

2012 TECHNICAL ASSESSMENT REPORT FOR THE STOCK PROPERTY

Omineca Mining Division, British Columbia

NTS 93L 11W

54 41' 40" N/127 27' 18" W

**BC Geological Survey
Assessment Report
34037**

Event #:

**Tenure #'s: 903869, 903829, 903849, 903870, 903749, 903769, 903729,
903871, 903789, 903809**

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&

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Smithers, BC

January 2013

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1. SUMMARY

In the fall of 2012, Richard Billingsley of Surrey, BC contracted UTM Exploration Services Ltd of Smithers, B.C. to conduct a field exploration program on the Stock property. The program was designed to focus on geochemical soil sampling, rock sampling as well as brief reconnaissance fieldwork to identify historical exploration workings.

The program targeted two main areas within the claim boundaries; the Stock Minfile showing and the Table Minfile showing. A soil survey was conducted over the Stock and Table showings west of the soil sampling grid of the 1960's. Analyses show very strong copper, gold, silver, zinc anomalies with localized molybdenum and lead anomalies. A rock sampling program was conducted across the property focusing on the areas of the Stock and Table showings and within the geochemical soil sampling grid. Analyses of the rock samples exhibited very strong copper percentages over a vast area.

The Stock property is located approximately 42km south-southwest of Smithers, British Columbia and consists of 10 mineral claims (Figure 1). Exploration included geochemical soil sampling, rock sampling and reconnaissance fieldwork focused on identifying historical workings.

This field program was conducted between September 30th and October 3rd 2012 and provided much of the data on which this report is based.

2. INTRODUCTION AND TERMS OF REFERENCE

This report borrows/quotes from historical assessment reports of the area as noted in the References section.

It is understood that this report may be required for material disclosure. The author visited the property several times in September/October of 2012.

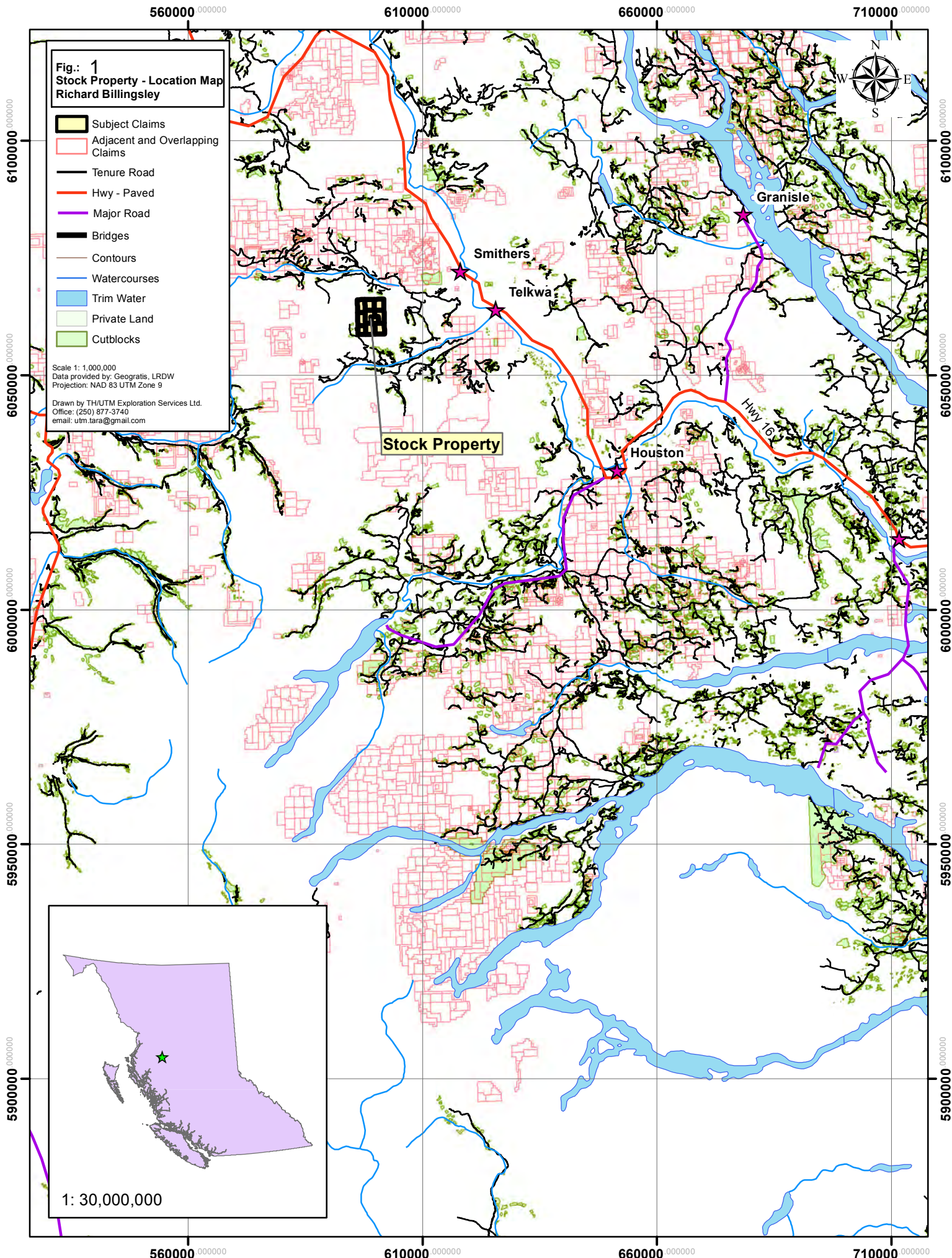
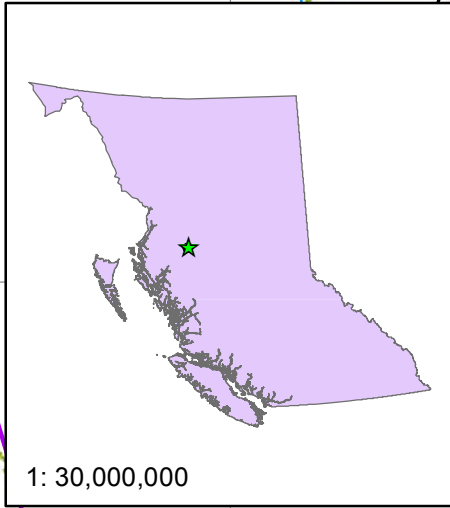


Fig.: 1
Stock Property - Location Map
Richard Billingsley

- Subject Claims
- Adjacent and Overlapping Claims
- Tenure Road
- Hwy - Paved
- Major Road
- Bridges
- Contours
- Watercourses
- Trim Water
- Private Land
- Cutblocks

Scale 1: 1,000,000
 Data provided by: Geogratis, LRDW
 Projection: NAD 83 UTM Zone 9
 Drawn by TH/UTM Exploration Services Ltd.
 Office: (250) 677-3740
 email: utm.tara@gmail.com

Stock Property



3. PROPERTY DESCRIPTION AND LOCATION

3.1 ACCESSIBILITY AND INFRASTRUCTURE

The property is accessed from the village of Telkwa, B.C. From Telkwa you drive approximately 26 kilometers south-southwest along the Telkwa Forest Service Road (FSR) and then turn right onto the Microwave access road. Driving another 16 km up and along this switchback dirt road takes you to the center of the Stock property. Access to the property can also be via helicopter from Smithers. Once on the property there are numerous small access trails throughout the entire property that reach all corners of the claims. These access trails have been created over the years from the local snowmobiling clubs and bike clubs.

The property, except for the obvious Leach Mountain to the west, is relatively flat lying with shallow and gradual elevation increases.

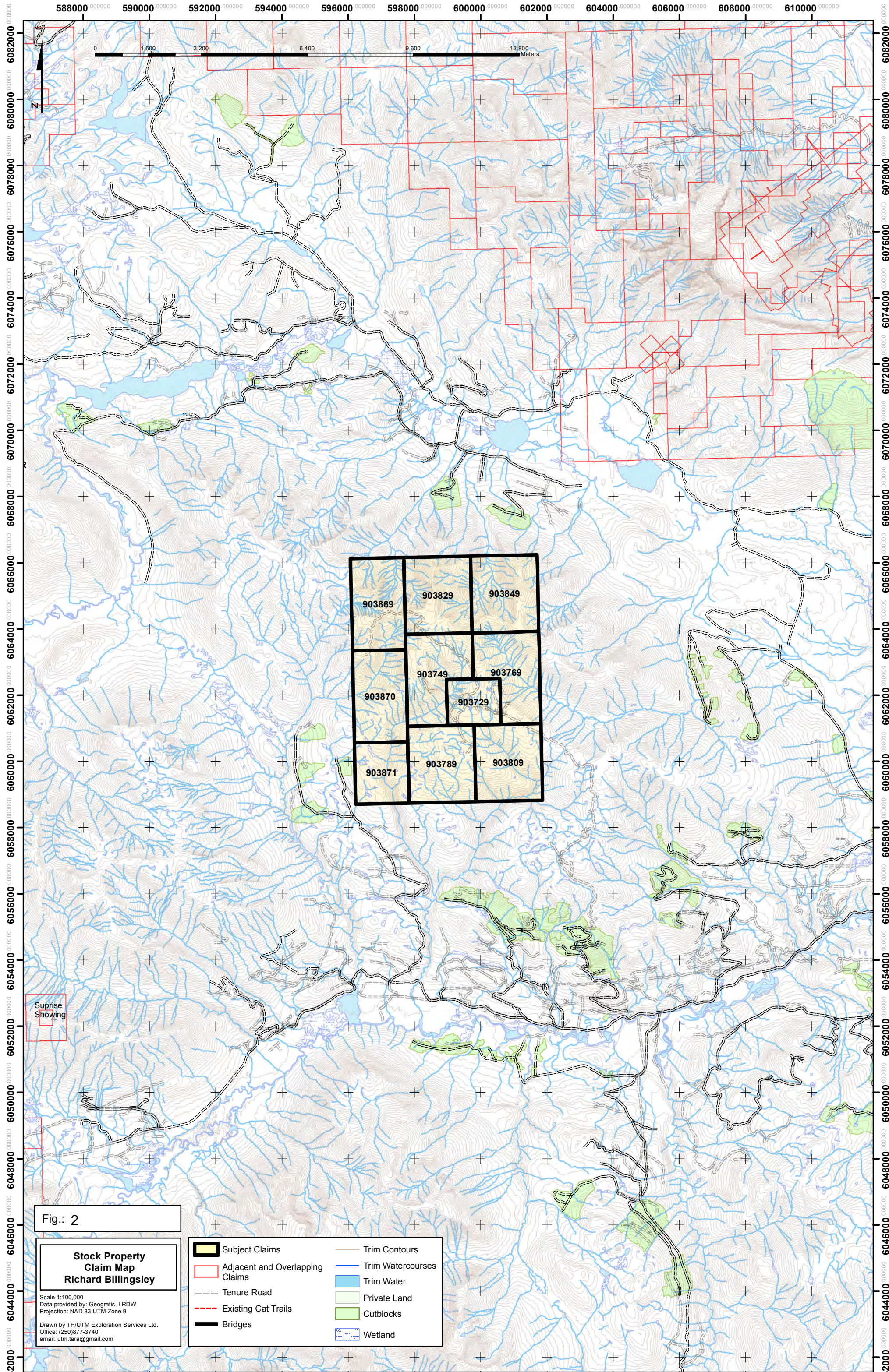
3.2 MINERAL TENURE INFORMATION

The Stock property consists of 10 mineral claims, totaling 4186.14ha (Table 1, Figures 2 and 3). The property is located on NTS map sheet 93L/11W in the Omineca Mining Division and approximately 42km south-southwest of the village of Telkwa, B.C. The geographic coordinates of the approximate centre of the property are 54°41'N Latitude and 127°27'W Longitude.

Table 1. Mineral Tenure Details.

Tenure Number	Type	Claim Name	Good Until	Area (ha)
903729	Mineral	STOCK	20140218	224.29
903749	Mineral	STOCK 1	20140218	448.5014
903769	Mineral	STOCK 2	20140218	448.4903
903789	Mineral	STOCK 3	20140218	467.4647
903809	Mineral	STOCK 4	20140218	467.4567
903829	Mineral	STOCK 5	20140218	466.9462
903849	Mineral	STOCK 6	20140218	466.9346
903869	Mineral	STOCK 7	20140218	448.2976
903870	Mineral	STOCK 8	20140218	448.5669
903871	Mineral	STOCK 9	20140218	299.1942

Total Area: 4186.1426 ha



588000 590000 592000 594000 596000 598000 600000 602000 604000 606000 608000 610000

0 1,600 3,200 6,400 9,600 12,800 Meters

6082000 6080000 6078000 6076000 6074000 6072000 6070000 6068000 6066000 6064000 6062000 6060000 6058000 6056000 6054000 6052000 6050000 6048000 6046000 6044000 6042000

6082000 6080000 6078000 6076000 6074000 6072000 6070000 6068000 6066000 6064000 6062000 6060000 6058000 6056000 6054000 6052000 6050000 6048000 6046000 6044000 6042000

903869 903829 903849
 903870 903749 903769
 903729
 903871 903789 903809

Suprise Showing

Fig.: 2

Stock Property Claim Map
Richard Billingsley

Scale 1:100,000
 Data provided by: Geogratix, LRDW
 Projection: NAD 83 UTM Zone 9

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- Subject Claims
- Adjacent and Overlapping Claims
- Tenure Road
- Existing Cat Trails
- Bridges
- Trim Contours
- Trim Watercourses
- Trim Water
- Private Land
- Cutblocks
- Wetland

596000 598000 600000 602000

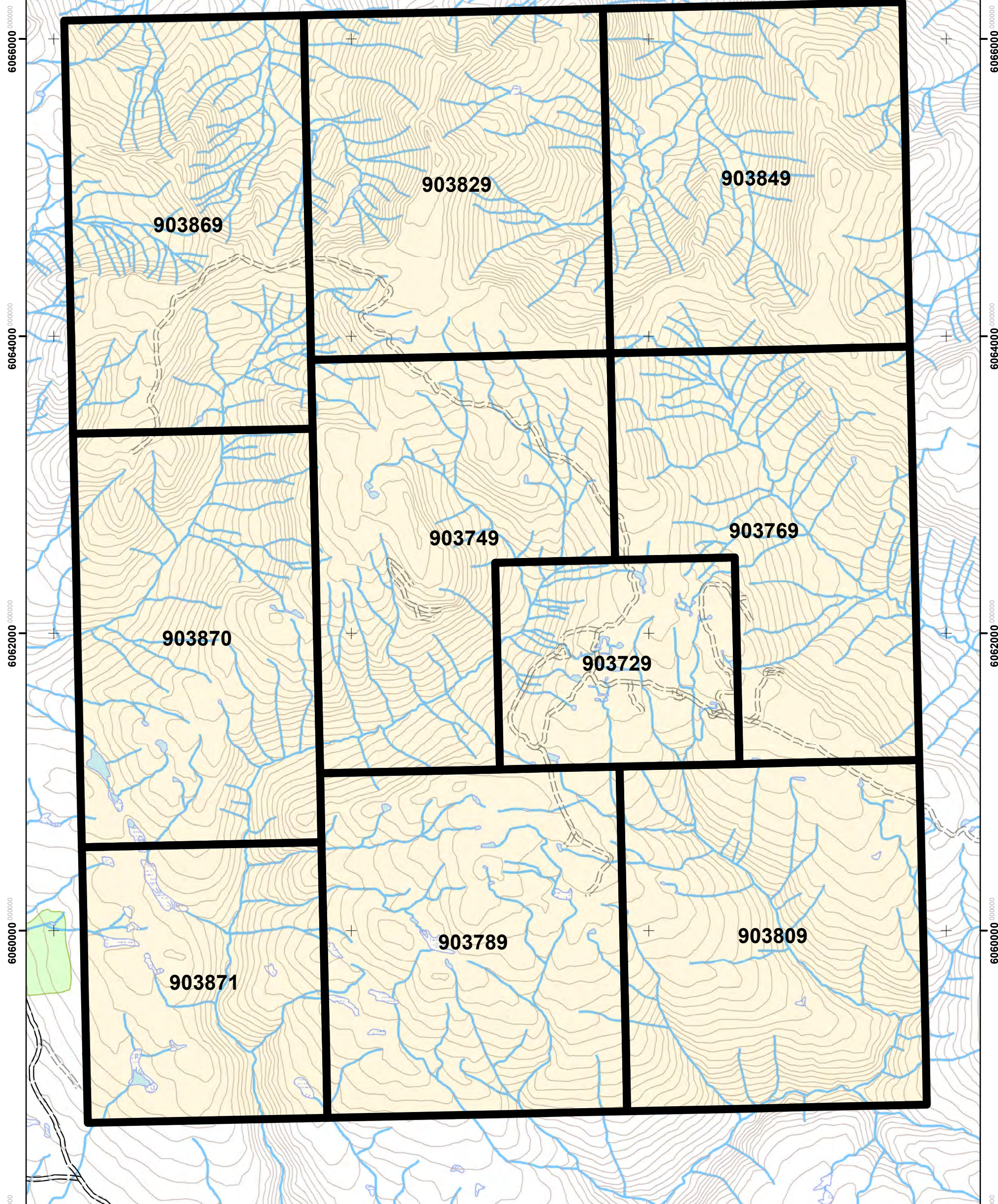
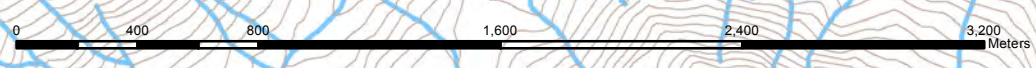


Fig.: 3

Stock Property Claim Map
Richard Billingsley
Scale 1:25,000
Data provided by: Geogatis, LRDW
Projection: NAD 83 UTM Zone 9
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- Subject Claims
- Adjacent and Overlapping Claims
- Tenure Road
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- Trim Watercourses
- Trim Water
- Private Land
- Cutblocks
- Wetland

596000 598000 600000 602000

3.3 PHYSIOGRAPHY AND CLIMATE

Topographic relief over the claims is moderate with gentle sloping subalpine fields extending to the north, northeast. Leach mountain sites across winfield creek to the west and represents the highest point of elevation on the property. Elevation varies from 1100m to 1400m across approximately 5km of north-south exposure.

Sub-alpine meadow and moderate stands of pine, spruce, alder and minor cottonwood scatter the southern and eastern claims while the upper claims are barren of trees and covered with a hummocky exposure of grasses and small brush. As the property lies at an average of 1250m of elevation, the weather and temperature are typical of the alpine regions of central and northwestern B.C.. Snow can be expected from early October to late May, while summer months experience moderate rainfall. Some ground (mostly shaded valleys and shaded northern facing slopes) can be covered during the colder summers.

4. HISTORY

The region has been explored since the early 1900's. A brief historical overview is shown below:

- 1917 the Copper Queen property was discovered – a 50-75 foot deep shaft was completed and another 95 foot adit below this shaft was completed. Local stories and the 1917 Omineca Herald newspaper say that the 12 tons of copper ore shipped out assayed 42% Cu, 10oz Ag and 0.4oz Au.
- 1917 – 1967 the property remained unexplored and dormant
- 1967 – Copper Queen Exploration Ltd - conducted a widespread geochemical survey over the stock and table property as well as a recce rock sampling program over Leach Mountain and the stock and Table areas
- 1969 – Copper Queen Exploration Ltd - conducted a geophysical IP survey over the stock and table showings.
- 1971- Copper Queen Exploration Ltd (Texas Gulf) – conducted another geochemical soil survey over the table and Ken claims
- 1971? - Drilling was conducted and 5 drillholes were drilled into the Table showing area – proper documentation of who did the drilling remains unknown, but previous assessment reports and maps therein suggest it was real (2012 confirmation of 1 drill collar was located)
- 1972 – Copper Queen Exploration Ltd – geological mapping and geochemical soil surveys conducted over the Stock and Table showings
- No further work has been reported since 1972

5. GEOLOGICAL SETTING

5.1 REGIONAL GEOLOGY

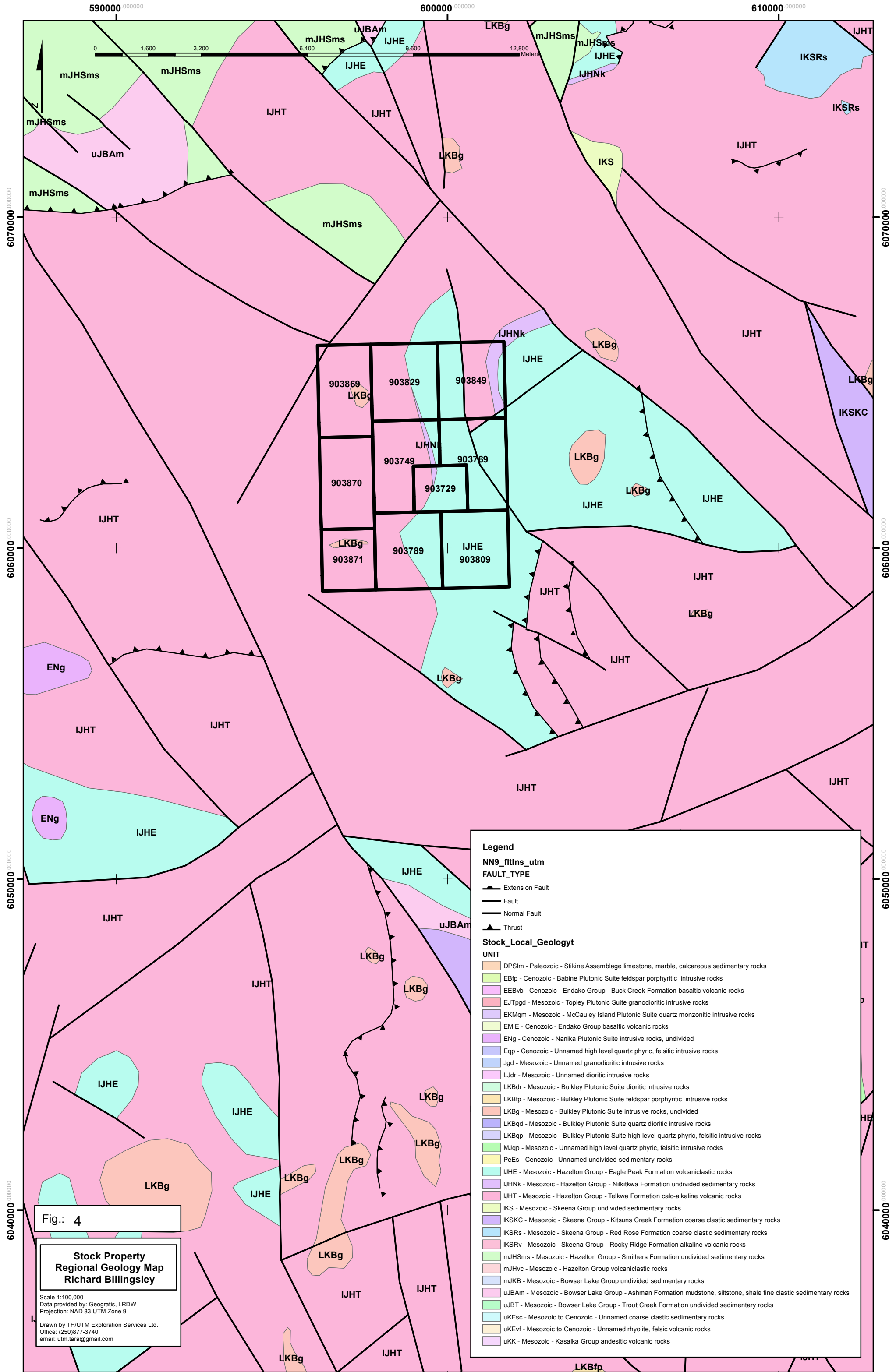
The property is underlain by a thick pile of volcanic rocks of the Jurassic-Cretaceous Hazelton group (Figure 4). This sequence includes volcanic flows, tuffs and agglomerates, ranging in composition from andesite to rhyolite and also contains sedimentary sections. The closest intrusive rocks are located as small occurrences throughout the property; however, insufficient regional mapping has yet to determine the true boundaries.

5.2 LOCAL GEOLOGY

Geological mapping at a scale of 400 feet to the inch was confined to the Table showing area and parts of the stock showing. A series of volcanic rocks trends north to northeastwards through the property with strikes ranging from 350-030° and dips ranging from 20-40° east. The sequence in and around the stock showing is comprised largely of a fine grained, purple lithic andesite and to a lesser degree, a grey lithic andesite. Locally this andesite is referred to as the Telkwa andesite. The grey version of the andesite is interpreted as being a “bleached” sequence of the purple, unaltered, andesite. In the southwest of the property, a porphyritic and sometimes amygdaloidal andesite, containing phenocrysts of pink feldspar form the local topographic highs.

To the southeast of the property in the occurrence of the Table showing the area is blanketed with a banded siliceous, almost chert like, rock. The bands are cm scale and alternating brown white with mafic specks throughout. The rock is extremely hard. This banded unit is probably rhyolite and exhibits both flow and tuffaceous textures. Moderate copper mineralization, present as malachite, can be found in this unit in numerous locations.

The stock showing or ‘old copper queen high grade zone’ is a strongly altered group of rocks that are assumed to be the local Telkwa andesite. The zone of high grade altered rock is approximately 10 meters wide and has an east-west strike of over 100 meters. Either side of the altered, gossanous looking rock, the rock is observed to gradually grade into a purple lithic andesite. The zone of mineralization has a “zipper” like opening to its presence, in that the eastern end of the altered corridor pinches out to the east and ultimately becomes only recognizable purple andesite and as the altered outcrop is uneartherd and followed to the west, the altered package of rocks increases in width until finally steep slopes and treed overburden cover its exposure.



Legend

NN9_fitlins_utm

FAULT_TYPE

- Extension Fault
- Fault
- Normal Fault
- Thrust

Stock_Local_Geologyt

UNIT

- DPSim - Paleozoic - Stikine Assemblage limestone, marble, calcareous sedimentary rocks
- EBfp - Cenozoic - Babine Plutonic Suite feldspar porphyritic intrusive rocks
- EEBvb - Cenozoic - Endako Group - Buck Creek Formation basaltic volcanic rocks
- EJTpqd - Mesozoic - Topley Plutonic Suite granodioritic intrusive rocks
- EKMqm - Mesozoic - McCauley Island Plutonic Suite quartz monzonitic intrusive rocks
- EMIE - Cenozoic - Endako Group basaltic volcanic rocks
- ENG - Cenozoic - Nanika Plutonic Suite intrusive rocks, undivided
- Eqp - Cenozoic - Unnamed high level quartz phyric, felsitic intrusive rocks
- Jgd - Mesozoic - Unnamed granodioritic intrusive rocks
- LJdr - Mesozoic - Unnamed dioritic intrusive rocks
- LKBdr - Mesozoic - Bulkley Plutonic Suite dioritic intrusive rocks
- LKBfp - Mesozoic - Bulkley Plutonic Suite feldspar porphyritic intrusive rocks
- LKBg - Mesozoic - Bulkley Plutonic Suite intrusive rocks, undivided
- LKBqd - Mesozoic - Bulkley Plutonic Suite quartz dioritic intrusive rocks
- LKBqp - Mesozoic - Bulkley Plutonic Suite high level quartz phyric, felsitic intrusive rocks
- MJqp - Mesozoic - Unnamed high level quartz phyric, felsitic intrusive rocks
- PeEs - Cenozoic - Unnamed undivided sedimentary rocks
- IJHE - Mesozoic - Hazelton Group - Eagle Peak Formation volcaniclastic rocks
- IJHNk - Mesozoic - Hazelton Group - Nilkitwa Formation undivided sedimentary rocks
- IJHT - Mesozoic - Hazelton Group - Telkwa Formation calc-alkaline volcanic rocks
- IKS - Mesozoic - Skeena Group undivided sedimentary rocks
- IKSKC - Mesozoic - Skeena Group - Kitsuns Creek Formation coarse clastic sedimentary rocks
- IKSRs - Mesozoic - Skeena Group - Red Rose Formation coarse clastic sedimentary rocks
- IKSRv - Mesozoic - Skeena Group - Rocky Ridge Formation alkaline volcanic rocks
- mJHSms - Mesozoic - Hazelton Group - Smithers Formation undivided sedimentary rocks
- mJHvc - Mesozoic - Hazelton Group volcaniclastic rocks
- mJKB - Mesozoic - Bowser Lake Group undivided sedimentary rocks
- uJBAm - Mesozoic - Bowser Lake Group - Ashman Formation mudstone, siltstone, shale fine clastic sedimentary rocks
- uJBT - Mesozoic - Bowser Lake Group - Trout Creek Formation undivided sedimentary rocks
- uKEsc - Mesozoic to Cenozoic - Unnamed coarse clastic sedimentary rocks
- uKEvf - Mesozoic to Cenozoic - Unnamed rhyolite, felsic volcanic rocks
- uKK - Mesozoic - Kasalka Group andesitic volcanic rocks

Fig.: 4

Stock Property Regional Geology Map
Richard Billingsley

Scale 1:100,000
Data provided by: Geogratix, LRDW
Projection: NAD 83 UTM Zone 9

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6. SAMPLING PROGRAM

6.1 METHODOLOGY AND PROCEDURE

Figure 5 shows the sample locations for both soils and rocks.

6.1.1 SOILS

Between September 30th and October 3rd, 2012, a four man crew from UTM Exploration Services conducted a detailed geochemical soil survey as well as a rock sampling program across the stock and table showing areas. Soil samples were taken at 100m sample spacing and 100m line spacing in order to adequately cover the two showings. A total of 162 soil samples were taken using a spade shovel from depths of 15cm to 50cm. All soil samples taken are found in Appendix I as well as on Figure 5.

The location of all samples was recorded as well as horizon taken from, soil composition, soil colour and visual comments. Location was determined using a handheld Garmin CSx GPS unit. Samples were collected in kraft paper sample bags and uniquely labeled with UTM sample tags. Samples were dried each evening, catalogued into an excel spreadsheet, marked on a field map and bagged, 9 samples to a poly bag, and submitted to the ACME prep lab in Smithers, B.C. at the end of the program.

All samples were transported directly to the lab by UTM personnel. All soil samples were prepped in Smithers, B.C. and then the pulps were transported to the Vancouver, B.C. laboratory for full analysis. Soils were analyzed using an ICP/ICP-MS method with all gold values reported in PPB while all other elements were recorded in Parts Per Million (PPM) or percentage. A complete description of the ACME analytical techniques is presented in Appendix II and the certificate of analysis are attached as Appendix I ACME labs is an ISO-9000 certified laboratory.

	Subject Claims		Trim Contours
	Adjacent and Overlapping Claims		Trim Watercourses
	Tenure Road		Trim Water
	Existing Cat Trails		Private Land
	Bridges		Cutblocks
			Wetland

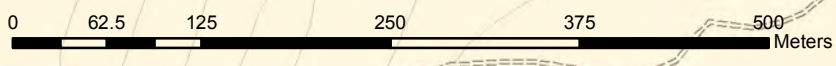


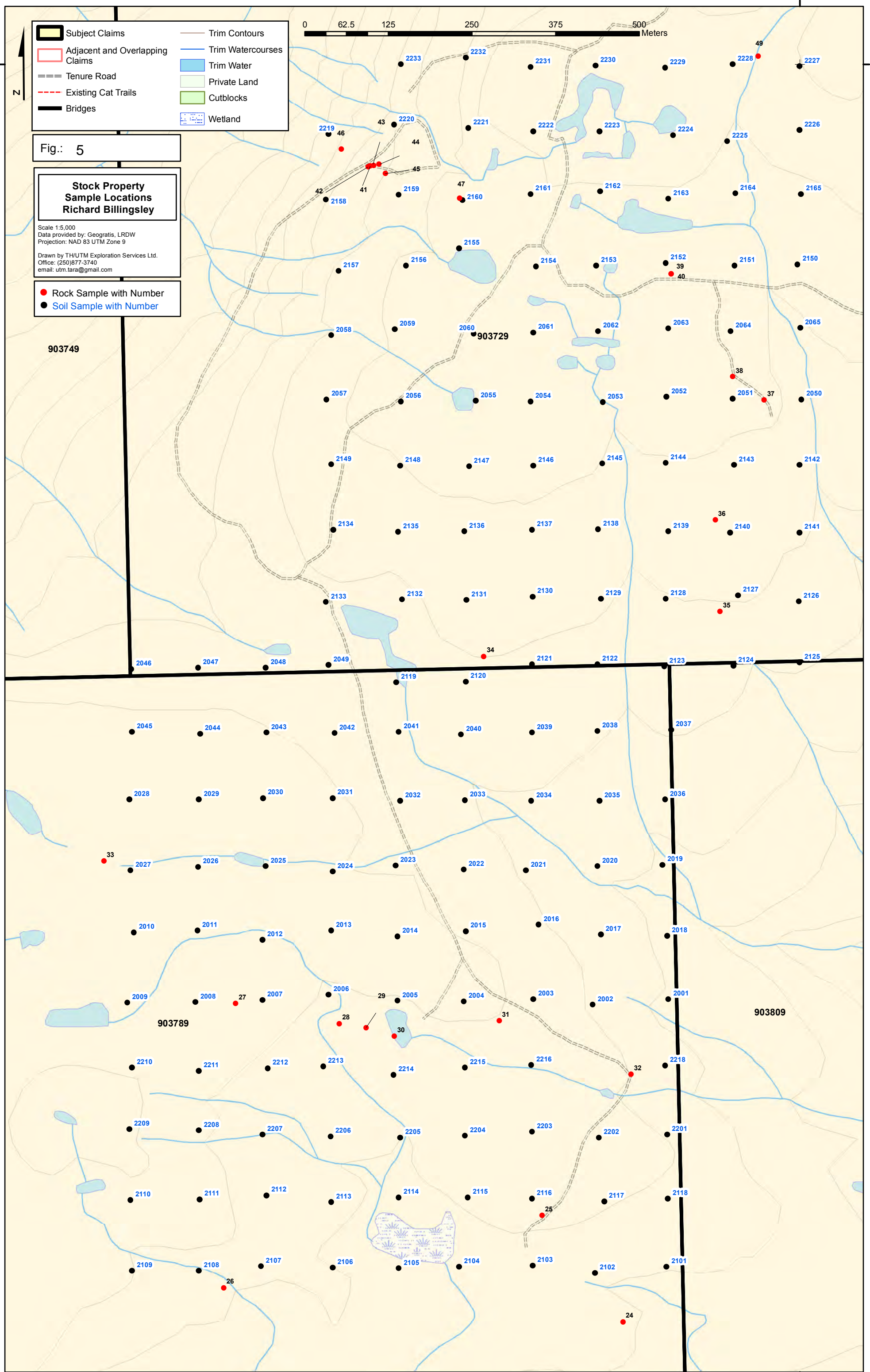
Fig.: 5

**Stock Property Sample Locations
Richard Billingsley**

Scale 1:5,000
Data provided by: Geogratix, LRDW
Projection: NAD 83 UTM Zone 9

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	Rock Sample with Number
	Soil Sample with Number



6.1.2 ROCKS

During the fall 2012 soil sampling program the crew collected a total of 25 rock samples while traversing the soil grid area. All rock samples are found in Appendix I as well as Figure 6. Table 2 shows assay highlights.

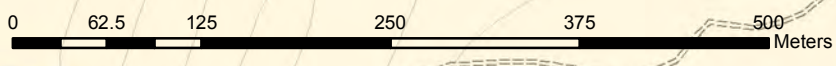
The location of the rock samples was recorded as well as descriptive comments. Location was determined using a handheld Garmin CSx GPS unit. Samples were collected in 12x20 poly samplebags and labeled using the sample tag number assigned to each individual sample. A sample tag matching the written number on the outside of the bag was placed in the bag and tied off using a tie strap.

All samples were transported directly to the laboratory by UTM personnel. All rock samples were prepped at the ACME prep lab in Smithers, B.C. and then the pulps were transported to the Vancouver, B.C. lab for full analysis. Rock samples were analyzed using an ICP/ICP-MS method as well as fire assay ICP-OES finish with all gold values reported in PPB while other elements were recorded in Parts Per Million (PPM) or percentage. A complete description of the ACME analytical techniques is presented in Appendix II and the certificate of analysis are attached as Appendix I. ACME labs is an ISO-9000 certified laboratory.

Table 2. Highlights from Rock Assays.

Sample #	Easting (NAD83)	Northing (NAD83)	Cu ppm	Cu%	Ag ppm	Au ppb	Pb ppm	Zn ppm	Mo ppm
24	599736	6060120	2366.7	0.24	1.2	48	13.9	43	0.2
25	599615	6060279	3.9	0.00	0.1	<0.5	21.5	21	0.1
26	599139	6060171	36.2	0.00	<0.1	1.7	4.1	329	0.1
27	599157	6060596	22.3	0.00	<0.1	0.6	6	365	0.2
28	599312	6060566	2335.4	0.23	8.1	21.7	9	43	0.3
29	599352	6060560	2617	0.26	4.8	11.2	6.7	18	0.2
30	599394	6060547	6163.1	0.62	13.7	43	4.9	33	0.2
31	599551	6060570	39.8	0.00	0.1	<0.5	5.6	45	0.2
32	599748	6060490	9789.8	0.98	14.6	3.4	3.1	82	0.2
33	598960	6060809	6.8	0.00	<0.1	<0.5	7.9	60	0.4
34	599528	6061115	24.1	0.00	<0.1	<0.5	4.2	35	0.2
35	599881	6061182	2	0.00	<0.1	<0.5	4	12	<0.1
36	599874	6061319	4.9	0.00	<0.1	<0.5	3.7	21	0.1
37	599947	6061498	1.3	0.00	<0.1	<0.5	3.2	29	<0.1
38	599900	6061533	2.3	0.00	<0.1	<0.5	1.7	15	<0.1
39	599808	6061687	9	0.00	<0.1	<0.5	6.7	68	<0.1
40	599808	6061687	3	0.00	0.1	<0.5	7	84	<0.1
41	599358	6061848	37710	3.77	44	12.8	32.8	44	0.7
42	599355	6061847	15140	1.51	8	19.9	97.5	56	4
43	599363	6061849	45940	4.59	>300	671.5	49.9	55	0.5
44	599371	6061851	51620	5.16	58	25.1	29.6	386	0.4
45	599381	6061837	40860	4.09	41	28.6	16.1	98	0.2
46	599315	6061873	37110	3.71	31	6.9	13.5	73	<0.1
47	599492	6061800	140.2	0.01	0.1	1.1	5.3	88	0.2
49	599938	6062012	164.3	0.02	0.7	1.5	2.5	79	<0.1

Subject Claims	Trim Contours
Adjacent and Overlapping Claims	Trim Watercourses
Tenure Road	Trim Water
Existing Cat Trails	Private Land
Bridges	Cutblocks
	Wetland



Sample

Au ppb	Cu ppm
Mo ppm	Zn ppm

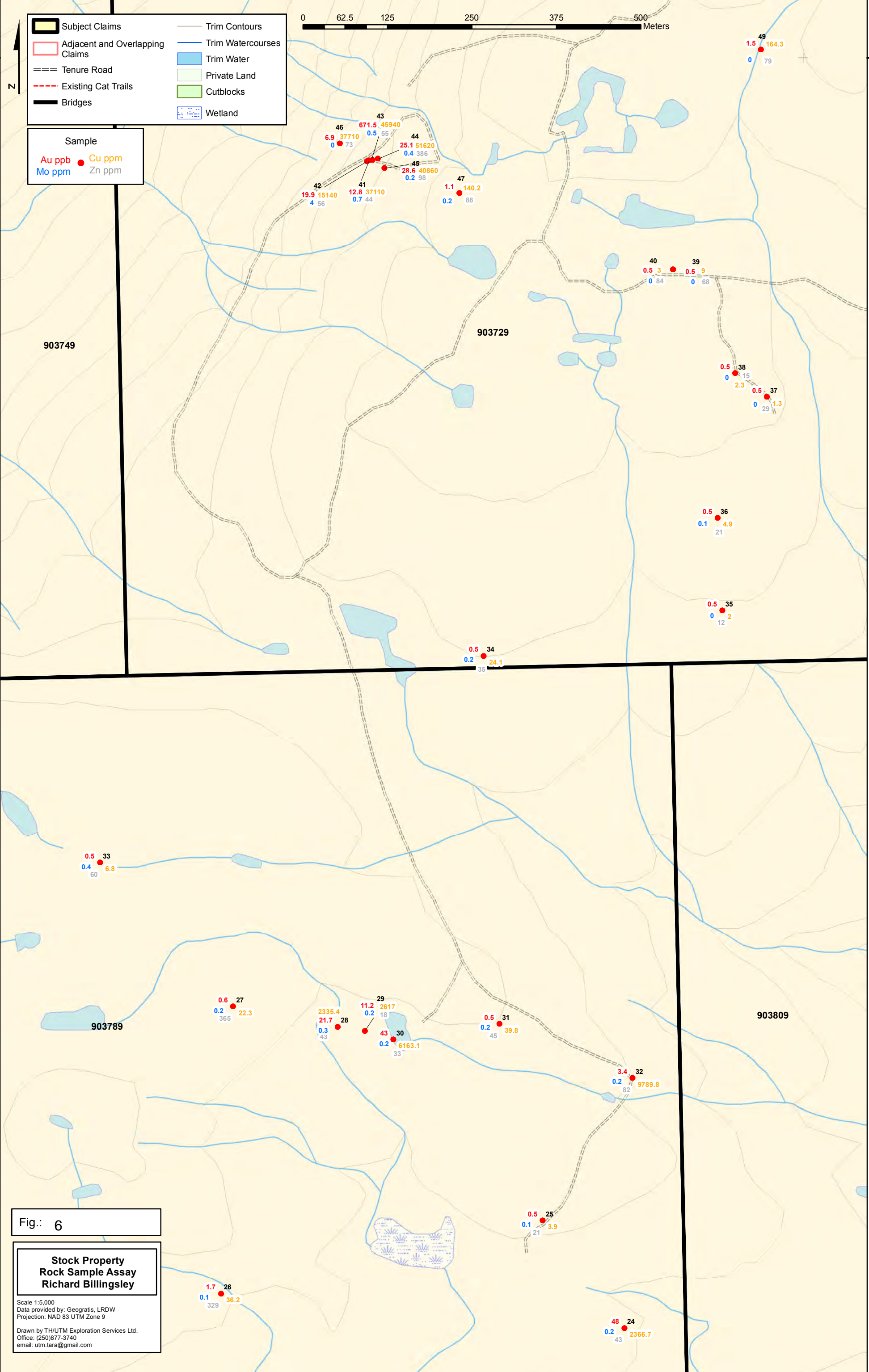


Fig.: 6

**Stock Property
Rock Sample Assay
Richard Billingsley**

Scale 1:5,000
Data provided by: Geogratix, LRDW
Projection: NAD 83 UTM Zone 9

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7. SAMPLING

7.1 SAMPLING METHOD AND APPROACH

See Sections 6.1 and 6.2 for details of on-site sampling method. After sample collection, sample bags were stored by UTM personnel until they were delivered to the ACME Prep Lab in Smithers, BC. Richard Beck saw the samples at ACME and filled out all the appropriate paperwork.

7.2 SAMPLE PREPARATION, ANALYSES, AND SECURITY

ACME dried all of the soil samples at 60C and then dry sieved 100g of each sample to -80 mesh. Aqua Regia digestion and ICP-MS analysis was requested, along with appropriate tests for overlimits. ACME crushed, split and pulverized all of the rock samples to 250g rock to 200 mesh. Aqua Regis digestion ICP-MS analysis was requested as well as 4-acid digestion ICP-ES finish, along with the appropriate tests for overlimits.

Lab methodology is described in Appendix II.

7.3 DATA VERIFICATION

No standards or blanks were submitted although the labs run their own tests regularly.

7.4 RESULTS

All assay results may be found in Appendix I.

8. INTERPRETATION AND CONCLUSIONS

Initial preview of the historical data, Minfiles, assessment reports, Minister of Mines Annual Reports and geophysical IP survey data, all suggested significant potential for the Stock Property. Visually the property is a moderately flat, rolling hill collection of easterly dipping andesites, rhyolitic tuffs and banded siliceous volcanics intruded by local mafic dikes. Within these andesites, rhyolites and banded volcanics many outcrop exposures returned significant assay results for copper and many of the geochemical soil samples taken across the same rock assemblages within the same area of exploration returned noteworthy assay results for copper, gold, silver, lead, molybdenum and zinc.

8.1 SOILS

The 2012 geochemical soil sampling program has outlined an extensive mineralized corridor as observed in the geochemical soil maps in Appendix III. The geochemical soil maps illustrate north-northeast striking anomalous zones, within the southern Table showing area, that have an apparent 700m strike length and a 100-300m width. The anomalous Cu, Ag, Mo, Pb and Zn are all coincident along strike and examination of the local geology and assumed faults suggests the mineralization is contained within the Table showing Banded Siliceous Volcanics and somewhat controlled by structure.

Anomalous zones are also apparent and interpreted in the northern portion of the soil grid. It is interpreted that the stronger anomalous zones of the southern Table showing area extend an additional 500m northeast. One of the notable areas in the northern portion of the soil grid that exhibits high anomalous assay results is the area directly over top of the Stock showing; however, due to steeper slopes and time constraints this was an area of limited coverage. Continued soil sampling coverage is strongly recommended.

The Cu-in-soil, Au-in-soil, and Ag-in-soil anomalies are concluded to have been derived from within the banded siliceous volcanics, however, the property is host to regionally mapped underlain Late Cretaceous intrusives (Figure 4); the same intrusives that are mineralized in the Serb deposit to the Southwest and the Davidson Molybdenum deposit to the northeast.

8.2 ROCKS

The results from the rock samples are significant in that the samples showed elevated anomalous copper and coincident anomalous silver and gold. These values are consistent with many of the historical findings of the early 1900's.

In particular, sample # 24, 28-30 and 32 all exhibited elevated copper values; 0.24%, 0.23%, 0.26%, 0.62% and 0.98% respectively. These sample sites are within the Banded Siliceous Volcanics of the southern table showing area and are coincident with the anomalous geochemical soil samples of the same area. Samples # 41-46 were taken from the Stock showing area and showed high grade elevated Cu% as well as elevated Ag. Samples at the stock showing were taken in a "+" sign pattern to best ascertain the possible distribution of copper mineralization across the showing. Samples # 41-46 returned assay values of copper 3.77% Cu, 1.51% Cu, 4.59% Cu, 5.16% Cu, 4.09% Cu and 3.71% Cu respectively.

Of note, regarding the two layers of geological data, is the coincident relationship between the high assay values for Cu-in-soil in the Stock showing area and the very high assay values for the associated rock samples. The values in both soil and in rock remain open in to the west. Strongly coincident Cu-in-soil and rock sample Cu% are numerous in the southern Table showing area and as example, soil sample #2006 assayed for Cu, 2040 ppm (0.20% equivalent), soil sample # 2005 assayed for Cu 114.2 ppm (0.01% equivalent) while the three rock samples from the same location, sample #28-30 assayed 0.23% Cu, 0.26% Cu and 0.62% Cu respectively. Refer to Geochemical maps in Appendix III for contoured soil imagery and Figure 5, sample location map, for rock sample/soil sample location.

Upon reviewing the 2012 collected data, analysis and reading of the historical assessment reports and Annual Minister of Mines Reports, interpretation of historical geophysical imagery and geological and geochemical maps, it is concluded that the compilation of data suggests a much larger picture of copper and silver mineralization than what has been known or interpreted in the past. The 2012 data confirms this larger picture interpretation.

The Total Field and the 1st Vertical Derivative images of the regional geophysical survey reported in Mapplace by the BCGS best illustrates the coincident nature of the zones of anomalous copper with the zones of interpreted structural offsetting and faulting and preferred magnetic lows. These zones of magnetic lows seem to go hand in hand with the alteration present around the areas of mineralization and lack of magnetite within the rock. Magnetite is abundantly present in the non-altered purple, lithic Telkwa andesite.

Historical exploration (geochemical, geological and geophysical) has been short, localized and successful. In the 1960's to 1970's the area of the Stock and Table showings has been shown to contain significant amounts of copper mineralization, elevated gold values and healthy silver values, but each exploration year has always left the area of discovery open in all directions. With the addition of the 2012 exploration coupled with historical data, a much larger mineralized corridor picture is developing; a picture that can easily suggest that the copper mineralization with its associated gold and silver extends as far as 800 – 1000 meters in all directions, from Leach Mountain to the west and both south and east of the Table Showing where the soil anomalies remain open. A complete geologically focused exploration program is strongly recommended to follow up the 2012 high grade assay results.

9. RECOMMENDATIONS

The results of the 2012 program were considerable and warrant continued work on the property and the following work is suggested:

- Additional staking is recommended to cover the areas where the magnetic lows and zones of alteration coincide (as intimated above in Interpretations and Conclusions)
- Continued soil sampling across the Stock and Table Minfile showing areas expanding South, West and East
- Complete regional mapping of the Stock Property claims
- Complete detailed mapping of the localized Stock and Table showings area
- Infill soil sampling of the 2012 soil grid
- Sampling, prospecting and mapping of the Leach Mountain area to the west of and along strike with the Stock Minfile showing
- Airborne geophysical survey over the Stock Property and including any new staked areas

An estimated \$500,000-\$800,000 exploration program is recommended for the Stock Property.

10. Statement of Costs

Exploration Work type	Comment	Days			Totals
Personnel (Name)* / Position	Field Days (list actual days)	Days	Rate	Subtotal*	
Richard Beck	Sept 30 - Oct 3rd	4	\$700.00	\$2,800.00	
Steve Oxtoby	Sept 30 - Oct 3rd	4	\$450.00	\$1,800.00	
Thomas Oxtoby	Sept 30 - Oct 3rd	4	\$450.00	\$1,800.00	
Chris King	Sept 30 - Oct 3rd	4	\$450.00	\$1,800.00	
				\$8,200.00	\$8,200.00
Office Studies	List Personnel (note - Office only, do not include field days)				
Pre field Prep		0.0	\$550.00	\$0.00	
GIS		0.4	\$600.00	\$240.00	
Expediting		0.0	\$550.00	\$0.00	
Logistics		0.0	\$550.00	\$0.00	
Report preparation		1.4	\$550.00	\$770.00	
Report preparation		0.0	\$550.00	\$0.00	
Other (specify)					
				\$1,010.00	\$1,010.00
Airborne Exploration Surveys	Line Kilometres / Enter total invoiced amount				
Aeromagnetics			\$0.00	\$0.00	
Radiometrics			\$0.00	\$0.00	
Electromagnetics			\$0.00	\$0.00	
Gravity			\$0.00	\$0.00	
Digital terrain modelling			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$0.00	\$0.00
Remote Sensing	Area in Hectares / Enter total invoiced amount or list personnel				
Aerial photography			\$0.00	\$0.00	
LANDSAT			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$0.00	\$0.00
Ground Exploration Surveys	Area in Hectares/List Personnel				
Geological mapping					
Regional					<i>note: expenditures here</i>
Reconnaissance					<i>should be captured in Personnel</i>
Prospect					<i>field expenditures above</i>
Underground	Define by length and width				
Trenches	Define by length and width			\$0.00	\$0.00
Ground geophysics	Line Kilometres / Enter total amount invoiced list personnel				
Radiometrics					
Magnetics					
Gravity					
Digital terrain modelling					
Electromagnetics					<i>note: expenditures for your crew in the field</i>
SP/AP/EP					<i>should be captured above in Personnel</i>
IP					<i>field expenditures above</i>
AMT/CSAMT					
Resistivity					
Complex resistivity					
Seismic reflection					
Seismic refraction					
Well logging	Define by total length				
Geophysical interpretation					
Petrophysics					
Other (specify)					
				\$0.00	\$0.00
Geochemical Surveying	Number of Samples	No.	Rate	Subtotal	
Drill (cuttings, core, etc.)			\$0.00	\$0.00	
Stream sediment			\$0.00	\$0.00	
Soil			\$0.00	\$2,948.40	
Rock			\$0.00	\$884.00	
Water			\$0.00	\$0.00	
Biogeochemistry			\$0.00	\$0.00	
Whole rock			\$0.00	\$0.00	
Petrology			\$0.00	\$0.00	

Other (specify)			\$0.00	\$0.00	
				\$3,832.40	\$3,832.40
Drilling	No. of Holes, Size of Core and Metres	No.	Rate	Subtotal	
Diamond			\$0.00	\$0.00	
Reverse circulation (RC)			\$0.00	\$0.00	
Rotary air blast (RAB)			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$0.00	\$0.00
Other Operations	Clarify	No.	Rate	Subtotal	
Trenching			\$0.00	\$0.00	
Bulk sampling			\$0.00	\$0.00	
Underground development			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
				\$0.00	\$0.00
Reclamation	Clarify	No.	Rate	Subtotal	
After drilling			\$0.00	\$0.00	
Monitoring			\$0.00	\$0.00	
Other (specify)			\$0.00	\$0.00	
Transportation		No.	Rate	Subtotal	
Airfare			\$0.00	\$0.00	
Taxi			\$0.00	\$0.00	
truck rental		4.00	\$100.00	\$400.00	
kilometers		401.00	\$0.75	\$300.75	
ATV		4.00	\$150.00	\$600.00	
fuel			\$0.00	\$0.00	
Helicopter (hours)			\$0.00	\$0.00	
Fuel (litres/hour)			\$0.00	\$0.00	
Other					
				\$1,300.75	\$1,300.75
Accommodation & Food	Rates per day				
Hotel	Actual Cost			\$ -	
Camp	Room and Board Day rate	16.00	\$65.00	\$1,040.00	
Camp Supplies					
Samp Fuel	Propane				
				\$1,040.00	\$1,040.00
Miscellaneous					
Standards				0	
Expenses Markup			\$0.00	\$2,344.22	
				\$2,344.22	\$2,344.22
Equipment Rentals					
Prospecting Kit	2 kits - 1 soil kit and 1 geo kit	7.00	\$35.00	\$245.00	
Field Gear (Specify)			\$0.00	\$0.00	
Other (Specify)					
				\$245.00	\$245.00
Freight, rock samples					
Assay			\$0.00	\$0.00	
				\$0.00	\$0.00
TOTAL Expenditures					\$17,972.37

11. REFERENCES

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- Desjardins, P.J., Arksey, R.L. and MacIntyre, D.G. (1991). Geology of the Lamprey Creek Map-Sheet (93L/3), in Geological Fieldwork 1989, BC Ministry of Energy, Mines and Petroleum Resources Paper 1990-1, pp.111-119.
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- Holland, S.S. (1976). Landforms of BritishColumbia, a physiographic outline. British Columbia Department of Mines and Petroleum Resources. Bulletin 48, 138p.
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12. STATEMENT OF QUALIFICATIONS

APPENDIX I: ASSAY CERTIFICATES



1020 Cordova St. East Vancouver BC V6A 4A3 Canada

Acme Analytical Laboratories (Vancouver) Ltd.

www.acmelab.com

Client: UTM Exploration Services Ltd.

104-1165 Main Street
Box 5037
Smithers BC V0J 2N0 CANADA

Submitted By: Richard Beck
Receiving Lab: Canada-Smithers
Received: October 05, 2012
Report Date: October 29, 2012
Page: 1 of 2

CERTIFICATE OF ANALYSIS

SMI12000446.1

CLIENT JOB INFORMATION

Project: Stock
Shipment ID:
P.O. Number 39
Number of Samples: 25

SAMPLE DISPOSAL

RTRN-PLP Return
PICKUP-RJT Client to Pickup Rejects

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: UTM Exploration Services Ltd.
104-1165 Main Street
Box 5037
Smithers BC V0J 2N0
CANADA

CC:

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Table with 6 columns: Method Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Rows include R200-250, 1DX3, and 7TD.

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.



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

www.acmelab.com

Client: **UTM Exploration Services Ltd.**
 104-1165 Main Street
 Box 5037
 Smithers BC V0J 2N0 CANADA

Project: Stock
 Report Date: October 29, 2012

Page: 2 of 2

Part: 1 of 1

CERTIFICATE OF ANALYSIS

SMI12000446.1

Method	WGHT	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
G1-SMI	Prep Blank	<0.01	0.1	4.1	14.2	53	<0.1	4.6	4.7	600	1.96	<0.5	1.9	5.4	54	<0.1	<0.1	0.2	37	0.51	0.072
G1-SMI	Prep Blank	<0.01	<0.1	2.6	42.8	74	0.3	3.5	4.3	543	1.83	0.6	<0.5	5.2	50	0.2	<0.1	0.4	33	0.41	0.073
24	Rock	1.75	0.2	2367	13.9	43	1.2	3.5	9.7	1241	3.99	27.4	48.0	0.8	18	0.3	0.4	0.2	50	1.68	0.071
25	Rock	1.63	0.1	3.9	21.5	21	0.1	0.9	0.7	176	1.38	1.1	<0.5	1.4	2	<0.1	<0.1	0.2	6	0.01	0.013
26	Rock	2.07	0.1	36.2	4.1	329	<0.1	23.9	35.4	3805	6.23	2.7	1.7	0.5	13	<0.1	<0.1	<0.1	190	0.78	0.085
27	Rock	1.73	0.2	22.3	6.0	365	<0.1	24.5	34.3	3462	6.18	9.4	0.6	0.5	11	1.3	0.1	<0.1	212	1.74	0.073
28	Rock	1.76	0.3	2335	9.0	43	8.1	3.4	9.0	777	3.63	4.2	21.7	1.3	6	0.2	0.2	<0.1	70	0.39	0.056
29	Rock	2.20	0.2	2617	6.7	18	4.8	0.8	1.6	275	1.46	3.0	11.2	1.2	3	<0.1	0.1	0.1	8	0.05	0.017
30	Rock	1.43	0.2	6163	4.9	33	13.7	1.5	2.4	264	1.60	44.1	43.0	1.4	2	<0.1	1.5	0.2	24	0.03	0.019
31	Rock	1.93	0.2	39.8	5.6	45	0.1	1.1	3.7	774	1.96	5.3	<0.5	1.1	2	<0.1	0.1	<0.1	35	0.04	0.012
32	Rock	1.86	0.2	9790	3.1	82	14.6	5.8	7.0	1060	2.45	3.6	3.4	1.9	6	0.5	<0.1	<0.1	38	0.24	0.022
33	Rock	1.49	0.4	6.8	7.9	60	<0.1	1.9	2.1	437	1.71	3.8	<0.5	0.9	4	0.5	0.2	<0.1	19	0.14	0.016
34	Rock	2.16	0.2	24.1	4.2	35	<0.1	2.0	2.8	443	2.71	5.1	<0.5	0.8	3	<0.1	0.4	<0.1	56	0.03	0.033
35	Rock	2.00	<0.1	2.0	4.0	12	<0.1	1.2	0.8	93	1.20	1.4	<0.5	1.0	2	0.2	0.1	<0.1	15	<0.01	0.011
36	Rock	1.70	0.1	4.9	3.7	21	<0.1	2.3	2.9	840	1.73	1.7	<0.5	0.8	2	0.2	0.1	0.2	15	0.01	0.016
37	Rock	1.52	<0.1	1.3	3.2	29	<0.1	1.3	2.9	145	1.73	7.5	<0.5	1.1	4	<0.1	0.3	<0.1	21	0.04	0.037
38	Rock	1.55	<0.1	2.3	1.7	15	<0.1	1.0	1.5	100	1.66	7.0	<0.5	0.9	3	<0.1	0.2	<0.1	9	<0.01	0.016
39	Rock	1.42	<0.1	9.0	6.7	68	<0.1	3.8	4.7	407	2.79	6.7	<0.5	0.5	17	<0.1	0.3	<0.1	35	<0.01	0.007
40	Rock	2.28	<0.1	3.0	7.0	84	0.1	6.4	6.0	636	2.87	3.1	<0.5	0.8	13	0.1	0.2	<0.1	49	0.01	0.013
41	Rock	2.25	0.7	>10000	32.8	44	41.8	2.3	4.1	464	4.70	519.1	12.8	1.1	2	0.9	1.9	1.0	227	0.06	0.054
42	Rock	2.23	4.0	>10000	97.5	56	7.1	2.1	9.2	635	3.57	5254	19.9	0.7	1	5.1	14.2	0.4	90	0.04	0.031
43	Rock	1.78	0.5	>10000	49.9	55	>100	3.2	6.0	809	3.26	957.2	671.5	1.1	7	0.7	4.2	2.2	131	0.76	0.020
44	Rock	2.21	0.4	>10000	29.6	386	51.1	9.6	16.9	1619	4.30	903.6	25.1	1.4	3	1.6	4.4	1.8	344	0.21	0.051
45	Rock	1.81	0.2	>10000	16.1	98	39.9	8.0	14.9	1568	8.28	15.2	28.6	1.4	4	0.7	0.7	2.3	963	0.52	0.051
46	Rock	1.92	<0.1	>10000	13.5	73	30.5	5.8	11.9	2508	3.19	193.2	6.9	0.4	38	0.7	1.6	0.1	86	6.10	0.073
47	Rock	1.71	0.2	140.2	5.3	88	0.1	5.9	12.0	1273	3.84	15.7	1.1	0.9	6	0.4	0.4	<0.1	159	0.56	0.042
49	Rock	1.81	<0.1	164.3	2.5	79	0.7	14.5	4.7	563	1.94	6.1	1.5	0.6	3	<0.1	0.3	<0.1	47	0.16	0.042



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Project: Stock
 Report Date: October 29, 2012

Page: 2 of 2

Part: 2 of 1

CERTIFICATE OF ANALYSIS

SMI12000446.1

Method	Analyte	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	7TD	7TD	
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Cu	Ag
Unit		ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	gm/t	
MDL		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.01	0.01	0.01	0.05	1	0.5	0.2	0.001	2	
G1-SMI	Prep Blank	10	11	0.62	245	0.126	<1	0.98	0.079	0.49	<0.1	<0.01	2.5	0.3	<0.05	5	<0.5	<0.2		
G1-SMI	Prep Blank	9	8	0.55	222	0.116	1	0.93	0.067	0.48	<0.1	<0.01	2.3	0.3	<0.05	5	<0.5	<0.2		
24	Rock	5	8	0.19	87	0.038	4	0.27	0.067	0.10	0.2	<0.01	12.7	<0.1	<0.05	1	1.5	<0.2		
25	Rock	3	2	<0.01	9	0.004	<1	0.17	0.083	<0.01	<0.1	<0.01	1.5	<0.1	<0.05	<1	<0.5	<0.2		
26	Rock	6	31	3.68	121	0.093	6	3.09	0.025	0.10	<0.1	<0.01	17.7	<0.1	<0.05	14	<0.5	<0.2		
27	Rock	5	36	3.14	114	0.369	19	3.05	0.036	0.04	0.2	<0.01	22.5	<0.1	<0.05	15	<0.5	<0.2		
28	Rock	18	8	0.15	32	0.032	2	0.25	0.049	0.09	0.1	<0.01	9.0	<0.1	<0.05	2	<0.5	<0.2		
29	Rock	11	2	0.02	73	0.008	1	0.22	0.068	0.10	<0.1	0.01	2.4	<0.1	<0.05	<1	<0.5	<0.2		
30	Rock	10	6	0.02	63	0.004	<1	0.24	0.080	0.09	<0.1	0.11	2.5	<0.1	<0.05	1	0.8	<0.2		
31	Rock	5	2	0.02	62	0.014	1	0.21	0.050	0.08	0.1	<0.01	3.6	<0.1	<0.05	<1	<0.5	<0.2		
32	Rock	19	4	0.07	221	0.003	2	0.30	0.045	0.14	<0.1	0.06	5.6	<0.1	<0.05	1	<0.5	<0.2		
33	Rock	12	3	0.06	27	0.018	<1	0.15	0.079	0.02	<0.1	<0.01	3.1	<0.1	<0.05	<1	<0.5	<0.2		
34	Rock	3	8	0.03	45	0.030	2	0.30	0.077	0.07	<0.1	<0.01	7.3	<0.1	<0.05	<1	<0.5	<0.2		
35	Rock	11	2	<0.01	30	0.002	2	0.24	0.043	0.07	<0.1	<0.01	1.7	<0.1	<0.05	<1	<0.5	<0.2		
36	Rock	13	4	0.02	89	0.003	2	0.31	0.062	0.07	<0.1	<0.01	4.5	<0.1	<0.05	1	<0.5	<0.2		
37	Rock	9	4	0.03	49	0.005	5	0.49	0.027	0.17	<0.1	0.02	2.9	<0.1	<0.05	2	<0.5	<0.2		
38	Rock	10	4	<0.01	21	0.001	2	0.35	0.059	0.04	<0.1	<0.01	2.0	<0.1	<0.05	<1	<0.5	<0.2		
39	Rock	2	5	0.02	61	0.003	2	0.48	0.008	0.07	<0.1	<0.01	3.8	0.1	<0.05	2	<0.5	<0.2		
40	Rock	2	5	0.03	54	0.012	1	0.38	0.054	0.09	<0.1	0.04	4.8	0.7	<0.05	2	<0.5	<0.2		
41	Rock	7	7	0.02	13	0.003	1	0.24	0.087	0.02	<0.1	0.23	9.6	<0.1	0.32	<1	3.2	1.5	3.771	44
42	Rock	8	3	0.02	10	0.001	<1	0.29	0.067	<0.01	<0.1	19.04	8.1	0.1	<0.05	<1	1.0	0.5	1.514	8
43	Rock	27	2	0.35	25	0.005	<1	0.18	0.070	<0.01	<0.1	0.11	8.4	0.1	0.68	1	3.3	769.7	4.594	>300
44	Rock	10	8	0.09	33	0.010	<1	0.33	0.081	0.01	0.2	0.21	12.8	<0.1	0.62	2	2.3	3.7	5.162	58
45	Rock	12	8	0.18	60	0.027	1	0.39	0.047	0.05	0.2	0.07	14.4	<0.1	0.43	2	4.5	8.8	4.086	41
46	Rock	7	2	2.49	53	0.004	<1	0.22	0.048	<0.01	<0.1	0.57	7.8	<0.1	0.65	1	1.6	<0.2	3.711	31
47	Rock	9	7	0.24	31	0.020	<1	0.30	0.053	0.03	<0.1	0.06	13.5	<0.1	<0.05	2	<0.5	<0.2		
49	Rock	11	7	0.05	28	0.016	<1	0.34	0.078	0.05	<0.1	0.04	10.2	<0.1	<0.05	1	<0.5	0.4		



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QUALITY CONTROL REPORT

SMI12000446.1

Method	WGHT	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
Pulp Duplicates																					
REP G1-SMI	QC	<0.1	3.9	13.3	53	<0.1	4.4	4.7	587	1.97	<0.5	0.6	5.1	52	<0.1	<0.1	0.2	38	0.51	0.074	
49	Rock	1.81	<0.1	164.3	2.5	79	0.7	14.5	4.7	563	1.94	6.1	1.5	0.6	3	<0.1	0.3	<0.1	47	0.16	0.042
REP 49	QC		0.1	128.8	2.4	74	0.2	14.2	4.5	575	1.99	5.9	<0.5	0.6	3	<0.1	0.3	<0.1	48	0.15	0.040
Reference Materials																					
STD CDN-ME-9	Standard																				
STD CDN-ME-14	Standard																				
STD DS9	Standard		13.4	110.1	126.2	314	1.9	42.1	7.8	579	2.34	24.3	121.0	6.7	70	2.3	5.0	6.5	39	0.74	0.080
STD DS9 Expected			12.84	108	126	317	1.83	40.3	7.6	575	2.33	25.5	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819
STD CDN-ME-9 Expected																					
STD CDN-ME-14 Expected																					
BLK	Blank		<0.1	1.2	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank																				
Prep Wash																					
G1-SMI	Prep Blank	<0.01																			
G1-SMI	Prep Blank	<0.01	<0.1	2.6	42.8	74	0.3	3.5	4.3	543	1.83	0.6	<0.5	5.2	50	0.2	<0.1	0.4	33	0.41	0.073
G1-SMI	Prep Blank		0.1	4.1	14.2	53	<0.1	4.6	4.7	600	1.96	<0.5	1.9	5.4	54	<0.1	<0.1	0.2	37	0.51	0.072



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QUALITY CONTROL REPORT

SMI12000446.1

Method	Analyte	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	1DX30	7TD	7TD	
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Cu	Ag
Unit		ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	gm/t	
MDL		1	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	0.001	2	
Pulp Duplicates																				
REP G1-SMI	QC	10	11	0.61	233	0.126	1	0.98	0.078	0.49	<0.1	<0.01	2.6	0.4	<0.05	5	<0.5	<0.2		
49	Rock	11	7	0.05	28	0.016	<1	0.34	0.078	0.05	<0.1	0.04	10.2	<0.1	<0.05	1	<0.5	0.4		
REP 49	QC	10	7	0.06	27	0.016	<1	0.34	0.080	0.05	<0.1	0.03	10.4	<0.1	<0.05	1	<0.5	<0.2		
Reference Materials																				
STD CDN-ME-9	Standard																		0.662	4
STD CDN-ME-14	Standard																		1.296	47
STD DS9	Standard	14	125	0.63	293	0.119	3	0.99	0.083	0.41	3.1	0.20	2.5	5.7	0.16	5	5.3	5.3		
STD DS9 Expected		13.3	121	0.6165	295	0.1108		0.9577	0.0853	0.395	2.89	0.2	2.5	5.3	0.1615	4.59	5.2	5.02		
STD CDN-ME-9 Expected																			0.654	
STD CDN-ME-14 Expected																			1.221	45
BLK	Blank	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank																		<0.001	<2
Prep Wash																				
G1-SMI	Prep Blank																			
G1-SMI	Prep Blank	9	8	0.55	222	0.116	1	0.93	0.067	0.48	<0.1	<0.01	2.3	0.3	<0.05	5	<0.5	<0.2		
G1-SMI	Prep Blank	10	11	0.62	245	0.126	<1	0.98	0.079	0.49	<0.1	<0.01	2.5	0.3	<0.05	5	<0.5	<0.2		



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Submitted By: Richard Beck
Receiving Lab: Canada-Smithers
Received: October 05, 2012
Report Date: October 19, 2012
Page: 1 of 7

CERTIFICATE OF ANALYSIS

SMI12000447.1

CLIENT JOB INFORMATION

Project: Stock
Shipment ID:
P.O. Number 39
Number of Samples: 162

SAMPLE DISPOSAL

RTRN-PLP Return
PICKUP-RJT Client to Pickup Rejects

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: UTM Exploration Services Ltd.
104-1165 Main Street
Box 5037
Smithers BC V0J 2N0
CANADA

CC:

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Table with 6 columns: Method Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Rows include Dry at 60C, SS80, and 1DX1.

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.



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CERTIFICATE OF ANALYSIS

SMI12000447.1

Method	Analyte	Unit	MDL	1DX Mo	1DX Cu	1DX Pb	1DX Zn	1DX Ag	1DX Ni	1DX Co	1DX Mn	1DX Fe	1DX As	1DX Au	1DX Th	1DX Sr	1DX Cd	1DX Sb	1DX Bi	1DX V	1DX Ca	1DX P	1DX La
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	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
2001	Soil			1.0	21.1	7.5	71	0.2	13.2	8.5	637	4.01	20.1	1.1	0.2	14	0.2	0.3	0.1	62	0.05	0.047	5
2002	Soil			0.8	56.7	6.7	82	0.1	15.9	9.1	679	3.45	16.6	2.1	0.2	22	0.1	0.3	0.1	58	0.13	0.054	8
2003	Soil			0.9	28.0	6.3	67	0.1	12.8	7.8	505	3.40	16.3	1.2	<0.1	13	0.1	0.3	0.1	58	0.05	0.054	5
2004	Soil			0.7	20.9	7.4	72	<0.1	17.6	11.6	702	3.15	13.7	4.1	0.1	10	0.2	0.3	0.1	55	0.08	0.056	4
2005	Soil			0.8	114.2	7.4	170	0.4	22.8	11.8	1149	3.27	14.7	1.3	0.2	28	0.8	0.4	<0.1	60	0.33	0.093	25
2006	Soil			0.5	2040	5.9	73	1.2	18.1	8.9	559	3.09	17.0	3.4	0.1	17	0.4	0.4	0.1	54	0.20	0.055	9
2007	Soil			0.4	19.0	6.1	97	0.1	15.6	8.7	402	2.64	12.0	0.5	<0.1	23	0.1	0.2	<0.1	54	0.09	0.075	5
2008	Soil			0.7	23.6	6.2	74	0.1	16.3	8.6	888	3.28	14.2	<0.5	<0.1	9	0.1	0.3	0.1	61	0.05	0.069	5
2009	Soil			0.7	19.6	6.0	85	0.1	15.3	8.5	592	3.23	13.7	1.0	<0.1	16	<0.1	0.1	0.1	58	0.06	0.123	5
2010	Soil			0.4	56.4	7.6	99	<0.1	20.7	11.9	1030	3.41	12.3	0.7	0.5	29	0.2	0.3	<0.1	61	0.21	0.055	9
2011	Soil			0.6	20.8	7.3	74	<0.1	17.6	11.1	825	3.29	14.2	<0.5	0.5	28	<0.1	0.2	0.1	59	0.31	0.064	13
2012	Soil			0.7	21.2	6.7	64	0.1	16.7	8.5	550	3.10	17.0	0.7	<0.1	12	<0.1	0.3	0.1	58	0.09	0.085	6
2013	Soil			0.6	14.4	6.4	81	<0.1	13.8	7.0	489	3.12	9.7	0.6	<0.1	9	0.1	0.2	0.1	52	0.05	0.089	4
2014	Soil			0.7	15.4	6.0	61	<0.1	13.3	6.7	378	2.86	10.1	0.8	<0.1	6	<0.1	0.3	<0.1	48	0.05	0.079	4
2015	Soil			0.8	23.9	6.6	73	0.1	13.2	7.7	593	3.32	14.9	1.4	0.1	14	0.1	0.3	<0.1	53	0.07	0.086	5
2016	Soil			1.0	13.0	5.6	56	0.1	9.2	5.1	345	2.85	11.1	1.3	<0.1	10	<0.1	0.3	<0.1	47	0.06	0.105	4
2017	Soil			0.9	15.6	6.1	63	0.1	6.9	5.1	891	2.91	9.8	46.7	<0.1	16	0.1	0.2	0.1	48	0.04	0.099	5
2018	Soil			0.3	12.1	10.3	74	0.3	13.4	9.9	524	4.08	26.2	0.8	0.2	27	0.1	0.2	0.1	65	0.17	0.103	12
2019	Soil			0.9	18.4	6.3	60	<0.1	12.1	8.5	636	2.87	17.4	3.0	<0.1	12	0.1	0.5	<0.1	46	0.08	0.093	4
2020	Soil			0.6	14.7	5.6	73	0.1	12.8	7.5	535	3.11	22.7	0.9	<0.1	24	<0.1	0.2	<0.1	54	0.09	0.073	7
2021	Soil			0.3	58.2	6.0	84	0.1	15.4	8.3	637	2.81	9.0	0.7	0.2	34	<0.1	0.1	<0.1	54	0.21	0.038	7
2022	Soil			0.5	45.3	4.4	86	<0.1	29.8	17.9	225	2.42	7.3	1.3	2.0	61	0.2	0.2	<0.1	85	0.74	0.054	9
2023	Soil			0.3	91.5	6.0	76	0.2	12.2	6.3	382	2.29	9.9	1.9	<0.1	10	<0.1	<0.1	0.1	55	0.10	0.102	9
2024	Soil			0.9	51.2	8.3	106	0.1	14.6	8.9	949	3.99	12.8	<0.5	0.2	6	0.3	0.2	0.2	61	0.04	0.183	9
2025	Soil			0.9	23.6	10.3	118	0.1	17.5	19.6	1839	4.03	16.8	<0.5	0.3	22	0.2	0.2	0.1	91	0.20	0.085	9
2026	Soil			0.6	24.9	5.5	59	0.2	8.2	4.9	341	2.42	9.7	<0.5	<0.1	15	0.2	0.2	<0.1	47	0.05	0.073	6
2027	Soil			0.7	15.9	8.3	63	0.2	8.9	5.8	301	2.53	9.9	<0.5	<0.1	10	0.2	0.2	0.1	44	0.04	0.085	5
2028	Soil			0.7	19.8	5.8	72	0.2	14.7	8.3	468	3.07	12.2	<0.5	<0.1	8	0.1	0.4	<0.1	47	0.06	0.095	5
2029	Soil			0.6	22.4	5.8	69	0.2	13.8	7.1	375	2.70	8.9	1.1	<0.1	7	0.1	0.2	<0.1	47	0.05	0.074	5
2030	Soil			0.8	46.6	6.1	82	0.3	11.9	6.9	535	2.97	13.1	0.9	<0.1	8	0.1	0.3	0.1	50	0.04	0.123	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.



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CERTIFICATE OF ANALYSIS

SMI12000447.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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	
MDL		1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
2001	Soil	21	0.54	74	0.026	<20	2.33	0.006	0.05	<0.1	0.05	2.9	<0.1	0.06	8	<0.5	<0.2
2002	Soil	21	0.58	89	0.028	<20	1.80	0.011	0.05	<0.1	0.04	3.4	<0.1	<0.05	6	<0.5	<0.2
2003	Soil	20	0.47	75	0.019	<20	2.69	0.006	0.04	<0.1	0.08	2.3	<0.1	0.09	7	<0.5	<0.2
2004	Soil	22	0.51	78	0.019	<20	2.22	0.006	0.04	<0.1	0.07	2.4	<0.1	<0.05	5	<0.5	<0.2
2005	Soil	31	0.63	230	0.014	<20	2.04	0.010	0.08	<0.1	0.04	14.6	<0.1	0.09	5	0.5	<0.2
2006	Soil	24	0.57	105	0.017	<20	1.71	0.007	0.05	<0.1	0.05	4.5	<0.1	0.06	5	<0.5	<0.2
2007	Soil	23	0.52	108	0.020	<20	2.56	0.007	0.06	<0.1	0.08	2.5	<0.1	0.15	7	0.8	<0.2
2008	Soil	25	0.49	85	0.014	<20	2.17	0.006	0.04	<0.1	0.07	2.2	<0.1	<0.05	7	<0.5	<0.2
2009	Soil	25	0.51	135	0.007	<20	2.90	0.005	0.06	<0.1	0.04	2.1	0.1	0.07	8	0.5	<0.2
2010	Soil	26	0.65	131	0.021	<20	2.01	0.010	0.06	<0.1	0.04	7.8	<0.1	<0.05	6	0.5	<0.2
2011	Soil	24	0.60	215	0.010	<20	1.78	0.010	0.05	<0.1	0.03	6.1	0.1	<0.05	5	<0.5	<0.2
2012	Soil	23	0.52	82	0.016	<20	2.49	0.007	0.04	<0.1	0.07	2.3	0.1	0.11	6	<0.5	<0.2
2013	Soil	23	0.47	67	0.011	<20	2.27	0.005	0.06	<0.1	0.04	1.1	<0.1	0.17	7	<0.5	<0.2
2014	Soil	20	0.40	57	0.009	<20	2.02	0.005	0.03	<0.1	0.07	0.9	<0.1	0.05	5	<0.5	<0.2
2015	Soil	22	0.44	78	0.015	<20	2.44	0.005	0.04	<0.1	0.08	1.8	<0.1	0.09	6	0.6	<0.2
2016	Soil	18	0.35	59	0.016	<20	1.94	0.005	0.03	<0.1	0.06	1.4	<0.1	0.06	6	<0.5	<0.2
2017	Soil	16	0.31	68	0.017	<20	1.93	0.005	0.06	<0.1	0.05	1.0	<0.1	0.11	8	<0.5	<0.2
2018	Soil	24	0.57	212	0.007	<20	2.72	0.012	0.06	<0.1	0.08	4.6	0.2	0.08	8	0.5	<0.2
2019	Soil	15	0.39	47	0.017	<20	1.74	0.005	0.03	<0.1	0.06	1.5	<0.1	<0.05	4	<0.5	<0.2
2020	Soil	20	0.50	94	0.016	<20	2.55	0.010	0.05	<0.1	0.05	2.1	<0.1	0.07	6	<0.5	<0.2
2021	Soil	22	0.60	166	0.016	<20	1.76	0.014	0.05	<0.1	0.06	5.8	0.2	0.08	6	<0.5	<0.2
2022	Soil	27	0.89	247	0.061	<20	2.48	0.079	0.04	<0.1	0.04	8.8	<0.1	<0.05	6	<0.5	<0.2
2023	Soil	23	0.40	119	0.007	<20	2.63	0.009	0.04	<0.1	0.09	2.5	<0.1	0.16	7	0.5	<0.2
2024	Soil	22	0.53	78	0.009	<20	3.04	0.008	0.09	0.1	0.04	2.5	<0.1	0.09	11	0.8	<0.2
2025	Soil	26	0.68	170	0.014	<20	2.30	0.011	0.07	<0.1	0.04	6.5	0.1	<0.05	9	0.7	<0.2
2026	Soil	15	0.31	60	0.011	<20	2.32	0.007	0.03	<0.1	0.07	1.1	<0.1	0.07	6	<0.5	<0.2
2027	Soil	14	0.32	54	0.008	<20	2.40	0.006	0.03	0.1	0.06	0.9	<0.1	0.13	7	<0.5	<0.2
2028	Soil	22	0.44	67	0.010	<20	2.48	0.006	0.04	<0.1	0.07	1.4	<0.1	0.13	6	0.6	<0.2
2029	Soil	19	0.41	68	0.008	<20	2.09	0.005	0.04	<0.1	0.05	1.3	<0.1	<0.05	6	<0.5	<0.2
2030	Soil	19	0.41	64	0.008	<20	2.73	0.005	0.05	<0.1	0.07	1.0	<0.1	0.06	7	0.8	<0.2

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Project: Stock
Report Date: October 19, 2012

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CERTIFICATE OF ANALYSIS

SMI12000447.1

Method	Analyte	Unit	MDL	1DX Mo	1DX Cu	1DX Pb	1DX Zn	1DX Ag	1DX Ni	1DX Co	1DX Mn	1DX Fe	1DX As	1DX Au	1DX Th	1DX Sr	1DX Cd	1DX Sb	1DX Bi	1DX V	1DX Ca	1DX P	1DX La
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	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
2031	Soil			0.6	35.1	7.1	115	0.2	19.0	12.1	1095	4.37	16.6	1.3	0.6	23	0.2	0.2	<0.1	112	0.19	0.078	9
2032	Soil			0.7	16.4	6.6	77	0.1	14.1	7.2	401	2.97	13.6	<0.5	<0.1	11	0.1	0.4	<0.1	51	0.14	0.068	4
2033	Soil			1.5	31.0	13.4	132	0.3	22.3	12.1	1175	3.88	22.5	1.1	0.4	24	0.1	0.3	0.1	78	0.38	0.178	25
2034	Soil			0.5	5.1	4.4	20	0.2	3.3	1.7	82	0.96	4.7	0.7	<0.1	9	<0.1	0.1	<0.1	22	0.03	0.091	3
2035	Soil			0.5	31.0	7.1	63	0.1	17.6	8.2	372	3.02	11.1	2.6	0.2	12	<0.1	0.4	<0.1	51	0.09	0.047	13
2036	Soil			1.0	17.9	8.4	72	0.2	13.5	7.9	510	3.15	14.9	<0.5	0.1	10	0.2	0.7	<0.1	52	0.09	0.081	5
2037	Soil			0.8	20.0	7.0	57	0.2	12.5	7.5	702	3.26	13.8	3.6	<0.1	7	0.2	0.5	<0.1	51	0.05	0.070	4
2038	Soil			0.7	13.3	6.4	52	0.2	9.6	5.7	1095	2.75	10.1	<0.5	<0.1	5	0.1	0.3	0.1	49	0.04	0.100	4
2039	Soil			1.0	19.2	6.5	73	0.1	13.1	7.1	470	3.71	15.3	1.0	<0.1	6	0.2	0.5	<0.1	61	0.06	0.088	3
2040	Soil			0.6	20.4	6.8	100	0.1	13.3	8.6	827	3.40	14.4	<0.5	<0.1	10	<0.1	0.2	0.1	64	0.08	0.117	5
2041	Soil			0.7	11.4	5.3	75	0.2	6.5	4.4	630	2.73	12.0	<0.5	<0.1	9	0.2	0.2	0.1	47	0.05	0.109	4
2042	Soil			0.7	16.5	6.8	113	0.2	17.2	8.8	935	3.18	13.3	11.1	0.7	23	<0.1	0.2	<0.1	65	0.37	0.104	18
2043	Soil			0.6	18.8	5.3	117	0.2	9.4	7.2	581	3.49	15.8	1.2	0.2	14	<0.1	0.2	<0.1	60	0.06	0.089	4
2044	Soil			0.8	16.5	4.7	71	0.1	10.6	7.0	466	3.16	15.4	<0.5	<0.1	13	0.1	0.2	<0.1	51	0.06	0.100	4
2045	Soil			0.6	16.6	6.0	85	0.3	10.9	9.1	795	3.59	18.6	<0.5	0.2	22	<0.1	0.3	0.1	67	0.09	0.070	5
2046	Soil			0.5	4.7	7.8	62	0.2	4.4	2.6	300	1.97	6.7	<0.5	<0.1	18	<0.1	0.2	0.2	38	0.15	0.056	4
2047	Soil			0.4	13.1	6.2	93	0.3	13.5	7.9	624	3.08	12.4	<0.5	0.2	37	0.1	0.2	0.1	57	0.41	0.106	10
2048	Soil			0.4	6.3	6.3	54	<0.1	6.1	4.1	347	2.65	12.5	0.8	<0.1	17	<0.1	0.2	<0.1	45	0.09	0.059	4
2049	Soil			0.5	10.7	6.2	59	0.1	9.0	5.8	396	2.70	13.0	<0.5	<0.1	9	<0.1	0.3	<0.1	47	0.04	0.064	5
2050	Soil			0.8	15.5	6.9	104	<0.1	13.0	8.5	1035	3.25	19.1	<0.5	<0.1	9	0.1	0.3	0.1	57	0.08	0.100	6
2051	Soil			0.8	17.3	6.8	69	<0.1	15.4	8.7	550	3.34	18.0	<0.5	<0.1	9	0.1	0.4	0.1	57	0.07	0.076	5
2052	Soil			1.0	13.5	6.3	56	<0.1	13.7	6.4	364	3.01	12.6	0.6	<0.1	8	0.1	0.4	<0.1	52	0.05	0.064	4
2053	Soil			0.3	14.7	5.2	51	<0.1	16.4	6.8	415	2.74	10.6	<0.5	0.3	12	<0.1	0.2	<0.1	48	0.09	0.034	6
2054	Soil			0.7	20.7	6.7	80	<0.1	15.0	9.2	613	3.51	21.0	0.9	0.3	9	0.1	0.3	<0.1	60	0.07	0.054	6
2055	Soil			0.7	15.8	6.1	55	0.2	13.9	6.7	281	3.06	10.6	1.1	<0.1	6	<0.1	0.2	0.1	47	0.05	0.075	7
2056	Soil			0.7	19.4	7.2	73	0.1	14.8	9.7	701	3.88	18.0	0.6	0.2	7	0.1	0.4	0.2	60	0.07	0.074	5
2057	Soil			0.6	15.3	6.0	74	0.2	16.3	7.5	561	3.12	13.6	0.9	<0.1	9	0.1	0.3	0.1	51	0.08	0.102	5
2058	Soil			0.6	18.1	6.1	68	0.2	8.7	5.0	378	2.52	9.7	0.6	<0.1	8	0.3	0.2	0.1	47	0.05	0.050	6
2059	Soil			0.7	19.7	5.2	69	<0.1	13.5	7.4	472	3.23	20.9	1.5	0.2	6	<0.1	0.3	<0.1	54	0.06	0.117	5
2060	Soil			0.3	14.9	6.7	50	<0.1	14.8	7.0	421	3.02	15.3	<0.5	0.3	22	<0.1	0.3	<0.1	56	0.23	0.029	10

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CERTIFICATE OF ANALYSIS

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Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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	20	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
2031	Soil	26	0.57	214	0.010	<20	2.08	0.010	0.05	<0.1	0.04	9.7	0.1	0.06	5	0.5	<0.2
2032	Soil	20	0.44	64	0.010	<20	1.61	0.006	0.03	<0.1	0.04	1.1	<0.1	0.12	5	<0.5	<0.2
2033	Soil	38	0.67	163	0.011	<20	2.46	0.011	0.08	0.1	0.06	8.8	<0.1	0.06	7	0.8	<0.2
2034	Soil	10	0.13	52	0.003	<20	1.39	0.003	0.02	<0.1	0.05	0.2	0.1	0.05	5	<0.5	<0.2
2035	Soil	22	0.51	104	0.013	<20	1.77	0.006	0.03	<0.1	0.06	4.7	<0.1	<0.05	5	<0.5	<0.2
2036	Soil	20	0.39	53	0.017	<20	1.97	0.005	0.02	<0.1	0.06	2.1	<0.1	<0.05	4	<0.5	<0.2
2037	Soil	21	0.39	53	0.013	<20	1.93	0.006	0.02	<0.1	0.09	1.6	<0.1	<0.05	5	<0.5	<0.2
2038	Soil	14	0.30	46	0.009	<20	1.63	0.005	0.03	<0.1	0.06	0.6	<0.1	<0.05	6	<0.5	<0.2
2039	Soil	25	0.42	60	0.015	<20	1.95	0.005	0.03	<0.1	0.12	1.6	<0.1	<0.05	5	<0.5	<0.2
2040	Soil	22	0.50	80	0.010	<20	2.22	0.006	0.08	<0.1	0.04	1.7	0.1	0.10	7	<0.5	<0.2
2041	Soil	14	0.24	59	0.010	<20	1.68	0.008	0.05	<0.1	0.07	0.6	<0.1	<0.05	6	<0.5	<0.2
2042	Soil	28	0.62	190	0.011	<20	2.06	0.012	0.08	<0.1	0.04	10.9	<0.1	<0.05	5	0.6	<0.2
2043	Soil	15	0.36	70	0.011	<20	2.64	0.007	0.05	<0.1	0.06	2.5	<0.1	<0.05	5	0.5	<0.2
2044	Soil	18	0.41	56	0.017	<20	2.72	0.006	0.05	0.1	0.07	1.7	<0.1	0.11	6	0.9	<0.2
2045	Soil	17	0.44	102	0.024	<20	2.86	0.008	0.06	<0.1	0.06	2.9	<0.1	<0.05	6	<0.5	<0.2
2046	Soil	11	0.22	82	0.016	<20	0.92	0.008	0.05	<0.1	0.01	0.9	<0.1	<0.05	6	<0.5	<0.2
2047	Soil	20	0.58	142	0.018	<20	1.79	0.019	0.07	<0.1	0.06	4.3	<0.1	0.07	5	<0.5	<0.2
2048	Soil	12	0.29	71	0.020	<20	1.51	0.009	0.04	<0.1	0.02	1.2	<0.1	0.05	6	<0.5	<0.2
2049	Soil	16	0.33	55	0.016	<20	2.01	0.006	0.04	<0.1	0.06	1.2	<0.1	<0.05	6	<0.5	<0.2
2050	Soil	20	0.39	77	0.010	<20	2.21	0.007	0.07	<0.1	0.04	1.2	<0.1	<0.05	6	<0.5	<0.2
2051	Soil	21	0.46	64	0.019	<20	2.61	0.008	0.04	<0.1	0.06	1.8	<0.1	0.08	7	<0.5	<0.2
2052	Soil	21	0.39	55	0.014	<20	2.49	0.006	0.03	<0.1	0.07	1.2	<0.1	<0.05	5	<0.5	<0.2
2053	Soil	21	0.50	76	0.022	<20	1.71	0.007	0.04	<0.1	0.07	4.0	<0.1	<0.05	4	<0.5	<0.2
2054	Soil	20	0.51	74	0.020	<20	2.56	0.008	0.06	<0.1	0.07	3.7	<0.1	<0.05	6	<0.5	<0.2
2055	Soil	21	0.45	81	0.010	<20	2.75	0.006	0.04	<0.1	0.07	1.7	<0.1	<0.05	6	<0.5	<0.2
2056	Soil	25	0.44	73	0.021	<20	2.79	0.007	0.05	<0.1	0.14	2.9	<0.1	<0.05	6	<0.5	<0.2
2057	Soil	20	0.45	63	0.016	<20	2.16	0.009	0.06	<0.1	0.07	1.8	<0.1	<0.05	6	0.5	<0.2
2058	Soil	16	0.28	80	0.015	<20	1.98	0.008	0.04	<0.1	0.06	1.1	<0.1	<0.05	7	<0.5	<0.2
2059	Soil	21	0.43	76	0.013	<20	3.00	0.007	0.05	<0.1	0.11	2.7	<0.1	<0.05	5	<0.5	<0.2
2060	Soil	20	0.48	157	0.021	<20	1.49	0.011	0.03	<0.1	0.02	4.8	<0.1	<0.05	5	<0.5	<0.2

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Method	Analyte	Unit	MDL	1DX Mo	1DX Cu	1DX Pb	1DX Zn	1DX Ag	1DX Ni	1DX Co	1DX Mn	1DX Fe	1DX As	1DX Au	1DX Th	1DX Sr	1DX Cd	1DX Sb	1DX Bi	1DX V	1DX Ca	1DX P	1DX La
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	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
2061	Soil			0.4	15.3	7.2	69	0.2	16.1	7.7	380	2.95	11.5	0.6	<0.1	18	<0.1	0.1	0.1	61	0.20	0.089	7
2062	Soil			0.5	12.6	4.9	69	<0.1	17.3	8.0	564	3.11	15.0	1.3	<0.1	9	<0.1	0.2	0.1	52	0.09	0.063	4
2063	Soil			0.7	17.6	5.8	61	0.2	16.8	7.8	422	2.93	13.4	1.1	0.2	9	<0.1	0.3	<0.1	49	0.08	0.071	5
2064	Soil			0.7	13.7	6.4	66	<0.1	11.5	7.7	548	3.44	24.2	0.5	<0.1	8	0.1	0.3	<0.1	57	0.06	0.061	5
2065	Soil			0.7	17.5	6.3	57	<0.1	13.3	8.9	671	2.85	22.8	1.0	0.2	13	<0.1	0.4	<0.1	51	0.11	0.070	7
2101	Soil			0.8	13.9	5.0	58	0.1	9.2	4.9	333	2.58	7.6	2.0	<0.1	18	0.2	0.3	<0.1	41	0.12	0.082	5
2102	Soil			0.6	88.9	6.0	75	0.4	12.5	9.4	572	3.10	10.9	<0.5	<0.1	26	0.1	0.2	0.1	55	0.32	0.089	7
2103	Soil			1.0	19.1	5.7	67	0.2	13.9	7.9	523	3.38	20.5	<0.5	<0.1	12	0.2	0.4	0.1	57	0.07	0.094	4
2104	Soil			0.8	16.2	6.0	50	0.2	10.3	6.3	338	2.66	11.2	<0.5	<0.1	12	0.1	0.4	0.1	45	0.05	0.048	5
2105	Soil			1.0	16.6	5.9	52	0.2	12.7	6.2	299	2.96	11.2	<0.5	<0.1	7	<0.1	0.4	<0.1	45	0.06	0.076	4
2106	Soil			0.6	16.5	6.0	62	0.2	16.7	8.7	377	3.12	15.9	<0.5	0.2	27	<0.1	0.4	<0.1	53	0.16	0.041	8
2107	Soil			0.7	13.0	4.9	35	0.1	4.1	2.3	151	1.70	8.6	<0.5	<0.1	12	0.1	0.1	0.1	34	0.04	0.079	5
2108	Soil			0.9	37.5	6.8	86	<0.1	16.3	13.1	682	4.11	38.7	2.6	0.4	25	0.2	0.4	0.1	78	0.08	0.041	8
2109	Soil			1.2	45.2	6.2	35	0.3	6.5	3.2	210	1.73	5.1	1.1	<0.1	43	0.4	0.3	0.2	30	0.06	0.103	11
2110	Soil			0.7	34.7	5.1	78	0.2	15.7	9.4	657	3.48	24.0	1.4	<0.1	33	<0.1	0.2	<0.1	75	0.29	0.078	8
2111	Soil			0.9	23.9	6.2	55	0.2	9.9	5.8	402	2.57	15.8	3.9	<0.1	14	0.2	0.2	0.2	47	0.04	0.071	5
2112	Soil			1.1	104.9	6.0	122	0.7	17.6	9.9	618	3.43	21.2	2.1	<0.1	26	0.1	0.2	0.1	64	0.13	0.084	8
2113	Soil			0.9	22.9	7.2	70	0.1	14.8	10.2	613	3.84	24.1	1.0	0.2	16	0.2	0.4	<0.1	61	0.05	0.045	6
2114	Soil			1.0	18.5	6.4	59	0.3	11.3	6.8	715	3.32	20.0	<0.5	<0.1	12	0.2	0.4	<0.1	57	0.04	0.102	4
2115	Soil			0.9	17.2	6.1	50	0.3	10.5	5.8	316	3.03	16.4	1.5	<0.1	12	0.2	0.3	0.1	48	0.05	0.058	4
2116	Soil			0.9	256.0	6.8	89	0.4	11.4	7.5	886	4.00	14.4	<0.5	<0.1	25	0.2	0.4	0.2	60	0.03	0.052	6
2117	Soil			0.7	30.9	5.6	86	0.3	11.5	7.1	755	3.78	15.7	<0.5	<0.1	14	0.1	0.2	0.1	62	0.04	0.067	7
2118	Soil			1.2	57.2	7.0	95	0.3	23.1	11.0	690	4.40	21.8	0.6	0.1	11	0.2	0.3	0.1	74	0.04	0.057	8
2119	Soil			0.8	17.8	7.6	128	0.1	10.2	6.7	922	3.44	13.5	1.3	<0.1	15	0.1	0.3	0.3	61	0.19	0.116	5
2120	Soil			0.8	8.3	6.5	34	0.1	5.3	3.2	197	2.68	12.4	1.4	<0.1	7	0.1	0.3	0.1	48	0.04	0.073	5
2121	Soil			0.3	9.4	6.9	69	<0.1	7.7	4.3	275	2.45	7.4	<0.5	<0.1	10	<0.1	0.1	<0.1	57	0.08	0.051	6
2122	Soil			0.4	11.8	6.1	63	<0.1	12.4	6.2	382	2.99	12.1	<0.5	<0.1	11	0.1	0.2	0.1	52	0.10	0.062	6
2123	Soil			0.5	9.2	4.7	45	<0.1	8.3	4.3	240	2.29	8.7	<0.5	<0.1	7	0.2	0.2	0.1	42	0.07	0.094	4
2124	Soil			0.5	17.0	6.4	84	0.1	15.8	7.5	501	3.34	11.8	1.0	<0.1	14	0.1	0.2	0.1	56	0.29	0.094	8
2125	Soil			1.0	15.3	7.9	59	0.1	10.6	5.8	386	3.43	12.8	0.7	<0.1	7	0.2	0.4	<0.1	58	0.05	0.094	4

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Project: Stock
 Report Date: October 19, 2012

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CERTIFICATE OF ANALYSIS

SMI12000447.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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	
MDL		1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
2061	Soil	24	0.59	108	0.010	<20	2.37	0.010	0.06	<0.1	0.04	2.5	0.1	<0.05	8	<0.5	<0.2
2062	Soil	23	0.56	84	0.015	<20	2.45	0.007	0.04	<0.1	0.05	2.6	0.1	0.09	6	<0.5	<0.2
2063	Soil	21	0.51	56	0.018	<20	2.09	0.006	0.04	<0.1	0.05	2.5	<0.1	0.10	5	<0.5	<0.2
2064	Soil	18	0.41	71	0.021	<20	2.30	0.007	0.04	<0.1	0.05	2.4	<0.1	<0.05	6	<0.5	<0.2
2065	Soil	18	0.41	64	0.028	<20	1.90	0.008	0.04	<0.1	0.04	3.4	<0.1	<0.05	4	<0.5	<0.2
2101	Soil	17	0.34	74	0.023	<20	3.02	0.012	0.05	<0.1	0.18	1.5	<0.1	0.11	7	0.6	<0.2
2102	Soil	19	0.44	150	0.016	<20	2.19	0.012	0.06	<0.1	0.06	1.6	<0.1	0.06	7	<0.5	<0.2
2103	Soil	22	0.49	81	0.018	<20	2.40	0.007	0.05	<0.1	0.06	1.9	<0.1	<0.05	6	<0.5	<0.2
2104	Soil	18	0.34	62	0.016	<20	1.84	0.006	0.03	<0.1	0.07	1.6	<0.1	<0.05	5	<0.5	<0.2
2105	Soil	21	0.39	51	0.010	<20	2.31	0.005	0.03	<0.1	0.09	1.0	<0.1	<0.05	5	<0.5	<0.2
2106	Soil	21	0.49	115	0.024	<20	1.87	0.011	0.03	<0.1	0.11	4.4	<0.1	<0.05	5	<0.5	<0.2
2107	Soil	12	0.15	94	0.006	<20	1.49	0.006	0.03	<0.1	0.06	0.4	<0.1	<0.05	6	<0.5	<0.2
2108	Soil	21	0.62	103	0.038	<20	2.40	0.008	0.05	<0.1	0.06	6.3	<0.1	<0.05	6	0.7	<0.2
2109	Soil	21	0.20	150	0.007	<20	3.63	0.007	0.03	<0.1	0.20	0.6	<0.1	0.09	5	1.1	<0.2
2110	Soil	22	0.67	156	0.016	<20	2.59	0.010	0.06	<0.1	0.07	2.8	<0.1	<0.05	7	<0.5	<0.2
2111	Soil	17	0.40	100	0.011	<20	2.14	0.006	0.05	<0.1	0.08	1.1	0.1	<0.05	7	<0.5	<0.2
2112	Soil	23	0.55	150	0.012	<20	3.66	0.010	0.07	<0.1	0.11	1.9	0.1	<0.05	8	0.6	<0.2
2113	Soil	21	0.51	68	0.027	<20	2.68	0.006	0.04	<0.1	0.05	3.7	<0.1	<0.05	6	<0.5	<0.2
2114	Soil	19	0.41	75	0.015	<20	1.97	0.006	0.04	<0.1	0.10	1.3	<0.1	<0.05	6	<0.5	<0.2
2115	Soil	20	0.42	59	0.016	<20	2.63	0.006	0.04	<0.1	0.08	1.3	<0.1	<0.05	6	<0.5	<0.2
2116	Soil	19	0.51	88	0.019	<20	2.67	0.004	0.07	<0.1	0.08	1.9	<0.1	<0.05	10	<0.5	<0.2
2117	Soil	19	0.46	96	0.015	<20	2.48	0.008	0.07	<0.1	0.06	1.5	<0.1	<0.05	9	<0.5	<0.2
2118	Soil	25	0.78	97	0.021	<20	3.86	0.006	0.07	<0.1	0.09	3.3	<0.1	<0.05	10	<0.5	<0.2
2119	Soil	16	0.41	94	0.009	<20	1.69	0.009	0.09	<0.1	0.11	1.8	<0.1	0.08	6	<0.5	<0.2
2120	Soil	12	0.21	45	0.013	<20	1.96	0.006	0.03	<0.1	0.07	0.8	<0.1	0.07	8	0.8	<0.2
2121	Soil	14	0.37	94	0.010	<20	1.79	0.008	0.04	<0.1	0.03	1.1	<0.1	<0.05	7	<0.5	<0.2
2122	Soil	19	0.45	95	0.012	<20	1.70	0.008	0.05	<0.1	0.03	1.2	<0.1	<0.05	6	<0.5	<0.2
2123	Soil	15	0.35	45	0.009	<20	1.76	0.006	0.04	<0.1	0.06	0.6	<0.1	0.05	6	<0.5	<0.2
2124	Soil	22	0.57	127	0.008	<20	2.09	0.008	0.06	<0.1	0.04	1.5	<0.1	0.05	7	<0.5	<0.2
2125	Soil	22	0.38	54	0.010	<20	2.28	0.006	0.03	<0.1	0.09	0.9	<0.1	0.09	6	0.5	<0.2

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Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		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	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	2	0.01	0.001	1	
2126	Soil	0.8	16.9	6.1	60	<0.1	14.4	6.9	390	3.50	12.0	0.6	<0.1	7	<0.1	0.3	<0.1	54	0.06	0.098	4
2127	Soil	0.7	16.3	6.6	61	<0.1	13.8	6.6	427	2.92	8.9	<0.5	<0.1	8	<0.1	0.2	0.1	50	0.06	0.081	5
2128	Soil	0.8	23.1	8.5	139	0.1	21.2	20.8	2047	5.58	17.4	1.6	0.5	16	0.2	0.2	<0.1	153	0.38	0.142	14
2129	Soil	0.7	11.8	6.7	50	0.2	7.9	4.4	305	3.24	13.9	<0.5	<0.1	11	0.2	0.3	0.1	55	0.09	0.072	5
2130	Soil	0.4	7.5	6.3	58	<0.1	10.1	4.8	262	2.39	8.3	<0.5	<0.1	14	<0.1	0.1	<0.1	45	0.17	0.063	5
2131	Soil	0.6	10.7	6.5	53	<0.1	6.9	5.2	1011	2.78	12.1	1.2	<0.1	9	<0.1	0.2	0.1	56	0.04	0.095	5
2132	Soil	0.7	14.4	6.4	66	<0.1	10.8	7.0	566	3.38	19.6	0.6	<0.1	11	0.1	0.4	<0.1	56	0.07	0.094	5
2133	Soil	0.4	16.7	5.6	56	0.1	10.8	6.1	360	2.67	12.9	<0.5	0.3	18	<0.1	0.1	<0.1	45	0.10	0.053	8
2134	Soil	0.9	15.2	6.7	61	0.2	12.5	6.1	371	3.03	14.9	0.6	<0.1	9	0.2	0.3	0.1	49	0.04	0.077	5
2135	Soil	0.6	13.1	7.8	58	<0.1	10.2	6.6	612	3.51	17.9	<0.5	0.1	8	0.2	0.3	0.1	58	0.06	0.106	5
2136	Soil	0.5	12.1	6.4	89	<0.1	13.5	7.0	588	3.25	13.0	0.6	<0.1	12	<0.1	0.1	0.1	57	0.11	0.105	6
2137	Soil	0.5	19.8	7.5	63	<0.1	13.6	7.8	500	3.06	12.8	<0.5	0.1	12	<0.1	0.2	0.1	53	0.12	0.060	6
2138	Soil	1.2	20.1	6.9	61	0.2	13.0	5.9	325	3.18	13.4	0.8	<0.1	7	0.1	0.3	0.1	57	0.05	0.067	5
2139	Soil	0.8	20.0	6.3	59	<0.1	12.9	6.8	741	3.37	15.4	<0.5	0.2	9	<0.1	0.3	<0.1	52	0.08	0.136	5
2140	Soil	0.7	22.2	6.7	88	0.1	15.1	8.3	662	3.30	20.8	2.4	0.3	12	0.2	0.3	<0.1	54	0.07	0.082	5
2141	Soil	1.1	23.7	6.7	67	0.2	11.8	5.9	394	3.30	17.5	0.5	<0.1	7	0.1	0.2	0.2	58	0.04	0.076	5
2142	Soil	0.7	13.8	5.8	57	<0.1	13.1	6.5	403	3.03	12.8	0.6	<0.1	9	0.1	0.4	<0.1	53	0.10	0.112	4
2143	Soil	1.1	22.2	7.1	64	<0.1	13.6	8.6	759	3.43	18.6	0.8	0.1	9	0.2	0.4	<0.1	57	0.07	0.079	5
2144	Soil	0.7	17.8	7.0	75	<0.1	14.9	7.8	479	3.41	16.1	1.6	0.3	12	0.2	0.5	0.2	57	0.08	0.079	5
2145	Soil	0.8	13.6	7.5	66	<0.1	9.2	5.7	616	3.35	17.4	1.3	0.2	9	0.1	0.4	0.2	53	0.04	0.111	6
2146	Soil	0.4	15.8	8.2	148	0.3	17.5	8.5	857	3.32	17.8	1.1	0.4	24	0.2	0.3	0.1	60	0.39	0.109	12
2147	Soil	0.8	9.6	6.1	44	<0.1	6.1	3.8	329	2.80	13.8	0.9	0.3	11	<0.1	0.3	0.1	43	0.05	0.076	7
2148	Soil	0.9	13.9	6.8	49	<0.1	5.6	3.4	396	2.80	10.3	<0.5	<0.1	9	0.2	0.5	0.2	41	0.03	0.104	6
2149	Soil	1.0	12.6	6.1	48	0.1	8.0	4.6	344	3.19	16.1	0.5	0.3	9	0.1	0.4	<0.1	45	0.04	0.077	6
2150	Soil	0.4	4.5	5.0	18	0.2	1.5	0.9	124	1.20	4.8	1.1	<0.1	8	<0.1	0.1	0.1	20	0.02	0.051	6
2151	Soil	0.8	10.1	6.7	57	<0.1	5.9	4.3	476	2.80	23.7	0.8	0.1	8	0.2	0.4	0.1	51	0.03	0.080	6
2152	Soil	0.6	39.4	9.6	142	<0.1	25.4	15.9	2185	4.06	16.1	4.0	0.3	9	0.3	0.5	<0.1	74	0.07	0.066	5
2153	Soil	0.6	15.8	7.9	77	<0.1	11.2	8.5	735	3.20	33.4	0.5	0.4	15	0.1	0.6	<0.1	56	0.07	0.050	8
2154	Soil	0.9	25.2	7.6	102	0.2	12.3	7.9	1382	4.22	29.8	0.8	<0.1	12	0.2	0.3	0.2	72	0.14	0.138	7
2155	Soil	0.4	29.5	8.9	70	<0.1	14.2	9.1	852	2.99	34.0	<0.5	0.6	15	0.1	0.4	<0.1	58	0.18	0.031	10

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		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	
MDL		1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	
2126	Soil	23	0.49	55	0.011	<20	2.47	0.006	0.04	<0.1	0.06	1.5	<0.1	<0.05	6	0.7	<0.2
2127	Soil	23	0.46	55	0.012	<20	2.14	0.007	0.05	<0.1	0.06	1.3	<0.1	<0.05	7	0.5	<0.2
2128	Soil	30	0.99	230	0.006	<20	3.23	0.012	0.10	<0.1	0.02	8.5	0.2	<0.05	10	<0.5	<0.2
2129	Soil	15	0.28	92	0.013	<20	1.58	0.008	0.05	<0.1	0.05	1.0	<0.1	0.05	7	<0.5	<0.2
2130	Soil	16	0.41	93	0.010	<20	1.60	0.009	0.04	<0.1	0.02	0.9	<0.1	<0.05	6	<0.5	<0.2
2131	Soil	16	0.28	58	0.016	<20	1.93	0.007	0.04	<0.1	0.05	1.4	0.1	<0.05	7	<0.5	<0.2
2132	Soil	19	0.40	65	0.016	<20	2.20	0.008	0.04	<0.1	0.08	1.6	<0.1	<0.05	5	<0.5	<0.2
2133	Soil	15	0.44	98	0.022	<20	2.06	0.010	0.05	<0.1	0.06	4.2	<0.1	<0.05	5	<0.5	<0.2
2134	Soil	18	0.46	52	0.020	<20	2.57	0.007	0.05	<0.1	0.06	1.7	<0.1	0.08	6	0.8	<0.2
2135	Soil	18	0.40	56	0.029	<20	1.84	0.006	0.07	<0.1	0.05	2.2	<0.1	<0.05	8	<0.5	<0.2
2136	Soil	19	0.54	107	0.012	<20	2.41	0.008	0.09	<0.1	0.03	2.6	0.1	0.05	8	<0.5	<0.2
2137	Soil	21	0.45	105	0.015	<20	2.50	0.009	0.05	<0.1	0.07	2.2	<0.1	<0.05	6	<0.5	<0.2
2138	Soil	21	0.48	70	0.019	<20	3.09	0.008	0.04	0.1	0.10	1.8	<0.1	0.05	6	0.6	<0.2
2139	Soil	21	0.43	68	0.018	<20	3.02	0.008	0.06	<0.1	0.15	2.3	<0.1	<0.05	6	<0.5	<0.2
2140	Soil	20	0.53	83	0.024	<20	3.21	0.009	0.08	<0.1	0.10	3.9	<0.1	<0.05	5	<0.5	<0.2
2141	Soil	19	0.50	71	0.014	<20	2.98	0.008	0.06	<0.1	0.09	1.5	<0.1	<0.05	9	0.6	<0.2
2142	Soil	20	0.45	45	0.016	<20	2.05	0.006	0.03	<0.1	0.07	1.6	<0.1	<0.05	5	<0.5	<0.2
2143	Soil	21	0.46	63	0.021	<20	2.57	0.008	0.04	<0.1	0.09	2.6	<0.1	<0.05	6	<0.5	<0.2
2144	Soil	21	0.52	83	0.023	<20	2.74	0.008	0.06	<0.1	0.08	3.1	<0.1	<0.05	7	<0.5	<0.2
2145	Soil	15	0.37	51	0.022	<20	2.34	0.007	0.06	<0.1	0.06	2.0	<0.1	<0.05	8	<0.5	<0.2
2146	Soil	18	0.52	253	0.010	<20	3.30	0.013	0.08	<0.1	0.07	4.2	<0.1	<0.05	5	0.7	<0.2
2147	Soil	14	0.29	49	0.024	<20	2.89	0.007	0.03	0.1	0.10	2.5	<0.1	<0.05	5	<0.5	<0.2
2148	Soil	12	0.24	44	0.018	<20	1.78	0.007	0.05	<0.1	0.06	1.1	<0.1	<0.05	9	0.5	<0.2
2149	Soil	18	0.33	66	0.023	<20	3.30	0.008	0.03	0.1	0.11	2.0	<0.1	<0.05	6	0.7	<0.2
2150	Soil	5	0.05	43	0.009	<20	0.85	0.008	0.03	<0.1	0.03	0.3	<0.1	<0.05	5	<0.5	<0.2
2151	Soil	14	0.26	62	0.021	<20	1.82	0.008	0.05	<0.1	0.07	1.3	<0.1	<0.05	6	<0.5	<0.2
2152	Soil	31	0.26	164	0.010	<20	1.34	0.005	0.08	<0.1	0.06	8.5	0.4	<0.05	4	<0.5	<0.2
2153	Soil	16	0.43	68	0.039	<20	2.29	0.010	0.05	<0.1	0.05	4.7	<0.1	<0.05	5	<0.5	<0.2
2154	Soil	23	0.52	158	0.012	<20	3.23	0.008	0.10	<0.1	0.08	1.4	0.2	0.05	10	0.8	<0.2
2155	Soil	22	0.49	139	0.028	<20	1.65	0.012	0.06	<0.1	0.04	7.2	<0.1	<0.05	5	0.6	<0.2

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Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX
		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	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	
2156	Soil	0.7	7.7	5.4	45	0.1	4.8	3.0	270	2.35	12.7	<0.5	0.2	9	0.2	0.3	0.1	42	0.04	0.071	6
2157	Soil	0.8	15.3	7.4	86	0.1	9.7	7.8	878	3.19	25.9	0.7	0.1	11	0.2	0.4	0.1	57	0.05	0.083	8
2158	Soil	0.4	14.1	6.1	125	<0.1	10.7	11.3	936	4.20	17.0	<0.5	<0.1	7	0.1	0.5	<0.1	111	0.12	0.102	6
2159	Soil	0.7	13.7	5.9	55	0.1	7.0	4.1	368	2.48	23.4	0.8	0.3	5	0.1	0.5	<0.1	42	0.03	0.086	5
2160	Soil	0.7	18.7	5.8	60	0.2	7.7	5.5	509	2.67	26.3	1.3	0.5	6	0.2	0.5	<0.1	40	0.03	0.070	5
2161	Soil	0.7	20.0	5.0	47	0.1	5.2	3.6	293	2.70	24.5	<0.5	0.5	5	<0.1	0.4	<0.1	39	0.03	0.086	4
2162	Soil	1.3	11.8	4.5	43	0.2	4.9	3.4	849	2.88	19.8	<0.5	0.1	6	0.1	0.3	0.2	43	0.04	0.102	6
2163	Soil	0.9	33.3	6.9	70	0.5	18.5	9.1	641	3.38	24.0	<0.5	0.3	4	0.3	0.3	0.2	60	0.03	0.077	5
2164	Soil	0.6	15.2	7.8	67	0.1	7.3	7.4	675	2.94	46.4	7.3	0.4	7	0.1	0.5	<0.1	45	0.04	0.075	6
2165	Soil	0.6	6.3	5.8	50	0.2	4.7	3.1	270	2.22	25.7	<0.5	0.1	7	0.1	0.3	<0.1	38	0.06	0.067	5
2201	Soil	0.8	31.6	8.6	107	0.2	18.3	17.0	1436	4.60	38.3	0.9	1.0	31	0.2	0.6	<0.1	93	0.13	0.071	7
2202	Soil	0.9	20.0	5.0	81	0.1	10.7	6.7	483	3.43	24.9	0.7	0.3	17	0.2	0.4	<0.1	52	0.05	0.080	9
2203	Soil	0.7	11.2	7.4	39	0.1	9.3	4.4	370	2.82	8.6	16.3	<0.1	7	0.1	0.3	0.1	52	0.04	0.100	5
2204	Soil	0.7	18.0	6.6	58	0.2	11.9	7.0	782	3.46	18.1	<0.5	0.1	15	<0.1	0.5	0.1	62	0.04	0.058	6
2205	Soil	1.1	19.9	9.8	109	0.2	16.3	27.0	7235	5.61	34.8	<0.5	0.5	50	0.7	0.3	0.1	82	0.47	0.116	10
2206	Soil	1.1	91.0	8.4	99	1.0	21.6	13.8	1921	4.13	20.8	3.0	0.4	35	0.2	0.3	0.1	91	0.28	0.096	15
2207	Soil	0.8	31.8	7.5	87	0.1	17.1	10.6	835	3.96	31.7	0.7	0.2	27	0.2	0.5	<0.1	68	0.09	0.048	8
2208	Soil	0.9	31.4	5.7	75	<0.1	12.3	8.8	655	4.07	30.5	1.9	0.3	18	0.1	0.6	<0.1	61	0.05	0.087	5
2209	Soil	0.6	32.9	7.4	84	<0.1	20.7	12.2	740	3.66	26.8	1.0	0.7	23	0.2	0.6	<0.1	66	0.11	0.050	8
2210	Soil	0.7	22.7	7.1	84	0.2	15.0	9.5	732	3.57	23.4	<0.5	0.1	16	0.1	0.5	<0.1	65	0.07	0.114	6
2211	Soil	0.7	81.3	7.7	176	0.7	29.3	16.9	1192	5.17	34.0	2.3	0.5	19	0.2	0.2	0.1	83	0.19	0.127	13
2212	Soil	1.0	15.0	7.7	49	0.2	10.3	5.6	335	3.27	13.6	0.7	<0.1	11	0.2	0.3	0.1	51	0.04	0.068	5
2213	Soil	0.6	40.3	8.3	92	<0.1	18.0	11.1	1187	3.97	26.7	1.1	1.1	43	<0.1	0.5	<0.1	79	0.23	0.038	11
2214	Soil	1.1	45.1	8.3	94	0.2	19.2	11.1	725	4.91	23.6	0.8	0.2	13	0.2	0.4	0.1	71	0.04	0.073	9
2215	Soil	0.6	29.4	7.3	77	0.2	21.2	10.0	460	3.51	15.0	1.5	0.3	10	0.1	0.3	0.1	60	0.05	0.048	7
2216	Soil	1.0	26.3	7.0	75	0.2	11.7	7.6	714	3.45	25.9	1.5	0.1	19	0.3	0.3	0.2	63	0.05	0.078	5
2218	Soil	1.0	31.9	7.2	82	0.3	15.7	8.8	650	3.53	25.1	0.7	0.1	16	0.1	0.4	0.1	66	0.08	0.078	6
2219	Soil	0.5	52.5	7.6	115	<0.1	12.9	11.1	1130	3.34	11.8	1.7	0.7	6	0.2	0.3	<0.1	66	0.09	0.062	9
2220	Soil	0.8	10.6	7.0	32	0.3	6.1	3.3	171	2.43	14.2	1.7	<0.1	5	0.1	0.2	0.2	40	0.03	0.066	4
2221	Soil	0.4	8.1	5.2	47	<0.1	6.3	3.7	268	1.88	11.4	1.1	<0.1	8	<0.1	0.2	0.1	39	0.05	0.078	5

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Project: Stock
 Report Date: October 19, 2012

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SMI12000447.1

Method	Analyte	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
		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	
MDL		1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
2156	Soil	14	0.20	56	0.020	<20	2.76	0.008	0.03	0.1	0.09	1.9	<0.1	<0.05	6	0.7	<0.2
2157	Soil	18	0.37	81	0.021	<20	1.86	0.008	0.05	<0.1	0.06	2.9	<0.1	<0.05	6	0.7	<0.2
2158	Soil	20	0.29	74	0.017	<20	1.22	0.011	0.04	<0.1	0.03	4.1	<0.1	<0.05	4	<0.5	<0.2
2159	Soil	13	0.24	39	0.015	<20	2.17	0.010	0.04	0.1	0.08	2.0	<0.1	<0.05	4	0.7	<0.2
2160	Soil	13	0.29	62	0.013	<20	2.62	0.007	0.04	<0.1	0.12	3.0	<0.1	<0.05	4	<0.5	<0.2
2161	Soil	13	0.22	56	0.014	<20	2.68	0.007	0.04	0.1	0.10	2.7	<0.1	<0.05	5	0.7	<0.2
2162	Soil	13	0.17	53	0.016	<20	2.96	0.009	0.05	0.2	0.12	0.8	0.1	<0.05	11	0.8	<0.2
2163	Soil	29	0.51	51	0.008	<20	3.54	0.007	0.05	<0.1	0.11	1.5	0.2	<0.05	8	0.6	<0.2
2164	Soil	13	0.29	68	0.020	<20	2.27	0.011	0.07	<0.1	0.07	3.5	<0.1	<0.05	4	0.8	<0.2
2165	Soil	9	0.22	64	0.010	<20	1.31	0.010	0.04	<0.1	0.05	0.9	<0.1	<0.05	6	<0.5	<0.2
2201	Soil	20	0.67	117	0.059	<20	2.70	0.010	0.09	<0.1	0.05	8.4	<0.1	<0.05	6	<0.5	<0.2
2202	Soil	17	0.43	75	0.016	<20	2.94	0.008	0.05	<0.1	0.10	3.0	<0.1	<0.05	6	0.5	<0.2
2203	Soil	19	0.34	47	0.025	<20	2.08	0.007	0.04	<0.1	0.04	1.4	<0.1	<0.05	8	0.7	<0.2
2204	Soil	19	0.44	69	0.026	<20	2.14	0.007	0.05	<0.1	0.06	3.2	<0.1	<0.05	8	<0.5	<0.2
2205	Soil	21	0.63	259	0.021	<20	2.34	0.021	0.08	<0.1	0.03	6.7	0.2	<0.05	7	0.6	<0.2
2206	Soil	30	0.77	291	0.011	<20	3.51	0.013	0.09	<0.1	0.11	8.2	0.2	<0.05	10	<0.5	<0.2
2207	Soil	22	0.64	176	0.024	<20	2.93	0.009	0.08	<0.1	0.08	5.3	0.1	<0.05	8	<0.5	<0.2
2208	Soil	22	0.53	94	0.024	<20	3.86	0.009	0.05	<0.1	0.12	4.1	<0.1	<0.05	7	<0.5	<0.2
2209	Soil	24	0.70	142	0.036	<20	2.63	0.013	0.07	<0.1	0.07	7.8	<0.1	<0.05	6	<0.5	<0.2
2210	Soil	22	0.55	80	0.027	<20	2.55	0.008	0.06	<0.1	0.06	3.4	<0.1	<0.05	7	0.5	<0.2
2211	Soil	34	1.07	262	0.008	<20	5.61	0.011	0.16	<0.1	0.12	6.7	0.2	<0.05	12	1.0	<0.2
2212	Soil	19	0.40	58	0.016	<20	2.53	0.007	0.05	<0.1	0.08	1.7	<0.1	<0.05	8	0.5	<0.2
2213	Soil	24	0.67	221	0.046	<20	2.16	0.015	0.09	<0.1	0.07	10.7	<0.1	<0.05	6	0.6	<0.2
2214	Soil	26	0.80	95	0.017	<20	3.23	0.007	0.10	<0.1	0.08	3.8	0.1	<0.05	11	0.6	<0.2
2215	Soil	26	0.66	83	0.016	<20	2.32	0.005	0.04	<0.1	0.09	4.6	<0.1	<0.05	6	<0.5	<0.2
2216	Soil	19	0.45	83	0.023	<20	2.39	0.006	0.06	<0.1	0.08	2.3	<0.1	<0.05	7	<0.5	<0.2
2218	Soil	22	0.50	91	0.022	<20	2.64	0.006	0.04	<0.1	0.07	3.1	<0.1	<0.05	6	<0.5	<0.2
2219	Soil	14	0.29	59	0.027	<20	0.96	0.009	0.06	<0.1	0.02	9.1	<0.1	<0.05	3	<0.5	<0.2
2220	Soil	15	0.18	49	0.011	<20	2.19	0.006	0.03	0.1	0.07	0.9	<0.1	<0.05	7	0.5	<0.2
2221	Soil	12	0.25	66	0.009	<20	1.45	0.006	0.04	<0.1	0.04	0.7	<0.1	<0.05	5	<0.5	<0.2

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Project: Stock
Report Date: October 19, 2012

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CERTIFICATE OF ANALYSIS

SMI12000447.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
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	
2222	Soil	0.8	21.2	5.8	93	<0.1	10.6	9.5	820	3.25	25.6	1.4	0.6	7	0.1	0.4	<0.1	56	0.07	0.113	5
2223	Soil	0.5	12.6	6.4	60	0.1	10.7	6.9	568	3.03	16.6	<0.5	0.1	7	<0.1	0.2	<0.1	59	0.04	0.078	6
2224	Soil	0.5	31.4	7.4	87	<0.1	13.7	11.1	909	3.70	30.0	1.2	0.6	7	0.1	0.4	<0.1	60	0.10	0.064	6
2225	Soil	0.2	11.7	7.7	65	<0.1	14.6	8.3	377	2.26	7.8	0.6	0.8	11	<0.1	0.2	0.2	49	0.14	0.065	7
2226	Soil	0.7	8.1	6.7	38	0.1	5.2	2.9	336	1.88	11.6	1.1	<0.1	8	0.1	0.2	0.2	37	0.10	0.127	5
2227	Soil	0.7	9.9	6.5	49	0.1	6.9	4.5	344	2.48	19.4	<0.5	0.1	7	0.1	0.2	0.1	47	0.04	0.073	5
2228	Soil	0.6	19.9	8.8	78	<0.1	9.5	8.6	1306	3.16	28.5	<0.5	0.2	7	<0.1	0.2	0.1	59	0.03	0.112	6
2229	Soil	0.6	23.3	8.8	115	0.6	17.9	11.9	1211	4.06	24.7	1.2	0.3	11	0.1	0.1	0.2	72	0.23	0.276	15
2230	Soil	0.7	20.5	5.6	62	0.2	9.8	6.5	467	3.07	22.7	1.1	0.2	9	0.1	0.3	<0.1	50	0.08	0.108	7
2231	Soil	0.6	13.0	6.7	73	<0.1	9.4	7.1	549	3.21	25.2	0.8	<0.1	7	0.2	0.2	<0.1	59	0.03	0.064	6
2232	Soil	0.9	11.7	7.3	52	0.1	7.7	5.0	439	3.80	28.8	0.7	0.1	7	0.1	0.3	<0.1	59	0.04	0.169	5
2233	Soil	0.9	30.3	5.9	99	<0.1	7.1	5.5	440	2.55	13.5	<0.5	<0.1	4	0.2	0.2	<0.1	56	0.09	0.061	5



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CERTIFICATE OF ANALYSIS

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Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
Analyte	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	20	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
2222	Soil	18	0.37	76	0.014	<20	3.16	0.008	0.05	0.1	0.09	3.5	<0.1	<0.05	5	<0.5	<0.2
2223	Soil	16	0.36	54	0.015	<20	1.90	0.007	0.04	<0.1	0.03	2.0	<0.1	<0.05	6	<0.5	<0.2
2224	Soil	20	0.44	95	0.013	<20	2.22	0.008	0.06	<0.1	0.06	4.7	<0.1	<0.05	5	<0.5	<0.2
2225	Soil	16	0.50	58	0.029	<20	1.65	0.008	0.04	<0.1	0.05	4.2	<0.1	<0.05	4	<0.5	<0.2
2226	Soil	14	0.16	54	0.009	<20	1.58	0.008	0.05	0.2	0.06	0.5	<0.1	<0.05	6	<0.5	<0.2
2227	Soil	13	0.26	67	0.011	<20	1.87	0.006	0.05	<0.1	0.04	1.4	<0.1	<0.05	6	<0.5	<0.2
2228	Soil	15	0.34	66	0.021	<20	1.69	0.005	0.07	<0.1	0.01	3.3	<0.1	<0.05	6	<0.5	<0.2
2229	Soil	30	0.61	201	0.006	<20	3.53	0.007	0.15	<0.1	0.06	6.3	0.3	0.10	10	0.7	<0.2
2230	Soil	15	0.35	74	0.015	<20	2.47	0.007	0.04	<0.1	0.23	2.5	<0.1	<0.05	4	<0.5	<0.2
2231	Soil	17	0.36	75	0.014	<20	2.10	0.007	0.05	<0.1	0.04	1.9	<0.1	<0.05	6	<0.5	<0.2
2232	Soil	18	0.25	55	0.015	<20	1.85	0.005	0.03	<0.1	0.09	1.3	<0.1	<0.05	6	<0.5	<0.2
2233	Soil	12	0.18	33	0.005	<20	0.92	0.007	0.03	<0.1	0.02	1.1	<0.1	<0.05	4	<0.5	<0.2



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QUALITY CONTROL REPORT

SMI12000447.1

Method	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	1DX	
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																					
2030	Soil	0.8	46.6	6.1	82	0.3	11.9	6.9	535	2.97	13.1	0.9	<0.1	8	0.1	0.3	0.1	50	0.04	0.123	5
REP 2030	QC	0.7	47.0	6.1	82	0.3	11.5	6.8	529	2.89	13.0	<0.5	<0.1	8	0.2	0.2	0.1	52	0.04	0.120	5
2053	Soil	0.3	14.7	5.2	51	<0.1	16.4	6.8	415	2.74	10.6	<0.5	0.3	12	<0.1	0.2	<0.1	48	0.09	0.034	6
REP 2053	QC	0.4	14.5	5.3	51	<0.1	16.7	6.9	422	2.73	10.8	1.2	0.3	12	<0.1	0.2	<0.1	48	0.09	0.036	6
2124	Soil	0.5	17.0	6.4	84	0.1	15.8	7.5	501	3.34	11.8	1.0	<0.1	14	0.1	0.2	0.1	56	0.29	0.094	8
REP 2124	QC	0.6	16.2	6.0	81	0.1	15.4	7.2	498	3.26	12.1	<0.5	<0.1	13	0.1	0.2	0.1	55	0.29	0.092	8
2160	Soil	0.7	18.7	5.8	60	0.2	7.7	5.5	509	2.67	26.3	1.3	0.5	6	0.2	0.5	<0.1	40	0.03	0.070	5
REP 2160	QC	0.7	19.0	6.0	61	0.2	7.2	5.7	511	2.71	27.3	0.9	0.5	6	0.2	0.5	<0.1	39	0.03	0.072	5
2232	Soil	0.9	11.7	7.3	52	0.1	7.7	5.0	439	3.80	28.8	0.7	0.1	7	0.1	0.3	<0.1	59	0.04	0.169	5
REP 2232	QC	0.8	11.4	7.3	50	<0.1	7.2	4.7	428	3.67	28.2	0.9	0.1	6	0.1	0.3	<0.1	60	0.04	0.164	4
Reference Materials																					
STD DS9	Standard	13.3	106.7	130.1	303	1.9	39.0	7.6	574	2.27	26.3	103.7	7.2	84	2.5	6.0	6.6	40	0.71	0.079	14
STD DS9	Standard	13.0	108.9	120.4	306	1.8	40.4	7.5	551	2.23	23.2	135.9	6.4	66	2.2	4.7	6.1	40	0.66	0.081	12
STD DS9	Standard	11.7	102.9	115.4	296	1.9	38.5	7.3	555	2.20	25.0	126.2	5.1	65	2.1	4.6	6.1	38	0.66	0.081	11
STD DS9	Standard	12.5	107.3	121.9	315	1.8	39.2	7.1	568	2.31	24.5	112.1	7.2	70	2.2	5.2	5.4	41	0.71	0.081	13
STD DS9	Standard	12.9	105.9	122.5	309	2.0	38.9	7.6	582	2.33	27.2	123.8	6.5	68	2.6	4.4	6.3	43	0.70	0.089	12
STD OREAS45CA	Standard	1.1	500.6	20.4	57	0.2	240.8	86.7	860	15.40	4.2	42.7	8.1	17	0.1	0.2	0.2	200	0.42	0.037	16
STD OREAS45CA	Standard	1.0	445.7	16.8	50	0.2	219.3	83.0	811	14.14	3.4	33.8	6.1	13	<0.1	0.1	0.2	194	0.37	0.037	14
STD OREAS45CA	Standard	1.0	433.1	17.0	50	0.2	205.5	80.1	814	14.18	3.3	31.9	6.1	13	<0.1	0.1	0.1	190	0.37	0.035	14
STD OREAS45CA	Standard	0.9	479.8	19.1	57	0.2	234.5	86.7	883	15.73	3.1	42.2	7.1	14	<0.1	<0.1	0.2	207	0.41	0.038	15
STD OREAS45CA	Standard	0.9	462.0	18.6	53	0.2	220.6	88.3	882	15.50	3.4	36.0	7.2	14	0.1	<0.1	0.1	213	0.38	0.038	15
STD DS9 Expected		12.84	108	126	317	1.83	40.3	7.6	575	2.33	25.5	118	6.38	69.6	2.4	4.94	6.32	40	0.7201	0.0819	13.3
STD OREAS45CA Expected		1	494	20	60	0.275	240	92	943	15.69	3.8	43	7	15	0.1	0.13	0.19	215	0.4265	0.0385	15.9
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	0.2	<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	0.2	<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

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.



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Project: Stock

Report Date: October 19, 2012

Page: 1 of 1

Part: 2 of 1

QUALITY CONTROL REPORT

SMI12000447.1

Method	Analyte	Unit	MDL	1DX Cr	1DX Mg	1DX Ba	1DX Ti	1DX B	1DX Al	1DX Na	1DX K	1DX W	1DX Hg	1DX Sc	1DX Tl	1DX S	1DX Ga	1DX Se	1DX Te
				ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
				1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	0.2
Pulp Duplicates																			
2030	Soil			19	0.41	64	0.008	<20	2.73	0.005	0.05	<0.1	0.07	1.0	<0.1	0.06	7	0.8	<0.2
REP 2030	QC			19	0.41	62	0.008	<20	2.67	0.005	0.05	<0.1	0.08	1.0	<0.1	0.10	7	0.9	<0.2
2053	Soil			21	0.50	76	0.022	<20	1.71	0.007	0.04	<0.1	0.07	4.0	<0.1	<0.05	4	<0.5	<0.2
REP 2053	QC			21	0.50	77	0.022	<20	1.73	0.008	0.03	<0.1	0.05	4.1	<0.1	<0.05	4	<0.5	<0.2
2124	Soil			22	0.57	127	0.008	<20	2.09	0.008	0.06	<0.1	0.04	1.5	<0.1	0.05	7	<0.5	<0.2
REP 2124	QC			22	0.57	124	0.007	<20	2.03	0.008	0.06	<0.1	0.05	1.5	<0.1	0.06	6	0.6	<0.2
2160	Soil			13	0.29	62	0.013	<20	2.62	0.007	0.04	<0.1	0.12	3.0	<0.1	<0.05	4	<0.5	<0.2
REP 2160	QC			13	0.29	63	0.012	<20	2.81	0.007	0.04	0.1	0.11	2.8	<0.1	<0.05	4	<0.5	<0.2
2232	Soil			18	0.25	55	0.015	<20	1.85	0.005	0.03	<0.1	0.09	1.3	<0.1	<0.05	6	<0.5	<0.2
REP 2232	QC			17	0.24	53	0.015	<20	1.73	0.005	0.03	<0.1	0.09	1.3	<0.1	<0.05	6	<0.5	<0.2
Reference Materials																			
STD DS9	Standard			117	0.60	327	0.127	<20	0.90	0.089	0.40	2.7	0.19	3.0	5.4	0.12	5	5.3	4.6
STD DS9	Standard			118	0.61	304	0.106	<20	0.86	0.077	0.37	2.4	0.22	2.1	5.3	0.12	5	5.4	5.0
STD DS9	Standard			114	0.58	306	0.105	<20	0.86	0.075	0.35	2.6	0.22	2.1	5.0	0.18	4	4.9	5.1
STD DS9	Standard			116	0.62	324	0.110	<20	0.92	0.086	0.40	2.7	0.21	2.4	5.4	0.15	4	5.1	4.8
STD DS9	Standard			120	0.61	329	0.108	<20	0.89	0.082	0.39	2.9	0.19	2.3	5.3	0.13	5	5.5	5.3
STD OREAS45CA	Standard			604	0.16	155	0.163	<20	3.39	0.014	0.07	<0.1	0.02	44.1	<0.1	<0.05	18	0.6	<0.2
STD OREAS45CA	Standard			653	0.13	145	0.124	<20	3.05	0.012	0.06	<0.1	0.02	37.9	<0.1	<0.05	16	<0.5	<0.2
STD OREAS45CA	Standard			646	0.13	145	0.126	<20	2.87	0.010	0.06	<0.1	0.03	38.5	0.1	<0.05	16	<0.5	<0.2
STD OREAS45CA	Standard			704	0.15	159	0.134	<20	3.50	0.013	0.07	<0.1	0.03	44.6	<0.1	<0.05	18	0.8	<0.2
STD OREAS45CA	Standard			712	0.12	158	0.122	<20	3.10	0.010	0.06	<0.1	0.03	37.6	<0.1	<0.05	17	<0.5	<0.2
STD DS9 Expected				121	0.6165	330	0.1108		0.9577	0.0853	0.395	2.89	0.2	2.5	5.3	0.1615	4.59	5.2	5.02
STD OREAS45CA Expected				709	0.1358	164	0.128		3.592	0.0075	0.0717		0.03	39.7	0.07	0.021	18.4	0.5	
BLK	Blank			<1	<0.01	<1	<0.001	<20	<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	<20	<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	<20	<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	<20	<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	<20	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2

APPENDIX II: LAB METHODOLOGIES

METHOD SPECIFICATIONS

GROUP 1D AND 1F – GEOCHEMICAL AQUA REGIA DIGESTION

Package Codes:	1D01 to 1D03, 1DX1 to 1DX3, 1F01 to 1F07
Sample Digestion:	HNO₃-HCl acid digestion
Instrumentation Method:	ICP-ES (1D), ICP-MS (1DX, 1F)
Applicability:	Sediment, Soil, Non-mineralized Rock and Drill Core

Method Description:

Prepared sample is digested with a modified Aqua Regia solution of equal parts concentrated HCl, HNO₃ and DI H₂O for one hour in a heating block of hot water bath. Sample is made up to volume with dilute HCl. Sample splits of 0.5g, 15g or 30g can be analyzed.

Element	Group 1D Detection	Group 1DX Detection	Group 1F Detection	Upper Limit
Ag	0.3 ppm	0.1 ppm	2 ppb	100 ppm
Al*	0.01%	0.01%	0.01%	10%
As	2 ppm	0.5 ppm	0.1 ppm	10000 ppm
Au	2 ppm	0.5 ppb	0.2 ppb	100 ppm
B*^	20 ppm	20 ppm	20 ppm	2000 ppm
Ba*	1 ppm	1 ppm	0.5 ppm	10000 ppm
Bi	3 ppm	0.1 ppm	0.02 ppm	2000 ppm
Ca*	0.01%	0.01%	0.01%	40%
Cd	0.5 ppm	0.1 ppm	0.01 ppm	2000 ppm
Co	1 ppm	0.1 ppm	0.1 ppm	2000 ppm
Cr*	1 ppm	1 ppm	0.5 ppm	10000 ppm
Cu	1 ppm	0.1 ppm	0.01 ppm	10000 ppm
Fe*	0.01%	0.01%	0.01%	40%
Ga*	-	1 ppm	0.1 ppm	1000 ppm
Hg	1 ppm	0.01 ppm	5 ppb	50 ppm
K*	0.01%	0.01%	0.01%	10%
La*	1 ppm	1 ppm	0.5 ppm	10000 ppm
Mg*	0.01%	0.01%	0.01%	30%
Mn*	2 ppm	1 ppm	1 ppm	10000 ppm
Mo	1 ppm	0.1 ppm	0.01 ppm	2000 ppm
Na*	0.01%	0.001%	0.001%	5%
Ni	1 ppm	0.1 ppm	0.1 ppm	10000 ppm
P*	0.001%	0.001%	0.001%	5%
Pb	3 ppm	0.1 ppm	0.01 ppm	10000 ppm
S	0.05%	0.05%	0.02%	10%

Element	Group 1D Detection	Group 1DX Detection	Group 1F Detection	Upper Limit
Sb	3 ppm	0.1 ppm	0.02 ppm	2000 ppm
Sc	-	0.1 ppm	0.1 ppm	100 ppm
Se	-	0.5 ppm	0.1 ppm	100 ppm
Sr*	1 ppm	1 ppm	0.5 ppm	10000 ppm
Te	-	0.2 ppm	0.02 ppm	1000 ppm
Th*	2 ppm	0.1 ppm	0.1 ppm	2000 ppm
Ti*	0.01%	0.001%	0.001%	5%
Tl	5 ppm	0.1 ppm	0.02 ppm	1000 ppm
U*	8 ppm	0.1 ppm	0.05 ppm	2000 ppm
V*	1 ppm	2 ppm	2 ppm	10000 ppm
W*	2 ppm	0.1 ppm	0.05 ppm	100 ppm
Zn	1 ppm	1 ppm	0.1 ppm	10000 ppm
Be*	-	-	0.1 ppm	1000 ppm
Ce*	-	-	0.1 ppm	2000 ppm
Cs*	-	-	0.02 ppm	2000 ppm
Ge*	-	-	0.1 ppm	100 ppm
Hf*	-	-	0.02 ppm	1000 ppm
In	-	-	0.02 ppm	1000 ppm
Li*	-	-	0.1 ppm	2000 ppm
Nb*	-	-	0.02 ppm	2000 ppm
Rb*	-	-	0.1 ppm	2000 ppm
Re	-	-	1 ppb	1000 ppb
Sn*	-	-	0.1 ppm	100 ppm
Ta*	-	-	0.05 ppm	2000 ppm
Y*	-	-	0.01 ppm	2000 ppm
Zr*	-	-	0.1 ppm	2000 ppm
Pt*	-	-	2 ppb	100 ppm
Pd*	-	-	10 ppb	100 ppm
Pb ₂₀₄	-	-	0.01 ppm	10000 ppm
Pb ₂₀₆	-	-	0.01 ppm	10000 ppm
Pb ₂₀₇	-	-	0.01 ppm	10000 ppm
Pb ₂₀₈	-	-	0.01 ppm	10000 ppm

* Solubility of some elements will be limited by mineral species present.

^Detection limit = 1 ppm for 15g / 30g analysis.

Limitations:

Au solubility can be limited by refractory and graphitic samples.

METHOD SPECIFICATIONS

GROUP 7TD AND 7TX – ASSAY FOUR-ACID DIGESTION

Package Codes: 7TD1, 7TD2, 7TD3, 7TX1
Sample Digestion: HF-HNO₃-HClO₄ acid digestion
Instrumentation Method: ICP-ES (7TD, 7TX), ICP-MS (7TX)
Applicability: Rock and Drill Core

Method Description:

Prepared sample is digested to complete dryness with an acid solution of (2:2:1:1) H₂O-HF-HClO₄-HNO₃. 50% HCl is added to the residue and heated using a mixing hot block. After cooling the solutions are made up to volume with dilute HCl in class A volumetric flasks. Sample splits of 0.5g or 0.1g can be analyzed. Very high-grade samples are reweighed at lower weight to accommodate analysis up to 100% upper limit.

Element	Group 7TD Detection	Group 7TX Detection
Ag	2 g/t	0.5 ppm
Al*	0.01%	0.01%
As	0.02%	5 ppm
Ba*	-	5 ppm
Be	-	5 ppm
Bi	0.01%	0.5 ppm
Ca*	0.01%	0.01%
Cd	0.001%	0.5 ppm
Ce	-	5 ppm
Co	0.001%	1 ppm
Cr*	0.001%	1 ppm
Cu	0.001%	0.5 ppm
Fe*	0.01%	0.01%
Hf*	-	0.5 ppm
K	0.01%	0.01%
La	-	0.5 ppm
Li	-	0.5 ppm
Mg	0.01%	0.01%
Mn*	0.01%	5 ppm
Mo	0.001%	0.5 ppm
Na	0.01%	0.01%
Nb*	-	0.5 ppm
Ni	0.001%	0.5 ppm
P	0.01%	0.01%
Pb	0.02%	0.5 ppm

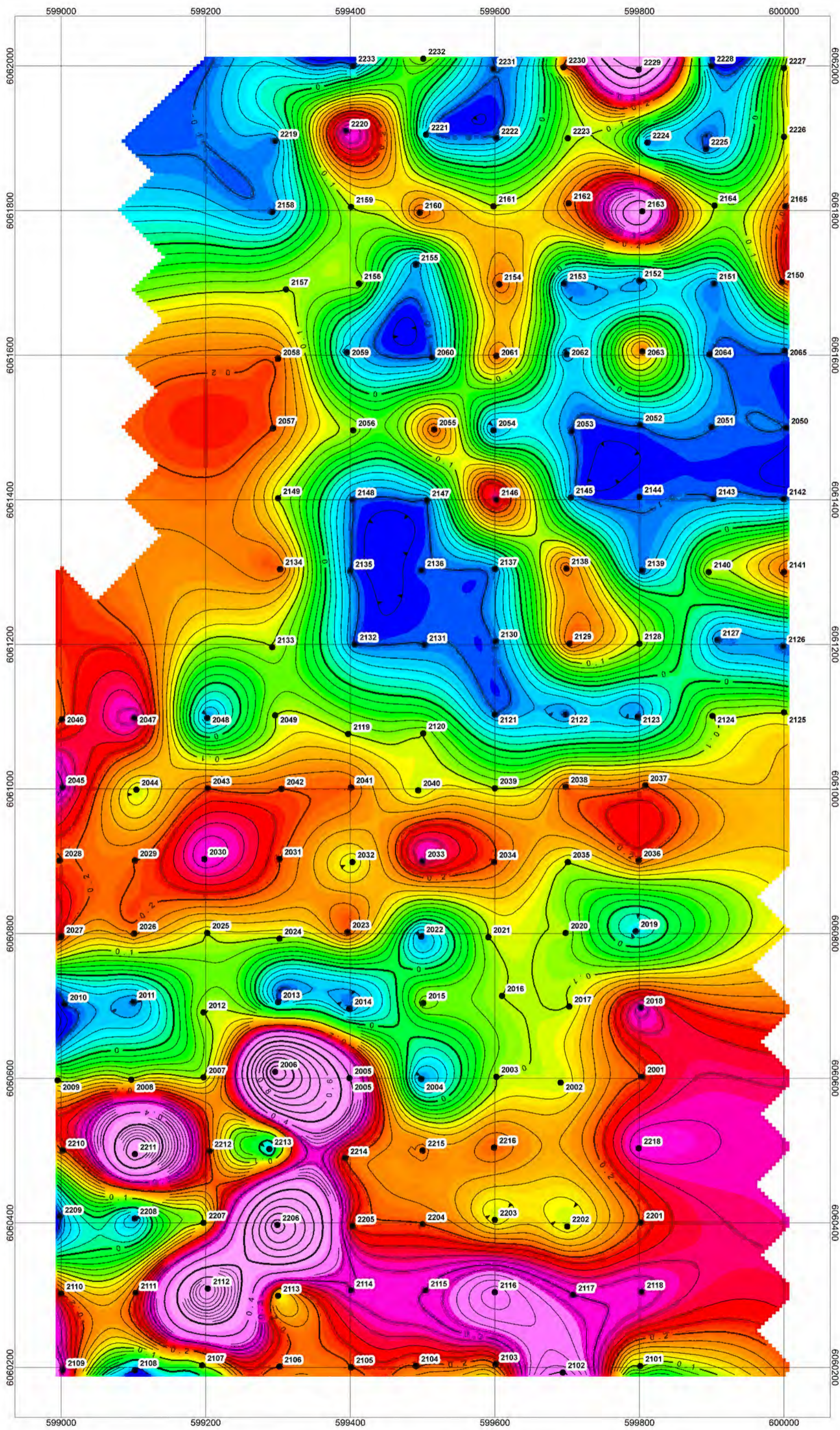
Element	Group 7TD Detection	Group 7TX Detection
Rb	-	0.5 ppm
S*	0.05%	0.05%
Sb	0.01%	0.5 ppm
Sc	-	1 ppm
Sn*	-	0.5 ppm
Sr	0.01%	5 ppm
Ta*	-	0.5 ppm
Th	-	0.5 ppm
Ti*	-	0.001%
U	-	0.5 ppm
V	-	10 ppm
W*	0.01%	0.5 ppm
Y	-	0.5 ppm
Zn	0.01%	5 ppm
Zr*	-	0.5 ppm

Limitations:

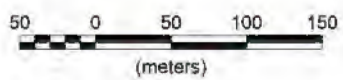
*This digestion is only partial for some Cr and Ba minerals and some oxides of Al, Fe, Hf, Mn, Nb, S, Sn, Ta, Ti, W and Zr if refractory minerals are present.

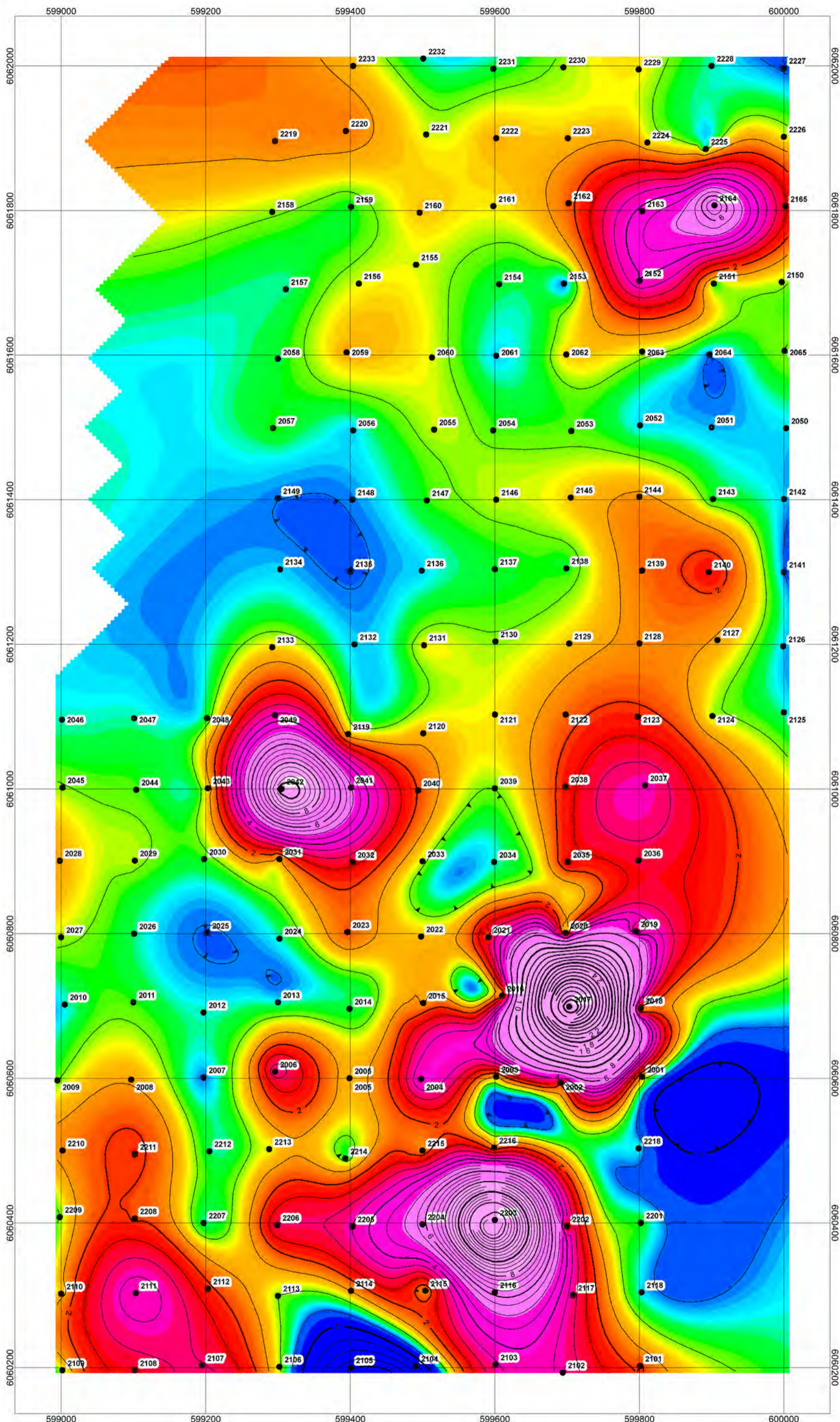
†Volatilization may occur during fuming resulting in some loss of As and Sb.

APPENDIX III: GEOCHEMICAL MAPS

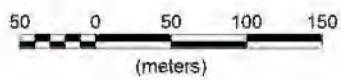


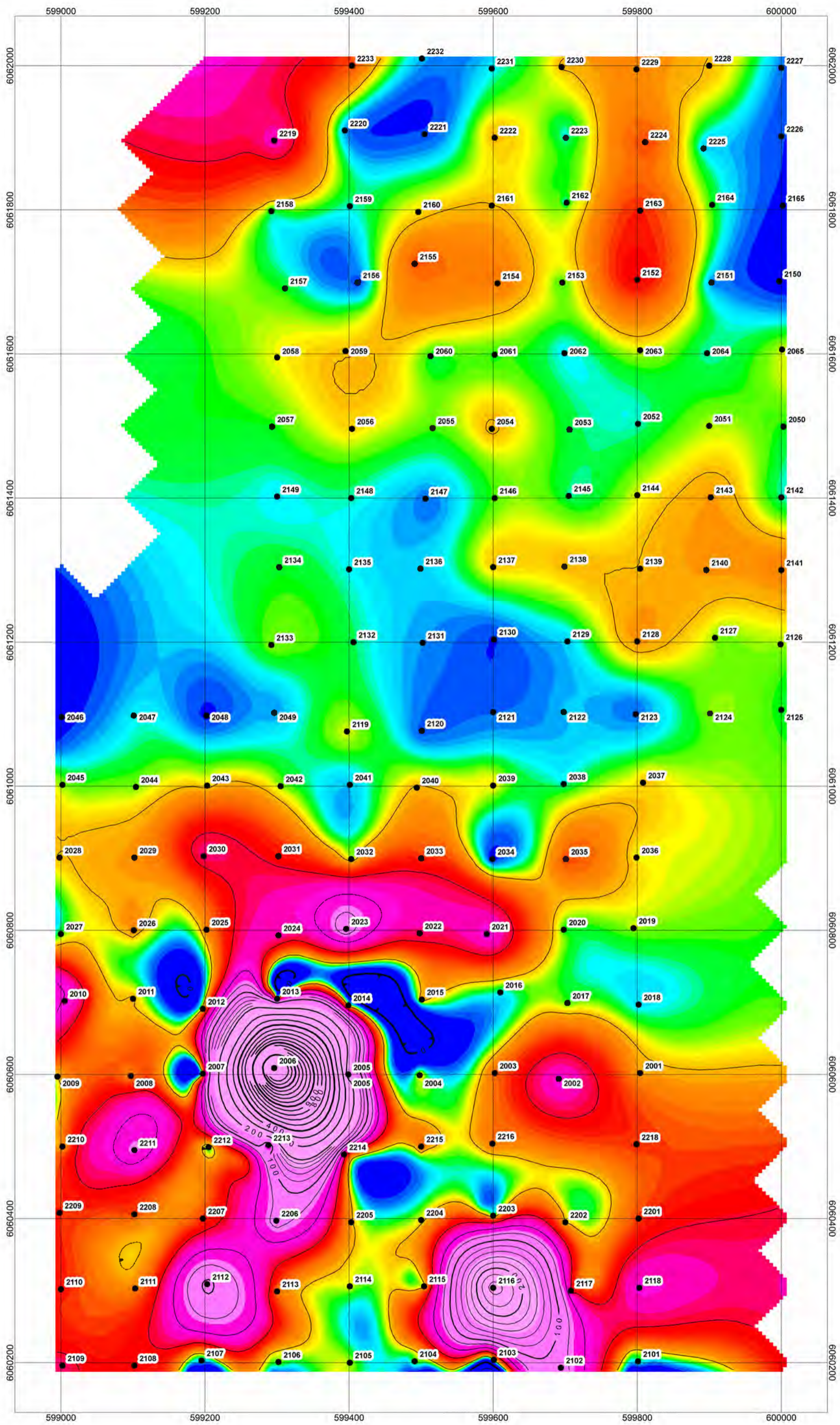
Stock Property 2012
Soil Assay Results
Ag ppm



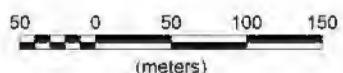


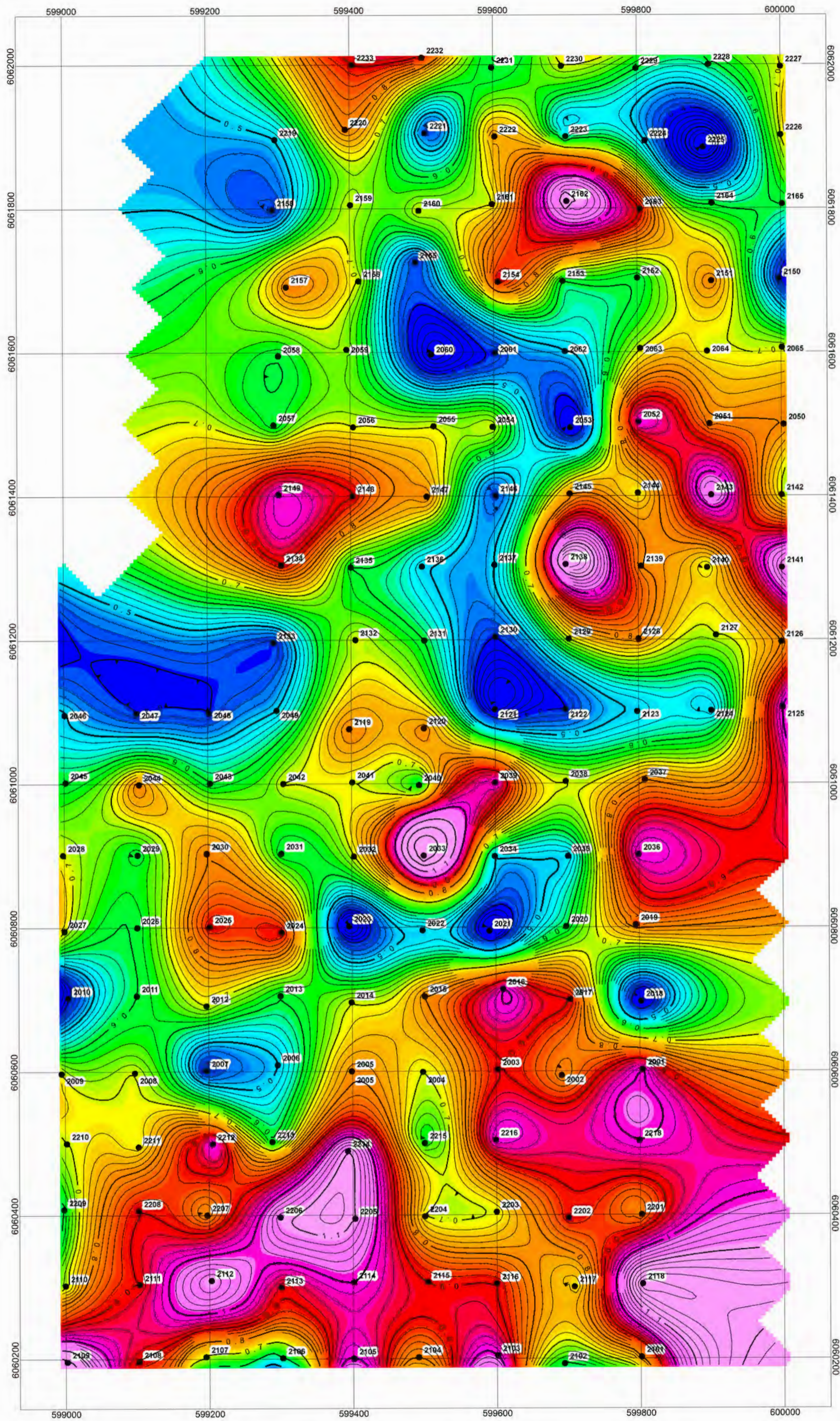
Stock Property 2012
Soil Assay Results
Au ppb



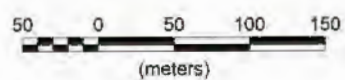


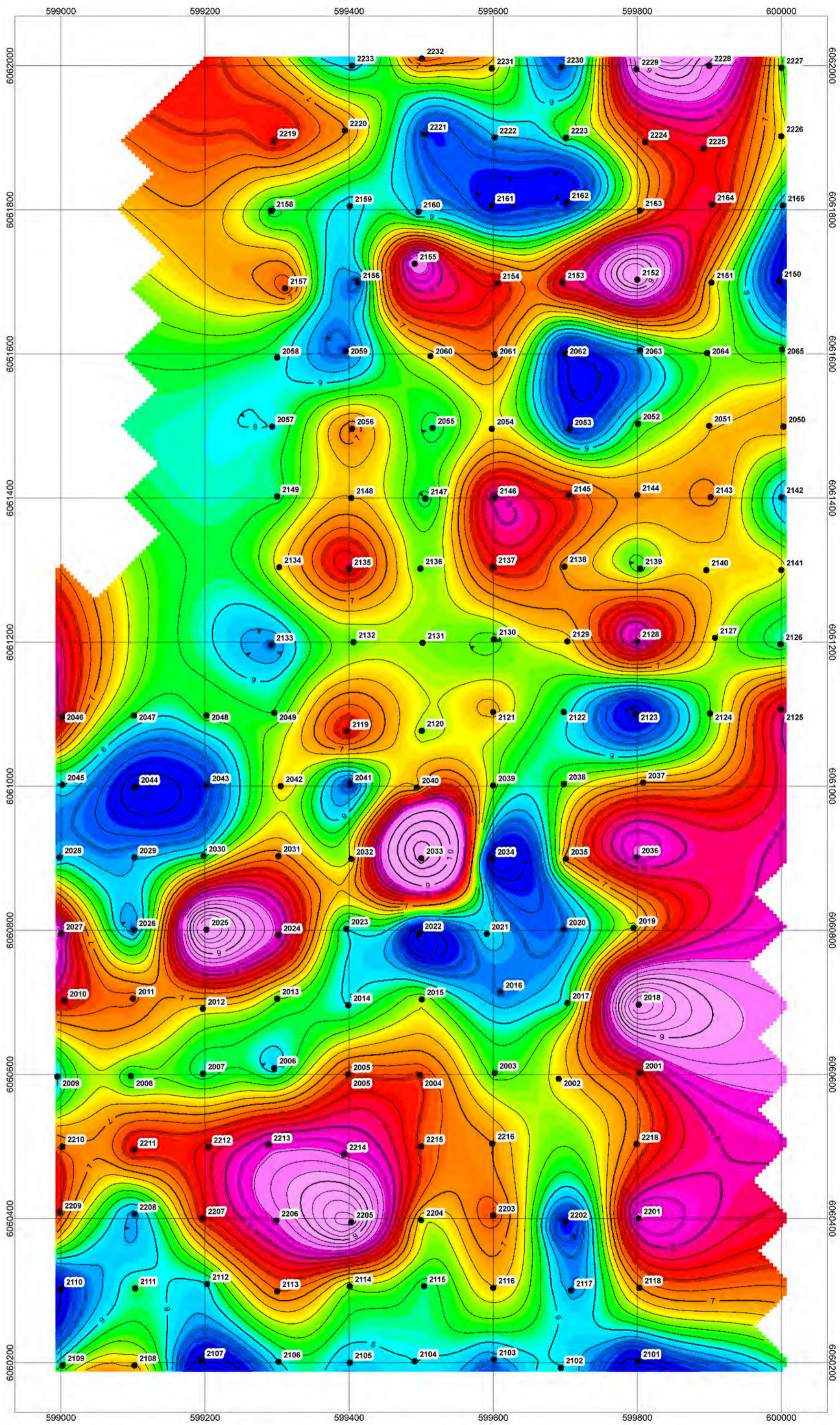
Stock Property 2012
 Soil Assay Results
 Cu ppm



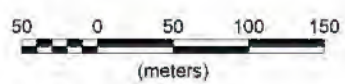


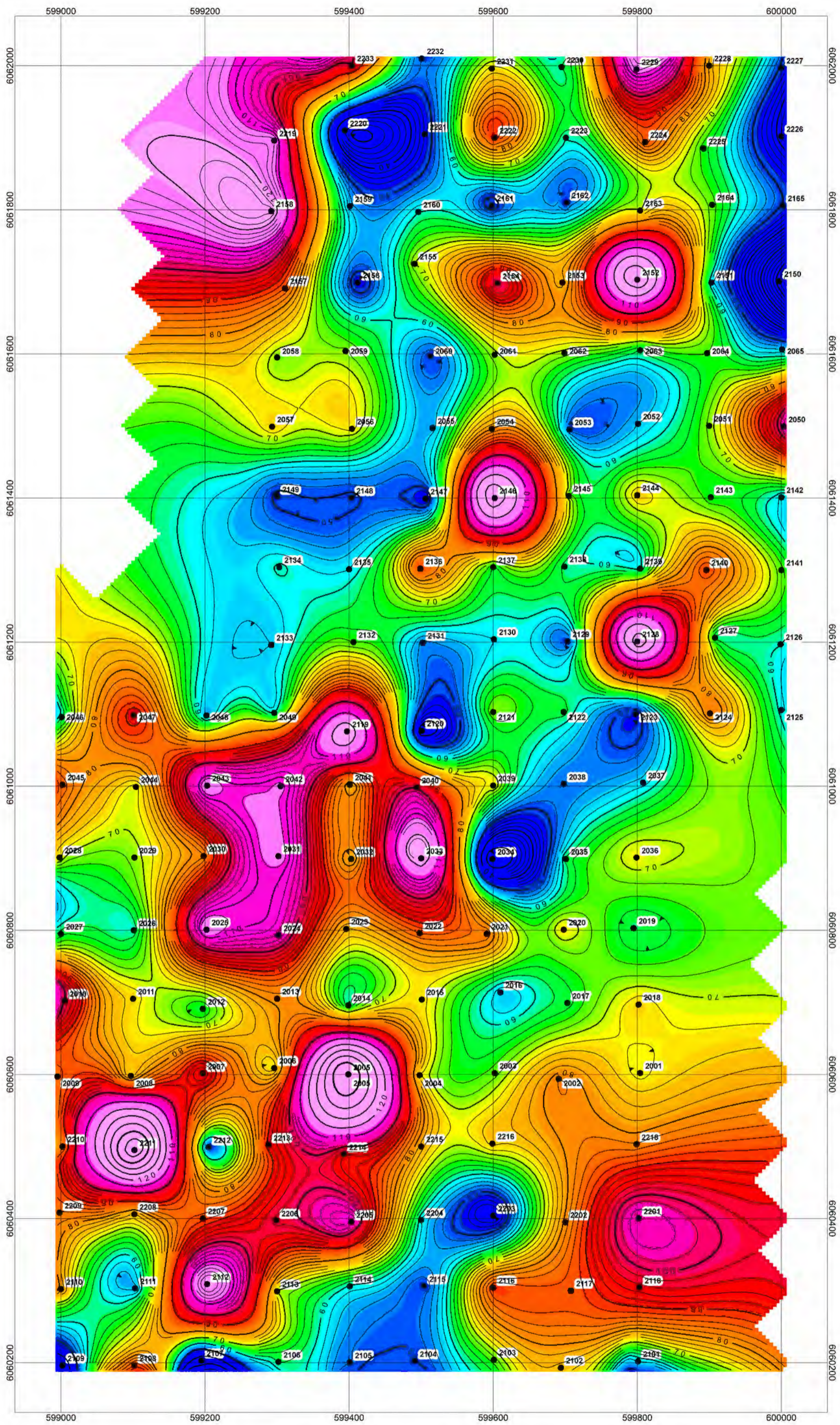
Stock Property 2012
Soil Assay Results
Mo ppm



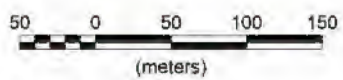


Stock Property 2012
Soil Assay Results
Pb ppm





Stock Property 2012
Soil Assay Results
Zn ppm



APPENDIX IV: SAMPLE DETAILS

Sample #	Date	Sampler	Client	Property Name	Stn#	Easting (NAD83)	Northing(NAD83)	Zone	Elevation (m)	Outcrop (Y/N)	Soil Horizon	Depth	Colour		Slope Dir.	Slope Angle	%clay	%silt	%sand	%pebbles	%cobbles
2001	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599804	6060602	9	1540	N	B	25	medium brown	Moist	Flat	Gentle	10	60	20	5	5
2002	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599691	6060594	9	1557	N	B	25	dark brown	Moist	Flat	Gentle	10	60	20	5	5
2003	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599602	6060602	9	1572	Y	B	20	light brown	Moist	Flat	Gentle	15	60	15	5	5
2004	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599498	6060599	9	1585	Y	B	20	grey brown	Moist	Flat	Gentle	10	60	10	5	15
2005	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599399	6060600	9	1576	N	B	25	light brown	Moist	Flat	Gentle	30	25	15	15	15
2006	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599296	6060609	9	1575	N	B	12	grey brown	Moist	Flat	Gentle	40	35	10	10	5
2007	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599197	6060601	9	1577	Y	B	20	light brown	Moist	Flat	Gentle	10	50	25	10	5
2008	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599097	6060598	9	1587	Y	B	35	yellow brown	Moist	Flat	Gentle	10	60	20	5	5
2009	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		598995	6060597	9	1587	N	B	25	brown	Moist	Flat	Gentle	10	70	10	5	5
2010	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599005	6060702	9	1581	Y	B	15	brown	Moist	Flat	Gentle	10	50	10	15	15
2011	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599100	6060705	9	1579	N	B	20	grey brown	Moist	Flat	Gentle	30	30	30	5	5
2012	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599197	6060691	9	1580	Y	B	20	brown	Moist	Flat	Gentle	20	50	20	5	5
2013	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599300	6060705	9	1581	N	B	25	brown	Moist	Flat	Gentle	5	70	5	15	5
2014	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599399	6060696	9	1578	Y	B	20	light brown	Moist	Flat	Gentle	5	60	20	10	5
2015	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599501	6060704	9	1575	Y	B	25	dark brown	Moist	Flat	Gentle	5	30	25	30	10
2016	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599610	6060714	9	1557	Y	B	25	brown	Moist	Flat	Gentle	5	60	20	10	5
2017	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599703	6060699	9	1540	N	B	25	dark brown	Moist	Flat	Gentle	10	60	20	5	5
2018	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599802	6060697	9	1530	N	B	25	grey brown	Wet	Flat	Gentle	10	60	20	5	5
2019	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599795	6060803	9	1530	Y	B	25	dark brown	Moist	Flat	Gentle	0	70	10	10	10
2020	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599698	6060801	9	1535	N	B	25	dark brown	Moist	Flat	Gentle	10	70	5	5	10
2021	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599591	6060795	9	1554	Y	B	25	grey brown	Moist	Flat	Gentle	60	15	15	5	5
2022	October 1 2012	Steve/Thomas Oxtoby	Richard Billingsley	Stock		599498	6060796	9	1560	N	B	35	light green/green/golden brown/red	Moist	Flat	Gentle	70	20	5	3	2
2023	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599396	6060802	9	1578	N	B	25	brown	Wet	Flat	Gentle	10	60	20	5	5
2024	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599302	6060793	9	1586	N	B	25	dark brown	Moist	Flat	Gentle	20	50	20	5	5
2025	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599202	6060801	9	1586	N	B	15	light brown	Moist	Flat	Gentle	50	30	10	8	2
2026	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599101	6060800	9	1592	Y	B	25	brown	Moist	Flat	Gentle	10	60	15	10	5
2027	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599000	6060795	9	1591	Y	B	25	light brown	Moist	Flat	Gentle	15	60	15	5	5
2028	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		598998	6060901	9	1596	Y	B	25	brown	Moist	Flat	Gentle	5	50	30	10	5
2029	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599102	6060901	9	1589	N	B	20	brown	Moist	Flat	Gentle	10	70	10	5	5
2030	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599198	6060903	9	1586	N	B	30	brown	Moist	Flat	Gentle	5	65	15	10	5
2031	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599302	6060903	9	1578	Y	B	20	brown	Moist	Flat	Gentle	10	40	25	20	5
2032	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599403	6060899	9	1573	N	B	30	light brown	Moist	Flat	Gentle	20	60	15	5	0
2033	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599500	6060900	9	1565	N	B	25	brown	Moist	Flat	Gentle	50	40	10	0	0
2034	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599599	6060899	9	1555	N	B	30	light brown	Moist	Flat	Gentle	5	60	20	10	5
2035	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599701	6060899	9	1547	N	B	30	light brown	Moist	Flat	Gentle	60	30	10	0	0
2036	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599799	6060901	9	1548	N	B	30	light brown	Moist	Flat	Gentle	10	40	30	15	5
2037	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599808	6061005	9	1559	N	B	25	light brown	Moist	Flat	Gentle	5	60	30	4	1
2038	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599698	6061003	9	1558	N	B	25	light brown	Moist	Flat	Gentle	10	60	20	5	5
2039	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599600	6061001	9	1565	N	B	25	brown	Moist	Flat	Gentle	5	50	30	10	5
2040	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599494	6060998	9	1563	Y	B	20	brown	Moist	Flat	Gentle	10	60	15	10	5
2041	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599401	6061002	9	1566	N	B	20	brown	Moist	Flat	Gentle	20	60	10	5	5
2042	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599305	6061000	9	1568	Y	B	20	grey brown white	Moist	Flat	Gentle	50	35	10	5	0
2043	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599203	6061001	9	1577	Y	B	25	light brown	Moist	Flat	Gentle	5	60	20	10	5
2044	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599104	6060999	9	1582	N	B	25	brown	Moist	Flat	Gentle	5	70	15	5	5
2045	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599002	6061002	9	1576	N	B	25	brown	Moist	Flat	Gentle	5	60	20	10	5
2046	October 2 2012	Thomas Oxtoby	Richard Billingsley	Stock		599001	6061096	9	1571	Y	B	20	brown	Moist	Flat	Gentle	20	50	20	5	5

Sample #	Date	Sampler	Client	Property Name	Stn#	Easting (NAD83)	Northing(NAD83)	Zone	Elevation (m)	Outcrop (Y/N)	Soil Horizon	Depth	Colour		Slope Dir.	Slope Angle	%clay	%silt	%sand	%pebbles	%cobbles
2047	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599101	6061098	9	1570	N	B	25	brown	Moist	Flat	Gentle	50	25	10	10	5
2048	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599202	6061098	9	1570	N	B	20	brown	Moist	Flat	Gentle	15	60	10	10	5
2049	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599296	6061102	9	1572	N	B	25	brown	Wet	Flat	Gentle	5	50	30	10	5
2050	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		600003	6061499	9	1594	N	B	25	brown	Moist	Flat	Gentle	10	70	10	5	5
2051	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599900	6061500	9	1602	Y	B	25	brown	Moist	Flat	Gentle	5	50	30	10	5
2052	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599801	6061503	9	1610	Y	B	25	brown	Moist	Flat	Gentle	5	60	20	10	5
2053	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599706	6061495	9	1608	N	B	20	light brown	Moist	Flat	Gentle	40	30	20	5	5
2054	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599598	6061496	9	1616	N	B	25	brown	Moist	Flat	Gentle	20	60	10	5	5
2055	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599516	6061497	9	1614	N	B	20	brown	Moist	Flat	Gentle	5	60	20	10	5
2056	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599404	6061496	9	1614	Y	B	25	brown	Moist	Flat	Gentle	5	40	30	15	10
2057	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599293	6061499	9	1599	Y	B	25	brown	Moist	Flat	Gentle	20	60	10	5	5
2058	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599300	6061595	9	1594	Y	B	30	brown	Moist	Flat	Gentle	5	60	20	5	10
2059	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599395	6061604	9	1610	Y	B	25	brown	Moist	Flat	Gentle	5	60	20	10	5
2060	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599513	6061597	9	1616	N	B	20	red brown	Moist	Flat	Gentle	50	30	10	5	5
2061	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599602	6061599	9	1612	Y	B	25	grey brown	Moist	Flat	Gentle	60	20	10	5	5
2062	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599699	6061601	9	1613	Y	B	25	brown	Moist	Flat	Gentle	10	60	15	10	5
2063	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599804	6061605	9	1614	Y	B	20	brown	Moist	Flat	Gentle	15	60	10	10	5
2064	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		599897	6061601	9	1607	N	B	25	brown	Moist	Flat	Gentle	5	70	20	5	0
2065	October 3 2012	Thomas Oxtoby	Richard Billingsley	Stock		600001	6061606	9	1598	N	B	25	brown	Moist	Flat	Gentle	5	60	20	10	5
2101	October 1 2012	Chris King	Richard Billingsley	Stock		599801	6060202	9	1538	N	B	25	dark brown	Moist	Flat	Gentle	5	50	25	20	0
2102	October 1 2012	Chris King	Richard Billingsley	Stock		599694	6060193	9	1541	N	B	20	dark brown	Moist	Flat	Gentle	50	20	20	10	0
2103	October 1 2012	Chris King	Richard Billingsley	Stock		599601	6060204	9	1553	N	B	20	brown	Moist	Flat	Gentle	20	40	20	20	0
2104	October 1 2012	Chris King	Richard Billingsley	Stock		599491	6060202	9	1556	N	B	25	light brown	Moist	Flat	Gentle	50	30	20	0	0
2105	October 1 2012	Chris King	Richard Billingsley	Stock		599401	6060200	9	1558	N	B	25	light brown	Moist	Flat	Gentle	30	40	20	10	0
2106	October 1 2012	Chris King	Richard Billingsley	Stock		599302	6060201	9	1555	N	B	25	light brown	Moist	Flat	Gentle	80	10	10	0	0
2107	October 1 2012	Chris King	Richard Billingsley	Stock		599195	6060203	9	1563	N	B	20	dark brown	Moist	Flat	Gentle	35	25	20	20	0
2108	October 1 2012	Chris King	Richard Billingsley	Stock		599102	6060196	9	1569	Y	B	15	dark brown	Moist	Flat	Gentle	40	40	15	5	0
2109	October 1 2012	Chris King	Richard Billingsley	Stock		599002	6060196	9	1576	N	B	25	dark brown	Moist	Flat	Gentle	50	20	20	10	0
2110	October 1 2012	Chris King	Richard Billingsley	Stock		599000	6060302	9	1590	Y	B	10	dark brown	Moist	Flat	Moderate	80	10	5	5	0
2111	October 1 2012	Chris King	Richard Billingsley	Stock		599103	6060303	9	1585	N	B	20	dark brown	Moist	Flat	Gentle	30	25	25	20	0
2112	October 1 2012	Chris King	Richard Billingsley	Stock		599203	6060309	9	1568	N	B	20	dark brown	Moist	Flat	Gentle	30	30	20	20	0
2113	October 1 2012	Chris King	Richard Billingsley	Stock		599300	6060299	9	1558	N	B	18	dark brown	Moist	Flat	Gentle	30	20	25	20	5
2114	October 1 2012	Chris King	Richard Billingsley	Stock		599401	6060306	9	1553	N	B	10	brown	Moist	Flat	Gentle	25	30	30	15	0
2115	October 1 2012	Chris King	Richard Billingsley	Stock		599504	6060306	9	1554	N	B	15	dark brown	Moist	Flat	Gentle	20	40	30	10	0
2116	October 1 2012	Chris King	Richard Billingsley	Stock		599600	6060304	9	1556	N	B	25	dark brown	Moist	Flat	Gentle	70	10	10	10	0
2117	October 1 2012	Chris King	Richard Billingsley	Stock		599708	6060300	9	1553	Y	B	15	brown	Moist	Flat	Gentle	10	45	25	20	0
2118	October 1 2012	Chris King	Richard Billingsley	Stock		599803	6060304	9	1542	N	B	25	red brown	Moist	Flat	Gentle	30	15	40	15	0
2119	October 2 2012	Chris King	Richard Billingsley	Stock		599397	6061076	9	1571	N	B	15	dark brown	Moist	Flat	Gentle	35	25	30	10	0
2120	October 2 2012	Chris King	Richard Billingsley	Stock		599501	6061077	9	1573	N	B	25	dark brown	Wet	Flat	Gentle	25	25	25	15	10
2121	October 2 2012	Chris King	Richard Billingsley	Stock		599600	6061103	9	1574	N	B	20	brown	Moist	Flat	Gentle	10	40	40	10	0
2122	October 2 2012	Chris King	Richard Billingsley	Stock		599698	6061103	9	1570	N	B	20	brown	Wet	Flat	Gentle	30	35	30	5	0
2123	October 2 2012	Chris King	Richard Billingsley	Stock		599798	6061100	9	1567	N	B	20	dark brown	Moist	Flat	Gentle	35	35	20	10	0
2124	October 2 2012	Chris King	Richard Billingsley	Stock		599901	6061101	9	1563	N	B	20	light brown	Moist	Flat	Gentle	20	40	20	20	0
2125	October 2 2012	Chris King	Richard Billingsley	Stock		600000	6061106	9	1565	N	B	20	dark brown	Moist	Flat	Gentle	35	35	20	10	0
2126	October 2 2012	Chris King	Richard Billingsley	Stock		599999	6061197	9	1569	N	B	20	light brown	Dry	Flat	Gentle	25	40	30	5	0
2127	October 2 2012	Chris King	Richard Billingsley	Stock		599908	6061206	9	1579	N	B	25	brown	Moist	Flat	Gentle	15	50	30	5	0

Sample #	Date	Sampler	Client	Property Name	Stn#	Easting (NAD83)	Northing(NAD83)	Zone	Elevation (m)	Outcrop (Y/N)	Soil Horizon	Depth	Colour		Slope Dir.	Slope Angle	%clay	%silt	%sand	%pebbles	%cobbles
2128	October 2 2012	Chris King	Richard Billingsley	Stock		599800	6061201	9	1576	N	B	20	dark brown	Wet	Flat	Gentle	80	10	10	0	0
2129	October 2 2012	Chris King	Richard Billingsley	Stock		599703	6061201	9	1581	N	B	15	brown	Dry	Flat	Gentle	15	30	40	15	0
2130	October 2 2012	Chris King	Richard Billingsley	Stock		599601	6061204	9	1585	N	B	25	brown	Dry	Flat	Gentle	20	50	20	10	0
2131	October 2 2012	Chris King	Richard Billingsley	Stock		599502	6061199	9	1587	Y	B	15	brown	Moist	Flat	Gentle	30	35	30	5	0
2132	October 2 2012	Chris King	Richard Billingsley	Stock		599406	6061200	9	1576	N	B	20	brown	Dry	Flat	Gentle	15	40	40	5	0
2133	October 2 2012	Chris King	Richard Billingsley	Stock		599292	6061196	9	1572	N	B	25	dark brown	Moist	Flat	Gentle	35	20	25	20	0
2134	October 2 2012	Chris King	Richard Billingsley	Stock		599303	6061304	9	1587	N	B	15	brown	Moist	Flat	Gentle	25	35	30	10	0
2135	October 2 2012	Chris King	Richard Billingsley	Stock		599400	6061301	9	1585	N	B	20	light brown	Moist	Flat	Gentle	45	30	25	0	0
2136	October 2 2012	Chris King	Richard Billingsley	Stock		599499	6061302	9	1590	N	B	20	brown	Moist	Flat	Gentle	35	35	20	10	0
2137	October 2 2012	Chris King	Richard Billingsley	Stock		599600	6061304	9	1592	N	B	20	brown	Wet	Flat	Gentle	70	20	10	0	0
2138	October 2 2012	Chris King	Richard Billingsley	Stock		599699	6061305	9	1586	N	B	25	dark brown	Moist	Flat	Gentle	20	40	20	10	10
2139	October 2 2012	Chris King	Richard Billingsley	Stock		599804	6061302	9	1584	N	B	20	brown	Moist	Flat	Gentle	10	40	40	10	0
2140	October 2 2012	Chris King	Richard Billingsley	Stock		599896	6061300	9	1583	Y	B	25	dark brown	Moist	Flat	Gentle	10	20	60	5	5
2141	October 2 2012	Chris King	Richard Billingsley	Stock		600000	6061300	9	1575	Y	B	20	light brown	Moist	Flat	Gentle	20	50	30	0	0
2142	October 2 2012	Chris King	Richard Billingsley	Stock		600000	6061401	9	1583	Y	B	25	light brown	Moist	Flat	Gentle	20	40	30	5	5
2143	October 2 2012	Chris King	Richard Billingsley	Stock		599902	6061401	9	1593	N	B	20	brown	Moist	Flat	Gentle	30	40	20	5	5
2144	October 2 2012	Chris King	Richard Billingsley	Stock		599800	6061404	9	1596	N	B	20	light brown	Moist	Flat	Gentle	20	30	30	10	10
2145	October 2 2012	Chris King	Richard Billingsley	Stock		599705	6061403	9	1595	Y	B	20	brown	Moist	Flat	Gentle	10	40	30	10	10
2146	October 2 2012	Chris King	Richard Billingsley	Stock		599602	6061400	9	1601	Y	B	20	dark brown	Wet	Flat	Gentle	40	30	30	0	0
2147	October 2 2012	Chris King	Richard Billingsley	Stock		599506	6061399	9	1605	Y	B	25	dark brown	Wet	Hilltop	Gentle	50	20	20	5	5
2148	October 2 2012	Chris King	Richard Billingsley	Stock		599403	6061400	9	1596	Y	B	20	dark brown	Moist	Flat	Gentle	10	40	30	10	10
2149	October 2 2012	Chris King	Richard Billingsley	Stock		599300	6061402	9	1593	Y	B	25	dark brown	Moist	Flat	Gentle	10	40	40	5	5
2150	October 3 2012	Chris King	Richard Billingsley	Stock		599997	6061701	9	1610	Y	B	20	light brown	Dry	Flat	Gentle	20	20	20	20	20
2151	October 3 2012	Chris King	Richard Billingsley	Stock		599903	6061699	9	1610	Y	B	20	brown	Dry	Flat	Gentle	20	40	30	5	5
2152	October 3 2012	Chris King	Richard Billingsley	Stock		599800	6061703	9	1612	Y	B	20	light brown	Moist	Flat	Gentle	10	30	30	20	10
2153	October 3 2012	Chris King	Richard Billingsley	Stock		599696	6061699	9	1617	Y	B	25	dark brown	Moist	Flat	Gentle	20	40	20	10	10
2154	October 3 2012	Chris King	Richard Billingsley	Stock		599606	6061698	9	1620	Y	B	20	dark brown	Wet	Flat	Gentle	40	20	30	5	5
2155	October 3 2012	Chris King	Richard Billingsley	Stock		599491	6061725	9	1616	Y	B	20	brown	Wet	Flat	Gentle	50	20	20	5	5
2156	October 3 2012	Chris King	Richard Billingsley	Stock		599412	6061699	9	1609	Y	B	20	brown	Dry	Hilltop	Gentle	20	30	30	10	10
2157	October 3 2012	Chris King	Richard Billingsley	Stock		599311	6061691	9	1588	Y	B	25	light brown	Dry	Flat	Gentle	20	40	30	5	5
2158	October 3 2012	Chris King	Richard Billingsley	Stock		599292	6061798	9	1569	Y	B	20	dark brown	Moist	Flat	Gentle	30	40	20	5	5
2159	October 3 2012	Chris King	Richard Billingsley	Stock		599401	6061805	9	1596	Y	B	20	dark brown	Moist	Flat	Gentle	20	30	30	10	10
2160	October 3 2012	Chris King	Richard Billingsley	Stock		599496	6061797	9	1616	Y	B	20	dark brown	Moist	Flat	Gentle	40	20	20	10	10
2161	October 3 2012	Chris King	Richard Billingsley	Stock		599598	6061806	9	1629	Y	B	20	dark brown	Moist	Flat	Gentle	30	20	20	20	10
2162	October 3 2012	Chris King	Richard Billingsley	Stock		599702	6061810	9	1624	N	B	20	dark brown	Moist	Flat	Gentle	50	20	20	5	5
2163	October 3 2012	Chris King	Richard Billingsley	Stock		599804	6061799	9	1620	N	B	15	dark brown	Moist	Flat	Gentle	25	30	25	10	10
2164	October 3 2012	Chris King	Richard Billingsley	Stock		599904	6061807	9	1620	Y	B	20	light brown	Moist	Flat	Gentle	30	25	30	15	0
2165	October 3 2012	Chris King	Richard Billingsley	Stock		600002	6061806	9	1623	N	B	20	brown	Moist	Flat	Gentle	30	20	20	20	10
2201	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599802	6060400	9	1549	Y	B	15	brown	Moist	North Facing	Moderate	5	10	70	10	5
2202	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599700	6060395	9	1567	N	B	20	light brown	Moist	Hilltop	Gentle	10	30	20	20	20
2203	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599600	6060404	9	1572	N	B	25	light brown	Moist	Hilltop	Gentle	5	50	20	10	15
2204	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599500	6060398	9	1575	N	B	20	brown	Moist	Hilltop	Gentle	10	40	30	10	10
2205	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599403	6060395	9	1559	N	B	15	grey brown	Wet	Flat	Gentle	60	15	15	5	5
2206	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599299	6060397	9	1572	Y	B	25	light brown	Wet	Flat	Gentle	10	60	10	10	10
2207	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599197	6060400	9	1580	Y	B	18	brown	Moist	Flat	Gentle	20	60	10	5	5
2208	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599102	6060406	9	1591	Y	B	15	brown	Moist	Hilltop	Moderate	0	20	60	10	10

Sample #	Date	Sampler	Client	Property Name	Stn#	Easting (NAD83)	Northing(NAD83)	Zone	Elevation (m)	Outcrop (Y/N)	Soil Horizon	Depth	Colour		Slope Dir.	Slope Angle	%clay	%silt	%sand	%pebbles	%cobbles
2209	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		598998	6060408	9	1602	Y	B	25	brown	Wet	Hilltop	Gentle	10	40	10	20	20
2210	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599002	6060500	9	1599	Y	B	20	light brown	Moist	North Facing	Gentle	5	60	15	10	10
2211	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599102	6060495	9	1586	Y	B	20	brown	Moist	NE facing	Gentle	10	30	30	15	15
2212	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599205	6060499	9	1580	Y	B	18	brown	Moist	Hilltop	Gentle	10	40	30	10	10
2213	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599288	6060502	9	1572	Y	B	20	brown	Wet	Flat	Gentle	30	20	20	15	15
2214	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599393	6060489	9	1569	N	B	20	light brown	Moist	Flat	Gentle	10	50	25	5	10
2215	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599500	6060500	9	1573	Y	B	30	light brown	Moist	Flat	Gentle	25	50	15	5	5
2216	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599599	6060504	9	1565	Y	B	28	brown	Moist	South Facing	Gentle	20	50	20	5	5
2217	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		No sample taken due to the sample area being in the middle of a very large previously excavated area - table minfile location															
2218	October 2 2012	Steve Oxtoby	Richard Billingsley	Stock		599799	6060503	9	1549	N	B	35	light brown	Moist	NE facing	Gentle	10	50	20	10	10
2219	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599296	6061896	9	1537	Y	B	25	brown	Moist	North Facing	Steep	40	40	10	5	5
2220	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599394	6061910	9	1586	Y	B	15	dark brown	Wet	Flat	Gentle	10	40	40	5	5
2221	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599505	6061905	9	1608	Y	B	15	brown	Moist	North Facing	Gentle	10	60	20	5	5
2222	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599602	6061900	9	1623	Y	B	15	light brown	Moist	Hilltop	Gentle	0	60	10	15	15
2223	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599701	6061900	9	1624	Y	B	15	brown	Moist	Hilltop	Gentle	5	60	15	10	10
2224	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599811	6061894	9	1628	Y	B	20	light brown	Moist	Flat	Gentle	5	50	5	20	20
2225	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599892	6061885	9	1627	Y	B	25	light brown	Wet	Flat	Gentle	10	30	40	10	10
2226	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		600000	6061902	9	1635	Y	B	15	brown	Moist	Hilltop	Gentle	0	40	40	10	10
2227	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		600000	6061997	9	1647	Y	B	25	brown	Moist	South Facing	Gentle	20	40	20	10	10
2228	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599900	6062000	9	1635	Y	B	25	brown	Moist	Hilltop	Gentle	40	30	10	10	10
2229	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599799	6061995	9	1635	Y	B	18	brown	Moist	Flat	Gentle	20	50	10	10	10
2230	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599695	6061998	9	1625	Y	B	18	light brown	Moist	South Facing	Gentle	10	40	30	10	10
2231	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599598	6061996	9	1622	N	B	32	brown	Moist	Flat	Gentle	10	50	30	5	5
2232	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599501	6062010	9	1606	N	B	15	brown	Moist	West Facing	Gentle	10	50	30	5	5
2233	October 3 2012	Steve Oxtoby	Richard Billingsley	Stock		599404	6062000	9	1570	N	B	25	brown	Moist	West Facing	Steep	10	50	30	5	5

APPENDIX V: PHOTOS

Andesite with malachite.



Downslope of Stock adit.



A photograph of a geological rock outcrop. The rock is reddish-brown and shows signs of weathering and fracturing. A black strap is visible at the top. In the foreground, a silver geological hammer is placed on the ground for scale. To the right, a black bag is partially visible. The ground is covered with brown soil and some sparse vegetation, including a small green plant with thin leaves. The text "East of Stock sample." is overlaid on the right side of the image.

East of Stock
sample.

Historical trench: Stock property.




Malachite in fractures.





Malachite and azurite.

A geological hammer with a black handle and a silver head is placed horizontally across a large, flat rock sample. The rock has a prominent greenish-blue patina, likely from mineralization or weathering, and shows some reddish-brown staining. The hammer's head is on the left, and the handle extends to the right. The background consists of a rocky terrain with small green plants and brown soil.

Stock adit
sample.

Stock MINfile outcrop boulder.



Stock MINfile showing
looking south.



Stock MINfile showing:
outcrop.



A photograph showing a rock sample with a hammer for scale. The rock is dark brown to black, with a prominent greenish-blue mineralization. The hammer is positioned vertically on the left side of the rock. The background consists of other rock fragments of similar color and texture.

Stock MINfile showing: sample.

Stock MINfile.



Table MINfile showing: DDH collar.





Table MINfile showing:
outcrop sample.