

Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geological and Geochemical

TOTAL COST: \$ 16,153.12

AUTHOR(S): Gideon Lambiv D., Brad Williamson SIGNATURE(S): _____

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): _____ YEAR OF WORK: 2014

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5511488; July 3, 2014

PROPERTY NAME: GD PROPERTY

CLAIM NAME(S) (on which the work was done): 558121, 558123, 602703, 789022, 789082, 790382, 790442, 790462, 829102, 829122, 829142

COMMODITIES SOUGHT: COPPER, GOLD, MOLYBDENUM/MOLYBDENITE

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 093L-242, 093L-307, 093L-144, 093L-315, 093L-225

MINING DIVISION: OMINECA NTS/BCGS: 093L

LATITUDE: 54 ° 45 ' 38.9 " LONGITUDE: 126 ° 10 ' 59.4 " (at centre of work)

OWNER(S):
1) ALTIPLANO MINERALS LTD. 2) _____

MAILING ADDRESS:
220, 9797 45 AVENUE
EDMONTON, ALBERTA T6E 5V8

OPERATOR(S) [who paid for the work]:
1) ALTIPLANO MINERALS LTD. 2) _____

MAILING ADDRESS:
220 9797 45 AVENUE
EDMONTON, ALBERTA T6E 5V8

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
COPPER-GOLD PORPHYRY, STIKINE TERRANE, TOPLEY INTRUSION, JURASSIC, TRIASSIC,
SPIKE PEAK INTRUSIVE SUITE

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 2727, 20794, 4427, 10862, 22025, 16874,
26329, 2095, 19556

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	_____	_____	_____
Photo interpretation	_____	_____	_____
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic	_____	_____	_____
Electromagnetic	_____	_____	_____
Induced Polarization	_____	_____	_____
Radiometric	_____	_____	_____
Seismic	_____	_____	_____
Other	_____	_____	_____
Airborne			
_____	_____	_____	_____
GEOCHEMICAL (number of samples analysed for...)			
Soil 179	_____	558123, 829142, 789022	15974.63
Silt	_____	_____	_____
Rock 2	_____	789022, 829142	178.49
Other	_____	_____	_____
DRILLING (total metres; number of holes, size)			
Core			
_____	_____	_____	_____
Non-core			
_____	_____	_____	_____
RELATED TECHNICAL			
Sampling/assaying	_____	_____	_____
Petrographic	_____	_____	_____
Mineralographic	_____	_____	_____
Metallurgic	_____	_____	_____
PROSPECTING (scale, area)			
_____	_____	_____	_____
PREPARATORY / PHYSICAL			
Line/grid (kilometres)	_____	_____	_____
Topographic/Photogrammetric (scale, area)	_____	_____	_____
Legal surveys (scale, area)	_____	_____	_____
Road, local access (kilometres)/trail	_____	_____	_____
Trench (metres)	_____	_____	_____
Underground dev. (metres)	_____	_____	_____
Other	_____	_____	_____
		TOTAL COST:	16153.12



**ASSESSMENT REPORT ON PORTIONS OF THE
GD PROPERTY, BRITISH COLUMBIA, CANADA**

BC Geological Survey
Assessment Report
34801

Company Name: Altiplano Minerals Ltd.
#220, 9797 – 45 Avenue
Edmonton, Alberta, Canada
T6E 5V8

Mineral Claims: 558121 (GD-1), 558123 (GD-2), 602703 (GD-3),
789022 (GD-4), 789082 (GD-5), 790382 (GD-6),
790442 (GD-7), 790462 (GD-8), 829102 (GD-9),
829122 (GD-10), 829142 (GD-11)

Centre of Property: Latitude 54°45' N and Longitude 126°10' W

Work Conducted: June 3 – 8, 2014

Location of Claims: Omineca Mining Division
NTS 093L09 & 093L16

Work Conducted By: Altiplano Minerals Ltd.

Prepared by:
Gideon Lambiv Dzemua, PhD, P.Geo.
Brad Williamson



Table of Contents

1	SUMMARY	1
2	INTRODUCTION	1
3	PROPERTY LOCATION AND DESCRIPTION	1
4	ACCESSIBILITY, CLIMATE, AND PHYSIOGRAPHY.....	5
5	EXPLORATION HISTORY OF THE GD PROPERTY	5
6	GEOLOGICAL SETTING.....	9
7	MINERALIZATION STYLE AND DEPOSIT TYPES	13
8	2014 EXPLORATION PROGRAM	13
9	SAMPLING AND ANALYTICAL APPROACH	13
10	RESULTS AND DISCUSSION.....	17
10.1	SOIL SAMPLES	17
10.2	ROCK SAMPLES.....	17
11	PERSONNEL INVOLVED IN 2014 ASSESSMENT WORK	21
12	CONCLUSIONS and RECOMMENDATIONS	22
13	CERTIFICATE OF AUTHORS	25

List of Figures

Figure 1: GD Property location map	2
Figure 2: GD Mineral Claims	4
Figure 3: Historic Mineral Showings within and around the GD Property	6
Figure 4: Regional Geological context.....	10
Figure 5: Local geological setting	12
Figure 6: 2014 Sample locations	16
Figure 7: Copper-in-soil geochemical map	18
Figure 8: Mo-in-soil geochemical map.....	19
Figure 9: Gold-in-soil geochemical map.....	20



List of Tables

Table 1: GD Property information.....	3
Table 2: Some historic showings within the GD Property area from BC Minfile records	5
Table 3: Summarized geology of the Stikine Terrane	9
Table 4: Background soil values for copper and molybdenum.....	17
Table 5: Individuals involved in the 2014 field program.....	21

List of Appendices

Appendix 1: Statement of Costs	
Appendix 2: Soil Sample Descriptions	
Appendix 3: Rock Sample Descriptions	
Appendix 4: Soil Sample Analytical Certificate	
Appendix 5: Rock Sample Analytical Certificate	
Appendix 6: Mineral Claim Exploration and Development Work/Expiry Date Change Confirmation	



1 SUMMARY

This report is a summary of the 2014 exploration work executed on the GD Mineral Claims (the "Property"), located 30 km northeast of Topley town in central British Columbia and is 100% owned by Altiplano Minerals Limited of Edmonton, Canada ("Altiplano").

The Property is located in the Omineca Mining Division and lies along the eastern margin of the Stikine terrane, which is characterized by a series of proximal arc assemblages (sedimentary and island-arc volcanic and related plutonic rocks) of Carboniferous to Middle Jurassic age and a long and dynamic history of magmatism with repeated pulses of melt generation above a subduction-zone complex. The region is known for its large porphyry copper, copper/gold, and copper/molybdenum deposits, some of which have been developed as producing mines including the Granisle and Bell copper mines. Mineralization in these deposits is characterized by pyrite, chalcopyrite, bornite, chalcocite, and molybdenite that occur as disseminations, fracture coatings, and in quartz veinlet stockworks within all phases of the intrusive complex.

The bedrock in the project area is covered by thick glacial deposits and is dominated by Jurassic Hazelton Group volcanic and clastic sedimentary rocks, which have been intruded by various plutonic suites. Several mineral showings and copper mineralizations have been reported within the Property, and when combined with the tectonic setting and geochronology data suggest the area has a high prospectivity for a large porphyry copper system.

During the 2014 exploration program, 179 soil samples and 2 rock samples were collected from the Property. The soil samples were collected from 10 east-west lines, with a cumulative length of 9.1 line-km, and at 50 m spacing within the lines. The soil samples were collected to check the continuity of the Cu, Mo, and/or Au anomalies, identified in 2013, between and beyond existing soil sample lines.

Seven (4%) of the soil samples returned anomalous Cu values with up to 215 ppm Cu; two samples had anomalous Au values (up to 124 ppb Au); and seventy eight samples had weakly anomalous to anomalous molybdenum values. These results together with previous ones defined several north-south trending Cu anomalous areas with coincident significant Mo and Au values and indicate the probable presence of a large mineralized system. One of the areas coincides with a historic linear IP chargeability anomaly and may be indicative of a disseminated sulfide mineralized fault zone. Further work is required in order to further constrain the anomalies and define drilling targets.



2 INTRODUCTION

This report summarizes the 2014 exploration work performed by Altiplano Minerals Ltd. (“Altiplano”) of Edmonton, Canada on its 100% owned GD Property in central British Columbia. The field work was executed between June 3 and June 8, 2014.

The Property is located within the Omineca Mining Division along the eastern margin of the Stikine (Volcanic Arc) Terrane of central British Columbia. The Omineca Mining Division is known for its large porphyry copper, copper/gold, and copper/molybdenum deposits, and host hosts two past producing mines: the Granisle Copper Mines and the Bell Copper Mines, which extracted 24 million pounds of copper annually while in production. Mineralization in these deposits is characterized by chalcopyrite, bornite, pyrite, and molybdenite which occur in fractures, veins, and veinlets in the host rock (Minfile No 093L 146). The mineralization may also be associated with hydrothermal breccia (Strickland, 2012).

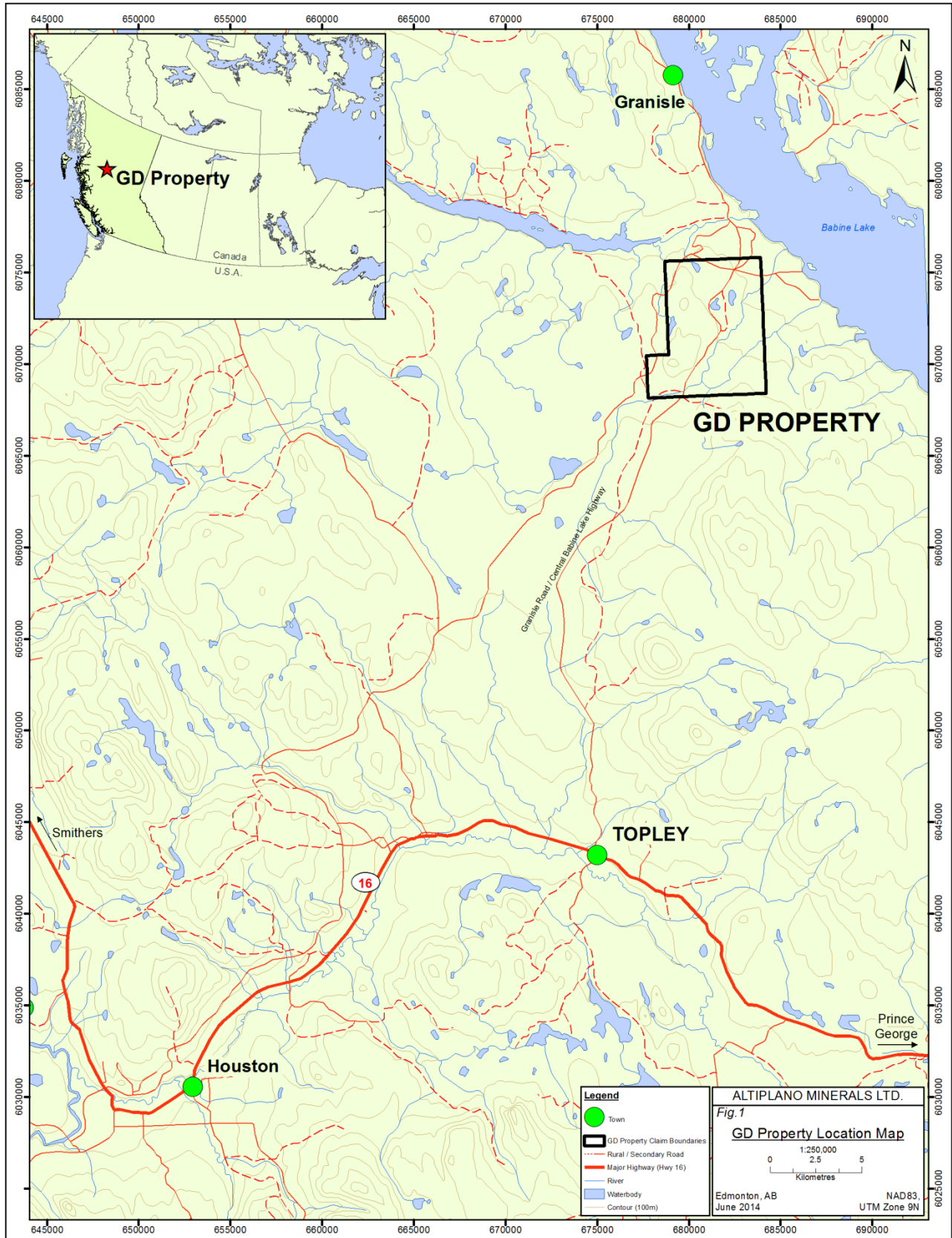
The Property is covered by extensive glacial deposits of variable thickness and has only limited outcrops, which occur mainly along the Tachek Creek canyon. The Tachek Creek is the main drainage system within the Property and is interpreted as a major pre-and interglacial valley that has been infilled with tilt and glacial outwash (Noranda, 1969).

A 2013 exploration program by Altiplano identified two distinct areas/trends with anomalous Cu, Au, and/or Mo values in soil samples collected from 200 m spaced lines (Roik and Robinson, 2013). One of the anomaly trends coincided with a historic time-domain IP anomaly (Roik and Robinson, 2013). A follow-up of these anomalies was the main target of the 2014 exploration program, with the following main objectives:

1. Test the northward extension of the central Cu anomaly and its continuity between 2013 200 m-spaced lines
2. Test the northward and southward extension of the coincident copper, gold, and molybdenum anomalies in the western end of soil line 69250N.

3 PROPERTY LOCATION AND DESCRIPTION

The GD Property is located 30 km northeast of Topley town and 5 km south of Topley Landing and Granisle villages in central British Columbia (Fig. 1). The Property consists of 11 contiguous Mineral Claims with a total surface area of 4,161.83 hectare, with the centroid at 54° 45' N and 126° 10' W (UTM coordinates: 681235 mE and 6071821 mN , Zone 9 NAD83).

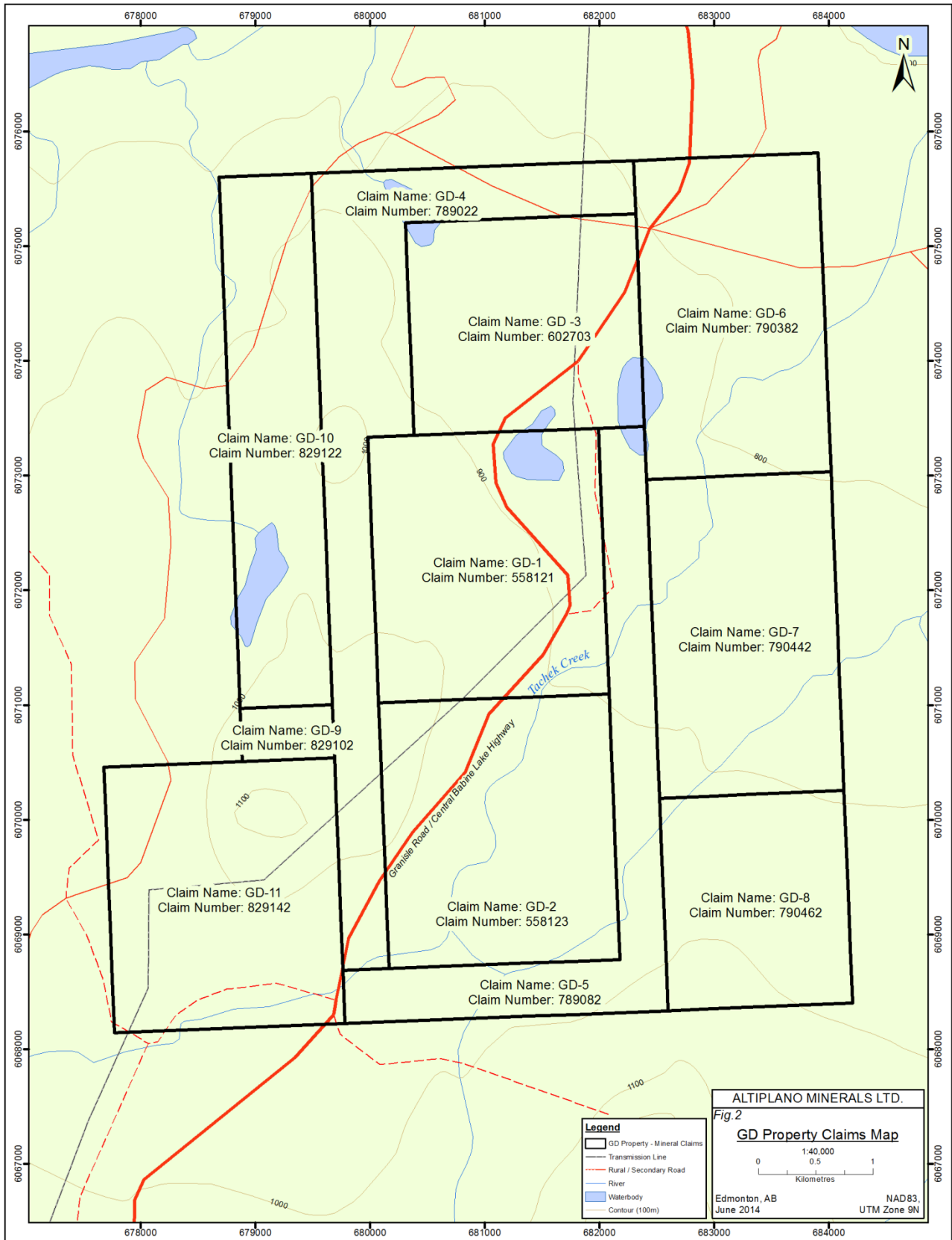




The Mineral Claims are listed in Table 1 and their geographic disposition shown in Figure 2.

Table 1: GD Property information

Claim Number	Claim Name	Owner	NTS Sheet	Expiry Date	Area (ha)
558121	GD-1	245861 (100%) (Altiplano Minerals Ltd.)	093L	11-Jul-15	466.54
558123	GD-2		093L	11-Jul-15	466.75
602703	GD-3		093L	11-Jul-15	373.07
789022	GD-4		093L	11-Jul-15	466.43
789082	GD-5		093L	11-Jul-15	317.39
790382	GD-6		093L	11-Jul-15	447.68
790442	GD-7		093L	11-Jul-15	447.95
790462	GD-8		093L	11-Jul-15	298.77
829102	GD-9		093L	11-Jul-15	37.33
829122	GD-10		093L	11-Jul-15	373.14
829142	GD-11		093L	11-Jul-15	466.79



4 ACCESSIBILITY, CLIMATE, AND PHYSIOGRAPHY

The Property is accessed by the Granisle Road/Central Babine Lake Highway/Topley Landing Road that bifurcates from Highway 16 at Topley town and runs northeast through the centre of the Property (Fig. 1 & 2). The property is also traversed by numerous forestry roads as well as the BC electric power transmission line. Accommodation and residential facilities are available in the town of Houston, about 60 km southwest of the Property.

The region is characterized by an annual average temperature of ca. +4°C, 17 cm of snowfall, and 30 mm of rainfall. In June, the average temperature is +13°C with nearly 50 mm of rain and these conditions are typical of central British Columbia (Environment Canada, 2013).

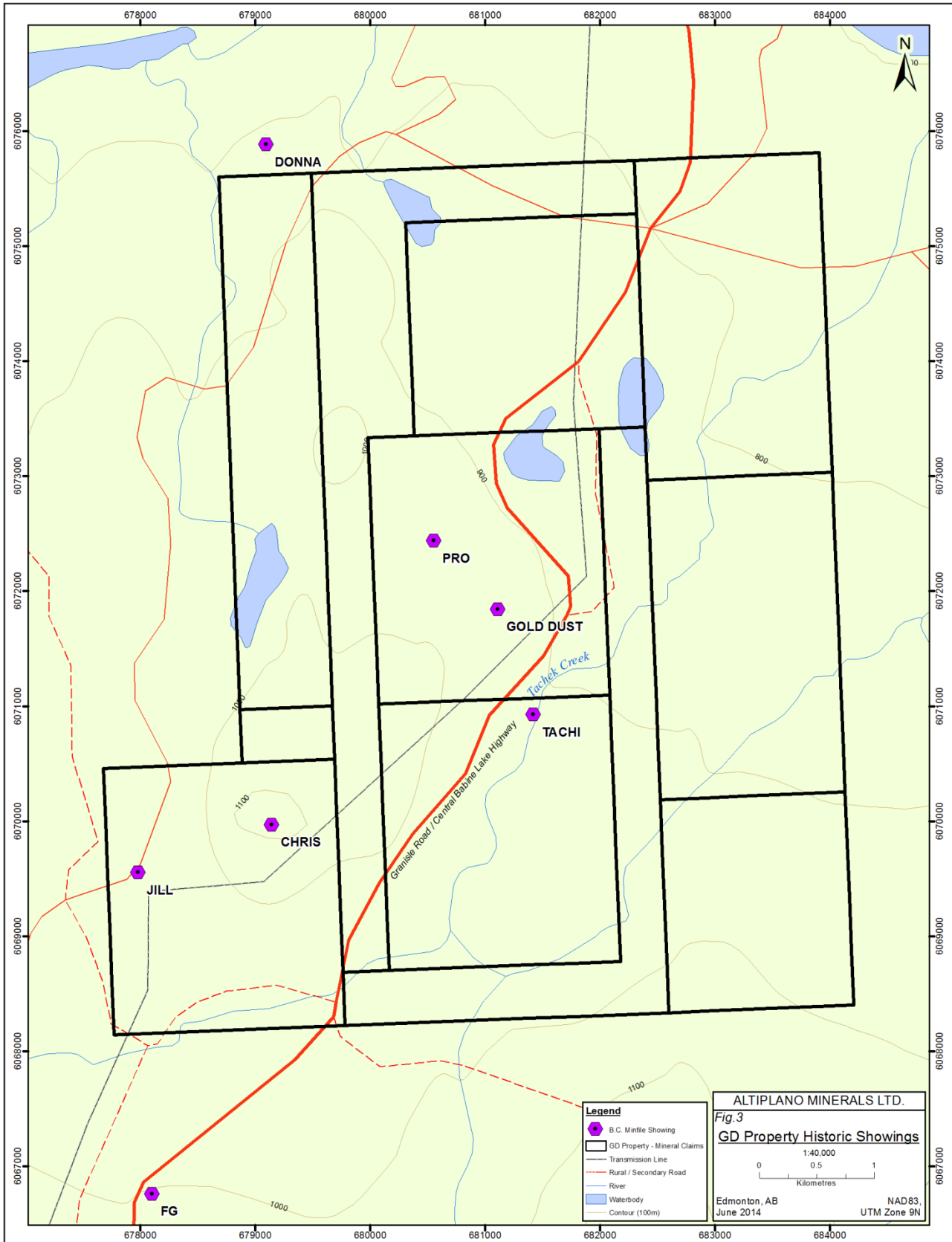
The topography in the project area ranges from ca. 790 m in the Tachek Creek canyon in the north, to ca. 1300 m at the top of Shoulder Mountain in the south (Noranda, 1969). Locally, the landscape is fairly level to gently undulating, with local exceptions common along the Tachek Creek with incised valleys and steep walls on either sides of the river. The Tachek Creek is the main drainage in the Property and drains into the Babine Lake in the northeast. There are also numerous small creeks and extensive swampy areas on the Property. The Property is covered by a moderate to dense forest with mixed coniferous (pine, spruce, cedar) and deciduous (poplar, spruce, willow) trees and a thick understory dominated by mosses.

5 EXPLORATION HISTORY OF THE GD PROPERTY

The GD Property has been extensively explored by various prospectors and mining companies for porphyry Cu, Mo, and Au deposits since 1968 when mineralization was first discovered in the Tachek Creek (Noranda, 1969). However, much of the historic work has not been systematic and has been centred on specific locations. British Columbia Minfile records document several mineral showings within and around the GD Property. Some of the historic mineral showings are listed in Table 2 and their locations with respect to the GD property are shown in Figure 3.

Table 2: Some historic showings within the GD Property area from BC Minfile records

Showing	Minfile Number	UTM Easting	UTM Northing	Inferred deposit type
Tachi	093L 144	681534	6070716	Porphyry Cu ± Mo ± Au
Donna	093L 212	679091	6075879	Porphyry Cu
FG	093L 213	678100	6066750	Porphyry Cu
Pro	093L 225	680668	6072229	Porphyry Cu ± Mo ± Au
Jill	093L 242	678000	6069500	Porphyry Cu ± Mo ± Au
Chris	093L 307	679100	6079900	Limestone
Gold Dust	093L 315	681229	6071633	Vein Au





Below is a brief outline of the exploration history of the GD Property area, summarized from various assessment reports.

- **1968 – 1969: Noranda Exploration Ltd (Noranda)**

Noranda staked 170 claims, carried out geological mapping, geochemical (soil and silt) and geophysical (induced polarization, magnetics, and electromagnetic) surveys, and drilled 2,740 m comprising 1,725 m percussion and 1,015 m diamond drilling. Significant assay results obtained from the drill program included 0.62% Cu over 3.1 m from hole 31 and 0.25% Cu over 3.1 m from hole 32 (Noranda, 1969).

- **1968 – 1969: Tro-Buttle Exploration Ltd**

One thousand two hundred and sixty seven (1267) soil samples were collected from a total of 75 line-km in search of a porphyry type deposit (Dirom, 1969). Several samples had anomalous Cu and Mo values with one sample yielding up to 4.65% Mo. The anomalous values were however not coherent spatially.

- **1970: Taseko Mines Ltd**

In 1970, Taseko Mines Limited drilled three diamond drill holes with a cumulative depth of 305 m. However, no assays were reported for the holes (Carter, 1988).

- **1970: Tro-Buttle Exploration Ltd**

As a follow-up of the anomalies discovered in 1969, Tro-Buttle Exploration Ltd collected 680 soil samples from 39 line-kilometres (24 line-miles) covering their entire claims in 1970. Several samples had anomalous Cu and Mo values. Similar to their observation in 1969, the spatial distribution of samples with anomalous values was not coherent (Alrae Engineering Ltd., 1970; Strickland, 2012).

- **1972: Twin Peak Resources Ltd and Cobre Exploration Ltd**

In 1972, Twin Peak Resources Ltd. completed an airborne magnetic survey over the Tachek Creek covering an area of about 30 km². The results revealed several positive magnetic anomalies including a prominent northeasterly trend in the eastern portion of the study area and a more subtle northerly trend in the western part (Woolverton, 1973).

- **1973: Perry, Knox, Kaufman Inc.**

In 1973, Geoterrex completed an 11 km time-domain induced polarization (IP) survey in search of disseminated style sulfide mineralization. Two anomalies were identified in the south and central areas of the property and recommended for follow-up drilling (Lloyd, 1973).

- **1973: Amoco Petroleum Company Ltd**

In 1973, Amoco Canada Petroleum Co. Ltd. carried out geochemical and geophysical surveys and drilled 3 diamond holes totalling 500 m. No results were reported (Strickland, 2012).

- **1982: Dancer Energy and Resources Ltd**

Dancer Energy and Resources Ltd carried out soil sampling and geological mapping. Their significant results include 1% Cu and 0.9% Mo (Plicka, 1982).



- **1987 – 1988: Gerard Auger**

Between 1987 and 1988, prospection work by Gerard Auger returned up to 214 ppm Cu, 1675 ppm Mo, and 1270 ppb Au from granitic rock samples (Carter, 1988; Roik and Robinson, 2013).

- **1989 – 1992: Nick Carter**

Between 1989 and 1992, prospection work by Nick Carter returned interesting results with up to 196 ppm Cu, 994 ppm Mo, and 4900 ppb Au (Carter, 1990, 1991, 1992). In 1990, a VLF-EM survey was completed over 12.5 km but no significant anomalies were observed (Carter, 1991). In 1991, percussion drill cuttings and drill core samples from Noranda's 1968 and 1969 drill programs were resampled and assayed. The results indicated a widespread low grades copper mineralization. The results also showed anomalous gold values in two areas of the property (Carter, 1992).

- **1993: Cominco Ltd**

In 1993, Cominco conducted an Induced Polarization/Resistivity survey on a property adjacent to the original Gold Dust claims to follow-up some of the previous alteration and sampling results. The results indicated the potential presence of a Cu-Mo porphyry system (Strickland, 2012).

- **1995 – 1999: Hudson Bay Exploration and Development Co. Ltd**

Between 1995 and 1995 Hudson Bay Exploration carried out several exploration programs including a follow-up of Cominco's targets, 16 km of ground electromagnetic (EM) and magnetic surveys, and collection of 68 soil samples. The EM survey defined two parallel conductors and no soil sample had anomalous values (Strickland, 2012). In 1998, an additional 16 km of geophysical and line cutting was carried out and in 1999, 7 diamond drill holes we completed for a total of 1,094.5 m. Only one hole (LEN-004) yielded significant base and precious metals values including 0.7% Cu, 0.4% Zn, 0.7% Mn, 0.3% As, and 14.9 g/t Ag (Dunning, 2000).

- **2006: NXA Inc.**

In 2006, NXA Inc. conducted IP, magnetic, and reconnaissance prospection and geochemical soil surveying. The geophysical survey identified mineralization targets with coincident low magnetic susceptibility and high conductivity (low resistivity). The orientation of their interpreted anomalies did not conform to historical drilling targets (Strickland, 2012).

- **2010 – Present: Altiplano Minerals Ltd.**

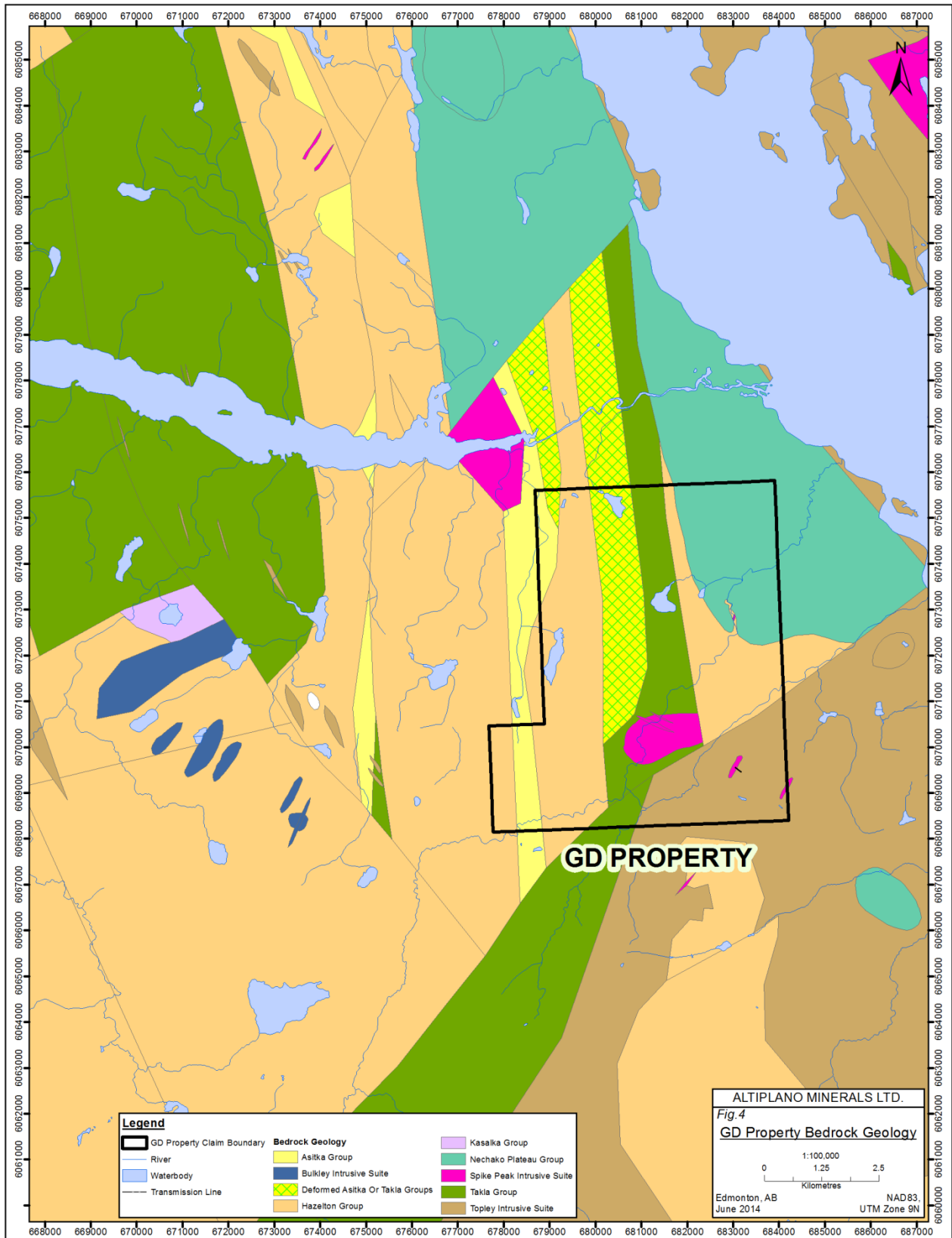
Since 2010, Altiplano Minerals Ltd has been conducting several exploration activities including geologic mapping, trenching, and rock and soil sampling within the GD Property. Altiplano has been using soil samples from the Ah horizon to define coherent Cu, Au, and Mo anomalies within the Property. This is a cost effective method that has been used successfully to detect blind/buried mineralized systems central British Columbia (Heberlein, 2010; Heberlein and Dunn, 2011).

6 GEOLOGICAL SETTING

The project area lies along the eastern margin of the Stikine volcanic arc terrane, which is the largest terrane of the Intermontane tectonic belt and is dominated by Carboniferous to Middle Jurassic island-arc volcanic, sedimentary, and related plutonic rocks, belonging to the Asitka, Hazelton, and Takla Groups (Fig. 4; MacIntyre et al., 2001; Strickland, 2012). The Asitka Group is characterized by Carboniferous to Permian limestones and chloritic metavolcanic rocks. The Takla Group comprises Middle to Late Triassic porphyritic basalt flows with augite phenocrysts, conglomerates, and related marine sedimentary units (MacIntyre et al., 1987). The Hazelton Group comprises Early to Middle Jurassic rocks, which have been subdivided into 4 formations namely Telkwa, Nilkitkwa, Saddle Hill, and Smithers (Table 3). The Telkwa formation consists of Lower Jurassic polymictic conglomerates, porphyritic andesites, tuffs, and breccia; the Nilkitkwa formation consists of Early Jurassic epiclastic sedimentary rocks, amygdaloidal basalt flows, conglomerates, tuffs, siltstones, argillites, and limestones; the Saddle Hill formation is characterized by Early to Middle Jurassic subaerial and submarine volcanic rocks including basalts, tuffs, andesite, and rhyolites; and the Smithers formation is characterized by various clastic sedimentary units, limestone, and volcanic rocks (Table 3; Strickland, 2012; Roik and Robinson, 2013).

Table 3: Summarized geology of the Stikine Terrane

Groups	Formations	Age	Lithological Description
<i>Hazelton</i>	Telkwa	Lower Jurassic	Feldspar phyric tuffs, breccia, and an upper member of amygdaloidal basalt.
	Nilkitkwa	Early Jurassic	Subaqueous greenstone, basalt breccias, flows, tuffs, interbedded sedimentary rocks.
	Saddle Hill	Early to Middle Jurassic	Subaerial to submarine basalt, andesitic to rhyolitic volcanic rocks.
	Smithers		Marine sedimentary rocks, felsic tuffs.
<i>Takla</i>		Middle to Late Triassic	Augite phyric basalt flows, conglomerate, and related marine sedimentary rocks.
<i>Asitka</i>		Carboniferous to Permian	Limestones and chloritic metavolcanic rocks.



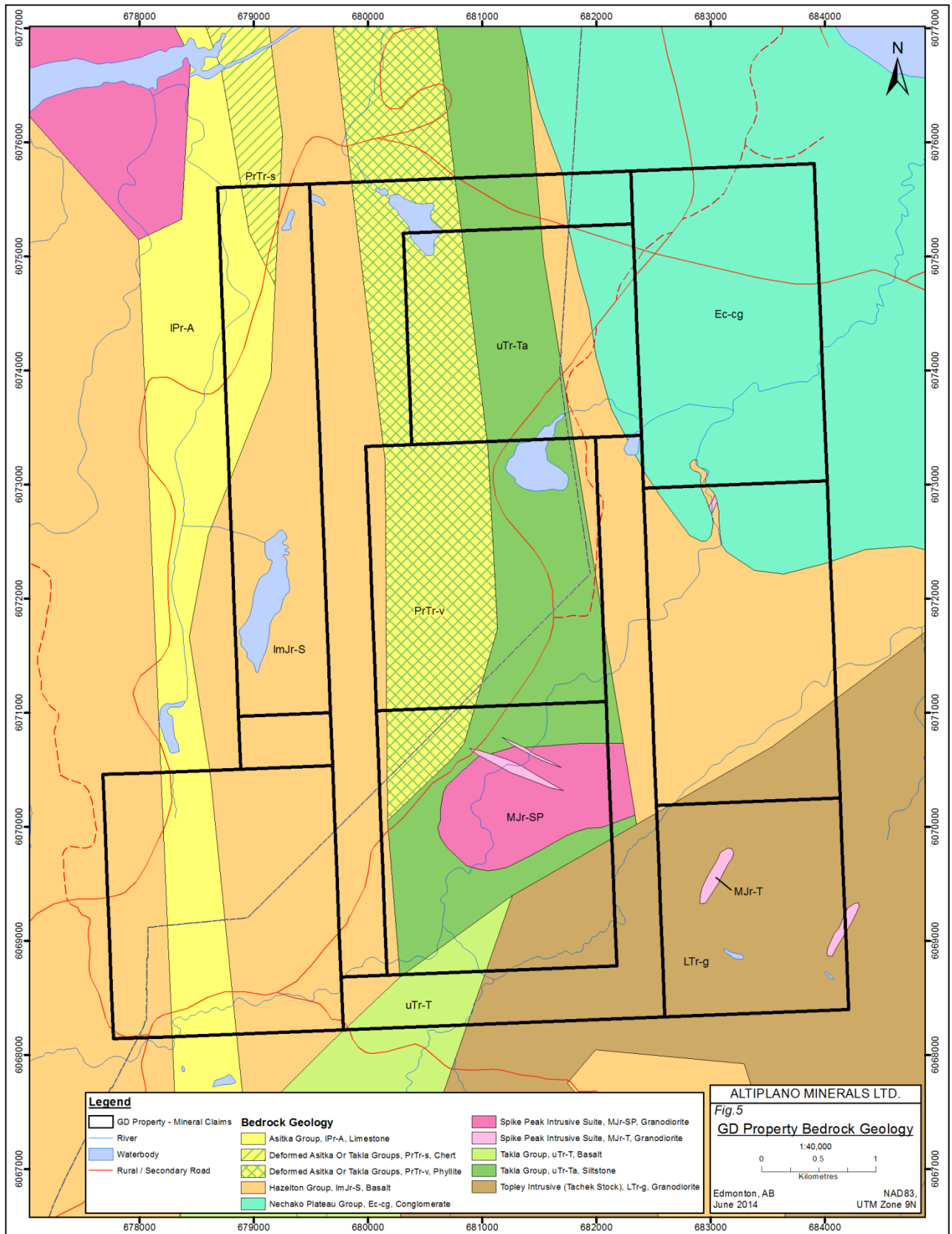
Locally, the project area is dominated by the Saddle Hill formation volcanic rocks with subordinate Asitka and Takla Group units (Fig. 4; Maclyntre et al., 1987). These rocks are variably deformed and metamorphosed into chlorite and sericite schists-dominated greenstones with common quartz and/or carbonate veins up to 0.5 metres wide (Strickland, 2012). The southeast corner of the Property is characterized by Late Triassic to Middle Jurassic Topley and Spike Peak intrusive suites.

The Topley intrusive suite includes the 218 Ma Tachek stock, which is a large granitic body separated from the Hazelton and Takla Groups by a high angle fault (MacIntyre et al., 1996; Schiarizza and MacIntyre, 1999; Strickland, 2012). It is cross-cut by younger, 2-10 m wide quartz-hornblende-biotite porphyry dykes, one of which has been dated at 176 Ma (BC Minfile 093 144; Carter, 1981; MacIntyre et al., 2001; Strickland, 2012). The dykes likely belong to the Early to Middle Jurassic Spike Peak intrusion suite characterized by quartz diorite to granodiorite and quartz monzonite. The Spike Peak units are similar in many aspects to the Tachek stock and are common in the eastern side of the Babine Lake (Maclyntre et al., 2001). The Spike Peak intrusive suite outcrops in along the Tachek Creek and hosts most of the copper mineralization identified in the project area (Strickland, 2012). Multiple phases of the Spike Peak units have been reported in Claim number 558123 (Fig. 4; Strickland, 2012; Roik and Robinson, 2013).

Volcanic rocks of similar ages to the above intrusive suites are common in the Babine porphyry copper district where the Babine-type porphyry, a quartz-feldspar porphyry granodiorite that hosts the Bell and Granisle mines, is the primary exploration target (Strickland, 2012).

The above rock units are covered by extensive glacial deposits that mask much of the bedrock geology in the project area (Strickland, 2012).

Structurally, the GD project area is part of a basin-and-range type horst and graben structures and must have experienced repeated pulses of melt generation above a subduction zone complex (MacIntyre et al., 2001; Strickland, 2012; Roik and Robinson, 2013).





7 MINERALIZATION STYLE AND DEPOSIT TYPES

Sulphides and related secondary minerals observed within the GD Property include chalcopyrite, malachite, magnetite, pyrite, molybdenite, azurite, and bornite. These minerals have been reported in several parts of the Property and suggest the presence of a large mineralized system. Primary Cu mineralization is predominantly hosted within Early to Middle Jurassic Spike Peak quartz monzonite intrusions. The Cu mineralization within these rocks is dominated by malachite and chalcopyrite, which are mainly associated with fractures (Strickland, 2012; Roik and Robinson, 2013). Molybdenite, azurite, and magnetite have also been observed in fractures along the Tachek Creek. These minerals have been observed along faults within the Property especially in the northern part of Tachek Creek. Copper mineralization has also been observed associated with porphyry and diabase dykes (Strickland, 2012; Roik and Robinson, 2013). These mineralizations are commonly associated with weak to moderate propylitic, argillic, sericite, and potassic alterations.

The above mineralization attributes suggest the possible presence of a porphyry Cu \pm Mo \pm Au system. This is corroborated by the tectonic location of the project area and the presence of large porphyry copper deposits in the region including the Granisle and Bell Copper Mines in the Babine Lake area. The formation of porphyry deposits has been described extensively in the literature (e.g., Sillitoe, 1972, 2010; Richards, 2003, 2011; Richards and Mumin, 2013). These deposits are large geochemical anomalies of Fe and S, with economically important enrichments in Cu \pm Mo \pm Au. Porphyry deposits are generally characterized by high tonnage low grade mineralization, with well-defined and zoned alteration footprint. Mineralization in porphyry deposits generally occur in a network of fine fractures and veinlets with variable proportions of chalcopyrite, bornite, molybdenite, pyrite, and magnetite, and are formed from magmatic-hydrothermal fluids exsolved from relatively oxidized S-rich, calc-alkaline to mildly alkaline, arc-related magmas (Richards & Mumin, 2013). Porphyry deposits occur most commonly in Mesozoic and Cenozoic rocks (Richards, 2009).

8 2014 EXPLORATION PROGRAM

The 2014 field program was executed by a two-man crew between June 3 and June 8, 2014 by Altiplano Minerals Ltd. The crew was based in Houston, British Columbia, from where they drove to the project site every morning.

The objective of the campaign was to collect soil samples to test the continuity and outward extension of the copper, gold, and molybdenum anomalies identified during the 2013 exploration program.

9 SAMPLING AND ANALYTICAL APPROACH

During the 2014 field program, 179 soil samples were collected from 10 east-west lines with a cumulative length of 9.1 line-km (Fig. 6). The soil samples were collected mostly from the Ah horizon, which has been shown to be a favorable sample medium for Cu, Mo, and Au in covered terranes. The Ah horizon in the sampled site is located between 1 and 38 cm below the surface.

The soil lines include:

- Lines 68950N, 69150N, 69350N, and 69550N, infilled to test the continuity of the Cu, Au, and Mo anomalies between soil lines 68850N and 69650N (Roik and Robinson, 2013). The new lines reduced the soil lines spacing from 200 m to 100 m locally.
- Lines 69850N, 70050N, and 70250N, spaced at 200 m intervals, were to test the northward extension of the above anomalies.
- Previous soil lines 69050N and 69450N were extended westward to test the northward and southward extension of the Cu, Au, and Mo anomalies observed in line 69250N during the 2013 campaign (Roik and Robinson, 2013).
- Line 70650N was located to check historic results in the vicinity of the quartz-hornblende-biotite porphyry dykes reported in that area (Carter, 1981; MacIntyre et al., 2001; Strickland, 2012; BC Minfile 093 144; Roik and Robinson, 2013).

Along each line, soil samples were collected at 50 m intervals except a sample location coincided with a deep swamp or significantly disturbed area such as cut lines, power lines, and areas disturbed by forestry operations. Each sample was observed and described, noting the attributes shown in Appendix 2. Rock fragment clasts were rejected by hand picking and each sample was placed, together with a labeled Tyvek sample tag, in a Kraft paper soil bag labeled with the sample number and sealed with a plastic cable tie.

The two rock samples were collected from two outcrops located between soil lines 70050N and 70250 N (Fig. 6) and that formed prominent north-northwest (10°) trending knolls in the central part of the Property. The knolls apparently belong to the same trend. Both outcrops contain abundant discontinuous blobs/veins of quartz and calcite and no sulphide minerals were observed in the rock samples. Each sample was described, noting the attributes shown in Appendix 3, and rock material weighing about 1-2 kg was placed, together with a labeled Tyvek sample tag, in a heavy grade plastic sample bag with the sample number written on the sides with a permanent marker. Each sample bag was sealed with a plastic cable tie.

Both soil and rock sample sites were marked in the field with pink arctic-grade flagging and an aluminum tag, both having been marked with the appropriate sample number. Sample locations were determined by hand-held GPS. Locations were recorded in Universal Transverse Mercator (UTM) coordinates using the North American datum established in 1983 (NAD83) within Zone 9N. All maps, figures and UTM coordinates referring to rock grab samples herein utilize UTM NAD 83 Zone 9N.

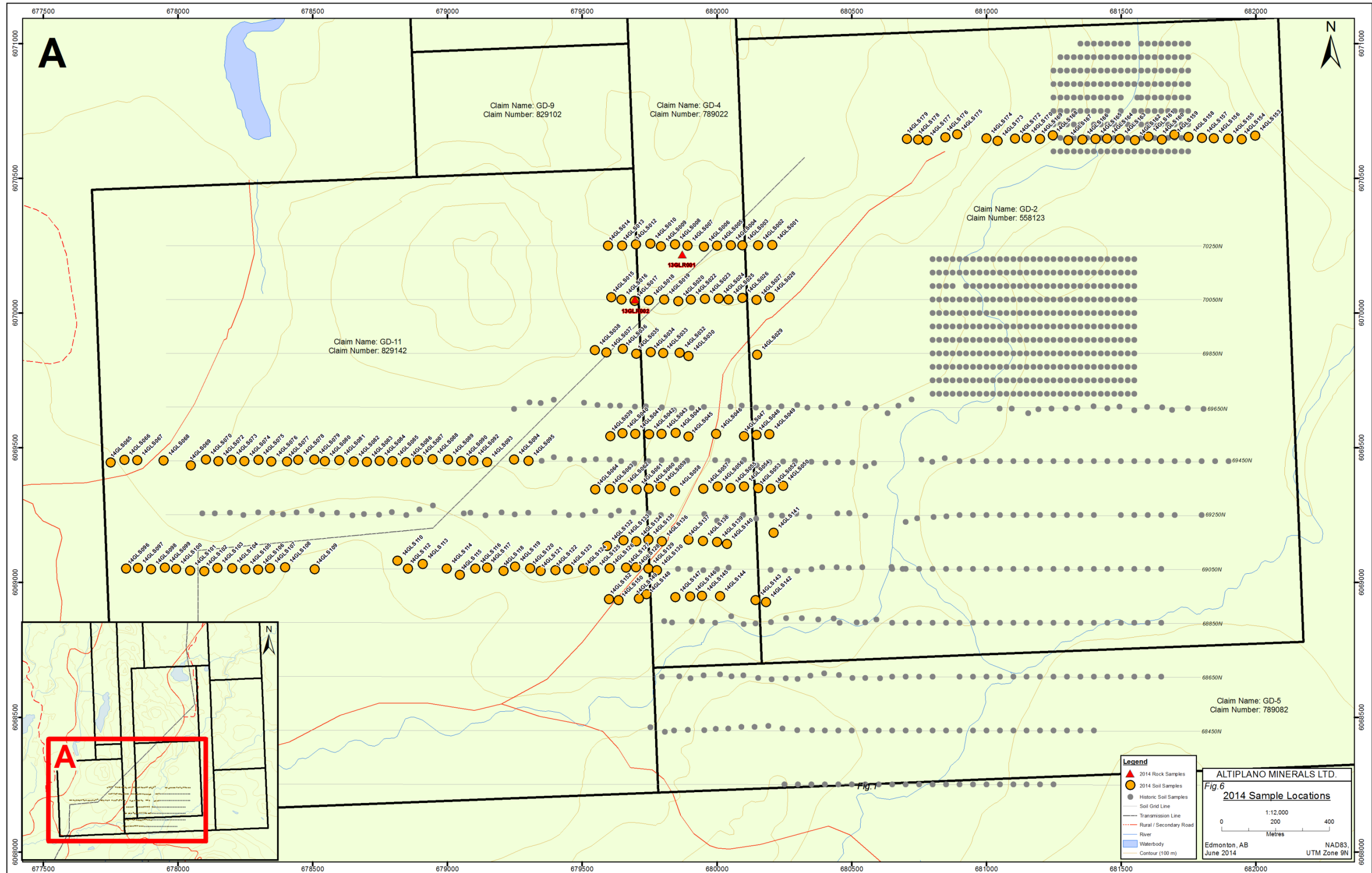
At the end of each day, all the samples collected were transported back to the operational base where they were organized, catalogued, and securely stored. At the end of the program, the samples were placed in poly woven rice bags labeled with the shipment number and the contained sample sequence. Each rice bag was securely closed using plastic cable ties and the samples were hand delivered to the Acme Analytical Laboratories' sample preparation facility at Smithers, British Columbia, from where the prepared samples were sent to Acme Lab facility in Vancouver for chemical analyses. Acme Analytical



Laboratories are ISO 9001:2008 accredited, and the Vancouver facility is also ISO/IEC 17025:2005 accredited.

The soil samples were analyzed for 36 elements by ICP-MS after digestion with aqua regia (laboratory analytical code: AQ201). The 2 rock samples were each analyzed by ICP-MS after aqua regia digestion (laboratory analytical code: AQ201) for 36 elements; by fire assay fusion with ICP-ES finish (FA330); and by XRF after lithium borax fusion (LF702_EXT) for 22 major and minor elements including silica.

The 179 soil samples included 10 duplicate samples inserted in the field. During the laboratory analysis, 5 additional duplicates plus 10 standards and 5 blank samples were inserted. The field duplicate samples were not identified as such to the laboratory.





10 RESULTS AND DISCUSSION

Gridded geochemical results of the soil samples are shown in Figures 7, 8, and 9 for Cu, Mo, and Au respectively. The detailed geochemical results of the soil and rock samples and the associated analytical certificates are appended as Appendices 4 and 5 respectively.

10.1 SOIL SAMPLES

The geochemical results are discussed using historic cut-off values shown in Table 4 below for Cu and Mo. These values are based on the works of Dirom (1969) and Alrae Engineering (1970) and have been used for the interpretation of the soil samples from the GD property throughout its exploration history.

Table 4: Background soil values for copper and molybdenum

Element	Background	Weakly Anomalous	Anomalous	Highly Anomalous
Copper	0 – 30 ppm	31 – 60 ppm	61 – 90 ppm	> 90 ppm
Molybdenum	< 1 ppm	2 – 3 ppm	3 – 4 ppm	> 5ppm

Significant results of the 2014 soil samples include:

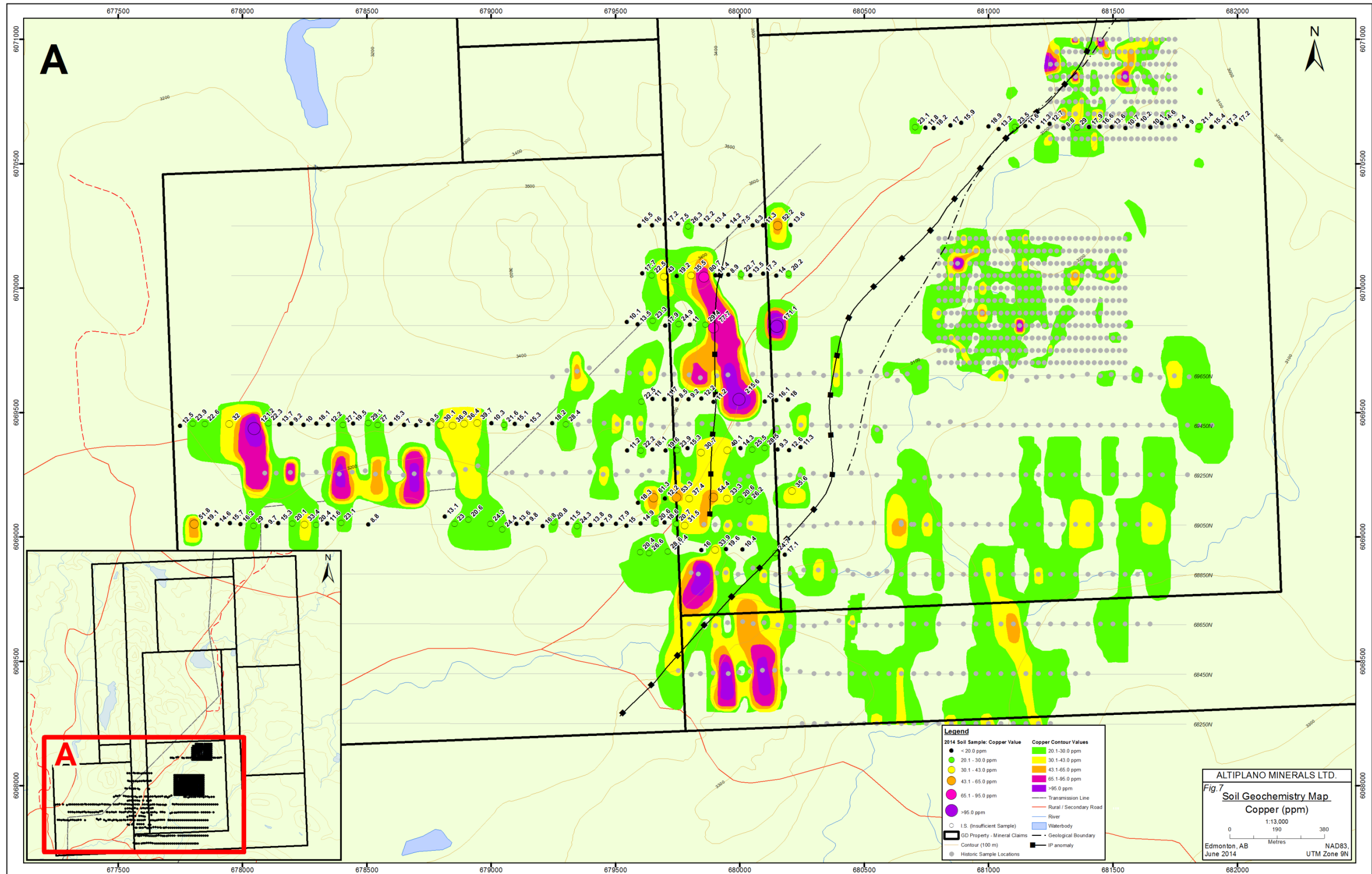
- Seven samples with anomalous to highly anomalous Cu values (up to 215 ppm Cu)
- Two samples with anomalous Au values up to 124.3 ppb.
- Sixteen samples with weakly anomalous Mo values

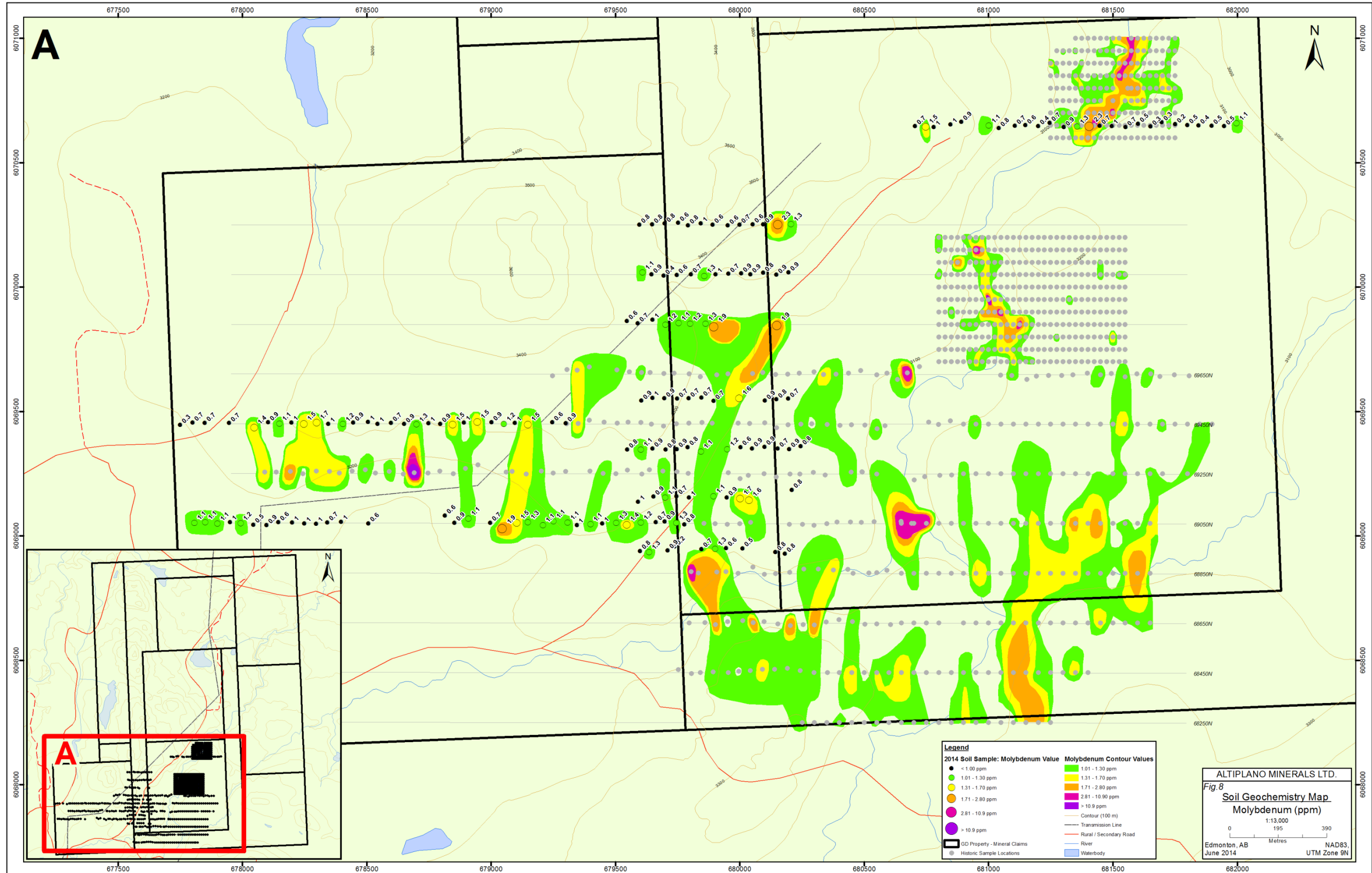
These results confirmed and extend previously defined areas with Cu anomalies (Fig. 7). The anomalies have a prominent north-south trend and the prominent one at the centre of Claim GD-4 (Claim Number: 789022) coincides with a historic high chargeability linear IP anomaly. It also coincides with several weakly anomalous to anomalous Mo and Au values and could be an indication of an underlying disseminated sulfide mineralized system associated with a possible fault zone.

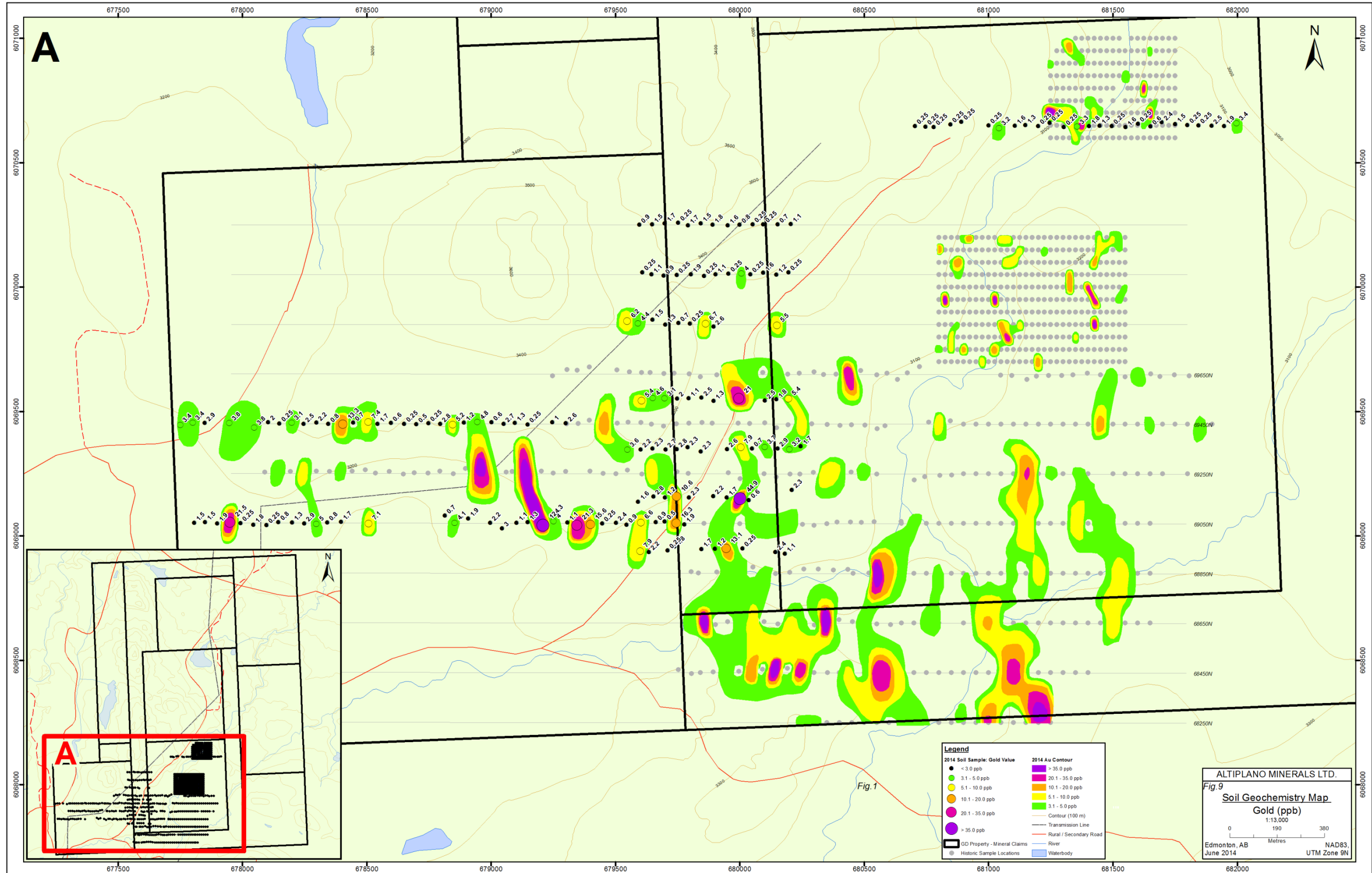
The results also confirmed the presence of a weakly anomalous Mo mineralization in the northeast corner of Claim GD-2 (Claim number 558123) in the area with reported quartz-hornblende-biotite porphyry dykes.

10.2 ROCK SAMPLES

Both rock samples are alkaline basalt (according to the TAS classification scheme) and their assay results returned no significant anomalies.









11 PERSONNEL INVOLVED IN 2014 ASSESSMENT WORK

Table 5 summarizes the list of the personnel utilized for both field and office works

Table 5: Individuals involved in the 2014 field program

People	Position	Company	Field Dates	Field Days	Office Days
Gideon Lambiv D., PhD., P.Geol.	Senior Geologist	Altiplano Minerals Ltd.	June 3-8	6	5
Brad Williamson	Student Geologist			6	5

The following is a list of the contracting organizations involved with both field work and subsequent analysis:

Acme Analytical Laboratories Ltd.

Vancouver Laboratory
 9050 Shaughnessy Street
 Vancouver, B.C. V6P 6E5

Acme Analytical Laboratories Ltd.

Smithers Branch
 3470 Highway 16
 Smithers, B.C. V0J 2N0

BearsPaw Inn

1977 Goold Road
 Houston, B.C. V0J 1Z0



12 CONCLUSIONS and RECOMMENDATIONS

The results of the 2014 exploration program confirmed the presence of several north-south trending Cu anomalies with coincident weakly anomalous to anomalous Mo and Au values. These anomalies suggest the presence of a large mineralized system in the Property. The central anomaly with a prominent north-south trend and coincident historic linear IP chargeability anomaly may be indicative of a disseminated sulfide mineralized fault zone.

Additional work is required in order to further constrain the anomalies and define drilling targets. Recommended work includes:

1. Infill soil sampling lines between soil lines 69250N and 69450N to further constrain the Cu anomaly at the eastern end of line 69250N.
2. Infill soil sampling lines between soil lines 69650N, 69850N, and 70050N to test the continuity of the north-south trending Cu anomaly along the historic IP anomaly.
3. Extension of soil line 68250N westward, beyond the historic IP anomaly, to test the southward extension of the Cu anomaly at the western end of soil line 68450N.
4. Continue prospecting along the Tachek Creek valley.



References

- Alrae Engineering Ltd. (1970): Report on Geochemical Survey - Totem and Babine Mineral Claims, Topley Landing Area. BC ARIS 2, 727.
- BC Geological Survey, Ministry of Energy, Mines & Petroleum Resources (2013): BC Minfile 093L 144 – Tachi. Retrieved June 1, 2013 from <http://minfile.gov.bc.ca/>
- BC Geological Survey, Ministry of Energy, Mines & Petroleum Resources (2013): BC Minfile 093L 315 – Gold Dust. Retrieved June 1, 2013 from <http://minfile.gov.bc.ca/>
- BC Geological Survey, Ministry of Energy, Mines & Petroleum Resources (2014): BC Minfile 093L 146 Retrieved July 2, 2014 from <http://minfile.gov.bc.ca/Summary.aspx?minfilno=093L++146>
- Carter, N. (1988): Geological Report on the Gold Dust I & II Mineral Claims. BC ARIS 16,874.
- Carter, N. (1990): Geological and Geochemical Report on the Gold Dust II Mineral Claim. BC ARIS 19, 556.
- Carter, N. (1991): Geophysical Report (VLF-EM Survey) on the Gold Dust II Mineral Claim. BC ARIS 20, 794.
- Carter, N. (1992): Geological and Geochemical Report on Sampling of Diamond Drill Cores and Percussion Hole Cuttings Gold Dust II Mineral Claim. BC ARIS 22, 025.
- Dunning, J. (2000): 1999 Diamond Drill Program Report including the Len 3, 4, 6, 7, 8 and Ful 1, 2 Mineral Tenures. BC ARIS 26,329.
- Dirom, G. (1969): Geochemical Report: Topley, Babine & Totem Claims for Tro-Buttle Exploration Ltd. BC ARIS 2,095.
- Environment Canada (2013): Canadian Climate Normals 1971-2000, Smithers B.C. Retrieved June 18, 2013 from <http://www.climate.weatheroffice.gc.ca>.
- Heberlein, D.R. (2010): Comparative study of partial and selective extractions of soils over blind porphyry copper-gold mineralization at Kwanika and Mount Miligan, central British Columbia (NTS 093N/01, 19): fieldwork, soil conductivity and pH results; *in* Geoscience BC Summary of Activities 2009, Geoscience BC, Report 2010-1, p. 11-24.
- Heberlein and Dunn, C.E. (2011): Preliminary results of a vegetation, Ah-horizon soil and charcoal geochemical investigation at the Kwanika Central zone, north-central British Columbia (NTS 093N/19); *in* Geoscience BC Summary of Activities 2010, Geoscience BC, Report 2011-1, p. 5-16.
- Lloyd, J. (1973): A Geophysical Report on a Time Domain Induced Polarization survey on the Tachi and Tak Claim Group near Topley Landing, British Columbia for Perry, Knox, Kaufman, Incorporated. BC ARIS 4, 479.
- MacIntyre, D.G., Webster, I.C.L., and Villeneuve, M. (1996): Babine porphyry belt project: Bedrock geology of the Old Fort Mountain Area (93M/1), British Columbia. Paper 1997-1, British Columbia Geological Survey Geological Fieldwork 1996.
- MacIntyre, D.G., Ash, C.H., Britton, J.B., Kilby, W., and Grunsky, E. (1995): Mineral Potential Assessment of the Skeena-Nass Area (93E,L,M,94D,103G,H, I,J,P,104A,B); *In* Geological Fieldwork 1994, Grant, B. and Newell, J.M., Editors, B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1995-1, pages 459-468.
- MacIntyre, D.G., Villeneuve, M.E. and Schiarizza, P. (2001): Timing and tectonic setting of Stikine Terrane magmatism, Babine-Takla lakes area, central British Columbia. Canadian Journal of Earth Sciences 38: 579-601.



2014 Assessment Report on Portions of the GD Property, British Columbia

Noranda Exploration Company Limited. (1969): Exploration Report, Tachi Option.

Plicka, P. (1982): Prospecting Report on Dan No. 1 Claim. BC ARIS 10, 862.

Roik, M., and Robinson, S. (2013): 2013 Assessment Report on portions of the GD property, British Columbia, Canada

Strickland, D. (2012): Geological and Geochemical Report on the GD Property.

Woolverton, R.W. (1973): Geophysical Report on the Jill Claims. BC ARIS 4, 427.



CERTIFICATE OF AUTHOR

I, Gideon Lambiv Dzemua, Ph.D., P.Ge., do hereby certify that:

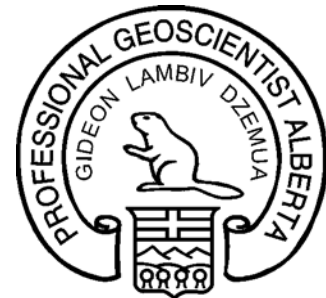
1. I am currently employed as a Geoscientist with:

Altiplano Minerals Ltd
#220 9797 45 Avenue
Edmonton, Alberta, Canada
T6E 5V8

2. My academic qualifications include a Doctor of Philosophy degree in Earth and Atmospheric Sciences, received in 2012 from the Alberta University; a Master of Science degree in Physical Land Resources, received in 2005 from Ghent University in Belgium; and a Bachelor of Science degree in Geology and Environmental Sciences, received in 1998 from the University of Buea in Cameroon
3. I am a member in good standing with the Association of Professional Engineers and Geoscientists of Alberta (APEGA).
4. I have worked as a geoscientist for a total of 13 years after my undergraduate degree and have extensive experience in mineral exploration.
5. I am responsible for the preparation of all sections of the technical report entitled "2014 Assessment Report on Portions of the GD Property, British Columbia", on behalf of Altiplano Minerals Ltd.
6. As of the date of this certificate, to the best of my knowledge, information and belief, the Assessment Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

July 4, 2014

Date



Gideon Lambiv Dzemua PhD, P.Ge.

APPENDIX 1

Statement of Costs

Statement of Costs - 2014 Field Program

June 2 - 9, 2014

Altiplano Minerals Ltd. - GD Property

Personnel		Man Days	Unit Cost (Average)	Total
Geologist	Field Work	16	\$ 375.00	\$ 6,000.00
Geologist	Research, Report Writing	10	\$ 307.50	\$ 3,075.00

Transportation and Accommodations	Days	Unit Cost	Total
Vehicle Rental	8	\$ 100.00	\$ 800.00
Fuel			\$ 513.58
Accommodations	7	\$ 140.00	\$ 980.00
Food			\$ 420.78

Analytical	Samples	Unit Cost	Total
Rock Samples	2	\$ 78.05	\$ 156.09
Soil Samples	179	\$ 21.61	\$ 3,868.19

Field Supplies	Total
Sampling equipment	\$ 339.48

2014 Field Program Total Expenditure	\$ 16,153.12
---	---------------------

APPENDIX 2

Soil Sample Descriptions

SAMPLEID	EAST	NORTH	UTM ZONE	SAMPLE DATE	NTS	GEOLOGIST	WEATHER	VEGETATION	VEG INTENSITY	DEPTH (cm)	HOR	MOISTURE	RELIEF	TOPO POSITION	BEDROCK	MATRIX P&CFC	TEXTURE	COLOUR	COMPACTION	SORTING	CLAST %	REMARKS
14GL5001	680206	6070253	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	10	Ah	Moist	Low	Ridge crest	ND	75	Sand	Brown	Medium	Poor	25	
14GL5002	680153	6070252	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	10	Ah	Moist	Low	Ridge crest	ND	75	Sandy silt	Brown	Medium	Poor	25	
14GL5003	680095	6070252	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	5	Ah	Moist	Low	Ridge crest	ND	85	Sand	Brown	Medium	Medium	15	
14GL5004	680052	6070252	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	8	Ah	Moist	Low	Level	ND	85	Sand	Brown	Medium	Poor	15	
14GL5005	680000	6070250	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	8	Ah	Moist	Medium	Mid slope	ND	85	Sand	Brown	Medium	Poor	15	Cleared, powerline
14GL5006	679952	6070247	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	8	Ah	Moist	High	Mid slope	ND	80	Sand	Brown	Medium	Poor	20	Located on a steep slope besides a linear N-S trending depression; IP anomaly area
14GL5007	679891	6070250	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous	Sparse	12	Ah	Moist	High	Ridge crest	ND	90	Sand	Brown	Medium	Medium	10	Located besides a large linear outcrop, trending NW, of a greenish, foliated, fine grained rock
14GL5008	679844	6070255	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Sparse	5	Ah	Moist	Low	Localized depression	ND	95	Sandy clay	Brown	Medium	Medium	5	Localized depression west of the above rock outcrop
14GL5009	679792	6070248	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	13	Ah	Moist	Low	Level	ND	95	Clay	Grey	Medium	Poor	5	
14GL5010	679753	6070258	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	8	Ah	Moist	Low	Level	ND	90	Sand	Brown	Medium	Poor	10	
14GL5011	679753	6070258	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	8	Ah	Moist	Low	Level	ND	90	Sand	Brown	Medium	Poor	10	Duplicate
14GL5012	679699	6070255	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous	Moderate	12	Ah	Moist	Low	Level	ND	80	Silt	Brown	Medium	Poor	20	Sparse undergrowth dominated mainly by mosses
14GL5013	679648	6070251	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	8	Ah	Moist	Medium	Mid slope	ND	85	Silt	Medium brown	Medium	Medium	15	
14GL5014	679596	6070250	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous	Moderate	11	Ah	Moist	High	Mid slope	ND	80	Sand	Grey	Medium	Medium	20	
14GL5015	679608	6070059	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous	Moderate	7	Ah	Moist	Medium	Mid slope	ND	80	Silt	Brown	Medium	Medium	20	
14GL5016	679645	6070050	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	10	Ah	Moist	Medium	Lower slope	ND	90	Sand	Grey	Medium	Medium	10	Lower slope beside a swampy creek about 20 m wide; thick litter layer
14GL5017	679694	6070045	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous	Sparse	10	Ah	Moist	Medium	Ridge crest	ND	80	Sand	Brown	Medium	Medium	20	Beside a large outcrop (sample 14GLR002)
14GL5018	679747	6070048	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	13	Ah	Moist	High	Mid slope	ND	80	Sand	Brown	Medium	Medium	20	Logged and cleared powerline area
14GL5019	679804	6070051	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	10	Ah	Moist	Medium	Mid slope	ND	40	Sand	Grey	Medium	Poor	60	Logged and cleared powerline area, shrubs, lower soil content
14GL5020	679857	6070044	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	12	Ah	Moist	Medium	Mid slope	ND	80	Clayey sand	Brown	Medium	Medium	20	Localized depression beside the powerline
14GL5021	679857	6070044	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	12	Ah	Moist	Medium	Mid slope	ND	80	Clayey sand	Brown	Medium	Medium	20	Duplicate
14GL5022	679903	6070050	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Sparse	8	Ah	Moist	Medium	Mid slope	ND	95	Sand	Brown	Medium	Medium	5	
14GL5023	679955	6070053	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous	Moderate	8	Ah	Moist	Medium	Mid slope	ND	70	Sand	Brown	Medium	Poor	30	
14GL5024	680006	6070054	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous	Moderate	16	Ah	Wet	Medium	Mid slope	ND	95	Clay	Medium brown	Medium	Medium	5	
14GL5025	680043	6070051	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous/Moss	Moderate	11	Ah	Moist	Low	Mid slope	ND	85	Sand	Brown	Medium	Poor	15	Gentle slope, thick organic layer dominated by mosses
14GL5026	680095	6070057	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	11	Ah	Moist	Low	Level	ND	90	Silty sand	Brown	Medium	Medium	10	
14GL5027	680147	6070049	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	6	Ah	Moist	Low	Mid slope	ND	80	Sand	Brown	Medium	Medium	20	
14GL5028	680196	6070059	NAD83_9N	3-Jun-14	093L	Gideon L.	Clear	Coniferous	Moderate	10	Ah	Moist	Medium	Lower slope	ND	90	Silt	Brown	Medium	Poor	10	Very gentle slope
14GL5029	680149	6069846	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous	WF	7	Ah	Moist	Medium	Lower slope	ND	60	Sand	Med brown	Medium	Medium	40	Very thick litter layer with no undergrowth
14GL5030	679895	6069841	NAD83_9N	4-Jun-14	093L	Gideon L.	Rain	Coniferous	Moderate	8	Ah	Moist	Medium	Lower slope	ND	60	Sand	Grey	Medium	Medium	40	Rain
14GL5031	679895	6069841	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous	Moderate	8	Ah	Moist	Medium	Lower slope	ND	60	Sand	Grey	Medium	Medium	40	Duplicate
14GL5032	679650	6069543	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous	Moderate	12	Ah	Moist	Medium	Ridge crest	ND	95	Silt	Yellowish brown	Medium	Poor	60	No organic layer
14GL5033	679800	6069852	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous	Moderate	15	Ah	Moist	Low	Mid slope	ND	75	Sand	Brown	Medium	Medium	25	
14GL5034	679754	6069855	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous	Moderate	9	Ah	Moist	Low	Mid slope	ND	60	Sand	Brown	Medium	Poor	40	
14GL5035	679701	6069849	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous	Moderate	10	Ah	Moist	Medium	Mid slope	ND	80	Sand	Med brown	Medium	Medium	20	
14GL5036	679650	6069868	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous	Sparse	12	Ah	Moist	Medium	Mid slope	ND	80	Sand	Brown	Medium	Medium	20	Cleared powerline area, poor gps signal
14GL5037	679590	6069854	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous	Moderate	8	Ah	Moist	Medium	Ridge crest	ND	60	Sand	Brown	Medium	Medium	40	Cleared powerline area, poor gps signal, abundant qtz + carbonate erratics
14GL5038	679547	6069863	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous	Moderate	7	Ah	Moist	Medium	Ridge crest	ND	70	Sand	Brown	Medium	Medium	30	Cleared powerline area
14GL5039	679604	6069543	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous	Moderate	12	Ah	Moist	Low	Mid slope	ND	95	Silt	Med brown	Medium	Medium	5	
14GL5040	679649	6069554	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous	Moderate	7	Ah	Moist	Low	Mid slope	ND	80	Sand	Brown	Medium	Medium	20	
14GL5041	679697	6069552	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous	Moderate	10	Ah	Moist	Low	Level	ND	90	Sand	Brown	Medium	Medium	10	
14GL5042	679748	6069551	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous	Moderate	10	Ah	Moist	Low	Lower slope	ND	90	Sand	Brown	Medium	Medium	10	
14GL5043	679795	6069552	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous/Grass/Moss	Moderate	9	Ah	Moist	Medium	Lower slope	ND	60	Sand	Brown	Medium	Medium	40	
14GL5044	679847	6069555	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	Moderate	8	Ah	Moist	Low	Lower slope	ND	90	Sand	Yellowish brown	Medium	Medium	10	Thick litter layer
14GL5045	679895	6069542	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/moss	Moderate	11	Ah	Moist	Low	Level	ND	95	Silty sand	Grey	Medium	Well	5	
14GL5046	679997	6069552	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous/Grass	Moderate	12	Ah	Moist	Low	Level	ND	80	Sand	Brown	Medium	Medium	20	Beside the road, apparently cleared during road construction
14GL5047	680101	6069543	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss/SWMP	Moderate	12	Ah	Moist	Low	Lower slope	ND	90	Sand	Brown	Medium	Well	5	Swampy
14GL5048	680147	6069548	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	WF	10	Ah	Moist	Medium	Ridge crest	ND	95	Silty sand	Brown	Medium	Well	5	
14GL5049	680195	6069551	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	WF	13	Ah	Moist	Low	Ridge crest	ND	90	Sandy silt	Yellowish brown	Medium	Medium	10	Poor gps signal
14GL5050	680246	6069359	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	WF	8	Ah	Moist	Low	Level	ND	95	Silty sand	Brown	Medium	Well	5	
14GL5051	680246	6069359	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	WF	8	Ah	Moist	Low	Level	ND	95	Silty sand	Brown	Medium	Well	5	Duplicate
14GL5052	680199	6069348	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	Moderate	14	Ah	Moist	Low	Level	ND	97	Sand	Brown	Medium	Well	3	
14GL5053	680133	6069350	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	WF	11	Ah	Moist	Low	Level	ND	95	Silty sand	Yellowish brown	Medium	Medium	5	
14GL5054	680100	6069357	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	WF	11	Ah	Moist	Low	Level	ND	95	Silty sand	Greyish brown	Medium	Medium	5	
14GL5055	680050	6069351	NAD83_9N	4-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss	WF	8	Ah	Moist	Low	Mid slope	ND	95	Silty sand	Yellowish brown	Medium	Well	5	
14GL5056	680003	6069356	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	10	Ah	Moist	Low	Lower slope	ND	95	Sand	Brown	Medium	Well	5	
14GL5057	679949	6069348	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	10	Ah	Moist	Low	Mid slope	ND	90	Sand	Yellowish brown	Medium	Medium	10	
14GL5058	679903	6069339	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	8	Ah	Moist	Low	Mid slope	ND	80	Sand	Yellowish brown	Medium	Medium	20	
14GL5059	679791	6069356	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	WF	9	Ah	Moist	Low	Mid slope	ND	80	Sand	Brown	Medium	Medium	20	
14GL5060	679747	6069348	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	WF	15	Ah	Wet	Low	Level	ND	90	Clayey sand	Greyish brown	Medium	Medium	10	Localized swampy depression
14GL5061	679702	6069346	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Deciduous	Moderate	10	Ah	Moist	Low	Ridge crest	ND	90	Sand	Yellowish brown	Medium	Medium	10	
14GL5062	679650	6069350	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Deciduous/Grass	WF	9	Ah	Moist	Low	Ridge crest	ND	90	Sand	Brown	Medium	Medium	10	
14GL5063	679602	6069347	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	7	Ah	Moist	Low	Mid slope	ND	95	Sand	Yellowish brown	Medium	Medium	5	Localized topo low
14GL5064	679548	6069346	NAD83_9N	4-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	WF	8	Ah	Moist	Low	Level	ND	90	Sand	Brown	Medium	Medium	10	
14GL5065	677749	6069446	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	WF	12	Ah	Wet	Low	Level	ND	95	Sandy clay	Grey	Medium	Well	5	
14GL5066	679305	6069455	NAD83_9N	5-Jun-14																		

SAMPLEID	EAST	NORTH	UTM_ZONE	SAMPLE_DATE	NTS	GEOLOGIST	WEATHER	VEGETATION	VEG_INTENSITY	DEPTH (cm)	HOR	MOISTURE	RELIEF	TOPO POSITION	BEDROCK	MATRIX P%CENT	TEXTURE	COLOR	COMPACTION	SORTING	CLAST %	REMARKS	
14GLS087	678891	6069455	NAD83_9N	5-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss	Moderate	8	Ah	Moist	High	Mid slope	ND		90	Silty sand	Yellowish brown	Medium	Medium	10	Steep slope opposite that from which 14GLS086 was collected
14GLS088	678944	6069458	NAD83_9N	5-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	High	Level	ND		70	Silty sand	Yellowish brown	Medium	Poor	30	Common surrounded erratics (boulders)
14GLS089	679002	6069456	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	High	Mid slope	ND		90	Silty sand	Dark brown	Medium	Medium	10	Very steep slope
14GLS090	679051	6069450	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	High	Mid slope	ND		80	Silty sand	Light brown	Medium	Medium	20	
14GLS091	679051	6069450	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	High	Mid slope	ND		80	Silty sand	Light brown	Medium	Medium	20	Duplicate
14GLS092	679096	6069453	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Medium	Ridge crest	ND		80	Silty sand	Light brown	Medium	Medium	20	Common erratics with diverse composition
14GLS093	679147	6069447	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Grass	Sparse	6	Ah	Moist	Medium	Ridge crest	ND		70	Sand	Medium brown	Medium	Medium	20	Clear area along the power line
14GLS094	679247	6069456	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	Medium	Mid slope	ND		80	Sand	Yellowish brown	Medium	Medium	20	Clear area along the power line, abundant reddish azarites
14GLS095	679301	6069452	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Medium	Mid slope	ND		90	Silty sand	Medium brown	Medium	Medium	10	Coincides with 13MRS083, gentle slope
14GLS096	677806	6069052	NAD83_9N	5-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	Low	Level	ND		90	Clayey sand	Black	Medium	Medium	10	
14GLS097	678500	6069054	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Low	Level	ND		95	Silty sand	Medium brown	Well	Medium	5	
14GLS098	677899	6069049	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	9	Ah	Moist	Low	Level	ND		85	Silty sand	Dark grey	Medium	Medium	15	
14GLS099	677950	6069055	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	15	Ah	Moist	Low	Level	ND		95	Silty sand	Yellowish brown	Medium	Well	5	
14GLS100	677992	6069050	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	15	Ah	Moist	Medium	Mid slope	ND		80	Silty sand	Medium brown	Medium	Medium	20	
14GLS101	678044	6069044	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss/Swamp	Moderate	11	Ah	Moist	Medium	Lower slope	ND		95	Silty sand	Medium brown	Well	Well	5	Beside a swamp, ~20 m away from the powerline
14GLS102	678097	6069042	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	13	Ah	Moist	High	Mid slope	ND		80	Silty sand	Medium brown	Medium	Medium	20	
14GLS103	678145	6069054	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	8	Ah	Moist	Low	Ridge crest	ND		80	Silty sand	Medium brown	Medium	Medium	20	
14GLS104	678200	6069053	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	Low	Level	ND		60	Silty sand	Medium brown	Well	Well	40	
14GLS105	678249	6069049	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Low	Level	ND		80	Silty sand	Dark grey	Well	Medium	5	Very stony
14GLS106	678297	6069048	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	Medium	Mid slope	ND		90	Silty sand	Medium brown	Medium	Medium	10	
14GLS107	678341	6069053	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Low	Mid slope	ND		95	Silty sand	Light brown	Medium	Medium	5	
14GLS108	678397	6069056	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Low	Level	ND		90	Silty sand	Yellowish brown	Medium	Well	5	An overlying leached ash-grey sandy horizon
14GLS109	678507	6069049	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Deciduous/Grass/Moss/Swamp	Sparse	12	Ah?	Wet	Low	Level	ND		40	Sandy clay	Dark grey	Well	Poor	60	Swamp
14GLS110	678814	6069081	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss/Swamp	Sparse	10	Ah?	Wet	Medium	Lower slope	ND		40	Sandy clay	Dark grey	Well	Poor	60	Displaced to the edge of a very extensive swamp
14GLS111	678814	6069081	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Moss/Swamp	Sparse	10	Ah?	Wet	Medium	Lower slope	ND		80	Sandy clay	Dark grey	Well	Poor	20	Duplicate
14GLS112	678853	6069052	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Grass/Moss/Swamp	Moderate	18	Ah?	Wet	Low	Level	ND		80	Silty sand	Dark grey	Medium	Poor	20	Eastern edge of the swamp mentioned above; very stony
14GLS113	678908	6069069	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	12	Ah	Moist	Low	Level	ND		70	Silty sand	Medium brown	Well	Medium	30	Displaced to the edge of the swamp; very stony
14GLS114	678997	6069052	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss/Swamp	Sparse	38	Ah?	Wet	Low	Level	ND		80	Silty sand	Dark brown	Well	Medium	20	Swamp edge, very stony
14GLS115	679045	6069029	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	8	Ah	Moist	Low	Level	ND		85	Silty sand	Light brown	Medium	Medium	15	Swamp edge
14GLS116	679103	6069052	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Low	Level	ND		95	Silty sand	Medium brown	Well	Medium	5	
14GLS117	679147	6069055	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	7	Ah	Moist	Medium	Mid slope	ND		95	Silty sand	Medium brown	Medium	Well	5	
14GLS118	679208	6069043	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	11	Ah	Dry	High	Mid slope	ND		90	Sand	Light brown	Medium	Well	10	Very steep slope
14GLS119	679208	6069043	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	Medium	Mid slope	ND		95	Silty sand	Dark brown	Medium	Medium	5	
14GLS120	679307	6069053	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	8	Ah	Moist	Medium	Mid slope	ND		85	Sand	Light brown	Medium	Medium	5	
14GLS121	679345	6069043	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	11	Ah	Moist	Medium	Mid slope	ND		80	Sand	Light brown	Medium	Medium	20	
14GLS122	679400	6069046	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	Medium	Lower slope	ND		80	Sand	Light brown	Medium	Medium	20	
14GLS123	679447	6069049	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	13	Ah	Moist	High	Mid slope	ND		80	Silty sand	Medium brown	Medium	Medium	20	
14GLS124	679447	6069049	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	13	Ah	Moist	High	Mid slope	ND		80	Silty sand	Medium brown	Medium	Medium	20	
14GLS125	679545	6069044	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	12	Ah	Moist	Medium	Mid slope	ND		85	Silty sand	Medium brown	Medium	Medium	15	
14GLS126	679602	6069053	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Medium	Lower slope	ND		90	Silty sand	Medium brown	Well	Medium	10	
14GLS127	679663	6069055	NAD83_9N	6-Jun-14	093L	Gideon L.	Cloudy	Coniferous/Grass/Moss	Moderate	14	Ah	Moist	Low	Level	ND		90	Silty sand	Dark brown	Well	Poor	30	
14GLS128	679699	6069051	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Low	Level	ND		80	Silty sand	Light brown	Medium	Medium	20	
14GLS129	679745	6069052	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	13	Ah	Moist	Low	Lower slope	ND		95	Silty sand	Yellowish brown	Medium	Well	5	
14GLS130	679777	6069045	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass	Moderate	22	Ah	Moist	Low	Level	ND		98	Silt	Yellowish brown	Medium	Well	2	Displaced because of road; very thick organic layer
14GLS131	679777	6069045	NAD83_9N	6-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass	Moderate	22	Ah	Moist	Low	Level	ND		98	Silt	Yellowish brown	Medium	Well	2	Duplicate
14GLS132	679592	6069136	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	11	Ah	Dry	Medium	Mid slope	ND		95	Sand	Medium brown	Medium	Medium	5	
14GLS133	679653	6069157	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	20	Ah	Moist	Low	Level	ND		90	Clayey silty sand	Medium black	Well	Poor	10	Localized depression
14GLS134	679700	6069153	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	15	Ah	Moist	Low	Level	ND		80	Silty sand	Medium brown	Well	Medium	20	Very thick organic layer
14GLS135	679746	6069159	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	16	Ah?	Wet	Medium	Lower slope	ND		60	Sand	Dark brown	Well	Poor	40	Mid swampy local depression
14GLS136	679796	6069153	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	10	Ah	Moist	Medium	Ridge crest	ND		80	Silty sand	Medium brown	Well	Poor	20	Low ridge
14GLS137	679894	6069159	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Deciduous/Grass/Moss	Moderate	12	Ah	Moist	Medium	Mid slope	ND		80	Silty sand	Light brown	Well	Medium	10	
14GLS138	679948	6069154	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss/Swamp	Moderate	30	Ah?	Wet	Medium	Lower slope	ND		90	Silty clay	Light brown	Well	Well	10	E-W striking paleo-swamp; very thick organic layer
14GLS139	680001	6069150	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss	Moderate	11	Ah	Dry	Low	Level	ND		70	Sand	Light brown	Well	Well	30	
14GLS140	680037	6069143	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Moss	Moderate	20	Ah	Moist	Medium	Lower slope	ND		60	Silty sand	Medium brown	Well	Well	40	Displaced to the edge of a very extensive swamp; very stony
14GLS141	680210	6069184	NAD83_9N	7-Jun-14	093L	Gideon L.	Clear	Coniferous/Grass/Moss/Swamp	Moderate	14	Ah?	Wet	Medium	Lower slope	ND		60	Clayey silt	Dark brown	Well	Medium	40	Displaced to the edge of the swamp

APPENDIX 3

Rock Sample Descriptions

SAMPLE ID	PROJECT CODE	SAMPLE TYPE	EASTING	NORTHING	UTM ZONE	CLAIM NUMBER	SAMPLE DATE	NTS	GEOLOGIST	LITHOLOGY	DISPOSITION	GRAIN_SIZE	QUARTZ	FELDSPAR	AMPHIBOLE	CHLORITE	PYROXENE	OLIVINE	OTHER	COMMENTS
14GLR001	99128	Rock	679872	6070218	NAD 1983 UTM z9N	789022	3-Jun-14	093L	Gideon L.	Mafic- Ultramafic	Outcrop	Fine	X			X		X?		Linear outcrop ca. 50 m wide, striking NNW (340) coinciding with a topographic high; greenish, foliated, common Qtz and calcite pods, strong magnetism; apparently propylitically altered
14GLR002	99128	Rock	679696	6070051	NAD 1983 UTM z9N	789022	3-Jun-14	093L	Gideon L.	Mafic- Ultramafic	Outcrop	Fine	X			X		X?		Same unit as above (14GLR001)

APPENDIX 4

Soil Sample Analytical Certificate



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Client: **Altiplano Minerals Ltd.**
220-9797 45 Ave
Edmonton AB T6E 5V8 CANADA

Submitted By: Brad Williamson
Receiving Lab: Canada-Smithers
Received: June 09, 2014
Report Date: June 18, 2014
Page: 1 of 7

CERTIFICATE OF ANALYSIS

SMI14000318.1

CLIENT JOB INFORMATION

Project: GD Property
Shipment ID: 14-APN-SS-00
P.O. Number
Number of Samples: 179

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.

Invoice To: Altiplano Minerals Ltd.
220-9797 45 Ave
Edmonton AB T6E 5V8
CANADA

CC: Gideon Lambiv
Simeon Robinson

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	179	Dry at 60C			SMI
SS80	179	Dry at 60C sieve 100g to -80 mesh			SMI
AQ201	179	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN

ADDITIONAL COMMENTS



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.



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
 PHONE (604) 253-3158

Client: **Altiplano Minerals Ltd.**
 220-9797 45 Ave
 Edmonton AB T6E 5V8 CANADA

Project: GD Property
 Report Date: June 18, 2014

Page: 2 of 7

Part: 1 of 2

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method Analyte	Unit	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
MDL		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm
		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	2	0.01	0.001		1
14GLS001	Soil	1.3	13.6	7.9	54	<0.1	8.4	5.2	250	2.46	4.8	1.1	0.3	25	0.3	0.7	<0.1	61	0.34	0.034	5
14GLS002	Soil	2.3	52.2	16.6	110	0.3	21.6	18.1	5711	4.11	10.4	0.7	0.5	48	0.8	0.6	0.2	76	0.65	0.138	14
14GLS003	Soil	0.9	11.3	8.6	53	0.1	9.7	6.4	384	2.93	7.9	<0.5	0.7	25	<0.1	0.8	<0.1	57	0.25	0.138	5
14GLS004	Soil	0.6	6.3	9.3	50	0.2	7.9	6.5	692	2.50	4.0	<0.5	0.7	18	0.2	0.4	<0.1	48	0.19	0.173	6
14GLS005	Soil	0.7	7.5	8.3	59	0.2	8.8	7.6	1099	2.41	1.6	0.8	0.4	32	0.3	0.4	<0.1	44	0.39	0.094	6
14GLS006	Soil	0.6	14.2	9.3	88	0.2	19.5	10.6	506	3.29	5.4	1.6	0.8	19	0.2	0.6	<0.1	58	0.27	0.205	5
14GLS007	Soil	0.6	13.4	9.1	78	<0.1	16.2	10.2	1267	3.04	6.6	1.8	0.6	24	<0.1	0.5	<0.1	60	0.25	0.074	7
14GLS008	Soil	1.0	12.2	10.8	60	0.3	9.0	8.4	1045	2.34	3.6	1.5	0.4	25	0.3	0.5	0.1	49	0.29	0.045	7
14GLS009	Soil	0.8	26.3	7.9	64	0.2	16.3	8.5	704	2.62	7.8	1.7	0.4	41	0.4	0.8	<0.1	50	0.65	0.068	13
14GLS010	Soil	0.6	7.5	10.0	116	0.1	9.9	7.2	439	3.11	7.4	<0.5	0.6	23	0.2	0.7	<0.1	58	0.23	0.148	6
14GLS011	Soil	0.6	7.8	9.4	111	0.1	10.9	7.4	442	3.04	6.8	<0.5	0.5	22	0.4	0.6	<0.1	53	0.21	0.157	6
14GLS012	Soil	0.8	17.2	10.7	79	0.4	12.5	9.3	611	2.98	10.2	1.7	0.7	37	0.3	0.8	<0.1	61	0.49	0.093	7
14GLS013	Soil	0.8	16.0	8.8	46	<0.1	12.2	8.2	406	2.96	12.7	1.5	0.7	19	<0.1	0.9	<0.1	59	0.20	0.037	6
14GLS014	Soil	0.8	16.5	7.4	66	0.2	13.7	7.9	308	2.83	9.0	0.9	0.7	26	0.2	0.8	<0.1	59	0.28	0.037	8
14GLS015	Soil	1.1	17.7	10.2	71	<0.1	13.7	9.1	272	3.76	16.0	<0.5	0.9	15	0.2	0.8	<0.1	81	0.20	0.069	5
14GLS016	Soil	0.9	22.5	9.6	65	<0.1	14.5	9.0	267	3.31	13.2	1.1	0.9	17	0.2	0.9	<0.1	67	0.20	0.034	6
14GLS017	Soil	0.4	43.0	6.0	76	<0.1	31.2	18.2	568	3.58	8.4	0.9	0.7	24	<0.1	0.5	<0.1	74	0.33	0.113	4
14GLS018	Soil	0.6	19.2	8.8	83	0.1	19.7	15.3	1021	3.26	3.5	<0.5	0.6	18	0.1	0.3	<0.1	70	0.27	0.134	5
14GLS019	Soil	0.7	35.5	8.3	112	0.5	23.2	13.6	541	3.41	5.4	1.9	0.7	29	0.2	0.5	<0.1	70	0.53	0.026	8
14GLS020	Soil	1.3	80.7	10.2	47	0.6	15.6	10.2	1311	3.03	8.1	<0.5	0.6	56	0.3	0.7	0.1	62	1.10	0.035	22
14GLS021	Soil	1.3	82.8	10.1	50	0.5	18.8	9.5	1178	3.04	9.1	<0.5	0.7	49	0.2	0.8	0.1	60	0.93	0.034	24
14GLS022	Soil	1.0	14.4	8.5	77	0.2	10.3	8.6	814	2.56	3.8	1.1	0.2	32	0.4	0.5	<0.1	50	0.44	0.096	5
14GLS023	Soil	0.7	8.9	17.7	60	0.1	6.7	5.0	334	2.57	2.6	<0.5	0.4	18	0.5	0.5	<0.1	59	0.19	0.036	5
14GLS024	Soil	0.9	22.7	7.1	30	0.2	11.2	5.5	159	2.45	6.8	4.0	0.3	81	0.4	0.5	<0.1	47	1.41	0.034	6
14GLS025	Soil	0.9	13.5	6.0	57	0.1	10.5	7.5	518	2.56	4.8	<0.5	0.6	20	0.2	0.5	<0.1	57	0.23	0.025	7
14GLS026	Soil	0.8	17.3	7.7	53	0.1	13.9	8.0	358	2.90	12.0	1.6	0.6	22	<0.1	0.8	<0.1	55	0.28	0.089	5
14GLS027	Soil	0.9	14.0	7.6	63	0.1	9.8	6.4	318	2.53	6.5	1.2	0.6	19	<0.1	0.5	<0.1	55	0.27	0.034	6
14GLS028	Soil	0.9	20.2	6.5	56	0.1	13.0	8.1	433	3.11	9.9	<0.5	0.8	24	0.1	0.7	<0.1	60	0.35	0.027	5
14GLS029	Soil	1.9	171.1	10.5	79	0.1	18.2	10.9	802	3.43	13.4	5.5	1.2	33	0.3	1.3	<0.1	59	0.61	0.086	9
14GLS030	Soil	1.9	77.7	7.4	61	0.1	9.8	7.2	262	3.52	12.4	3.0	0.8	19	0.2	0.7	<0.1	93	0.25	0.051	5

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.

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		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	0.05	1	0.5	0.2	
14GLS001	Soil	16	0.25	160	0.045	2	0.78	0.008	0.12	0.1	0.02	1.9	<0.1	<0.05	4	<0.5	<0.2
14GLS002	Soil	29	0.36	530	0.026	2	2.44	0.010	0.10	0.2	0.06	5.1	0.1	<0.05	7	<0.5	<0.2
14GLS003	Soil	16	0.24	153	0.036	<1	1.04	0.008	0.05	0.1	0.02	3.1	<0.1	<0.05	4	<0.5	<0.2
14GLS004	Soil	14	0.15	166	0.035	<1	1.06	0.008	0.07	0.1	0.03	2.2	<0.1	<0.05	5	<0.5	<0.2
14GLS005	Soil	16	0.24	204	0.051	2	0.87	0.015	0.07	<0.1	0.02	2.1	<0.1	<0.05	4	<0.5	<0.2
14GLS006	Soil	27	0.57	210	0.047	1	1.53	0.007	0.06	<0.1	0.03	3.7	<0.1	<0.05	6	0.7	<0.2
14GLS007	Soil	21	0.38	262	0.051	1	1.61	0.009	0.04	<0.1	0.03	3.2	<0.1	<0.05	5	<0.5	<0.2
14GLS008	Soil	14	0.19	253	0.035	2	0.98	0.009	0.06	<0.1	0.03	2.1	<0.1	<0.05	4	<0.5	<0.2
14GLS009	Soil	19	0.37	210	0.035	2	1.30	0.012	0.07	<0.1	0.06	4.6	<0.1	<0.05	4	0.7	<0.2
14GLS010	Soil	17	0.24	158	0.034	2	1.23	0.009	0.06	<0.1	0.02	2.6	<0.1	<0.05	5	<0.5	<0.2
14GLS011	Soil	15	0.24	170	0.034	2	1.31	0.009	0.06	0.1	0.02	2.5	<0.1	<0.05	6	<0.5	<0.2
14GLS012	Soil	16	0.28	270	0.039	2	1.30	0.010	0.06	<0.1	0.04	3.5	<0.1	<0.05	4	<0.5	<0.2
14GLS013	Soil	17	0.31	125	0.054	2	1.09	0.009	0.05	<0.1	0.02	3.6	<0.1	<0.05	3	<0.5	<0.2
14GLS014	Soil	16	0.31	158	0.053	3	1.16	0.009	0.06	0.1	0.03	3.4	<0.1	<0.05	4	<0.5	<0.2
14GLS015	Soil	17	0.33	135	0.045	1	1.33	0.009	0.03	<0.1	0.03	3.5	<0.1	<0.05	5	<0.5	<0.2
14GLS016	Soil	18	0.36	155	0.049	2	1.40	0.011	0.03	<0.1	0.03	4.0	<0.1	<0.05	4	<0.5	<0.2
14GLS017	Soil	30	1.29	124	0.114	2	2.50	0.008	0.04	<0.1	0.03	4.7	<0.1	<0.05	7	<0.5	<0.2
14GLS018	Soil	24	0.58	282	0.081	2	1.53	0.007	0.07	<0.1	0.01	4.8	<0.1	<0.05	7	<0.5	<0.2
14GLS019	Soil	27	0.75	306	0.103	1	1.82	0.015	0.06	<0.1	0.04	6.1	<0.1	<0.05	6	<0.5	<0.2
14GLS020	Soil	20	0.31	411	0.047	1	1.66	0.013	0.04	0.1	0.09	5.4	<0.1	<0.05	5	0.8	<0.2
14GLS021	Soil	21	0.34	415	0.048	3	1.71	0.015	0.04	0.1	0.08	6.0	<0.1	<0.05	5	0.7	<0.2
14GLS022	Soil	14	0.27	221	0.043	2	0.88	0.008	0.06	<0.1	0.03	2.3	<0.1	<0.05	5	<0.5	<0.2
14GLS023	Soil	15	0.20	124	0.061	2	0.75	0.008	0.04	<0.1	0.02	2.2	<0.1	<0.05	5	<0.5	<0.2
14GLS024	Soil	16	0.27	343	0.036	2	1.23	0.012	0.03	0.1	0.05	2.6	<0.1	<0.05	4	0.8	<0.2
14GLS025	Soil	16	0.29	175	0.058	<1	1.01	0.010	0.05	<0.1	0.02	3.1	<0.1	<0.05	4	<0.5	<0.2
14GLS026	Soil	16	0.34	133	0.048	2	1.24	0.008	0.06	<0.1	0.03	2.9	<0.1	<0.05	4	<0.5	<0.2
14GLS027	Soil	15	0.24	216	0.046	2	1.39	0.011	0.04	<0.1	0.02	3.1	<0.1	<0.05	5	<0.5	<0.2
14GLS028	Soil	17	0.32	251	0.047	<1	1.42	0.012	0.03	<0.1	0.03	4.5	<0.1	<0.05	4	<0.5	<0.2
14GLS029	Soil	17	0.46	149	0.053	2	1.11	0.016	0.07	0.1	0.05	5.6	<0.1	<0.05	4	<0.5	<0.2
14GLS030	Soil	15	0.80	134	0.148	2	1.71	0.013	0.06	0.1	0.03	6.7	<0.1	<0.05	8	<0.5	<0.2

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method Analyte	Unit	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
MDL		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm
		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
14GLS031	Soil	1.6	30.8	9.0	69	0.1	13.8	8.2	265	3.78	16.5	2.6	0.8	17	0.2	0.8	<0.1	77	0.20	0.072	5
14GLS032	Soil	1.3	29.4	10.4	74	0.2	20.4	11.5	400	4.03	15.8	6.7	0.8	17	0.2	0.8	0.1	80	0.21	0.111	5
14GLS033	Soil	1.2	11.0	14.8	86	0.1	7.2	7.9	686	2.96	6.1	<0.5	0.6	16	0.4	0.6	0.1	60	0.19	0.085	5
14GLS034	Soil	1.1	24.9	10.3	84	0.2	17.6	10.7	388	4.09	22.1	0.7	0.7	15	0.3	1.1	<0.1	74	0.20	0.115	6
14GLS035	Soil	1.2	17.9	17.3	124	0.2	9.6	11.8	1580	3.21	8.2	1.3	0.4	16	0.9	0.9	0.1	59	0.41	0.080	6
14GLS036	Soil	1.0	23.3	12.6	91	0.1	16.6	9.4	453	3.35	17.8	1.5	0.8	15	0.4	1.3	0.1	60	0.31	0.083	5
14GLS037	Soil	0.7	13.5	12.4	162	0.2	9.8	7.8	597	2.94	7.3	4.4	0.5	15	0.6	1.0	0.1	49	0.35	0.093	6
14GLS038	Soil	0.6	10.1	14.6	85	0.2	8.5	6.5	421	2.84	6.8	6.2	0.6	20	0.3	1.0	0.1	58	0.32	0.133	5
14GLS039	Soil	0.9	22.5	8.3	49	0.3	13.2	7.8	1204	2.85	9.1	5.4	0.9	28	0.2	0.6	0.1	54	0.41	0.035	9
14GLS040	Soil	1.0	11.0	8.4	51	<0.1	8.0	5.5	454	2.67	7.9	4.6	0.7	18	0.2	0.7	<0.1	57	0.22	0.049	5
14GLS041	Soil	0.9	11.7	8.9	61	0.2	8.9	8.0	608	2.92	10.0	3.1	0.7	19	0.2	0.8	<0.1	59	0.20	0.115	6
14GLS042	Soil	0.7	8.5	8.3	53	<0.1	7.7	5.9	289	2.63	6.4	2.0	0.7	15	0.2	0.7	0.1	52	0.14	0.089	5
14GLS043	Soil	0.7	9.2	10.1	114	0.2	10.3	7.9	310	3.04	6.9	1.1	0.7	20	0.3	0.8	0.2	57	0.22	0.131	5
14GLS044	Soil	0.7	12.2	7.1	69	<0.1	9.6	6.6	345	2.84	9.4	2.5	0.7	15	0.3	0.7	<0.1	54	0.15	0.173	5
14GLS045	Soil	0.7	11.2	7.7	45	0.3	7.8	3.8	151	2.28	8.0	1.3	0.6	16	0.1	0.5	<0.1	52	0.15	0.065	5
14GLS046	Soil	1.6	215.6	11.8	67	0.3	15.9	9.8	864	2.95	13.9	21.0	0.6	39	0.4	1.2	0.1	57	0.80	0.088	9
14GLS047	Soil	0.9	13.0	5.7	38	<0.1	10.4	6.5	166	2.61	8.7	2.5	0.6	17	<0.1	0.7	<0.1	57	0.16	0.023	5
14GLS048	Soil	0.8	16.1	8.2	54	<0.1	12.8	8.0	211	3.17	13.7	1.8	0.9	24	<0.1	0.8	<0.1	68	0.20	0.084	6
14GLS049	Soil	0.7	18.0	7.4	61	<0.1	15.3	8.6	279	3.07	11.5	5.4	1.2	19	<0.1	0.8	<0.1	58	0.17	0.165	6
14GLS050	Soil	0.8	11.3	8.1	53	0.1	8.1	5.6	384	2.79	9.1	1.7	0.7	17	0.1	0.6	<0.1	58	0.15	0.096	5
14GLS051	Soil	0.8	10.7	7.9	47	0.1	7.1	5.2	301	2.54	8.1	3.6	0.7	17	<0.1	0.6	<0.1	56	0.15	0.078	5
14GLS052	Soil	0.9	12.6	7.7	102	<0.1	11.6	8.9	652	3.05	9.4	3.2	0.9	13	0.2	0.7	<0.1	61	0.13	0.172	6
14GLS053	Soil	0.7	9.3	7.8	67	<0.1	7.5	6.0	824	2.83	8.6	2.9	0.7	14	0.2	0.7	<0.1	60	0.12	0.166	5
14GLS054	Soil	0.9	28.5	9.4	71	0.1	17.0	11.1	435	3.32	14.7	3.7	1.1	22	0.1	1.0	<0.1	62	0.23	0.092	6
14GLS055	Soil	0.9	25.5	11.9	61	<0.1	15.3	8.7	247	3.18	14.6	0.7	1.1	14	0.1	0.9	<0.1	61	0.15	0.142	6
14GLS056	Soil	0.6	14.3	7.1	75	0.1	10.2	6.8	192	2.78	9.3	7.9	0.7	14	0.2	0.7	<0.1	54	0.14	0.122	5
14GLS057	Soil	1.2	40.1	8.1	64	0.1	8.0	5.9	210	3.00	8.9	2.6	0.6	16	0.1	0.7	<0.1	67	0.15	0.040	5
14GLS058	Soil	1.1	30.7	8.7	80	0.2	9.1	7.6	359	3.27	12.2	2.3	0.7	16	0.3	0.8	<0.1	68	0.16	0.161	5
14GLS059	Soil	0.8	15.3	7.4	62	<0.1	10.8	7.0	267	2.88	12.0	2.3	0.6	12	0.1	0.8	<0.1	62	0.11	0.059	4
14GLS060	Soil	0.9	23.9	6.9	46	<0.1	15.5	8.3	337	2.80	10.5	2.8	1.0	26	<0.1	0.8	<0.1	61	0.39	0.021	9

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	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	0.05	1	0.5	0.2	
14GLS031	Soil	18	0.38	131	0.057	2	1.44	0.010	0.04	<0.1	0.03	3.9	<0.1	<0.05	5	<0.5	<0.2
14GLS032	Soil	23	0.58	158	0.048	1	1.82	0.009	0.05	<0.1	0.04	4.8	<0.1	<0.05	6	<0.5	<0.2
14GLS033	Soil	14	0.21	152	0.048	2	0.97	0.009	0.04	0.1	0.02	2.5	<0.1	<0.05	5	0.6	<0.2
14GLS034	Soil	20	0.39	121	0.053	2	1.59	0.009	0.04	<0.1	0.04	4.1	<0.1	<0.05	5	<0.5	<0.2
14GLS035	Soil	15	0.20	182	0.033	3	1.35	0.010	0.03	0.1	0.04	2.8	<0.1	<0.05	5	<0.5	<0.2
14GLS036	Soil	17	0.35	158	0.046	<1	1.57	0.009	0.07	<0.1	0.03	3.7	<0.1	<0.05	4	<0.5	<0.2
14GLS037	Soil	14	0.22	195	0.030	2	1.34	0.010	0.04	<0.1	0.03	2.8	<0.1	<0.05	5	<0.5	<0.2
14GLS038	Soil	15	0.19	148	0.039	2	1.17	0.009	0.04	<0.1	0.02	2.8	<0.1	<0.05	5	<0.5	<0.2
14GLS039	Soil	17	0.28	332	0.031	3	1.74	0.015	0.03	<0.1	0.05	5.7	<0.1	<0.05	4	<0.5	<0.2
14GLS040	Soil	13	0.23	171	0.039	2	0.91	0.009	0.05	<0.1	0.02	2.7	<0.1	<0.05	4	<0.5	<0.2
14GLS041	Soil	14	0.18	131	0.045	3	1.16	0.009	0.04	<0.1	0.02	2.8	<0.1	<0.05	4	<0.5	<0.2
14GLS042	Soil	13	0.19	136	0.040	2	0.90	0.008	0.03	<0.1	0.02	2.7	<0.1	<0.05	4	<0.5	<0.2
14GLS043	Soil	15	0.27	150	0.041	2	1.31	0.010	0.04	<0.1	0.02	3.1	<0.1	<0.05	5	<0.5	<0.2
14GLS044	Soil	14	0.25	111	0.043	3	1.15	0.007	0.05	<0.1	0.02	3.1	<0.1	<0.05	4	<0.5	<0.2
14GLS045	Soil	13	0.22	93	0.039	2	1.04	0.010	0.03	<0.1	0.04	2.6	<0.1	<0.05	4	<0.5	<0.2
14GLS046	Soil	18	0.41	270	0.039	6	1.24	0.015	0.08	<0.1	0.07	5.6	<0.1	<0.05	3	<0.5	<0.2
14GLS047	Soil	14	0.25	175	0.033	2	1.18	0.010	0.02	<0.1	0.02	2.7	<0.1	<0.05	4	<0.5	<0.2
14GLS048	Soil	17	0.26	188	0.038	1	1.38	0.010	0.04	<0.1	0.02	3.9	<0.1	<0.05	4	<0.5	<0.2
14GLS049	Soil	18	0.23	137	0.041	4	1.87	0.010	0.05	<0.1	0.03	3.8	<0.1	<0.05	5	<0.5	<0.2
14GLS050	Soil	14	0.16	123	0.040	3	1.00	0.009	0.04	<0.1	0.02	2.4	<0.1	<0.05	4	<0.5	<0.2
14GLS051	Soil	13	0.15	113	0.039	<1	0.92	0.009	0.03	<0.1	0.02	2.5	<0.1	<0.05	4	<0.5	<0.2
14GLS052	Soil	17	0.25	119	0.041	2	1.76	0.010	0.03	0.1	0.05	3.9	<0.1	<0.05	4	<0.5	<0.2
14GLS053	Soil	14	0.16	104	0.036	2	1.14	0.008	0.03	<0.1	0.02	2.7	<0.1	<0.05	5	<0.5	<0.2
14GLS054	Soil	18	0.38	182	0.047	2	1.49	0.012	0.03	<0.1	0.04	4.5	<0.1	<0.05	4	<0.5	<0.2
14GLS055	Soil	16	0.32	108	0.043	1	1.56	0.008	0.03	<0.1	0.02	4.2	<0.1	<0.05	4	<0.5	<0.2
14GLS056	Soil	14	0.22	119	0.036	<1	1.37	0.010	0.03	0.1	0.04	3.2	<0.1	<0.05	4	<0.5	<0.2
14GLS057	Soil	15	0.21	108	0.054	2	0.98	0.009	0.04	<0.1	0.02	2.5	<0.1	<0.05	5	<0.5	<0.2
14GLS058	Soil	16	0.22	96	0.042	2	1.17	0.008	0.03	<0.1	0.03	3.2	<0.1	<0.05	4	<0.5	<0.2
14GLS059	Soil	14	0.24	89	0.044	2	1.08	0.010	0.03	<0.1	0.02	3.2	<0.1	<0.05	4	<0.5	<0.2
14GLS060	Soil	17	0.35	255	0.046	2	1.47	0.016	0.03	<0.1	0.04	6.0	<0.1	<0.05	4	<0.5	<0.2

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method Analyte	Unit	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
MDL		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
		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	2	0.01	0.001	1	
14GLS061	Soil	0.8	19.6	8.0	91	0.2	16.1	9.3	451	3.43	13.8	2.7	0.8	17	0.2	1.0	<0.1	69	0.22	0.127	5
14GLS062	Soil	0.9	18.1	8.1	73	0.2	13.8	8.9	401	3.53	15.0	2.3	0.8	17	0.1	0.9	<0.1	69	0.20	0.188	5
14GLS063	Soil	1.1	22.2	7.8	64	<0.1	17.4	9.6	321	3.01	14.3	2.2	0.8	14	0.1	0.9	<0.1	56	0.16	0.106	5
14GLS064	Soil	0.8	11.2	8.3	48	<0.1	8.9	5.5	320	2.75	10.0	3.6	0.8	17	<0.1	0.6	<0.1	59	0.18	0.128	5
14GLS065	Soil	0.3	12.5	7.7	37	<0.1	8.4	3.7	101	1.32	3.0	3.4	0.4	21	<0.1	0.2	<0.1	35	0.17	0.045	6
14GLS066	Soil	0.7	23.9	5.7	53	<0.1	12.1	6.5	308	2.24	6.7	3.4	1.0	18	<0.1	0.5	<0.1	47	0.20	0.055	6
14GLS067	Soil	0.7	22.6	6.8	66	0.2	13.5	6.7	388	2.27	5.7	2.9	0.9	32	0.2	0.4	<0.1	53	0.32	0.056	8
14GLS068	Soil	0.7	32.0	7.7	55	<0.1	13.2	7.3	468	2.48	10.0	3.8	1.0	33	0.1	0.8	<0.1	51	0.37	0.073	10
14GLS069	Soil	1.4	121.2	17.0	101	0.6	28.3	13.0	1134	5.09	22.6	3.8	0.9	73	0.6	0.8	0.2	82	0.73	0.105	42
14GLS070	Soil	0.9	22.3	7.9	58	0.1	12.4	7.5	525	2.81	10.8	2.0	0.8	25	<0.1	0.7	<0.1	56	0.26	0.067	10
14GLS071	Soil	1.0	22.8	8.1	60	0.1	12.7	7.3	488	2.87	10.9	3.7	0.9	27	<0.1	0.8	<0.1	59	0.26	0.071	11
14GLS072	Soil	1.1	13.7	8.9	79	0.2	11.0	8.5	357	3.48	12.0	<0.5	0.7	36	0.2	0.7	<0.1	71	0.44	0.196	5
14GLS073	Soil	1.0	9.2	8.1	55	<0.1	7.0	5.0	217	2.43	5.9	3.1	0.8	16	<0.1	0.5	<0.1	52	0.16	0.043	5
14GLS074	Soil	1.5	10.0	6.7	88	0.1	9.1	7.1	361	2.97	7.0	2.5	0.7	15	0.3	0.6	<0.1	56	0.15	0.067	5
14GLS075	Soil	1.7	18.1	7.9	70	0.2	9.0	5.3	399	2.28	5.8	2.2	0.5	19	0.2	0.5	<0.1	48	0.15	0.063	7
14GLS076	Soil	1.0	12.2	6.2	52	<0.1	6.9	5.1	405	2.13	4.2	0.8	0.6	16	<0.1	0.4	<0.1	49	0.14	0.040	5
14GLS077	Soil	1.2	27.1	11.3	67	0.1	12.4	9.1	712	3.01	9.6	13.3	0.8	25	0.1	0.6	0.1	58	0.22	0.049	7
14GLS078	Soil	0.9	19.5	9.9	91	0.2	15.1	9.8	1009	3.31	10.2	0.7	0.8	27	0.3	0.8	<0.1	67	0.31	0.177	6
14GLS079	Soil	1.0	29.1	8.8	64	<0.1	14.5	7.9	312	3.22	14.0	7.4	0.7	19	<0.1	0.9	<0.1	60	0.21	0.078	6
14GLS080	Soil	1.0	27.0	9.6	57	0.2	14.1	9.1	268	3.10	13.6	1.7	0.9	20	<0.1	0.9	<0.1	58	0.24	0.094	6
14GLS081	Soil	0.7	15.3	9.2	124	0.2	12.2	8.6	316	3.48	10.2	0.6	0.8	19	0.2	0.6	<0.1	64	0.23	0.173	5
14GLS082	Soil	0.9	7.0	6.5	75	0.1	6.9	6.3	545	2.33	4.2	<0.5	0.6	13	0.2	0.4	0.1	49	0.16	0.065	5
14GLS083	Soil	1.3	8.0	8.4	42	0.1	6.5	6.6	383	2.57	6.1	0.5	0.7	17	<0.1	0.5	<0.1	56	0.18	0.029	5
14GLS084	Soil	1.0	9.5	7.2	90	0.2	10.4	7.8	332	2.82	8.5	<0.5	0.7	15	0.2	0.5	<0.1	57	0.18	0.127	5
14GLS085	Soil	0.9	30.1	9.1	64	<0.1	14.6	8.5	395	3.06	14.8	2.8	0.9	24	<0.1	1.0	<0.1	60	0.27	0.043	6
14GLS086	Soil	1.5	36.9	20.1	144	0.2	22.4	14.7	865	4.31	21.5	5.2	0.9	21	0.3	1.3	0.2	85	0.23	0.195	6
14GLS087	Soil	1.0	36.4	10.7	56	<0.1	17.1	8.8	252	3.15	15.7	1.2	0.8	20	<0.1	1.0	<0.1	60	0.20	0.046	5
14GLS088	Soil	1.5	39.7	22.8	186	0.7	16.0	11.9	433	4.21	19.4	4.8	1.0	22	0.5	0.8	0.2	79	0.22	0.101	6
14GLS089	Soil	0.9	10.3	8.7	62	0.1	9.4	7.3	338	2.85	5.7	0.6	0.8	18	0.2	0.6	<0.1	64	0.18	0.033	5
14GLS090	Soil	1.2	21.6	10.6	74	0.2	15.0	9.9	379	3.48	13.8	2.7	0.9	20	0.2	0.9	<0.1	69	0.21	0.114	5

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method	Analyte	AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201	
		Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	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	0.05	1	0.5	0.2			
14GLS061	Soil	17	0.37	129	0.044	2	1.46	0.009	0.07	<0.1	0.03	4.3	<0.1	<0.05	4	<0.5	<0.2		
14GLS062	Soil	18	0.33	128	0.039	1	1.44	0.007	0.05	<0.1	0.03	4.1	<0.1	<0.05	5	<0.5	<0.2		
14GLS063	Soil	16	0.32	104	0.035	1	1.63	0.009	0.03	<0.1	0.05	3.8	<0.1	<0.05	4	<0.5	<0.2		
14GLS064	Soil	14	0.16	105	0.030	1	1.21	0.008	0.04	<0.1	0.02	3.0	<0.1	<0.05	4	<0.5	<0.2		
14GLS065	Soil	11	0.24	169	0.022	2	1.29	0.010	0.03	<0.1	0.01	2.6	<0.1	<0.05	5	<0.5	<0.2		
14GLS066	Soil	15	0.35	121	0.045	1	1.30	0.010	0.03	<0.1	0.02	3.1	<0.1	<0.05	4	<0.5	<0.2		
14GLS067	Soil	16	0.38	235	0.028	<1	1.74	0.011	0.04	<0.1	0.05	4.7	<0.1	<0.05	5	<0.5	<0.2		
14GLS068	Soil	16	0.36	148	0.051	2	1.10	0.014	0.04	<0.1	0.05	5.4	<0.1	<0.05	3	<0.5	<0.2		
14GLS069	Soil	31	0.52	670	0.008	<1	3.87	0.013	0.09	<0.1	0.14	11.3	<0.1	<0.05	8	<0.5	<0.2		
14GLS070	Soil	15	0.32	150	0.040	2	1.30	0.009	0.05	<0.1	0.03	3.8	<0.1	<0.05	4	<0.5	<0.2		
14GLS071	Soil	16	0.35	152	0.042	2	1.38	0.010	0.04	<0.1	0.03	4.0	<0.1	<0.05	4	<0.5	<0.2		
14GLS072	Soil	16	0.31	133	0.036	2	1.35	0.009	0.04	0.1	0.02	3.2	<0.1	<0.05	5	<0.5	<0.2		
14GLS073	Soil	11	0.16	85	0.036	<1	0.90	0.006	0.04	<0.1	0.02	2.4	<0.1	<0.05	4	<0.5	<0.2		
14GLS074	Soil	13	0.23	111	0.037	2	1.19	0.008	0.04	<0.1	0.02	2.7	<0.1	<0.05	4	<0.5	<0.2		
14GLS075	Soil	12	0.22	162	0.031	2	1.14	0.008	0.04	<0.1	0.03	2.6	<0.1	<0.05	4	<0.5	<0.2		
14GLS076	Soil	11	0.21	114	0.040	2	0.89	0.008	0.03	<0.1	0.01	2.5	<0.1	<0.05	4	<0.5	<0.2		
14GLS077	Soil	15	0.39	185	0.043	2	1.34	0.011	0.04	<0.1	0.03	4.0	<0.1	<0.05	4	0.6	<0.2		
14GLS078	Soil	17	0.29	199	0.043	3	1.44	0.010	0.09	<0.1	0.03	3.9	<0.1	<0.05	5	<0.5	<0.2		
14GLS079	Soil	16	0.37	115	0.044	3	1.31	0.009	0.05	<0.1	0.03	4.1	<0.1	<0.05	4	<0.5	<0.2		
14GLS080	Soil	15	0.34	117	0.045	1	1.22	0.009	0.04	<0.1	0.03	3.6	<0.1	<0.05	3	<0.5	<0.2		
14GLS081	Soil	16	0.27	187	0.035	2	1.45	0.008	0.07	0.1	0.02	3.6	<0.1	<0.05	6	<0.5	<0.2		
14GLS082	Soil	11	0.16	119	0.039	2	1.04	0.008	0.04	<0.1	0.02	2.1	<0.1	<0.05	4	<0.5	<0.2		
14GLS083	Soil	12	0.15	117	0.040	2	0.86	0.008	0.05	<0.1	0.01	2.1	<0.1	<0.05	4	<0.5	<0.2		
14GLS084	Soil	14	0.22	113	0.036	3	1.37	0.007	0.05	0.1	0.03	2.5	<0.1	<0.05	5	<0.5	<0.2		
14GLS085	Soil	15	0.37	150	0.055	3	1.11	0.011	0.04	<0.1	0.03	4.5	<0.1	<0.05	3	<0.5	<0.2		
14GLS086	Soil	23	0.52	192	0.046	3	1.68	0.009	0.04	0.1	0.02	4.5	<0.1	<0.05	6	<0.5	<0.2		
14GLS087	Soil	15	0.36	193	0.044	2	1.47	0.011	0.03	<0.1	0.03	4.0	<0.1	<0.05	4	<0.5	<0.2		
14GLS088	Soil	16	0.46	235	0.048	2	1.88	0.012	0.05	<0.1	0.03	4.7	0.1	<0.05	6	<0.5	<0.2		
14GLS089	Soil	13	0.29	205	0.041	2	1.24	0.009	0.04	<0.1	0.01	2.8	<0.1	<0.05	5	<0.5	<0.2		
14GLS090	Soil	16	0.36	143	0.037	3	1.57	0.008	0.05	<0.1	0.03	3.7	<0.1	<0.05	5	<0.5	<0.2		

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method Analyte	Unit	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
MDL		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
		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
14GLS091	Soil	1.1	21.6	10.6	67	0.3	14.6	9.8	352	3.37	14.3	1.7	0.9	19	0.2	0.9	0.1	66	0.20	0.110	5
14GLS092	Soil	1.0	15.1	9.7	63	0.1	10.7	7.4	360	2.95	8.7	1.3	0.8	16	0.1	0.7	<0.1	62	0.17	0.089	5
14GLS093	Soil	1.5	15.3	9.2	85	0.1	9.0	7.4	229	3.57	9.6	<0.5	0.5	21	0.3	0.6	0.1	85	0.23	0.025	5
14GLS094	Soil	0.6	18.2	7.9	80	0.3	12.9	8.9	373	3.22	12.7	1.0	0.9	21	0.2	0.8	<0.1	60	0.24	0.145	5
14GLS095	Soil	0.9	28.4	9.4	125	0.3	19.0	10.7	1081	3.54	9.8	2.6	0.6	25	0.3	0.6	0.1	68	0.25	0.061	8
14GLS096	Soil	1.1	51.8	12.8	91	0.4	25.3	11.2	1468	4.26	12.7	1.5	1.7	51	0.4	0.6	0.2	77	0.64	0.061	12
14GLS097	Soil	1.1	19.1	6.9	74	0.2	13.5	8.0	645	2.74	7.7	1.5	0.9	22	<0.1	0.5	<0.1	51	0.21	0.043	7
14GLS098	Soil	1.1	14.6	7.5	59	0.2	7.2	5.4	271	2.51	6.9	1.9	0.7	19	0.2	0.5	<0.1	58	0.18	0.058	5
14GLS099	Soil	1.0	15.7	7.0	74	<0.1	13.0	7.1	268	2.89	8.5	21.5	1.0	17	0.1	0.5	<0.1	55	0.18	0.083	5
14GLS100	Soil	1.2	16.2	8.3	97	0.2	10.2	8.1	677	3.31	14.0	<0.5	0.9	14	0.3	0.8	0.1	68	0.12	0.135	5
14GLS101	Soil	0.5	29.0	6.5	61	<0.1	14.1	8.3	371	2.81	11.5	1.8	1.0	20	0.1	0.7	<0.1	52	0.18	0.058	6
14GLS102	Soil	0.9	9.7	7.8	63	<0.1	8.8	7.1	388	2.70	6.9	<0.5	0.7	14	<0.1	0.5	<0.1	57	0.15	0.059	5
14GLS103	Soil	0.6	15.3	5.7	57	<0.1	10.2	7.0	275	2.59	5.9	0.8	0.8	16	<0.1	0.5	<0.1	53	0.18	0.047	5
14GLS104	Soil	1.0	20.1	10.5	88	0.3	14.1	11.6	457	3.97	12.8	1.3	0.8	29	0.2	0.8	0.1	82	0.28	0.075	6
14GLS105	Soil	1.0	33.4	9.3	110	0.3	18.1	11.2	1234	3.60	9.5	2.9	0.9	46	0.3	0.7	0.1	72	0.49	0.080	10
14GLS106	Soil	1.0	20.4	9.8	59	0.2	11.3	7.6	755	2.89	8.0	5.0	0.8	32	0.2	0.5	0.1	61	0.34	0.043	8
14GLS107	Soil	0.7	11.6	7.2	57	0.1	9.8	8.2	220	2.79	8.8	0.8	0.8	16	<0.1	0.6	<0.1	54	0.15	0.117	5
14GLS108	Soil	1.0	23.1	7.6	95	0.3	19.2	12.5	274	3.55	14.6	1.7	1.2	16	0.2	0.8	<0.1	63	0.14	0.197	5
14GLS109	Soil	0.6	8.8	6.6	36	<0.1	4.4	2.9	116	1.68	2.9	7.1	0.2	40	<0.1	0.3	0.1	45	0.58	0.029	5
14GLS110	Soil	0.6	13.1	7.2	56	0.1	7.8	4.9	224	2.06	4.4	0.7	0.6	29	0.2	0.4	0.1	47	0.39	0.024	7
14GLS111	Soil	0.5	12.5	7.0	53	0.1	7.5	4.8	199	2.03	3.9	1.9	0.6	30	0.1	0.4	<0.1	49	0.41	0.026	6
14GLS112	Soil	0.9	23.0	6.9	60	0.1	12.2	6.6	288	2.60	9.5	4.1	0.7	37	0.1	0.7	0.1	54	0.60	0.072	9
14GLS113	Soil	1.1	20.6	8.1	88	0.3	8.4	6.7	284	3.11	9.2	1.9	0.8	22	0.3	0.6	0.1	68	0.21	0.087	5
14GLS114	Soil	0.7	24.3	7.5	56	0.2	11.6	8.1	195	2.57	7.3	2.2	0.5	70	0.1	0.4	0.1	56	1.22	0.045	9
14GLS115	Soil	1.9	24.4	11.1	120	0.3	12.7	9.5	326	4.50	19.0	3.0	0.8	15	0.4	0.9	0.1	86	0.14	0.271	5
14GLS116	Soil	1.5	13.6	9.3	165	0.5	9.3	11.4	736	3.61	8.1	1.1	0.8	18	0.3	0.6	0.1	72	0.21	0.090	6
14GLS117	Soil	1.3	9.8	9.2	112	0.1	9.1	8.6	295	3.60	8.1	1.3	0.7	14	0.2	0.6	0.1	83	0.20	0.063	5
14GLS118	Soil	1.1	16.8	13.3	93	0.1	14.1	10.3	463	4.55	15.7	124.3	1.1	18	0.1	1.2	0.1	96	0.25	0.141	6
14GLS119	Soil	1.1	20.8	8.8	73	0.1	11.1	8.2	273	3.19	12.9	4.0	0.7	19	0.2	0.8	<0.1	74	0.28	0.029	5
14GLS120	Soil	1.1	11.5	7.7	62	0.3	7.3	5.3	199	2.52	7.0	1.1	0.7	14	0.1	0.4	<0.1	58	0.13	0.041	5

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	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	0.05	1	0.5	0.2	
14GLS091	Soil	16	0.37	141	0.040	3	1.52	0.009	0.05	<0.1	0.03	3.8	<0.1	<0.05	5	<0.5	<0.2
14GLS092	Soil	14	0.28	154	0.035	2	1.34	0.008	0.05	<0.1	0.02	3.4	<0.1	<0.05	5	<0.5	<0.2
14GLS093	Soil	16	0.27	194	0.037	2	1.31	0.009	0.04	0.1	0.03	3.1	<0.1	<0.05	6	<0.5	<0.2
14GLS094	Soil	15	0.36	124	0.039	3	1.52	0.008	0.05	0.1	0.03	3.7	<0.1	<0.05	4	<0.5	<0.2
14GLS095	Soil	22	0.38	258	0.026	2	2.00	0.010	0.07	<0.1	0.03	4.8	0.1	<0.05	6	<0.5	<0.2
14GLS096	Soil	28	0.47	454	0.023	2	3.17	0.016	0.07	<0.1	0.05	9.5	0.1	<0.05	8	<0.5	<0.2
14GLS097	Soil	14	0.30	209	0.036	1	1.53	0.011	0.03	<0.1	0.02	3.4	<0.1	<0.05	4	<0.5	<0.2
14GLS098	Soil	11	0.20	163	0.027	2	1.18	0.009	0.04	0.1	0.04	3.0	<0.1	<0.05	5	<0.5	<0.2
14GLS099	Soil	16	0.24	133	0.033	<1	1.68	0.010	0.04	<0.1	0.02	3.7	<0.1	<0.05	5	<0.5	<0.2
14GLS100	Soil	15	0.21	120	0.036	2	1.43	0.008	0.03	0.1	0.03	3.3	<0.1	<0.05	4	<0.5	<0.2
14GLS101	Soil	14	0.28	139	0.039	<1	1.17	0.011	0.03	<0.1	0.04	4.1	<0.1	<0.05	3	<0.5	<0.2
14GLS102	Soil	12	0.22	112	0.033	2	1.04	0.009	0.04	<0.1	0.01	2.7	<0.1	<0.05	4	<0.5	<0.2
14GLS103	Soil	15	0.33	124	0.043	1	1.31	0.010	0.03	<0.1	0.02	3.6	<0.1	<0.05	4	<0.5	<0.2
14GLS104	Soil	18	0.38	268	0.028	2	1.97	0.011	0.05	0.1	0.04	4.6	<0.1	<0.05	7	<0.5	<0.2
14GLS105	Soil	19	0.49	358	0.030	2	2.36	0.013	0.06	<0.1	0.05	6.3	0.1	<0.05	6	<0.5	<0.2
14GLS106	Soil	14	0.25	229	0.028	1	1.71	0.011	0.04	<0.1	0.02	4.4	<0.1	<0.05	5	<0.5	<0.2
14GLS107	Soil	14	0.19	135	0.036	<1	1.47	0.008	0.06	<0.1	0.03	3.1	<0.1	<0.05	4	<0.5	<0.2
14GLS108	Soil	18	0.32	167	0.030	2	2.29	0.009	0.03	<0.1	0.06	4.4	<0.1	<0.05	5	<0.5	<0.2
14GLS109	Soil	10	0.21	165	0.024	2	0.91	0.013	0.03	<0.1	0.03	2.3	<0.1	<0.05	5	<0.5	<0.2
14GLS110	Soil	12	0.23	254	0.036	2	1.07	0.012	0.03	0.1	0.02	3.4	<0.1	<0.05	4	<0.5	<0.2
14GLS111	Soil	12	0.24	249	0.035	1	1.12	0.013	0.03	<0.1	0.02	3.4	<0.1	<0.05	4	<0.5	<0.2
14GLS112	Soil	15	0.41	207	0.041	2	1.18	0.019	0.04	<0.1	0.05	5.8	<0.1	<0.05	4	<0.5	<0.2
14GLS113	Soil	14	0.34	178	0.037	<1	1.39	0.009	0.04	0.1	0.03	3.7	<0.1	<0.05	6	<0.5	<0.2
14GLS114	Soil	16	0.44	509	0.013	3	1.97	0.016	0.03	0.1	0.05	4.4	<0.1	<0.05	6	<0.5	<0.2
14GLS115	Soil	20	0.36	137	0.036	3	2.19	0.010	0.04	0.4	0.07	4.7	<0.1	<0.05	7	<0.5	<0.2
14GLS116	Soil	16	0.29	229	0.030	1	1.79	0.008	0.06	<0.1	0.04	3.4	<0.1	<0.05	6	<0.5	<0.2
14GLS117	Soil	16	0.28	177	0.036	2	1.34	0.009	0.04	0.1	0.02	3.1	<0.1	<0.05	5	<0.5	<0.2
14GLS118	Soil	19	0.41	171	0.053	2	1.29	0.009	0.04	0.3	0.03	4.8	<0.1	<0.05	4	<0.5	<0.2
14GLS119	Soil	14	0.33	179	0.037	2	1.17	0.010	0.03	<0.1	0.03	3.9	<0.1	<0.05	4	<0.5	<0.2
14GLS120	Soil	12	0.18	154	0.036	1	1.09	0.009	0.03	<0.1	0.03	2.8	<0.1	<0.05	4	<0.5	<0.2

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method Analyte	Unit	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
MDL		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
		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
14GLS121	Soil	1.0	24.3	10.5	128	0.3	15.5	9.2	512	3.57	15.3	21.3	1.1	20	0.3	0.7	0.1	68	0.23	0.109	6
14GLS122	Soil	1.1	13.8	12.2	133	0.2	11.8	11.1	587	4.37	13.5	15.6	0.9	15	0.4	0.6	0.1	94	0.18	0.137	5
14GLS123	Soil	1.0	7.9	9.8	58	0.1	5.6	4.8	405	2.78	6.4	<0.5	0.6	10	0.1	0.5	0.1	60	0.09	0.065	5
14GLS124	Soil	1.3	17.9	10.4	75	0.2	13.2	8.7	472	3.62	15.7	2.4	0.8	26	0.2	0.8	0.1	71	0.31	0.130	6
14GLS125	Soil	1.4	15.0	12.0	81	0.2	12.5	8.9	272	3.77	16.7	0.9	0.7	16	0.2	0.7	0.1	79	0.18	0.078	5
14GLS126	Soil	1.2	14.9	8.6	67	0.4	10.5	7.9	211	3.10	9.6	6.6	0.7	18	0.2	0.5	<0.1	72	0.17	0.042	6
14GLS127	Soil	0.7	20.6	8.0	51	<0.1	11.3	6.8	246	2.71	9.2	0.9	0.8	25	0.2	0.5	<0.1	57	0.30	0.026	6
14GLS128	Soil	0.9	18.6	8.7	94	0.2	12.5	7.7	350	3.18	11.3	0.5	1.1	12	0.2	0.7	<0.1	58	0.14	0.124	6
14GLS129	Soil	1.3	20.7	8.0	61	<0.1	15.2	8.1	233	2.87	12.8	16.3	1.1	14	<0.1	0.9	<0.1	58	0.12	0.083	5
14GLS130	Soil	0.8	31.5	7.8	57	<0.1	9.0	6.6	425	2.84	10.5	1.9	0.9	14	<0.1	0.6	<0.1	53	0.14	0.131	5
14GLS131	Soil	0.7	34.8	8.2	52	<0.1	9.5	6.6	458	2.81	10.4	1.4	0.9	15	<0.1	0.5	<0.1	52	0.15	0.132	5
14GLS132	Soil	1.0	18.3	9.5	80	0.1	16.3	10.2	325	3.61	19.7	1.6	0.9	15	0.2	1.0	<0.1	72	0.18	0.113	5
14GLS133	Soil	0.9	61.3	8.1	45	0.3	13.5	6.9	547	2.72	10.6	2.8	0.8	42	0.2	0.5	<0.1	52	0.70	0.041	23
14GLS134	Soil	1.1	12.2	9.0	56	0.2	10.1	6.3	349	2.85	8.0	1.2	0.7	26	0.2	0.6	0.1	64	0.47	0.028	6
14GLS135	Soil	0.7	53.3	9.7	61	0.3	14.1	6.4	471	3.04	9.9	10.6	0.4	50	0.3	0.9	0.1	62	0.93	0.069	13
14GLS136	Soil	1.0	37.4	8.3	79	0.2	9.3	6.4	345	3.18	10.4	2.3	0.8	12	0.1	0.7	<0.1	64	0.14	0.105	5
14GLS137	Soil	1.1	54.4	8.9	102	0.3	12.8	7.7	640	3.15	13.6	2.2	0.8	13	0.2	0.8	0.1	62	0.17	0.103	5
14GLS138	Soil	0.9	33.3	7.7	42	0.3	8.2	4.8	312	2.53	9.7	1.7	0.4	49	0.2	0.9	<0.1	50	1.02	0.092	7
14GLS139	Soil	1.7	20.6	10.1	81	0.3	9.4	6.7	178	3.94	15.8	44.9	0.9	13	<0.1	0.6	0.1	84	0.13	0.129	5
14GLS140	Soil	1.6	26.2	13.8	82	<0.1	15.4	10.1	223	3.78	16.2	0.6	0.9	22	0.2	0.8	0.1	80	0.32	0.047	5
14GLS141	Soil	0.8	35.6	8.3	52	0.7	11.7	6.6	784	2.65	8.6	2.3	0.7	42	0.4	0.6	0.2	50	0.67	0.052	13
14GLS142	Soil	0.8	17.1	9.0	74	<0.1	12.5	6.9	231	2.98	12.0	1.1	0.6	11	0.1	0.7	<0.1	54	0.12	0.115	6
14GLS143	Soil	0.8	24.7	9.3	66	<0.1	14.8	8.0	446	2.92	12.0	2.4	0.5	24	0.1	0.8	<0.1	53	0.27	0.060	6
14GLS144	Soil	0.5	10.4	6.6	40	<0.1	5.8	3.1	184	1.31	3.9	<0.5	0.1	60	<0.1	0.3	<0.1	29	1.23	0.056	4
14GLS145	Soil	0.6	19.6	8.4	86	<0.1	14.6	7.8	406	3.32	14.0	13.1	1.1	11	0.1	0.9	<0.1	61	0.13	0.116	5
14GLS146	Soil	1.3	33.9	9.2	80	0.3	13.9	9.1	277	3.76	18.1	1.2	0.9	13	0.1	1.0	0.2	69	0.13	0.086	5
14GLS147	Soil	0.7	16.0	6.2	51	0.1	10.8	5.0	185	2.19	7.8	1.7	0.4	36	<0.1	0.6	<0.1	39	0.69	0.062	4
14GLS148	Soil	0.2	11.4	6.6	52	<0.1	8.6	5.5	297	2.46	7.3	1.8	0.8	26	0.2	0.6	<0.1	48	0.39	0.023	5
14GLS149	Soil	0.9	28.6	5.6	51	<0.1	9.7	4.9	183	2.17	9.0	<0.5	0.5	20	0.1	0.7	<0.1	46	0.28	0.038	4
14GLS150	Soil	1.3	26.6	7.3	71	<0.1	15.6	8.7	397	2.75	12.2	2.2	0.9	13	0.3	0.8	<0.1	50	0.13	0.060	5

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method	Analyte	AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201	
		Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	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	0.05	1	0.5	0.2			
14GLS121	Soil	17	0.40	255	0.042	2	1.64	0.009	0.07	<0.1	0.05	4.6	<0.1	<0.05	5	<0.5	<0.2		
14GLS122	Soil	18	0.35	162	0.056	2	1.73	0.008	0.06	0.1	0.04	3.6	<0.1	<0.05	6	<0.5	<0.2		
14GLS123	Soil	12	0.15	101	0.038	<1	0.87	0.008	0.03	<0.1	0.01	2.4	<0.1	<0.05	4	<0.5	<0.2		
14GLS124	Soil	15	0.33	161	0.044	3	1.42	0.008	0.05	0.1	0.02	3.7	<0.1	<0.05	5	<0.5	<0.2		
14GLS125	Soil	16	0.39	146	0.048	3	1.53	0.008	0.05	0.1	0.03	3.9	<0.1	<0.05	5	<0.5	<0.2		
14GLS126	Soil	14	0.24	200	0.041	2	1.45	0.010	0.03	<0.1	0.04	2.9	<0.1	<0.05	5	<0.5	<0.2		
14GLS127	Soil	14	0.35	230	0.039	2	1.21	0.013	0.03	<0.1	0.04	3.8	<0.1	<0.05	4	<0.5	<0.2		
14GLS128	Soil	15	0.25	116	0.042	<1	1.46	0.007	0.03	<0.1	0.03	3.7	<0.1	<0.05	4	<0.5	<0.2		
14GLS129	Soil	16	0.30	148	0.043	1	1.55	0.008	0.03	<0.1	0.03	3.7	<0.1	<0.05	4	<0.5	<0.2		
14GLS130	Soil	14	0.18	100	0.031	1	1.33	0.007	0.03	<0.1	0.02	2.8	<0.1	<0.05	4	<0.5	<0.2		
14GLS131	Soil	13	0.18	101	0.032	<1	1.30	0.007	0.03	<0.1	0.03	2.9	<0.1	<0.05	4	<0.5	<0.2		
14GLS132	Soil	17	0.38	120	0.052	2	1.44	0.008	0.04	0.1	0.03	3.6	<0.1	<0.05	4	<0.5	<0.2		
14GLS133	Soil	17	0.33	369	0.033	1	1.38	0.018	0.03	0.1	0.12	9.0	<0.1	<0.05	4	0.6	<0.2		
14GLS134	Soil	15	0.29	246	0.040	2	1.31	0.012	0.03	<0.1	0.02	3.4	<0.1	<0.05	4	<0.5	<0.2		
14GLS135	Soil	17	0.42	262	0.041	3	1.21	0.022	0.04	0.1	0.08	6.0	<0.1	0.05	3	<0.5	<0.2		
14GLS136	Soil	15	0.25	113	0.028	2	1.31	0.007	0.04	<0.1	0.04	3.3	<0.1	<0.05	5	<0.5	<0.2		
14GLS137	Soil	15	0.30	123	0.038	3	1.27	0.008	0.04	<0.1	0.03	3.3	<0.1	<0.05	4	<0.5	<0.2		
14GLS138	Soil	16	0.33	231	0.035	3	0.92	0.019	0.03	<0.1	0.09	3.8	<0.1	0.05	3	0.6	<0.2		
14GLS139	Soil	17	0.26	115	0.037	1	1.85	0.008	0.03	0.1	0.04	3.0	<0.1	<0.05	6	<0.5	<0.2		
14GLS140	Soil	18	0.32	206	0.036	1	1.84	0.011	0.03	0.1	0.03	4.1	<0.1	<0.05	6	<0.5	<0.2		
14GLS141	Soil	15	0.32	261	0.035	2	1.33	0.015	0.03	<0.1	0.07	6.2	<0.1	<0.05	3	<0.5	<0.2		
14GLS142	Soil	16	0.26	102	0.034	1	1.48	0.008	0.03	0.1	0.05	3.7	<0.1	<0.05	4	<0.5	<0.2		
14GLS143	Soil	16	0.37	200	0.038	2	1.41	0.012	0.04	<0.1	0.05	4.5	<0.1	<0.05	3	<0.5	<0.2		
14GLS144	Soil	9	0.22	285	0.018	3	0.93	0.016	0.03	<0.1	0.04	1.7	<0.1	<0.05	3	<0.5	<0.2		
14GLS145	Soil	17	0.35	94	0.041	2	1.69	0.009	0.04	<0.1	0.05	4.8	<0.1	<0.05	4	<0.5	<0.2		
14GLS146	Soil	17	0.33	129	0.042	3	1.76	0.010	0.04	<0.1	0.03	3.6	<0.1	<0.05	5	<0.5	<0.2		
14GLS147	Soil	12	0.28	232	0.026	3	1.27	0.015	0.03	<0.1	0.03	3.1	<0.1	<0.05	4	<0.5	<0.2		
14GLS148	Soil	13	0.33	171	0.047	2	1.00	0.018	0.03	<0.1	0.03	4.3	<0.1	<0.05	3	<0.5	<0.2		
14GLS149	Soil	12	0.29	154	0.034	1	1.15	0.010	0.04	<0.1	0.03	3.2	<0.1	<0.05	4	<0.5	<0.2		
14GLS150	Soil	15	0.33	134	0.041	2	1.49	0.012	0.03	<0.1	0.06	5.0	<0.1	<0.05	3	<0.5	<0.2		

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		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	
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	2	0.01	0.001	1	
14GLS151	Soil	0.8	28.4	7.0	74	<0.1	16.1	9.2	389	2.86	12.0	4.2	0.9	14	<0.1	0.7	<0.1	51	0.11	0.060	4
14GLS152	Soil	0.8	20.4	7.8	77	0.1	10.0	7.3	260	2.40	9.0	7.9	0.3	15	0.2	0.7	<0.1	53	0.18	0.049	5
14GLS153	Soil	1.1	17.2	7.9	66	<0.1	13.6	9.2	335	2.61	9.6	3.4	1.0	18	0.1	0.9	<0.1	47	0.16	0.109	5
14GLS154	Soil	0.5	17.3	6.1	54	<0.1	12.8	5.8	192	2.14	6.5	1.9	1.0	16	0.2	0.7	<0.1	42	0.17	0.047	6
14GLS155	Soil	0.5	15.4	5.9	54	<0.1	14.0	5.9	241	2.28	6.8	2.5	0.9	19	0.1	0.5	<0.1	43	0.22	0.060	5
14GLS156	Soil	0.4	21.4	7.7	48	0.3	12.9	4.8	172	1.54	4.4	<0.5	0.1	24	<0.1	0.2	<0.1	34	0.26	0.061	8
14GLS157	Soil	0.5	9.0	5.1	34	<0.1	7.0	4.1	157	1.50	3.9	<0.5	0.6	17	<0.1	0.4	<0.1	34	0.20	0.036	5
14GLS158	Soil	0.2	7.4	4.4	39	<0.1	5.8	3.8	168	1.18	2.1	1.5	0.6	21	<0.1	0.2	<0.1	29	0.23	0.021	5
14GLS159	Soil	0.3	14.6	6.0	50	<0.1	10.9	5.2	188	1.81	5.3	2.4	0.6	22	<0.1	0.3	<0.1	42	0.25	0.049	6
14GLS160	Soil	0.3	10.1	6.3	45	<0.1	8.3	4.7	259	1.61	5.4	0.6	0.8	21	<0.1	0.2	<0.1	36	0.27	0.042	6
14GLS161	Soil	0.5	10.2	5.8	57	0.1	7.9	4.9	339	1.48	3.7	<0.5	0.4	23	<0.1	0.3	<0.1	36	0.26	0.035	6
14GLS162	Soil	0.7	10.7	5.4	59	0.1	8.1	5.0	429	1.82	5.2	1.6	0.5	21	0.2	0.4	<0.1	41	0.25	0.039	5
14GLS163	Soil	1.0	13.6	7.7	56	<0.1	14.4	8.9	295	3.01	12.8	<0.5	1.0	15	0.1	1.0	<0.1	52	0.19	0.109	5
14GLS164	Soil	0.7	16.6	8.5	72	<0.1	11.8	8.2	552	2.83	10.3	1.3	0.7	19	0.1	0.9	<0.1	56	0.20	0.103	6
14GLS165	Soil	2.3	17.9	7.7	70	<0.1	15.8	9.3	771	3.35	11.8	1.8	1.3	30	0.4	0.9	<0.1	63	0.36	0.077	9
14GLS166	Soil	1.3	29.0	8.5	69	<0.1	17.5	9.7	567	3.13	16.2	3.3	0.8	22	0.1	0.9	<0.1	56	0.27	0.054	8
14GLS167	Soil	0.9	8.8	7.6	78	0.1	4.7	5.5	813	2.41	7.5	<0.5	0.6	16	0.3	0.5	<0.1	49	0.20	0.123	5
14GLS168	Soil	0.7	12.7	7.7	68	<0.1	6.6	5.7	1031	2.34	6.9	<0.5	0.5	14	0.2	0.6	<0.1	44	0.15	0.084	5
14GLS169	Soil	0.4	11.3	8.2	98	<0.1	7.9	6.2	1026	2.74	7.8	<0.5	0.7	18	<0.1	0.9	<0.1	52	0.19	0.101	5
14GLS170	Soil	0.6	11.6	8.7	66	<0.1	11.8	6.7	309	2.78	10.3	1.3	0.8	19	0.1	0.6	<0.1	57	0.21	0.080	6
14GLS171	Soil	0.7	12.8	8.7	57	<0.1	11.3	6.3	275	2.79	11.9	2.9	0.8	18	0.1	0.7	<0.1	54	0.19	0.081	5
14GLS172	Soil	0.7	23.5	9.8	58	<0.1	12.6	8.1	670	3.00	13.1	1.6	1.1	22	<0.1	0.8	<0.1	59	0.29	0.053	8
14GLS173	Soil	0.8	13.2	7.5	67	<0.1	9.9	6.0	215	2.52	8.8	3.2	0.7	15	0.2	0.7	<0.1	49	0.17	0.095	5
14GLS174	Soil	1.1	18.9	8.5	63	<0.1	14.6	7.8	302	3.12	12.5	<0.5	0.8	20	0.2	0.8	0.1	60	0.24	0.093	5
14GLS175	Soil	0.9	15.9	8.5	65	<0.1	11.2	7.5	582	2.84	8.1	<0.5	0.4	18	0.1	0.6	<0.1	57	0.21	0.096	4
14GLS176	Soil	1.0	17.0	8.3	62	0.1	13.3	7.9	465	3.03	11.2	<0.5	0.8	16	0.1	1.0	<0.1	59	0.18	0.089	5
14GLS177	Soil	1.0	18.2	7.7	88	0.2	16.0	8.9	361	3.28	13.3	<0.5	0.6	18	0.1	0.7	<0.1	63	0.21	0.116	5
14GLS178	Soil	1.5	11.8	6.0	53	<0.1	12.2	6.3	254	2.93	10.2	<0.5	0.6	16	0.1	0.6	<0.1	69	0.18	0.036	5
14GLS179	Soil	0.7	23.1	7.1	78	<0.1	13.7	8.4	997	3.00	9.4	<0.5	0.6	23	0.6	0.7	<0.1	59	0.29	0.080	5

CERTIFICATE OF ANALYSIS

SMI14000318.1

Method	Analyte	AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201	
		Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te		
Unit	MDL	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm		
		1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2			
14GLS151	Soil	15	0.34	133	0.042	2	1.50	0.012	0.03	<0.1	0.05	4.8	<0.1	<0.05	4	<0.5	<0.2		
14GLS152	Soil	14	0.27	132	0.033	1	1.39	0.011	0.03	<0.1	0.03	3.3	<0.1	<0.05	5	<0.5	<0.2		
14GLS153	Soil	14	0.28	125	0.039	2	1.49	0.009	0.04	0.1	0.02	3.6	<0.1	<0.05	4	<0.5	<0.2		
14GLS154	Soil	13	0.25	169	0.041	1	1.41	0.010	0.04	<0.1	0.05	3.8	<0.1	<0.05	4	<0.5	<0.2		
14GLS155	Soil	14	0.34	139	0.045	1	1.36	0.012	0.04	<0.1	0.04	3.7	<0.1	<0.05	3	<0.5	<0.2		
14GLS156	Soil	15	0.30	222	0.014	1	1.73	0.012	0.03	<0.1	0.10	3.3	0.1	<0.05	5	<0.5	<0.2		
14GLS157	Soil	10	0.28	101	0.044	<1	0.99	0.010	0.03	<0.1	0.01	2.9	<0.1	<0.05	4	<0.5	<0.2		
14GLS158	Soil	10	0.29	144	0.036	<1	0.95	0.011	0.03	<0.1	0.02	2.9	<0.1	<0.05	3	<0.5	<0.2		
14GLS159	Soil	12	0.33	146	0.047	2	1.18	0.013	0.03	0.1	0.02	3.6	<0.1	<0.05	4	<0.5	<0.2		
14GLS160	Soil	11	0.33	132	0.050	<1	0.97	0.012	0.03	<0.1	0.03	3.4	<0.1	<0.05	3	<0.5	<0.2		
14GLS161	Soil	12	0.32	169	0.038	1	1.04	0.011	0.03	<0.1	0.03	3.3	<0.1	<0.05	4	<0.5	<0.2		
14GLS162	Soil	11	0.29	171	0.035	<1	1.07	0.010	0.03	<0.1	0.01	2.9	<0.1	<0.05	4	<0.5	<0.2		
14GLS163	Soil	15	0.30	137	0.032	<1	1.33	0.008	0.04	0.2	0.03	4.0	<0.1	<0.05	4	<0.5	<0.2		
14GLS164	Soil	15	0.31	133	0.043	1	1.15	0.010	0.07	0.1	0.02	4.2	<0.1	<0.05	4	<0.5	<0.2		
14GLS165	Soil	17	0.42	139	0.058	2	0.98	0.014	0.05	<0.1	0.02	5.2	<0.1	<0.05	4	<0.5	<0.2		
14GLS166	Soil	18	0.44	137	0.037	2	1.16	0.012	0.07	<0.1	0.03	5.5	<0.1	<0.05	4	<0.5	<0.2		
14GLS167	Soil	11	0.14	160	0.036	<1	0.71	0.008	0.05	<0.1	0.01	2.8	<0.1	<0.05	4	<0.5	<0.2		
14GLS168	Soil	11	0.17	142	0.032	<1	0.82	0.009	0.05	<0.1	0.02	2.9	<0.1	<0.05	3	<0.5	<0.2		
14GLS169	Soil	14	0.21	146	0.044	<1	0.98	0.011	0.06	<0.1	<0.01	3.6	<0.1	<0.05	4	<0.5	<0.2		
14GLS170	Soil	14	0.20	163	0.037	1	1.34	0.009	0.05	<0.1	0.01	3.7	<0.1	<0.05	4	0.6	<0.2		
14GLS171	Soil	14	0.22	153	0.034	<1	1.25	0.011	0.04	<0.1	0.01	3.7	<0.1	<0.05	4	<0.5	<0.2		
14GLS172	Soil	16	0.39	212	0.057	1	1.19	0.012	0.07	<0.1	0.03	5.4	<0.1	<0.05	4	<0.5	<0.2		
14GLS173	Soil	13	0.23	157	0.034	1	1.08	0.009	0.04	0.1	<0.01	3.6	<0.1	<0.05	4	<0.5	<0.2		
14GLS174	Soil	17	0.35	214	0.043	1	1.33	0.010	0.06	0.1	0.02	4.0	<0.1	<0.05	4	<0.5	<0.2		
14GLS175	Soil	15	0.28	142	0.044	<1	1.09	0.010	0.04	<0.1	0.03	3.0	<0.1	<0.05	5	<0.5	<0.2		
14GLS176	Soil	16	0.34	181	0.044	1	1.21	0.010	0.04	0.1	0.03	3.8	<0.1	<0.05	5	<0.5	<0.2		
14GLS177	Soil	19	0.43	185	0.045	1	1.45	0.009	0.05	0.2	<0.01	3.4	<0.1	<0.05	6	<0.5	<0.2		
14GLS178	Soil	17	0.36	102	0.066	1	1.05	0.009	0.05	<0.1	0.03	3.4	<0.1	<0.05	6	<0.5	<0.2		
14GLS179	Soil	17	0.42	248	0.052	<1	1.16	0.009	0.07	<0.1	0.02	3.8	<0.1	<0.05	4	<0.5	<0.2		

QUALITY CONTROL REPORT

SMI14000318.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
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																					
14GLS011	Soil	0.6	7.8	9.4	111	0.1	10.9	7.4	442	3.04	6.8	<0.5	0.5	22	0.4	0.6	<0.1	53	0.21	0.157	6
REP 14GLS011	QC	0.6	8.1	9.9	107	0.1	9.9	7.5	440	3.09	6.7	0.9	0.5	23	0.3	0.5	<0.1	54	0.22	0.155	6
14GLS047	Soil	0.9	13.0	5.7	38	<0.1	10.4	6.5	166	2.61	8.7	2.5	0.6	17	<0.1	0.7	<0.1	57	0.16	0.023	5
REP 14GLS047	QC	1.1	12.7	5.7	39	<0.1	11.3	6.8	168	2.67	8.8	1.8	0.7	18	<0.1	0.6	<0.1	59	0.16	0.023	5
14GLS083	Soil	1.3	8.0	8.4	42	0.1	6.5	6.6	383	2.57	6.1	0.5	0.7	17	<0.1	0.5	<0.1	56	0.18	0.029	5
REP 14GLS083	QC	1.5	7.9	8.4	43	<0.1	6.7	6.5	356	2.49	6.5	5.9	0.7	18	<0.1	0.5	<0.1	55	0.18	0.027	5
14GLS119	Soil	1.1	20.8	8.8	73	0.1	11.1	8.2	273	3.19	12.9	4.0	0.7	19	0.2	0.8	<0.1	74	0.28	0.029	5
REP 14GLS119	QC	1.1	20.1	8.6	73	<0.1	11.3	8.2	271	3.26	12.6	2.2	0.7	18	0.3	0.8	<0.1	73	0.27	0.027	5
14GLS155	Soil	0.5	15.4	5.9	54	<0.1	14.0	5.9	241	2.28	6.8	2.5	0.9	19	0.1	0.5	<0.1	43	0.22	0.060	5
REP 14GLS155	QC	0.6	15.5	5.5	54	<0.1	12.7	6.1	236	2.22	7.0	0.8	0.8	18	0.1	0.5	<0.1	43	0.19	0.055	5
Reference Materials																					
STD DS10	Standard	13.9	143.5	148.1	357	2.0	73.0	12.4	981	2.77	46.3	116.3	6.6	68	2.3	8.5	13.2	42	1.03	0.074	17
STD DS10	Standard	14.5	141.5	148.6	359	1.9	72.8	11.8	824	2.82	44.7	76.2	7.0	66	2.6	8.1	11.9	44	1.05	0.070	18
STD DS10	Standard	15.4	163.1	150.2	370	1.9	77.5	13.4	900	2.87	47.0	89.1	7.4	70	2.6	9.0	12.7	46	1.10	0.077	18
STD DS10	Standard	15.9	147.8	147.7	367	1.9	75.6	13.3	851	2.90	44.0	82.4	7.6	69	2.5	8.3	11.7	43	1.04	0.070	18
STD DS10	Standard	15.1	159.7	147.2	374	1.9	78.3	13.7	843	2.93	43.2	78.6	8.0	72	2.4	8.5	11.4	41	1.05	0.074	19
STD OXC109	Standard	1.0	36.4	10.6	41	<0.1	74.4	18.1	466	2.83	0.8	207.1	1.4	147	0.2	<0.1	<0.1	46	0.71	0.106	12
STD OXC109	Standard	1.4	34.7	10.8	43	<0.1	75.4	19.3	396	3.18	<0.5	195.6	1.5	150	<0.1	<0.1	<0.1	46	0.72	0.102	13
STD OXC109	Standard	1.4	35.2	11.3	42	<0.1	73.0	19.6	433	3.07	1.0	196.1	1.6	162	<0.1	<0.1	<0.1	51	0.77	0.121	13
STD OXC109	Standard	1.5	35.5	10.6	44	<0.1	76.0	19.8	407	3.08	<0.5	183.6	1.5	146	<0.1	<0.1	<0.1	43	0.74	0.104	13
STD OXC109	Standard	1.4	37.9	11.1	42	<0.1	77.8	20.9	434	3.22	<0.5	201.6	1.5	148	<0.1	<0.1	<0.1	48	0.76	0.105	13
STD DS10 Expected		14.69	154.61	150.55	370	2.02	74.6	12.9	875	2.7188	43.7	91.9	7.5	67.1	2.49	8.23	11.65	43	1.0625	0.073	17.5
STD OXC109 Expected		201																			
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	0.2	<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

QUALITY CONTROL REPORT

SMI14000318.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		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	0.05	1	0.5	0.2	
Pulp Duplicates																	
14GLS011	Soil	15	0.24	170	0.034	2	1.31	0.009	0.06	0.1	0.02	2.5	<0.1	<0.05	6	<0.5	<0.2
REP 14GLS011	QC	16	0.25	170	0.035	2	1.25	0.009	0.06	0.1	0.02	2.5	<0.1	<0.05	6	<0.5	<0.2
14GLS047	Soil	14	0.25	175	0.033	2	1.18	0.010	0.02	<0.1	0.02	2.7	<0.1	<0.05	4	<0.5	<0.2
REP 14GLS047	QC	14	0.25	178	0.035	2	1.22	0.010	0.03	<0.1	0.02	2.7	<0.1	<0.05	4	<0.5	<0.2
14GLS083	Soil	12	0.15	117	0.040	2	0.86	0.008	0.05	<0.1	0.01	2.1	<0.1	<0.05	4	<0.5	<0.2
REP 14GLS083	QC	12	0.15	113	0.041	2	0.86	0.009	0.04	<0.1	0.02	2.0	<0.1	<0.05	4	<0.5	<0.2
14GLS119	Soil	14	0.33	179	0.037	2	1.17	0.010	0.03	<0.1	0.03	3.9	<0.1	<0.05	4	<0.5	<0.2
REP 14GLS119	QC	14	0.31	171	0.035	2	1.11	0.010	0.03	<0.1	0.03	3.8	<0.1	<0.05	4	<0.5	<0.2
14GLS155	Soil	14	0.34	139	0.045	1	1.36	0.012	0.04	<0.1	0.04	3.7	<0.1	<0.05	3	<0.5	<0.2
REP 14GLS155	QC	14	0.34	140	0.044	2	1.33	0.012	0.04	<0.1	0.03	3.5	<0.1	<0.05	4	<0.5	<0.2
Reference Materials																	
STD DS10	Standard	52	0.78	359	0.079	6	1.03	0.070	0.33	3.2	0.29	3.2	5.3	0.21	4	2.1	4.6
STD DS10	Standard	53	0.73	328	0.076	8	0.99	0.059	0.33	3.1	0.28	3.0	5.0	0.29	4	2.3	4.8
STD DS10	Standard	57	0.81	349	0.083	7	1.10	0.061	0.34	3.0	0.32	3.0	5.0	0.29	5	1.9	5.7
STD DS10	Standard	55	0.75	360	0.084	7	1.08	0.063	0.33	3.4	0.29	2.8	5.4	0.25	5	2.6	4.8
STD DS10	Standard	56	0.77	365	0.088	6	1.04	0.062	0.33	3.5	0.27	3.2	5.3	0.26	5	2.3	5.2
STD OXC109	Standard	55	1.43	60	0.379	2	1.52	0.681	0.40	0.3	<0.01	2.3	<0.1	<0.05	6	<0.5	<0.2
STD OXC109	Standard	58	1.43	56	0.383	2	1.52	0.676	0.40	0.2	<0.01	1.5	<0.1	<0.05	5	<0.5	<0.2
STD OXC109	Standard	60	1.52	65	0.396	3	1.65	0.745	0.42	0.2	<0.01	1.2	<0.1	<0.05	5	<0.5	<0.2
STD OXC109	Standard	57	1.46	59	0.403	3	1.52	0.700	0.40	0.2	<0.01	0.9	<0.1	<0.05	6	<0.5	<0.2
STD OXC109	Standard	59	1.49	58	0.406	<1	1.56	0.659	0.42	0.2	<0.01	1.0	<0.1	<0.05	6	<0.5	<0.2
STD DS10 Expected		54.6	0.775	359	0.0817		1.0259	0.067	0.338	3.32	0.3	2.8	5.1	0.29	4.3	2.3	5.01
STD OXC109 Expected																	
BLK	Blank	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	0.2	<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	0.2	<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

APPENDIX 5

Rock Sample Analytical Certificate



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Client: Altiplano Minerals Ltd.
220-9797 45 Ave
Edmonton AB T6E 5V8 CANADA

Submitted By: Brad Williamson
Receiving Lab: Canada-Smithers
Received: June 09, 2014
Report Date: June 24, 2014
Page: 1 of 2

CERTIFICATE OF ANALYSIS

SMI14000317.1

CLIENT JOB INFORMATION

Project: GD Property
Shipment ID: 14-APN-SS-00
P.O. Number
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.

Invoice To: Altiplano Minerals Ltd.
220-9797 45 Ave
Edmonton AB T6E 5V8
CANADA

CC: Simeon Robinson
Gideon Lambiv

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Table with 6 columns: Procedure Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Rows include PRP70-250, FA330-Au, LF702_EXT, and AQ201.

ADDITIONAL COMMENTS



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.



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
 PHONE (604) 253-3158

Client: **Altiplano Minerals Ltd.**
 220-9797 45 Ave
 Edmonton AB T6E 5V8 CANADA

Project: GD Property
 Report Date: June 24, 2014

Page: 2 of 2

Part: 1 of 4

CERTIFICATE OF ANALYSIS

SMI14000317.1

Method	WGHT	FA330	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700
Analyte	Wgt	Au	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O	K2O	MnO	TiO2	P2O5	Cr2O3	Ba	LOI	Cu	Ni	Pb	SO3	Sr	
Unit	kg	ppb	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
MDL	0.01	2	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-5.11	0.001	0.001	0.001	0.002	0.002	
14GLR001	Rock	2.16	4	46.18	13.84	9.04	13.42	5.13	2.55	0.81	0.17	1.32	0.23	0.03	0.07	7.58	0.003	0.007	0.001	0.015	0.042
14GLR002	Rock	1.67	3	46.92	17.22	10.06	7.05	6.51	4.25	0.50	0.18	1.26	0.21	<0.01	0.02	5.13	<0.001	0.003	0.001	<0.002	0.035



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: Altiplano Minerals Ltd.
220-9797 45 Ave
Edmonton AB T6E 5V8 CANADA

Project: GD Property
Report Date: June 24, 2014

Page: 2 of 2

Part: 2 of 4

CERTIFICATE OF ANALYSIS

SMI14000317.1

Method	LF700	LF700	LF700	LF700	TC000	TC000	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	V2O5	Zn	Zr	SUM	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	
Unit	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	
MDL	0.002	0.001	0.002	0.01	0.02	0.02	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	
14GLR001	Rock	0.035	0.006	0.008	100.50	1.50	<0.02	0.2	47.2	1.4	42	<0.1	71.1	25.9	956	3.32	9.6	<0.5	0.2	136	<0.1
14GLR002	Rock	0.046	0.009	0.006	99.43	0.53	<0.02	<0.1	24.4	0.7	78	<0.1	48.9	34.5	1142	4.82	5.4	<0.5	0.1	64	<0.1



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: Altiplano Minerals Ltd.
220-9797 45 Ave
Edmonton AB T6E 5V8 CANADA

Project: GD Property
Report Date: June 24, 2014

Page: 2 of 2

Part: 3 of 4

CERTIFICATE OF ANALYSIS

SMI14000317.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	
Unit		ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	
MDL		0.1	0.1	2	0.01	0.001	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	
14GLR001	Rock	0.5	<0.1	78	5.07	0.087	2	117	2.09	354	0.253	3	2.16	0.033	0.12	<0.1	<0.01	4.9	<0.1	<0.05	7	
14GLR002	Rock	0.4	<0.1	119	1.94	0.083	2	59	3.33	27	0.207	4	3.20	0.027	0.09	<0.1	0.01	6.6	<0.1	<0.05	9	



www.acmelab.com

Acme Analytical Laboratories (Vancouver) Ltd.
9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
PHONE (604) 253-3158

Client: **Altiplano Minerals Ltd.**
220-9797 45 Ave
Edmonton AB T6E 5V8 CANADA

Project: GD Property
Report Date: June 24, 2014

Page: 2 of 2

Part: 4 of 4

CERTIFICATE OF ANALYSIS

SMI14000317.1

Method	Analyte	AQ201	AQ201
		Se	Te
Unit		ppm	ppm
MDL		0.5	0.2
14GLR001	Rock	<0.5	<0.2
14GLR002	Rock	<0.5	<0.2

QUALITY CONTROL REPORT

SMI14000317.1

Method	WGHT	FA330	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700	LF700
Analyte	Wgt	Au	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O	K2O	MnO	TiO2	P2O5	Cr2O3	Ba	LOI	Cu	Ni	Pb	SO3	Sr	
Unit	kg	ppb	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
MDL	0.01	2	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Pulp Duplicates																					
14GLR001	Rock	2.16	4	46.18	13.84	9.04	13.42	5.13	2.55	0.81	0.17	1.32	0.23	0.03	0.07	7.58	0.003	0.007	0.001	0.015	0.042
REP 14GLR001	QC																				
14GLR002	Rock	1.67	3	46.92	17.22	10.06	7.05	6.51	4.25	0.50	0.18	1.26	0.21	<0.01	0.02	5.13	<0.001	0.003	0.001	<0.002	0.035
REP 14GLR002	QC		6	47.36	17.44	10.13	7.10	6.55	4.29	0.49	0.18	1.25	0.20	<0.01	0.01	5.14	0.002	0.005	0.002	0.003	0.036
Reference Materials																					
STD DS10	Standard																				
STD GS311-1	Standard																				
STD GS910-4	Standard																				
STD OREAS72B	Standard			51.75	8.99	9.74	3.93	16.33	1.31	1.32	0.13	0.36	0.06	0.15	0.03	5.49	0.019	0.730	0.002	0.303	<0.002
STD OXC109	Standard																				
STD OXD108	Standard		433																		
STD SY-4(D)	Standard			50.18	20.64	6.17	7.86	0.51	7.17	1.66	0.10	0.27	0.12	<0.01	0.03	4.56	<0.001	<0.001	<0.001	0.027	0.105
STD GS311-1 Expected																					
STD GS910-4 Expected																					
STD OXD108 Expected			414																		
STD DS10 Expected																					
STD OXC109 Expected																					
STD SY-4(D) Expected				49.9	20.69	6.21	8.05	0.54	7.1	1.66	0.108	0.287	0.131		0.034	4.56					
STD OREAS72B Expected				51.165	8.9728	9.724	3.96	16.22	1.2915	1.33	0.13	0.3553	0.0611	0.145	0.0335	5.14	0.0193	0.709	0.0017	1.025	0.0073
BLK	Blank																				
BLK	Blank		4																		
BLK	Blank																				
BLK	Blank			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00	<0.001	<0.001	<0.001	<0.002	<0.002
Prep Wash																					
G1-SMI	Prep Blank		4	67.85	15.65	3.39	3.32	1.02	3.61	3.62	0.10	0.41	0.17	<0.01	0.09	0.58	<0.001	<0.001	0.003	<0.002	0.045

QUALITY CONTROL REPORT

SMI14000317.1

Method	LF700	LF700	LF700	LF700	TC000	TC000	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	V2O5	Zn	Zr	SUM	TOT/C	TOT/S	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	
Unit	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	
MDL	0.002	0.001	0.002	0.01	0.02	0.02	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	
Pulp Duplicates																					
14GLR001	Rock	0.035	0.006	0.008	100.50	1.50	<0.02	0.2	47.2	1.4	42	<0.1	71.1	25.9	956	3.32	9.6	<0.5	0.2	136	<0.1
REP 14GLR001	QC					1.51	<0.02														
14GLR002	Rock	0.046	0.009	0.006	99.43	0.53	<0.02	<0.1	24.4	0.7	78	<0.1	48.9	34.5	1142	4.82	5.4	<0.5	0.1	64	<0.1
REP 14GLR002	QC	0.043	0.009	0.006	100.29																
Reference Materials																					
STD DS10	Standard							13.7	152.9	157.1	376	1.9	76.0	12.9	878	2.78	44.8	73.5	7.4	66	2.7
STD GS311-1	Standard					1.03	2.38														
STD GS910-4	Standard					2.72	8.16														
STD OREAS72B	Standard	0.014	0.011	0.008	100.88																
STD OXC109	Standard							1.5	34.4	12.7	40	<0.1	72.1	18.4	405	2.90	1.2	189.2	1.5	140	<0.1
STD OXD108	Standard																				
STD SY-4(D)	Standard	<0.002	0.011	0.062	99.51																
STD GS311-1 Expected						1.02	2.35														
STD GS910-4 Expected						2.65	8.27														
STD OXD108 Expected																					
STD DS10 Expected								14.69	154.61	150.55	370	2.02	74.6	12.9	875	2.7188	43.7	91.9	7.5	67.1	2.49
STD OXC109 Expected																		201			
STD SY-4(D) Expected		0.0093	0.0517																		
STD OREAS72B Expected		0.0136	0.0096	0.0063																	
BLK	Blank					<0.02	<0.02														
BLK	Blank																				
BLK	Blank					<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	
BLK	Blank	<0.002	<0.001	<0.002	<0.01																
Prep Wash																					
G1-SMI	Prep Blank	0.008	0.005	0.018	99.91	0.02	<0.02	0.1	2.5	3.3	46	<0.1	2.7	4.6	579	1.97	0.5	<0.5	5.9	59	<0.1

QUALITY CONTROL REPORT

SMI14000317.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	
Unit	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	
MDL	0.1	0.1	2	0.01	0.001	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	
Pulp Duplicates																					
14GLR001	Rock	0.5	<0.1	78	5.07	0.087	2	117	2.09	354	0.253	3	2.16	0.033	0.12	<0.1	<0.01	4.9	<0.1	<0.05	7
REP 14GLR001	QC																				
14GLR002	Rock	0.4	<0.1	119	1.94	0.083	2	59	3.33	27	0.207	4	3.20	0.027	0.09	<0.1	0.01	6.6	<0.1	<0.05	9
REP 14GLR002	QC																				
Reference Materials																					
STD DS10	Standard	8.9	12.1	42	1.04	0.067	17	55	0.78	324	0.074	10	1.03	0.066	0.33	3.5	0.33	2.4	5.2	0.27	5
STD GS311-1	Standard																				
STD GS910-4	Standard																				
STD OREAS72B	Standard																				
STD OXC109	Standard	<0.1	<0.1	47	0.68	0.104	13	53	1.43	56	0.371	2	1.53	0.678	0.41	0.3	<0.01	1.1	<0.1	<0.05	5
STD OXD108	Standard																				
STD SY-4(D)	Standard																				
STD GS311-1 Expected																					
STD GS910-4 Expected																					
STD OXD108 Expected																					
STD DS10 Expected		8.23	11.65	43	1.0625	0.073	17.5	54.6	0.775	359	0.0817		1.0259	0.067	0.338	3.32	0.3	2.8	5.1	0.29	4.3
STD OXC109 Expected																					
STD SY-4(D) Expected																					
STD OREAS72B Expected																					
BLK	Blank																				
BLK	Blank																				
BLK	Blank	<0.1	<0.1	<2	<0.01	<0.001	<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
BLK	Blank																				
Prep Wash																					
G1-SMI	Prep Blank	<0.1	0.1	38	0.47	0.071	14	6	0.51	162	0.108	2	1.00	0.104	0.52	<0.1	<0.01	2.7	0.3	<0.05	5

QUALITY CONTROL REPORT

SMI14000317.1

Method	AQ201	AQ201
Analyte	Se	Te
Unit	ppm	ppm
MDL	0.5	0.2
Pulp Duplicates		
14GLR001	Rock	<0.5 <0.2
REP 14GLR001	QC	
14GLR002	Rock	<0.5 <0.2
REP 14GLR002	QC	
Reference Materials		
STD DS10	Standard	1.0 5.2
STD GS311-1	Standard	
STD GS910-4	Standard	
STD OREAS72B	Standard	
STD OXC109	Standard	<0.5 <0.2
STD OXD108	Standard	
STD SY-4(D)	Standard	
STD GS311-1 Expected		
STD GS910-4 Expected		
STD OXD108 Expected		
STD DS10 Expected	2.3	5.01
STD OXC109 Expected		
STD SY-4(D) Expected		
STD OREAS72B Expected		
BLK	Blank	
BLK	Blank	
BLK	Blank	<0.5 <0.2
BLK	Blank	
Prep Wash		
G1-SMI	Prep Blank	<0.5 0.3