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HICKMAN PROSPECTING

THUNDER BAY, ONTARIO

ASSESSMENT REPORT – 2019

PROSPECTING AND SOIL SAMPLING – REPORT B

RICKABY PROPERTY

NAD 1983 UTM Zone 16N

(0458626E/5516106N)

RICKABY TOWNSHIP/KABY LAKE AREA

THUNDER BAY MINING DISTRICT

ONTARIO

Prepared By

J. Vrzovski

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1. Introduction

This report was prepared to summarize the prospecting and soil sampling work completed on the 100% owned Rickaby Property. The Rickaby property is comprised of 71 contiguous claim units covering an area of ~14.7 km² with all the claims situated within the Kaby Lake area and Rickaby Township. This report is being submitted to the Ministry of Northern Development and Mines (MNDM) for assessment credit. Field work was completed between September and October 2019 and incurred expenditures of **\$10,467 CDN**, which is being submitted for assessment credit. At the time of this reports creation there are eight claims on the property that were previously on hold pending extension at the time of Report A's submission. As 30% of the work was completed on these claims a total of **\$3,140 CDN** is being submitted in this secondary report (Report B) as these claims have now been approved for extension. The other 70% of expenditures totaling **7,327\$ CDN** was submitted for assessment within a previous report detailing the same work (Report A). See expenditure tables in Appendix V for breakdown of expenses and work distribution.

2. Property Description and Location

The physiography, terrain and vegetation are typical of the Canadian Shield. The property lies at an elevation of approximately 350m above sea level. The terrain is essentially flat with low rolling hills and ridges with topographic relief of no more than 20 m. The vegetation is northern coniferous boreal forest made up of dense black spruce stands and occasional birch along the ridges and black spruce, alder and moose maple in swamps in the low-lying areas. About 10% of the area is covered by lakes and streams.

The property is located 200km northeast of Thunder Bay, the closest significant population centre. It takes about 3 hours to drive from Thunder Bay to the property. The town of Beardmore located 33km southwest of the property has a population of a few hundred. Access from Thunder Bay is via the Trans Canada Highway (Highway 17) east to Nipigon, turning north on Highway 11, then east through Beardmore and Jellicoe to the Kinghorn road 11 km east of Jellicoe. The Kinghorn road is an all-weather gravel former logging road that heads north and west to the property and crosses right through the property from one side to the other. The east side of the property lies at approximately the 14km marker post and the west side of the property is at about the 32km marker post. There are a number of trails and old bush roads that transect the property and upgrading of these routes would greatly improve access to the interior of the property.

The climate is continental with 6 months of winter and 6 months of summers. Temperature in the summer reaches up to 30°C and falls to -40°C in the winters. Winter snow lasts from November to April and lakes are frozen from December to March. The

property lies east of Lake Nipigon where lake-effect snow may be heavy, nonetheless the climate does not provide any particular impediments to mining developments and it is feasible to work outside throughout the year.

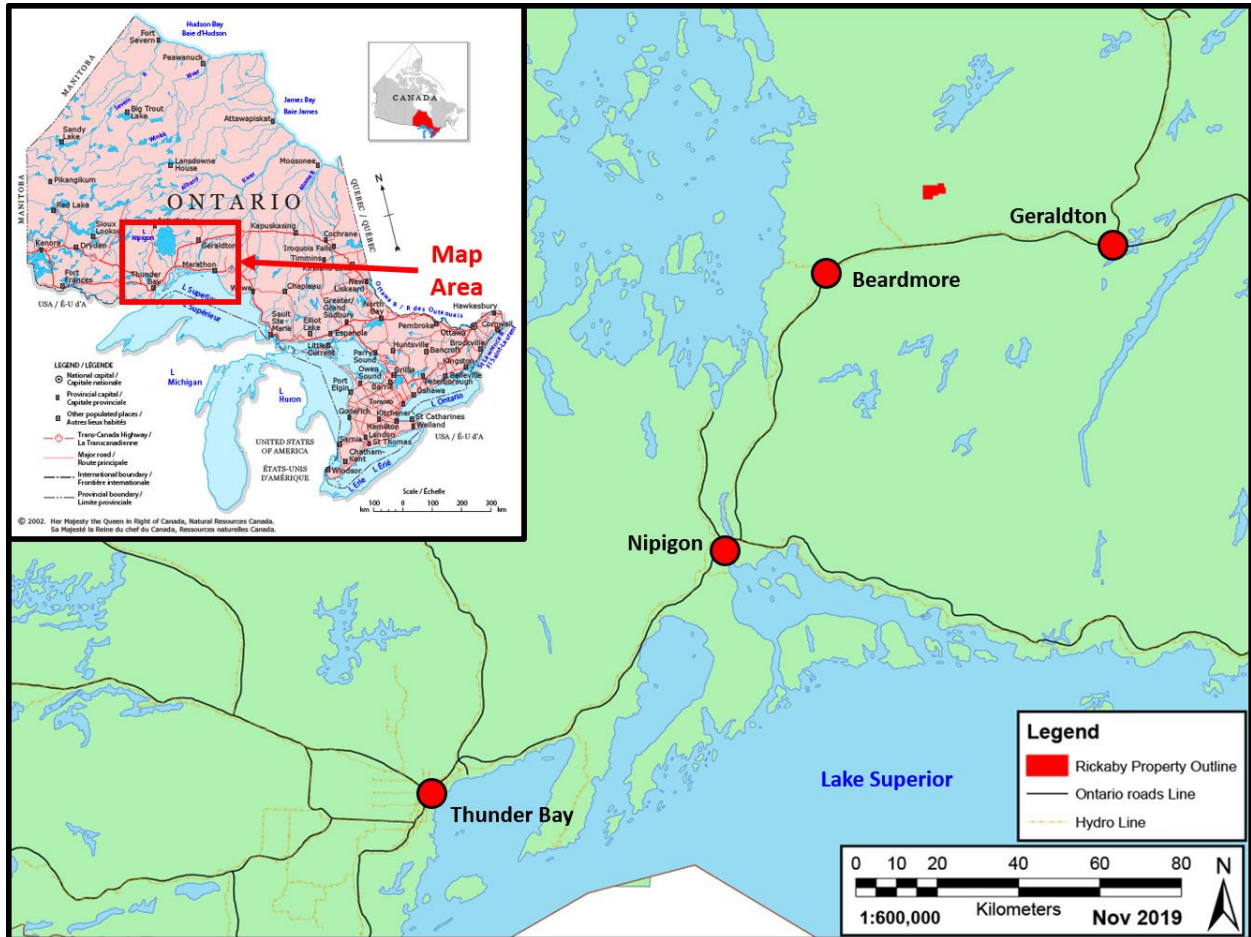


Figure 1. Rickaby Property Location

3. Claim Status

The property consists of 71 claim units kilometers (1,470 hectares; Figure 2). All the mineral claims lie within the Thunder Bay North Mining Division and encompass area in the Kaby Lake Area. The Rickaby property is 100% controlled by Clifford Neil Hickman and all claims except those highlighted in red in Table 1 are in good standing. Claims highlighted in red were previously on hold pending extension of time but have now been granted extension and it is work performed on these claims that is being applied for assessment credit.

Table 1. Rickaby Property Claim List

Claim Number	Claim Type	Status	Recorded Holder	Percent Option	Due Date
101456	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	10/26/2019
101459	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	10/26/2019
195486	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	10/26/2019
214163	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	10/26/2019
214164	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	10/26/2019
225661	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	10/26/2019
261612	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	10/26/2019
281673	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	10/26/2019
340635	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
340636	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
340602	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
340603	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
340604	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
101478	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
101479	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
101457	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
116784	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
116785	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
116786	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
116807	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
116783	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
121065	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
166227	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
166228	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
166256	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
166257	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
179058	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
179059	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
179060	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
179061	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
179093	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
179094	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
214159	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
214190	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
225657	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
225658	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
225659	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
225660	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
232937	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
262141	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019

Claim Number	Claim Type	Status	Recorded Holder	Percent Option	Due Date
281674	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
281675	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
281698	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
281699	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
298999	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
298973	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
298974	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
328767	Boundary Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
328768	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
328769	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	12/4/2019
505099	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
506006	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510794	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510795	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510796	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510797	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510798	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510799	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510800	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510801	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510802	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510803	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510804	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
510805	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	4/10/2020
538186	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	1/3/2021
538187	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	1/3/2021
538188	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	1/3/2021
538189	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	1/3/2021
538190	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	1/3/2021
538191	Single Cell Mining Claim	Active	Clifford N. Hickman	100%	1/3/2021

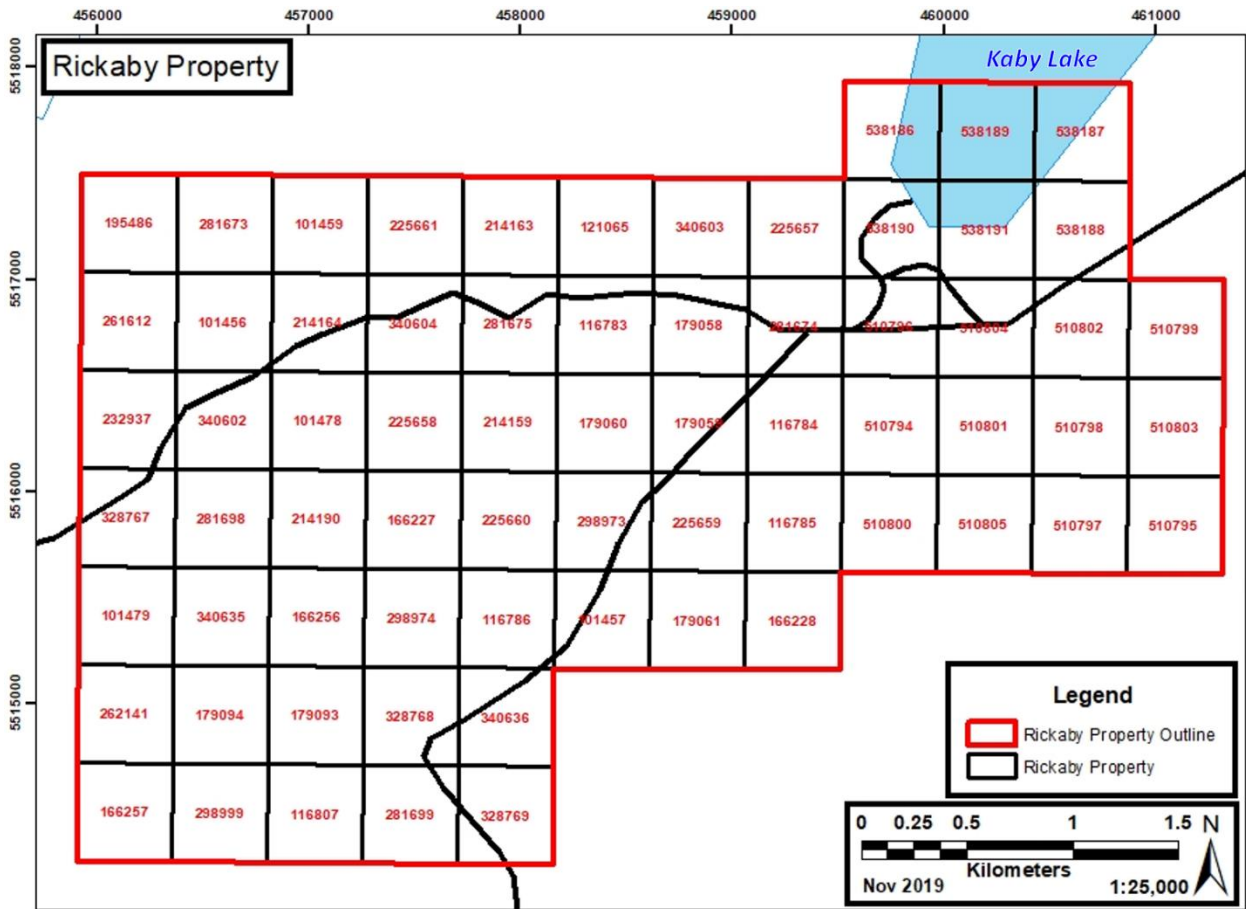


Figure 2. Rickaby property claims map.

4. Property History

The main sulphide mineralization on the property is a low-grade Cu, Zn Ag, Pb and Au sulphide occurrence historically referred to as the Kenty zone (Figure 3). Adjacent to this zone is the Kayli zone which hosts mineralization of similar characteristics to the Kenty zone (Figure 3). Also located on the property, to the south-west of the Kenty and Kayli zones, is the Dickinson occurrence which has also demonstrated base metal potential (Figure 3). The property has seen base and precious metal exploration since the early 1900s with more significant exploration commencing in the area in the early 1950s. The exploration history of the Rickaby property as it pertains to the currently held ground is summarized as follows:

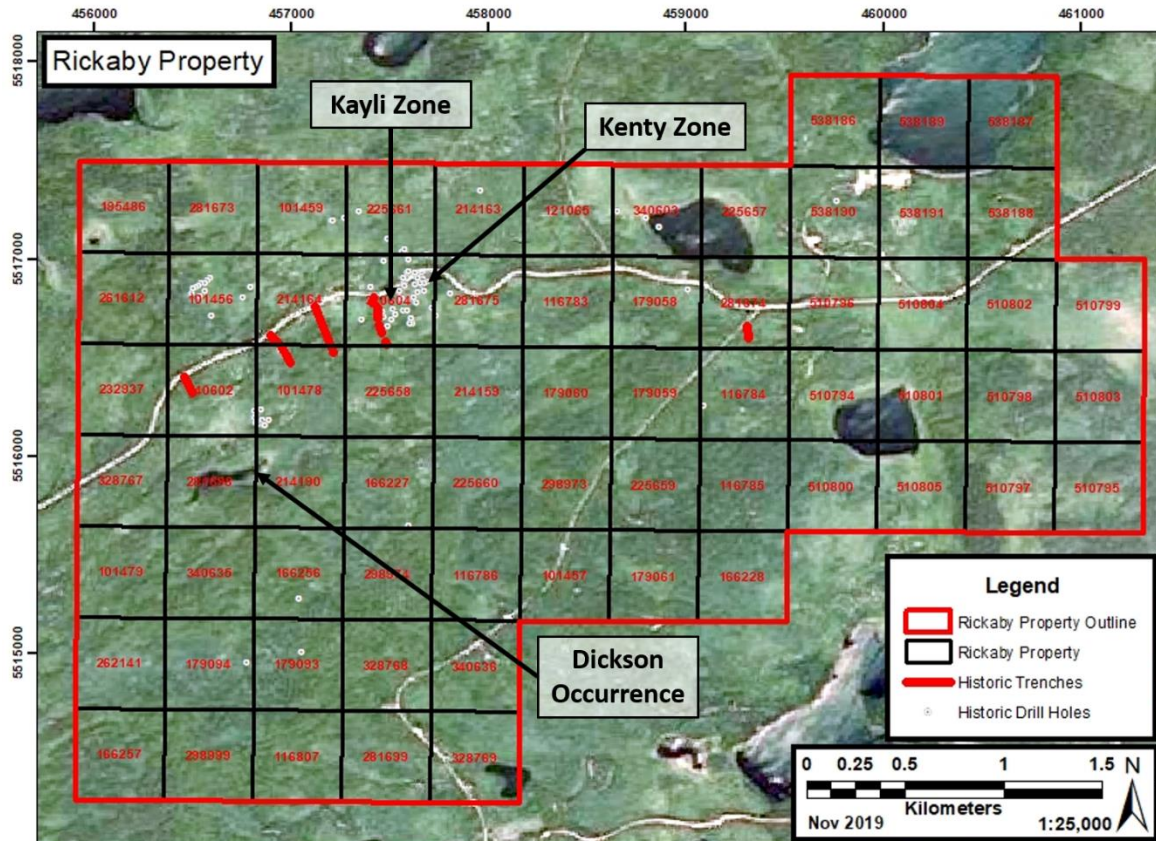


Figure 3. Satellite image of the Rickaby property, highlighting main mineralized zones and occurrences.

1952: Chesterville Mines drilled 11 exploration diamond drill holes in the area known as the Dickinson occurrence. Drill hole #4 intersected 3.3ft of 7.53% Zn, 2.12% Pb, 4.86 oz Ag, 0.11% Cu and 0.01 oz Au, this area has seen little to no exploration since as most of the property work has focused on the Kenty and Kayli zones.

1956: Noranda Mines drilled 13 holes into the Kenty zone, identifying low-grade base metal mineralization.

1971 – 1972: The Kenty zone was further investigated with 27 diamond drill holes by Phelps Dodge Corporation of Canada. This drilling identified similar mineralization as previous drilling and was able to outline a large low-grade Cu, Zn, Ag, Pb and Au zone of disseminated sulphide in felsic volcanoclastic formations. Drilling outlined a higher grade 1% Cu pipe-like core within the low-grade zone that had a strike length of 400m and shallowly plunged (25-30°) to the south-west.

1998: Consolidated Shoshoni Gold Inc. drilled 22 diamond drill holes on the Kenty zone. The last Shoshoni hole on the property, hole R-98-22, returned a 71m interval of 0.74% Cu, and 27.8 g/t Ag (Erskine, 1998). Various other news releases on the Rickaby property (MacDonald, 1998a, 1998b; Tommasi, 1998) report other results of the Shoshoni drilling. The drilling appears to have been restricted to the vicinity of the earlier drilling and

confirmed the presence of an east-west low-grade Cu-Ag zone up to 130m wide and 300m long to a depth of 200m.

An interim evaluation of the property (Staargaard, 1998) shows the location of the first 13 holes on the property are confined to short 200m long part of the known mineralized zone. In one news release (Tommasi, 1998) it was stated that Shoshoni's goal was to establish a resource of 50,000,000 tons plus of approximately \$20 per ton ore. Drill holes R-98-7 and R-9-98 to R-98-15 were filed for assessment work by Whalen Resources Ltd. (Spence, 1999) but it appears the other drilling done by Shoshoni was not filed for assessment work. The core from the Shoshoni drilling is reportedly stored at the Ontario Geological Survey core storage facility at Beardmore.

Shoshoni carried out a gradient electrode array induced polarization (IP) survey on the property (Glass, 1998). Because of the long wires involved in the gradient electrode array IP method in certain circumstances the data may be compromised. The survey outlined a large weak chargeability anomaly, commensurate with the low disseminated sulphide content outlined by the drilling. The zone remains open along strike to the east and west. Shoshoni announced that it would follow-up the IP target in 1999 (Erskine, 1998) but appears not to have done so.

2007 – 2008: Manual stripping of the Kayli showing, from which a high-grade grab sample was reportedly obtained, and cut a portable diamond saw channel sample which returned 0.29% Pb and 0.28% Zn over 9.1m. (Spence, 2007).

In 2008 backhoe stripping and hydraulic outcrop washing in the area opened up and cleared off expanses of outcrop, including the Kayli showing, and cut a number of portable diamond saw channel samples. No known geological map of the stripped area has been seen, but there are assay results available for the channel sampling for Au, Cu, Pb and Zn. Individual 0.5m channel samples graded up to 1.45 g/t Au, 2.00% Pb and 3.05% Zn. The stripping coarse lapilli tuff to agglomerate fragmental rhyolite to intermediate metavolcanics with sulphide mineralization indicative of a volcanogenic massive sulphide (VMS) hydrothermal system. Small discontinuous lenses of semimassive to massive sulphides were observed in the stripped area, as well as cross cutting and concordant quartz veining. This style of mineralization was also indicated by others (MacDonald, 1998a; Staargaard, 1998), and only lack in a large massive sulphide accumulation.

2009: Highland Resources Inc. prospected south of the Kenty and Kayli showings and identified Zn mineralization (>10,000 ppm – true value never reported) in altered and sheared volcanic rocks.

5. Regional Geology

The Rickaby property is situated within the Onaman-Tashota (OT) greenstone belt, which is a part of the larger Wabigoon sub-province of the Archean Superior Province. The OT greenstone belt is immediately north of the Geraldton-Beardmore (GB) greenstone belt. The Paint Lake fault system which is a major crustal scale fault structure separates the two greenstone belts.

The area is collectively referred to as the GB metagenic belt which hosts a number of base metal and gold occurrences. Historically gold has been produced from a number of different operations in the area. There are three main types of gold occurrences in the OT greenstone belt: quartz vein-associated, chemical sedimentary rocks and shear disseminated occurrences. Quartz veins are mainly hosted with felsic to intermediate metavolcanic rocks and are observed to be more abundant proximal to the margins of regional felsic intrusions. Gold occurrences in chemical metasedimentary rocks are dominantly hosted within interlayered chert and banded iron formation units. The shear disseminated gold mineralization has been associated with disseminated pyrite, pyrrhotite and/or chalcopyrite hosted within strongly sheared felsic metavolcanic rocks.

6. Property Geology and Mineralization

The geology of the property is more wholly summarized by Makcset and Wallace (1978) but is dominantly comprised of felsic to intermediate fragmental metavolcanic rocks (Figure 4). The felsic to intermediate units consist of laminated tuffs, crystal tuffs, lapilli tuffs, tuff-breccias and pyroclastic breccias. The dominant presence of felsic fragmental units in the area have been interpreted as being proximal to a volcanic center. The area also hosts minor pillowed, massive and flow banded mafic metavolcanic units. The supercrustal rocks in the area are intruded by various felsic intrusive rocks ranging from tonalite to granodiorite in compositions. Most notably are the Kaby Lake stock to the east of the property and the Elmhirst stock to the west-end of the property. The stocks and their proximal area are known to host gold bearing quartz veins. A number of late-stage north-trending diabase dykes have also been identified in the area and cross-cut all other units.

Gold and base metal mineralization have been identified in multiple locations on the property. The gold-bearing quartz veins are interpreted to occupy dilational tension fractures that develop along conjugate stress directions of a shear-type structural regime. The northwest/southeast strike of the veins is the predictable for tension fractures in an eastwest dextral shear regime, in this case, provided by the Paint Lake fault which separates the OT belt from the GB belt just to the south of the property. The veins are primarily hosted by granodiorite intrusions although they trend into the metavolcanic rocks adjacent

to the granite contacts, particularly where these rocks have been silicified and/or transformed to hornfels around the intrusions. The VMS style deposits are stratabound to discordant deposits of base metal sulphides in agglomerate and fragmental intermediate to felsic metavolcanics, consistent with current models for VMS deposits near hydrothermal events related to subsea felsic volcanism. Typically, VMS deposits consist of lenticular, often stacked, massive sulphide bodies with associated underlying discordant has homogenized and baked the metavolcanic rocks stockwork-stringer feeders and replacement zones. Historically on the Rickaby property the best identified mineralization in the Kenty and Kayli zones is of the disseminated stockwork style, and no massive sulphides have yet been discovered on the ground.

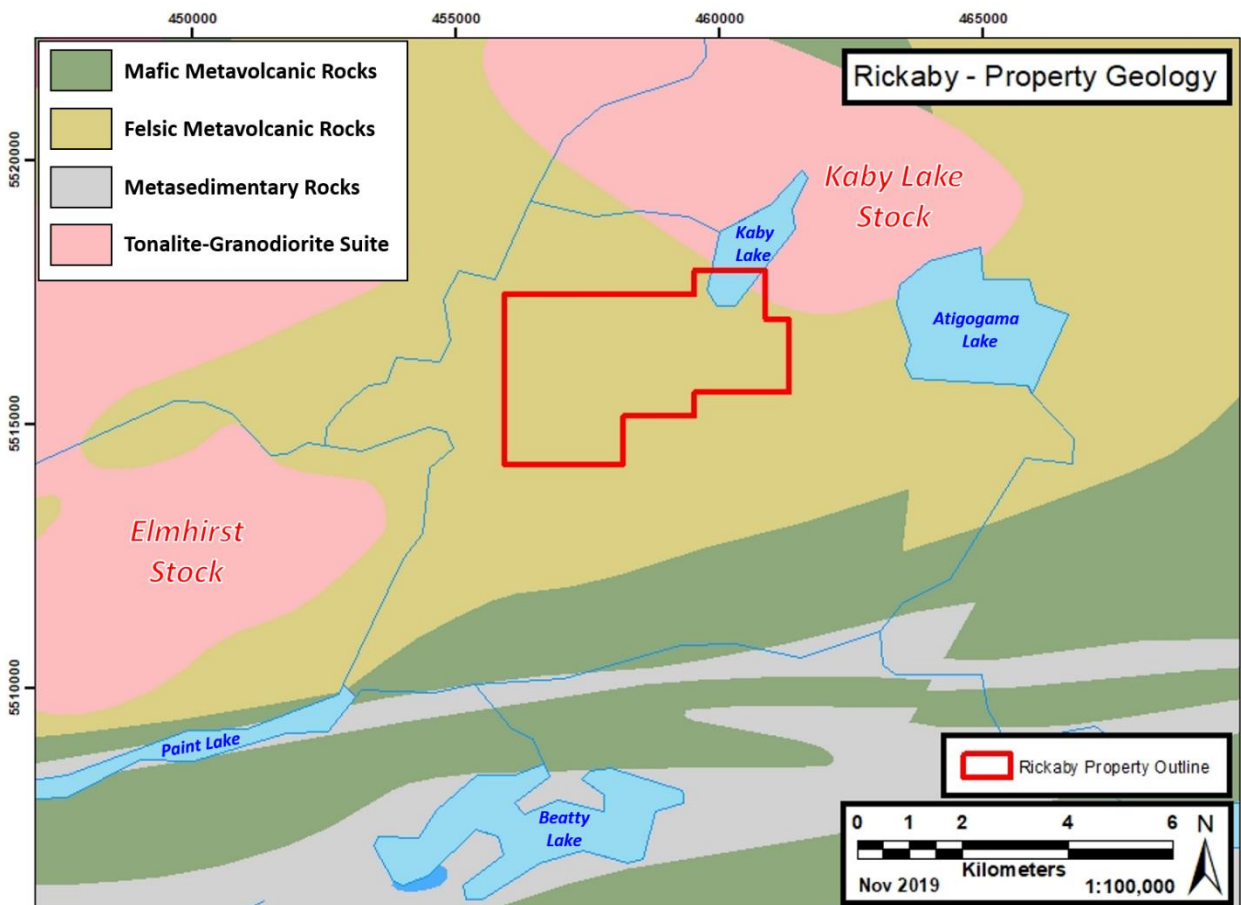


Figure 4. Simplified geology of the Rickaby property area.

7. Prospecting and Soil Sampling

Sampling of soils and rocks was completed by Robert Heilman and Jason Heilman on the property from September 20 – 26, 2019, a detailed log of work conducted on the property during this time is located in Appendix I. During this time 55 soil samples and 28 rock samples were collected from the property with specific focus around the Kenty and Kayli

zones and the Dickinson occurrence (Figure 5). Soil sampling targeted the area between the main zones and the Dickinson occurrence as there is a lack of outcrop and previous work in this area. Most of the area surrounding the Dickinson occurrence was wet swamp and soil samples were unable to be obtained from these areas (Figure 5). Rock sampling was also conducted on eastern and south-eastern areas of the property, evaluating potential mineralization in new showings (Figure 6 and 7). A complete property map displaying all sample locations has been attached in Appendix II.

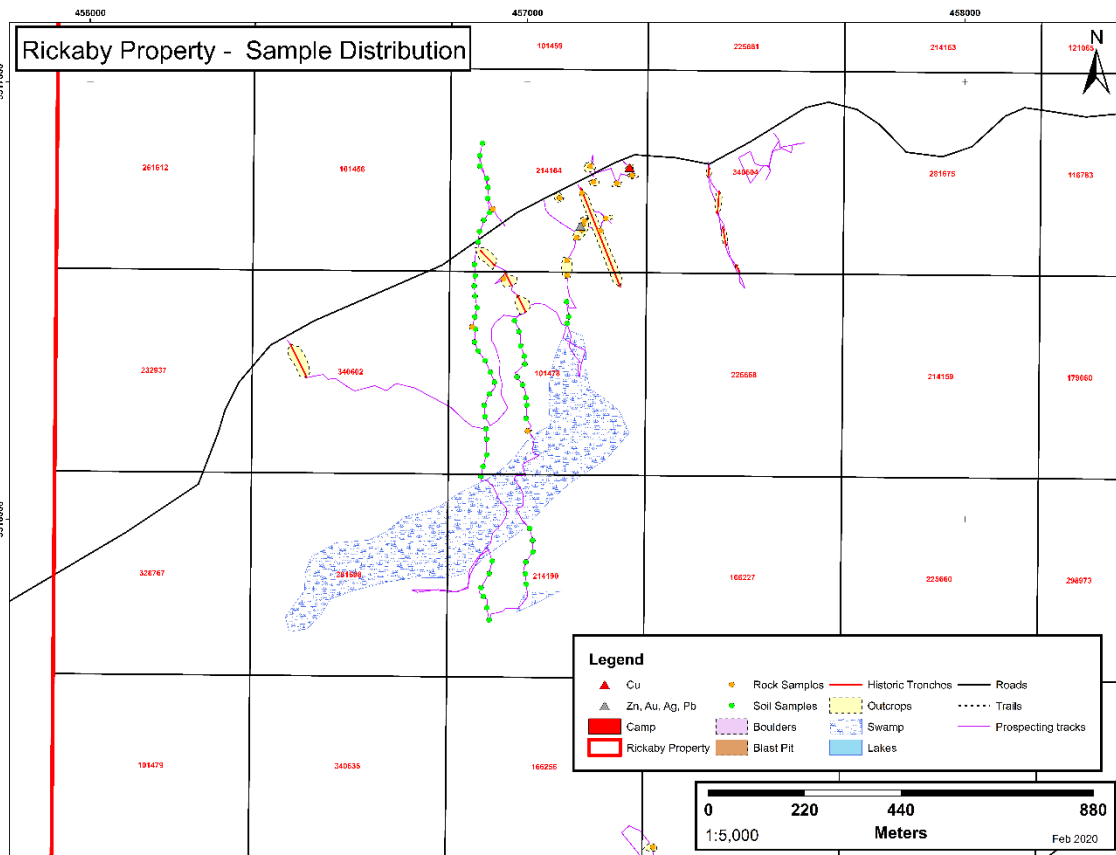


Figure 5. Rickaby property, central area soil and geochemical sampling.

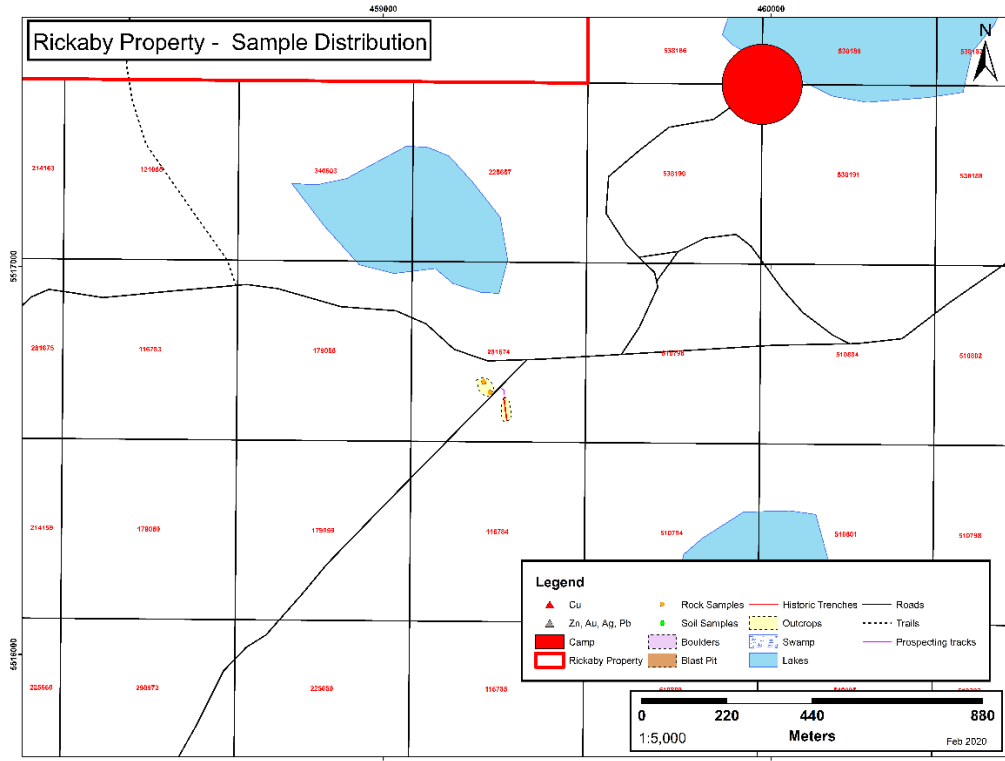


Figure 6. Rickaby property east geochemical samples.

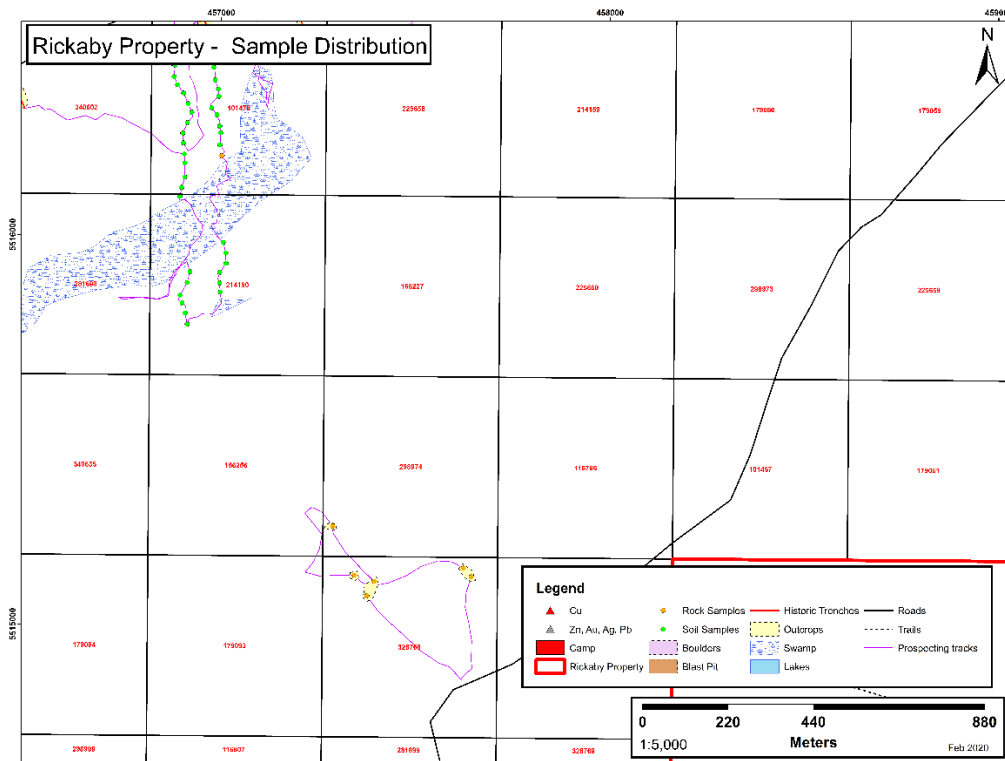


Figure 7. Rickaby property south-west geochemical samples.

8. Sample Analysis

Samples were submitted to Activation Laboratories Ltd. in Thunder Bay, Ontario where they underwent sample preparation and subsequent analysis for precious and base metals as well as multi-element analysis. QA/QC is performed in-house by Activation Laboratories Ltd., all assay results and certificates for assays have been provided in Appendix II.

9. Results

The recent sampling program taking place on the Rickaby property included soil and geochemical sampling in the vicinity of historic zones and occurrences on the property (See attached Map 1). Mineralization identified in these zones is base metal rich (Cu, Zn, Pb) but can also be elevated in Au and Ag. Copper, Zn, Pb, Au, Ag and As for soils and whole-rock samples was plotted spatially in order to assess geochemical trends and anomalism in the sampling. Spatial distribution plots for grabs and soils are attached in Appendix II and III.

Anomalous soils were present in southern sampling in the vicinity of the Dickinson occurrence with Au, Cu, Pb and Zn being elevated in this area. Copper anomalism was also present in the northern sampling and is associated with elevated Zn and moderate As. These would be good target areas for follow up prospecting or future targeting. Geochemical sampling in the area of the Kenty and Kayli zones confirmed the presence of low- and high-grade base and precious metal mineralization in these areas. Copper mineralization in the Kenty Zone returned two samples >1% Cu (1.54% Cu and 1.11% Cu) and was also associated with anomalous Au and Ag. Zinc mineralization was identified around the Kayli zones with samples returning up 8.5% Zn and multiple assays >1% Zn. The zinc mineralization at the Kayli Zone was found to be associated with elevated concentration of Pb and As, low-grade Cu (0.3 – 0.5%) and anomalous Au and Ag values up to 0.9 g/t Au and 213 g/t Ag. Outside of this area no other anomalous mineralization was identified.

10. Conclusions and Recommendations

The exploration activities outlined above as well as historic exploration on the property demonstrate the potential for the area to host significant VMS-style base metal mineralization. The Kenty and Kayli zones have been proven to host significant base metal mineralization through historic diamond drilling and recent trenching. More work should be done to expand on these zones looking to increase the extents of known mineralization. The Dickinson occurrence also displays potential to host mineralization of similar style and occurrence as the Kenty and Kayli zones and should further be prospected in order to better define the spatial extent of mineralization in the area.

It is recommended that a cohesive database of historic drilling on the property be created tying together past work done on the Kenty and Kayli zones. Drilling of these zones is quite tightly spaced and it would be beneficial to step-outside of the previous drilling in order to expand on the extent of mineralization observed in this area. The Dickinson occurrence would benefit from ground geophysical work to help better target in this area due to the lack of outcrop exposure.

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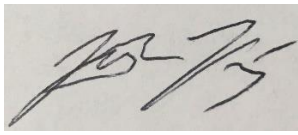
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Statement of Qualifications

I, Joseph R. Vrzovski, M.Sc. do hereby certify that:

1. I am currently employed as an Exploration Geologist for Benton Resources Ltd. based in Thunder Bay, Ontario.
2. I graduated with a BSc Honours degree in geology from the University of Toronto in 2016.
3. I graduated with a MSc degree in geology from Lakehead University, Thunder Bay in 2018.
4. I have worked continually as a geologist since the graduation of my Masters in 2018.
5. I have prepared the report titled “ASSESSMENT REPORT – 2019 PROSPECTING AND SOIL SAMPLING on the RICKABY PROPERTY” which is based on work conducted September 2019.
6. I have personally verified the quality of the data acquired during the course of this sampling program.

Dated this 23rd Day of November 2019.

A handwritten signature in black ink, appearing to read 'J. Vrzovski', is written over a horizontal line.

Joey Vrzovski, M.Sc

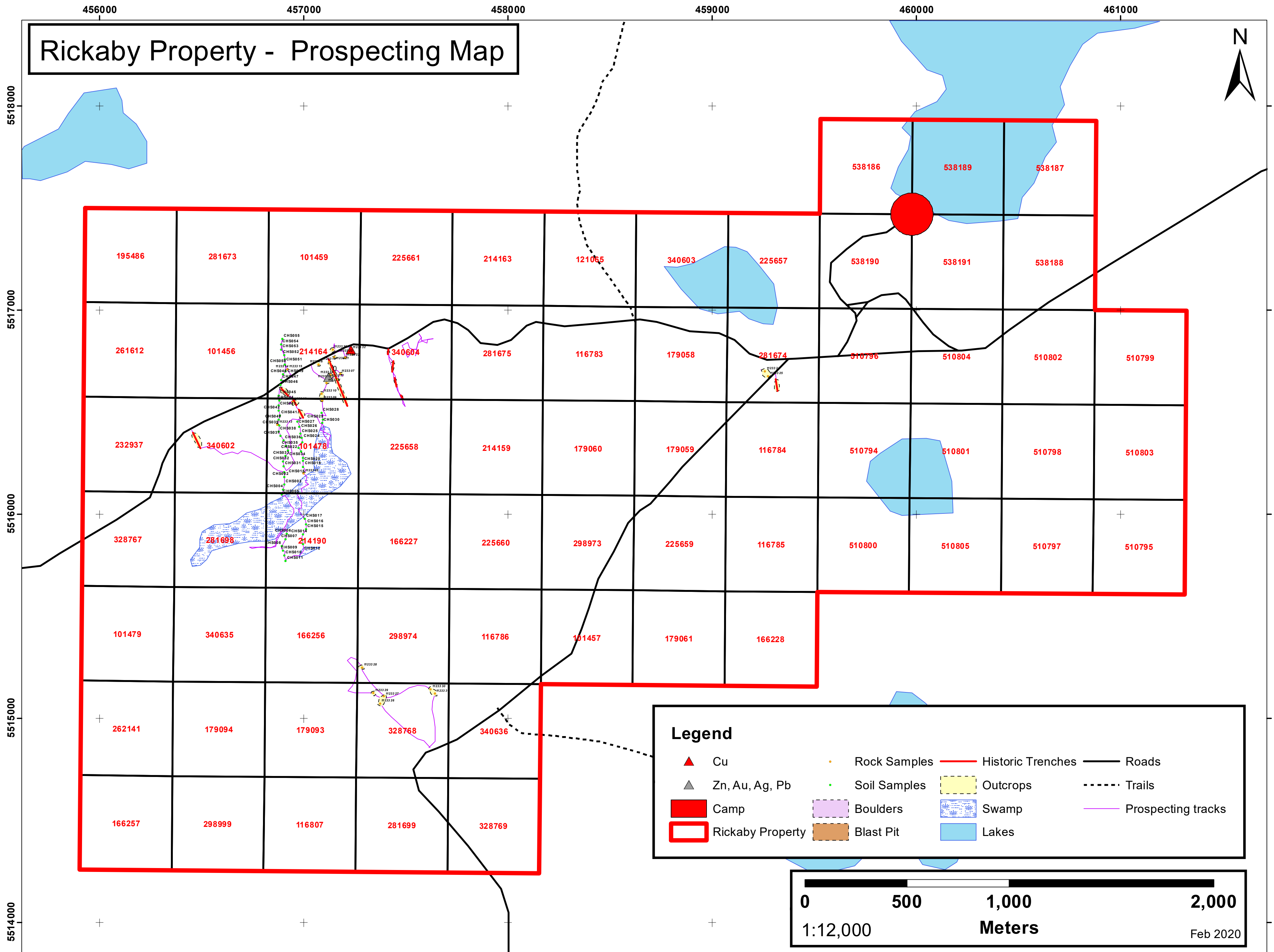
Appendix I: Daily Log

Prospector Log: Work Completed by Robert Heilman and Jason Heilman

Day	Activities Completed
<i>September 20th, 2019</i>	Pick up supplies, travel to property and set up camp.
<i>September 21st, 2019</i>	Soil sampling CHS001 - CHS027. Thick, wet cedar swamp between samples CHS005 and CHS006, as well as CHS017 and CHS018. Shallower samples were taken.
<i>September 22nd, 2019</i>	Soil sampling CHS028 - CHS055, took 3 samples headed south and then encountered thick Cedar swamp and were unable to retrieve samples. Then moved west and headed north from the start location of the previous day.
<i>September 23rd, 2019</i>	Prospecting and geological sampling 1123305 - 1123326, prospected north side of the property around the Kenty showing (Copper). Found four historic trenches and sampled identified base-metal mineralization.
<i>September 24th, 2019</i>	Rain day, most of the day spent at camp. Drove to Nipigon to re-fuel.
<i>September 25th, 2019</i>	Prospected on the middle of the property, located the Martin Zone (Zinc) and re-sampled across and down strike of this zone 1123326 - 112331. Also identified historic Kenty (Copper) showing and took one more sample 1123332.
<i>September 26th, 2019</i>	Packed up camp and returned to Thunder Bay.

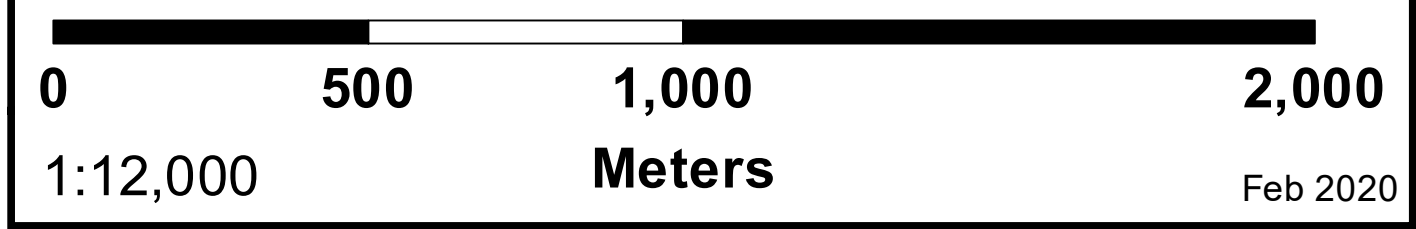
Appendix II: Sample Distribution Map

Rickaby Property - Prospecting Map



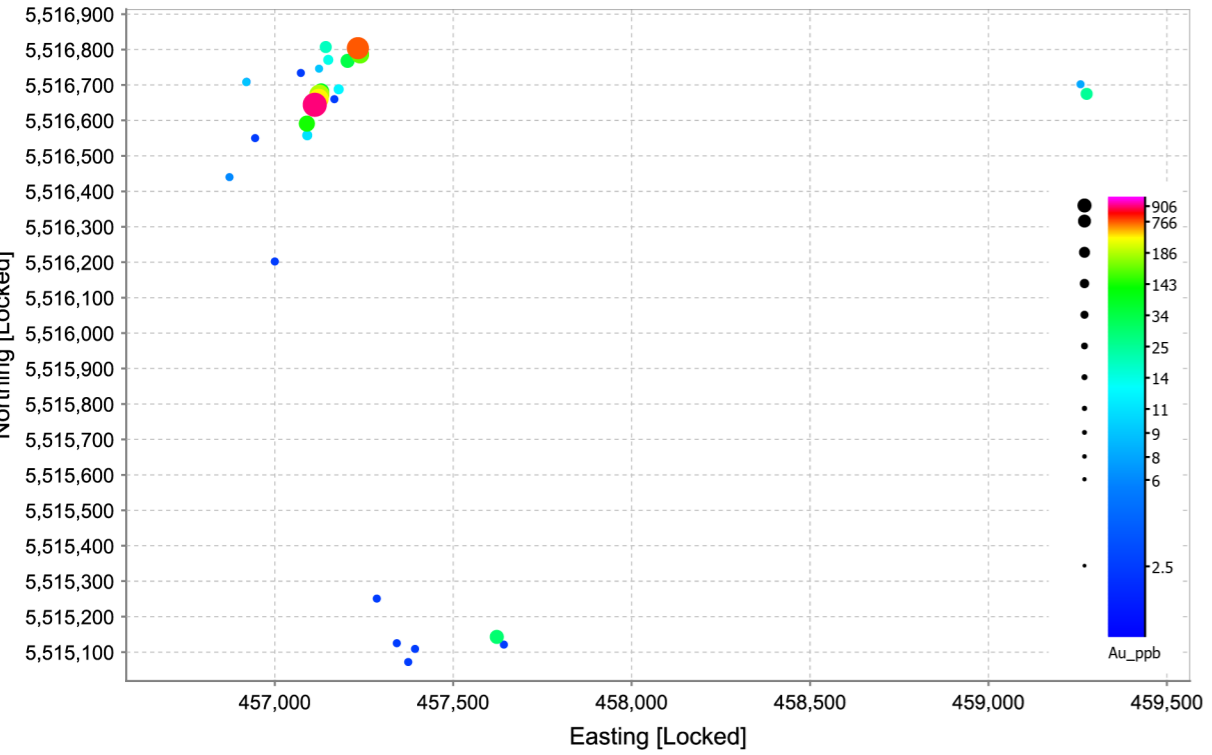
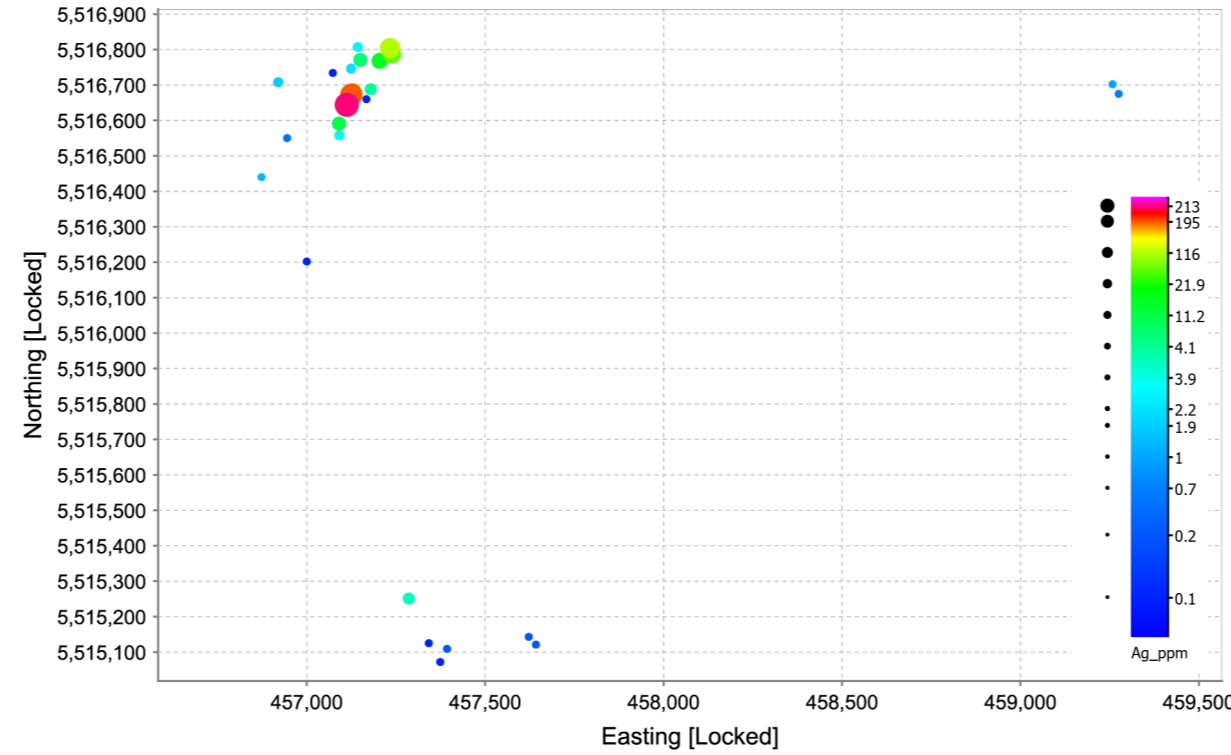
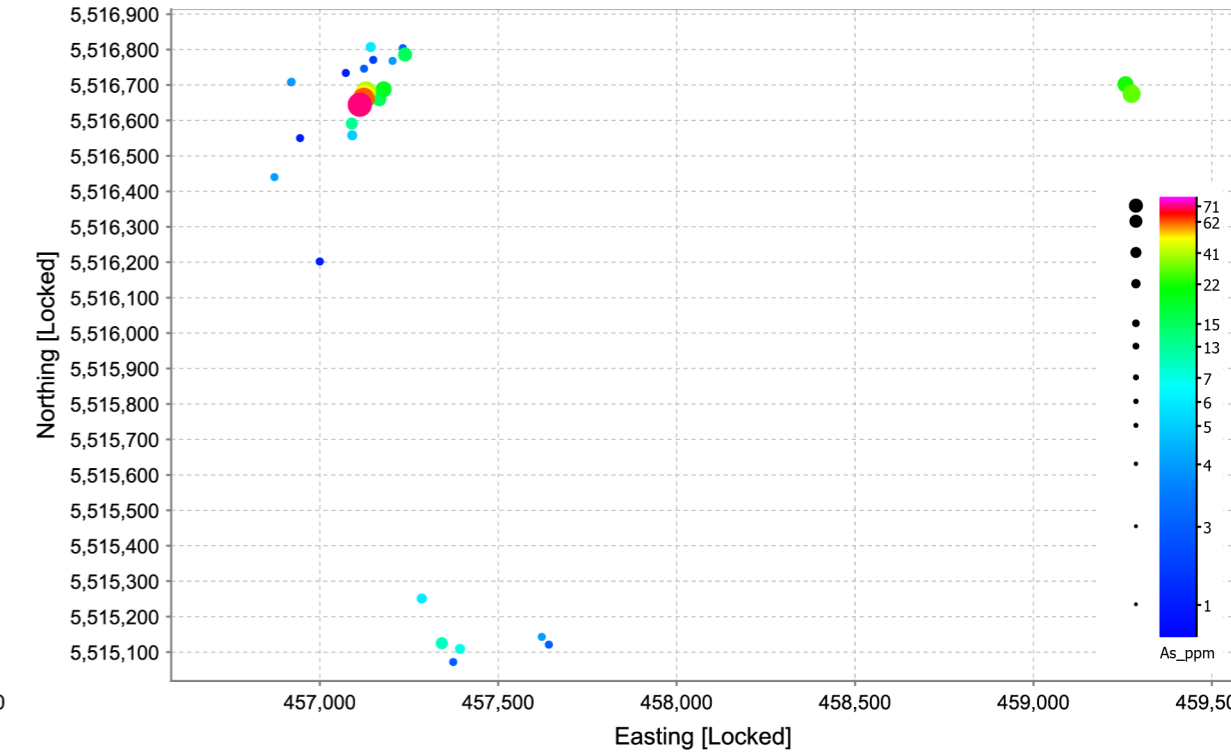
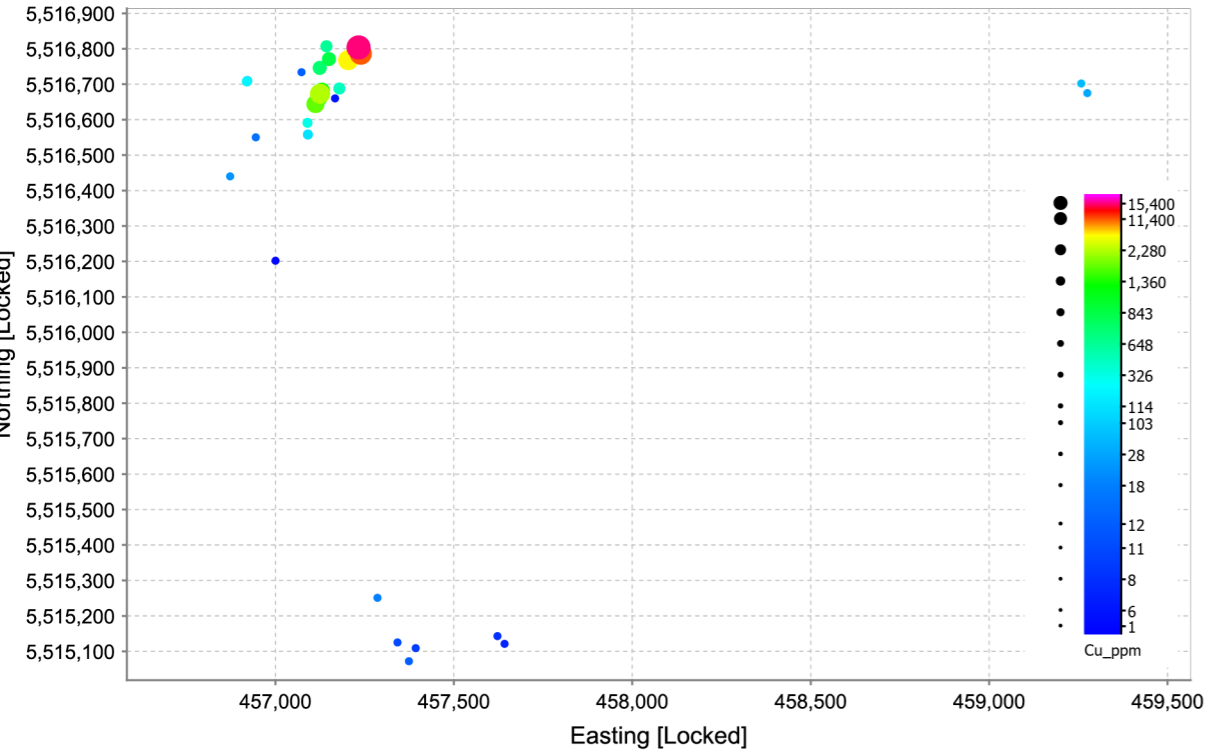
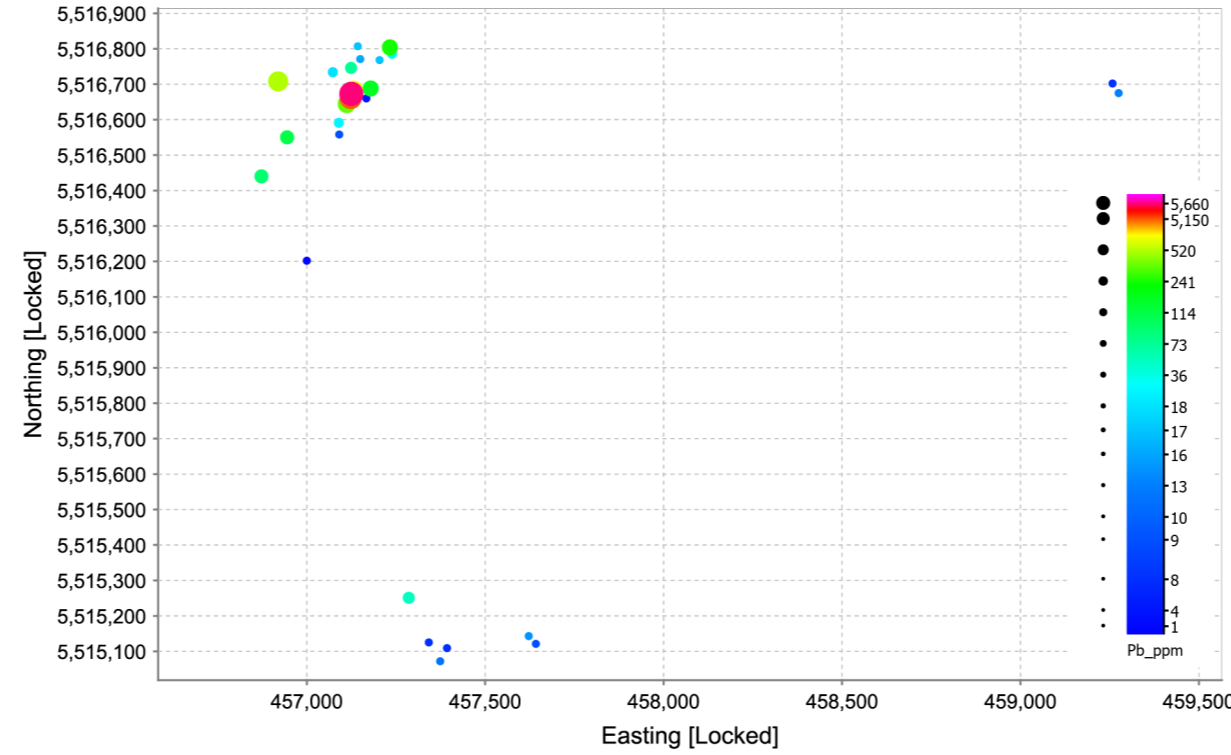
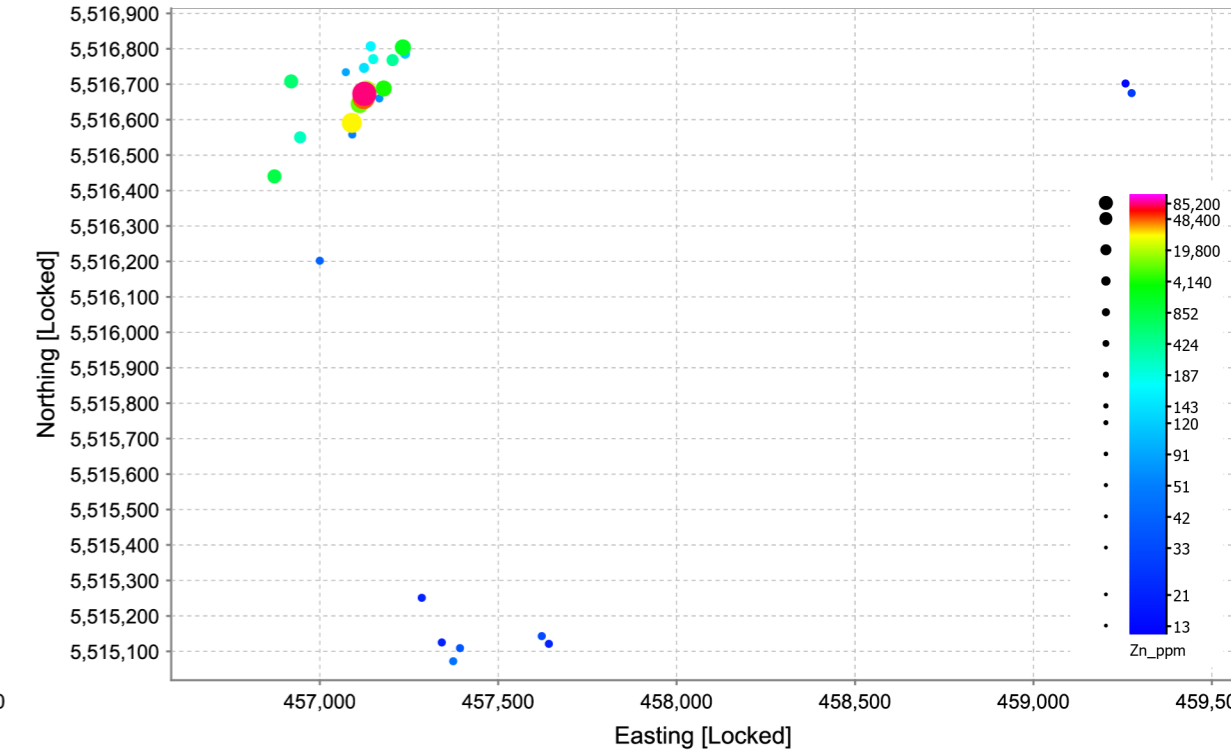
Legend

- ▲ Cu
- ▲ Zn, Au, Ag, Pb
- Camp
- Rickaby Property
- Rock Samples
- Soil Samples
- Boulders
- Blast Pit
- Historic Trenches
- Outcrops
- Swamps
- Lakes
- Roads
- Trails
- Prospecting tracks



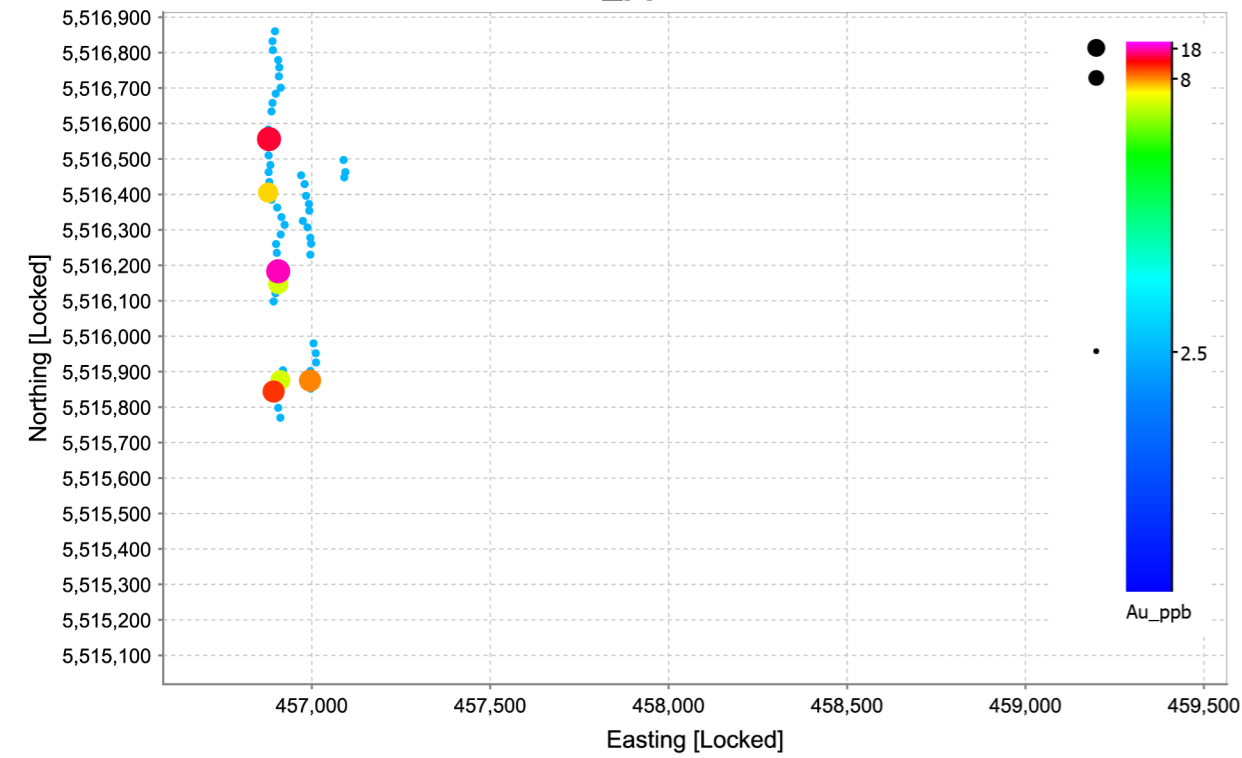
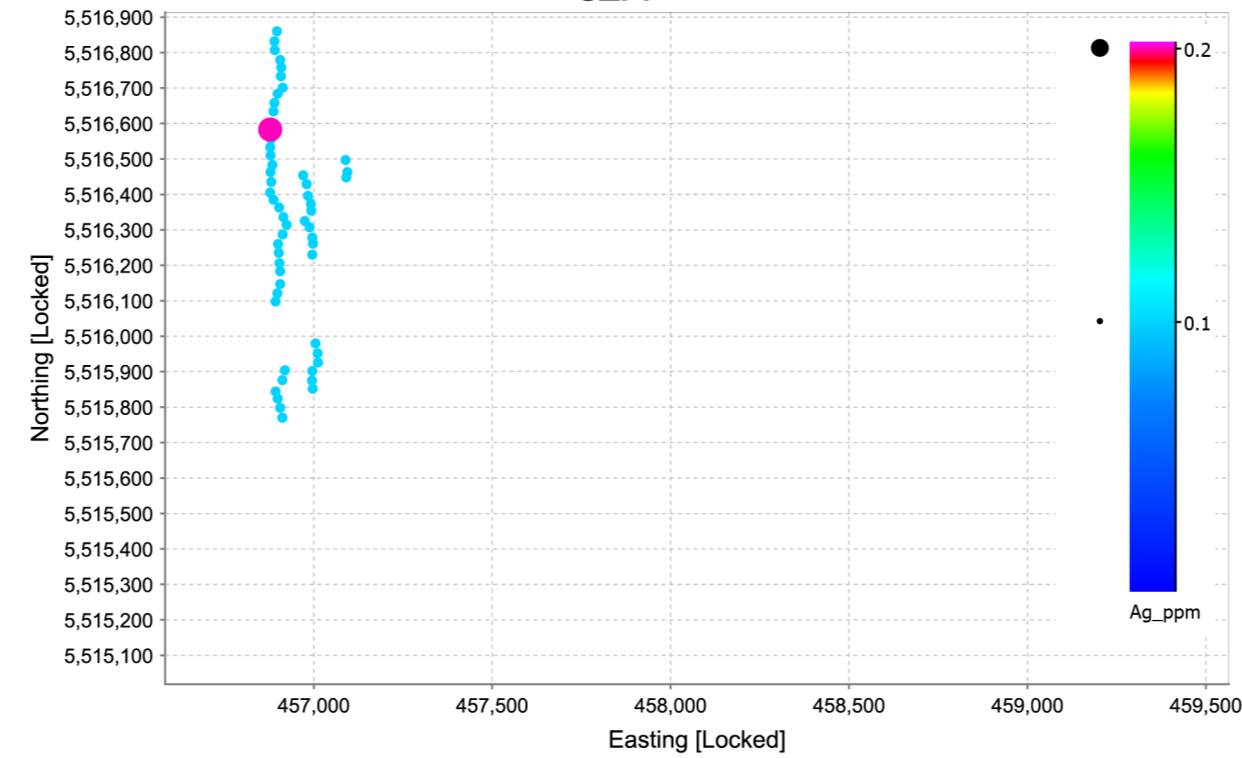
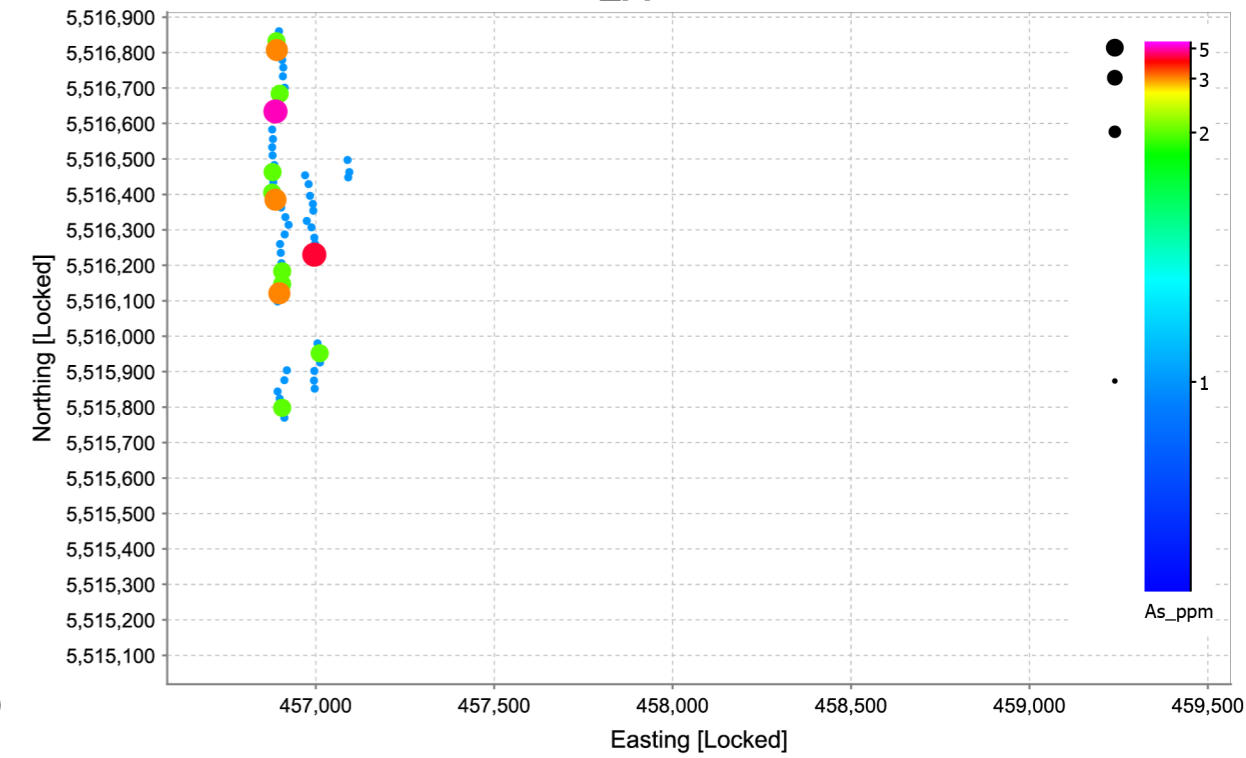
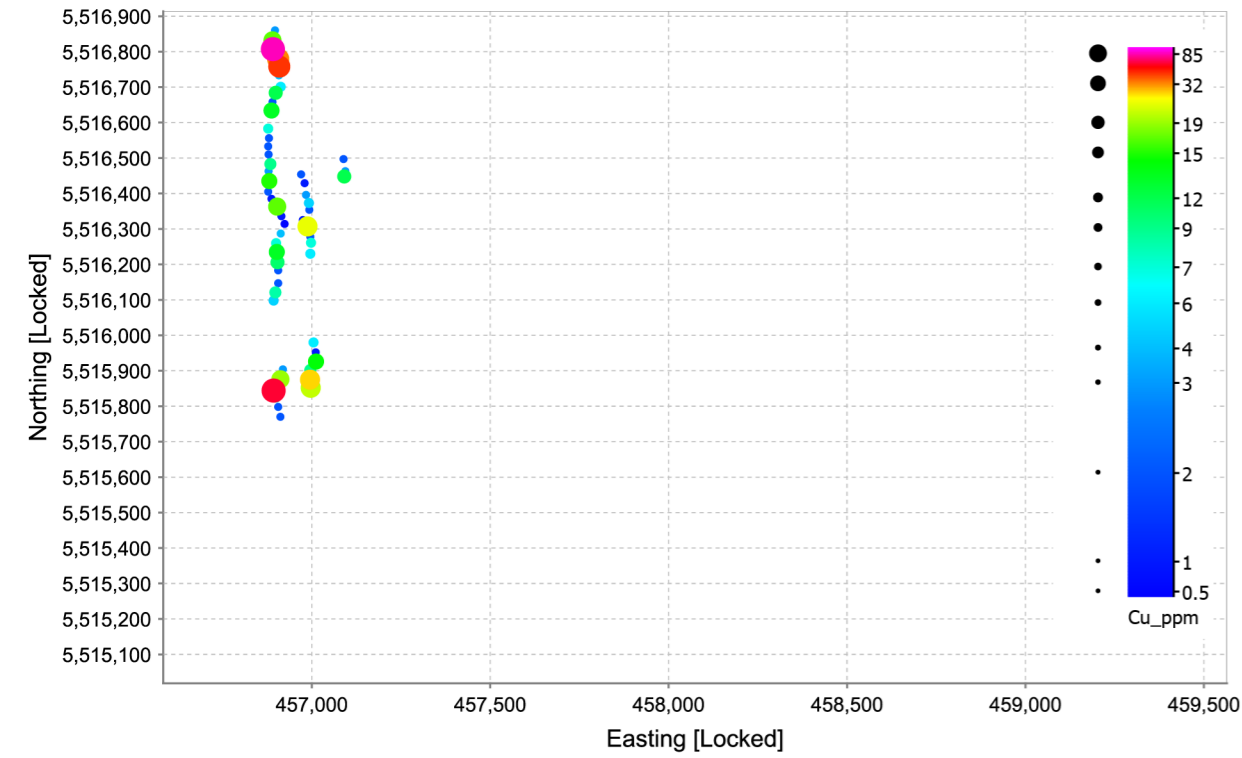
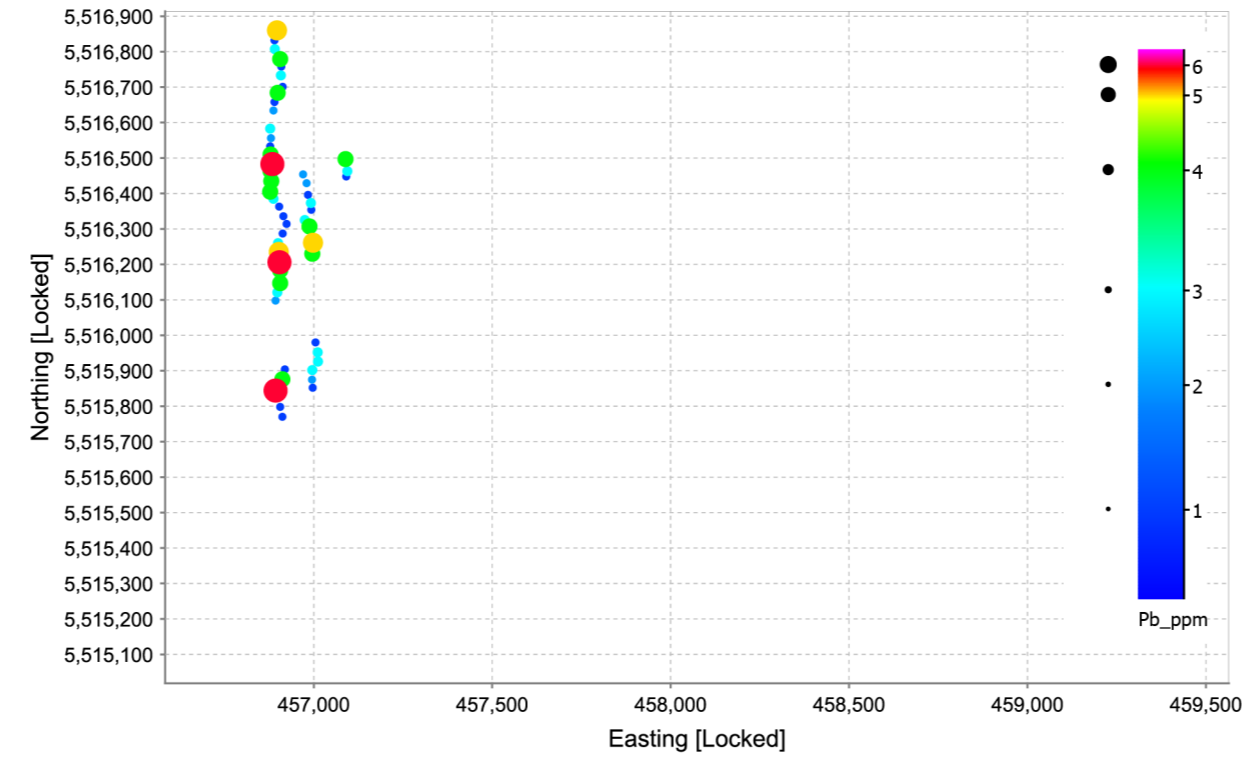
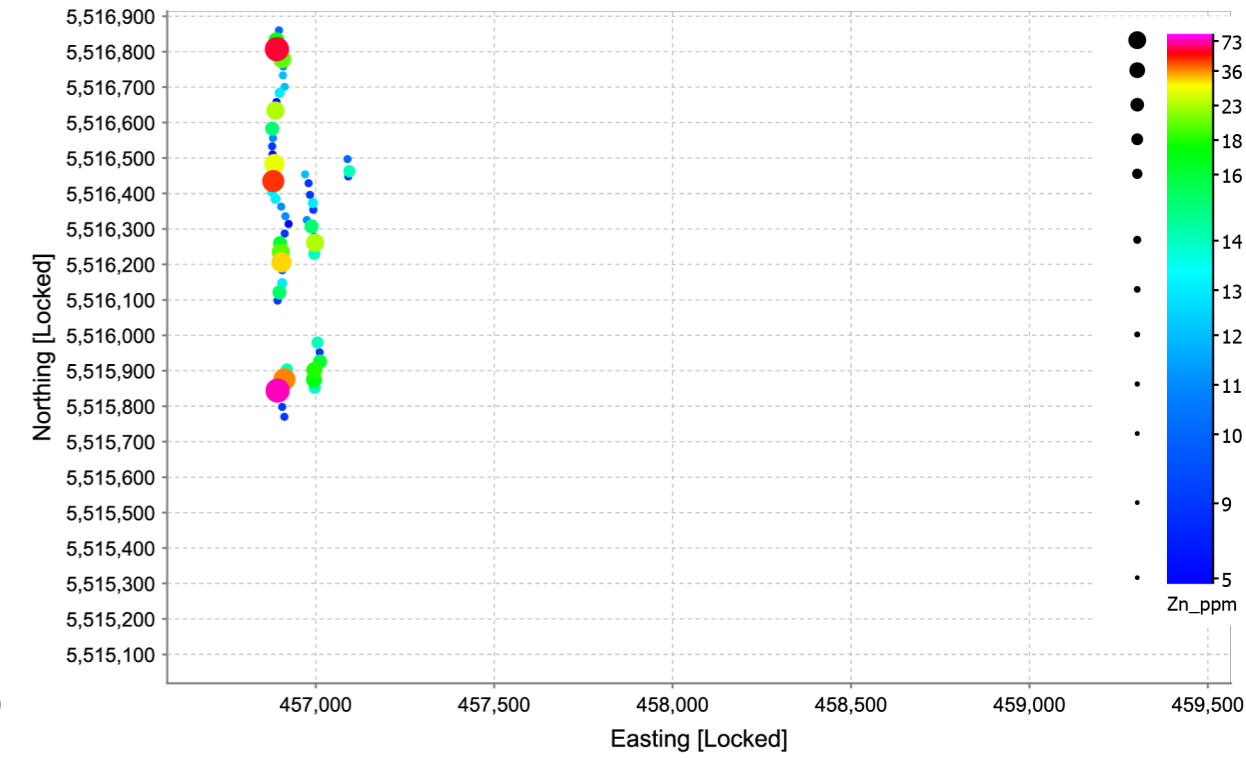
Appendix III: Geochemical Sampling Summary and Results

Sample ID	Type	Rock Type	Sample Description	Easting	Northing
1123305	Grab - Outcrop	Felsic Volcanic	Sheared felsic volcanics, 3% disseminated pyrite, thin (1-2 cm) quartz+carbonate veining	457000	5516202
1123306	Grab - Outcrop	Felsic Volcanic	Silicified felsic volcanics with minor quartz+carbonate veining and trace (<1%) pyrite	456945	5516550
1123307	Grab - Outcrop	Felsic Volcanic	Silicified felsic volcanic, strongly sheared, 3-5% disseminated pyrite	457179	5516688
1123308	Grab - Outcrop	Felsic Volcanic	Silicified felsic with trace pyrite	457167	5516660
1123309	Grab - Outcrop	Felsic Volcanic	Gaussened felsic volcanic with 3% pyrite and trace chalcopyrite and magnetite	457091	5516558
1123310	Grab - Outcrop	Felsic Volcanic	Gaussened felsic volcanic with 3% pyrite and trace chalcopyrite and magnetite	457090	5516591
1123311	Grab - Outcrop	Felsic Volcanic	Heavily gaussened felsic volcanic with 15% pyrite in 1m wide zone	457112	5516644
1123312	Grab - Outcrop	Felsic Volcanic	Semi-massive to massive sulphides with pyrite, chalcopyrite, spalerite and galena, 2 m zone in historic Kenty area	457123	5516661
1123313	Grab - Boulder	Felsic Volcanic	Silicified felsic boulder, 0.5m2, trace pyrite	456873	5516440
1123314	Grab - Rubble	Felsic volcanic	Silicified felsic volcanic with trace pyrite and chalcopyrite, blast pit rubble	456920	5516708
1123315	Grab - Rubble	Felsic volcanic	Silicified felsic with 5% pyrite and trace chalcopyrite, blast pit rubble	456921	5516709
1123316	Grab - Outcrop	Felsic volcanic	Felsic volcanic with trace pyrite and thin quartz veining	457073	5516734
1123317	Grab - Outcrop	Felsic volcanic	Gaussened felsic volcanic with 8% galena, 10% pyrite and and trace chalcopyrite and sphalerite	457125	5516673
1123318	Grab - Outcrop	Felsic volcanic	silicified felsic with 20% pyrite, 2% chalcopyrite and trace sphalerite	457130	5516682
1123319	Grab - Outcrop	Felsic volcanic	Felsic volcanic with 3-5% cubic disseminated pyrite	457124	5516746
1123320	Grab - Outcrop	Felsic volcanic	Felsic volcanic with trace pyrite and chalcopyrite	457143	5516807
1123321	Grab - Outcrop	Felsic volcanic	Felsic volcanic with 3% pyrite and chalcopyrite	457150	5516771
1123322	Grab - Outcrop	Felsic volcanic	Sheared felsic volcanic with 5% chalcopyrite and thin quartz veining	457204	5516768
1123323	Grab - Outcrop	Felsic volcanic	Sheared felsic volcanic with 5% chalcopyrite, weak malachite staining	457239	5516786
1123324	Grab - Outcrop	Felsic volcanic	Sheared felsic volcanic with 20% fine-grained disseminated pyrite	459258	5516702
1123325	Grab - Outcrop	Felsic volcanic	Sheared felsic volcanic with 20% pyrite, old channel cut	459275	5516675
1123326	Grab - Outcrop	Felsic volcanic	Sheared felsic volcanic with 10% fine-grained disseminated pyrite in 20m wide zone	457374	5515072
1123327	Grab - Outcrop	Felsic volcanic	Silicified sheared felsic volcanic with 10% pyrite, similar to 1123326	457393	5515109
1123328	Grab - Outcrop	Felsic volcanic	Silicified felsic sheared bands of pyrite 5%	457286	5515251
1123329	Grab - Outcrop	Felsic volcanic	Silicified sheared felsic with 10% pyrite	457342	5515125
1123330	Grab - Outcrop	Felsic volcanic	Silicified sheared felsic with 3% pyrite	457622	5515143
1123331	Grab - Outcrop	Felsic volcanic	Silicified and sheared felsic volcanic with 20% pyrite, historic blast pit	457642	5515121
1123332	Grab - Outcrop	Felsic volcanic	Sheared felsic with 8% chalcopyrite	457233	5516804

Au_ppb**Ag_ppm****As_ppm****Cu_ppm****Pb_ppm****Zn_ppm**

Appendix IV: Soil Sample Summary and Results

Sample ID	Sample Type	Soil Description	Sample Depth (inches)	Easting	Northing
CHS-001	Soil	Light Brown Sand	6"	456904	5516206
CHS-002	Soil	Light Brown Sand	6"	456906	5516183
CHS-003	Soil	Light Brown Sand	6"	456906	5516147
CHS-004	Soil	Brown Sand	6"	456898	5516121
CHS-005	Soil	Grey Clay	3"	456893	5516098
CHS-006	Soil	Grey Clay	3"	456919	5515904
CHS-007	Soil	Dark Grey Sand	6"	456912	5515876
CHS-008	Soil	Black Sand/Clay	5"	456893	5515844
CHS-009	Soil	Light Brown Sand	6"	456899	5515824
CHS-010	Soil	Light Brown Sand	6"	456906	5515798
CHS-011	Soil	Light Brown Sand	6"	456912	5515770
CHS-012	Soil	Light Brown Sand	6"	456997	5515852
CHS-013	Soil	Grey Sand Clay	5"	456995	5515875
CHS-014	Soil	Light Brown Sand	6"	456996	5515902
CHS-015	Soil	Light Brown Sand	6"	457012	5515926
CHS-016	Soil	Red Brown Sand	6"	457011	5515952
CHS-017	Soil	Grey Clay	3"	457005	5515980
CHS-018	Soil	Red Brown Sand	3"	456996	5516230
CHS-019	Soil	Red Brown Sand	6"	456998	5516261
CHS-020	Soil	Light Brown Sand	6"	456996	5516278
CHS-021	Soil	Light Brown Sand	6"	456988	5516307
CHS-022	Soil	Light Brown Sand	6"	456975	5516325
CHS-023	Soil	Grey Clay	3"	456993	5516354
CHS-024	Soil	Grey Clay	4"	456992	5516373
CHS-025	Soil	Grey Clay	4"	456984	5516396
CHS-026	Soil	Light Brown Sand	6"	456980	5516429
CHS-027	Soil	Red Sand	6"	456970	5516454
CHS-028	Soil	Light Brown Sand	6"	457089	5516497
CHS-029	Soil	Red Brown Sand	6"	457094	5516463
CHS-030	Soil	Grey Clay	6"	457091	5516448
CHS-031	Soil	Dark Grey Clay	5"	456902	5516235
CHS-032	Soil	Light Brown Clay	6"	456900	5516260
CHS-033	Soil	Light Brown Sand	5"	456913	5516287
CHS-034	Soil	Light Brown Sand	5"	456924	5516314
CHS-035	Soil	Light Brown/Grey Clay	6"	456915	5516336
CHS-036	Soil	Light Brown/Grey Clay	6"	456903	5516363
CHS-037	Soil	Red Sand	6"	456887	5516385
CHS-038	Soil	Light Brown Sand	6"	456878	5516405
CHS-039	Soil	Red Brown Sand	6"	456881	5516435
CHS-040	Soil	Red Sand	6"	456879	5516463
CHS-041	Soil	Brown Sand	6"	456884	5516483
CHS-042	Soil	Red Sand	6"	456879	5516510
CHS-043	Soil	Light Brown Sand	6"	456878	5516533
CHS-044	Soil	Light Brown Sand	6"	456880	5516556
CHS-045	Soil	Red Sand	6"	456878	5516583
CHS-046	Soil	Red Sand	6"	456887	5516634
CHS-047	Soil	Red Sand	6"	456890	5516658
CHS-048	Soil	Grey Clay	4"	456899	5516684
CHS-049	Soil	Grey Clay	4"	456913	5516701
CHS-050	Soil	Brown Sand	6"	456908	5516733
CHS-051	Soil	Grey Clay	4"	456909	5516758
CHS-052	Soil	Grey Clay	4"	456906	5516779
CHS-053	Soil	Grey Clay	4"	456891	5516807
CHS-054	Soil	Grey Sand	6"	456890	5516832
CHS-055	Soil	Grey Sand	6"	456897	5516860

Au_ppb**Ag_ppm****As_ppm****Cu_ppm****Pb_ppm****Zn_ppm**

Appendix V: Expense Summary

Category	Date	Receipt/Invoice Number	Payee	Description	Total Amount	Report A - 70%	Report B - 30%
Prospecting	9/27/2019	422452	Robert Heilman	14 Man Days (2 Men x 7 Days) @ 300.00\$ CDN / Day	\$ 4,200.00	\$ 2,940	\$ 1,260
	9/27/2019	422452	Robert Heilman	7 Day Camp Rental @ 200.00\$ CDN / Day	\$ 1,400.00	\$ 980	\$ 420
				Subtotal	\$ 5,600.00	\$ 3,920	\$ 1,680
Assays	10/10/2019	A19-13077	Activation Laboratories Ltd.	55 Soil Samples - Au + ICP @ 34.25\$ CDN / Sample	\$ 1,883.75	\$ 1,319	\$ 565
	10/10/2019	A19-13077	Activation Laboratories Ltd.	28 Rock Samples - Au + ICP @ 41.75\$ CDN / Sample	\$ 1,169.00	\$ 818	\$ 351
				Subtotal	\$ 3,052.75	\$ 2,137	\$ 916
Transportation - Fuel				Fuel - Gas	\$ 545.04	\$ 382	\$ 164
Food				Food during duration of work	\$ 368.85	\$ 258	\$ 111
				Subtotal	\$ 913.89	\$ 640	\$ 274
Labour - Report Writing			Joey Vrzovski	3 Days Report Writing @ 300\$ CDN / day	\$ 900.00	\$ 630	\$ 270
Total Amount Submitted for Credit					\$ 10,467	\$ 7,327	\$ 3,140

Claims	# of Samples
298974	1
328768	5
281674	2
214164	25
101478	38
214190	12
Total	83

Claim Number	Percent of Work	Credit
298974	1%	\$ 126
328768	6%	\$ 631
281674	2%	\$ 252
214164	30%	\$ 3,153
101478	46%	\$ 4,792
214190	14%	\$ 1,513
Total		\$ 10,467

Appendix VI: Assays and Certificates



Report No.: A19-13077
Report Date: 17-Oct-19
Date Submitted: 26-Sep-19
Your Reference:

Hickman Prospecting
401-1241 Jasper Drive
Thunder Bay Ontario P7B6N8
Canada

ATTN: Cliff Hickman

CERTIFICATE OF ANALYSIS

83 Rock samples were submitted for analysis.

Table with 3 columns: Analytical package requested, Method, and Testing Date. Rows include 1A2-Tbay (QOP AA-Au), 1E3-Tbay (QOP AquaGeo), and their respective testing dates.

REPORT A19-13077

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

[Handwritten signature]

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613
E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Results

Activation Laboratories Ltd.

Report: A19-13077

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CHS-001	< 5	< 0.2	< 0.5	11	121	< 1	12	6	25	1.46	< 2	< 10	36	< 0.5	< 2	0.30	6	30	1.50	< 10	< 1	0.04	17
CHS-002	18	< 0.2	< 0.5	2	64	< 1	6	4	10	1.14	2	< 10	39	< 0.5	< 2	0.15	3	20	1.21	< 10	< 1	0.04	12
CHS-003	6	< 0.2	< 0.5	2	63	< 1	8	4	13	1.08	2	< 10	30	< 0.5	< 2	0.15	3	21	1.46	< 10	< 1	0.04	< 10
CHS-004	< 5	< 0.2	< 0.5	8	83	< 1	14	3	15	1.63	3	< 10	45	< 0.5	< 2	0.19	6	31	1.85	< 10	< 1	0.04	< 10
CHS-005	< 5	< 0.2	< 0.5	5	111	< 1	8	2	9	0.53	< 2	< 10	24	< 0.5	< 2	2.83	3	16	0.94	< 10	< 1	0.05	16
CHS-006	< 5	< 0.2	< 0.5	3	78	< 1	6	< 2	14	0.50	< 2	< 10	22	< 0.5	< 2	0.75	3	16	0.64	< 10	< 1	0.04	13
CHS-007	6	< 0.2	< 0.5	19	99	< 1	11	4	36	0.68	< 2	< 10	31	< 0.5	< 2	0.72	3	25	0.84	< 10	< 1	0.06	20
CHS-008	12	< 0.2	< 0.5	82	252	< 1	24	6	73	1.40	< 2	< 10	65	< 0.5	< 2	1.68	10	42	1.88	< 10	< 1	0.11	25
CHS-009	< 5	< 0.2	< 0.5	7	94	< 1	6	2	11	0.57	< 2	< 10	24	< 0.5	< 2	0.62	2	17	0.93	< 10	< 1	0.04	13
CHS-010	< 5	< 0.2	< 0.5	2	70	< 1	6	< 2	9	0.81	2	< 10	33	< 0.5	< 2	0.27	2	16	0.79	< 10	< 1	0.03	13
CHS-011	< 5	< 0.2	< 0.5	2	57	< 1	4	< 2	9	0.60	< 2	< 10	23	< 0.5	< 2	0.19	2	16	0.86	< 10	< 1	0.03	< 10
CHS-012	< 5	< 0.2	< 0.5	23	146	< 1	8	< 2	14	0.63	< 2	< 10	25	< 0.5	< 2	2.05	3	20	1.10	< 10	< 1	0.06	17
CHS-013	8	< 0.2	< 0.5	29	215	< 1	12	2	17	0.85	< 2	< 10	33	< 0.5	< 2	1.34	4	27	1.28	< 10	< 1	0.06	18
CHS-014	< 5	< 0.2	< 0.5	9	164	< 1	11	3	18	0.90	< 2	< 10	34	< 0.5	< 2	0.54	5	26	1.26	< 10	< 1	0.05	17
CHS-015	< 5	< 0.2	< 0.5	14	189	< 1	9	3	16	0.77	< 2	< 10	30	< 0.5	< 2	0.89	4	23	1.23	< 10	< 1	0.06	17
CHS-016	< 5	< 0.2	< 0.5	1	66	< 1	9	3	9	1.11	2	< 10	41	< 0.5	< 2	0.15	3	25	1.47	< 10	< 1	0.04	< 10
CHS-017	< 5	< 0.2	< 0.5	6	59	< 1	6	< 2	14	0.71	< 2	< 10	28	< 0.5	< 2	0.47	2	17	0.58	< 10	< 1	0.05	18
CHS-018	< 5	< 0.2	< 0.5	6	88	< 1	10	4	14	1.13	4	< 10	25	< 0.5	< 2	0.22	3	29	1.63	< 10	< 1	0.05	12
CHS-019	< 5	< 0.2	< 0.5	7	81	< 1	7	5	23	1.43	< 2	< 10	37	< 0.5	< 2	0.14	2	23	1.37	< 10	< 1	0.03	12
CHS-020	< 5	< 0.2	< 0.5	2	65	< 1	5	< 2	10	0.95	< 2	< 10	31	< 0.5	< 2	0.20	2	18	0.88	< 10	< 1	0.04	12
CHS-021	< 5	< 0.2	< 0.5	26	94	1	8	4	15	1.01	< 2	< 10	30	< 0.5	< 2	0.41	3	23	1.12	< 10	< 1	0.04	19
CHS-022	< 5	< 0.2	< 0.5	1	54	< 1	5	3	11	1.01	< 2	< 10	33	< 0.5	< 2	0.20	2	18	1.02	< 10	< 1	0.03	11
CHS-023	< 5	< 0.2	< 0.5	2	96	< 1	5	< 2	9	0.40	< 2	< 10	25	< 0.5	< 2	0.54	2	13	0.70	< 10	< 1	0.04	11
CHS-024	< 5	< 0.2	< 0.5	5	100	< 1	6	3	13	0.73	< 2	< 10	43	< 0.5	< 2	0.51	3	19	0.93	< 10	< 1	0.05	25
CHS-025	< 5	< 0.2	< 0.5	3	84	< 1	4	< 2	9	0.40	< 2	< 10	23	< 0.5	< 2	0.60	2	12	0.51	< 10	< 1	0.03	12
CHS-026	< 5	< 0.2	< 0.5	1	69	< 1	4	2	9	0.56	< 2	< 10	21	< 0.5	< 2	0.45	2	15	0.86	< 10	< 1	0.04	10
CHS-027	< 5	< 0.2	< 0.5	2	69	< 1	9	2	12	1.25	< 2	< 10	39	< 0.5	< 2	0.18	4	22	1.33	< 10	< 1	0.05	< 10
CHS-028	< 5	< 0.2	< 0.5	2	185	< 1	5	4	10	0.91	< 2	< 10	30	< 0.5	< 2	0.19	2	19	1.30	< 10	< 1	0.04	10
CHS-029	< 5	< 0.2	< 0.5	3	73	< 1	9	3	14	1.33	< 2	< 10	46	< 0.5	< 2	0.19	4	25	1.57	< 10	< 1	0.05	11
CHS-030	< 5	< 0.2	< 0.5	12	106	< 1	5	< 2	9	0.76	< 2	< 10	29	< 0.5	< 2	0.53	2	14	0.86	< 10	< 1	0.03	12
CHS-031	< 5	< 0.2	< 0.5	13	124	< 1	8	5	21	1.72	< 2	< 10	66	0.7	< 2	0.94	5	25	1.62	< 10	< 1	0.05	23
CHS-032	< 5	< 0.2	< 0.5	7	157	< 1	12	3	16	0.73	< 2	< 10	28	< 0.5	< 2	1.51	4	30	1.11	< 10	< 1	0.05	14
CHS-033	< 5	< 0.2	< 0.5	4	99	< 1	8	< 2	9	0.50	< 2	< 10	21	< 0.5	< 2	1.17	2	15	0.84	< 10	< 1	0.04	13
CHS-034	< 5	< 0.2	< 0.5	< 1	38	< 1	4	< 2	5	0.76	< 2	< 10	23	< 0.5	< 2	0.11	1	11	0.55	< 10	< 1	0.02	< 10
CHS-035	< 5	< 0.2	< 0.5	1	217	< 1	7	< 2	11	0.75	< 2	< 10	29	< 0.5	< 2	0.34	3	18	0.94	< 10	< 1	0.04	11
CHS-036	< 5	< 0.2	< 0.5	16	367	1	7	< 2	11	0.57	< 2	< 10	30	< 0.5	< 2	0.53	3	17	0.92	< 10	< 1	0.04	14
CHS-037	< 5	< 0.2	< 0.5	1	56	< 1	7	3	13	1.01	3	< 10	26	< 0.5	< 2	0.17	3	19	1.15	< 10	< 1	0.04	< 10
CHS-038	7	< 0.2	< 0.5	2	123	< 1	9	4	13	1.19	2	< 10	37	< 0.5	< 2	0.18	4	22	1.33	< 10	< 1	0.04	12
CHS-039	< 5	< 0.2	< 0.5	15	139	< 1	20	4	56	2.01	< 2	< 10	43	< 0.5	< 2	0.25	6	45	2.20	< 10	< 1	0.06	14
CHS-040	< 5	< 0.2	< 0.5	3	74	< 1	7	4	12	1.10	2	< 10	32	< 0.5	< 2	0.16	2	23	1.44	< 10	< 1	0.04	< 10
CHS-041	< 5	< 0.2	< 0.5	9	111	1	8	6	24	1.67	< 2	< 10	36	< 0.5	< 2	0.14	2	26	1.60	< 10	< 1	0.03	13
CHS-042	< 5	< 0.2	< 0.5	2	47	< 1	5	4	8	0.93	< 2	< 10	32	< 0.5	< 2	0.13	1	15	1.14	< 10	< 1	0.03	< 10
CHS-043	< 5	< 0.2	< 0.5	2	116	< 1	6	< 2	9	0.60	< 2	< 10	24	< 0.5	< 2	0.33	3	18	0.95	< 10	< 1	0.04	16
CHS-044	13	< 0.2	< 0.5	2	75	< 1	7	2	11	1.07	< 2	< 10	40	< 0.5	< 2	0.21	3	20	1.14	< 10	< 1	0.04	10
CHS-045	< 5	0.2	< 0.5	7	117	1	14	3	15	1.42	< 2	< 10	29	< 0.5	< 2	0.28	4	33	1.84	< 10	< 1	0.04	12
CHS-046	< 5	< 0.2	< 0.5	13	117	< 1	14	2	23	1.45	5	< 10	35	< 0.5	< 2	0.26	6	34	1.69	< 10	< 1	0.05	14
CHS-047	< 5	< 0.2	< 0.5	2	68	< 1	6	< 2	7	0.67	< 2	< 10	23	< 0.5	< 2	0.23	2	17	1.00	< 10	< 1	0.03	< 10
CHS-048	< 5	< 0.2	< 0.5	12	183	< 1	12	4	13	0.88	2	< 10	38	< 0.5	< 2	3.05	4	21	1.22	< 10	< 1	0.05	20
CHS-049	< 5	< 0.2	< 0.5	6	161	< 1	8	< 2	12	0.58	< 2	< 10	24	< 0.5	< 2	0.40	3	24	1.04	< 10	2	0.04	15
CHS-050	< 5	< 0.2	< 0.5	4	81	< 1	5	3	12	0.73	< 2	< 10	32	< 0.5	< 2	0.38	3	16	1.01	< 10	< 1	0.04	14
CHS-051	< 5	< 0.2	< 0.5	45	78	< 1	5	< 2	11	0.52	< 2	< 10	35	< 0.5	< 2	1.78	2	15	0.83	< 10	< 1	0.04	16

Results

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Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
CHS-052	< 5	< 0.2	< 0.5	32	137	< 1	11	4	21	0.76	< 2	< 10	40	< 0.5	< 2	1.68	4	25	1.18	< 10	< 1	0.06	17
CHS-053	< 5	< 0.2	< 0.5	85	110	< 1	17	3	72	1.17	3	< 10	50	< 0.5	< 2	1.13	4	28	1.26	< 10	< 1	0.07	20
CHS-054	< 5	< 0.2	< 0.5	16	145	< 1	12	< 2	17	0.83	2	< 10	30	< 0.5	< 2	2.54	4	29	1.18	< 10	< 1	0.05	16
CHS-055	< 5	< 0.2	< 0.5	3	42	< 1	2	5	10	0.66	< 2	< 10	21	< 0.5	< 2	0.13	1	12	0.45	< 10	< 1	0.02	< 10
1123305	< 5	< 0.2	< 0.5	1	495	< 1	32	< 2	42	2.12	< 2	< 10	115	< 0.5	< 2	2.26	24	18	2.97	< 10	< 1	0.39	14
1123306	< 5	0.3	1.1	16	694	2	< 1	114	361	1.39	< 2	< 10	65	< 0.5	< 2	1.92	2	12	1.47	< 10	< 1	0.47	22
1123307	12	4.1	19.0	418	402	1	2	164	4140	1.75	19	< 10	26	< 0.5	< 2	0.18	9	6	5.01	< 10	< 1	0.51	19
1123308	< 5	< 0.2	< 0.5	6	992	< 1	32	4	75	1.77	15	< 10	62	< 0.5	< 2	1.70	9	19	3.24	< 10	< 1	0.30	19
1123309	11	3.9	1.0	114	26100	< 1	14	9	51	0.39	5	< 10	< 10	< 0.5	11	7.00	< 1	4	23.2	< 10	< 1	< 0.01	< 10
1123310	143	11.2	169	326	26600	< 1	18	23	> 10000	1.07	13	< 10	11	< 0.5	9	4.43	11	4	15.9	< 10	< 1	0.05	< 10
1123311	906	> 100	49.5	1780	10600	< 1	7	519	9230	0.63	71	< 10	< 10	< 0.5	< 2	4.06	< 1	3	14.4	< 10	< 1	0.04	< 10
1123312	296	> 100	113	1130	1280	< 1	4	> 5000	> 10000	1.14	62	< 10	< 10	< 0.5	4	0.04	< 1	4	17.9	< 10	< 1	0.14	< 10
1123313	6	1.8	3.0	22	693	1	2	88	852	1.66	4	< 10	84	< 0.5	< 2	1.08	2	12	1.69	< 10	< 1	0.53	28
1123314	9	1.9	1.1	275	477	1	59	520	466	2.83	< 2	< 10	115	< 0.5	< 2	1.61	11	91	3.25	< 10	< 1	0.78	13
1123315	6	0.8	< 0.5	103	700	2	16	10	93	1.58	4	< 10	79	< 0.5	< 2	1.62	13	11	3.58	< 10	< 1	0.45	18
1123316	< 5	< 0.2	< 0.5	12	303	< 1	65	18	91	1.46	< 2	< 10	24	< 0.5	< 2	1.28	11	97	2.01	< 10	< 1	0.08	< 10
1123317	186	> 100	188	2280	901	< 1	8	> 5000	> 10000	1.14	60	< 10	< 10	< 0.5	2	0.03	< 1	3	14.6	< 10	< 1	0.15	10
1123318	62	21.9	65.1	1360	434	1	8	1300	> 10000	1.43	41	< 10	< 10	< 0.5	8	0.04	< 1	7	9.65	< 10	< 1	0.20	11
1123319	9	2.2	< 0.5	790	441	< 1	9	73	143	1.53	3	< 10	28	0.7	4	1.19	26	5	3.88	< 10	< 1	0.40	24
1123320	16	2.7	< 0.5	648	752	< 1	54	17	155	3.15	6	< 10	65	< 0.5	< 2	3.07	18	46	4.28	< 10	< 1	0.31	< 10
1123321	14	4.2	1.0	843	389	< 1	6	16	187	1.28	2	< 10	97	< 0.5	2	1.55	7	6	1.53	< 10	< 1	0.35	21
1123322	34	13.5	2.6	3190	659	< 1	14	17	424	1.72	4	< 10	135	< 0.5	3	3.55	6	10	2.48	< 10	< 1	0.44	15
1123323	147	27.1	< 0.5	> 10000	161	25	4	36	120	1.65	15	< 10	72	< 0.5	14	0.12	9	3	3.59	< 10	< 1	0.42	21
1123324	8	1.0	< 0.5	39	34	1	< 1	8	13	1.04	22	< 10	28	< 0.5	4	0.04	4	4	4.06	< 10	< 1	0.47	18
1123325	25	0.7	< 0.5	28	120	1	5	13	30	1.30	30	< 10	< 10	< 0.5	< 2	0.03	< 1	4	6.98	< 10	< 1	0.45	< 10
1123326	< 5	< 0.2	< 0.5	12	496	6	3	11	48	0.64	3	< 10	45	< 0.5	< 2	1.05	3	9	2.11	< 10	< 1	0.32	25
1123327	< 5	0.2	< 0.5	10	412	2	2	8	34	0.57	7	< 10	54	< 0.5	< 2	0.54	1	8	2.37	< 10	< 1	0.32	28
1123328	< 5	4.0	< 0.5	18	93	22	3	71	21	1.19	6	< 10	27	< 0.5	16	0.15	7	9	4.02	< 10	< 1	0.39	20
1123329	< 5	< 0.2	< 0.5	11	428	1	2	8	21	0.69	9	< 10	74	< 0.5	< 2	0.37	< 1	10	2.75	< 10	< 1	0.37	24
1123330	33	0.2	< 0.5	8	775	1	1	15	33	0.66	4	< 10	29	< 0.5	6	1.22	1	9	3.93	< 10	< 1	0.34	26
1123331	< 5	0.2	< 0.5	7	203	2	1	9	21	0.77	3	< 10	59	< 0.5	< 2	0.09	< 1	13	1.43	< 10	< 1	0.33	35
1123332	766	> 100	5.5	> 10000	274	3	5	241	937	1.28	3	< 10	37	< 0.5	52	0.82	19	5	3.63	< 10	< 1	0.35	20

Results

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Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Ag	Cu	Pb	Zn
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	3	0.001	0.003	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	ICP-OES	ICP-OES	ICP-OES	ICP-OES
CHS-001	0.31	0.021	0.014	< 0.01	< 2	3	14	0.14	< 20	3	< 2	< 10	36	< 10	6	5				
CHS-002	0.14	0.020	0.013	< 0.01	< 2	2	11	0.11	< 20	< 1	< 2	< 10	34	< 10	4	4				
CHS-003	0.15	0.018	0.027	< 0.01	< 2	2	10	0.11	< 20	< 1	< 2	< 10	37	< 10	3	3				
CHS-004	0.25	0.022	0.020	< 0.01	< 2	2	11	0.13	< 20	< 1	< 2	< 10	37	< 10	4	6				
CHS-005	1.53	0.026	0.050	< 0.01	3	2	21	0.09	< 20	< 1	< 2	< 10	22	< 10	8	3				
CHS-006	0.38	0.021	0.053	0.02	< 2	2	14	0.09	< 20	3	< 2	< 10	18	< 10	6	5				
CHS-007	0.29	0.025	0.064	0.02	< 2	3	20	0.10	< 20	3	< 2	< 10	25	< 10	8	3				
CHS-008	0.80	0.027	0.079	0.05	2	4	23	0.11	< 20	4	< 2	< 10	38	< 10	13	3				
CHS-009	0.20	0.019	0.041	0.01	< 2	2	13	0.08	< 20	1	< 2	< 10	21	< 10	6	1				
CHS-010	0.14	0.019	0.021	< 0.01	< 2	2	13	0.09	< 20	< 1	< 2	< 10	23	< 10	5	1				
CHS-011	0.12	0.019	0.021	< 0.01	< 2	1	10	0.08	< 20	< 1	< 2	< 10	24	< 10	3	2				
CHS-012	1.06	0.024	0.057	< 0.01	< 2	3	19	0.09	< 20	2	< 2	< 10	25	< 10	8	2				
CHS-013	0.58	0.025	0.048	0.02	< 2	3	20	0.09	< 20	1	< 2	< 10	26	< 10	8	2				
CHS-014	0.30	0.025	0.038	< 0.01	< 2	3	16	0.10	< 20	< 1	< 2	< 10	28	< 10	8	2				
CHS-015	0.47	0.024	0.051	< 0.01	< 2	3	17	0.10	< 20	< 1	< 2	< 10	27	< 10	8	2				
CHS-016	0.16	0.022	0.012	< 0.01	< 2	2	10	0.10	< 20	< 1	< 2	< 10	32	< 10	3	4				
CHS-017	0.19	0.021	0.035	0.02	< 2	3	13	0.08	< 20	< 1	< 2	< 10	25	< 10	8	3				
CHS-018	0.24	0.020	0.037	< 0.01	< 2	2	12	0.11	< 20	< 1	< 2	< 10	35	< 10	5	4				
CHS-019	0.17	0.019	0.014	< 0.01	< 2	3	12	0.11	< 20	< 1	< 2	< 10	34	< 10	3	4				
CHS-020	0.15	0.022	0.019	< 0.01	< 2	2	12	0.10	< 20	1	< 2	< 10	28	< 10	4	2				
CHS-021	0.22	0.022	0.029	< 0.01	< 2	4	15	0.10	< 20	1	< 2	< 10	25	< 10	11	3				
CHS-022	0.13	0.020	0.016	< 0.01	< 2	2	10	0.09	< 20	< 1	< 2	< 10	29	< 10	5	2				
CHS-023	0.20	0.021	0.040	0.01	< 2	2	12	0.07	< 20	< 1	< 2	< 10	17	< 10	5	2				
CHS-024	0.18	0.019	0.036	0.01	< 2	3	14	0.07	< 20	< 1	< 2	< 10	29	< 10	11	1				
CHS-025	0.16	0.019	0.051	0.02	< 2	2	15	0.08	< 20	3	< 2	< 10	14	< 10	6	3				
CHS-026	0.17	0.019	0.022	< 0.01	< 2	2	13	0.08	< 20	< 1	< 2	< 10	23	< 10	4	2				
CHS-027	0.17	0.020	0.028	< 0.01	< 2	2	10	0.11	< 20	3	< 2	< 10	30	< 10	4	6				
CHS-028	0.13	0.019	0.041	< 0.01	< 2	2	11	0.11	< 20	< 1	< 2	< 10	34	< 10	4	3				
CHS-029	0.17	0.022	0.039	< 0.01	< 2	3	11	0.11	< 20	2	< 2	< 10	36	< 10	4	6				
CHS-030	0.14	0.020	0.019	0.01	< 2	2	15	0.07	< 20	1	< 2	< 10	25	< 10	6	1				
CHS-031	0.22	0.022	0.029	0.03	< 2	3	20	0.09	< 20	5	< 2	< 10	32	< 10	8	2				
CHS-032	0.67	0.023	0.040	< 0.01	< 2	3	19	0.10	< 20	1	< 2	< 10	24	< 10	7	2				
CHS-033	0.45	0.020	0.034	< 0.01	< 2	2	14	0.07	< 20	< 1	< 2	< 10	21	< 10	6	2				
CHS-034	0.07	0.019	0.008	< 0.01	< 2	1	9	0.07	< 20	2	< 2	< 10	19	< 10	3	< 1				
CHS-035	0.18	0.019	0.013	< 0.01	< 2	2	12	0.09	< 20	< 1	< 2	< 10	24	< 10	5	2				
CHS-036	0.19	0.021	0.039	< 0.01	< 2	2	15	0.08	< 20	2	< 2	< 10	22	< 10	7	1				
CHS-037	0.14	0.017	0.025	< 0.01	< 2	2	10	0.09	< 20	3	< 2	< 10	27	< 10	3	3				
CHS-038	0.17	0.020	0.046	< 0.01	< 2	2	10	0.10	< 20	< 1	< 2	< 10	32	< 10	4	4				
CHS-039	0.40	0.022	0.055	0.01	< 2	3	14	0.14	< 20	2	< 2	< 10	43	< 10	5	6				
CHS-040	0.17	0.020	0.018	< 0.01	< 2	2	11	0.11	< 20	2	< 2	< 10	36	< 10	3	4				
CHS-041	0.16	0.018	0.022	0.02	< 2	2	11	0.11	< 20	< 1	< 2	< 10	35	< 10	4	2				
CHS-042	0.09	0.018	0.015	0.01	< 2	1	10	0.10	< 20	< 1	< 2	< 10	37	< 10	2	3				
CHS-043	0.18	0.022	0.032	< 0.01	< 2	3	12	0.09	< 20	1	< 2	< 10	24	< 10	8	2				
CHS-044	0.15	0.021	0.040	< 0.01	< 2	2	11	0.09	< 20	6	< 2	< 10	27	< 10	4	5				
CHS-045	0.25	0.021	0.046	0.02	< 2	3	12	0.11	< 20	< 1	< 2	< 10	36	< 10	5	3				
CHS-046	0.28	0.023	0.030	< 0.01	< 2	3	13	0.12	< 20	3	< 2	< 10	36	< 10	6	7				
CHS-047	0.15	0.022	0.038	< 0.01	< 2	2	10	0.08	< 20	1	< 2	< 10	23	< 10	4	4				
CHS-048	1.39	0.027	0.051	0.02	< 2	3	26	0.09	< 20	1	< 2	< 10	26	< 10	9	3				
CHS-049	0.25	0.020	0.054	< 0.01	< 2	3	13	0.09	< 20	< 1	< 2	< 10	24	< 10	7	3				
CHS-050	0.17	0.022	0.015	< 0.01	< 2	2	13	0.09	< 20	2	< 2	< 10	26	< 10	5	2				

Results

Activation Laboratories Ltd.

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Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Ag	Cu	Pb	Zn
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	3	0.001	0.003	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	ICP-OES	ICP-OES	ICP-OES	ICP-OES
CHS-051	0.83	0.024	0.059	0.01	< 2	2	20	0.08	< 20	4	< 2	< 10	23	< 10	9	4				
CHS-052	0.76	0.027	0.056	0.02	< 2	3	22	0.10	< 20	9	< 2	< 10	26	< 10	8	5				
CHS-053	0.59	0.024	0.067	0.01	< 2	4	21	0.10	< 20	5	< 2	< 10	36	< 10	10	3				
CHS-054	1.01	0.025	0.048	< 0.01	< 2	3	26	0.10	< 20	3	< 2	< 10	25	< 10	7	4				
CHS-055	0.09	0.019	0.008	< 0.01	< 2	2	11	0.09	< 20	2	< 2	< 10	21	< 10	3	1				
1123305	1.30	0.085	0.041	0.76	< 2	6	36	0.20	< 20	3	< 2	< 10	32	< 10	10	21				
1123306	0.17	0.109	0.020	0.10	< 2	2	36	0.04	< 20	3	< 2	< 10	4	< 10	10	27				
1123307	0.17	0.047	0.016	3.68	3	2	7	< 0.01	< 20	4	< 2	< 10	3	< 10	6	51				
1123308	1.09	0.096	0.038	0.03	< 2	3	29	< 0.01	< 20	4	< 2	< 10	18	< 10	7	9				
1123309	1.31	0.014	0.007	0.46	11	< 1	78	< 0.01	< 20	7	18	< 10	12	< 10	6	8				
1123310	1.50	0.018	0.004	2.92	5	1	49	< 0.01	< 20	4	20	< 10	10	66	5	12				3.73
1123311	1.65	0.024	0.002	6.66	9	< 1	29	< 0.01	< 20	8	< 2	< 10	3	< 10	3	13	213			
1123312	0.27	0.023	0.006	17.3	123	< 1	3	< 0.01	< 20	8	< 2	< 10	5	20	2	23	178		5.15	4.84
1123313	0.26	0.128	0.020	0.20	< 2	2	30	< 0.01	< 20	3	< 2	< 10	4	< 10	9	42				
1123314	1.11	0.296	0.046	0.14	< 2	5	55	0.27	< 20	3	< 2	< 10	58	< 10	8	25				
1123315	1.05	0.205	0.058	0.38	< 2	8	553	0.27	< 20	7	< 2	< 10	76	< 10	11	47				
1123316	1.08	0.136	0.045	0.19	2	3	20	< 0.01	< 20	< 1	< 2	< 10	21	< 10	5	8				
1123317	0.21	0.023	0.008	16.4	104	< 1	3	< 0.01	< 20	3	< 2	< 10	4	15	2	28	195		5.66	8.52
1123318	0.28	0.028	0.016	9.08	9	2	4	0.02	< 20	5	< 2	< 10	3	< 10	3	30				1.98
1123319	0.70	0.079	0.017	2.15	< 2	3	41	< 0.01	< 20	3	6	< 10	20	< 10	10	66				
1123320	1.80	0.090	0.040	0.13	< 2	5	26	0.02	< 20	< 1	< 2	< 10	39	< 10	5	9				
1123321	0.25	0.094	0.057	0.41	< 2	2	35	< 0.01	< 20	7	< 2	< 10	9	< 10	7	3				
1123322	0.66	0.035	0.015	0.50	< 2	1	97	< 0.01	< 20	3	< 2	< 10	5	< 10	7	34				
1123323	0.59	0.030	0.048	1.07	< 2	2	9	< 0.01	< 20	8	< 2	< 10	5	< 10	9	10		1.14		
1123324	0.03	0.053	0.015	4.24	3	1	11	0.03	< 20	4	< 2	< 10	1	< 10	12	115				
1123325	0.12	0.056	0.013	7.57	3	2	11	0.02	< 20	2	< 2	< 10	2	< 10	10	97				
1123326	0.04	0.098	0.018	1.68	< 2	1	53	< 0.01	< 20	< 1	< 2	< 10	1	< 10	10	68				
1123327	0.02	0.076	0.021	1.03	< 2	1	30	< 0.01	< 20	2	< 2	< 10	1	< 10	7	38				
1123328	0.38	0.063	0.008	2.35	< 2	2	6	0.06	< 20	4	< 2	< 10	3	< 10	17	135				
1123329	0.02	0.072	0.020	0.91	< 2	1	11	< 0.01	< 20	2	< 2	< 10	1	< 10	8	40				
1123330	0.11	0.083	0.016	3.42	< 2	1	39	< 0.01	< 20	4	< 2	< 10	1	< 10	8	71				
1123331	0.04	0.148	0.015	0.73	< 2	2	11	< 0.01	< 20	< 1	< 2	< 10	1	< 10	9	46				
1123332	0.36	0.059	0.022	2.05	< 2	1	14	< 0.01	< 20	14	< 2	< 10	2	< 10	10	55	116	1.54		

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas		0.3	< 0.5	73	1030	2	25	95	131	7.46	253	< 10	718	0.9	< 2	0.12	11	84	5.93	20	< 1	1.18	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
GXR-6 Meas		0.3	< 0.5	70	999	1	25	91	128	7.33	242	< 10	688	0.9	< 2	0.12	11	82	5.66	20	1	1.12	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
MP-1b Meas																							
MP-1b Cert																							
CPB-2 Meas																							
CPB-2 Cert																							
CZN-4 Meas																							
CZN-4 Cert																							
OREAS 922 (AQUA REGIA) Meas		0.7	< 0.5	2190	712	< 1	33	59	265	2.99	5		84	0.8	4	0.42	16	47	5.00	< 10		0.49	34
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 922 (AQUA REGIA) Meas		0.8	< 0.5	2230	731	< 1	35	57	262	3.05	8		84	0.8	8	0.42	16	46	5.11	< 10		0.50	34
OREAS 922 (AQUA REGIA) Cert		0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62		0.376	32.5
OREAS 923 (AQUA REGIA) Meas		1.5	< 0.5	4300	810	< 1	34	72	337	3.00	6		69	0.7	18	0.41	19	42	5.80	< 10		0.42	31
OREAS 923 (AQUA REGIA) Cert		1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01		0.322	30.0
OREAS 923 (AQUA REGIA) Meas		1.5	< 0.5	4390	810	< 1	33	78	335	3.03	5		66	0.7	16	0.42	18	45	5.72	< 10		0.40	31
OREAS 923 (AQUA REGIA) Cert		1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01		0.322	30.0
PTC-1b Meas																							
PTC-1b Cert																							
Oreas 96 (Aqua Regia) Meas		10.2		> 10000				84	423						38		40						
Oreas 96 (Aqua Regia) Cert		11.50		39100.00				100	448						27.9		49.2						
Oreas 96 (Aqua Regia) Meas		10.3		> 10000				84	424						33		39						
Oreas 96 (Aqua Regia) Cert		11.50		39100.00				100	448						27.9		49.2						
CCU-1e Meas																							
CCU-1e Cert																							
OREAS 220 (Fire Assay) Meas	882																						
OREAS 220 (Fire Assay) Cert	866																						
OREAS 220 (Fire Assay) Meas	898																						
OREAS 220 (Fire Assay) Cert	866																						
OREAS 220 (Fire Assay) Meas	897																						
OREAS 220 (Fire Assay) Cert	866																						

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	K	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas 621 (Aqua Regia) Meas		65.1	264	3530	502	14	25	> 5000	> 10000	1.77	77			0.6	< 2	1.64	26	30	3.33	< 10	4	0.36	18
Oreas 621 (Aqua Regia) Cert		68.0	278	3660	520	13.3	25.8	13600	51700	1.60	75.0			0.530	3.85	1.65	27.9	31.3	3.43	9.29	3.93	0.333	19.4
Oreas 621 (Aqua Regia) Meas		66.1	277	3580	516	14	24	> 5000	> 10000	1.83	79			0.6	2	1.69	27	32	3.44	10	3	0.39	19
Oreas 621 (Aqua Regia) Cert		68.0	278	3660	520	13.3	25.8	13600	51700	1.60	75.0			0.530	3.85	1.65	27.9	31.3	3.43	9.29	3.93	0.333	19.4
Oreas 77b (4 Acid Digest) Meas																							
Oreas 77b (4 Acid Digest) Cert																							
OREAS 238 (Fire Assay) Meas	3190																						
OREAS 238 (Fire Assay) Cert	3030																						
CHS-006 Orig		< 0.2	< 0.5	3	80	< 1	6	< 2	14	0.52	< 2	< 10	22	< 0.5	< 2	0.77	3	17	0.66	< 10	< 1	0.05	14
CHS-006 Dup		< 0.2	< 0.5	3	77	< 1	5	2	13	0.47	< 2	< 10	21	< 0.5	< 2	0.72	3	16	0.62	< 10	< 1	0.04	12
CHS-010 Orig	< 5																						
CHS-010 Dup	< 5																						
CHS-020 Orig	< 5																						
CHS-020 Dup	< 5																						
CHS-029 Orig		< 0.2	< 0.5	3	73	< 1	11	2	15	1.33	< 2	< 10	46	< 0.5	< 2	0.19	3	25	1.55	< 10	< 1	0.05	10
CHS-029 Dup		< 0.2	< 0.5	3	73	< 1	8	3	14	1.33	< 2	< 10	47	< 0.5	< 2	0.19	4	25	1.60	< 10	< 1	0.05	11
CHS-030 Orig	< 5																						
CHS-030 Dup	< 5																						
CHS-043 Orig		< 0.2	< 0.5	2	116	< 1	7	< 2	9	0.61	< 2	< 10	24	< 0.5	< 2	0.33	3	19	0.94	< 10	< 1	0.04	15
CHS-043 Dup		< 0.2	< 0.5	2	117	< 1	6	< 2	10	0.59	< 2	< 10	25	< 0.5	< 2	0.33	3	18	0.95	< 10	< 1	0.04	16
CHS-045 Orig	< 5																						
CHS-045 Dup	< 5																						
CHS-055 Orig	< 5																						
CHS-055 Dup	6																						
1123305 Orig	< 5	< 0.2	< 0.5	1	495	< 1	32	< 2	42	2.12	< 2	< 10	115	< 0.5	< 2	2.26	24	18	2.97	< 10	< 1	0.39	14
1123305 Split PREP DUP	< 5	< 0.2	< 0.5	2	497	< 1	33	< 2	43	2.17	< 2	< 10	117	< 0.5	< 2	2.26	24	18	3.00	< 10	< 1	0.42	13
1123306 Orig		0.3	1.1	16	686	3	3	114	357	1.39	< 2	< 10	64	< 0.5	< 2	1.91	2	12	1.45	< 10	< 1	0.46	22
1123306 Dup		0.2	1.1	16	701	2	< 1	114	365	1.38	< 2	< 10	65	< 0.5	< 2	1.92	2	11	1.50	< 10	< 1	0.47	23
1123313 Orig	5																						
1123313 Dup	6																						
1123318 Orig		21.9	65.0	1370	434	1	9	1300	> 10000	1.45	42	< 10	11	< 0.5	8	0.04	< 1	8	9.61	< 10	< 1	0.20	11
1123318 Dup		21.9	65.2	1340	435	1	8	1300	> 10000	1.41	40	< 10	< 10	< 0.5	8	0.04	1	6	9.69	< 10	2	0.20	11
1123328 Orig	< 5																						
1123328 Dup	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Ag	Cu	Pb	Zn
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	3	0.001	0.003	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	ICP-OES	ICP-OES	ICP-OES	ICP-OES
GXR-6 Meas	0.42	0.082	0.036	0.01	4	19	24	< 20	< 1	< 2	< 10	174	< 10	4	8					
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0	5.30	0.0180	2.20	1.54	186	1.90	14.0	110					
GXR-6 Meas	0.40	0.079	0.035	0.01	5	19	24	< 20	< 1	< 2	< 10	170	< 10	4	8					
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0	5.30	0.0180	2.20	1.54	186	1.90	14.0	110					
MP-1b Meas																	48	3.08	2.09	17.0
MP-1b Cert																	47	3.07	2.09	16.7
CPB-2 Meas																		0.123	63.5	5.99
CPB-2 Cert																		0.1213	63.52	6.04
CZN-4 Meas																	49	0.403	0.186	55.0
CZN-4 Cert																	51	0.403	0.1861	55.07
OREAS 922 (AQUA REGIA) Meas	1.31	0.030	0.064	0.36	< 2	4	15	< 20		< 2	< 10	35	< 10	22	22					
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0	14.5		0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	1.34	0.031	0.066	0.37	2	4	15	< 20		< 2	< 10	36	< 10	22	24					
OREAS 922 (AQUA REGIA) Cert	1.33	0.021	0.063	0.386	0.57	3.15	15.0	14.5		0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 923 (AQUA REGIA) Meas	1.41		0.061	0.62	< 2	4	13	< 20		< 2	< 10	34	< 10	20	31					
OREAS 923 (AQUA REGIA) Cert	1.43		0.061	0.684	0.58	3.09	13.6	14.3		0.12	1.80	30.6	1.96	14.3	22.5					
OREAS 923 (AQUA REGIA) Meas	1.40		0.062	0.66	< 2	4	13	< 20		< 2	< 10	34	< 10	20	27					
OREAS 923 (AQUA REGIA) Cert	1.43		0.061	0.684	0.58	3.09	13.6	14.3		0.12	1.80	30.6	1.96	14.3	22.5					
PTC-1b Meas																	54	7.86	0.086	0.212
PTC-1b Cert																	53	7.97	0.080	0.2083
Oreas 96 (Aqua Regia) Meas				3.18	7															
Oreas 96 (Aqua Regia) Cert				4.38	4.53															
Oreas 96 (Aqua Regia) Meas				3.36	7															
Oreas 96 (Aqua Regia) Cert				4.38	4.53															
CCU-1e Meas																	205	22.9	0.699	3.02
CCU-1e Cert																	205	22.9	0.703	3.02
OREAS 220 (Fire Assay) Meas																				
OREAS 220 (Fire Assay) Cert																				
OREAS 220 (Fire Assay) Meas																				
OREAS 220 (Fire Assay) Cert																				
OREAS 220 (Fire Assay) Meas																				
OREAS 220 (Fire Assay) Cert																				

Analyte Symbol	Mg	Na	P	S	Sb	Sc	Sr	Ti	Th	Te	Tl	U	V	W	Y	Zr	Ag	Cu	Pb	Zn
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	3	0.001	0.003	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	ICP-OES	ICP-OES	ICP-OES	ICP-OES
Assay) Cert																				
Oreas 621 (Aqua Regia) Meas	0.43	0.177	0.033	4.39	109	2	17		< 20			< 2	< 10	12	< 10	8	60			
Oreas 621 (Aqua Regia) Cert	0.436	0.160	0.0335	4.50	107	2.20	18.9		5.91			0.770	1.63	10.9	1.00	6.87	55.0			
Oreas 621 (Aqua Regia) Meas	0.45	0.184	0.033	4.44	109	3	18		< 20			< 2	< 10	13	< 10	8	62			
Oreas 621 (Aqua Regia) Cert	0.436	0.160	0.0335	4.50	107	2.20	18.9		5.91			0.770	1.63	10.9	1.00	6.87	55.0			
Oreas 77b (4 Acid Digest) Meas																	< 3	0.330	0.006	0.020
Oreas 77b (4 Acid Digest) Cert																	1.62	0.343	0.00610	0.0205
OREAS 238 (Fire Assay) Meas																				
OREAS 238 (Fire Assay) Cert																				
CHS-006 Orig	0.39	0.022	0.054	0.02	< 2	2	14	0.09	< 20	2	< 2	< 10	19	< 10	6	5				
CHS-006 Dup	0.36	0.021	0.051	0.02	< 2	2	13	0.08	< 20	4	< 2	< 10	18	< 10	6	5				
CHS-010 Orig																				
CHS-010 Dup																				
CHS-020 Orig																				
CHS-020 Dup																				
CHS-029 Orig	0.17	0.021	0.040	< 0.01	< 2	3	11	0.11	< 20	2	< 2	< 10	36	< 10	4	6				
CHS-029 Dup	0.17	0.023	0.039	< 0.01	< 2	3	11	0.11	< 20	1	< 2	< 10	37	< 10	5	6				
CHS-030 Orig																				
CHS-030 Dup																				
CHS-043 Orig	0.18	0.021	0.032	< 0.01	< 2	3	13	0.09	< 20	1	< 2	< 10	24	< 10	8	2				
CHS-043 Dup	0.18	0.023	0.032	< 0.01	< 2	2	12	0.09	< 20	1	< 2	< 10	25	< 10	8	2				
CHS-045 Orig																				
CHS-045 Dup																				
CHS-055 Orig																				
CHS-055 Dup																				
1123305 Orig	1.30	0.085	0.041	0.76	< 2	6	36	0.20	< 20	3	< 2	< 10	32	< 10	10	21				
1123305 Split PREP DUP	1.30	0.089	0.042	0.82	< 2	6	34	0.20	< 20	6	< 2	< 10	33	< 10	10	21				
1123306 Orig	0.17	0.108	0.020	0.10	< 2	2	36	0.04	< 20	1	< 2	< 10	4	< 10	10	27				
1123306 Dup	0.17	0.110	0.019	0.10	< 2	2	36	0.04	< 20	4	< 2	< 10	4	< 10	10	26				
1123313 Orig																				
1123313 Dup																				
1123318 Orig	0.28	0.028	0.016	9.14	9	2	4	0.02	< 20	5	< 2	< 10	3	< 10	3	30				
1123318 Dup	0.28	0.029	0.016	9.03	9	2	4	0.02	< 20	4	< 2	< 10	3	< 10	3	29				
1123328 Orig																				
1123328 Dup																				
Method Blank																				
Method Blank																				
Method Blank																				
Method Blank																				
Method Blank																				
Method Blank	< 0.01	< 0.001	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	2	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	0.012	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank																	< 3	< 0.001	< 0.003	< 0.001