.2		36		8.7	78	0.1	15	9.5	767	2.9	12	0.4	0.9		0.8	37	0.5	0.9	0.2	59	0.4	0.1	5	17	0.4	247	0	2	1.3	0	0.1	0.2	0	3.6	0.1	0	4	0.3	0.1
709000N 81575E	681575	6070900	Normal	2.8		55		13	72	0.1	18	12	847	3.2	19	0.7	1.1		0.6	51	0.4	1.1	0.2	63	0.8	0.1	8	21	0.5	307	0	5	1.4	0	0.1	0.3	0.1	4.7	0.1	0	4	0.7	0.1
709000N 81600E	681600	6070900	Normal	1.6		21		8.9	82	0.1	16	9.6	635	3.1	12	0.4	0.8		1.1	20	0.2	1	0.1	61	0.2	0.1	6	17	0.4	146	0	0.5	1.4	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
709000N 81625E	681625	6070900	Normal	0.9		18		7.9	54	0.1	11	7.5	264	2.6	8.8	0.3	0.6		0.9	22	0.1	1	0.1	56	0.2	0.1	5	15	0.3	134	0	1	1	0	0	0.1	0	3.2	0.1	0	3	0.3	0.1
709000N 81650E	681650	6070900	Normal	0.8		20		8.1	53	0.1	12	7.6	397	2.7	11	0.4	2.2		0.9	22	0.2	1	0.1	56	0.2	0	5	15	0.3	120	0.1	1	0.9	0	0.1	0.1	0	3.4	0.1	0	3	0.3	0.1
709000N 81675E	681675	6070900	Normal	0.6		13		6.6	56	0.1	6.2	4.5	403	1.2	2	0.3	0.3		0.3	21	0.1	0.3	0.1	31	0.2	0	6	9	0.2	177	0	0.5	0.9	0	0	0.1	0	1.5	0.1	0	4	0.3	0.1
709000N 81700E	681700	6070900	Normal	1		17		8.1	82	0.2	8.7	6.9	930	2.2	6.2	0.3	0.3		0.4	28	0.3	0.6	0.1	50	0.3	0.1	7	13	0.3	304	0	0.5	1.1	0	0.1	0.2	0.1	2.2	0.1	0	5	0.3	0.1
709000N 81725E	681725	6070900	Normal	1.2		13		8.1	82	0.1	9.8	6.5	240	3.2	10	0.3	0.9		0.8	19	0.2	0.7	0.1	70	0.2	0.1	5	15	0.2	159	0	1	1.4	0	0	0.2	0	2.8	0.1	0	6	0.3	0.1
709000N 81750E	681750	6070900	Normal	0.7		11		6	53	0.1	6.8	4	186	1.4	2.7	0.3	1.6		0.2	22	0.1	0.3	0.1	36	0.2	0	5	11	0.3	147	0	0.5	0.9	0	0	0.1	0	1.7	0.1	0	4	0.3	0.1
70950N 81275E	681275	6070950	Normal	1		39		8.6	56	0.1	11	7.3	681	2.6	9.7	0.3	2.7		0.6	27	0.1	0.9	0.1	59	0.3	0.1	5	15	0.3	206	0.1	1	1	0	0.1	0.1	0	2.9	0.1	0	4	0.3	0.1
70950N 81300E	681300	6070950	Normal	1.1		15		8.9	73	0.1	5.9	7.6	1970	2.4	4.5	0.3	1		0.5	23	0.4	0.7	0.1	49	0.2	0.1	5	12	0.1	238	0	1	0.8	0	0.1	0.1	0	1.9	0.1	0	4	0.3	0.1
70950N 81325E	681325	6070950	Normal	0.8		14		8	63	0.1	7.8	6.9	937	2.4	6.8	0.3	17		0.6	23	0.2	0.6	0.1	55	0.2	0.1	5	14	0.2	227	0.1	0.5	1.1	0	0.1	0.1	0	2.2	0.1	0	4	0.3	0.1
70950N 81350E	681350	6070950	Normal	1.1		15		8.8	67	0.2	6.6	7	537	2.7	7.3	0.3	4.5		0.4	31	0.3	0.9	0.1	61	0.3	0.1	5	14	0.2	227	0	2	1.1	0	0.1	0.2	0	2	0.1	0	5	0.3	0.1
70950N 81375E	681375	6070950	Normal	1		20		9.3	72	0.1	9.8	9	964	2.8	9.3	0.3	0.3		0.6	23	0.3	0.9	0.1	60	0.2	0.1	5	15	0.3	208	0	2	1.1	0	0.1	0.1	0	2.6	0.1	0	4	0.3	0.1
70950N 81400E	681400	6070950	Normal	0.8		21		7.5	53	0.1	13	7.6	357	2.8	14	0.3	1		0.8	18	0.1	1.1	0.1	60	0.2	0.1	4	15	0.4	113	0.1	0.5	1.2	0	0	0.1	0	3	0.1	0	3	0.3	0.1
70950N 81425E	681425	6070950	Normal	1		24		7.7	69	0.1	15	8.7	415	3	13	0.4	0.3		0.9	18	0.2	1.1	0.1	63	0.2	0.1	5	16	0.4	160	0.1	1	1.3	0	0	0.1	0	3	0.1	0	4	0.3	0.1
70950N 81450E	681450	6070950	Normal	1.1		15		9.9	87	0.1	9.4	8.2	1164	2.9	7.6	0.3	0.7		0.3	18	0.5	0.8	0.1	64	0.2	0.1	5	15	0.3	261	0	1	1.2	0	0.1	0.1	0	2.3	0.1	0	5	0.3	0.1
70950N 81475E	681475	6070950	Normal	1.2		53		8.3	44	0.2	10	6.2	387	2.5	9.7	0.8	0.3		0.3	57	0.5	1	0.1	51	1.3	0	5	18	0.3	477	0	3	1	0	0	0.1	0.1	2.6	0.1	0	4	1.2	0.1
70950N 81500E	681500	6070950	Normal	1.1		17		8.8	53	0.1	10	8.1	539	2.5	8.5	0.3	1.5		0.7	33	0.3	0.8	0.1	55	0.5	0	4	16	0.3	255	0	1	1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
70950N 81525E	681525	6070950	Normal	1		43		9.8	52	0.2	12	9.1	450	2.8	11	0.7	1.7		0.5	49	0.3	0.9	0.1	58	0.8	0.1	6	21	0.4	305	0	2	1	0	0.1	0.1	0.1	3.9	0.1	0	4	0.8	0.1
70950N 81550E	681550	6070950	Normal	1		37		8.3	58	0.1	13	8.7	751	2.2	9	0.6	1.4		0.4	64	0.4	1	0.1	45	1.4	0.1	6	15	0.4	354	0	6	0.8	0	0.1	0.1	0.1	3.3	0.1	0.1	3	1.2	0.1
70950N 81575E	681575	6070950	Normal	3		54		9.5	79	0.2	16	9.6	1305	2.9	9.8	0.7	0.7		0.4	43	0.7	0.9	0.1	56	0.6	0.1	13	17	0.4	299	0	3	1.4	0	0.1	0.2	0	3.8	0.1	0	5	0.3	0.1
70950N 81600E	681600	6070950	Normal	1.1		22		8.4	61	0.1	12	8.5	538	2.8	11	0.3	1.3		0.8	23	0.3	1.1	0.1	59	0.2	0.1	5	14	0.4	118	0.1	2	1	0	0.1	0.1	0	3.3	0.1	0	3	0.3	0.2
70950N 81625E	681625	6070950	Normal	1.7		30		10	56	0.2	14	9.3	601	2.6	11	0.4	1.2		0.5	34	0.2	1.1	0.1	50	0.5	0.1	7	16	0.4	158	0	2	1	0	0.1	0.1	0	3.9	0.1	0	4	0.3	0.1
70950N 81650E	681650	6070950	Normal	1		28		8.7	62	0.1	15	9.9	608	2.7	12	0.3	3.7		0.6	31	0.3	1.2	0.1	52	0.5	0.1	8	16	0.4	155	0	4	1	0	0.1	0.1	0.1	4.2	0.1	0	3	0.3	0.1
70950N 81675E	681675	6070950	Normal	1		25		7.5	84	0.3	14	8.2	1082	2.3	6.9	0.5	2.9		0.7	31	0.2	0.6	0.1	50	0.3	0.1	9	17	0.4	270	0	2	1.8	0	0.1	0.1	0.1	3.8	0.1	0	5	0.3	0.1
70950N 81700E	681700	6070950	Normal	0.8		12		6.2	62	0.1	8.1	5.3	368	1.9	5.9	0.3	1		0.5	23	0.2	0.6	0.2	45	0.2	0.1	6	12	0.2	155	0	1	1.1	0	0.1	0.1	0	2.3	0.1	0	4	0.3	0.1
70950N 81725E	681725	6070950	Normal	1.1		20		8.3	66	0.1	12	7.8	724	2.6	11	0.3	3		0.7	27	0.4	0.9	0.1	57	0.3	0.1	4	15	0.3	162	0	2	1.1	0	0.1	0.1	0	2.5	0.1	0	4	0.3	0.1
70950N 81750E	681750	6070950	Normal	1.1		15		14	99	0.1	14	11	757	3.7	15	0.4	0.6		0.9	22	0.4	1.1	0.1	70	0.3	0.3	5	17	0.4	175	0	2	1.4	0	0.1	0.2	0	3.3	0.1	0	5	0.3	0.1
71000N 81350E	681350	6071000	Normal	1		76		9.5	43	0.6	15	7.3	1920	2.2	6.8	1	1.5		0.3	67	1.2	0.8	0.1	44	1.5	0.1	12	14	0.3	480	0	3	1.1	0	0	0.1	0.1	3.6	0.1	0.1	3	0.9	0.1
71000N 81375E	681375	6071000	Normal	0.8		16		8.4	81	0.1	10	7.6	989	2.7	6.9	0.4	1.5		0.7	31	0.4	0.8	0.1	54	0.6	0	5	14	0.3	266	0	4	1.1	0	0.1	0.1	0	3	0.1	0	4	0.3	0.1
71000N 81400E	681400	6071000	Normal	0.9		19		11	83	0.1	11	8.2	1201	2.8	7.5	0.4	0.3		0.6	23	0.5	0.8	0.1	55	0.3	0.1	5	15	0.2	258	0	2	1.1	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
71000N 81425E	681425	6071000	Normal	0.9		28		9.5	68	0.1	15	9.5	525	3.3	16	0.4	3.5		0.9	26	0.3	1.3	0.1	73	0.4	0.1	6	17	0.4	146	0.1	3	1	0	0.1	0.1	0	3.9	0.1	0	4	0.3	0.1
71000N 81450E	681450	6071000	Normal	0.8		110		3.9	30	0.3	11	3.9	738	1.1	6	2.5	1.2		0.1	104	0.8	1.6	0.1	21	3	0.1	10	14	0.2	538	0	12	0.5	0	0	0.1	0.2	1.2	0.1	0.2	2	2.5	0.1
71000N 81475E	681475	6071000	Normal	0.6		13		3	26	0.1	4.6	2.5	138	0.9	3.5	0.2	0.7		0.1	89	0.4	0.4	0.1	15	3.1	0.1	2	8	0.2	498	0	11	0.4	0	0	0.1	0	0.8	0.1	0.2	1	0.7	0.1
71000N 81500E	681500	6071000	Normal	1.4		16		8.2	72	0.1	13	9.3	618	3.2	11	0.3	3.2		0.8	24	0.2	0.9	0.1	72	0.4	0	6	18	0.3	196	0	2	1.2	0	0	0.1	0	2.9	0.1	0	5	0.3	0.1
71000N 81525E	681525	6071000	Normal	1.7		14		7.7	67	0.1	12	8.5	421	3.1	11	0.2	0.6		0.7	19	0.1	0.9	0.1	66	0.2	0	4	16	0.3	223	0	2	1.1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
71000N 81575E	681575	6071000	Normal	4.3		23		7.5	53	0.1	13	8.8	425	2.6	12	0.3	0.3		0.7	27	0.2	0.9	0.1	52	0.3	0.1	5	15	0.4	112	0	3	1	0	0.1	0.1	0	3.1	0.1	0	4	0.3	0.1
71000N 81600E	681600	6071000	Normal	1.9		18		7.7	103	0.1	12	9.1	1074	2.8	9.5	0.3	0.3		0.7	23	0.8	0.8	0.1	56	0.2	0.1	5	16	0.3	210	0	2	1.1	0	0.1	0.1	0	3	0.1	0	4	0.3	0.1
71000N 81625E	681625	6071000	Normal	1.6		42		10	86	0.3	22	11	1475	2.9	12	0.4	0.5		0.4	54	1	1.2	0.1	58	0.8	0.1	12	18	0.5	352	0	3	1.5	0	0.1	0.1	0.1	4.4	0.1	0	4	0.3	0.1
71000N 81650E	681650	6071000	Normal	1.1		23		9.3	69	0.1	15	9.3	543	2.9	14	0.4	2.2		0.5	33	0.4	1.1	0.1	64	0.5	0.1	7	18	0.4	134	0	3	1.2	0	0.1	0.1	0	3.6	0.1	0	4	0.3	0.1
71000N 81675E	681675	6071000	Normal	0.9		36		11	74	0.2	20	12	788	3.3	15	0.4	1.3		1.3	37	0.2	1.4	0.1	65	0.5	0.1	11	21	0.5	208	0	3	1.4	0	0.1	0.1	0.1	6.6	0.1	0	5	0.3	0.1
71000N 81700E	681700	6071000	Normal	1.1		19		6.5	61	0.1	11	7.2	281	2.7	11	0.3	2		0.7	29	0.3	0.9	0.1	61	0.4	0.1	5	15	0.3	163	0	2	1.2	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
71000N 81725E	681725	6071000	Normal	0.8		21		6.9	50	0.1	13	7.4	300	2.8	12	0.3	0.8		1	22	0.1	0.9	0.1	61	0.2	0.1	5	18	0.3	160	0	2	1.3	0	0	0.1	0	3.1	0.1	0	3	0.3	0.1
71000N 81750E	681750	6071000	Normal	1.3		17		9	133	0.3	10	9.5	1473	3.3	12	0.3	1.4		0.6	28	0.7	0.7	0.1	75	0.3	0.1	5	17	0.3	325	0	2	1.4	0	0.1	0.2	0.1	2.8	0.1	0	6	0.3	0.1
70600N 81250E	681250	6070600	Normal	0.8		34		9.3	69	0.1	16	10	764	3	15	0.4	2.3		1.1	39	0.4	1.3	0.1	60	0.8	0.1	9	17	0.4	172	0.1	3	0.9	0	0.1	0.1	0.1	5.1	0.1	0	3	0.3	0.1
70600N 81275E	681275	6070600	Normal	0.9		19		8	58	0.1	12	8.3	468	2.9	12	0.3	1.8		1	24	0.1	1	0.1	60	0.3	0.1	6	15	0.3	186	0	2	1.1	0	0	0.1	0	3.7	0.1	0	4	0.3	0.1
70600N 81300E	681300	6070600	Normal	0.9		16		8.8	73	0.1	13	7.9	574	2.9	12	0.3	0.3		0.9	23	0.2	0.9	0.1	66	0.3	0.1	6	16	0.3	178	0	2	1.2	0	0.1	0.1	0	3.2	0.1	0	4	0.3	0.1
70600N 81325E	681325	6070600	Normal	1		18		7.8	59	0.1	12	8.5	588	2.9	13	0.3	0.8		1	28	0.2	1.1	0.1	64	0.3	0	6	16	0.4	175	0	2	1.2	0	0.1	0.1	0	4.3	0.1	0	4	0.3	0.1
70600N 81350E	681350	6070600	Normal	1.5		26		8.7	65	0.1	14	9.5	495	3	34	0.3	8.6		0.8	27	0.2	3.9	0.1	61	0.3	0	6	18	0.4	134	0.1	2	1.2	0	0.1	0.1	0.1	4.1	0.4	0	4	0.3	0.1
70600N 81375E	681375	6070600	Normal	1.5		19		8.1	90	0.1	15	10	558	3.2	13	0.4	1.4		0.9	25	0.3	0.8	0.1	68	0.3	0.1	6	19	0.4	152	0	1	1.4	0	0.1	0.1	0	3.6	0.1	0	4	0.3	0.1

2012 Soil Data

Name	Easting _NAD8	Northing_ NAD83	Soil_Ho rizon	Mo_ ppm	Mo_ ppm	Cu_ ppm	Cu_ ppm	Pb_ ppm	Zn_ ppm	Ag_ ppm	Ni_p pm	Co_ ppm	Mn_ ppm	Fe_ pct	As_ ppm	U_p pm	Au_ ppb	Au_ ppb	Th_ ppm	Sr_ ppm	Cd_ ppm	Sb_ ppm	Bi_p pm	V_p pm	Ca_ pct	P_p ct	La_ ppm	Cr_ ppm	Mg_ pct	Ba_ ppm	Ti_p ct	B_p pm	Al_p ct	Na_ pct	K_p ct	W_p pm	Hg_ ppm	Sc_ ppm	Tl_p pm	S_p ct	Ga_ ppm	Se_ ppm	Te_ ppm
70600N 81400E	681400	6070600	Normal	2.3		21		7.4	70	0.1	15	9.8	672	3.2	11	0.5	0.8		1.2	35	0.2	0.9	0.1	69	0.4	0.1	7	18	0.5	144	0.1	2	1.1	0	0	0.1	0	4	0.1	0	4	0.3	0.1
70600N 81425E	681425	6070600	Normal	1.3		38		9.5	69	0.1	16	10	566	3.1	17	0.4	1.4		1.2	28	0.3	1.3	0.1	64	0.3	0.1	9	20	0.4	149	0.1	3	1.2	0	0.1	0.1	0	5.1	0.1	0	4	0.3	0.1
70600N 81450E	681450	6070600	Normal	0.9		23		7.4	69	0.1	15	8.2	395	3.1	14	0.4	1.1		1.1	31	0.2	1.1	0.1	62	0.3	0.1	7	19	0.4	144	0.1	2	1.2	0	0.1	0.1	0	4.5	0.1	0	4	0.3	0.1
70600N 81475E	681475	6070600	Normal	0.8		18		8.1	67	0.1	12	8.7	557	2.7	11	0.4	1.9		1.1	28	0.2	1	0.1	60	0.3	0.1	7	17	0.4	134	0.1	2	1.1	0	0.1	0.1	0	3.6	0.1	0	4	0.3	0.1
70600N 81500E	681500	6070600	Normal	0.4		8.2		4.9	39	0.1	7.7	4	135	1.4	3.7	0.3	0.6		0.8	19	0.1	0.3	0.1	39	0.2	0	5	11	0.3	112	0	1	1	0	0	0.1	0	2.2	0.1	0	3	0.3	0.1
70600N 81525E	681525	6070600	Normal	0.4		8.2		5.3	55	0.1	7.7	4.2	184	1.5	4.2	0.3	1.4		0.7	22	0.1	0.3	0.1	42	0.3	0	5	12	0.3	145	0	1	1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
70600N 81550E	681550	6070600	Normal	0.4		9.7		5.2	44	0.1	9.2	5.5	229	1.7	4.6	0.4	0.7		0.9	23	0.1	0.4	0.1	44	0.3	0	6	13	0.3	127	0.1	1	1.1	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
70600N 81575E	681575	6070600	Normal	0.4		13		5.9	62	0.1	9.4	5.2	290	1.7	3.9	0.3	1.3		0.7	28	0.2	0.3	0.1	48	0.3	0	6	15	0.3	191	0	2	1.2	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
70600N 81600E	681600	6070600	Normal	0.5		11		5.6	52	0.1	10	5.3	212	1.8	5.2	0.3	0.8		0.7	24	0.1	0.4	0.1	47	0.3	0.1	6	13	0.3	127	0.1	1	1	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
70600N 81625E	681625	6070600	Normal	0.4		10		5.7	50	0.1	9	5.2	363	1.6	4	0.3	2		0.5	25	0.2	0.4	0.1	41	0.3	0	5	12	0.3	170	0	2	1	0	0	0.1	0	2.4	0.1	0	3	0.3	0.1
70600N 81650E	681650	6070600	Normal	1		24		12	83	0.4	13	9.5	1260	3	8	0.6	1.7		0.7	44	0.5	0.7	0.2	69	0.6	0.1	7	18	0.4	312	0	2	1.8	0	0	0.2	0.1	3.6	0.1	0	6	0.3	0.1
70600N 81675E	681675	6070600	Normal	0.7		10		5.6	47	0.1	8.4	4.7	212	1.8	4.5	0.3	1		0.6	21	0.2	0.5	0.1	47	0.3	0	5	13	0.3	138	0	0.5	1.1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
70600N 81700E	681700	6070600	Normal	0.6		11		6.8	49	0.1	9.8	5.4	237	2	6.2	0.3	1.4		0.8	20	0.1	0.5	0.1	48	0.3	0	5	13	0.4	125	0	2	1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
70600N 81725E	681725	6070600	Normal	0.6		15		6.3	62	0.2	11	5.8	228	2.1	5.7	0.4	1.2		0.7	29	0.2	0.6	0.1	45	0.4	0.1	5	14	0.3	191	0	2	1.3	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
70600N 81750E	681750	6070600	Normal	0.6		8.8		6.1	38	0.1	7.5	3.8	128	1.4	2.9	0.2	1.1		0.7	16	0.1	0.4	0.1	36	0.2	0	4	10	0.2	131	0	1	0.9	0	0	0.1	0	1.8	0.1	0	3	0.3	0.1
70650N 81250E	681250	6070650	Normal	1		17		8.9	75	0.1	13	7.9	528	3	12	0.3	1.3		0.9	17	0.2	1.1	0.1	61	0.2	0.1	5	16	0.3	125	0	2	1.2	0	0	0.1	0	3	0.1	0	4	0.3	0.1
70650N 81275E	681275	6070650	Normal	1.1		12		9.3	85	0.1	6.7	7.7	1559	2.7	7.3	0.3	1.4		0.7	13	0.4	0.8	0.1	55	0.2	0.1	5	14	0.2	136	0	2	0.8	0	0.1	0.2	0.1	2.2	0.1	0	4	0.3	0.1
70650N 81300E	681300	6070650	Normal	1.1		13		9.7	97	0.1	8.7	7.8	1321	3	9.4	0.3	2		0.7	17	0.3	0.8	0.1	60	0.2	0.1	5	15	0.2	194	0	2	1	0	0.1	0.2	0	2.3	0.1	0	4	0.3	0.1
70650N 81325E	681325	6070650	Normal	1.1		22		9.8	80	0.1	13	8	554	3.4	13	0.3	6.2		0.8	23	0.3	0.9	0.1	67	0.3	0.1	5	17	0.3	178	0	2	1.3	0	0.1	0.2	0	2.6	0.1	0	5	0.3	0.1
70650N 81350E	681350	6070650	Normal	1.5		29		10	76	0.1	15	9.7	887	3.3	14	0.4	1.3		0.6	23	0.4	1.2	0.1	67	0.3	0.1	6	18	0.4	179	0	3	1.2	0	0.1	0.1	0	3.6	0.1	0	4	0.3	0.1
70650N 81375E	681375	6070650	Normal	1.1		25		9.6	82	0.1	14	10	746	3.5	14	0.4	28		0.9	23	0.4	1.4	0.1	69	0.3	0.1	7	18	0.4	148	0.1	2	1	0	0	0.2	0	3.5	0.1	0	4	0.3	0.1
70650N 81400E	681400	6070650	Normal	2.1		27		9.4	75	0.1	19	11	956	3.5	13	0.6	3.5		1.2	49	0.3	1.1	0.2	68	0.6	0.1	9	21	0.5	206	0.1	2	1.2	0	0	0.1	0.1	4.8	0.1	0	4	0.3	0.1
70650N 81425E	681425	6070650	Normal	3.2		27		8.8	80	0.1	15	10	939	3	13	0.5	1.5		0.8	44	0.2	0.9	0.1	56	0.6	0.1	9	19	0.4	211	0	3	1.2	0	0.1	0.1	0.1	3.9	0.1	0	4	0.3	0.1
70650N 81450E	681450	6070650	Normal	1.9		15		9.8	63	0.1	12	7.1	271	2.9	11	0.3	1.8		0.8	20	0.2	0.9	0.1	63	0.2	0.1	4	16	0.3	112	0	2	1.1	0	0.1	0.1	0	2.8	0.1	0	4	0.3	0.1
70650N 81475E	681475	6070650	Normal	1.3		20		9.2	61	0.1	13	9.5	515	3	11	0.3	1.2		0.8	24	0.3	1.2	0.1	66	0.3	0.1	6	17	0.3	149	0	4	1.3	0	0.1	0.1	0	3.1	0.1	0	4	0.3	0.1
70650N 81500E	681500	6070650	Normal	1		24		9.4	91	0.1	13	9.1	975	2.9	11	0.4	4.1		0.8	36	0.6	1	0.1	58	0.4	0.1	7	18	0.3	188	0.1	2	1	0	0.1	0.1	0	3.3	0.1	0	4	0.3	0.1
70650N 81525E	681525	6070650	Normal	0.9		20		8.7	72	0.2	14	9.2	737	2.9	10	0.4	0.3		0.8	29	0.3	1	0.1	61	0.3	0.1	7	18	0.4	159	0	3	1.4	0	0.1	0.1	0	3.6	0.1	0	4	0.3	0.1
70650N 81550E	681550	6070650	Normal	0.8		22		13	65	0.1	14	9.8	529	3	13	0.4	1.7		1.1	27	0.2	1.2	0.1	59	0.3	0.1	7	17	0.4	120	0.1	4	1.2	0	0.1	0.1	0	3.7	0.1	0	4	0.3	0.1
70650N 81575E	681575	6070650	Normal	0.9		13		7.3	82	0.2	9.6	7	699	2.5	6	0.3	0.9		0.7	21	0.3	0.7	0.1	56	0.2	0.1	6	14	0.3	145	0.1	2	1.1	0	0	0.1	0	2.8	0.1	0	5	0.3	0.1
70650N 81600E	681600	6070650	Normal	0.6		11		5.4	65	0.1	9.3	5.9	446	1.9	4.4	0.3	2.1		0.6	25	0.2	0.6	0.1	47	0.3	0.1	6	14	0.4	140	0.1	2	1	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
70650N 81625E	681625	6070650	Normal	0.5		11		7.2	65	0.1	9.6	5	240	1.7	4.2	0.3	3.1		0.7	25	0.2	0.4	0.1	45	0.3	0	6	13	0.3	139	0.1	2	1.1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
70650N 81650E	681650	6070650	Normal	0.5		13		6.5	64	0.1	9.4	5	175	1.6	4	0.3	0.9		0.7	19	0.1	0.4	0.1	40	0.2	0	5	12	0.3	135	0.1	1	1.1	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
70650N 81675E	681675	6070650	Normal	0.5		13		6.4	41	0.1	8.6	4.2	148	1.6	4	0.4	1.6		0.8	21	0.1	0.3	0.1	37	0.2	0	6	13	0.3	154	0	2	1.3	0	0	0.1	0.1	2.6	0.1	0	4	0.3	0.1
70650N 81700E	681700	6070650	Normal	0.7		17		6.9	44	0.1	13	7.1	226	2.6	9.3	0.4	1.8		1.1	22	0.1	0.7	0.1	55	0.2	0.1	7	16	0.3	135	0.1	2	1.5	0	0	0.1	0	3	0.1	0	4	0.3	0.1
70650N 81725E	681725	6070650	Normal	1.3		17		9.6	108	0.2	11	7.7	456	3.3	11	0.4	0.8		0.9	18	0.4	0.8	0.1	66	0.2	0.2	6	17	0.3	172	0	2	1.4	0	0.1	0.1	0.1	2.9	0.1	0	6	0.3	0.1
70650N 81750E	681750	6070650	Normal	1.1		14		8	85	0.1	12	8.6	579	3	10	0.3	1.1		0.6	23	0.2	0.7	0.1	66	0.3	0.1	6	16	0.4	148	0	3	1.4	0	0.1	0.1	0	2.8	0.1	0	6	0.3	0.1
70700N 81250E	681250	6070700	Normal	1		22		9.2	92	0.2	15	9.1	465	3.7	15	0.4	74		0.9	18	0.2	1.1	0.1	77	0.2	0.1	5	19	0.3	152	0	3	1.5	0	0	0.1	0	3.3	0.1	0	5	0.3	0.1
70700N 81275E	681275	6070700	Normal	1.1		13		9.3	82	0.1	9.1	8	688	2.9	10	0.3	12		0.6	21	0.2	0.9	0.1	64	0.2	0.1	5	15	0.2	200	0	2	1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
70700N 81300E	681300	6070700	Normal	1.1		48		13	112	0.2	13	12	1589	3.1	12	0.4	8.9		0.6	52	0.7	0.9	0.1	61	0.5	0.2	10	18	0.3	417	0	4	1.4	0	0.1	0.1	0	4.1	0.1	0	4	0.3	0.1
70700N 81325E	681325	6070700	Normal	1.1		24		10	75	0.1	16	8.9	531	3.6	16	0.4	6.8		0.9	24	0.3	1.1	0.1	74	0.3	0.1	6	19	0.4	159	0.1	2	1.4	0	0.1	0.1	0	3.4	0.1	0	4	0.3	0.1
70700N 81350E	681350	6070700	Normal	0.9		43		9	62	0.2	15	8.8	711	2.8	12	0.7	4		0.6	50	0.4	1.1	0.1	56	0.9	0.1	9	17	0.4	263	0	3	1	0	0.1	0.1	0.1	4.6	0.1	0	3	0.6	0.3
70700N 81400E	681400	6070700	Normal	1.8		25		8.9	70	0.1	19	11	1066	3.4	13	0.7	2		1.1	46	0.3	0.9	0.1	65	0.6	0.1	9	22	0.5	189	0.1	3	1.2	0	0.1	0.1	0.1	4.6	0.1	0	4	0.3	0.1
70700N 81425E	681425	6070700	Normal	2.4		31		8.9	70	0.1	18	10	921	3.4	12	0.7	6.3		1	54	0.2	0.9	0.1	67	0.7	0.1	9	21	0.5	193	0.1	3	1.2	0	0.1	0.1	0.1	4.5	0.1	0	4	0.3	0.1
70700N 81450E	681450	6070700	Normal	1.9		34		9.8	68	0.1	17	9.7	436	3.4	16	0.4	4.3		1.1	26	0.2	1.3	0.1	67	0.3	0.1	8	21	0.4	139	0	2	1.3	0	0.1	0.1	0	4.5	0.1	0	4	0.3	0.1
70700N 81475E	681475	6070700	Normal	2.2		17		9.5	73	0.1	13	7.9	207	3.3	12	0.3	1.2		0.8	19	0.1	1	0.1	72	0.2	0	5	19	0.3	154	0	2	1.5	0	0	0.1	0	2.9	0.1	0	5	0.3	0.1
70700N 81500E	681500	6070700	Normal	3.2		17		8.2	69	0.1	16	10	303	3.4	13	0.3	3		0.9	15	0.2	0.9	0.1	68	0.2	0.2	5	17	0.3	174	0	0.5	1.4	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
70700N 81525E	681525	6070700	Normal	1.1		14		6.5	85	0.2	12	8	731	2.8	9.3	0.3	1.1		0.8	21	0.4	0.7	0.1	52	0.3	0.1	5	15	0.3	167	0	1	1.1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
70700N 81550E	681550	6070700	Normal	1		17		7.6	93	0.1	15	8.7	458	3.2	15	0.3	1		1	19	0.3	0.9	0.1	58	0.3	0.1	5	17	0.4	161	0	2	1.4	0	0.1	0.1	0	2.9	0.1	0	4	0.3	0.1
70700N 81575E	681575	6070700	Normal	1		42		8.8	91	0.5	16	10	1167	3	12	0.6	1.3		0.4	33	0.8	0.9	0.1	52	0.4	0.1	9	17	0.3	240	0	2	1.5	0	0.1	0.1	0.1	3.2	0.1	0	4	0.3	0.1
70700N 81600E	681600	6070700	Normal	1		13		7.5	72	0.1	11	8.3	473	2.9	11	0.3	0.8		0.8	16	0.3	0.8	0.1	57	0.2	0.1	4	14	0.3	163	0	1	1.2	0	0.1	0.1	0	2.4	0.1	0	4	0.3	0.1
70700N 81625E	681625	6070700	Normal	1		26		6.5	51	0.1	14	8.2	312	2.9	14	0.3	1.2		0.8	16	0.2	0.9	0.1	58	0.2	0.1	4	15	0.3	166	0	1	1.4	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70700N 81650E	681650	6070700	Normal	0.9		9.1		7.1	107	0.3	7.8	7.7	598	2.7	6.7	0.2	132		0.7	11	0.3	0.6	0.1	56	0.1	0.1	4	13	0.2	165	0	2	1	0	0	0.1	0	1.8	0.1	0	5	0.3	0.1
70700N 81675E	681675	6070700	Normal	0.8		9.3		7.9	103	0.2	7.5	5.9	316	3	7.8	0.3	0.3		0.7	11	0.3	0.7	0.1	63	0.1	0.2	4	15	0.2	147	0	1	1.3	0	0	0.1	0	2	0.1	0	6	0.3	0.1
70700N 81700E	681700	6070700	Normal	1.1		20		8.1	85	0.4	14	8.8	433	3.6	15	0.3	1.1		0.8	16	0.2	1	0.1	70	0.2	0.2	4	17	0.3	168	0	1	1.7	0	0	0.1	0.1	2.6	0.1	0	5	0.3	0.1
70700N 81725E	681725	6070700	Normal	1.5		27		9.6	73	0.3	15	9.8	503	4	21	0.3	1.9		0.8	16	0.2	1	0.3	71	0.2	0.2	4	18	0.3	156	0	2	2	0	0	0.2	0.1	2.8	0.1	0	6	0.3	0.1
70700N 81750E	681750	6070700	Normal	0.5		8.2		5.7	40	0.1	5.6	3.6	271	1.3	3.5	0.2	1.1		0.5	17	0.1	0.4	0.1	34	0.2	0	5	8	0.2	195	0	0.5	1	0	0	0.1	0	1.6	0.1	0	5	0.3	0.1

2012 Soil Data

Name	Easting _NAD8	Northing_ NAD83	Soil_Ho rizon	Mo_ ppm	Mo_ ppm	Cu_ ppm	Cu_ ppm	Pb_ ppm	Zn_ ppm	Ag_ ppm	Ni_p pm	Co_ ppm	Mn_ ppm	Fe_ pct	As_ ppm	U_p pm	Au_ ppb	Au_ ppb	Th_ ppm	Sr_ ppm	Cd_ ppm	Sb_ ppm	Bi_p pm	V_p pm	Ca_ pct	P_p ct	La_ ppm	Cr_ ppm	Mg_ pct	Ba_ ppm	Ti_p ct	B_p pm	Al_p ct	Na_ pct	K_p ct	W_p pm	Hg_ ppm	Sc_ ppm	Tl_p pm	S_p ct	Ga_ ppm	Se_ ppm	Te_ ppm
70750N 81250E	681250	6070750	Normal	0.9		14		7.9	132	0.2	16	8.8	637	3.3	15	0.2	0.6		0.7	15	0.3	0.7	0.1	68	0.2	0.1	4	17	0.4	241	0	1	1.6	0	0	0.1	0	2.1	0.1	0	6	0.3	0.1
70750N 81275E	681275	6070750	Normal	0.7		13		6.9	77	0.1	9.4	7.5	521	2.8	9.9	0.3	0.9		0.6	14	0.2	0.9	0.1	56	0.2	0.2	4	14	0.2	148	0	1	1.2	0	0	0.1	0	2.1	0.1	0	4	0.3	0.1
70750N 81300E	681300	6070750	Normal	1		20		7	67	0.2	13	7.5	304	3.2	15	0.3	3.4		0.7	18	0.1	1	0.1	68	0.2	0.1	4	16	0.3	167	0	1	1.4	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
70750N 81325E	681325	6070750	Normal	0.8		29		7.4	63	0.1	14	8.8	553	3.1	14	0.4	1.3		1	21	0.2	1.2	0.1	65	0.3	0.1	6	15	0.4	128	0.1	2	1	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
70750N 81350E	681350	6070750	Normal	0.9		30		8.9	88	0.1	15	9.6	763	3.1	15	0.3	0.7		0.9	24	0.4	1.1	0.1	63	0.4	0.1	6	15	0.4	194	0	2	1.1	0	0.1	0.1	0	3.5	0.1	0	4	0.3	0.1
70750N 81375E	681375	6070750	Normal	0.9		36		8.4	68	0.1	14	11	684	3.2	16	0.3	2.5		1	22	0.2	1.2	0.1	61	0.3	0.1	6	15	0.5	121	0	2	1.1	0	0	0.1	0	3.6	0.1	0	4	0.3	0.3
70750N 81400E	681400	6070750	Normal	1.3		24		12	78	0.1	14	11	1056	3.5	16	0.4	4.2		0.8	26	0.5	1.2	0.3	73	0.4	0.1	6	18	0.4	228	0	2	1.1	0	0.1	0.1	0.1	3.2	0.1	0	4	0.3	0.1
70750N 81425E	681425	6070750	Normal	1.1		8.8		6.7	77	0.1	8	6.3	259	2.8	8.5	0.2	3.4		0.6	17	0.2	0.7	0.1	65	0.2	0	4	13	0.2	215	0	1	1	0	0	0.1	0	1.8	0.1	0	5	0.3	0.1
70750N 81450E	681450	6070750	Normal	1.2		25		7.6	56	0.1	13	7.8	307	2.9	14	0.3	0.9		0.9	20	0.1	1.2	0.1	59	0.2	0.1	5	17	0.4	147	0	2	1.1	0	0.1	0.1	0	3.2	0.1	0	4	0.3	0.1
70750N 81500E	681500	6070750	Normal	2.6		13		8.5	73	0.1	6.9	5.8	666	2.9	8.9	0.2	0.8		0.4	13	0.3	0.7	0.2	66	0.2	0.1	4	14	0.2	153	0	2	1.1	0	0	0.1	0	1.8	0.1	0	6	0.3	0.1
70750N 81550E	681550	6070750	Normal	1.2		14		7.5	105	0.1	15	9.5	478	3.1	11	0.3	2.6		1	15	0.2	0.8	0.1	57	0.1	0.1	5	17	0.3	171	0	2	1.8	0	0	0.1	0	2.7	0.1	0	5	0.3	0.1
70750N 81575E	681575	6070750	Normal	1.6		13		9.3	130	0.3	10	7.2	821	3.3	12	0.2	0.6		0.6	12	0.4	0.7	0.2	66	0.1	0.2	4	18	0.3	170	0	2	1.5	0	0.1	0.1	0	2.4	0.1	0	6	0.3	0.1
70750N 81600E	681600	6070750	Normal	1.5		18		7.8	85	0.1	13	9.2	594	3.1	12	0.3	1.1		0.9	24	0.3	0.9	0.1	58	0.3	0.1	5	15	0.3	173	0	2	1.2	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
70750N 81625E	681625	6070750	Normal	1.8		12		6.8	73	0.1	9.6	7	406	2.7	9.1	0.3	1		0.7	18	0.3	0.5	0.1	50	0.2	0.1	4	14	0.3	171	0	2	1.2	0	0.1	0.1	0	2.5	0.1	0	4	0.3	0.1
70750N 81650E	681650	6070750	Normal	0.9		18		7	60	0.1	12	7.9	498	2.7	11	0.3	0.8		0.9	23	0.3	1	0.1	54	0.3	0.1	6	15	0.3	157	0.1	2	1	0	0.1	0.1	0	3	0.1	0	3	0.3	0.2
70750N 81675E	681675	6070750	Normal	0.7		18		6.8	51	0.1	11	8	352	2.7	11	0.3	3.9		0.7	22	0.2	1	0.1	54	0.3	0.1	5	14	0.3	146	0.1	2	1	0	0.1	0.1	0	2.7	0.1	0	3	0.3	0.1
70750N 81700E	681700	6070750	Normal	0.6		8.5		6.7	84	0.1	5.8	6.9	953	2.3	4.3	0.2	1.2		0.4	15	0.4	0.5	0.1	51	0.2	0.1	5	12	0.2	179	0	2	0.8	0	0.1	0.1	0	1.6	0.1	0	4	0.3	0.2
70750N 81725E	681725	6070750	Normal	0.9		8.2		7.7	86	0.1	6.4	6.3	1005	2.5	5.5	0.2	0.7		0.6	13	0.2	0.5	0.1	59	0.2	0.1	4	13	0.1	163	0	1	1	0	0	0.1	0	1.7	0.1	0	5	0.3	0.1
70750N 81750E	681750	6070750	Normal	1.2		15		7.6	70	0.2	12	11	724	3.7	17	0.3	0.8		0.8	15	0.3	0.8	0.1	68	0.1	0.1	4	14	0.3	167	0	2	1.4	0	0.1	0.1	0	2.6	0.1	0	6	0.3	0.1
70800N 81250E	681250	6070800	Normal	0.9		13		6.6	87	0.1	10	6.5	405	2.9	12	0.2	2.4		0.6	16	0.3	0.7	0.1	61	0.2	0.1	4	15	0.3	162	0	2	1.2	0	0	0.1	0	2	0.1	0	5	0.3	0.1
70800N 81275E	681275	6070800	Normal	1		14		8.1	98	0.1	11	9.3	883	3	10	0.3	0.6		0.6	22	0.3	0.7	0.1	60	0.3	0.1	5	15	0.3	210	0	1	1.3	0	0.1	0.1	0	2.1	0.1	0	5	0.3	0.1
70800N 81300E	681300	6070800	Normal	1		18		8.3	95	0.1	12	8.3	344	3	13	0.3	2		0.8	15	0.3	0.9	0.1	64	0.2	0.1	4	16	0.3	150	0	2	1.5	0	0	0.1	0.1	2.3	0.1	0	4	0.3	0.1
70800N 81325E	681325	6070800	Normal	0.9		11		9.6	92	0.2	8.3	8	861	2.9	9.1	0.3	0.8		0.4	15	0.3	0.7	0.1	59	0.1	0.1	5	14	0.2	196	0	2	1.3	0	0	0.1	0	2	0.1	0	5	0.3	0.2
70800N 81350E	681350	6070800	Normal	1		22		8.1	66	0.1	13	8.1	324	3.2	15	0.3	1.7		0.8	15	0.2	1.1	0.1	62	0.2	0.1	4	15	0.3	118	0	2	1.3	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70800N 81375E	681375	6070800	Normal	1.4		19		7.8	76	0.1	15	7.9	377	3.3	16	0.3	1.2		0.6	16	0.2	0.9	0.1	69	0.2	0.1	4	16	0.3	205	0	2	1.5	0	0	0.1	0	2.7	0.1	0	6	0.3	0.1
70800N 81400E	681400	6070800	Normal	1.3		15		10	99	0.2	11	9.3	1051	3.2	12	0.3	0.6		0.6	20	0.5	1	0.1	65	0.2	0.1	5	16	0.3	230	0	2	1.2	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
70800N 81425E	681425	6070800	Normal	1.3		29		10	120	0.2	15	9.5	1148	3.3	11	0.4	1.3		1.1	15	0.6	0.9	0.1	63	0.2	0.1	4	18	0.4	171	0	2	1.4	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
70800N 81450E	681450	6070800	Normal	1.2		14		9.3	63	0.1	10	8.7	724	2.7	7.7	0.3	0.3		0.6	17	0.5	0.8	0.1	53	0.2	0.1	5	16	0.2	189	0	2	1	0	0.1	0.1	0	2.4	0.1	0	4	0.3	0.1
70800N 81475E	681475	6070800	Normal	1.3		13		7.4	55	0.1	9.8	6.8	430	2.6	7.9	0.3	0.5		0.8	14	0.2	1	0.1	51	0.2	0.1	4	13	0.3	124	0	2	0.9	0	0	0.1	0	2.1	0.1	0	3	0.3	0.1
70800N 81500E	681500	6070800	Normal	1.3		8.9		7.8	50	0.1	8.2	6.2	329	2.4	6	0.2	0.7		0.6	13	0.2	0.6	0.1	50	0.2	0.1	4	13	0.2	129	0	2	0.9	0	0	0.1	0	1.7	0.1	0	4	0.3	0.1
70800N 81560E	681560	6070800	Normal	2.4		30		9.5	74	0.2	10	7.1	242	3	8.9	0.3	0.3		0.8	15	0.2	0.9	0.1	66	0.2	0.1	4	19	0.4	138	0	1	1.2	0	0	0.1	0	2.3	0.1	0	5	0.3	0.1
70800N 81575E	681575	6070800	Normal	2.8		32		9.9	117	0.4	14	12	1050	3.3	12	0.4	1		0.8	28	0.5	0.9	0.1	65	0.4	0.1	5	18	0.5	209	0	2	1.3	0	0.1	0.2	0.1	3.2	0.1	0	5	0.3	0.1
70800N 81600E	681600	6070800	Normal	2		18		9.1	118	0.1	17	12	667	3.5	14	0.3	0.3		1	19	0.3	1	0.1	63	0.2	0.2	5	18	0.4	150	0	2	1.3	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
70800N 81625E	681625	6070800	Normal	1.2		18		7.7	58	0.2	11	7.4	409	2.5	8.9	0.3	25		0.6	19	0.3	0.9	0.1	51	0.2	0.1	5	14	0.3	129	0	1	0.9	0	0.1	0.1	0	2.4	0.1	0	4	0.3	0.1
70800N 81650E	681650	6070800	Normal	1.1		19		7.7	50	0.1	12	7.6	329	2.7	9.4	0.3	0.3		0.9	22	0.1	0.9	0.1	57	0.3	0.1	5	16	0.3	133	0	1	0.9	0	0	0.1	0	2.7	0.1	0	3	0.3	0.1
70800N 81675E	681675	6070800	Normal	1.2		28		8.3	57	0.1	17	9.4	413	3.2	13	0.3	1.1		1	23	0.2	0.9	0.1	61	0.3	0.1	5	17	0.5	196	0	2	1.4	0	0	0.1	0	3.2	0.1	0	5	0.3	0.1
70800N 81700E	681700	6070800	Normal	1.4		10		8.6	82	0.2	6.9	8.5	1353	2.5	4.8	0.2	0.3		0.7	14	0.4	0.5	0.1	54	0.2	0.1	4	12	0.1	195	0	1	1	0	0	0.1	0	1.7	0.1	0	4	0.3	0.1
70800N 81725E	681725	6070800	Normal	1.5		18		10	86	0.1	14	12	1708	3.6	13	0.3	2.2		0.8	14	0.3	1	0.1	69	0.2	0.1	5	17	0.4	123	0	2	1.2	0	0.1	0.2	0	2.7	0.1	0	5	0.3	0.1
70800N 81750E	681750	6070800	Normal	1.3		11		8.2	56	0.1	7.6	5.2	243	3.1	8.3	0.3	2		0.6	17	0.2	0.8	0.1	73	0.1	0	5	15	0.2	186	0	0.5	1	0	0	0.1	0	1.9	0.1	0	6	0.3	0.1
70850N 81250E	681250	6070850	Normal	0.9		22		6.5	44	0.1	8.9	5.8	388	2	6.3	0.3	0.3		0.4	24	0.3	0.6	0.1	49	0.4	0	4	13	0.3	160	0	2	0.9	0	0.1	0.1	0	1.9	0.1	0	3	0.3	0.1
70850N 81275E	681275	6070850	Normal	1.3		27		8.9	78	0.1	9.5	7.7	1177	2.5	7.9	0.3	1.5		0.4	25	0.5	0.8	0.1	52	0.4	0.1	4	13	0.2	157	0	4	0.8	0	0.1	0.2	0.1	1.8	0.1	0	3	0.3	0.1
70850N 81300E	681300	6070850	Normal	0.9		16		8.5	89	0.2	9.6	7.3	646	2.9	9.3	0.3	1.2		0.3	23	0.3	0.9	0.1	63	0.3	0.2	5	16	0.2	174	0	3	1	0	0.1	0.2	0	1.9	0.1	0	4	0.3	0.1
70850N 81325E	681325	6070850	Normal	1		21		7	58	0.1	11	7.4	349	2.8	11	0.3	0.9		0.5	13	0.3	1	0.1	55	0.2	0.1	4	14	0.3	110	0	2	0.9	0	0.1	0.1	0	2.3	0.1	0	3	0.3	0.1
70850N 81350E	681350	6070850	Normal	1.5		159		13	66	1	29	12	2962	3.5	8.1	1.8	1.4		1.6	47	1.3	1.2	0.2	60	0.9	0.1	25	26	0.3	588	0	2	2.3	0	0.1	0.1	0.1	12	0.2	0	5	0.3	0.1
70850N 81375E	681375	6070850	Normal	1		14		8.6	68	0.1	12	7.5	287	3.3	11	0.3	0.6		0.8	12	0.2	0.9	0.1	70	0.2	0.1	4	17	0.3	126	0	2	1.2	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
70850N 81400E	681400	6070850	Normal	0.8		9.7		8.8	130	0.1	8.8	7	268	3	7.8	0.3	0.3		0.9	14	0.4	0.8	0.1	58	0.2	0.2	4	15	0.2	157	0	2	1.2	0	0.1	0.2	0	2.3	0.1	0	4	0.3	0.1
70850N 81425E	681425	6070850	Normal	1.2		21		8.4	77	0.1	17	9.2	381	3.6	16	0.3	0.7		0.8	14	0.2	1.2	0.1	72	0.2	0.1	4	16	0.4	134	0	1	1.4	0	0	0.1	0	2.9	0.1	0	5	0.3	0.1
70850N 81450E	681450	6070850	Normal	1		11		10	110	0.2	4.7	4.6	554	2.2	3.1	0.2	0.3		0.4	11	0.4	0.5	0.1	50	0.1	0.1	4	11	0.1	139	0	2	0.7	0	0.1	0.1	0	1.4	0.1	0	4	0.3	0.2
70850N 81475E	681475	6070850	Normal	1.1		13		9.8	109	0.1	11	8.5	486	3.3	9.1	0.3	0.3		0.8	18	0.2	0.8	0.1	70	0.2	0.1	5	17	0.3	170	0	2	1.4	0	0	0.1	0	2.5	0.1	0	6	0.3	0.3
70850N 81500E	681500	6070850	Normal	1.1		24		7.9	56	0.1	16	9.2	456	2.9	12	0.4	0.3		0.9	21	0.2	1.2	0.1	60	0.3	0	6	19	0.4	126	0.1	1	1.1	0	0.1	0.1	0	3.2	0.1	0	3	0.3	0.1
70850N 81525E	681525	6070850	Normal	3.6		62		11	74	0.1	16	12	763	3.2	15	0.5	2.6		1.1	34	0.3	1.4	0.3	60	0.6	0.1	9	19	0.5	137	0	4	1.1	0	0.1	0.2	0.1	4.2	0.1	0	3	0.3	0.1
70850N 81550E	681550	6070850	Normal	2.5		118		9.7	79	0.1	17	13	612	4.2	31	0.5	4.3		1.1	24	0.2	1.2	0.2	72	0.3	0.1	6	21	0.5	142	0	3	1.3	0	0.1	0.1	0	4.2	0.1	0.1	5	0.3	0.1
70850N 81575E	681575	6070850	Normal	1.4		17		8.6	92	0.1	16	9.8	680	3.3	9.9	0.3	0.3		1	21	0.3	0.9	0.1	65	0.3	0.1	5	18	0.4	152	0	2	1.2	0	0.1	0.1	0	3	0.1	0	4	0.3	0.1
70850N 81600E	681600	6070850	Normal	0.9		14		7.8	64	0.1	12	7.3	903	2.4	7.1	0.3	0.3		0.6	20	0.3	0.8	0.1	52	0.2	0.1	5	15	0.2	166	0	2	0.9	0	0.1	0.1	0	2.2	0.1	0	3	0.3	0.1
70850N 81625E	681625	6070850	Normal	1.1		28		9	58	0.1	14	8.4	471	3	12	0.4	2.5		1.1	27	0.1	0.9	0.1	63	0.3	0.1	8	17	0.3	219	0	2	1.2	0	0	0.1	0.1	3.9	0.1	0	4	0.3	0.1
70850N 81650E	681650	6070850	Normal	1.2		21		9.5	72	0.1	17	10	577	3.5	12	0.4	0.3		1.1	21	0.2	1.1	0.1	70	0.3	0.1	6	17	0.4	129	0	2	1.3	0	0.1	0.2	0.1	3.2	0.1	0	4	0.3	0.1

2012 Soil Data

Name	Easting_NAD8	Northing_NAD83	Soil_Horizon	Mo_ppm	Mo_ppm	Cu_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm	Au_ppb	Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Te_ppm
70850N 81675E	681675	6070850	Normal	1.3		18		9.2	123	0.2	16	9.9	346	3.8	16	0.4	2		1	15	0.3	1	0.1	76	0.1	0.2	5	19	0.3	187	0	2	1.9	0	0	0.2	0.1	2.8	0.1	0	6	0.3	0.1
70850N 81700E	681700	6070850	Normal	1.4		16		10	123	0.2	14	10	375	4.2	14	0.3	0.3		0.9	22	0.2	0.9	0.1	81	0.2	0.2	5	19	0.4	178	0	2	1.7	0	0.1	0.1	0.1	2.9	0.1	0	7	0.3	0.1
70850N 81725E	681725	6070850	Normal	1.1		26		7.9	76	0.2	18	9.2	434	3.2	13	0.4	1.6		0.8	19	0.2	0.9	0.1	64	0.2	0.1	5	19	0.4	196	0	2	1.7	0	0.1	0.1	0	3.1	0.1	0	5	0.3	0.1
70850N 81750E	681750	6070850	Normal	0.6		15		5.8	45	0.1	14	6.1	196	2	5.1	0.3	1.4		0.9	18	0.1	0.6	0.1	45	0.2	0	6	16	0.3	123	0	0.5	1.4	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
70150N 80800E	680800	6070150	Normal	1.1		19		14	58	0.1	14	8.7	475	3.3	15	0.4	19		1	18	0.2	1.3	0.1	67	0.3	0.1	5	17	0.4	120	0	2	1.3	0	0	0.1	0	3.2	0.1	0	3	0.3	0.1
70150N 80825E	680825	6070150	Normal	0.8		26		9.4	62	0.1	13	9.2	995	2.6	11	0.4	1.1		1.1	31	0.4	1.1	0.1	54	0.4	0.1	7	15	0.4	164	0	2	0.9	0	0	0.1	0.1	4.4	0.1	0	3	0.3	0.1
70150N 80850E	680850	6070150	Normal	0.8		28		9.9	61	0.1	14	9.1	695	2.8	13	0.4	2.5		1.1	25	0.3	1.2	0.1	55	0.3	0.1	8	16	0.4	137	0	2	0.9	0	0.1	0.1	0.1	4.2	0.1	0	3	0.3	0.1
70150N 80875E	680875	6070150	Normal	0.8		29		9.2	64	0.1	15	8.2	588	2.7	12	0.4	1.8		1	32	0.3	1.1	0.1	54	0.5	0.1	8	16	0.4	200	0	1	1	0	0	0.1	0.1	4.5	0.1	0	3	0.3	0.1
70150N 80900E	680900	6070150	Normal	0.8		29		9.3	66	0.1	15	9.7	659	2.8	11	0.4	1.8		1.1	35	0.4	1.1	0.1	54	0.6	0.1	8	16	0.4	142	0	2	0.9	0	0.1	0.1	0.1	4.4	0.1	0	3	0.3	0.1
70150N 80925E	680925	6070150	Normal	1.3		18		8.4	64	0.1	14	10	639	2.8	11	0.6	0.9		1.1	29	0.3	0.9	0.1	52	0.3	0.1	8	17	0.4	122	0	1	1.1	0	0	0.1	0	3.9	0.1	0	3	0.3	0.1
70150N 80950E	680950	6070150	Normal	3.4		44		10	86	0.1	13	9.3	559	3.4	14	0.5	1		1.1	25	0.3	0.9	0.1	62	0.2	0.1	6	19	0.4	152	0	2	1.5	0	0	0.1	0	3.5	0.1	0	5	0.3	0.1
70150N 80975E	680975	6070150	Normal	2.1		17		9.8	89	0.1	15	11	973	3.4	14	0.4	3.3		1.1	24	0.3	0.9	0.1	64	0.3	0.1	5	18	0.3	191	0	1	1.3	0	0	0.1	0	3.1	0.1	0	5	0.3	0.1
70150N 81000E	681000	6070150	Normal	0.9		21		7.7	53	0.1	12	7.9	361	2.7	12	0.3	1.6		1	20	0.2	1	0.1	55	0.2	0.1	6	15	0.3	122	0	1	0.9	0	0	0.1	0	3.4	0.1	0	3	0.3	0.4
70150N 81025E	681025	6070150	Normal	1		19		7.8	60	0.1	18	9.5	275	3.3	13	0.3	0.3		0.9	16	0.1	0.9	0.1	66	0.2	0.1	5	17	0.3	146	0	1	1.6	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
70150N 81050E	681050	6070150	Normal	1		17		7.3	53	0.1	15	8.3	233	2.9	12	0.3	0.3		0.9	18	0.1	1	0.1	58	0.2	0.1	4	15	0.3	120	0	2	1.2	0	0	0.1	0	3	0.1	0	4	0.3	0.1
70150N 81075E	681075	6070150	Normal	0.7		9.6		9.4	49	0.1	8.5	6.8	640	2.6	7.5	0.3	0.8		0.9	19	0.1	0.7	0.1	56	0.2	0.1	5	14	0.2	164	0	1	0.9	0	0.1	0.1	0	2	0.1	0	4	0.3	0.1
70150N 81100E	681100	6070150	Normal	0.9		23		9.2	68	0.1	15	11	692	3	12	0.4	0.3		1.2	33	0.3	1.1	0.1	57	0.5	0.1	8	17	0.4	147	0.1	2	1	0	0.1	0.1	0	4.4	0.1	0	3	0.3	0.1
70150N 81125E	681125	6070150	Normal	0.8		22		7.5	57	0.1	14	7.3	276	3.1	13	0.4	9		1.2	23	0.1	1.2	0.1	64	0.2	0	6	18	0.3	167	0.1	1	1.2	0	0	0.1	0	3.3	0.1	0	3	0.3	0.1
70150N 81150E	681150	6070150	Normal	0.9		27		7.8	63	0.1	16	8.5	313	3.1	13	0.4	2		1.1	20	0.2	1.2	0.1	63	0.2	0.1	6	17	0.3	133	0	1	1.2	0	0	0.1	0	3.7	0.1	0	3	0.3	0.1
70150N 81175E	681175	6070150	Normal	0.9		26		8.8	63	0.1	16	7.7	295	3.2	15	0.4	1.6		1.2	19	0.1	1.2	0.1	66	0.2	0.1	7	18	0.3	155	0.1	2	1.4	0	0	0.1	0	3.4	0.1	0	4	0.3	0.1
70150N 81200E	681200	6070150	Normal	0.9		25		7.8	58	0.1	17	7.9	297	3.1	14	0.4	0.3		1.2	19	0.1	1.2	0.1	62	0.2	0.1	6	17	0.3	161	0.1	2	1.3	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
70150N 81225E	681225	6070150	Normal	0.7		29		7.1	49	0.1	14	7	279	2.6	11	0.4	3.8		1.4	19	0.1	0.9	0.1	53	0.2	0.1	6	17	0.3	142	0.1	0.5	1.3	0	0	0.1	0	3.3	0.1	0	3	0.3	0.1
70150N 81250E	681250	6070150	Normal	0.8		20		8	80	0.1	16	8.9	263	3.1	13	0.4	1.3		1.1	14	0.1	1	0.1	59	0.2	0.1	6	17	0.3	120	0	1	1.6	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
70150N 81275E	681275	6070150	Normal	0.9		26		12	61	0.1	15	8.3	285	2.9	14	0.4	1.3		1	15	0.1	1	0.1	60	0.1	0.1	6	18	0.3	143	0	2	1.4	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
70150N 81300E	681300	6070150	Normal	0.7		21		6.5	67	0.1	14	7.2	276	2.7	9.6	0.4	2		1.1	24	0.1	0.8	0.1	54	0.2	0.1	7	17	0.3	167	0	2	1.4	0	0	0.1	0	3.4	0.1	0	4	0.3	0.1
70150N 81325E	681325	6070150	Normal	0.5		11		6.9	55	0.1	8.7	5.2	247	1.7	4.5	0.3	1.1		1	17	0.1	0.4	0.1	40	0.2	0	5	12	0.2	125	0	1	1.2	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
70150N 81350E	681350	6070150	Normal	0.5		14		6.7	54	0.1	12	5.8	151	2	5.5	0.3	0.3		0.9	17	0.1	0.5	0.1	47	0.2	0.1	6	15	0.2	131	0	0.5	1.5	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70150N 81375E	681375	6070150	Normal	0.8		15		8.6	58	0.2	10	7	341	2.8	11	0.4	2.6		1.3	18	0.1	0.9	0.1	57	0.2	0.1	6	16	0.2	113	0	0.5	1.2	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
70150N 81400E	681400	6070150	Normal	0.8		14		6.8	51	0.1	14	6.8	289	2.4	9.4	0.3	0.6		1	16	0.1	0.7	0.1	48	0.2	0.1	5	15	0.3	114	0	0.5	1.5	0	0	0.1	0	2.6	0.1	0	3	0.3	0.1
70150N 81425E	681425	6070150	Normal	0.8		11		8.9	75	0.1	8.8	7.2	503	2.9	9.9	0.3	0.8		0.9	28	0.2	0.8	0.1	61	0.2	0.2	5	15	0.2	130	0	2	1.3	0	0	0.1	0	2.3	0.1	0	5	0.3	0.1
70150N 81450E	681450	6070150	Normal	0.8		19		8.4	63	0.1	12	7.5	515	3	12	0.4	9.6		0.9	19	0.2	1.5	0.1	62	0.2	0.1	5	16	0.3	133	0	2	1.3	0	0.1	0.1	0.1	2.9	0.1	0	4	0.3	0.1
70150N 81475E	681475	6070150	Normal	0.8		15		9.2	76	0.1	11	6.4	247	2.8	10	0.4	3.3		1	13	0.2	0.8	0.1	54	0.1	0.1	6	15	0.3	128	0	2	1.4	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
70150N 81500E	681500	6070150	Normal	0.9		23		8.2	68	0.1	12	7.8	412	3	12	0.4	1.4		1.1	18	0.2	1.1	0.1	60	0.2	0.1	6	16	0.3	172	0.1	0.5	1.2	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
70150N 81525E	681525	6070150	Normal	0.4		11		6.9	32	0.3	8.6	4.6	155	1.4	3.9	0.3	4.4		0.4	17	0.1	0.3	0.1	34	0.2	0	5	12	0.3	119	0	0.5	1	0	0	0.1	0	1.9	0.1	0	3	0.3	0.1
70150N 81550E	681550	6070150	Normal	0.7		15		5.9	40	0.1	11	6	234	2	5.9	0.3	1		0.9	15	0.1	0.5	0.1	44	0.2	0.1	5	13	0.3	105	0	1	1.2	0	0	0.1	0	2.4	0.1	0	3	0.3	0.1
70200N 80800E	680800	6070200	Normal	1.1		19		8	44	0.2	8.6	7.3	849	2.3	7.7	0.3	1.1		0.4	20	0.2	0.6	0.1	52	0.3	0.1	5	14	0.2	169	0	2	0.9	0	0.1	0.1	0	1.7	0.1	0	4	0.3	0.1
70200N 80825E	680825	6070200	Normal	0.7		9.6		5.3	36	0.1	9	5.3	261	2.1	6.1	0.2	0.3		0.8	13	0.1	0.5	0.1	47	0.2	0	4	11	0.2	132	0	1	0.9	0	0	0.1	0	2	0.1	0	3	0.3	0.1
70200N 80850E	680850	6070200	Normal	0.7		10		6.7	50	0.1	9.1	6.4	509	2.3	6.9	0.3	1.1		0.7	14	0.2	0.6	0.1	48	0.2	0.1	4	13	0.2	136	0	1	0.9	0	0	0.1	0	2.3	0.1	0	3	0.3	0.1
70200N 80875E	680875	6070200	Normal	1		18		8.2	65	0.1	12	8.5	498	2.6	10	0.3	1.2		0.7	17	0.2	0.9	0.1	53	0.3	0.1	5	15	0.3	108	0	2	0.9	0	0.1	0.1	0	2.9	0.1	0	4	0.3	0.1
70200N 80900E	680900	6070200	Normal	1.1		32		8.7	67	0.1	16	9.6	618	2.9	13	0.3	4.8		0.7	24	0.2	0.9	0.1	56	0.4	0.1	7	17	0.4	133	0	2	1.1	0	0.1	0.1	0.1	3.9	0.1	0	3	0.3	0.1
70200N 80925E	680925	6070200	Normal	1.6		29		8.9	75	0.1	18	11	1028	3	13	0.6	17		1.1	46	0.4	1	0.1	58	0.6	0.1	9	20	0.5	191	0	2	1.2	0	0.1	0.1	0.1	4.6	0.1	0	4	0.3	0.1
70200N 80950E	680950	6070200	Normal	1		19		7.9	72	0.1	17	10	660	3	11	0.6	1.2		1.2	36	0.3	1	0.1	61	0.4	0.1	9	19	0.5	159	0.1	2	1.1	0	0.1	0.1	0.1	4.2	0.1	0	4	0.3	0.1
70200N 80975E	680975	6070200	Normal	1.7		22		8.7	75	0.1	16	11	741	3.2	13	0.6	0.3		1.5	33	0.2	0.9	0.1	60	0.3	0.1	8	20	0.5	175	0	2	1.5	0	0	0.1	0.1	4.2	0.1	0	4	0.3	0.1
70200N 81000E	681000	6070200	Normal	0.8		21		8.9	78	0.1	14	9.9	1038	2.9	9.6	0.4	1.3		1	30	0.7	0.9	0.1	58	0.3	0.1	8	17	0.3	247	0	2	1.2	0	0.1	0.1	0	3.7	0.1	0	4	0.3	0.1
70200N 81025E	681025	6070200	Normal	1		14		7.4	56	0.1	13	7	336	2.6	8.5	0.3	1.5		1	26	0.2	0.7	0.1	54	0.3	0.1	6	16	0.3	165	0	2	1.2	0	0.1	0.1	0	3.3	0.1	0	4	0.3	0.1
70200N 81050E	681050	6070200	Normal	0.8		19		7.5	64	0.1	11	7.4	811	2.8	10	0.4	8		1	24	0.2	1	0.1	60	0.3	0.1	6	15	0.3	111	0.1	1	0.9	0	0.1	0.1	0	2.9	0.1	0	3	0.3	0.1
70200N 81075E	681075	6070200	Normal	0.8		19		7.9	64	0.1	14	8.4	442	3	12	0.4	6.5		1.1	20	0.2	1	0.1	63	0.3	0.1	6	16	0.3	142	0.1	2	1.2	0	0.1	0.1	0	3.2	0.1	0	4	0.3	0.1
70200N 81100E	681100	6070200	Normal	0.7		27		8.9	65	0.1	17	9.9	558	3	13	0.5	1.3		1.5	33	0.2	1.2	0.1	59	0.4	0.1	10	17	0.4	172	0.1	2	1.2	0	0.1	0.1	0.1	5.3	0.1	0	3	0.3	0.1
70200N 81125E	681125	6070200	Normal	0.8		28		8.3	59	0.1	12	8.2	496	2.9	13	0.4	2.5		1.2	27	0.2	1.3	0.1	62	0.3	0.1	8	15	0.3	125	0.1	1	1	0	0.1	0.1	0	4.2	0.1	0	3	0.3	0.1
70200N 81150E	681150	6070200	Normal	0.8		31		7.8	61	0.1	9.8	7	339	2.9	9.8	0.3	0.3		0.7	19	0.1	0.9	0.1	61	0.2	0.1	5	15	0.2	117	0	2	1.2	0	0	0.1	0	2.3	0.1	0	4	0.3	0.1
70200N 81175E	681175	6070200	Normal	0.9		12		8	71	0.1	8.9	7.4	1176	2.6	7.3	0.3	1.1		0.7	22	0.2	0.7	0.1	61	0.2	0.1	6	14	0.2	140	0	2	1	0	0	0.1	0	2.2	0.1	0	4	0.3	0.1
70200N 81200E	681200	6070200	Normal	0.8		14		8	65	0.2	10	7	341	2.8	9	0.4	0.9		0.9	20	0.1	0.8	0.1	62	0.2	0.1	6	17	0.3	116	0.1	2	1.2	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70200N 81225E	681225	6070200	Normal	0.8		19		7	60	0.1	15	8.2	414	2.9	11	0.4	2.8		1.2	21	0.1	1	0.1	61	0.2	0.1	8	19	0.3	115	0.1	1	1.4	0	0	0.1	0.1	3.4	0.1	0	4	0.3	0.1
70200N 81250E	681250	6070200	Normal	0.8		16		7.2	58	0.1	13	7	340	2.9	9.4	0.4	0.6		1.1	18	0.1	0.9	0.1	64	0.2	0.1	6	17	0.3	124	0.1	2	1.3	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
70200N 81275E	681275	6070200	Normal	0.5		13		5.4	51	0.1	11	5.6	256	2	4.7	0.3	0.5		1	18	0.1	0.5	0.1	44	0.2	0.1	6	14	0.3	121	0	1	1.3	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
70200N 81300E	681300	6070200	Normal	0.8		19		7.2	61	0.1	16	8.5	277	3	13	0.4	1.2		1.1	17	0.1	1	0.1	65	0.2	0.1	6	20	0.3	118	0.1	2	1.5	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1

Name	Easting_NAD8	Northing_NAD83	Soil_Horizon	Mo_ppm	Mo_ppm	Cu_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm	Au_ppb	Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Te_ppm
70200N 81325E	681325	6070200	Normal	0.8		21		6	54	0.1	14	6.6	236	2.5	9.3	0.3	0.9		0.9	20	0.1	0.7	0.1	54	0.2	0.1	6	18	0.3	105	0.1	2	1.4	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70200N 81350E	681350	6070200	Normal	0.8		16		7.4	65	0.1	13	7.6	382	2.8	11	0.4	0.6		1	20	0.1	0.9	0.1	59	0.2	0.1	6	16	0.3	104	0.1	2	1.3	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
70200N 81375E	681375	6070200	Normal	0.9		16		7.3	77	0.1	16	8.9	346	3.3	14	0.3	1.6		1	14	0.2	1	0.1	65	0.2	0.1	5	18	0.3	100	0.1	2	1.5	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70200N 81400E	681400	6070200	Normal	0.6		9.5		5.5	40	0.1	7.5	3.8	154	1.6	3.7	0.3	0.3		0.7	16	0.1	0.4	0.1	41	0.1	0	5	12	0.2	114	0	0.5	1	0	0	0.1	0	2.2	0.1	0	3	0.3	0.1
70200N 81425E	681425	6070200	Normal	0.5		9.1		6	43	0.1	7.2	4.1	173	1.6	3.4	0.3	2.3		0.7	18	0.1	0.4	0.1	43	0.2	0	6	12	0.3	94	0.1	0.5	1	0	0	0.1	0	2.1	0.1	0	4	0.3	0.1
70200N 81450E	681450	6070200	Normal	0.9		17		6.3	64	0.1	11	7	393	2.8	8	0.4	6.6		0.9	18	0.1	0.8	0.1	63	0.2	0.1	6	16	0.3	111	0.1	2	1.3	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
70200N 81475E	681475	6070200	Normal	1		13		9.7	52	0.1	7	6.4	591	2.8	8.3	0.3	0.3		0.6	17	0.2	1	0.1	65	0.1	0.1	5	15	0.2	93	0	2	0.8	0	0	0.1	0	2	0.1	0	4	0.3	0.1
70200N 81500E	681500	6070200	Normal	0.8		15		7.8	61	0.1	11	6.5	335	2.9	10	0.3	5.1		1	19	0.1	0.9	0.1	65	0.2	0.1	5	15	0.3	133	0	2	1.1	0	0	0.1	0	2.6	0.1	0.1	4	0.3	0.3
70200N 81525E	681525	6070200	Normal	0.8		17		7.9	63	0.1	8.6	6.3	385	2.9	9.2	0.3	4.3		1	12	0.1	0.9	0.1	67	0.1	0.1	6	17	0.2	98	0	0.5	1.1	0	0	0.1	0	2.8	0.1	0.1	4	0.3	0.1
70200N 81550E	681550	6070200	Normal	0.8		21		7.4	54	0.1	15	7.8	639	2.8	10	0.3	1.6		1	17	0.1	0.9	0.1	61	0.2	0.1	5	17	0.3	146	0	1	1.3	0	0	0.1	0	2.8	0.1	0.1	4	0.3	0.3
70050N 80800E	680800	6070050	Normal	1.2		12		8.9	72	0.1	8.4	7.4	483	2.9	6.7	0.3	1.5		0.7	13	0.3	0.8	0.1	66	0.2	0.1	4	15	0.2	106	0	1	1	0	0.1	0.1	0	2.1	0.1	0.1	4	0.3	0.1
70050N 80825E	680825	6070050	Normal	0.6		14		6.8	47	0.1	13	7.2	194	2.6	7.7	0.3	0.8		1	17	0.1	0.7	0.1	56	0.2	0.1	5	15	0.3	122	0	0.5	1.3	0	0	0.1	0	2.5	0.1	0.1	4	0.3	0.1
70050N 80850E	680850	6070050	Normal	0.9		36		9.1	59	0.1	20	12	644	3.4	12	0.5	1		1.5	32	0.1	1.1	0.1	67	0.4	0	11	21	0.5	215	0.1	2	1.4	0	0.1	0.1	0.1	6.1	0.1	0.1	4	0.3	0.1
70050N 80875E	680875	6070050	Normal	1		17		7.8	65	0.1	15	8.2	540	2.7	8.3	0.3	3.2		0.9	19	0.2	0.7	0.1	56	0.3	0.1	5	16	0.3	134	0	2	1.1	0	0.1	0.1	0	2.7	0.1	0.1	4	0.3	0.1
70050N 80900E	680900	6070050	Normal	1		23		8.6	73	0.1	17	10	691	3.1	11	0.4	0.3		0.7	29	0.3	0.9	0.1	58	0.4	0.1	7	18	0.4	159	0	1	1.3	0	0.1	0.1	0	3.4	0.1	0.1	4	0.3	0.1
70050N 80925E	680925	6070050	Normal	0.8		21		7.3	60	0.1	19	7.3	456	2.6	9.5	0.4	1.2		0.7	31	0.2	0.7	0.1	47	0.3	0.1	9	17	0.3	159	0	1	1.3	0	0.1	0.1	0.1	3.8	0.1	0.1	4	0.3	0.1
70050N 80950E	680950	6070050	Normal	1		17		6.5	61	0.1	13	8.1	471	2.6	8.5	0.3	0.3		0.6	22	0.3	0.7	0.1	49	0.2	0.1	6	15	0.2	145	0	0.5	1.2	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
70050N 80975E	680975	6070050	Normal	1.5		19		7.9	66	0.1	16	10	721	3	11	0.5	1.1		1.1	34	0.3	0.9	0.1	59	0.5	0.1	7	19	0.4	125	0	1	1.1	0	0	0.1	0	3.6	0.1	0.1	4	0.3	0.1
70050N 81000E	681000	6070050	Normal	1.7		30		8.3	72	0.1	19	11	1079	3.1	11	0.7	0.8		1.1	41	0.3	0.8	0.1	63	0.6	0.1	9	23	0.5	176	0	2	1.2	0	0.1	0.1	0.1	4.5	0.1	0.1	4	0.3	0.1
70050N 81025E	681025	6070050	Normal	1.2		27		8.4	71	0.1	22	11	584	3.2	12	0.4	1.5		1.4	34	0.3	1	0.1	57	0.5	0.1	8	19	0.4	148	0	1	1.1	0	0.1	0.1	0.1	4.9	0.1	0.1	3	0.3	0.1
70050N 81050E	681050	6070050	Normal	0.8		24		6.8	54	0.1	17	8.1	297	2.8	9.2	0.4	1.8		1.5	25	0.1	0.8	0.1	54	0.3	0.1	8	18	0.3	142	0.1	1	1.3	0	0	0.1	0	4	0.1	0	4	0.3	0.1
70050N 81075E	681075	6070050	Normal	0.8		22		7.4	55	0.1	13	8.4	439	2.8	9.9	0.4	0.6		1.3	19	0.2	0.9	0.1	58	0.2	0.1	6	17	0.3	106	0.1	1	1.1	0	0.1	0.1	0	3.4	0.1	0	3	0.3	0.1
70050N 81100E	681100	6070050	Normal	0.7		27		7.5	51	0.1	14	7.9	353	2.7	11	0.4	0.8		1.2	20	0.2	1	0.1	60	0.2	0.1	6	16	0.3	123	0.1	2	1	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
70050N 81125E	681125	6070050	Normal	0.9		22		7.5	69	0.1	14	8.3	622	3	11	0.4	0.3		1	25	0.2	1	0.1	62	0.3	0.1	7	16	0.4	139	0.1	1	1	0	0.1	0.2	0	3.4	0.1	0	3	0.3	0.1
70050N 81150E	681150	6070050	Normal	0.9		23		7.1	60	0.1	14	7.9	433	2.8	11	0.4	0.9		1.1	24	0.1	0.9	0.1	60	0.3	0.1	7	18	0.3	131	0.1	1	1.1	0	0.1	0.1	0	3.8	0.1	0	3	0.3	0.1
70050N 81175E	681175	6070050	Normal	0.7		25		8	50	0.1	13	8.5	479	2.8	11	0.4	1.2		1.1	24	0.2	1	0.1	61	0.4	0.1	7	18	0.3	115	0.1	2	1	0	0.1	0.1	0	3.7	0.1	0	3	0.3	0.1
70050N 81200E	681200	6070050	Normal	0.9		28		8.2	56	0.1	14	9.2	590	2.9	12	0.4	0.3		1.3	31	0.2	1.1	0.1	62	0.4	0.1	9	18	0.4	134	0.1	2	1	0	0.1	0.1	0.1	4.6	0.1	0	3	0.3	0.1
70050N 81225E	681225	6070050	Normal	0.6		9.9		4.4	50	0.1	9.4	5.2	305	1.9	5.1	0.3	0.3		0.7	18	0.1	0.5	0.1	45	0.2	0	5	14	0.3	93	0.1	0.5	0.9	0	0	0.1	0	2.3	0.1	0	3	0.3	0.1
70050N 81250E	681250	6070050	Normal	1		13		7.7	75	0.1	11	7.5	567	2.8	8.6	0.3	0.3		0.9	14	0.1	0.6	0.1	60	0.1	0.1	6	17	0.2	146	0	1	1.3	0	0	0.1	0	2.8	0.1	0	5	0.3	0.1
70050N 81275E	681275	6070050	Normal	0.9		18		7.6	66	0.1	13	7.6	249	2.9	9.5	0.4	1.6		1.1	15	0.1	0.8	0.1	58	0.2	0.1	6	19	0.2	99	0.1	1	1.5	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
70050N 81300E	681300	6070050	Normal	0.9		19		7.1	67	0.1	14	7.7	293	3	11	0.3	0.3		0.9	13	0.1	0.9	0.1	64	0.1	0.1	5	18	0.2	109	0.1	1	1.5	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
70050N 81325E	681325	6070050	Normal	0.8		25		6.5	57	0.1	16	7.2	230	2.6	9	0.4	17		1	16	0.1	0.7	0.1	57	0.2	0.1	6	18	0.3	162	0.1	2	1.6	0	0	0.1	0.1	3.3	0.1	0	4	0.3	0.1
70050N 81350E	681350	6070050	Normal	0.8		60		9.3	147	0.9	31	8.3	367	2.4	6.8	1.3	2		1.6	38	0.3	0.6	0.1	56	0.6	0.1	15	28	0.4	364	0	2	3.3	0	0.1	0.1	0.2	7.4	0.1	0	7	0.3	0.1
70050N 81375E	681375	6070050	Normal	0.5		22		7.5	46	0.2	13	6.9	248	2.4	7.8	0.9	1.3		1	32	0.1	0.7	0.1	56	0.7	0.1	7	17	0.4	284	0	1	1.3	0	0	0.1	0	4.2	0.1	0.1	4	0.3	0.1
70050N 81400E	681400	6070050	Normal	0.4		14		6.3	37	0.1	10	5.9	302	2	6.2	0.4	2.6		1	24	0.1	0.4	0.1	48	0.3	0.1	7	14	0.3	164	0	1	1.1	0	0	0.1	0	2.9	0.1	0	3	0.3	0.1
70050N 81425E	681425	6070050	Normal	1		22		8	60	0.1	15	8.6	339	3.1	12	0.4	0.8		1.1	17	0.1	0.9	0.1	64	0.2	0.1	6	18	0.3	115	0.1	2	1.4	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
70050N 81450E	681450	6070050	Normal	1.1		19		6.4	46	0.2	12	6.8	269	2.5	9.8	0.4	0.3		0.9	17	0.1	0.8	0.1	58	0.2	0.1	6	17	0.2	122	0.1	2	1.4	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70050N 81475E	681475	6070050	Normal	0.9		35		6.4	39	0.4	13	5.5	338	2.1	6.8	0.7	0.6		0.3	45	0.2	0.5	0.1	52	1	0.1	12	17	0.2	329	0	1	1.6	0	0	0.1	0.1	3.3	0.1	0.1	4	0.3	0.1
70050N 81500E	681500	6070050	Normal	0.9		40		7.1	73	0.4	17	7.1	1099	2.5	7.2	0.7	0.6		0.8	40	0.3	0.6	0.1	56	0.7	0	9	22	0.4	316	0	1	1.8	0	0.1	0.1	0.1	5.3	0.1	0.1	4	0.3	0.1
70050N 81525E	681525	6070050	Normal	1.1		26		7	55	0.1	12	6.6	201	2.5	9.5	0.4	2.2		1.1	20	0.1	1.1	0.1	63	0.2	0	6	17	0.3	131	0.1	2	1.4	0	0	0.1	0	3	0.1	0	4	0.3	0.1
70050N 81550E	681550	6070050	Normal	1.1		15		8.4	66	0.1	12	8.2	462	3	11	0.3	0.3		0.9	17	0.1	0.8	0.1	65	0.2	0.1	6	18	0.2	126	0.1	1	1.4	0	0	0.1	0	2.6	0.1	0	5	0.3	0.1
70100N 80800E	680800	6070100	Normal	0.9		18		7.1	73	0.1	15	7.9	503	2.7	9.7	0.3	0.3		1.2	14	0.1	0.8	0.1	57	0.1	0.1	5	18	0.2	108	0.1	1	1.4	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
70100N 80825E	680825	6070100	Normal	0.7		18		8.7	99	0.1	18	9.5	431	3.2	10	0.4	0.3		1.2	14	0.2	0.9	0.1	66	0.2	0.1	5	19	0.3	126	0	2	1.5	0	0.1	0.1	0	3.2	0.1	0	4	0.3	0.1
70100N 80850E	680850	6070100	Normal	0.9		43		9.9	60	0.1	16	9.8	662	3.1	14	0.5	3.2		1.4	28	0.2	1.2	0.1	63	0.4	0.1	9	17	0.4	161	0.1	2	1	0	0.1	0.1	0.1	5.4	0.1	0	4	0.3	0.1
70100N 80875E	680875	6070100	Normal	2.3		117		19	114	0.2	33	21	1420	4.4	30	0.4	14		1.8	44	0.6	1.6	0.3	78	1.3	0.1	10	27	0.8	346	0.1	3	1.6	0	0.3	0.3	0.1	8.2	0.2	0.1	5	0.3	0.1
70100N 80925E	680925	6070100	Normal	0.9		23		8.1	70	0.1	17	11	1216	3	11	0.4	1		0.8	49	0.3	0.7	0.1	53	0.9	0.1	8	20	0.4	266	0	3	1.2	0	0.1	0.1	0.1	4.3	0.1	0.1	4	0.3	0.1
70100N 80950E	680950	6070100	Normal	1.1		18		7.2	74	0.1	16	10	674	2.8	9.9	0.5	1.4		1	33	0.4	0.7	0.1	55	0.4	0.1	8	20	0.4	158	0	1	1.2	0	0	0.1	0.1	4.4	0.1	0	4	0.3	0.1
70100N 80975E	680975	6070100	Normal	1.2		24		7.8	70	0.1	16	9.9	473	2.8	9.5	0.6	1.1		0.8	36	0.2	0.7	0.1	55	0.5	0.1	9	19	0.4	177	0	1	1.2	0	0.1	0.1	0.1	4.3	0.1	0	4	0.3	0.1
70100N 81000E	681000	6070100	Normal	1.5		20		7.1	67	0.1	16	10	563	2.8	11	0.5	1		1	32	0.1	0.8	0.1	54	0.4	0.1	8	18	0.4	159	0	2	1.2	0	0	0.1	0.1	4.3	0.1	0	4	0.3	0.1
70100N 81025E	681025	6070100	Normal	1.2		18		5.6	39	0.1	15	5.6	371	2	6.9	0.6	0.3		0.4	65	0.3	0.6	0.1	36	1.8	0	5	19	0.3	356	0	6	0.9	0	0.1	0.1	0.1	2.7	0.1	0.1	3	1	0.1
70100N 81050E	681050	6070100	Normal	1.2		13		6.4	72	0.1	12	8.3	549	2.8	9.1	0.3	0.7		0.7	17	0.2	0.6	0.1	59	0.3	0.1	5	15	0.2	129	0	0.5	1.1	0	0.1	0.1	0	3.1	0.1	0	4	0.3	0.1
70100N 81075E	681075	6070100	Normal	0.3		10		5.2	27	0.2	7.4	3.4	130	0.7	1.1	0.6	9.2		0.3	41	0.3	0.2	0.1	20	1.1	0.1	4	12	0.2	142	0	2	0.8	0	0.1	0.1	0	2.4	0.1	0.1	3	0.3	0.1
70100N 81100E	681100	6070100	Normal	0.9		20		6.6	65	0.1	15	9	459	2.8	10	0.3	6.3		0.9	22	0.3	0.8	0.1	56	0.3	0.1	7	17	0.3	128	0.1	2	1.1	0	0.1	0.1	0	4	0.1	0	3	0.3	0.1
70100N 81125E	681125	6070100	Normal	1		21		7	86	0.1	14	9	655	2.8	9.9	0.3	0.7		1	23	0.5	0.9	0.1	56	0.4	0.1	7	17	0.3	151	0.1	0.5	1	0	0.1	0.1	0	4.1	0.1	0	4	0.3	0.1
70100N 81150E	681150	6070100	Normal	0.9		31		8.2	62	0.1	15	9.6	597	3	13	0.4	2.8		1.1	28	0.2	1.1	0.1	62	0.5	0.1	8	18	0.3	163	0.1	0.5	1.1	0	0.1	0.1	0	5	0.1	0	3	0.3	0.1
70100N 81175E	681175	6070100	Normal	0.9		11		7.9	51	0.1	9.1	7	292	2.7	6.8	0.3	1.6		0.9	16	0.1	0.6	0.1	64	0.2	0.1	6	17	0.2	145	0.1	1	1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1

2012 Soil Data

Name	Easting _NAD8	Northing_ NAD83	Soil_Ho rizon	Mo_ ppm	Mo_ ppm	Cu_ ppm	Cu_ ppm	Pb_ ppm	Zn_ ppm	Ag_ ppm	Ni_p pm	Co_ ppm	Mn_ ppm	Fe_ pct	As_ ppm	U_p pm	Au_ ppb	Au_ ppb	Th_ ppm	Sr_ ppm	Cd_ ppm	Sb_ ppm	Bi_p pm	V_p pm	Ca_ pct	P_p ct	La_ ppm	Cr_ ppm	Mg_ pct	Ba_ ppm	Ti_p ct	B_p pm	Al_p ct	Na_ pct	K_p ct	W_p pm	Hg_ ppm	Sc_ ppm	Tl_p pm	S_p ct	Ga_ ppm	Se_ ppm	Te_ ppm
70100N 81200E	681200	6070100	Normal	0.7		14		7.3	59	0.1	11	6.9	439	2.6	8.1	0.3	0.8		0.6	16	0.1	0.5	0.1	57	0.2	0.1	5	16	0.2	135	0	2	1.2	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
70100N 81225E	681225	6070100	Normal	0.9		23		6.8	55	0.1	11	6.3	375	2.5	8.4	0.4	1.5		1.1	15	0.1	0.6	0.1	54	0.2	0.1	6	16	0.2	118	0.1	1	1.2	0	0	0.1	0	3	0.1	0	4	0.3	0.1
70100N 81250E	681250	6070100	Normal	0.6		13		6.6	55	0.1	11	4.5	148	1.6	5.1	0.3	0.8		0.2	15	0.1	0.5	0.1	44	0.1	0.1	5	15	0.3	99	0	0.5	1.3	0	0	0.1	0	1.5	0.1	0	4	0.3	0.1
70100N 81275E	681275	6070100	Normal	0.5		11		6.7	31	0.1	7.5	3.9	107	1.3	3.6	0.2	0.3		0.4	18	0.1	0.3	0.1	38	0.1	0	5	13	0.2	126	0	0.5	1	0	0	0.1	0	1.8	0.1	0	4	0.3	0.1
70100N 81300E	681300	6070100	Normal	0.7		20		8.8	29	0.2	13	4.7	90	1.3	4.3	0.5	1.4		0.1	23	0.1	0.4	0.1	33	0.2	0.1	7	15	0.2	189	0	0.5	1.5	0	0	0.1	0.1	1.5	0.1	0	4	0.7	0.1
70100N 81325E	681325	6070100	Normal	1		20		7.1	60	0.1	16	8.5	323	2.8	12	0.4	1.4		1.3	19	0.1	1	0.1	59	0.2	0.1	6	18	0.3	146	0	1	1.4	0	0	0.1	0	3.1	0.1	0	4	0.7	0.1
70100N 81350E	681350	6070100	Normal	0.4		10		7.2	40	0.1	9.5	3.4	128	1.3	3.4	0.3	1.4		0.3	15	0.1	0.4	0.1	35	0.1	0.1	5	13	0.2	78	0	0.5	1.1	0	0	0.1	0	1.5	0.1	0	4	0.3	0.1
70100N 81375E	681375	6070100	Normal	0.9		19		7.1	57	0.1	12	6.9	224	2.7	11	0.4	3		1.3	16	0.1	0.9	0.1	58	0.1	0.1	8	17	0.3	129	0	1	1.4	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1
70100N 81400E	681400	6070100	Normal	0.9		22		7.9	69	0.1	15	8.3	371	2.9	11	0.4	2.5		1.2	15	0.1	1	0.1	63	0.1	0.1	7	17	0.3	142	0	1	1.4	0	0	0.1	0	3.3	0.1	0	4	0.6	0.1
70100N 81425E	681425	6070100	Normal	1		22		7.2	51	0.2	13	6.6	526	2.5	8.7	0.5	20		0.8	31	0.1	0.8	0.1	61	0.4	0	6	17	0.3	277	0	2	1.4	0	0	0.1	0.1	3.7	0.1	0	4	0.3	0.1
70100N 81450E	681450	6070100	Normal	1.2		15		7.9	68	0.2	11	6.7	710	2.8	12	0.3	1		0.6	19	0.2	0.8	0.1	60	0.2	0.1	5	14	0.3	143	0	1	1.2	0	0	0.1	0	2.1	0.1	0	4	0.3	0.1
70100N 81475E	681475	6070100	Normal	0.9		17		6.9	58	0.1	12	6.3	276	2.5	9.7	0.4	0.5		0.8	21	0.2	0.9	0.1	61	0.2	0	5	16	0.3	148	0.1	2	1.2	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
70100N 81500E	681500	6070100	Normal	0.8		30		6.2	28	0.3	8.6	4.5	636	1.5	4.3	1	1.6		0.2	74	0.6	0.6	0.1	38	1.5	0.1	7	14	0.3	308	0	2	0.9	0	0	0.1	0.1	2.7	0.1	0.1	3	0.3	0.1
70100N 81525E	681525	6070100	Normal	0.9		20		8.1	61	0.1	13	7.9	297	3.1	13	0.4	1.1		1	19	0.1	1	0.1	66	0.2	0.1	6	18	0.3	153	0	2	1.3	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
70100N 81550E	681550	6070100	Normal	0.8		18		7.5	73	0.2	12	6.9	282	2.8	10	0.4	0.9		1	20	0.2	0.9	0.1	60	0.2	0.1	6	15	0.3	146	0	2	1.3	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
68250N-80250E	680250	6068250	Normal	1.1		17		9.2	54	0.1	14	6.9	181	2.8	11		3.2		0.9	16	0.1	0.7	0.1	66	0.2	0	5	17	0.3	192	0	1	1.4	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
68250N-80300E	680300	6068250	Normal	1		14		7.2	45	0.1	8.9	5	137	2.3	8		3.3		0.8	14	0.1	0.7	0.1	56	0.1	0	5	13	0.2	148	0	1	1.1	0	0	0.1	0	3	0.1	0	4	0.3	0.1
68250N-80350E	680350	6068250	Normal	0.9		30		9.1	60	0.1	15	8.4	297	3.1	14		1.1		1.2	15	0.1	1.1	0.1	61	0.1	0.1	6	17	0.3	228	0	2	1.3	0	0	0.1	0	4.2	0.1	0	3	0.3	0.1
68250N-80400E	680400	6068250	Normal	1.1		18		8.4	50	0.1	12	7.2	174	2.7	11		2.3		0.9	13	0.1	0.8	0.1	62	0.1	0	5	16	0.2	172	0	0.5	1.6	0	0	0.1	0.1	3.3	0.1	0	4	0.3	0.1
68250N-80450E	680450	6068250	Normal	0.7		13		6.4	66	0.1	13	6.2	220	2.4	7.7		1.2		1	14	0.1	0.7	0.1	49	0.1	0.1	5	15	0.2	122	0	0.5	1.4	0	0	0.1	0	3	0.1	0	4	0.3	0.1
68250N-80500E	680500	6068250	Normal	0.9		15		8.2	85	0.1	12	8.2	238	3.2	12		2.5		1.1	12	0.1	0.7	0.1	63	0.1	0.1	5	18	0.2	101	0	1	1.5	0	0	0.1	0	3.1	0.1	0	5	0.3	0.1
68250N-80550E	680550	6068250	Normal	1		34		11	65	0.1	16	9.5	334	3.1	18		6		1.4	16	0.2	1.1	0.1	63	0.2	0.1	7	17	0.3	160	0	1	1.3	0	0	0.1	0	4.9	0.1	0	4	0.3	0.1
68250N-80600E	680600	6068250	Normal	0.9		20		8.6	60	0.1	14	9	207	2.9	13		1.4		1.3	13	0.1	1	0.1	57	0.1	0	7	17	0.3	193	0	1	1.6	0	0	0.1	0.1	4.3	0.1	0	4	0.3	0.1
68250N-80650E	680650	6068250	Normal	1		31		9.1	59	0.1	16	8.4	270	2.9	15		3		1	23	0.1	0.9	0.1	59	0.3	0.1	6	17	0.3	220	0	0.5	1.4	0	0	0.1	0	4.1	0.1	0	3	0.3	0.1
68250N-80700E	680700	6068250	Normal	1		22		8.2	63	0.1	13	7.8	239	2.7	10		4.8		0.9	16	0.1	0.8	0.1	62	0.1	0.1	7	16	0.3	190	0	0.5	1.4	0	0	0.1	0	4	0.1	0	4	0.3	0.1
68250N-80750E	680750	6068250	Normal	1.1		20		9.8	64	0.1	15	9.4	217	3.2	15		3.7		1	13	0.1	0.9	0.1	66	0.1	0.1	5	18	0.3	146	0	0.5	1.7	0	0	0.1	0	3.5	0.1	0	4	0.3	0.1
68250N-80800E	680800	6068250	Normal	0.8		10		10	78	0.1	8.8	6.1	302	2.5	6.9		1.6		0.6	15	0.2	0.6	0.1	64	0.2	0.1	5	16	0.2	106	0	2	0.8	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
68250N-80850E	680850	6068250	Normal	1.1		33		11	87	0.3	19	12	968	3.3	13		1.8		1.2	43	0.3	1	0.1	60	0.6	0.1	9	23	0.4	350	0	2	1.6	0	0.1	0.1	0.1	7	0.1	0	4	0.3	0.1
68250N-80900E	680900	6068250	Normal	1.3		25		13	140	0.3	16	13	305	3.7	13		4.5		1	20	0.2	1.1	0.1	72	0.2	0.1	6	21	0.3	202	0	1	2	0	0.1	0.1	0	4	0.1	0	6	0.3	0.1
68250N-80950E	680950	6068250	Normal	1.2		24		9.3	93	0.2	12	7.6	221	2.9	11		2.1		1.3	14	0.2	0.8	0.1	60	0.2	0.1	6	18	0.3	132	0	1	1.7	0	0	0.1	0	3.9	0.1	0	5	0.3	0.1
68250N-81000E	681000	6068250	Normal	1		32		10	72	0.2	16	10	725	3	13		24		1.1	34	0.3	1.1	0.1	60	0.4	0.1	10	19	0.4	201	0	2	1.2	0	0.1	0.1	0.1	6	0.1	0	4	0.3	0.1
68250N-81050E	681050	6068250	Normal	0.9		16		6.9	73	0.2	12	8.6	646	2.5	6.8		1		0.9	29	0.2	0.7	0.1	59	0.4	0	6	18	0.4	306	0	0.5	1.3	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1
68250N-81100E	681100	6068250	Normal	0.9		23		7.5	59	0.2	15	8.3	311	2.5	9.8		5.2		0.9	25	0.1	0.7	0.1	56	0.3	0	7	18	0.3	308	0	1	1.4	0	0	0.1	0	3.7	0.1	0	4	0.3	0.1
68250N-81150E	681150	6068250	Normal	1.8		30		10	120	0.6	21	12	377	4.4	21		4.3		1.2	19	0.2	0.9	0.1	88	0.1	0.2	5	27	0.4	187	0	2	2.4	0	0.1	0.1	0.1	5.1	0.1	0	7	0.3	0.1
68250N-81200E	681200	6068250	Normal	2.2		33		15	137	0.3	20	13	343	4.6	21		53		1.1	22	0.3	1.1	0.2	100	0.2	0.1	5	26	0.4	207	0	1	2	0	0	0.1	0	4.5	0.1	0	7	0.3	0.1
68250N-81250E	681250	6068250	Normal	1.2		17		8.3	59	0.1	12	7.4	268	2.8	10		0.3		0.8	16	0.1	0.8	0.1	64	0.2	0	4	17	0.3	126	0	0.5	1.1	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
68450N-80400E	680400	6068450	Normal	0.8		16		16	65	0.2	12	6.9	424	2.6	10		1.6		0.8	33	0.3	0.7	0.1	58	0.5	0	6	16	0.3	196	0	1	1.1	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1
68450N-80450E	680450	6068450	Normal	1.5		22		22	164	0.4	14	11	649	4	22		6.4		0.9	18	0.6	1.2	0.2	79	0.2	0.2	5	20	0.3	189	0	2	1.6	0	0.1	0.2	0.1	3.9	0.1	0	6	0.3	0.1
68450N-80500E	680500	6068450	Normal	0.8		27		9.5	67	0.2	11	7	276	2.7	12		2.8		0.8	28	0.2	0.9	0.1	56	0.4	0	11	15	0.2	207	0	1	1.2	0	0	0.1	0.1	4.7	0.1	0	4	0.3	0.1
68450N-80550E	680550	6068450	Normal	1.3		25		18	174	0.2	14	12	562	3.5	16		21		0.7	32	1	1	0.2	74	0.4	0.1	6	19	0.3	245	0	2	1.4	0	0	0.1	0	4.2	0.1	0	5	0.3	0.1
68450N-80600E	680600	6068450	Normal	1.1		16		11	123	0.1	14	8.9	404	3.2	13		26		1.1	14	0.2	1	0.1	64	0.2	0.1	6	17	0.3	152	0	2	1.4	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1
68450N-80650E	680650	6068450	Normal	1.6		32		19	103	0.4	17	11	660	3.9	25		6.6		1.2	15	0.3	1.2	0.2	73	0.2	0.2	5	21	0.3	145	0	0.5	1.8	0	0	0.1	0.1	4.6	0.1	0	4	0.3	0.1
68450N-80700E	680700	6068450	Normal	1.1		17		16	74	0.1	14	8.6	275	3.1	13		1.6		1	13	0.2	1	0.1	64	0.1	0.1	5	16	0.2	134	0	1	1.5	0	0	0.1	0	3.4	0.1	0	4	0.3	0.1
68450N-80750E	680750	6068450	Normal	0.8		17		8.3	80	0.1	14	8.6	402	3	13		2.1		1.2	13	0.1	0.9	0.1	62	0.1	0.1	5	17	0.3	151	0	2	1.5	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1
68450N-80800E	680800	6068450	Normal	0.8		17		11	87	0.1	13	7.9	444	3.1	13		1.5		1.1	11	0.1	0.9	0.1	61	0.1	0.1	5	17	0.2	114	0	0.5	1.4	0	0	0.1	0	3.7	0.1	0	4	0.3	0.1
68450N-80850E	680850	6068450	Normal	0.6		17		7.4	62	0.1	12	6.6	332	2.2	6.9		0.9		0.7	29	0.2	0.6	0.1	49	0.4	0	7	15	0.3	218	0	1	1.3	0	0	0.1	0	3.9	0.1	0	4	0.3	0.1
68450N-80900E	680900	6068450	Normal	1.3		15		9.5	96	0.2	8.2	10	951	3.1	7.7		1		0.5	26	0.4	0.6	0.1	71	0.3	0.1	6	18	0.2	241	0	0.5	1.5	0	0.1	0.1	0	2.9	0.1	0	6	0.3	0.1
68450N-80950E	680950	6068450	Normal	0.9		29		9.1	61	0.1	15	9.5	488	3	14		1		1.2	23	0.1	1.1	0.1	64	0.3	0.1	7	18	0.4	106	0	1	1	0	0	0.1	0	5.1	0.1	0	3	0.3	0.1
68450N-81000E	681000	6068450	Normal	1		19		11	125	0.1	14	10	796	3	10		0.9		1	26	0.5	0.8	0.1	62	0.4	0	6	19	0.3	312	0	1	1.3	0	0	0.1	0	4.3	0.1	0	4	0.3	0.1
68450N-81050E	681050	6068450	Normal	0.8		25		8.4	43	0.4	10	6	462	2.5	9.3		8.4		0.4	63	0.2	0.5	0.1	51	1.3	0.1	9	14	0.4	408	0	3	1.3	0	0	0.1	0.1	4.3	0.1	0	4	0.3	0.1
68450N-81100E	681100	6068450	Normal	2.2		19		11	93	0.2	14	10	526	3.8	16		29		0.7	21	0.4	0.9	0.1	91	0.2	0	5	21	0.4	184	0	1	1.4	0	0.1	0.1	0	3.1	0.1	0	6	0.3	0.1
68450N-81150E	681150	6068450	Normal	2		41		13	85	0.2	19	12	461	4	22		5.6		0.8	22	0.2	1.4	0.1	89	0.3	0.1	5	23	0.5	192	0	2	1.8	0	0.1	0.1	0.1	4.5	0.1	0	6	0.3	0.1
68450N-81200E	681200	6068450	Normal	1.1		19		7.6	75	0.1	16	9	463	2.7	14		1.2		1.1	15	0.2	0.7	0.1	56	0.2	0.1	4	19	0.3	171	0	1	1.3	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
68450N-81250E	681250	6068450	Normal	1.1		23		9.9	81	0.2	18	10	555	3.5	16		1.7		1	15	0.2	1	0.1	77	0.2	0.1	4	22	0.4	123	0	0.5	1.5	0	0	0.1	0	3.7	0.1	0	4	0.3	0.1
68450N-81300E	681300	6068450	Normal	0.9		20		8.2	86	0.1	16	9.2	603	3	14		0.9		0.9	12	0.2	0.9	0.1	61	0.1	0.1	4	20	0.3	114	0	1	1.2	0	0	0.1	0	3.5	0.1	0	4	0.3	0.1
68450N-81350E	681350	6068450	Normal	1.4		20		14	115	0.4	13	8.7	501	4.1	20		1.3		0.9	19	0.3	0.9	0.2	82	0.2	0.3	4	22	0.3	219	0	2	1.8	0	0.1	0.2	0.1	3.6	0.1	0	7	0.3	0.1

2012 Soil Data

Name	Easting _NAD8	Northing_ NAD83	Soil_Ho rizon	Mo_ ppm	Mo_ ppm	Cu_ ppm	Cu_ ppm	Pb_ ppm	Zn_ ppm	Ag_ ppm	Ni_p pm	Co_ ppm	Mn_ ppm	Fe_ pct	As_ ppm	U_p pm	Au_ ppb	Au_ ppb	Th_ ppm	Sr_ ppm	Cd_ ppm	Sb_ ppm	Bi_p pm	V_p pm	Ca_ pct	P_p ct	La_ ppm	Cr_ ppm	Mg_ pct	Ba_ ppm	Ti_p ct	B_p pm	Al_p ct	Na_ pct	K_p ct	W_p pm	Hg_ ppm	Sc_ ppm	Tl_p pm	S_p ct	Ga_ ppm	Se_ ppm	Te_ ppm
68450N-81400E	681400	6068450	Normal	0.8		9.8		7	68	0.1	12	7.1	416	2.5	10		0.3		0.9	13	0.2	0.7	0.1	53	0.1	0.1	4	16	0.3	104	0	1	1.1	0	0	0.1	0.1	2.9	0.1	0	4	0.3	0.1
68650N-80650E	680650	6068650	Normal	0.7		19		8.1	44	0.1	13	6.8	360	2.5	9.8		2.4		1.1	30	0.1	0.8	0.1	51	0.4	0.1	8	16	0.3	190	0	1	1	0	0	0.1	0.1	4.9	0.1	0	3	0.3	0.1
68650N-80700E	680700	6068650	Normal	0.9		25		8.2	66	0.1	14	6.8	207	2.4	8.4		2.3		0.9	18	0.1	0.7	0.1	52	0.2	0	6	15	0.3	198	0	1	1.3	0	0	0.1	0	3.7	0.1	0	4	0.3	0.1
68650N-80750E	680750	6068650	Normal	0.9		30		9.8	55	0.1	15	8.1	259	2.9	13		3.8		1.3	16	0.1	1.2	0.1	54	0.1	0.1	6	17	0.3	156	0	1	1.4	0	0	0.1	0	4.3	0.1	0	3	0.3	0.1
68650N-80800E	680800	6068650	Normal	0.4		16		8.4	41	0.1	11	6	218	1.9	6.1		3.4		0.9	28	0.1	0.4	0.1	48	0.4	0.1	6	14	0.3	197	0	1	1.1	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
68650N-80900E	680900	6068650	Normal	0.7		14		8.2	55	0.1	13	8.2	233	2.8	12		0.9		1	15	0.1	0.9	0.1	55	0.1	0.1	5	17	0.3	126	0	1	1.2	0	0	0.1	0	3.2	0.1	0	3	0.3	0.1
68650N-80950E	680950	6068650	Normal	0.8		22		10	79	0.1	17	7.6	193	2.5	7.5		5.7		0.4	20	0.1	0.6	0.1	55	0.2	0.1	5	16	0.3	210	0	2	1.8	0	0	0.1	0	3.3	0.1	0	5	0.3	0.1
68650N-81000E	681000	6068650	Normal	1		22		9.2	62	0.1	18	9.4	381	3	14		11		1.2	16	0.2	0.9	0.1	58	0.2	0.1	6	17	0.3	108	0	2	1.4	0	0	0.1	0	4.3	0.1	0	3	0.3	0.1
68650N-81050E	681050	6068650	Normal	0.9		40		11	78	0.2	18	10	628	3	14		4.1		0.9	31	0.3	1	0.1	65	0.5	0.1	8	23	0.5	166	0	3	1.3	0	0.1	0.1	0	5.5	0.1	0	4	0.3	0.1
68650N-81100E	681100	6068650	Normal	1.3		48		9.3	66	0.2	20	10	456	3.2	14		2.8		1.3	22	0.1	1.1	0.1	62	0.2	0.1	8	20	0.4	206	0	1	1.7	0	0	0.1	0.1	4.9	0.1	0	4	0.3	0.1
68650N-81150E	681150	6068650	Normal	1.7		18		16	94	0.2	9.8	11	771	3.2	10		2.7		1.2	100	0.4	0.7	0.1	68	0.9	0.1	6	16	0.4	201	0	2	2.5	0	0.1	0.1	0	4	0.1	0	9	0.3	0.1
68650N-81200E	681200	6068650	Normal	1.1		16		8.6	91	0.1	15	9.4	279	3.1	15		0.3		1	13	0.2	0.8	0.1	64	0.2	0.2	5	18	0.3	121	0	0.5	1.5	0	0	0.1	0	3.5	0.1	0	4	0.3	0.1
68650N-81250E	681250	6068650	Normal	0.7		14		7	55	0.1	12	7.2	414	2.3	7.1		2.8		0.9	24	0.1	0.7	0.1	51	0.3	0	6	16	0.3	150	0	2	1	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
68650N-81300E	681300	6068650	Normal	0.8		18		8.3	55	0.1	12	7.1	383	2.5	8.9		2.2		0.9	35	0.2	0.8	0.1	55	0.5	0	7	17	0.3	193	0.1	2	1.1	0	0	0.1	0	4.5	0.1	0	3	0.3	0.1
68650N-81350E	681350	6068650	Normal	0.9		14		7.2	76	0.1	6.2	5.5	273	2.4	5.7		0.7		0.4	24	0.3	0.6	0.1	58	0.3	0	6	14	0.2	124	0	1	0.8	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
68650N-81400E	681400	6068650	Normal	0.7		15		6.1	62	0.1	15	7.1	372	2.4	9.8		0.8		1	18	0.1	0.7	0.1	50	0.2	0.1	6	18	0.3	107	0	1	1.1	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
68650N-81450E	681450	6068650	Normal	1.5		23		11	105	0.1	18	12	517	3.8	22		1.4		0.8	24	0.2	1.1	0.1	83	0.3	0.1	5	20	0.5	271	0	2	1.8	0	0	0.1	0	4.6	0.1	0	6	0.3	0.1
68650N-81500E	681500	6068650	Normal	1		30		11	70	0.1	16	10	672	3	14		9.1		1.1	19	0.1	1	0.1	59	0.2	0.1	7	17	0.3	170	0	2	1.3	0	0	0.1	0	4.1	0.1	0	4	0.3	0.1
68650N-81550E	681550	6068650	Normal	1		21		8.5	65	0.1	14	7.6	234	2.9	12		0.7		1	17	0.1	1	0.2	60	0.2	0.1	5	16	0.3	113	0	1	1.4	0	0	0.1	0	3.5	0.1	0	4	0.3	0.1
68650N-81600E	681600	6068650	Normal	1.1		16		8.7	102	0.1	12	8.3	480	2.9	11		0.6		0.8	16	0.2	0.8	0.1	62	0.2	0.1	5	15	0.3	139	0	1	1.2	0	0	0.1	0	3.2	0.1	0	4	0.3	0.1
68650N-81650E	681650	6068650	Normal	1.1		17		12	77	0.1	12	8.8	361	3	13		1.7		0.9	46	0.1	0.9	0.1	64	0.3	0.1	5	16	0.4	115	0.1	1	1.6	0	0	0.2	0	3.4	0.1	0	5	0.3	0.1
68850N-80650E	680650	6068850	Normal	0.9		23		9	66	0.1	16	8.5	350	2.9	12		3.7		1.1	23	0.1	1	0.1	55	0.3	0.1	8	18	0.3	193	0	0.5	1.2	0	0	0.1	0	4	0.1	0	4	0.3	0.1
68850N-80700E	680700	6068850	Normal	1		17		8.6	52	0.1	16	7.9	277	2.7	10		0.3		1.2	17	0.1	0.8	0.1	51	0.2	0	6	16	0.3	214	0	0.5	1.3	0	0	0.1	0	3.9	0.1	0	4	0.3	0.1
68850N-80750E	680750	6068850	Normal	0.8		18		6.6	53	0.1	17	8.4	307	2.7	10		0.7		1.2	16	0.1	0.9	0.1	52	0.2	0.1	7	17	0.3	162	0	1	1.4	0	0	0.1	0.1	4.5	0.1	0	4	0.3	0.1
68850N-80800E	680800	6068850	Normal	0.8		22		8.1	54	0.1	17	8.5	230	3.1	13		3.9		1	18	0.1	1.1	0.1	56	0.1	0.1	5	17	0.3	174	0	1	1.3	0	0	0.1	0	4	0.1	0	4	0.3	0.1
68850N-80850E	680850	6068850	Normal	0.8		18		8.3	57	0.1	18	8.7	275	3	14		0.8		1	18	0.1	1	0.1	54	0.1	0.1	6	16	0.3	168	0	0.5	1.3	0	0	0.1	0	4.1	0.1	0	3	0.3	0.1
68850N-80900E	680900	6068850	Normal	0.6		14		7.8	53	0.1	9.7	5.2	227	2.1	6.5		3.3		0.7	19	0.1	0.6	0.1	48	0.2	0	6	14	0.3	131	0	0.5	1	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
68850N-80950E	680950	6068850	Normal	1.6		24		10	103	0.1	11	8.5	580	2.9	11		1		0.5	25	0.5	1	0.1	59	0.3	0.1	6	18	0.3	208	0	2	1.2	0	0.1	0.1	0	3.5	0.1	0	4	0.3	0.1
68850N-81000E	681000	6068850	Normal	1.1		34		11	100	0.1	18	11	635	3.3	15		2.5		1.2	29	0.4	1.3	0.1	61	0.4	0.1	8	20	0.4	185	0	3	1.3	0	0.1	0.1	0	5.6	0.1	0	4	0.3	0.1
68850N-81050E	681050	6068850	Normal	0.8		28		7.7	60	0.1	14	7.6	274	2.7	12		2.1		1.1	17	0.1	0.9	0.1	54	0.2	0.1	6	16	0.3	187	0	1	1.2	0	0	0.1	0	3.9	0.1	0	3	0.3	0.1
68850N-81100E	681100	6068850	Normal	1		20		8.9	88	0.1	17	9.2	279	3.1	14		3.9		1.3	14	0.2	1	0.1	60	0.2	0.1	5	17	0.3	114	0	1	1.5	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1
68850N-81150E	681150	6068850	Normal	1.1		15		6.2	75	0.2	9.3	7	483	2.7	9.8		2		0.6	11	0.1	0.9	0.1	67	0.1	0.1	4	16	0.2	103	0	0.5	0.9	0	0	0.1	0	2.7	0.1	0	4	0.3	0.1
68850N-81200E	681200	6068850	Normal	1.5		31		16	151	0.4	13	10	379	3.8	19		7.1		0.9	14	0.4	1.1	0.3	82	0.2	0.1	4	21	0.3	142	0	0.5	1.6	0	0	0.2	0	3.2	0.1	0	6	0.3	0.1
68850N-81250E	681250	6068850	Normal	1.7		28		11	115	0.3	18	9.6	452	3.7	22		1.9		1	15	0.3	1	0.1	72	0.2	0.1	5	22	0.3	149	0	0.5	2	0	0	0.2	0	4.2	0.1	0	5	0.3	0.1
68850N-81300E	681300	6068850	Normal	1.4		27		9.2	75	0.4	17	10	355	3.4	16		0.3		0.9	14	0.2	1	0.1	71	0.1	0.1	5	19	0.3	210	0	1	1.8	0	0	0.1	0	3.9	0.1	0	5	0.3	0.1
68850N-81350E	681350	6068850	Normal	1.4		23		11	107	0.4	14	8.3	275	3.3	15		2.1		0.7	30	0.3	0.9	0.1	71	0.4	0	5	18	0.3	269	0	2	1.4	0	0	0.1	0	3.8	0.1	0	5	0.3	0.1
68850N-81400E	681400	6068850	Normal	1.2		12		11	102	0.4	7.1	6.2	609	3.1	8.8		1.7		0.7	15	0.3	0.8	0.1	80	0.2	0.1	5	16	0.2	156	0	0.5	1.1	0	0.1	0.1	0	2.6	0.1	0	6	0.3	0.1
68850N-81450E	681450	6068850	Normal	1.1		9.2		8	63	0.2	5.6	3.8	331	2.3	5.5		1.9		0.6	16	0.5	0.6	0.1	57	0.2	0.1	4	14	0.1	92	0	1	0.8	0	0.1	0.1	0	2.2	0.1	0	4	0.3	0.1
68850N-81500E	681500	6068850	Normal	1		18		7.3	45	0.1	12	6.1	278	2.1	7		5.3		1	27	0.1	0.5	0.1	49	0.3	0	7	16	0.3	120	0.1	0.5	1.1	0	0.1	0.1	0	4.3	0.1	0	4	0.3	0.1
68850N-81550E	681550	6068850	Normal	1.2		24		7.6	58	0.1	15	8.5	414	2.6	10		5.6		1	26	0.1	0.9	0.1	58	0.3	0.1	6	21	0.5	116	0	1	1.3	0	0.1	0.1	0	3.7	0.1	0	4	0.3	0.1
68850N-81600E	681600	6068850	Normal	2.3		17		10	96	0.2	9.5	6.7	230	2.3	6.4		2.3		0.6	34	0.3	0.6	0.1	58	0.3	0	8	16	0.3	101	0	0.5	1.1	0	0	0.1	0	3.1	0.1	0	5	0.3	0.1
68850N-81650E	681650	6068850	Normal	1.3		24		6.8	42	0.1	11	5.5	262	1.9	5.2		1.6		1	30	0.2	0.5	0.1	48	0.4	0	9	16	0.4	129	0	0.5	1.1	0	0	0.1	0	4.1	0.1	0	4	0.3	0.1
69050N-80650E	680650	6069050	Normal	5.8		48		14	71	0.1	16	12	1290	3.4	12		1.2		1.4	83	0.3	0.8	0.2	61	0.7	0.1	12	20	0.5	227	0	2	1.5	0	0.1	0.1	0.1	6.2	0.1	0	4	0.3	0.1
69050N-80700E	680700	6069050	Normal	3.8		22		12	96	0.2	11	11	950	3.5	13		1.2		0.9	29	0.2	0.9	0.1	73	0.2	0.1	6	19	0.3	128	0	1	1.5	0	0.1	0.1	0	3.5	0.1	0	5	0.3	0.1
69050N-80750E	680750	6069050	Normal	3.2		35		12	72	0.1	16	11	997	3.4	13		1.7		1.6	64	0.2	1	0.1	67	0.6	0.1	10	20	0.5	188	0	2	1.5	0	0.1	0.1	0	5.9	0.1	0	4	0.3	0.1
69050N-80800E	680800	6069050	Normal	0.9		22		7.8	63	0.2	16	6.9	454	2.9	9.7		1.3		0.9	29	0.3	0.9	0.1	61	0.4	0.1	7	19	0.3	174	0	0.5	1.3	0	0.1	0.1	0	4.4	0.1	0	4	0.3	0.1
69050N-80850E	680850	6069050	Normal	0.6		13		6.3	46	0.1	12	6.3	344	2.4	7		1.2		0.9	22	0.1	0.6	0.1	50	0.3	0	6	15	0.3	149	0	0.5	1.1	0	0	0.1	0	3.6	0.1	0	3	0.3	0.1
69050N-80900E	680900	6069050	Normal	1.1		18		9.6	96	0.2	14	8.9	296	3.4	14		0.3		0.9	13	0.2	1	0.1	71	0.1	0.1	5	18	0.2	113	0	0.5	1.6	0	0	0.1	0	3.5	0.1	0	5	0.3	0.1
69050N-80950E	680950	6069050	Normal	0.9		19		10	107	0.1	17	8.5	435	2.8	11		0.8		1.2	13	0.1	0.9	0.1	52	0.1	0.1	6	17	0.2	104	0	1	1.4	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1
69050N-81000E	681000	6069050	Normal	0.9		20		7.5	61	0.1	20	9.5	481	3.1	14		2.4		1.4	19	0.1	1.1	0.1	57	0.2	0.1	7	18	0.3	126	0	1	1.2	0	0	0.1	0.1	4.6	0.1	0	3	0.3	0.1
69050N-81050E	681050	6069050	Normal	0.6		14		7.8	50	0.1	14	8.3	311	2.3	6.9		0.8		1.1	26	0.1	0.5	0.1	54	0.4	0	7	17	0.3	221	0	1	1.4	0	0	0.1	0	4.6	0.1	0	4	0.3	0.1
69050N-81100E	681100	6069050	Normal	1		23		8	44	0.2	16	8.5	442	2.6	9.6		2.4		0.9	35	0.2	0.7	0.1	49	0.6	0	9	18	0.3	246	0	1	1.2	0	0	0.1	0.1	5.5	0.1	0	3	0.3	0.1
69050N-81150E	681150	6069050	Normal	1		21		8.2	77	0.1	15	9	417	2.9	12		9.9		1	12	0.1	1	0.1	57	0.1	0.1	5	16	0.3	142	0	0.5	1.4	0	0	0.1	0	3.5	0.1	0	4	0.3	0.1
69050N-81200E	681200	6069050	Normal	1.4		27		10	92	0.2	17	11	423	3.8	19		1.2		1.1	15	0.2	1	0.1	86	0.1	0.1	5	22	0.4	113	0	1	1.9	0	0	0.2	0.1	4.1	0.1	0	5	0.3	0.1
69050N-81250E	681250	6069050	Normal	0.8		12		8.3	69	0.2	6.4	5.7	251	2.4	7.8		1.7		0.8	15	0.1	0.6	0.1	56	0.1	0.1	5	13	0.2	102	0	1	1	0	0	0.1	0	2.4	0.1	0	4	0.3	0.1
69050N-81300E	681300	6069050	Normal	0.9		16		8.3	82	0.1	16	9.3	505	2.9	13		0.5		1.1	13	0.3	0.9	0.1	60	0.1	0.1	5	18	0.3	97	0	0.5	1.4	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1

2012 Soil Data

Name	Easting_NAD8	Northing_NAD83	Soil_Horizon	Mo_ppm	Mo_ppm	Cu_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm	Au_ppb	Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Te_ppm
69050N-81350E	681350	6069050	Normal	1.9		42		16	78	0.2	19	11	546	3.8	26		7.7		1.3	33	0.2	1.2	0.2	78	0.3	0.1	5	25	0.4	239	0	1	2.4	0	0.1	0.2	0.1	5.2	0.1	0	5	0.3	0.1
69050N-81400E	681400	6069050	Normal	1.3		42		17	152	0.4	30	14	839	4	18		2.7		0.9	24	0.3	1.6	0.1	101	0.4	0.1	4	50	0.8	205	0.1	4	2.3	0	0.1	0.1	0	6.4	0.1	0	6	0.3	0.1
69050N-81450E	681450	6069050	Normal	2.3		19		8.3	70	0.3	12	8.4	261	3.4	14		3.4		0.8	28	0.2	0.8	0.2	82	0.2	0	4	19	0.3	244	0	0.5	1.7	0	0	0.1	0	3.7	0.1	0	7	0.3	0.1
69050N-81500E	681500	6069050	Normal	1		14		13	53	0.1	11	9.2	397	2.5	8.9		3.5		0.6	48	0.2	0.4	0.2	73	0.6	0	5	18	0.4	272	0	0.5	1.5	0	0	0.1	0	3.8	0.1	0	6	0.3	0.1
69050N-81550E	681550	6069050	Normal	1.1		28		9.8	71	0.1	14	8.7	315	3.2	18		1.4		0.9	15	0.2	1.2	0.1	68	0.2	0.1	5	16	0.3	158	0	1	1.3	0	0	0.1	0	3.7	0.1	0	4	0.3	0.1
69050N-81600E	681600	6069050	Normal	0.9		30		12	95	0.2	13	8.3	456	3	13		2.6		1.2	12	0.2	0.8	0.1	62	0.1	0.1	6	17	0.3	151	0	1	1.7	0	0	0.1	0	3.8	0.1	0	5	0.3	0.1
69050N-81650E	681650	6069050	Normal	1.3		33		11	67	0.1	19	11	257	3.3	15		2.3		0.8	13	0.1	1.1	0.1	70	0.2	0.1	4	20	0.4	170	0	0.5	1.5	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1
69250N-80900E	680900	6069250	Normal	1		22		8.1	52	0.1	14	8.1	303	2.8	12		1.7		1.1	21	0.1	1.1	0.1	58	0.2	0.1	5	16	0.3	157	0	1	1.2	0	0	0.1	0	3.2	0.1	0	3	0.3	0.1
69250N-80950E	680950	6069250	Normal	0.8		9.7		9.5	52	0.1	8.6	6.1	220	2.3	6.7		0.6		0.9	14	0.1	0.7	0.1	52	0.1	0.1	5	13	0.1	103	0	0.5	1.2	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
69250N-81000E	681000	6069250	Normal	0.7		20		6.4	57	0.1	15	7.2	290	2.5	9.2		2.6		1.2	29	0.1	0.8	0.1	51	0.2	0	9	18	0.3	180	0	1	1.3	0	0	0.1	0	5.3	0.1	0	4	0.3	0.1
69250N-81050E	681050	6069250	Normal	0.7		19		5.5	48	0.1	14	7.2	287	2.4	9.5		1.1		1.1	25	0.1	0.8	0.1	50	0.2	0.1	7	16	0.3	149	0	1	1.2	0	0	0.1	0	4.5	0.1	0	3	0.3	0.1
69250N-81100E	681100	6069250	Normal	1		13		7.2	63	0.1	14	8.1	200	2.9	12		0.3		0.8	13	0.1	1	0.1	61	0.1	0.1	5	17	0.2	125	0	1	1.4	0	0	0.1	0	3	0.1	0	4	0.3	0.1
69250N-81150E	681150	6069250	Normal	1.1		26		7.6	67	0.1	15	8.1	334	2.9	13		22		1	13	0.1	1.1	0.1	57	0.1	0.1	5	17	0.3	99	0	0.5	1.4	0	0	0.1	0.1	3.8	0.1	0	4	0.3	0.1
69250N-81200E	681200	6069250	Normal	1.2		18		9.7	57	0.1	13	7.9	201	2.9	12		2		1.2	13	0.1	1	0.1	60	0.1	0.1	7	17	0.3	139	0	1	1.4	0	0	0.1	0	4.1	0.1	0	4	0.3	0.1
69250N-81250E	681250	6069250	Normal	1.1		21		9	77	0.1	16	9.5	308	2.9	13		3.1		1	14	0.1	1	0.1	60	0.2	0.1	6	17	0.3	153	0	0.5	1.4	0	0	0.1	0	3.6	0.1	0	4	0.3	0.1
69250N-81300E	681300	6069250	Normal	0.6		27		8.8	46	0.1	14	7.1	347	2.5	8.8		1.6		1.2	26	0.1	0.8	0.1	55	0.3	0	8	17	0.3	216	0	1	1.2	0	0	0.1	0	5.5	0.1	0	4	0.3	0.1
69250N-81350E	681350	6069250	Normal	0.4		24		7.8	37	0.1	13	6.2	233	2.3	7.6		3.7		1.1	25	0.1	0.7	0.1	51	0.3	0	8	16	0.3	223	0	0.5	1.2	0	0	0.1	0	4.7	0.1	0	3	0.3	0.1
69250N-81400E	681400	6069250	Normal	0.8		14		7.3	40	0.1	9.9	4.8	149	1.9	6		2.9		0.8	16	0.1	0.5	0.1	46	0.2	0	5	13	0.2	137	0	0.5	1.2	0	0	0.1	0	2.9	0.1	0	4	0.3	0.1
69250N-81500E	681500	6069250	Normal	1		24		8.8	69	0.1	15	8.9	292	3.1	15		0.7		1.1	14	0.1	1.1	0.1	60	0.1	0.1	5	17	0.3	170	0	1	1.5	0	0	0.1	0	4.2	0.1	0	4	0.3	0.1
69250N-81550E	681550	6069250	Normal	1.1		15		7.7	51	0.1	9.9	6	218	2	7		1.7		0.7	22	0.1	0.5	0.1	53	0.2	0	5	12	0.2	199	0	0.5	1.2	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
69250N-81600E	681600	6069250	Normal	0.5		15		7.3	52	0.3	15	7	203	2.2	8.1		1.6		1	26	0.1	0.5	0.1	53	0.3	0	6	15	0.4	346	0	1	1.5	0	0	0.1	0.1	5.2	0.1	0	4	0.3	0.1
69250N-81650E	681650	6069250	Normal	1		26		9	51	0.1	18	8.6	279	3	14		0.3		1	16	0.1	1.1	0.1	57	0.2	0	5	17	0.3	142	0	1	1.6	0	0	0.1	0	3.8	0.1	0	3	0.3	0.1
69250N-81700E	681700	6069250	Normal	0.9		24		7.8	50	0.1	14	8.6	375	2.4	8.2		2.4		1	20	0.1	0.7	0.1	56	0.2	0	7	16	0.3	270	0	1	1.5	0	0	0.1	0	3.9	0.1	0	4	0.3	0.1
69250N-81800E	681800	6069250	Normal	1.1		18		8.4	45	0.2	11	6.6	216	2.1	7.8		2.7		0.5	19	0.1	0.6	0.1	53	0.2	0	5	14	0.2	203	0	0.5	1.4	0	0	0.1	0	3	0.1	0	5	0.3	0.1
69450N-80900E	680900	6069450	A	1	0.7	16	35	7	56	0.1	12	6.3	229	2.8	11		0.3	1.2	0.5	15	0.2	1	0.1	59	0.2	0.1	4	14	0.2	102	0	0.5	0.9	0	0	0.1	0	3	0.1	0	4	0.3	0.1
69450N-80950E	680950	6069450	A	1	1.1	19	34	7.6	56	0.1	11	7.1	266	2.7	11		0.8	2.9	0.7	20	0.2	1.1	0.1	55	0.3	0.1	5	15	0.3	114	0	1	0.9	0	0.1	0.1	0	3.6	0.1	0	3	0.3	0.1
69450N-81000E	681000	6069450	A	0.7	0.8	6.4	19	6.8	26	0.1	4.1	3.6	407	1.6	3.8		0.3	3.2	0.5	15	0.1	0.5	0.1	45	0.1	0	5	8	0.1	117	0	0.5	0.6	0	0	0.1	0	1.8	0.1	0	4	0.3	0.1
69450N-81050E	681050	6069450	A	1	0.9	14	21	14	67	0.1	10	6.1	305	2.6	8.8		2.1	1.5	0.7	13	0.1	0.9	0.1	56	0.2	0.1	5	14	0.3	80	0	0.5	1.1	0	0	0.1	0	3.1	0.1	0	5	0.3	0.1
69450N-81100E	681100	6069450	A	0.8	1	11	16	7.8	53	0.2	7.9	7.7	675	2.6	7.6		0.3	0.7	0.7	14	0.2	0.7	0.1	61	0.1	0.1	5	14	0.1	123	0	0.5	1.1	0	0	0.1	0	2.7	0.1	0	5	0.3	0.1
69450N-81150E	681150	6069450	A	1	1.2	29	17	8.7	60	0.1	16	8.8	319	3.2	14		0.8	0.7	1.1	17	0.2	1.2	0.1	62	0.2	0.1	6	17	0.3	123	0	2	1.4	0	0	0.1	0	4	0.1	0	3	0.3	0.1
69450N-81200E	681200	6069450	A	0.8	1.1	7.5	17	7.1	47	0.1	7.3	6.2	634	2.5	7.9		0.8	3.4	0.5	13	0.2	0.8	0.1	57	0.1	0.1	4	12	0.1	83	0	1	0.7	0	0	0.1	0	2	0.1	0	4	0.3	0.1
69450N-81250E	681250	6069450	A	0.7	0.7	17	19	6.6	56	0.2	13	6.3	341	2.3	7.4		1.2	0.7	0.8	30	0.1	0.6	0.1	52	0.4	0	7	16	0.3	222	0	0.5	1.3	0	0	0.1	0	4.2	0.1	0	4	0.3	0.1
69450N-81300E	681300	6069450	A	0.7	0.8	12	16	6.5	40	0.2	9.3	4.3	179	1.6	5.6		29	0.9	0.2	14	0.1	0.4	0.1	40	0.2	0.1	5	12	0.2	87	0	0.5	1	0	0	0.1	0.1	1.8	0.1	0	4	0.3	0.1
69450N-81350E	681350	6069450	A	0.8	1.2	9.2	71	8.9	67	0.1	7.1	5.6	359	2.7	9.1		5	1.1	0.9	13	0.2	0.7	0.1	57	0.1	0.1	5	14	0.1	95	0	0.5	1.1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
69450N-81400E	681400	6069450	A	1	0.9	19	27	8.4	64	0.1	11	6.7	377	2.7	11		1.9	2.2	0.3	19	0.3	0.9	0.1	55	0.2	0.1	5	15	0.2	127	0	2	1	0	0.1	0.1	0	2.7	0.1	0	4	0.3	0.1
69450N-81450E	681450	6069450	A	0.9	0.9	12	16	9	86	0.1	9.2	6.6	275	2.8	9.8		0.3	13	0.9	12	0.2	0.8	0.1	57	0.1	0.1	5	15	0.2	97	0	0.5	1.1	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69450N-81500E	681500	6069450	A	1	1.1	9.1	31	6.1	32	0.1	5.4	2.8	110	1.9	6.8		5.6	1.3	0.4	15	0.1	0.7	0.1	56	0.1	0	4	10	0.1	67	0	1	0.5	0	0	0.1	0	1.8	0.1	0	4	0.3	0.1
69450N-81550E	681550	6069450	A	1.4	1.1	11	16	9.2	72	0.1	8.7	6	258	3.1	11		3.5	1.4	0.8	16	0.2	0.7	0.1	62	0.1	0.1	5	16	0.2	139	0	0.5	1.4	0	0	0.1	0	2.8	0.1	0	5	0.3	0.1
69450N-81600E	681600	6069450	A	0.9	0.9	10	22	7.5	49	0.1	7.5	5.1	545	2.4	7.9		2	0.9	0.2	16	0.1	0.7	0.1	56	0.1	0.1	5	13	0.1	115	0	0.5	1	0	0	0.1	0	1.9	0.1	0	4	0.3	0.1
69450N-81650E	681650	6069450	A	0.9	0.7	8.5	16	7.4	34	0.1	6.3	5.4	280	1.8	5.4		3.8	3.7	0.3	11	0.1	0.5	0.1	47	0.1	0	5	11	0.2	77	0	0.5	0.9	0	0	0.1	0	2	0.1	0	4	0.3	0.1
69450N-81700E	681700	6069450	A	1	1.2	13	22	7.9	60	0.1	11	6.9	445	2.6	9.4		0.6	0.7	0.9	19	0.1	0.8	0.1	54	0.2	0.1	5	15	0.2	126	0	0.5	1.1	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
69450N-81750E	681750	6069450	A	0.6	0.6	9.1	11	7.2	46	0.1	6.7	3.2	111	1.7	5.5		1	1.5	0.2	15	0.1	0.4	0.1	41	0.2	0.1	5	11	0.1	103	0	0.5	0.9	0	0	0.1	0	1.6	0.1	0	4	0.3	0.1
69450N-81800E	681800	6069450	A	0.8	1	7.9	23	7.2	63	0.1	6.6	4.1	532	2.5	6.4		1.3	1	0.6	27	0.2	0.7	0.2	56	0.4	0.1	4	12	0.1	174	0	2	0.7	0	0	0.1	0	2	0.1	0	4	0.3	0.1
69450N-80900E	680900	6069450	B	0.7		35		7.9	59	0.1	15	8.4	400	3.1	15		1.2		1.1	21	0.1	1.4	0.1	60	0.3	0.1	6	16	0.3	147	0	0.5	1.1	0	0	0.1	0	4.7	0.1	0	3	0.3	0.1
69450N-80950E	680950	6069450	B	1.1		34		9.7	72	0.1	18	11	692	3.2	15		2.9		1.4	36	0.2	1.5	0.1	64	0.4	0.1	13	22	0.4	190	0.1	2	1.3	0	0.1	0.1	0.1	8	0.1	0	4	0.3	0.1
69450N-81000E	681000	6069450	B	0.8		19		7.1	63	0.1	13	7.5	212	2.9	11		3.2		1.1	16	0.1	0.9	0.1	56	0.1	0.1	6	15	0.3	162	0	0.5	1.4	0	0	0.1	0	4.2	0.1	0	4	0.3	0.1
69450N-81050E	681050	6069450	B	0.9		21		16	81	0.1	13	6.3	261	2.8	10		1.5		1	15	0.2	0.9	0.1	58	0.2	0.1	5	17	0.3	104	0	0.5	1.5	0	0	0.1	0	3.6	0.1	0	5	0.3	0.1
69450N-81100E	681100	6069450	B	1		16		7	68	0.2	11	6.4	278	2.8	10		0.7		1	15	0.1	0.7	0.1	62	0.1	0.1	5	15	0.2	151	0	1	1.4	0	0	0.1	0	3.6	0.1	0	5	0.3	0.1
69450N-81150E	681150	6069450	B	1.2		17		9.8	69	0.1	13	8.8	778	3.2	13		0.7		0.9	21	0.3	1.1	0.1	64	0.2	0.2	5	16	0.3	157	0	1	1.1	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
69450N-81200E	681200	6069450	B	1.1		17		8	58	0.1	15	8.9	330	3.4	15		3.4		0.9	19	0.1	1	0.1	68	0.2	0.1	5	16	0.3	146	0	2	1.4	0	0	0.1	0	3.9	0.1	0	4	0.3	0.1
69450N-81250E	681250	6069450	B	0.7		19		6.9	53	0.1	15	8.1	414	2.5	8		0.7		1.1	31	0.2	0.7	0.1	53	0.4	0	9	18	0.3	208	0	1	1.2	0	0	0.1	0	5.1	0.1	0	4	0.3	0.1
69450N-81300E	681300	6069450	B	0.8		16		6.2	54	0.1	13	6.2	201	2.1	6.7		0.9		0.7	19	0.1	0.5	0.1	48	0.2	0	6	15	0.3	124	0	0.5	1.4	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
69450N-81350E	681350	6069450	B	1.2		71		8.4	74	0.1	17	9.3	347	3.1	20		1.1		1.3	15	0.2	1.1	0.1	62	0.2	0.1	6	17	0.3	152	0.1	2	1.6	0	0.1	0.1	0	4.4	0.1	0	4	0.3	0.1
69450N-81400E	681400	6069450	B	0.9		27		7.9	70	0.2	15	8.5	297	3.1	13		2.2		1.1	17	0.2	1	0.1	61	0.2	0.1	6	18	0.3	155	0	2	1.5	0	0	0.1	0	4.1	0.1	0	4	0.3	0.1
69450N-81450E	681450	6069450	B	0.9		16		8.6	92	0.1	11	8.9	638	2.9	10		13		1	16	0.3	1	0.1	61	0.2	0.1	6	16	0.2	151	0	2	1.3	0	0	0.1	0	3.3	0.1	0	5	0.3	0.1
69450N-81500E	681500	6069450	B	1.1		31		7.8	55	0.1	15	8.4	305	2.9	12		1.3		1.1	20	0.1	0.9	0.1	59	0.2	0	6	17	0.3	203	0.1	1	1.4	0	0	0.1	0	4.2	0.1	0	4	0.3	0.1

2012 Soil Data

Name	Easting_NAD8	Northing_NAD83	Soil_Horizon	Mo_ppm	Mo_ppm	Cu_ppm	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm	Au_ppb	Au_ppb	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Te_ppm
69450N-81550E	681550	6069450	B	1.1		16		7.3	58	0.2	9.5	6.6	367	2.7	9.2		1.4		0.7	21	0.1	0.8	0.1	59	0.2	0.1	7	15	0.2	169	0	2	1.2	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
69450N-81600E	681600	6069450	B	0.9		22		7.9	66	0.1	14	8.1	352	2.9	10		0.9		0.7	17	0.1	0.8	0.1	62	0.2	0.1	7	17	0.3	173	0	2	1.5	0	0	0.1	0	4.1	0.1	0	5	0.3	0.1
69450N-81650E	681650	6069450	B	0.7		16		5.7	40	0.1	12	5.4	207	2	5.7		3.7		1	20	0.1	0.5	0.1	47	0.2	0	7	15	0.3	132	0.1	1	1.2	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
69450N-81700E	681700	6069450	B	1.2		22		7.5	65	0.1	15	8.3	272	2.9	12		0.7		1.1	17	0.1	1	0.1	58	0.2	0.1	6	17	0.3	120	0	2	1.5	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1
69450N-81750E	681750	6069450	B	0.6		11		6.4	50	0.1	8.3	4.5	127	1.6	4.1		1.5		0.8	19	0.1	0.4	0.1	43	0.2	0	7	12	0.2	155	0	0.5	1.1	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69450N-81800E	681800	6069450	B	1		23		7.6	57	0.1	16	8.5	262	3	13		1		1	16	0.1	1	0.1	60	0.2	0.1	5	17	0.3	141	0.1	2	1.4	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1
69450N-81850E	681850	6069450	B	1		24		13	80	0.1	15	8.5	328	2.9	13		3.7		1.2	17	0.1	1.2	0.1	58	0.2	0.1	6	17	0.3	170	0.1	2	1.4	0	0	0.1	0	4.4	0.1	0	4	0.3	0.1
69450N-81900E	681900	6069450	B	1		25		7.8	55	0.1	16	8.6	299	3	13		1.4		1.1	18	0.1	1	0.1	63	0.2	0	6	17	0.3	212	0.1	2	1.5	0	0	0.1	0	4.4	0.1	0	4	0.3	0.1
69850N-81425E	681425	6069850	Normal	0.6		15		6.5	43	0.1	8.2	4.6	280	1.7	5.3		0.6		0.6	23	0.1	0.5	0.1	44	0.2	0	6	12	0.2	131	0	1	0.9	0	0	0.1	0	2.6	0.1	0	4	0.3	0.1
69850N-81425E	681425	6069850	Normal	0.8		24		7.8	75	0.1	14	6.5	240	2.1	6.1		1.8		0.9	24	0.1	0.6	0.1	53	0.3	0	7	17	0.4	209	0	1	1.6	0	0	0.1	0	4	0.1	0	5	0.3	0.1
69850N-81425E	681425	6069850	Normal	0.6		27		6.9	62	0.1	15	7.2	219	2.1	5.6		37		0.9	22	0.1	0.6	0.1	51	0.2	0	7	16	0.4	197	0	2	1.6	0	0	0.1	0	4	0.1	0	5	0.3	0.1
69850N-81425E	681425	6069850	Normal	0.5		26		6	39	0.1	13	6.1	246	2	5.6		1.6		1.1	23	0.1	0.7	0.1	44	0.3	0.1	8	15	0.3	144	0.1	2	1.1	0	0	0.1	0	3.8	0.1	0	3	0.3	0.1
69850N-81425E	681425	6069850	Normal	0.6		26		8.1	58	0.1	14	6.9	230	2.1	5.6		4.1		0.8	21	0.1	0.6	0.1	50	0.2	0	6	15	0.4	183	0	2	1.5	0	0	0.1	0	3.5	0.1	0	4	0.3	0.1
69950N-81425E	681425	6069950	Normal	0.9		11		5.5	41	0.1	8.5	4.1	139	1.9	5.3		0.8		0.4	20	0.2	0.5	0.1	47	0.2	0	5	12	0.2	97	0	1	0.9	0	0	0.1	0	2.5	0.1	0	3	0.3	0.1
69950N-81425E	681425	6069950	Normal	0.5		16		5.6	43	0.1	12	6.4	234	2.1	5.8		2.2		1.2	25	0.1	0.6	0.1	49	0.3	0	8	15	0.3	157	0.1	1	1.1	0	0	0.1	0	4.4	0.1	0	3	0.3	0.1
69950N-81425E	681425	6069950	Normal	0.5		19		5.8	42	0.1	12	6.2	243	2.2	6.1		1.4		1.3	28	0.1	0.7	0.1	49	0.3	0.1	9	15	0.3	157	0.1	1	1.1	0	0	0.1	0	5	0.1	0	3	0.3	0.1
69950N-81425E	681425	6069950	Normal	0.4		16		5.8	41	0.1	13	6	239	2.2	5.6		2		1.2	27	0.1	0.7	0.1	50	0.3	0	9	15	0.3	153	0.1	2	1	0	0	0.1	0	4.7	0.1	0	3	0.3	0.1

Name	Easting_NAD83	Northing_NAD83	Soil_Horizon	Mo_ppm	Mo_ppm_b	Cu_ppm	Cu_ppm_b	Pb_ppm	Zn_ppm	Ag_ppm	Ni_ppm	Co_ppm	Mn_ppm	Fe_pct	As_ppm	U_ppm	Au_ppb	Au_ppb_b	Th_ppm	Sr_ppm	Cd_ppm	Sb_ppm	Bi_ppm	V_ppm	Ca_pct	P_pct	La_ppm	Cr_ppm	Mg_pct	Ba_ppm	Ti_pct	B_ppm	Al_pct	Na_pct	K_pct	W_ppm	Hg_ppm	Sc_ppm	Tl_ppm	S_pct	Ga_ppm	Se_ppm	Te_ppm
69450N-80900E "A"	680900	6069450	A	1	0.7	16	35	7	56	0.1	12	6.3	229	2.8	11		0.3	1.2	0.5	15	0.2	1	0.1	59	0.2	0.1	4	14	0.2	102	0	0.5	0.9	0	0	0.1	0	3	0.1	0	4	0.3	0.1
69450N-80950E "A"	680950	6069450	A	1	1.1	19	34	7.6	56	0.1	11	7.1	266	2.7	11		0.8	2.9	0.7	20	0.2	1.1	0.1	55	0.3	0.1	5	15	0.3	114	0	1	0.9	0	0.1	0.1	0	3.6	0.1	0	3	0.3	0.1
69450N-81000E "A"	681000	6069450	A	0.7	0.8	6.4	19	6.8	26	0.1	4.1	3.6	407	1.6	3.8		0.3	3.2	0.5	15	0.1	0.5	0.1	45	0.1	0	5	8	0.1	117	0	0.5	0.6	0	0	0.1	0	1.8	0.1	0	4	0.3	0.1
69450N-81050E "A"	681050	6069450	A	1	0.9	14	21	14	67	0.1	10	6.1	305	2.6	8.8		2.1	1.5	0.7	13	0.1	0.9	0.1	56	0.2	0.1	5	14	0.3	80	0	0.5	1.1	0	0	0.1	0	3.1	0.1	0	5	0.3	0.1
69450N-81100E "A"	681100	6069450	A	0.8	1	11	16	7.8	53	0.2	7.9	7.7	675	2.6	7.6		0.3	0.7	0.7	14	0.2	0.7	0.1	61	0.1	0.1	5	14	0.1	123	0	0.5	1.1	0	0	0.1	0	2.7	0.1	0	5	0.3	0.1
69450N-81150E "A"	681150	6069450	A	1	1.2	29	17	8.7	60	0.1	16	8.8	319	3.2	14		0.8	0.7	1.1	17	0.2	1.2	0.1	62	0.2	0.1	6	17	0.3	123	0	2	1.4	0	0	0.1	0	4	0.1	0	3	0.3	0.1
69450N-81200E "A"	681200	6069450	A	0.8	1.1	7.5	17	7.1	47	0.1	7.3	6.2	634	2.5	7.9		0.8	3.4	0.5	13	0.2	0.8	0.1	57	0.1	0.1	4	12	0.1	83	0	1	0.7	0	0	0.1	0	2	0.1	0	4	0.3	0.1
69450N-81250E "A"	681250	6069450	A	0.7	0.7	17	19	6.6	56	0.2	13	6.3	341	2.3	7.4		1.2	0.7	0.8	30	0.1	0.6	0.1	52	0.4	0	7	16	0.3	222	0	0.5	1.3	0	0	0.1	0	4.2	0.1	0	4	0.3	0.1
69450N-81300E "A"	681300	6069450	A	0.7	0.8	12	16	6.5	40	0.2	9.3	4.3	179	1.6	5.6		29	0.9	0.2	14	0.1	0.4	0.1	40	0.2	0.1	5	12	0.2	87	0	0.5	1	0	0	0.1	0.1	1.8	0.1	0	4	0.3	0.1
69450N-81350E "A"	681350	6069450	A	0.8	1.2	9.2	71	8.9	67	0.1	7.1	5.6	359	2.7	9.1		5	1.1	0.9	13	0.2	0.7	0.1	57	0.1	0.1	5	14	0.1	95	0	0.5	1.1	0	0	0.1	0	2.5	0.1	0	4	0.3	0.1
69450N-81400E "A"	681400	6069450	A	1	0.9	19	27	8.4	64	0.1	11	6.7	377	2.7	11		1.9	2.2	0.3	19	0.3	0.9	0.1	55	0.2	0.1	5	15	0.2	127	0	2	1	0	0.1	0.1	0	2.7	0.1	0	4	0.3	0.1
69450N-81450E "A"	681450	6069450	A	0.9	0.9	12	16	9	86	0.1	9.2	6.6	275	2.8	9.8		0.3	13	0.9	12	0.2	0.8	0.1	57	0.1	0.1	5	15	0.2	97	0	0.5	1.1	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69450N-81500E "A"	681500	6069450	A	1	1.1	9.1	31	6.1	32	0.1	5.4	2.8	110	1.9	6.8		5.6	1.3	0.4	15	0.1	0.7	0.1	56	0.1	0	4	10	0.1	67	0	1	0.5	0	0	0.1	0	1.8	0.1	0	4	0.3	0.1
69450N-81550E "A"	681550	6069450	A	1.4	1.1	11	16	9.2	72	0.1	8.7	6	258	3.1	11		3.5	1.4	0.8	16	0.2	0.7	0.1	62	0.1	0.1	5	16	0.2	139	0	0.5	1.4	0	0	0.1	0	2.8	0.1	0	5	0.3	0.1
69450N-81600E "A"	681600	6069450	A	0.9	0.9	10	22	7.5	49	0.1	7.5	5.1	545	2.4	7.9		2	0.9	0.2	16	0.1	0.7	0.1	56	0.1	0.1	5	13	0.1	115	0	0.5	1	0	0	0.1	0	1.9	0.1	0	4	0.3	0.1
69450N-81650E "A"	681650	6069450	A	0.9	0.7	8.5	16	7.4	34	0.1	6.3	5.4	280	1.8	5.4		3.8	3.7	0.3	11	0.1	0.5	0.1	47	0.1	0	5	11	0.2	77	0	0.5	0.9	0	0	0.1	0	2	0.1	0	4	0.3	0.1
69450N-81700E "A"	681700	6069450	A	1	1.2	13	22	7.9	60	0.1	11	6.9	445	2.6	9.4		0.6	0.7	0.9	19	0.1	0.8	0.1	54	0.2	0.1	5	15	0.2	126	0	0.5	1.1	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
69450N-81750E "A"	681750	6069450	A	0.6	0.6	9.1	11	7.2	46	0.1	6.7	3.2	111	1.7	5.5		1	1.5	0.2	15	0.1	0.4	0.1	41	0.2	0.1	5	11	0.1	103	0	0.5	0.9	0	0	0.1	0	1.6	0.1	0	4	0.3	0.1
69450N-81800E "A"	681800	6069450	A	0.8	1	7.9	23	7.2	63	0.1	6.6	4.1	532	2.5	6.4		1.3	1	0.6	27	0.2	0.7	0.2	56	0.4	0.1	4	12	0.1	174	0	2	0.7	0	0	0.1	0	2	0.1	0	4	0.3	0.1
69450N-81850E "B"	681850	6069450	A	0	1	0	24	13	80	0.1	15	8.5	328	2.9	13		0	3.7	1.2	17	0.1	1.2	0.1	58	0.2	0.1	6	17	0.3	170	0.1	2	1.4	0	0	0.1	0	4.4	0.1	0	4	0.3	0.1
69450N-81900E "B"	681900	6069450	A	0	1	0	25	7.8	55	0.1	16	8.6	299	3	13		0	1.4	1.1	18	0.1	1	0.1	63	0.2	0	6	17	0.3	212	0.1	2	1.5	0	0	0.1	0	4.4	0.1	0	4	0.3	0.1
69450N-80900E "B"	680900	6069450	B	0.7		35		7.9	59	0.1	15	8.4	400	3.1	15		1.2		1.1	21	0.1	1.4	0.1	60	0.3	0.1	6	16	0.3	147	0	0.5	1.1	0	0	0.1	0	4.7	0.1	0	3	0.3	0.1
69450N-80950E "B"	680950	6069450	B	1.1		34		9.7	72	0.1	18	11	692	3.2	15		2.9		1.4	36	0.2	1.5	0.1	64	0.4	0.1	13	22	0.4	190	0.1	2	1.3	0	0.1	0.1	0.1	8	0.1	0	4	0.3	0.1
69450N-81000E "B"	681000	6069450	B	0.8		19		7.1	63	0.1	13	7.5	212	2.9	11		3.2		1.1	16	0.1	0.9	0.1	56	0.1	0.1	6	15	0.3	162	0	0.5	1.4	0	0	0.1	0	4.2	0.1	0	4	0.3	0.1
69450N-81050E "B"	681050	6069450	B	0.9		21		16	81	0.1	13	6.3	261	2.8	10		1.5		1	15	0.2	0.9	0.1	58	0.2	0.1	5	17	0.3	104	0	0.5	1.5	0	0	0.1	0	3.6	0.1	0	5	0.3	0.1
69450N-81100E "B"	681100	6069450	B	1		16		7	68	0.2	11	6.4	278	2.8	10		0.7		1	15	0.1	0.7	0.1	62	0.1	0.1	5	15	0.2	151	0	1	1.4	0	0	0.1	0	3.6	0.1	0	5	0.3	0.1
69450N-81150E "B"	681150	6069450	B	1.2		17		9.8	69	0.1	13	8.8	778	3.2	13		0.7		0.9	21	0.3	1.1	0.1	64	0.2	0.2	5	16	0.3	157	0	1	1.1	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
69450N-81200E "B"	681200	6069450	B	1.1		17		8	58	0.1	15	8.9	330	3.4	15		3.4		0.9	19	0.1	1	0.1	68	0.2	0.1	5	16	0.3	146	0	2	1.4	0	0	0.1	0	3.9	0.1	0	4	0.3	0.1
69450N-81250E "B"	681250	6069450	B	0.7		19		6.9	53	0.1	15	8.1	414	2.5	8		0.7		1.1	31	0.2	0.7	0.1	53	0.4	0	9	18	0.3	208	0	1	1.2	0	0	0.1	0	5.1	0.1	0	4	0.3	0.1
69450N-81300E "B"	681300	6069450	B	0.8		16		6.2	54	0.1	13	6.2	201	2.1	6.7		0.9		0.7	19	0.1	0.5	0.1	48	0.2	0	6	15	0.3	124	0	0.5	1.4	0	0	0.1	0	3.1	0.1	0	4	0.3	0.1
69450N-81350E "B"	681350	6069450	B	1.2		71		8.4	74	0.1	17	9.3	347	3.1	20		1.1		1.3	15	0.2	1.1	0.1	62	0.2	0.1	6	17	0.3	152	0.1	2	1.6	0	0.1	0.1	0	4.4	0.1	0	4	0.3	0.1
69450N-81400E "B"	681400	6069450	B	0.9		27		7.9	70	0.2	15	8.5	297	3.1	13		2.2		1.1	17	0.2	1	0.1	61	0.2	0.1	6	18	0.3	155	0	2	1.5	0	0	0.1	0	4.1	0.1	0	4	0.3	0.1
69450N-81450E "B"	681450	6069450	B	0.9		16		8.6	92	0.1	11	8.9	638	2.9	10		13		1	16	0.3	1	0.1	61	0.2	0.1	6	16	0.2	151	0	2	1.3	0	0	0.1	0	3.3	0.1	0	5	0.3	0.1
69450N-81500E "B"	681500	6069450	B	1.1		31		7.8	55	0.1	15	8.4	305	2.9	12		1.3		1.1	20	0.1	0.9	0.1	59	0.2	0	6	17	0.3	203	0.1	1	1.4	0	0	0.1	0	4.2	0.1	0	4	0.3	0.1
69450N-81550E "B"	681550	6069450	B	1.1		16		7.3	58	0.2	9.5	6.6	367	2.7	9.2		1.4		0.7	21	0.1	0.8	0.1	59	0.2	0.1	7	15	0.2	169	0	2	1.2	0	0	0.1	0	3.3	0.1	0	4	0.3	0.1
69450N-81600E "B"	681600	6069450	B	0.9		22		7.9	66	0.1	14	8.1	352	2.9	10		0.9		0.7	17	0.1	0.8	0.1	62	0.2	0.1	7	17	0.3	173	0	2	1.5	0	0	0.1	0	4.1	0.1	0	5	0.3	0.1
69450N-81650E "B"	681650	6069450	B	0.7		16		5.7	40	0.1	12	5.4	207	2	5.7		3.7		1	20	0.1	0.5	0.1	47	0.2	0	7	15	0.3	132	0.1	1	1.2	0	0	0.1	0	3.5	0.1	0	3	0.3	0.1
69450N-81700E "B"	681700	6069450	B	1.2		22		7.5	65	0.1	15	8.3	272	2.9	12		0.7		1.1	17	0.1	1	0.1	58	0.2	0.1	6	17	0.3	120	0	2	1.5	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1
69450N-81750E "B"	681750	6069450	B	0.6		11		6.4	50	0.1	8.3	4.5	127	1.6	4.1		1.5		0.8	19	0.1	0.4	0.1	43	0.2	0	7	12	0.2	155	0	0.5	1.1	0	0	0.1	0	2.8	0.1	0	4	0.3	0.1
69450N-81800E "B"	681800	6069450	B	1		23		7.6	57	0.1	16	8.5	262	3	13		1		1	16	0.1	1	0.1	60	0.2	0.1	5	17	0.3	141	0.1	2	1.4	0	0	0.1	0	3.8	0.1	0	4	0.3	0.1

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada

www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Submitted By:	Temporary Email Distribution
Receiving Lab:	Canada-Smithers
Received:	May 29, 2012
Report Date:	June 12, 2012
Page:	1 of 7

CERTIFICATE OF ANALYSIS SMI12000022.1

CLIENT JOB INFORMATION

Project:	GD-12
Shipment ID:	
P.O. Number	12327
Number of Samples:	175

SAMPLE DISPOSAL

DISP-PLP	Dispose of Pulp After 90 days
DISP-RJT-SOIL	Immediate Disposal of Soil Reject

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	170	Dry at 60C			SMI
SS80	170	Dry at 60C sieve 100g to -80 mesh			SMI
1DX2	170	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN

ADDITIONAL COMMENTS

Invoice To: Rio Minerals Ltd.
910 - 475 Howe Street
Vancouver BC V6C 2B3
Canada

CC:

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

AcmeLabs
Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 12, 2012

CERTIFICATE OF ANALYSIS SMI12000022.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
68250N-80250E	Soil	1.1	16.6	9.2	54	<0.1	13.5	6.9	181	2.84	10.5	3.2	0.9	16	<0.1	0.7	0.1	66	0.17	0.032	5
68250N-80300E	Soil	1.0	13.8	7.2	45	<0.1	8.9	5.0	137	2.32	8.0	3.3	0.8	14	<0.1	0.7	<0.1	56	0.12	0.037	5
68250N-80350E	Soil	0.9	29.7	9.1	60	<0.1	15.2	8.4	297	3.10	14.1	1.1	1.2	15	0.1	1.1	<0.1	61	0.13	0.050	6
68250N-80400E	Soil	1.1	18.1	8.4	50	<0.1	12.2	7.2	174	2.67	10.5	2.3	0.9	13	<0.1	0.8	<0.1	62	0.11	0.029	5
68250N-80450E	Soil	0.7	13.3	6.4	66	<0.1	12.5	6.2	220	2.36	7.7	1.2	1.0	14	<0.1	0.7	<0.1	49	0.12	0.054	5
68250N-80500E	Soil	0.9	14.8	8.2	85	<0.1	11.5	8.2	238	3.19	11.6	2.5	1.1	12	0.1	0.7	<0.1	63	0.10	0.114	5
68250N-80550E	Soil	1.0	33.5	10.6	65	<0.1	16.0	9.5	334	3.11	18.0	6.0	1.4	16	0.2	1.1	<0.1	63	0.18	0.088	7
68250N-80600E	Soil	0.9	19.9	8.6	60	<0.1	14.3	9.0	207	2.90	12.7	1.4	1.3	13	0.1	1.0	<0.1	57	0.11	0.046	7
68250N-80650E	Soil	1.0	30.9	9.1	59	<0.1	15.8	8.4	270	2.89	15.3	3.0	1.0	23	<0.1	0.9	<0.1	59	0.25	0.051	6
68250N-80700E	Soil	1.0	21.5	8.2	63	<0.1	12.6	7.8	239	2.71	10.3	4.8	0.9	16	0.1	0.8	<0.1	62	0.14	0.050	7
68250N-80750E	Soil	1.1	19.5	9.8	64	0.1	15.3	9.4	217	3.21	14.8	3.7	1.0	13	0.1	0.9	<0.1	66	0.13	0.085	5
68250N-80800E	Soil	0.8	10.2	10.3	78	<0.1	8.8	6.1	302	2.52	6.9	1.6	0.6	15	0.2	0.6	<0.1	64	0.18	0.054	5
68250N-80850E	Soil	1.1	33.4	11.4	87	0.3	19.1	11.7	968	3.32	12.6	1.8	1.2	43	0.3	1.0	0.1	60	0.58	0.088	9
68250N-80900E	Soil	1.3	24.5	12.7	140	0.3	15.8	12.6	305	3.65	13.0	4.5	1.0	20	0.2	1.1	0.1	72	0.20	0.108	6
68250N-80950E	Soil	1.2	24.3	9.3	93	0.2	12.4	7.6	221	2.88	10.5	2.1	1.3	14	0.2	0.8	0.1	60	0.15	0.107	6
68250N-81000E	Soil	1.0	31.8	10.3	72	0.2	15.9	10.4	725	3.01	13.3	23.6	1.1	34	0.3	1.1	0.1	60	0.43	0.084	10
68250N-81050E	Soil	0.9	16.4	6.9	73	0.2	11.6	8.6	646	2.47	6.8	1.0	0.9	29	0.2	0.7	0.1	59	0.36	0.027	6
68250N-81100E	Soil	0.9	23.0	7.5	59	0.2	14.9	8.3	311	2.51	9.8	5.2	0.9	25	0.1	0.7	<0.1	56	0.28	0.043	7
68250N-81150E	Soil	1.8	30.0	10.0	120	0.6	20.7	11.9	377	4.42	21.1	4.3	1.2	19	0.2	0.9	0.1	88	0.14	0.175	5
68250N-81200E	Soil	2.2	33.2	15.3	137	0.3	19.7	13.2	343	4.58	21.3	52.5	1.1	22	0.3	1.1	0.2	100	0.23	0.129	5
68250N-81250E	Soil	1.2	16.6	8.3	59	<0.1	11.9	7.4	268	2.75	10.1	<0.5	0.8	16	<0.1	0.8	0.1	64	0.17	0.033	4
68450N-80400E	Soil	0.8	16.2	16.3	65	0.2	11.7	6.9	424	2.64	10.3	1.6	0.8	33	0.3	0.7	0.1	58	0.49	0.048	6
68450N-80450E	Soil	1.5	22.3	22.3	164	0.4	14.2	11.3	649	4.03	21.6	6.4	0.9	18	0.6	1.2	0.2	79	0.24	0.206	5
68450N-80500E	Soil	0.8	27.0	9.5	67	0.2	11.0	7.0	276	2.70	12.3	2.8	0.8	28	0.2	0.9	0.1	56	0.37	0.041	11
68450N-80550E	Soil	1.3	25.3	17.9	174	0.2	13.6	11.5	562	3.45	16.4	20.6	0.7	32	1.0	1.0	0.2	74	0.43	0.090	6
68450N-80600E	Soil	1.1	16.1	11.1	123	<0.1	14.4	8.9	404	3.19	13.3	25.7	1.1	14	0.2	1.0	<0.1	64	0.18	0.122	6
68450N-80650E	Soil	1.6	32.1	18.9	103	0.4	17.0	10.8	660	3.91	24.8	6.6	1.2	15	0.3	1.2	0.2	73	0.16	0.152	5
68450N-80700E	Soil	1.1	16.7	16.0	74	<0.1	14.3	8.6	275	3.14	13.3	1.6	1.0	13	0.2	1.0	<0.1	64	0.13	0.101	5
68450N-80750E	Soil	0.8	17.4	8.3	80	<0.1	13.9	8.6	402	3.03	12.9	2.1	1.2	13	0.1	0.9	<0.1	62	0.12	0.093	5
68450N-80800E	Soil	0.8	16.7	10.7	87	0.1	12.8	7.9	444	3.05	12.9	1.5	1.1	11	0.1	0.9	<0.1	61	0.11	0.111	5

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada
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www.acmelab.com

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910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 12, 2012

CERTIFICATE OF ANALYSIS SMI12000022.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
68250N-80250E	Soil	17	0.27	192	0.036	1	1.42	0.008	0.03	<0.1	0.04	3.2	<0.1	<0.05	4	<0.5	<0.2
68250N-80300E	Soil	13	0.17	148	0.031	1	1.10	0.008	0.02	<0.1	0.04	3.0	<0.1	<0.05	4	<0.5	<0.2
68250N-80350E	Soil	17	0.28	228	0.043	2	1.34	0.007	0.03	<0.1	0.04	4.2	<0.1	<0.05	3	<0.5	<0.2
68250N-80400E	Soil	16	0.24	172	0.030	<1	1.62	0.008	0.02	<0.1	0.05	3.3	<0.1	<0.05	4	<0.5	<0.2
68250N-80450E	Soil	15	0.24	122	0.031	<1	1.43	0.008	0.03	<0.1	0.04	3.0	<0.1	<0.05	4	<0.5	<0.2
68250N-80500E	Soil	18	0.20	101	0.043	1	1.54	0.007	0.02	0.1	0.03	3.1	<0.1	<0.05	5	<0.5	<0.2
68250N-80550E	Soil	17	0.28	160	0.044	1	1.28	0.009	0.03	<0.1	0.04	4.9	<0.1	<0.05	4	<0.5	<0.2
68250N-80600E	Soil	17	0.26	193	0.041	1	1.56	0.009	0.02	<0.1	0.05	4.3	<0.1	<0.05	4	<0.5	<0.2
68250N-80650E	Soil	17	0.31	220	0.038	<1	1.42	0.010	0.03	<0.1	0.03	4.1	<0.1	<0.05	3	<0.5	<0.2
68250N-80700E	Soil	16	0.26	190	0.041	<1	1.42	0.010	0.03	<0.1	0.03	4.0	<0.1	<0.05	4	<0.5	<0.2
68250N-80750E	Soil	18	0.26	146	0.036	<1	1.68	0.007	0.03	0.1	0.04	3.5	<0.1	<0.05	4	<0.5	<0.2
68250N-80800E	Soil	16	0.24	106	0.043	2	0.83	0.007	0.04	<0.1	0.02	2.5	<0.1	<0.05	4	<0.5	<0.2
68250N-80850E	Soil	23	0.41	350	0.027	2	1.57	0.010	0.07	<0.1	0.07	7.0	<0.1	<0.05	4	<0.5	<0.2
68250N-80900E	Soil	21	0.32	202	0.032	1	1.95	0.008	0.05	0.1	0.03	4.0	<0.1	<0.05	6	<0.5	<0.2
68250N-80950E	Soil	18	0.26	132	0.035	1	1.71	0.008	0.04	<0.1	0.04	3.9	<0.1	<0.05	5	<0.5	<0.2
68250N-81000E	Soil	19	0.37	201	0.047	2	1.17	0.020	0.06	0.1	0.05	6.0	<0.1	<0.05	4	<0.5	<0.2
68250N-81050E	Soil	18	0.37	306	0.038	<1	1.32	0.010	0.04	<0.1	0.03	3.8	<0.1	<0.05	4	<0.5	<0.2
68250N-81100E	Soil	18	0.27	308	0.031	1	1.40	0.010	0.03	<0.1	0.03	3.7	<0.1	<0.05	4	<0.5	<0.2
68250N-81150E	Soil	27	0.40	187	0.029	2	2.37	0.008	0.05	0.1	0.06	5.1	<0.1	<0.05	7	<0.5	<0.2
68250N-81200E	Soil	26	0.38	207	0.030	1	1.95	0.007	0.04	0.1	0.03	4.5	<0.1	<0.05	7	<0.5	<0.2
68250N-81250E	Soil	17	0.29	126	0.036	<1	1.06	0.007	0.03	<0.1	0.02	3.1	<0.1	<0.05	4	<0.5	<0.2
68450N-80400E	Soil	16	0.32	196	0.044	1	1.05	0.012	0.03	<0.1	0.04	3.8	<0.1	<0.05	4	<0.5	<0.2
68450N-80450E	Soil	20	0.34	189	0.036	2	1.57	0.006	0.05	0.2	0.05	3.9	<0.1	<0.05	6	<0.5	<0.2
68450N-80500E	Soil	15	0.23	207	0.034	1	1.22	0.009	0.03	<0.1	0.05	4.7	<0.1	<0.05	4	<0.5	<0.2
68450N-80550E	Soil	19	0.34	245	0.033	2	1.39	0.008	0.04	0.1	0.04	4.2	<0.1	<0.05	5	<0.5	<0.2
68450N-80600E	Soil	17	0.25	152	0.039	2	1.40	0.010	0.03	0.1	0.03	3.8	<0.1	<0.05	4	<0.5	<0.2
68450N-80650E	Soil	21	0.31	145	0.032	<1	1.84	0.006	0.04	0.1	0.08	4.6	<0.1	<0.05	4	<0.5	<0.2
68450N-80700E	Soil	16	0.23	134	0.037	1	1.51	0.008	0.04	0.1	0.03	3.4	<0.1	<0.05	4	<0.5	<0.2
68450N-80750E	Soil	17	0.27	151	0.042	2	1.45	0.008	0.03	<0.1	0.03	3.6	<0.1	<0.05	4	<0.5	<0.2
68450N-80800E	Soil	17	0.21	114	0.037	<1	1.41	0.007	0.03	<0.1	0.04	3.7	<0.1	<0.05	4	<0.5	<0.2

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 12, 2012

CERTIFICATE OF ANALYSIS SMI12000022.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
68450N-80850E	Soil	0.6	16.9	7.4	62	<0.1	11.9	6.6	332	2.22	6.9	0.9	0.7	29	0.2	0.6	<0.1	49	0.35	0.046	7
68450N-80900E	Soil	1.3	15.0	9.5	96	0.2	8.2	10.0	951	3.10	7.7	1.0	0.5	26	0.4	0.6	0.1	71	0.29	0.090	6
68450N-80950E	Soil	0.9	29.0	9.1	61	<0.1	15.0	9.5	488	3.03	13.6	1.0	1.2	23	0.1	1.1	<0.1	64	0.31	0.058	7
68450N-81000E	Soil	1.0	18.5	10.8	125	0.1	13.5	10.1	796	3.00	10.0	0.9	1.0	26	0.5	0.8	<0.1	62	0.35	0.047	6
68450N-81050E	Soil	0.8	24.6	8.4	43	0.4	10.1	6.0	462	2.51	9.3	8.4	0.4	63	0.2	0.5	0.1	51	1.29	0.056	9
68450N-81100E	Soil	2.2	18.7	10.5	93	0.2	14.1	10.1	526	3.77	15.5	28.7	0.7	21	0.4	0.9	0.1	91	0.24	0.031	5
68450N-81150E	Soil	2.0	40.9	13.2	85	0.2	18.7	11.9	461	4.04	21.8	5.6	0.8	22	0.2	1.4	0.1	89	0.25	0.080	5
68450N-81200E	Soil	1.1	19.2	7.6	75	<0.1	16.2	9.0	463	2.73	13.6	1.2	1.1	15	0.2	0.7	<0.1	56	0.15	0.072	4
68450N-81250E	Soil	1.1	23.3	9.9	81	0.2	17.6	10.2	555	3.46	16.1	1.7	1.0	15	0.2	1.0	<0.1	77	0.16	0.100	4
68450N-81300E	Soil	0.9	19.6	8.2	86	<0.1	15.6	9.2	603	2.96	13.6	0.9	0.9	12	0.2	0.9	<0.1	61	0.14	0.087	4
68450N-81350E	Soil	1.4	20.1	13.6	115	0.4	13.0	8.7	501	4.06	19.7	1.3	0.9	19	0.3	0.9	0.2	82	0.23	0.313	4
68450N-81400E	Soil	0.8	9.8	7.0	68	<0.1	12.3	7.1	416	2.48	10.1	<0.5	0.9	13	0.2	0.7	<0.1	53	0.13	0.106	4
68650N-80650E	Soil	0.7	18.9	8.1	44	<0.1	12.8	6.8	360	2.48	9.8	2.4	1.1	30	<0.1	0.8	<0.1	51	0.36	0.059	8
68650N-80700E	Soil	0.9	24.9	8.2	66	0.1	14.1	6.8	207	2.39	8.4	2.3	0.9	18	<0.1	0.7	<0.1	52	0.20	0.042	6
68650N-80750E	Soil	0.9	30.3	9.8	55	<0.1	15.1	8.1	259	2.85	12.6	3.8	1.3	16	<0.1	1.2	<0.1	54	0.14	0.065	6
68650N-80800E	Soil	0.4	16.0	8.4	41	0.1	11.3	6.0	218	1.89	6.1	3.4	0.9	28	0.1	0.4	<0.1	48	0.39	0.053	6
68650N-80850E	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
68650N-80900E	Soil	0.7	13.5	8.2	55	<0.1	13.3	8.2	233	2.75	11.8	0.9	1.0	15	0.1	0.9	<0.1	55	0.12	0.075	5
68650N-80950E	Soil	0.8	21.7	10.1	79	<0.1	16.9	7.6	193	2.50	7.5	5.7	0.4	20	0.1	0.6	<0.1	55	0.17	0.053	5
68650N-81000E	Soil	1.0	21.6	9.2	62	<0.1	17.5	9.4	381	2.98	13.5	11.1	1.2	16	0.2	0.9	<0.1	58	0.17	0.091	6
68650N-81050E	Soil	0.9	39.8	10.5	78	0.2	18.4	10.0	628	3.02	13.5	4.1	0.9	31	0.3	1.0	0.1	65	0.45	0.084	8
68650N-81100E	Soil	1.3	48.0	9.3	66	0.2	19.6	10.3	456	3.17	14.1	2.8	1.3	22	0.1	1.1	0.1	62	0.23	0.082	8
68650N-81150E	Soil	1.7	17.9	16.3	94	0.2	9.8	11.0	771	3.23	10.3	2.7	1.2	100	0.4	0.7	0.1	68	0.92	0.092	6
68650N-81200E	Soil	1.1	16.1	8.6	91	<0.1	14.9	9.4	279	3.07	14.8	<0.5	1.0	13	0.2	0.8	<0.1	64	0.17	0.150	5
68650N-81250E	Soil	0.7	14.4	7.0	55	<0.1	11.6	7.2	414	2.27	7.1	2.8	0.9	24	0.1	0.7	<0.1	51	0.33	0.027	6
68650N-81300E	Soil	0.8	17.5	8.3	55	<0.1	12.0	7.1	383	2.50	8.9	2.2	0.9	35	0.2	0.8	0.1	55	0.52	0.049	7
68650N-81350E	Soil	0.9	13.8	7.2	76	0.1	6.2	5.5	273	2.39	5.7	0.7	0.4	24	0.3	0.6	0.1	58	0.27	0.035	6
68650N-81400E	Soil	0.7	14.9	6.1	62	<0.1	14.5	7.1	372	2.39	9.8	0.8	1.0	18	0.1	0.7	<0.1	50	0.21	0.081	6
68650N-81450E	Soil	1.5	23.3	11.2	105	0.1	17.7	11.6	517	3.81	21.7	1.4	0.8	24	0.2	1.1	0.1	83	0.30	0.094	5
68650N-81500E	Soil	1.0	30.2	10.6	70	<0.1	15.6	10.4	672	2.98	13.5	9.1	1.1	19	0.1	1.0	<0.1	59	0.19	0.065	7

AcmeLabs
Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 12, 2012

CERTIFICATE OF ANALYSIS SMI12000022.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
68450N-80850E	Soil	15	0.29	218	0.033	1	1.26	0.012	0.04	<0.1	0.04	3.9	<0.1	<0.05	4	<0.5	<0.2
68450N-80900E	Soil	18	0.24	241	0.026	<1	1.45	0.007	0.05	0.1	0.04	2.9	<0.1	<0.05	6	<0.5	<0.2
68450N-80950E	Soil	18	0.38	106	0.044	1	1.02	0.010	0.03	<0.1	0.03	5.1	<0.1	<0.05	3	<0.5	<0.2
68450N-81000E	Soil	19	0.30	312	0.037	1	1.33	0.012	0.04	<0.1	0.03	4.3	<0.1	<0.05	4	<0.5	<0.2
68450N-81050E	Soil	14	0.41	408	0.040	3	1.30	0.024	0.04	<0.1	0.07	4.3	<0.1	<0.05	4	<0.5	<0.2
68450N-81100E	Soil	21	0.36	184	0.042	1	1.38	0.008	0.05	0.1	0.03	3.1	<0.1	<0.05	6	<0.5	<0.2
68450N-81150E	Soil	23	0.49	192	0.037	2	1.78	0.007	0.05	0.1	0.05	4.5	<0.1	<0.05	6	<0.5	<0.2
68450N-81200E	Soil	19	0.29	171	0.035	1	1.34	0.009	0.03	<0.1	0.02	3.1	<0.1	<0.05	4	<0.5	<0.2
68450N-81250E	Soil	22	0.35	123	0.036	<1	1.46	0.007	0.04	0.1	0.04	3.7	<0.1	<0.05	4	<0.5	<0.2
68450N-81300E	Soil	20	0.30	114	0.032	1	1.19	0.007	0.03	<0.1	0.02	3.5	<0.1	<0.05	4	<0.5	<0.2
68450N-81350E	Soil	22	0.31	219	0.025	2	1.81	0.006	0.05	0.2	0.07	3.6	<0.1	<0.05	7	<0.5	<0.2
68450N-81400E	Soil	16	0.25	104	0.032	1	1.09	0.007	0.03	<0.1	0.05	2.9	<0.1	<0.05	4	<0.5	<0.2
68650N-80650E	Soil	16	0.30	190	0.043	1	0.96	0.014	0.03	<0.1	0.05	4.9	<0.1	<0.05	3	<0.5	<0.2
68650N-80700E	Soil	15	0.31	198	0.042	1	1.29	0.009	0.03	<0.1	0.03	3.7	<0.1	<0.05	4	<0.5	<0.2
68650N-80750E	Soil	17	0.30	156	0.042	1	1.36	0.010	0.03	<0.1	0.04	4.3	<0.1	<0.05	3	<0.5	<0.2
68650N-80800E	Soil	14	0.31	197	0.043	1	1.10	0.013	0.03	<0.1	0.03	3.5	<0.1	<0.05	3	<0.5	<0.2
68650N-80850E	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
68650N-80900E	Soil	17	0.27	126	0.037	1	1.20	0.008	0.03	<0.1	0.02	3.2	<0.1	<0.05	3	<0.5	<0.2
68650N-80950E	Soil	16	0.30	210	0.027	2	1.78	0.009	0.03	<0.1	0.04	3.3	<0.1	<0.05	5	<0.5	<0.2
68650N-81000E	Soil	17	0.31	108	0.040	2	1.35	0.008	0.03	<0.1	0.03	4.3	<0.1	<0.05	3	<0.5	<0.2
68650N-81050E	Soil	23	0.47	166	0.042	3	1.31	0.012	0.07	<0.1	0.04	5.5	<0.1	<0.05	4	<0.5	<0.2
68650N-81100E	Soil	20	0.41	206	0.041	1	1.71	0.008	0.04	<0.1	0.06	4.9	<0.1	<0.05	4	<0.5	<0.2
68650N-81150E	Soil	16	0.40	201	0.031	2	2.53	0.007	0.10	0.1	0.04	4.0	<0.1	<0.05	9	<0.5	<0.2
68650N-81200E	Soil	18	0.31	121	0.032	<1	1.50	0.007	0.03	0.1	0.03	3.5	<0.1	<0.05	4	<0.5	<0.2
68650N-81250E	Soil	16	0.30	150	0.042	2	1.01	0.010	0.04	<0.1	0.02	3.5	<0.1	<0.05	3	<0.5	<0.2
68650N-81300E	Soil	17	0.34	193	0.050	2	1.08	0.015	0.04	0.1	0.04	4.5	<0.1	<0.05	3	<0.5	<0.2
68650N-81350E	Soil	14	0.18	124	0.040	1	0.82	0.007	0.04	<0.1	0.02	2.4	<0.1	<0.05	4	<0.5	<0.2
68650N-81400E	Soil	18	0.27	107	0.041	1	1.07	0.008	0.03	<0.1	0.03	3.5	<0.1	<0.05	3	<0.5	<0.2
68650N-81450E	Soil	20	0.50	271	0.035	2	1.75	0.008	0.04	0.1	0.04	4.6	<0.1	<0.05	6	<0.5	<0.2
68650N-81500E	Soil	17	0.31	170	0.042	2	1.28	0.009	0.04	0.1	0.03	4.1	<0.1	<0.05	4	<0.5	<0.2

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
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	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
68650N-81550E	Soil	1.0	20.7	8.5	65	<0.1	13.6	7.6	234	2.90	11.8	0.7	1.0	17	0.1	1.0	0.2	60	0.16	0.079	5
68650N-81600E	Soil	1.1	15.7	8.7	102	0.1	12.0	8.3	480	2.93	11.4	0.6	0.8	16	0.2	0.8	<0.1	62	0.18	0.097	5
68650N-81650E	Soil	1.1	17.1	11.7	77	0.1	12.4	8.8	361	3.04	12.7	1.7	0.9	46	0.1	0.9	0.1	64	0.26	0.075	5
68850N-80650E	Soil	0.9	22.7	9.0	66	<0.1	15.8	8.5	350	2.91	12.2	3.7	1.1	23	0.1	1.0	<0.1	55	0.25	0.060	8
68850N-80700E	Soil	1.0	17.3	8.6	52	<0.1	15.5	7.9	277	2.68	10.0	<0.5	1.2	17	<0.1	0.8	<0.1	51	0.15	0.031	6
68850N-80750E	Soil	0.8	17.7	6.6	53	<0.1	16.6	8.4	307	2.72	10.3	0.7	1.2	16	<0.1	0.9	<0.1	52	0.15	0.061	7
68850N-80800E	Soil	0.8	22.0	8.1	54	<0.1	17.2	8.5	230	3.05	13.4	3.9	1.0	18	<0.1	1.1	<0.1	56	0.13	0.060	5
68850N-80850E	Soil	0.8	17.8	8.3	57	<0.1	17.7	8.7	275	3.01	13.6	0.8	1.0	18	0.1	1.0	<0.1	54	0.14	0.054	6
68850N-80900E	Soil	0.6	14.0	7.8	53	<0.1	9.7	5.2	227	2.06	6.5	3.3	0.7	19	0.1	0.6	<0.1	48	0.20	0.048	6
68850N-80950E	Soil	1.6	23.9	10.0	103	0.1	11.3	8.5	580	2.85	10.7	1.0	0.5	25	0.5	1.0	<0.1	59	0.28	0.098	6
68850N-81000E	Soil	1.1	33.6	10.6	100	<0.1	17.9	11.2	635	3.29	14.9	2.5	1.2	29	0.4	1.3	<0.1	61	0.43	0.107	8
68850N-81050E	Soil	0.8	27.8	7.7	60	<0.1	13.6	7.6	274	2.73	11.5	2.1	1.1	17	0.1	0.9	<0.1	54	0.15	0.075	6
68850N-81100E	Soil	1.0	19.8	8.9	88	<0.1	16.7	9.2	279	3.11	13.7	3.9	1.3	14	0.2	1.0	<0.1	60	0.18	0.085	5
68850N-81150E	Soil	1.1	14.8	6.2	75	0.2	9.3	7.0	483	2.71	9.8	2.0	0.6	11	0.1	0.9	0.1	67	0.10	0.056	4
68850N-81200E	Soil	1.5	30.8	15.8	151	0.4	13.2	10.1	379	3.81	19.4	7.1	0.9	14	0.4	1.1	0.3	82	0.15	0.093	4
68850N-81250E	Soil	1.7	27.6	10.6	115	0.3	18.3	9.6	452	3.71	21.9	1.9	1.0	15	0.3	1.0	0.1	72	0.15	0.144	5
68850N-81300E	Soil	1.4	27.2	9.2	75	0.4	17.2	10.0	355	3.40	16.2	<0.5	0.9	14	0.2	1.0	0.1	71	0.12	0.065	5
68850N-81350E	Soil	1.4	22.8	10.7	107	0.4	14.2	8.3	275	3.25	14.5	2.1	0.7	30	0.3	0.9	0.1	71	0.44	0.047	5
68850N-81400E	Soil	1.2	12.1	10.9	102	0.4	7.1	6.2	609	3.13	8.8	1.7	0.7	15	0.3	0.8	0.1	80	0.16	0.099	5
68850N-81450E	Soil	1.1	9.2	8.0	63	0.2	5.6	3.8	331	2.26	5.5	1.9	0.6	16	0.5	0.6	0.1	57	0.21	0.085	4
68850N-81500E	Soil	1.0	17.5	7.3	45	<0.1	12.0	6.1	278	2.09	7.0	5.3	1.0	27	<0.1	0.5	<0.1	49	0.31	0.049	7
68850N-81550E	Soil	1.2	23.8	7.6	58	<0.1	15.4	8.5	414	2.63	10.0	5.6	1.0	26	0.1	0.9	<0.1	58	0.31	0.062	6
68850N-81600E	Soil	2.3	16.9	10.0	96	0.2	9.5	6.7	230	2.32	6.4	2.3	0.6	34	0.3	0.6	0.1	58	0.27	0.040	8
68850N-81650E	Soil	1.3	23.5	6.8	42	0.1	10.8	5.5	262	1.90	5.2	1.6	1.0	30	0.2	0.5	<0.1	48	0.35	0.027	9
69050N-80650E	Soil	5.8	48.1	13.9	71	0.1	16.1	12.0	1290	3.35	12.1	1.2	1.4	83	0.3	0.8	0.2	61	0.69	0.072	12
69050N-80700E	Soil	3.8	21.7	12.3	96	0.2	11.4	11.4	950	3.49	12.6	1.2	0.9	29	0.2	0.9	0.1	73	0.21	0.083	6
69050N-80750E	Soil	3.2	34.7	11.6	72	<0.1	16.2	11.3	997	3.42	12.8	1.7	1.6	64	0.2	1.0	0.1	67	0.55	0.053	10
69050N-80800E	Soil	0.9	21.6	7.8	63	0.2	15.7	6.9	454	2.91	9.7	1.3	0.9	29	0.3	0.9	<0.1	61	0.43	0.065	7
69050N-80850E	Soil	0.6	13.2	6.3	46	<0.1	12.2	6.3	344	2.42	7.0	1.2	0.9	22	0.1	0.6	<0.1	50	0.31	0.035	6
69050N-80900E	Soil	1.1	17.7	9.6	96	0.2	14.1	8.9	296	3.38	14.4	<0.5	0.9	13	0.2	1.0	0.1	71	0.14	0.138	5

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

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910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 12, 2012

CERTIFICATE OF ANALYSIS SMI12000022.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
68650N-81550E	Soil	16	0.29	113	0.038	1	1.40	0.008	0.03	<0.1	0.04	3.5	<0.1	<0.05	4	<0.5	<0.2
68650N-81600E	Soil	15	0.29	139	0.034	1	1.24	0.007	0.03	0.1	0.04	3.2	<0.1	<0.05	4	<0.5	<0.2
68650N-81650E	Soil	16	0.38	115	0.059	1	1.62	0.008	0.04	0.2	0.03	3.4	<0.1	<0.05	5	<0.5	<0.2
68850N-80650E	Soil	18	0.29	193	0.041	<1	1.20	0.011	0.04	<0.1	0.04	4.0	<0.1	<0.05	4	<0.5	<0.2
68850N-80700E	Soil	16	0.25	214	0.029	<1	1.31	0.009	0.03	<0.1	0.03	3.9	<0.1	<0.05	4	<0.5	<0.2
68850N-80750E	Soil	17	0.27	162	0.040	1	1.42	0.009	0.03	<0.1	0.06	4.5	<0.1	<0.05	4	<0.5	<0.2
68850N-80800E	Soil	17	0.28	174	0.031	1	1.28	0.008	0.03	<0.1	0.04	4.0	<0.1	<0.05	4	<0.5	<0.2
68850N-80850E	Soil	16	0.27	168	0.033	<1	1.25	0.009	0.03	<0.1	0.02	4.1	<0.1	<0.05	3	<0.5	<0.2
68850N-80900E	Soil	14	0.29	131	0.042	<1	1.04	0.008	0.03	<0.1	0.02	2.9	<0.1	<0.05	4	<0.5	<0.2
68850N-80950E	Soil	18	0.26	208	0.027	2	1.15	0.007	0.06	<0.1	0.03	3.5	<0.1	<0.05	4	<0.5	<0.2
68850N-81000E	Soil	20	0.43	185	0.044	3	1.30	0.014	0.08	<0.1	0.03	5.6	<0.1	<0.05	4	<0.5	<0.2
68850N-81050E	Soil	16	0.25	187	0.043	1	1.20	0.009	0.03	<0.1	0.03	3.9	<0.1	<0.05	3	<0.5	<0.2
68850N-81100E	Soil	17	0.32	114	0.041	1	1.48	0.008	0.03	0.1	0.04	3.8	<0.1	<0.05	4	<0.5	<0.2
68850N-81150E	Soil	16	0.23	103	0.032	<1	0.93	0.004	0.03	0.1	0.02	2.7	<0.1	<0.05	4	<0.5	<0.2
68850N-81200E	Soil	21	0.31	142	0.033	<1	1.55	0.006	0.04	0.2	0.04	3.2	<0.1	<0.05	6	<0.5	<0.2
68850N-81250E	Soil	22	0.34	149	0.028	<1	1.99	0.006	0.03	0.2	0.04	4.2	<0.1	<0.05	5	<0.5	<0.2
68850N-81300E	Soil	19	0.32	210	0.026	1	1.77	0.007	0.04	0.1	0.04	3.9	<0.1	<0.05	5	<0.5	<0.2
68850N-81350E	Soil	18	0.34	269	0.029	2	1.40	0.010	0.03	0.1	0.03	3.8	<0.1	<0.05	5	<0.5	<0.2
68850N-81400E	Soil	16	0.19	156	0.035	<1	1.05	0.007	0.05	<0.1	0.03	2.6	<0.1	<0.05	6	<0.5	<0.2
68850N-81450E	Soil	14	0.13	92	0.038	1	0.75	0.005	0.07	0.1	0.02	2.2	<0.1	<0.05	4	<0.5	<0.2
68850N-81500E	Soil	16	0.34	120	0.051	<1	1.07	0.037	0.05	<0.1	0.03	4.3	<0.1	<0.05	4	<0.5	<0.2
68850N-81550E	Soil	21	0.48	116	0.043	1	1.29	0.014	0.07	<0.1	0.02	3.7	<0.1	<0.05	4	<0.5	<0.2
68850N-81600E	Soil	16	0.32	101	0.041	<1	1.10	0.006	0.03	0.1	0.02	3.1	<0.1	<0.05	5	<0.5	<0.2
68850N-81650E	Soil	16	0.35	129	0.036	<1	1.05	0.009	0.03	<0.1	0.03	4.1	<0.1	<0.05	4	<0.5	<0.2
69050N-80650E	Soil	20	0.53	227	0.040	2	1.47	0.010	0.06	<0.1	0.05	6.2	<0.1	<0.05	4	<0.5	<0.2
69050N-80700E	Soil	19	0.32	128	0.032	1	1.47	0.007	0.05	0.1	0.03	3.5	<0.1	<0.05	5	<0.5	<0.2
69050N-80750E	Soil	20	0.46	188	0.042	2	1.53	0.009	0.06	0.1	0.04	5.9	<0.1	<0.05	4	<0.5	<0.2
69050N-80800E	Soil	19	0.29	174	0.034	<1	1.25	0.009	0.05	0.1	0.03	4.4	<0.1	<0.05	4	<0.5	<0.2
69050N-80850E	Soil	15	0.27	149	0.036	<1	1.08	0.009	0.03	<0.1	0.03	3.6	<0.1	<0.05	3	<0.5	<0.2
69050N-80900E	Soil	18	0.24	113	0.030	<1	1.57	0.006	0.04	<0.1	0.04	3.5	<0.1	<0.05	5	<0.5	<0.2

AcmeLabs Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

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910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 12, 2012

CERTIFICATE OF ANALYSIS SMI12000022.1

Method		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
Analyte		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
MDL		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
69050N-80950E	Soil	0.9	18.8	10.0	107	<0.1	16.7	8.5	435	2.77	10.5	0.8	1.2	13	0.1	0.9	<0.1	52	0.13	0.094	6
69050N-81000E	Soil	0.9	20.1	7.5	61	<0.1	19.5	9.5	481	3.11	13.6	2.4	1.4	19	<0.1	1.1	<0.1	57	0.20	0.077	7
69050N-81050E	Soil	0.6	14.0	7.8	50	0.1	14.1	8.3	311	2.34	6.9	0.8	1.1	26	<0.1	0.5	<0.1	54	0.38	0.025	7
69050N-81100E	Soil	1.0	23.1	8.0	44	0.2	15.7	8.5	442	2.57	9.6	2.4	0.9	35	0.2	0.7	<0.1	49	0.59	0.048	9
69050N-81150E	Soil	1.0	20.6	8.2	77	0.1	15.1	9.0	417	2.85	11.7	9.9	1.0	12	0.1	1.0	<0.1	57	0.11	0.070	5
69050N-81200E	Soil	1.4	27.4	10.3	92	0.2	17.0	11.0	423	3.84	19.1	1.2	1.1	15	0.2	1.0	0.1	86	0.14	0.123	5
69050N-81250E	Soil	0.8	11.6	8.3	69	0.2	6.4	5.7	251	2.41	7.8	1.7	0.8	15	0.1	0.6	<0.1	56	0.13	0.093	5
69050N-81300E	Soil	0.9	15.8	8.3	82	<0.1	15.8	9.3	505	2.90	13.3	0.5	1.1	13	0.3	0.9	<0.1	60	0.14	0.120	5
69050N-81350E	Soil	1.9	41.7	16.3	78	0.2	18.7	11.3	546	3.83	25.6	7.7	1.3	33	0.2	1.2	0.2	78	0.26	0.111	5
69050N-81400E	Soil	1.3	42.0	16.6	152	0.4	29.6	14.0	839	4.03	18.3	2.7	0.9	24	0.3	1.6	<0.1	101	0.40	0.110	4
69050N-81450E	Soil	2.3	18.7	8.3	70	0.3	12.2	8.4	261	3.42	13.5	3.4	0.8	28	0.2	0.8	0.2	82	0.19	0.030	4
69050N-81500E	Soil	1.0	13.8	12.7	53	<0.1	11.1	9.2	397	2.48	8.9	3.5	0.6	48	0.2	0.4	0.2	73	0.64	0.033	5
69050N-81550E	Soil	1.1	27.8	9.8	71	<0.1	14.0	8.7	315	3.24	18.1	1.4	0.9	15	0.2	1.2	0.1	68	0.18	0.120	5
69050N-81600E	Soil	0.9	30.3	12.1	95	0.2	13.3	8.3	456	3.02	12.8	2.6	1.2	12	0.2	0.8	<0.1	62	0.12	0.115	6
69050N-81650E	Soil	1.3	32.7	10.5	67	0.1	19.1	10.5	257	3.29	14.8	2.3	0.8	13	0.1	1.1	0.1	70	0.15	0.063	4
69250N-80900E	Soil	1.0	21.6	8.1	52	<0.1	14.2	8.1	303	2.84	12.3	1.7	1.1	21	<0.1	1.1	<0.1	58	0.17	0.073	5
69250N-80950E	Soil	0.8	9.7	9.5	52	0.1	8.6	6.1	220	2.34	6.7	0.6	0.9	14	0.1	0.7	<0.1	52	0.12	0.092	5
69250N-81000E	Soil	0.7	20.1	6.4	57	<0.1	14.8	7.2	290	2.45	9.2	2.6	1.2	29	0.1	0.8	<0.1	51	0.23	0.048	9
69250N-81050E	Soil	0.7	18.5	5.5	48	<0.1	13.9	7.2	287	2.38	9.5	1.1	1.1	25	<0.1	0.8	<0.1	50	0.23	0.050	7
69250N-81100E	Soil	1.0	12.6	7.2	63	<0.1	13.9	8.1	200	2.91	12.2	<0.5	0.8	13	0.1	1.0	<0.1	61	0.09	0.100	5
69250N-81150E	Soil	1.1	25.6	7.6	67	0.1	14.8	8.1	334	2.92	12.5	21.7	1.0	13	0.1	1.1	<0.1	57	0.12	0.132	5
69250N-81200E	Soil	1.2	18.0	9.7	57	<0.1	13.1	7.9	201	2.94	11.7	2.0	1.2	13	<0.1	1.0	<0.1	60	0.11	0.077	7
69250N-81250E	Soil	1.1	21.1	9.0	77	0.1	15.5	9.5	308	2.94	12.8	3.1	1.0	14	0.1	1.0	<0.1	60	0.15	0.078	6
69250N-81300E	Soil	0.6	27.0	8.8	46	<0.1	13.9	7.1	347	2.45	8.8	1.6	1.2	26	<0.1	0.8	<0.1	55	0.26	0.047	8
69250N-81350E	Soil	0.4	24.2	7.8	37	<0.1	12.7	6.2	233	2.31	7.6	3.7	1.1	25	<0.1	0.7	<0.1	51	0.26	0.033	8
69250N-81400E	Soil	0.8	14.2	7.3	40	0.1	9.9	4.8	149	1.90	6.0	2.9	0.8	16	<0.1	0.5	<0.1	46	0.16	0.035	5
69250N-81450E	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
69250N-81500E	Soil	1.0	24.3	8.8	69	<0.1	15.2	8.9	292	3.12	14.6	0.7	1.1	14	0.1	1.1	<0.1	60	0.13	0.079	5
69250N-81550E	Soil	1.1	15.2	7.7	51	0.1	9.9	6.0	218	1.96	7.0	1.7	0.7	22	<0.1	0.5	<0.1	53	0.21	0.023	5
69250N-81600E	Soil	0.5	15.3	7.3	52	0.3	14.6	7.0	203	2.20	8.1	1.6	1.0	26	<0.1	0.5	<0.1	53	0.33	0.041	6

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	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
69050N-80950E	Soil	17	0.23	104	0.032	1	1.44	0.007	0.04	<0.1	0.04	3.6	<0.1	<0.05	4	<0.5	<0.2
69050N-81000E	Soil	18	0.29	126	0.042	1	1.18	0.007	0.03	0.1	0.05	4.6	<0.1	<0.05	3	<0.5	<0.2
69050N-81050E	Soil	17	0.32	221	0.037	1	1.36	0.013	0.02	<0.1	0.04	4.6	<0.1	<0.05	4	<0.5	<0.2
69050N-81100E	Soil	18	0.28	246	0.034	1	1.19	0.013	0.03	<0.1	0.05	5.5	<0.1	<0.05	3	<0.5	<0.2
69050N-81150E	Soil	16	0.26	142	0.032	<1	1.43	0.007	0.03	<0.1	0.03	3.5	<0.1	<0.05	4	<0.5	<0.2
69050N-81200E	Soil	22	0.38	113	0.042	1	1.88	0.007	0.04	0.2	0.05	4.1	<0.1	<0.05	5	<0.5	<0.2
69050N-81250E	Soil	13	0.16	102	0.023	1	1.03	0.006	0.03	<0.1	0.02	2.4	<0.1	<0.05	4	<0.5	<0.2
69050N-81300E	Soil	18	0.32	97	0.035	<1	1.36	0.009	0.03	<0.1	0.02	3.6	<0.1	<0.05	4	<0.5	<0.2
69050N-81350E	Soil	25	0.40	239	0.045	1	2.41	0.008	0.05	0.2	0.05	5.2	<0.1	<0.05	5	<0.5	<0.2
69050N-81400E	Soil	50	0.82	205	0.055	4	2.27	0.007	0.07	0.1	0.04	6.4	<0.1	<0.05	6	<0.5	<0.2
69050N-81450E	Soil	19	0.34	244	0.028	<1	1.71	0.007	0.03	0.1	0.04	3.7	<0.1	<0.05	7	<0.5	<0.2
69050N-81500E	Soil	18	0.44	272	0.021	<1	1.54	0.012	0.03	<0.1	0.03	3.8	<0.1	<0.05	6	<0.5	<0.2
69050N-81550E	Soil	16	0.31	158	0.033	1	1.31	0.006	0.04	0.1	0.02	3.7	<0.1	<0.05	4	<0.5	<0.2
69050N-81600E	Soil	17	0.26	151	0.039	1	1.65	0.008	0.04	0.1	0.03	3.8	<0.1	<0.05	5	<0.5	<0.2
69050N-81650E	Soil	20	0.36	170	0.035	<1	1.48	0.008	0.03	<0.1	0.02	3.6	<0.1	<0.05	4	<0.5	<0.2
69250N-80900E	Soil	16	0.27	157	0.042	1	1.21	0.007	0.03	<0.1	0.02	3.2	<0.1	<0.05	3	<0.5	<0.2
69250N-80950E	Soil	13	0.14	103	0.030	<1	1.16	0.008	0.04	<0.1	0.02	2.6	<0.1	<0.05	4	<0.5	<0.2
69250N-81000E	Soil	18	0.30	180	0.042	1	1.32	0.026	0.04	<0.1	0.04	5.3	<0.1	<0.05	4	<0.5	<0.2
69250N-81050E	Soil	16	0.30	149	0.046	1	1.19	0.022	0.04	<0.1	0.03	4.5	<0.1	<0.05	3	<0.5	<0.2
69250N-81100E	Soil	17	0.22	125	0.026	1	1.40	0.008	0.03	<0.1	0.04	3.0	<0.1	<0.05	4	<0.5	<0.2
69250N-81150E	Soil	17	0.25	99	0.034	<1	1.44	0.008	0.04	<0.1	0.05	3.8	<0.1	<0.05	4	<0.5	<0.2
69250N-81200E	Soil	17	0.25	139	0.039	1	1.43	0.012	0.03	0.1	0.03	4.1	<0.1	<0.05	4	<0.5	<0.2
69250N-81250E	Soil	17	0.27	153	0.036	<1	1.41	0.012	0.04	<0.1	0.04	3.6	<0.1	<0.05	4	<0.5	<0.2
69250N-81300E	Soil	17	0.33	216	0.043	1	1.21	0.023	0.04	<0.1	0.04	5.5	<0.1	<0.05	4	<0.5	<0.2
69250N-81350E	Soil	16	0.32	223	0.042	<1	1.15	0.021	0.03	<0.1	0.03	4.7	<0.1	<0.05	3	<0.5	<0.2
69250N-81400E	Soil	13	0.24	137	0.034	<1	1.20	0.009	0.03	<0.1	0.02	2.9	<0.1	<0.05	4	<0.5	<0.2
69250N-81450E	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
69250N-81500E	Soil	17	0.30	170	0.043	1	1.45	0.013	0.04	<0.1	0.03	4.2	<0.1	<0.05	4	<0.5	<0.2
69250N-81550E	Soil	12	0.23	199	0.026	<1	1.22	0.011	0.02	<0.1	0.03	2.6	<0.1	<0.05	4	<0.5	<0.2
69250N-81600E	Soil	15	0.35	346	0.032	1	1.48	0.014	0.03	<0.1	0.05	5.2	<0.1	<0.05	4	<0.5	<0.2

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Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 12, 2012

CERTIFICATE OF ANALYSIS SMI12000022.1

Method		1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
Analyte		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
MDL		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
69250N-81650E	Soil	1.0	25.5	9.0	51	<0.1	17.9	8.6	279	3.04	14.1	<0.5	1.0	16	<0.1	1.1	<0.1	57	0.16	0.037	5
69250N-81700E	Soil	0.9	24.3	7.8	50	0.1	14.4	8.6	375	2.36	8.2	2.4	1.0	20	0.1	0.7	<0.1	56	0.20	0.023	7
69250N-81750E	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
69250N-81800E	Soil	1.1	18.4	8.4	45	0.2	11.4	6.6	216	2.08	7.8	2.7	0.5	19	0.1	0.6	<0.1	53	0.19	0.020	5
69450N-80900E "A"	Soil	1.0	16.0	7.0	56	<0.1	11.6	6.3	229	2.76	10.6	<0.5	0.5	15	0.2	1.0	<0.1	59	0.17	0.083	4
69450N-80950E "A"	Soil	1.0	19.0	7.6	56	<0.1	11.3	7.1	266	2.66	10.9	0.8	0.7	20	0.2	1.1	<0.1	55	0.26	0.080	5
69450N-81000E "A"	Soil	0.7	6.4	6.8	26	<0.1	4.1	3.6	407	1.62	3.8	<0.5	0.5	15	0.1	0.5	<0.1	45	0.14	0.024	5
69450N-81050E "A"	Soil	1.0	14.1	13.6	67	0.1	10.0	6.1	305	2.62	8.8	2.1	0.7	13	0.1	0.9	<0.1	56	0.16	0.107	5
69450N-81100E "A"	Soil	0.8	10.9	7.8	53	0.2	7.9	7.7	675	2.63	7.6	<0.5	0.7	14	0.2	0.7	<0.1	61	0.11	0.079	5
69450N-81150E "A"	Soil	1.0	28.6	8.7	60	0.1	16.2	8.8	319	3.17	14.3	0.8	1.1	17	0.2	1.2	<0.1	62	0.18	0.080	6
69450N-81200E "A"	Soil	0.8	7.5	7.1	47	0.1	7.3	6.2	634	2.51	7.9	0.8	0.5	13	0.2	0.8	<0.1	57	0.13	0.055	4
69450N-81250E "A"	Soil	0.7	16.6	6.6	56	0.2	12.6	6.3	341	2.34	7.4	1.2	0.8	30	0.1	0.6	0.1	52	0.37	0.035	7
69450N-81300E "A"	Soil	0.7	11.9	6.5	40	0.2	9.3	4.3	179	1.62	5.6	29.1	0.2	14	0.1	0.4	<0.1	40	0.15	0.068	5
69450N-81350E "A"	Soil	0.8	9.2	8.9	67	0.1	7.1	5.6	359	2.70	9.1	5.0	0.9	13	0.2	0.7	<0.1	57	0.13	0.148	5
69450N-81400E "A"	Soil	1.0	18.6	8.4	64	0.1	11.3	6.7	377	2.66	11.1	1.9	0.3	19	0.3	0.9	<0.1	55	0.18	0.063	5
69450N-81450E "A"	Soil	0.9	11.5	9.0	86	<0.1	9.2	6.6	275	2.83	9.8	<0.5	0.9	12	0.2	0.8	<0.1	57	0.12	0.109	5
69450N-81500E "A"	Soil	1.0	9.1	6.1	32	<0.1	5.4	2.8	110	1.89	6.8	5.6	0.4	15	<0.1	0.7	<0.1	56	0.13	0.021	4
69450N-81550E "A"	Soil	1.4	11.3	9.2	72	0.1	8.7	6.0	258	3.14	10.7	3.5	0.8	16	0.2	0.7	<0.1	62	0.12	0.123	5
69450N-81600E "A"	Soil	0.9	10.4	7.5	49	0.1	7.5	5.1	545	2.44	7.9	2.0	0.2	16	<0.1	0.7	<0.1	56	0.14	0.087	5
69450N-81650E "A"	Soil	0.9	8.5	7.4	34	0.1	6.3	5.4	280	1.81	5.4	3.8	0.3	11	0.1	0.5	<0.1	47	0.08	0.032	5
69450N-81700E "A"	Soil	1.0	13.0	7.9	60	<0.1	10.5	6.9	445	2.60	9.4	0.6	0.9	19	0.1	0.8	<0.1	54	0.19	0.071	5
69450N-81750E "A"	Soil	0.6	9.1	7.2	46	<0.1	6.7	3.2	111	1.70	5.5	1.0	0.2	15	0.1	0.4	<0.1	41	0.16	0.058	5
69450N-81800E "A"	Soil	0.8	7.9	7.2	63	0.1	6.6	4.1	532	2.48	6.4	1.3	0.6	27	0.2	0.7	0.2	56	0.38	0.109	4
69450N-81850E "A"	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
69450N-81900E "A"	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
69450N-80900E "B"	Soil	0.7	35.4	7.9	59	<0.1	14.8	8.4	400	3.05	14.7	1.2	1.1	21	0.1	1.4	<0.1	60	0.25	0.065	6
69450N-80950E "B"	Soil	1.1	33.9	9.7	72	<0.1	17.8	10.5	692	3.21	14.5	2.9	1.4	36	0.2	1.5	<0.1	64	0.40	0.075	13
69450N-81000E "B"	Soil	0.8	19.0	7.1	63	<0.1	13.2	7.5	212	2.85	10.7	3.2	1.1	16	<0.1	0.9	<0.1	56	0.14	0.050	6
69450N-81050E "B"	Soil	0.9	21.2	16.1	81	<0.1	12.8	6.3	261	2.82	10.2	1.5	1.0	15	0.2	0.9	<0.1	58	0.18	0.082	5
69450N-81100E "B"	Soil	1.0	16.2	7.0	68	0.2	11.2	6.4	278	2.83	10.1	0.7	1.0	15	0.1	0.7	<0.1	62	0.14	0.059	5

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	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
69250N-81650E	Soil	17	0.31	142	0.042	1	1.58	0.009	0.03	<0.1	0.03	3.8	<0.1	<0.05	3	<0.5	<0.2
69250N-81700E	Soil	16	0.30	270	0.035	1	1.49	0.013	0.02	<0.1	0.03	3.9	<0.1	<0.05	4	<0.5	<0.2
69250N-81750E	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
69250N-81800E	Soil	14	0.20	203	0.027	<1	1.44	0.010	0.02	<0.1	0.03	3.0	<0.1	<0.05	5	<0.5	<0.2
69450N-80900E "A"	Soil	14	0.24	102	0.037	<1	0.91	0.009	0.03	0.1	0.03	3.0	<0.1	<0.05	4	<0.5	<0.2
69450N-80950E "A"	Soil	15	0.26	114	0.042	1	0.89	0.010	0.06	0.1	0.04	3.6	<0.1	<0.05	3	<0.5	<0.2
69450N-81000E "A"	Soil	8	0.09	117	0.043	<1	0.57	0.009	0.03	0.1	0.02	1.8	<0.1	<0.05	4	<0.5	<0.2
69450N-81050E "A"	Soil	14	0.25	80	0.034	<1	1.11	0.009	0.04	0.1	0.04	3.1	<0.1	<0.05	5	<0.5	<0.2
69450N-81100E "A"	Soil	14	0.14	123	0.038	<1	1.13	0.008	0.04	0.1	0.04	2.7	<0.1	<0.05	5	<0.5	<0.2
69450N-81150E "A"	Soil	17	0.31	123	0.049	2	1.40	0.008	0.03	0.1	0.04	4.0	<0.1	<0.05	3	<0.5	<0.2
69450N-81200E "A"	Soil	12	0.12	83	0.040	1	0.65	0.007	0.04	<0.1	0.02	2.0	<0.1	<0.05	4	<0.5	<0.2
69450N-81250E "A"	Soil	16	0.31	222	0.036	<1	1.25	0.013	0.03	<0.1	0.04	4.2	<0.1	<0.05	4	<0.5	<0.2
69450N-81300E "A"	Soil	12	0.21	87	0.024	<1	1.02	0.007	0.04	<0.1	0.06	1.8	<0.1	<0.05	4	<0.5	<0.2
69450N-81350E "A"	Soil	14	0.14	95	0.030	<1	1.10	0.007	0.04	0.1	0.03	2.5	<0.1	<0.05	4	<0.5	<0.2
69450N-81400E "A"	Soil	15	0.24	127	0.038	2	1.02	0.007	0.05	<0.1	0.03	2.7	<0.1	<0.05	4	<0.5	<0.2
69450N-81450E "A"	Soil	15	0.18	97	0.037	<1	1.09	0.007	0.04	<0.1	0.02	2.8	<0.1	<0.05	4	<0.5	<0.2
69450N-81500E "A"	Soil	10	0.11	67	0.042	1	0.54	0.007	0.03	<0.1	0.02	1.8	<0.1	<0.05	4	<0.5	<0.2
69450N-81550E "A"	Soil	16	0.15	139	0.034	<1	1.38	0.009	0.03	0.1	0.02	2.8	<0.1	<0.05	5	<0.5	<0.2
69450N-81600E "A"	Soil	13	0.14	115	0.028	<1	1.03	0.007	0.03	0.1	0.04	1.9	<0.1	<0.05	4	<0.5	<0.2
69450N-81650E "A"	Soil	11	0.15	77	0.025	<1	0.91	0.007	0.03	<0.1	0.04	2.0	<0.1	<0.05	4	<0.5	<0.2
69450N-81700E "A"	Soil	15	0.20	126	0.039	<1	1.09	0.007	0.04	0.1	0.03	3.1	<0.1	<0.05	4	<0.5	<0.2
69450N-81750E "A"	Soil	11	0.14	103	0.029	<1	0.88	0.010	0.04	<0.1	0.04	1.6	<0.1	<0.05	4	<0.5	<0.2
69450N-81800E "A"	Soil	12	0.13	174	0.038	2	0.74	0.006	0.04	<0.1	0.04	2.0	<0.1	<0.05	4	<0.5	<0.2
69450N-81850E "A"	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
69450N-81900E "A"	Soil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
69450N-80900E "B"	Soil	16	0.31	147	0.048	<1	1.12	0.011	0.04	<0.1	0.03	4.7	<0.1	<0.05	3	<0.5	<0.2
69450N-80950E "B"	Soil	22	0.39	190	0.058	2	1.26	0.024	0.07	0.1	0.05	8.0	<0.1	<0.05	4	<0.5	<0.2
69450N-81000E "B"	Soil	15	0.25	162	0.044	<1	1.40	0.009	0.03	<0.1	0.04	4.2	<0.1	<0.05	4	<0.5	<0.2
69450N-81050E "B"	Soil	17	0.29	104	0.039	<1	1.52	0.008	0.04	<0.1	0.03	3.6	<0.1	<0.05	5	<0.5	<0.2
69450N-81100E "B"	Soil	15	0.22	151	0.037	1	1.42	0.009	0.04	0.1	0.03	3.6	<0.1	<0.05	5	<0.5	<0.2

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1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

Client: **Rio Minerals Ltd.**
910 - 475 Howe Street
Vancouver BC V6C 2B3 Canada

Project: GD-12
Report Date: June 12, 2012

CERTIFICATE OF ANALYSIS SMI12000022.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
69450N-81150E "B"	Soil	1.2	16.6	9.8	69	<0.1	12.9	8.8	778	3.22	12.9	0.7	0.9	21	0.3	1.1	<0.1	64	0.22	0.168	5
69450N-81200E "B"	Soil	1.1	16.9	8.0	58	0.1	14.8	8.9	330	3.35	15.4	3.4	0.9	19	0.1	1.0	<0.1	68	0.17	0.058	5
69450N-81250E "B"	Soil	0.7	18.7	6.9	53	<0.1	14.5	8.1	414	2.46	8.0	0.7	1.1	31	0.2	0.7	<0.1	53	0.36	0.041	9
69450N-81300E "B"	Soil	0.8	16.0	6.2	54	0.1	13.2	6.2	201	2.09	6.7	0.9	0.7	19	<0.1	0.5	<0.1	48	0.18	0.047	6
69450N-81350E "B"	Soil	1.2	71.2	8.4	74	<0.1	16.5	9.3	347	3.14	19.5	1.1	1.3	15	0.2	1.1	<0.1	62	0.16	0.079	6
69450N-81400E "B"	Soil	0.9	26.7	7.9	70	0.2	15.4	8.5	297	3.07	13.3	2.2	1.1	17	0.2	1.0	<0.1	61	0.17	0.102	6
69450N-81450E "B"	Soil	0.9	16.3	8.6	92	0.1	11.3	8.9	638	2.93	10.1	12.7	1.0	16	0.3	1.0	<0.1	61	0.15	0.077	6
69450N-81500E "B"	Soil	1.1	31.1	7.8	55	<0.1	15.3	8.4	305	2.89	11.6	1.3	1.1	20	0.1	0.9	<0.1	59	0.19	0.046	6
69450N-81550E "B"	Soil	1.1	15.5	7.3	58	0.2	9.5	6.6	367	2.65	9.2	1.4	0.7	21	0.1	0.8	<0.1	59	0.19	0.065	7
69450N-81600E "B"	Soil	0.9	21.5	7.9	66	<0.1	13.7	8.1	352	2.90	10.4	0.9	0.7	17	0.1	0.8	0.1	62	0.17	0.075	7
69450N-81650E "B"	Soil	0.7	15.6	5.7	40	<0.1	11.9	5.4	207	2.02	5.7	3.7	1.0	20	<0.1	0.5	<0.1	47	0.19	0.031	7
69450N-81700E "B"	Soil	1.2	21.6	7.5	65	0.1	14.6	8.3	272	2.88	11.5	0.7	1.1	17	<0.1	1.0	<0.1	58	0.17	0.075	6
69450N-81750E "B"	Soil	0.6	11.0	6.4	50	<0.1	8.3	4.5	127	1.64	4.1	1.5	0.8	19	<0.1	0.4	<0.1	43	0.17	0.025	7
69450N-81800E "B"	Soil	1.0	23.2	7.6	57	<0.1	15.8	8.5	262	2.95	12.6	1.0	1.0	16	<0.1	1.0	<0.1	60	0.16	0.064	5
69450N-81850E "B"	Soil	1.0	23.7	13.2	80	<0.1	15.4	8.5	328	2.86	12.8	3.7	1.2	17	0.1	1.2	<0.1	58	0.15	0.064	6
69450N-81900E "B"	Soil	1.0	25.1	7.8	55	<0.1	16.0	8.6	299	3.01	13.1	1.4	1.1	18	<0.1	1.0	<0.1	63	0.16	0.048	6
69850N-81425E A	Soil	0.6	14.6	6.5	43	0.1	8.2	4.6	280	1.74	5.3	0.6	0.6	23	0.1	0.5	<0.1	44	0.22	0.042	6
69850N-81425E B	Soil	0.8	24.1	7.8	75	0.1	13.5	6.5	240	2.11	6.1	1.8	0.9	24	0.1	0.6	0.1	53	0.25	0.039	7
69850N-81425E C	Soil	0.6	27.3	6.9	62	0.1	14.9	7.2	219	2.08	5.6	36.8	0.9	22	<0.1	0.6	0.1	51	0.24	0.035	7
69850N-81425E D	Soil	0.5	25.8	6.0	39	<0.1	13.3	6.1	246	1.97	5.6	1.6	1.1	23	<0.1	0.7	<0.1	44	0.27	0.063	8
69850N-81425E Dup	Soil	0.6	26.3	8.1	58	0.1	14.1	6.9	230	2.07	5.6	4.1	0.8	21	<0.1	0.6	<0.1	50	0.20	0.036	6
69950N-81425E A	Soil	0.9	11.0	5.5	41	<0.1	8.5	4.1	139	1.87	5.3	0.8	0.4	20	0.2	0.5	<0.1	47	0.21	0.047	5
69950N-81425E B	Soil	0.5	15.6	5.6	43	<0.1	12.4	6.4	234	2.12	5.8	2.2	1.2	25	<0.1	0.6	<0.1	49	0.26	0.044	8
69950N-81425E C	Soil	0.5	18.6	5.8	42	<0.1	12.4	6.2	243	2.21	6.1	1.4	1.3	28	<0.1	0.7	<0.1	49	0.33	0.053	9
69950N-81425E Dup	Soil	0.4	16.2	5.8	41	<0.1	12.7	6.0	239	2.15	5.6	2.0	1.2	27	<0.1	0.7	<0.1	50	0.29	0.045	9

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CERTIFICATE OF ANALYSIS SMI12000022.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
69450N-81150E "B"	Soil	16	0.25	157	0.043	1	1.09	0.007	0.04	0.1	0.03	3.3	<0.1	<0.05	4	<0.5	<0.2
69450N-81200E "B"	Soil	16	0.28	146	0.043	2	1.42	0.010	0.04	0.1	0.02	3.9	<0.1	<0.05	4	<0.5	<0.2
69450N-81250E "B"	Soil	18	0.33	208	0.047	1	1.22	0.022	0.04	<0.1	0.04	5.1	<0.1	<0.05	4	<0.5	<0.2
69450N-81300E "B"	Soil	15	0.27	124	0.039	<1	1.36	0.009	0.04	<0.1	0.04	3.1	<0.1	<0.05	4	<0.5	<0.2
69450N-81350E "B"	Soil	17	0.34	152	0.051	2	1.57	0.011	0.05	0.1	0.03	4.4	<0.1	<0.05	4	<0.5	<0.2
69450N-81400E "B"	Soil	18	0.29	155	0.041	2	1.49	0.008	0.04	<0.1	0.04	4.1	<0.1	<0.05	4	<0.5	<0.2
69450N-81450E "B"	Soil	16	0.20	151	0.046	2	1.30	0.012	0.04	0.1	0.03	3.3	<0.1	<0.05	5	<0.5	<0.2
69450N-81500E "B"	Soil	17	0.28	203	0.050	1	1.42	0.010	0.04	0.1	0.04	4.2	<0.1	<0.05	4	<0.5	<0.2
69450N-81550E "B"	Soil	15	0.19	169	0.044	2	1.16	0.008	0.04	<0.1	0.03	3.3	<0.1	<0.05	4	<0.5	<0.2
69450N-81600E "B"	Soil	17	0.25	173	0.042	2	1.51	0.010	0.04	0.1	0.04	4.1	<0.1	<0.05	5	<0.5	<0.2
69450N-81650E "B"	Soil	15	0.30	132	0.053	1	1.20	0.013	0.03	<0.1	0.03	3.5	<0.1	<0.05	3	<0.5	<0.2
69450N-81700E "B"	Soil	17	0.26	120	0.045	2	1.53	0.008	0.04	0.1	0.04	3.8	<0.1	<0.05	4	<0.5	<0.2
69450N-81750E "B"	Soil	12	0.20	155	0.047	<1	1.11	0.010	0.03	<0.1	0.02	2.8	<0.1	<0.05	4	<0.5	<0.2
69450N-81800E "B"	Soil	17	0.30	141	0.050	2	1.39	0.011	0.04	0.1	0.04	3.8	<0.1	<0.05	4	<0.5	<0.2
69450N-81850E "B"	Soil	17	0.30	170	0.054	2	1.42	0.010	0.04	<0.1	0.03	4.4	<0.1	<0.05	4	<0.5	<0.2
69450N-81900E "B"	Soil	17	0.32	212	0.050	2	1.45	0.012	0.04	<0.1	0.03	4.4	<0.1	<0.05	4	<0.5	<0.2
69850N-81425E A	Soil	12	0.24	131	0.044	1	0.93	0.008	0.04	<0.1	0.03	2.6	<0.1	<0.05	4	<0.5	<0.2
69850N-81425E B	Soil	17	0.35	209	0.041	1	1.60	0.012	0.04	0.1	0.03	4.0	<0.1	<0.05	5	<0.5	<0.2
69850N-81425E C	Soil	16	0.38	197	0.049	2	1.60	0.011	0.04	<0.1	0.04	4.0	<0.1	<0.05	5	<0.5	<0.2
69850N-81425E D	Soil	15	0.33	144	0.056	2	1.10	0.014	0.03	<0.1	0.03	3.8	<0.1	<0.05	3	<0.5	<0.2
69850N-81425E Dup	Soil	15	0.35	183	0.044	2	1.48	0.011	0.04	<0.1	0.04	3.5	<0.1	<0.05	4	<0.5	<0.2
69950N-81425E A	Soil	12	0.21	97	0.048	1	0.85	0.010	0.03	<0.1	0.02	2.5	<0.1	<0.05	3	<0.5	<0.2
69950N-81425E B	Soil	15	0.30	157	0.060	1	1.10	0.019	0.04	<0.1	0.03	4.4	<0.1	<0.05	3	<0.5	<0.2
69950N-81425E C	Soil	15	0.31	157	0.065	1	1.07	0.022	0.04	<0.1	0.03	5.0	<0.1	<0.05	3	<0.5	<0.2
69950N-81425E Dup	Soil	15	0.30	153	0.064	2	1.04	0.020	0.04	<0.1	0.03	4.7	<0.1	<0.05	3	<0.5	<0.2

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QUALITY CONTROL REPORT SMI12000022.1

	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
	Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm
	MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
Pulp Duplicates																					
68250N-80400E	Soil	1.1	18.1	8.4	50	<0.1	12.2	7.2	174	2.67	10.5	2.3	0.9	13	<0.1	0.8	<0.1	62	0.11	0.029	5
REP 68250N-80400E	QC	1.0	18.9	8.3	49	<0.1	12.3	6.9	170	2.57	10.7	7.8	0.9	13	0.1	0.8	<0.1	61	0.11	0.028	5
68450N-81300E	Soil	0.9	19.6	8.2	86	<0.1	15.6	9.2	603	2.96	13.6	0.9	0.9	12	0.2	0.9	<0.1	61	0.14	0.087	4
REP 68450N-81300E	QC	1.0	19.0	8.3	87	<0.1	15.6	9.2	595	3.00	13.6	<0.5	0.9	12	0.2	0.9	<0.1	63	0.14	0.090	4
68850N-81300E	Soil	1.4	27.2	9.2	75	0.4	17.2	10.0	355	3.40	16.2	<0.5	0.9	14	0.2	1.0	0.1	71	0.12	0.065	5
REP 68850N-81300E	QC	1.5	27.7	9.1	75	0.4	17.2	10.0	343	3.36	15.5	3.1	0.9	13	0.2	1.0	0.1	70	0.12	0.064	5
69250N-81250E	Soil	1.1	21.1	9.0	77	0.1	15.5	9.5	308	2.94	12.8	3.1	1.0	14	0.1	1.0	<0.1	60	0.15	0.078	6
REP 69250N-81250E	QC	1.1	21.8	9.1	78	0.1	16.0	9.6	312	3.04	13.0	5.2	1.0	14	0.1	1.1	<0.1	59	0.14	0.079	6
69450N-81600E "B"	Soil	0.9	21.5	7.9	66	<0.1	13.7	8.1	352	2.90	10.4	0.9	0.7	17	0.1	0.8	0.1	62	0.17	0.075	7
REP 69450N-81600E "B"	QC	0.9	20.9	8.3	65	<0.1	14.4	8.1	358	2.92	10.6	0.9	0.8	18	<0.1	0.8	0.1	62	0.18	0.076	7
Reference Materials																					
STD DS8	Standard	14.3	117.1	133.0	329	1.9	41.5	8.0	618	2.51	25.5	127.1	7.1	70	2.5	6.0	7.0	45	0.71	0.079	16
STD DS8	Standard	14.3	115.4	129.6	314	1.9	41.3	8.0	620	2.47	24.9	115.7	7.1	69	2.4	6.0	7.0	45	0.70	0.080	16
STD DS8	Standard	15.5	115.6	131.5	325	1.8	41.6	7.9	636	2.54	25.4	118.6	7.5	76	2.6	6.1	7.1	46	0.76	0.080	18
STD DS8	Standard	14.8	115.8	132.1	322	1.9	41.3	8.1	625	2.52	25.9	113.3	7.2	75	2.4	6.2	7.3	45	0.72	0.080	16
STD DS8	Standard	14.1	114.1	128.9	314	1.9	39.7	7.8	599	2.43	25.2	118.8	7.0	72	2.3	5.7	7.0	45	0.70	0.078	16
STD DS9	Standard	13.9	112.8	131.4	320	1.9	41.2	8.0	578	2.34	26.2	122.4	6.7	75	2.5	5.9	7.1	41	0.73	0.082	14
STD DS9	Standard	14.2	112.8	133.8	323	1.9	43.0	7.9	588	2.34	25.1	123.4	6.9	74	2.5	5.9	7.2	44	0.71	0.083	14
STD DS9	Standard	14.1	113.9	135.1	330	1.9	43.6	7.9	603	2.46	27.0	119.3	7.1	82	2.6	6.1	7.3	44	0.76	0.085	16
STD DS9	Standard	13.8	112.0	133.7	325	2.0	42.0	8.0	593	2.38	26.7	127.5	6.7	79	2.3	6.2	7.4	42	0.73	0.085	14
STD DS9	Standard	13.9	112.8	130.3	319	1.9	41.7	8.0	571	2.31	25.0	114.0	6.6	71	2.5	6.0	6.9	43	0.70	0.083	13
STD DS9 Expected		12.84	108	126	317	1.83	40.3	7.6	575	2.33	25.5	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819	13.3
STD DS8 Expected		13.44	110	123	312	1.69	38.1	7.5	615	2.46	26	107	6.89	67.7	2.38	5.7	6.67	41.1	0.7	0.08	14.6
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001	<1

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	Method	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15	1DX15
	Analyte	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
	Unit	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	MDL	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																	
68250N-80400E	Soil	16	0.24	172	0.030	<1	1.62	0.008	0.02	<0.1	0.05	3.3	<0.1	<0.05	4	<0.5	<0.2
REP 68250N-80400E	QC	15	0.24	171	0.032	1	1.54	0.008	0.02	0.1	0.05	3.2	<0.1	<0.05	4	<0.5	<0.2
68450N-81300E	Soil	20	0.30	114	0.032	1	1.19	0.007	0.03	<0.1	0.02	3.5	<0.1	<0.05	4	<0.5	<0.2
REP 68450N-81300E	QC	19	0.30	115	0.032	2	1.21	0.007	0.04	<0.1	0.03	3.5	<0.1	<0.05	4	<0.5	<0.2
68850N-81300E	Soil	19	0.32	210	0.026	1	1.77	0.007	0.04	0.1	0.04	3.9	<0.1	<0.05	5	<0.5	<0.2
REP 68850N-81300E	QC	19	0.32	207	0.026	<1	1.76	0.011	0.04	0.1	0.04	3.9	<0.1	<0.05	5	<0.5	<0.2
69250N-81250E	Soil	17	0.27	153	0.036	<1	1.41	0.012	0.04	<0.1	0.04	3.6	<0.1	<0.05	4	<0.5	<0.2
REP 69250N-81250E	QC	17	0.27	154	0.034	1	1.41	0.010	0.05	0.1	0.03	3.8	<0.1	<0.05	4	<0.5	<0.2
69450N-81600E "B"	Soil	17	0.25	173	0.042	2	1.51	0.010	0.04	0.1	0.04	4.1	<0.1	<0.05	5	<0.5	<0.2
REP 69450N-81600E "B"	QC	17	0.26	173	0.041	2	1.51	0.011	0.04	0.1	0.03	3.9	<0.1	<0.05	5	<0.5	<0.2
Reference Materials																	
STD DS8	Standard	125	0.61	295	0.123	3	0.92	0.096	0.41	3.2	0.20	2.8	5.7	0.15	4	4.9	5.6
STD DS8	Standard	127	0.62	293	0.124	2	0.93	0.094	0.41	3.2	0.20	2.7	5.6	0.15	5	4.7	4.9
STD DS8	Standard	126	0.57	304	0.129	3	0.98	0.108	0.46	3.2	0.21	3.4	5.7	0.12	5	5.7	5.4
STD DS8	Standard	125	0.63	307	0.123	2	0.96	0.119	0.44	3.2	0.21	3.8	5.7	0.15	5	5.5	5.2
STD DS8	Standard	125	0.61	286	0.121	2	0.96	0.113	0.44	3.0	0.22	3.7	5.6	0.11	5	4.9	5.0
STD DS9	Standard	122	0.62	312	0.120	3	0.94	0.086	0.39	3.2	0.21	2.6	5.6	0.14	5	4.9	5.2
STD DS9	Standard	128	0.62	315	0.121	2	0.96	0.091	0.40	3.0	0.21	2.6	5.5	0.16	5	5.4	5.1
STD DS9	Standard	129	0.58	340	0.128	3	1.04	0.107	0.43	3.2	0.22	3.5	5.7	0.13	5	5.1	5.1
STD DS9	Standard	124	0.63	321	0.118	2	1.00	0.103	0.42	3.1	0.21	3.0	5.5	0.14	5	5.1	5.0
STD DS9	Standard	126	0.62	300	0.117	3	0.96	0.095	0.40	3.0	0.20	2.8	5.4	0.13	5	5.1	4.7
STD DS9 Expected		121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	0.2	2.5	5.3	0.1615	4.59	5.2	5.02
STD DS8 Expected		115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	0.192	2.3	5.4	0.1679	4.7	5.23	5
BLK	Blank	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
BLK	Blank	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2