

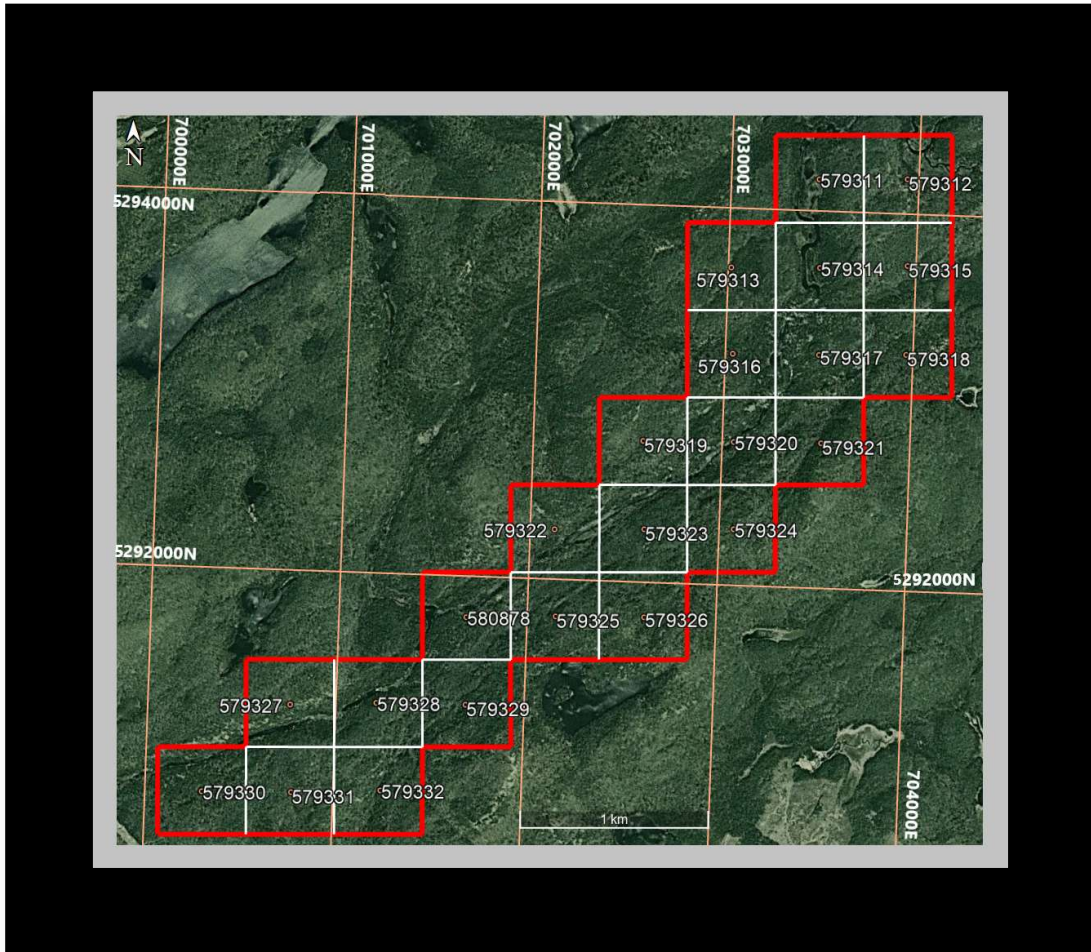
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Assessment Report on Exploration at the Long Lake Claims Sampson & Tabobondung Twsp., Ontario



Report Prepared for
12551110 Canada Inc.

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12 FEBRUARY 2022

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Effective Date: 12 February 2022

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This Assessment Report was prepared for 12551110 Canada Inc. by Ryder & Associates, Bradford, ON, Canada. Estimates, information, conclusions, and recommendations are consistent with the information received from outside sources, information generated as a result of works overseen by the author, and the assumptions and conditions specified in this Assessment Report.

This Assessment Report is intended for 12551110 Canada Inc. as part of a scope of work agreed with 12551110 Canada Inc. under relevant securities legislation. Except for uses defined under the Ontario Mining Act as well as under the Business Corporations Acts of Provinces in which 12551110 Canada Inc. is a reporting issuer, all other uses are at the sole risk of the reader.

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Frontispiece: Long Lake Claim Group - Unpatented Claims

1.0 Summary

1.1 Scope of Work and Location

This report was prepared by Ryder & Associates (“RA”) at the request of Mr. Jim Steel, CEO of 12551110 Canada Inc. (“12551110”) an Ontario based, privately held company that does not have Reporting Issuer status. The purpose of this report is to satisfy assessment requirements on the Long Lake Claim Group as described under Section 65 (1) of the *Mining Act* and Ontario Regulation 65/18.

The Long Lake Claim Group (the Property) is located in northern Ontario, approximately 135 km directly north of the city of Sault Ste. Marie and 44.5 km directly south east of the town of Wawa, in the Sampson & northern part of Tabobondung townships, on the 1:250,000 NTS sheet 041N



Figure 1.1 Location Map

1.2 Tenure and Encumbrances

The Long Lake Project encompasses 23 mining claims covering 497.60 hectares. Required works total \$9,600.00.

As of the date of this report there are no encumbrances on the claims in question, save the requirement to file annual assessment.

1.3 History

The Michipicoten greenstone belt to the north west has been of economic interest since the early 1900s, when iron and gold were discovered near Wawa, Ontario. Little or no exploration on or near the claim group has been conducted. In 1965 the Consolidated Mining and Smelting Company of Canada Limited drilled 5 holes to test EM conductors some 6.5 to 13 kilometres to the north east of the claims.

1.4 Geology & Mineralization

The property is underlain by Archean rocks of the Wawa subprovince, of the Superior Province. The claims are located approximately twenty kilometres east of the Garnitagama Greenstone Belt (GGB), thirty kilometres south east of the Michipicoten Greenstone Belt (MGB). They are close to the termination of the southern end of the Kapuskasing Structural Zone in the Chapleau area.

Mafic metavolcanics, iron formation, tonalite gneisses, and migmatites underlie the claims and are cut by a number of northwesterly mafic gabbroic dykes. A major lineament transects the claims in a NE direction.

Apart from mapped Iron Formation and trace copper and gold in the immediate vicinity of the claims, no mineral deposits are known. The Surluga gold camp is located 40 kms to the northwest.

1.5 Exploration

Interpretation of the Long Wave InfraRed (LWIR) spectral survey data collected on 16th August 2021 utilizing proprietary algorithms to build a digital signal model of the spectral reflectance and emissivity emanating from the rocks at the Long Lake Project after water, vegetation, clouds, and cloud shadow had been removed by Aster Funds Ltd. of Toronto occurred between August 20th and 10th September.

Long wave infrared spectra were categorized by minerals and target vector minerals (TVM's) identified for gold deposits in the survey area to define target areas for gold and base metal exploration. In addition, Quadratic Determinant Function Classifiers (QDFC) were constructed to produce a gold predictor/fingerprint map of the claims between 1st and 10th September 2021.

A site visit (29th October 2021) was made and two soil samples and one rock sample were collected on 30th October 2021.

All data locations reported in UTM NAD 83 or WGH 84 lat/long.

1.7 Conclusions

The Long Wave Infrared remote sensing survey identified abundance areas of monticellite, orthoclase, talc, pyrrhotite, epidote, beryl, kaolinite, cerussite, breccia, feldspar, alunite, augite, cordierite, and goethite on the Long Lake claim group. Target vector mineral analysis for gold outlined target areas of preferential exploration based on mineral distribution overlap. Soil samples and the rock sample geochemical results did not show any elevated values for gold and base metals.

Quadratic and Linear Determinant Function Classifiers were established for different gold deposits/prospects/occurrences in the region, with discrete exploration anomalies being found on the claims for gold.

2.0 Introduction

2.1 Introduction and Terms of Reference

The following is a summary of the interpretation of (remote sensing) Long Wave Infrared data by Aster Funds Ltd on the Long Lake Project. In addition, a proprietary analysis products called the Quadratic and/or Linear Determinant Classifiers Function (an n-dimensional quadratic regression) was used to determine areal extent and intensity of exploration anomalies in gold.

2.2 Site Visits

Site visits were made by the author and Mr. Fred Archibald P. Geo on October 29th and October 30th 2021.

2.3 Sources of Information

This Report is based, in part, on internal company technical reports, and maps, published government reports and public information. Several sections from assessment and technical reports authored by other geoscientists have been directly quoted or summarized in this Report, and are so indicated where appropriate.

2.4 Disclaimer

This technical report represents the professional opinions of Ryder & Associates as to the interpretations to be made and conclusions drawn in light of information made available to, inspections performed by, and assumptions made by the author using his professional judgment and reasonable care. This document has been prepared based on a scope of work agreed with 12551110 Canada Inc. and is subject to inherent limitations in light of the scope of work, the methodology, procedures, and sampling techniques used. This document is meant to be read as a whole, and portions thereof should not be read or relied upon unless in the context of the whole.

The opinions expressed herein are based on data and information supplied by, or gathered from 12551110 Canada Inc., from regulatory filings of other companies, and from Government of Ontario geoscientific and related data. This document is written for the sole and exclusive benefit of 12551110 Canada Inc. Any other person or entity choosing to rely on this document does so at his/her own risk and the author disclaims all liability to any such person or entity.

Information on tenure was obtained from 12551110 Canada Inc. and the Ontario government MLAS website.

Any statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this Report.

3.0 Property Description

3.1 Project Location

The Long Lake Claim Group (the Property) is located in northern Ontario, approximately 135 km directly north of the city of Sault Ste. Marie and 44.5 km directly south east of the town of Wawa, in the Sampson & Tabobondung townships, on the 1:250,000 NTS sheet 041N and 1:50,000 NT sheets 041N/16/09

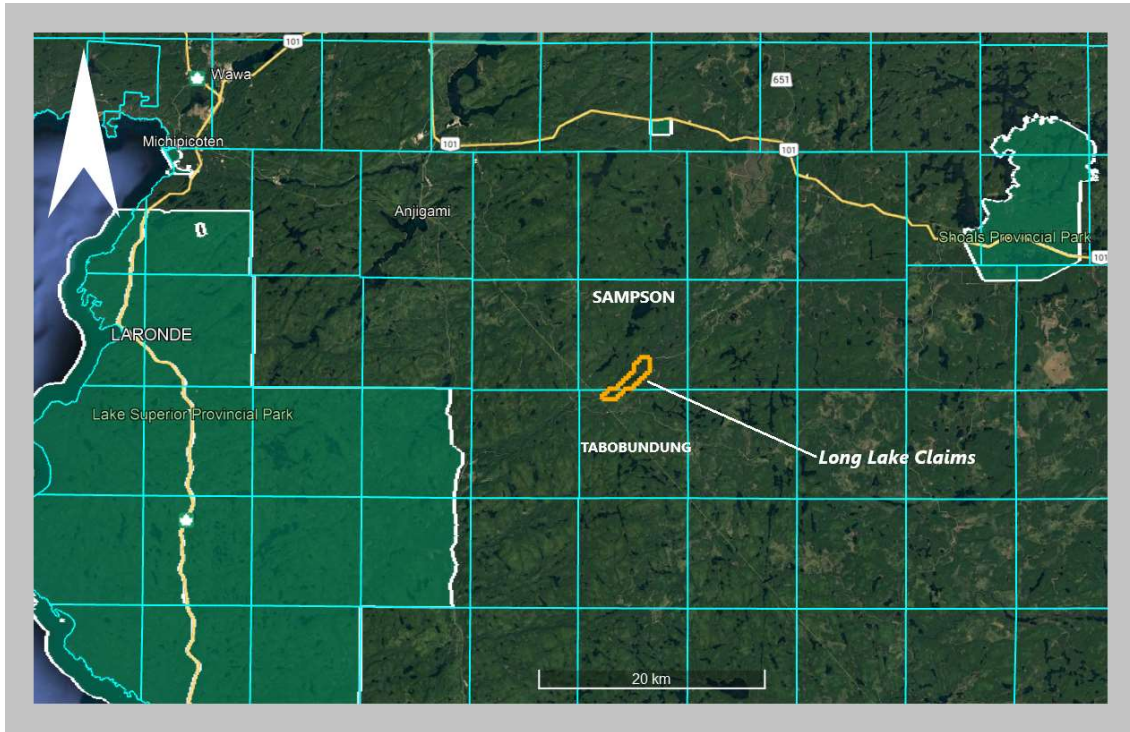


Figure 3.1 Claim Group Location Map

The centre of the claim group is located at 47°45'14.88"N, 84°17'37.46"W or UTM 16 T 702825.21 m E, 5292521.47 m N at the junction of four claims 579319, 579320, 579323 and 579324

3.2 Tenure

The Long Lake claim group is comprised of twenty-three contiguous claims (Figure 3.2) totaling 497.60 hectares (Figure 3.3). As the map-designated claims have pre-established positions, a legal survey of them is not required and none of the staked claims have been surveyed.

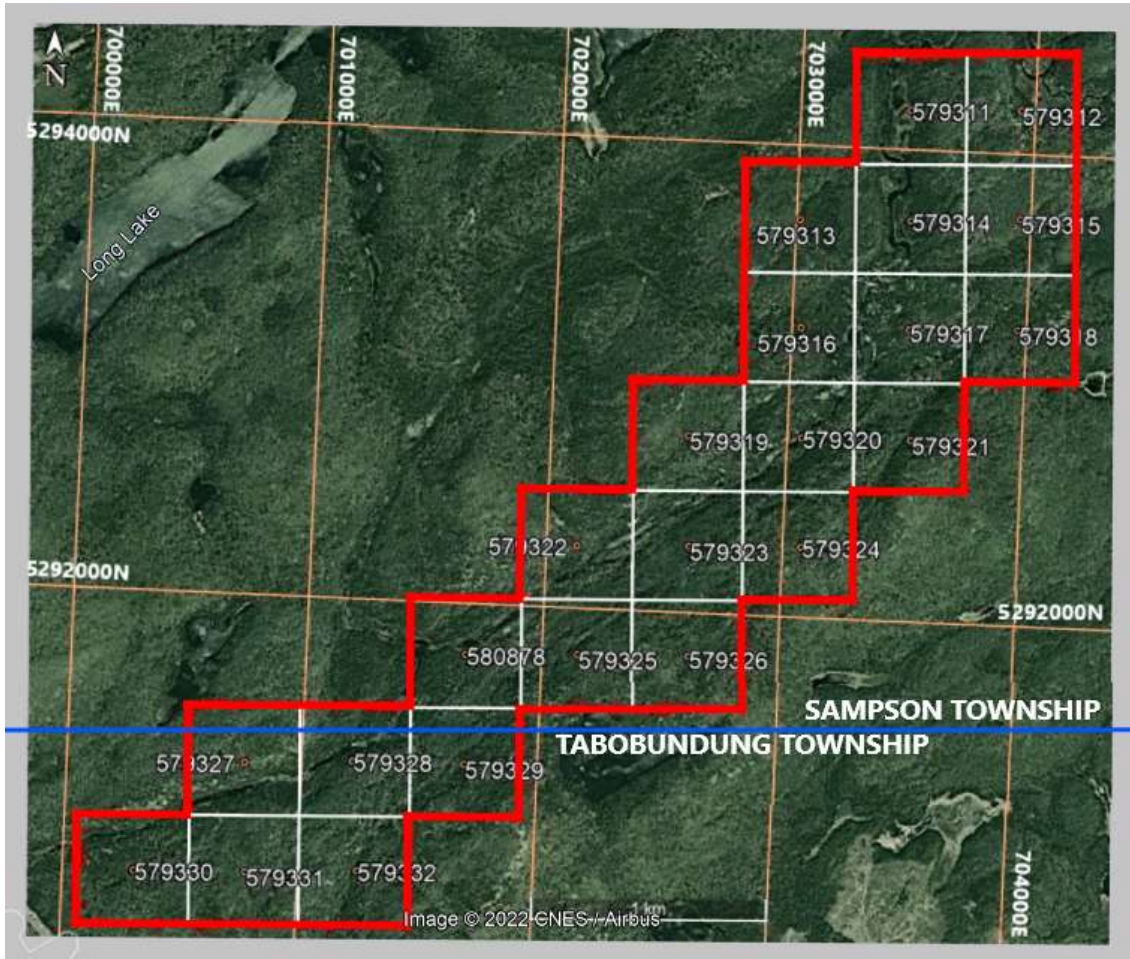


Figure 3.2 Long Lake Claim Group

Expenditures from the previous explorer on the claims before the acquisition of same by 12551110 Canada Inc., are not sufficient to offset current work requirement expenditure (Figure 3.3). Work expenditures in 2020-2021 though, are sufficient for the twenty-three claims.

3.4 Permits

There are no permits required for current exploration works on the Long Lake Project apart from First Nations consultation which has commenced.

3.4 Royalties and Taxes

There are no royalties payable on Long Lake production and only municipal taxes area to be paid.

3.5 Environmental Liabilities

There are no known defined environmental liabilities on the Long Lake Project.

Claim Number	Cell ID	Claim Holder	Claim Type	Registration Date	Anniversary Date	Work Required \$	Reserve \$
579311	41N16C315	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579312	41N16C316	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579313	41N16C334	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579314	41N16C335	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579315	41N16C336	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579316	41N16C354	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579317	41N16C355	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579318	41N16C356	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579319	41N16C373	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579320	41N16C374	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579321	41N16C375	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579322	41N16C392	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579323	41N16C393	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579324	41N16C394	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
580878	41N09K011	12551110 Canada Inc.	SCMC	2020-03-05	2022-03-05	400.00	0.00
579325	41N09K012	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579326	41N09K013	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579327	41N09K029	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579328	41N09K030	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579329	41N09K031	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579330	41N09K048	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579331	41N09K049	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
579332	41N09K050	12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	400.00	0.00
23		12551110 Canada Inc.	SCMC	2020-02-21	2022-02-29	\$9,200.00	\$0.00

Figure 3.3 Claim Tenure – Long Lake Claim Group Table

4.0 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

4.1 Accessibility

It is possible to access the Long Lake claims by logging roads south of the paved Highway 101 from Wawa to Chapleau. The Anjigami logging road provides access close to the southern claims (#579330) and a second logging road from Hwy 101 comes to within 600 metres of the north east corner of claim #579312 (Figure 4.1).

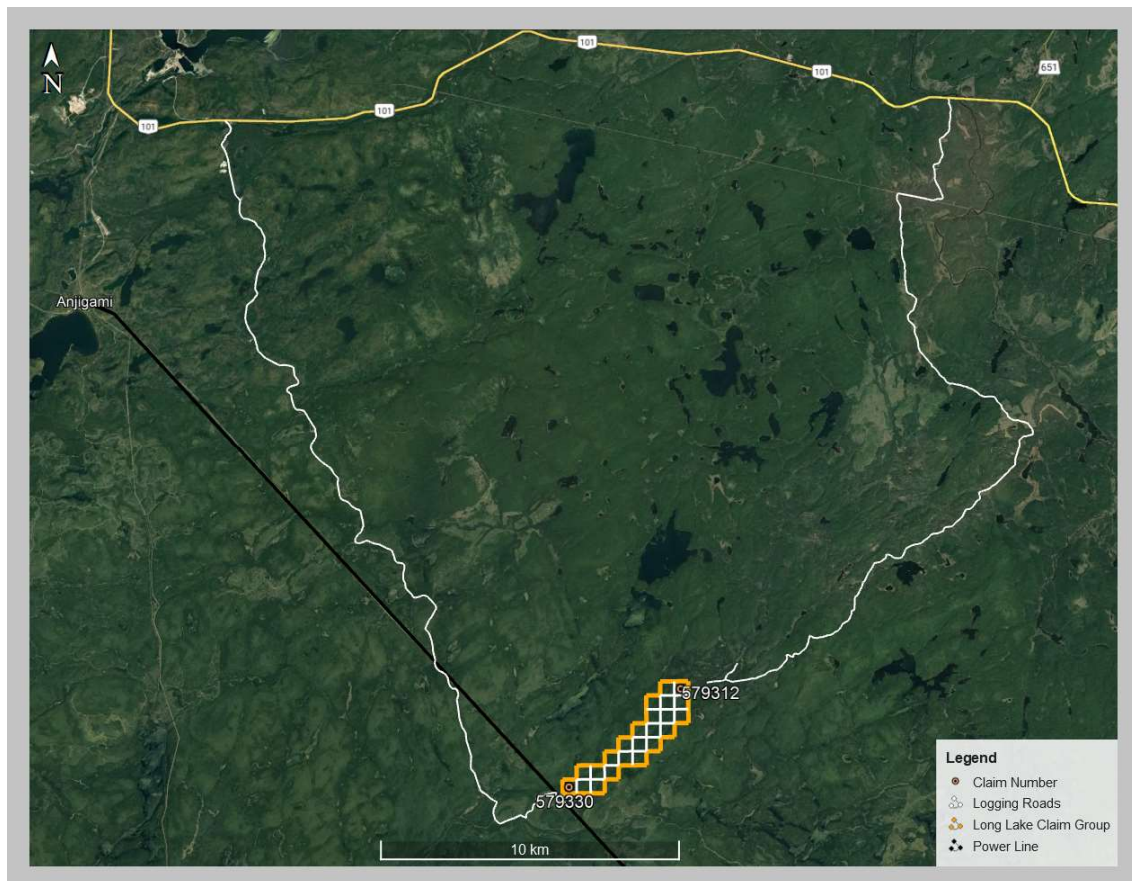


Figure 4.1: Claim Access -Logging Roads

4.2 Climate

The climate in the Long Lake area is typical of northern Ontario. The summers are long, comfortable, and partly cloudy and the winters are frigid, snowy, and overcast. Over the course of the year, the temperature typically varies from -18°C to 21°C and is rarely below -29°C or above 26°C . Lakes are ice-free starting from late May to early June through until late-October. Snow alone is most common from November 20 to March 25

4.3 Local Resources

A full variety of services, including fuel, stores, hospital, policing, various mining contractors, an airport, and a helicopter base are available in the town of Wawa. The Anjigami power station is twenty-three kilometres north west of the claim and the main power line runs within 150 metres of the southern boundary of the claims (Figure 4.1)

4.4 Infrastructure

There is presently no infrastructure on the Property apart from a power line from the Anjigami power station running within 100 metres of the southern boundary of the claims. Abundant water supply is available from nearby lakes. Recent logging roads are the main access routes to the claims.

4.5 Physiography

High ground runs NE-SW through the claim area reflecting the weathering resistant Iron Formation and the ground slopes to the northwest toward the NE flowing river through the centre of the claim block. The greater part of the claim group is covered bedrock - thin (less than 1 m) subglacial till deposited during the Late Wisconsinan by the Labrador sector of the Laurentide Ice Sheet. The northern part of the claim group is covered by glaciofluvial outwash deposits of sand and gravel (Figure 4.2).

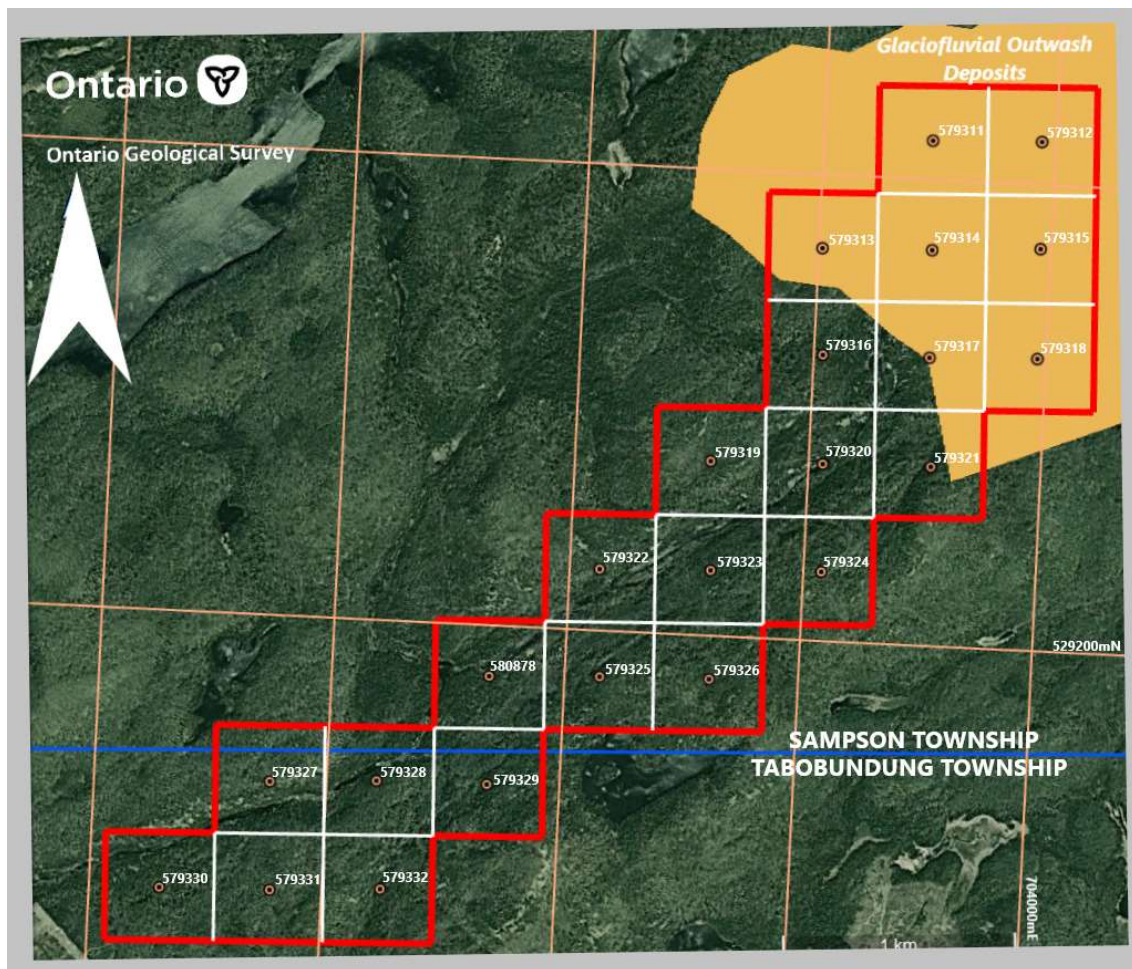


Figure 4.2 Quaternary Geology Map (Morris 2001)

The elevation of the Long Lake claim group ranges from 369m asl to 537m asl. Vegetation is a mixture of conifer and mature birch plus poplar deciduous hardwood forest.

5.0 History

The Wawa area to the west of the claims has been subjected to intense mineral exploration several times in the past. Exploration for gold was intense around 1900, during the 1930's and at the present time (2021). The main period for diamond exploration was in the 1990's to 2012. Iron was the subject of intense activity around 1900, during WWII, during the early 1950's and during the mid-1960's. Base metals have been the target of numerous exploration programs from the late 1950's to the mid-1970's.

In the vicinity of the Long Lake claims, exploration activity from Ministry files appears limited to the period 1961 and 1965 when geological mapping, prospecting, EM surveying and diamond drilling was undertaken in an area 6.5 to 13.5 kms northeast of the claim group by the Consolidated Mining and Smelting Company of Canada Limited. All five drill holes report intersections of altered basic metavolcanics/ chlorite schist with calcite veins/blebs of pyrite, pyrrhotite and chalcopryite plus thin feldspar porphyry dykes.

No exploration works apart from OGS mapping in 1970's is recorded over the claims area.

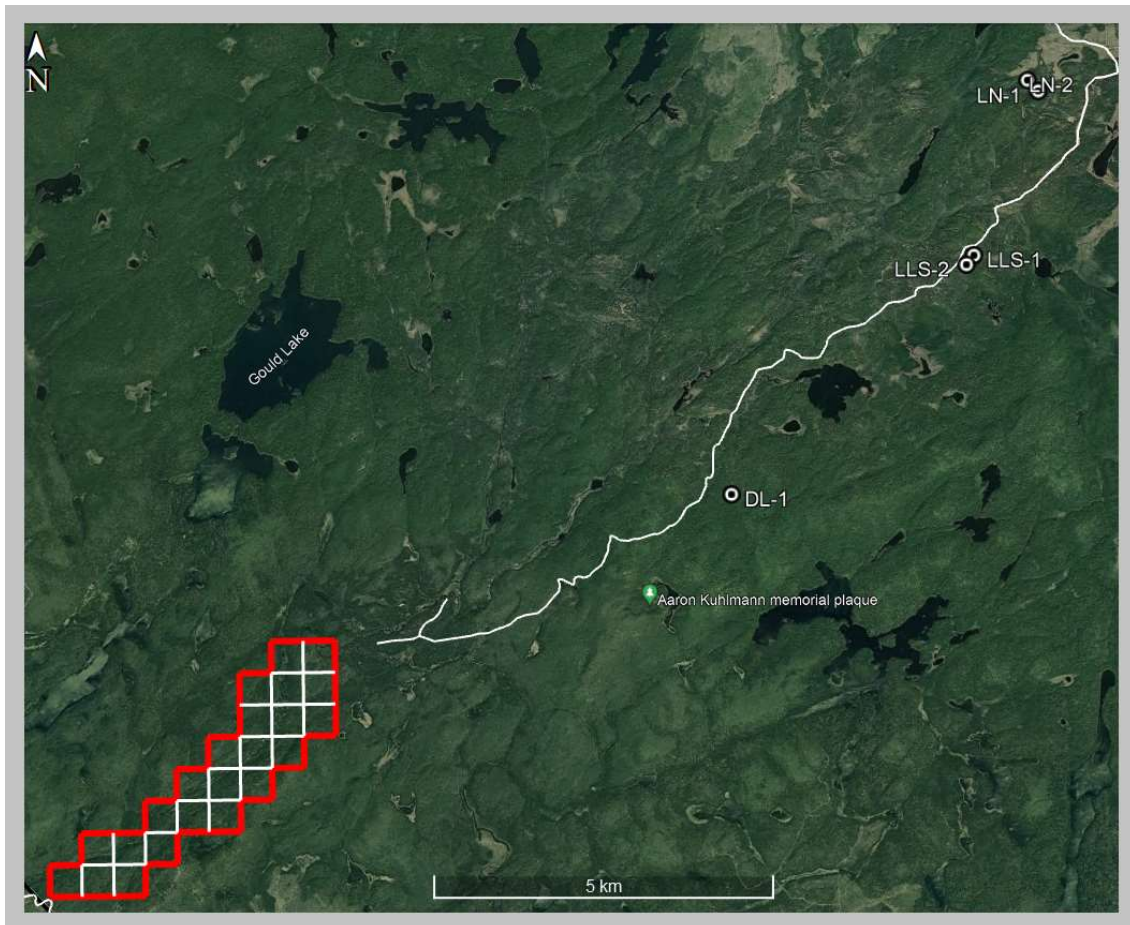


Figure 5.1: Drilling (1965)

6.0 Geological Setting and Mineralization

6.1 Regional & Local Geology

Data in this section is largely from Percival & Easton (2007); Easton (2000); Masun & Chamois (2020); Morris (2001)

The Property is located in the Superior Province of Northern Ontario. The Superior Province makes up approximately 70 percent of the Canadian Shield in Ontario and forms the core of the North American continent, surrounded by provinces of Paleoproterozoic age on the west, north and east, and Mesoproterozoic age (Grenville Province) on the southeast (Figures 6.1). Tectonic stability has prevailed since circa 2.5 Ga in large parts of the Superior Province. Proterozoic and younger activity is limited to rifting of the margins, emplacement of several mafic dyke swarms, compressional reactivation and large-scale rotation at circa 1.9 Ga, as well as failed rifting at circa 1.1 Ga

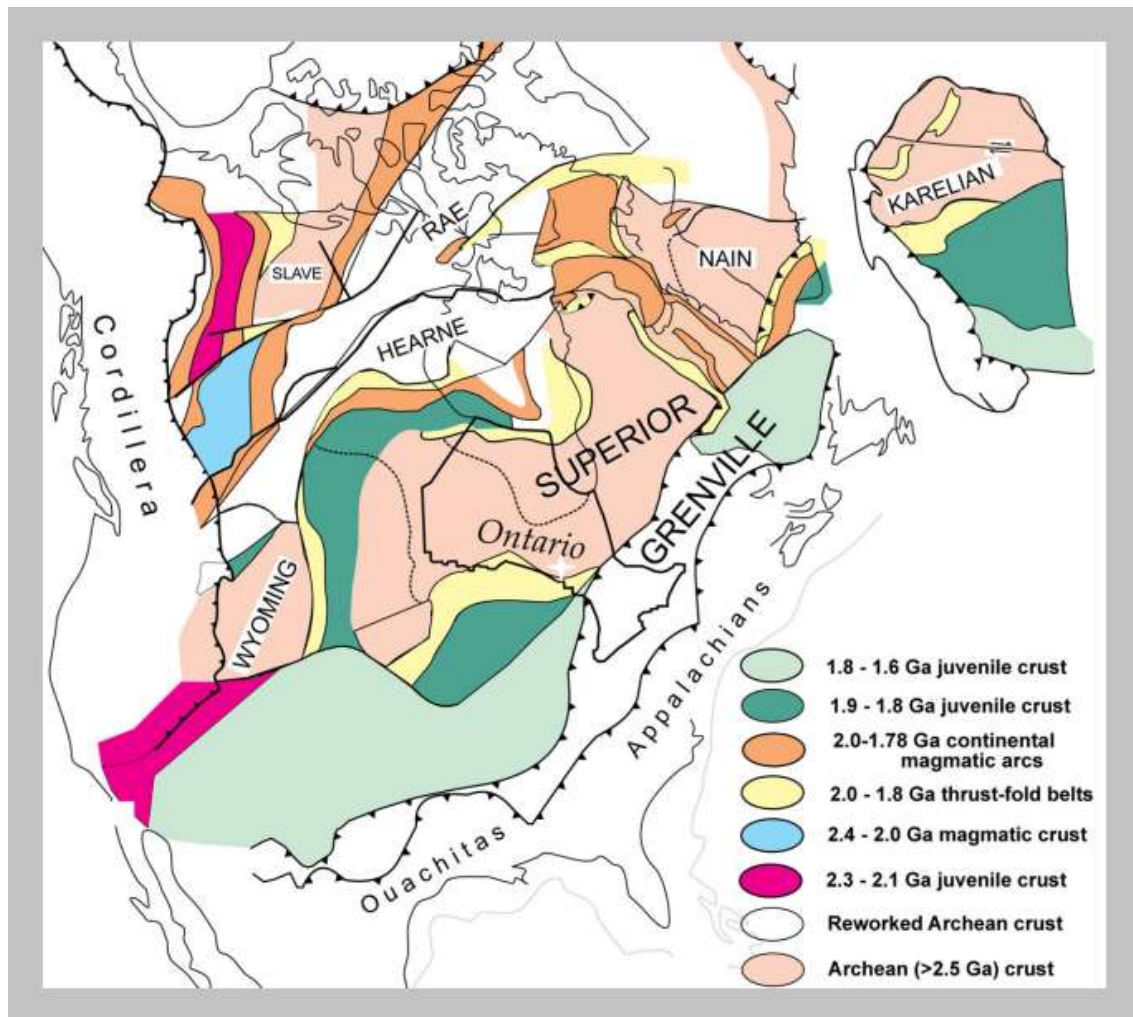


Figure 6.1: Tectonic Map of North America (2007 Percival & Easton)

The Superior Province is seen as a collage (Figure 6.2) made up of small continental and oceanic plates with a complex history of aggregation between 2.72 and 2.68 Ga, followed by post-orogenic effects. Sedimentary rocks as old as 2.48 Ga uncomfortably overlie Superior Province granites, indicating that most erosion had occurred prior to circa 2.5 Ga. The claims are situated in the Wawa terrane in the Wawa gneiss domain (Figure 6.2)

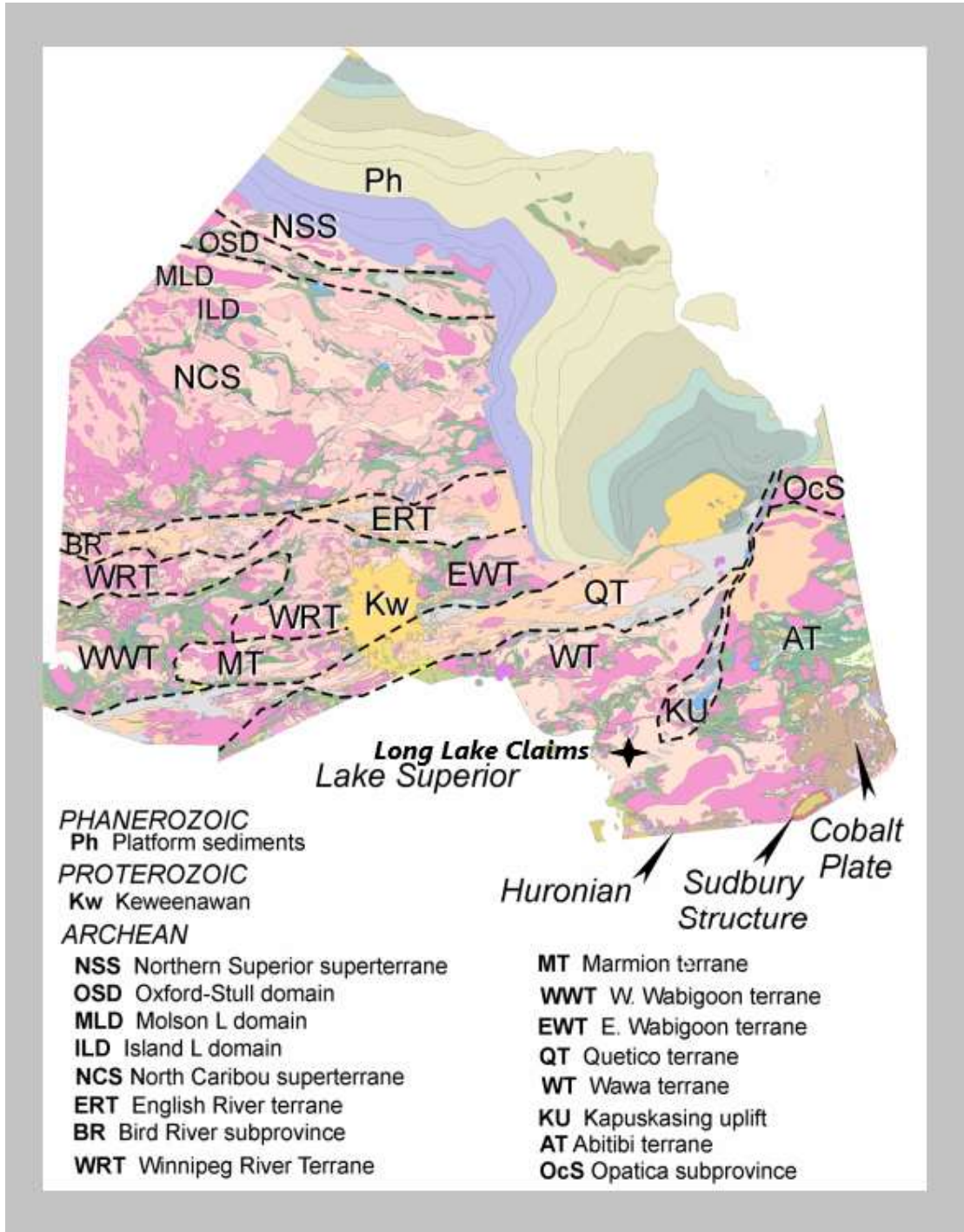


Figure 6.2: Terrane & Geological Map (Percival & Easton)

The Superior Province is divided into numerous subprovinces/terrane (Figure 6.3), each bounded by linear faults and characterized by differing lithologies, structural/tectonic conditions, ages, and metamorphic conditions. These subprovinces are classified into four types by Card and Ciesielski (1986):

- Volcano-plutonic: consisting of low-grade metamorphic greenstone belts, typically intruded by granitic magmas, and products of multiple deformation events.
- Metasedimentary: dominated by clastic sedimentary rocks and displaying low grade metamorphism at the subprovince boundary and amphibolite to granulite facies towards the centres.
- Gneissic-plutonic: comprised of tonalitic gneiss containing early plutonic and volcanic mafic enclaves, and larger volumes of granitoid plutons, which range from sodic (early) to potassic (late).
- High grade gneissic subprovinces: characterized by amphibolite to granulite facies igneous and metasedimentary gneisses intruded by tonalite, granodioritic, and syenitic magmas.



Figure 6.3 Regional Geology-Sub-Provinces.

The claims are situated in the Wawa subprovince/terrane that has a large variation in regional metamorphic grade that is related in part, to the ratio of supracrustal to plutonic rocks; the lowest

grades of metamorphism are found within large greenstone belts that contain few internal granitic bodies (e.g., Michipicoten greenstone belt), and the highest grades of metamorphism are found in small greenstone belts containing a greater volume of internal granitic rocks (e.g., Manitowadge greenstone belt). In addition, metamorphic grade increases in the Wawa subprovince from Lake Superior eastward toward the Kapuskasing structural zone, generally reflecting increasing depths of exposure.

The Wawa gneiss domain within which the Long Lake claims are located, lies between the Michipicoten–Garnitagama greenstone belts and the Kapuskasing structural zone (Figure 6.4). Geobarometric studies of amphibole-bearing tonalitic rocks across the Wawa gneiss domain indicate pressures of crystallization of 5 kbar in the west, increasing to 6.5 kbar in the east. U–Pb ages obtained on titanite also decrease from 2685 Ma in the west to ~2600 Ma in the east, possibly reflecting prolonged high temperatures at deeper structural levels for rocks in the eastern part of the domain. Metamorphism and deformation in the Wawa subprovince have been related to accretion to the Quetico subprovince. There is a similarity of timing and sequence of events between the two subprovinces, with evidence of an earlier, localized, amphibolite-facies metamorphic event in both occurring at between 2700 and 2688 Ma, followed by a regional, slightly lower pressure event at 2689–2678 Ma.

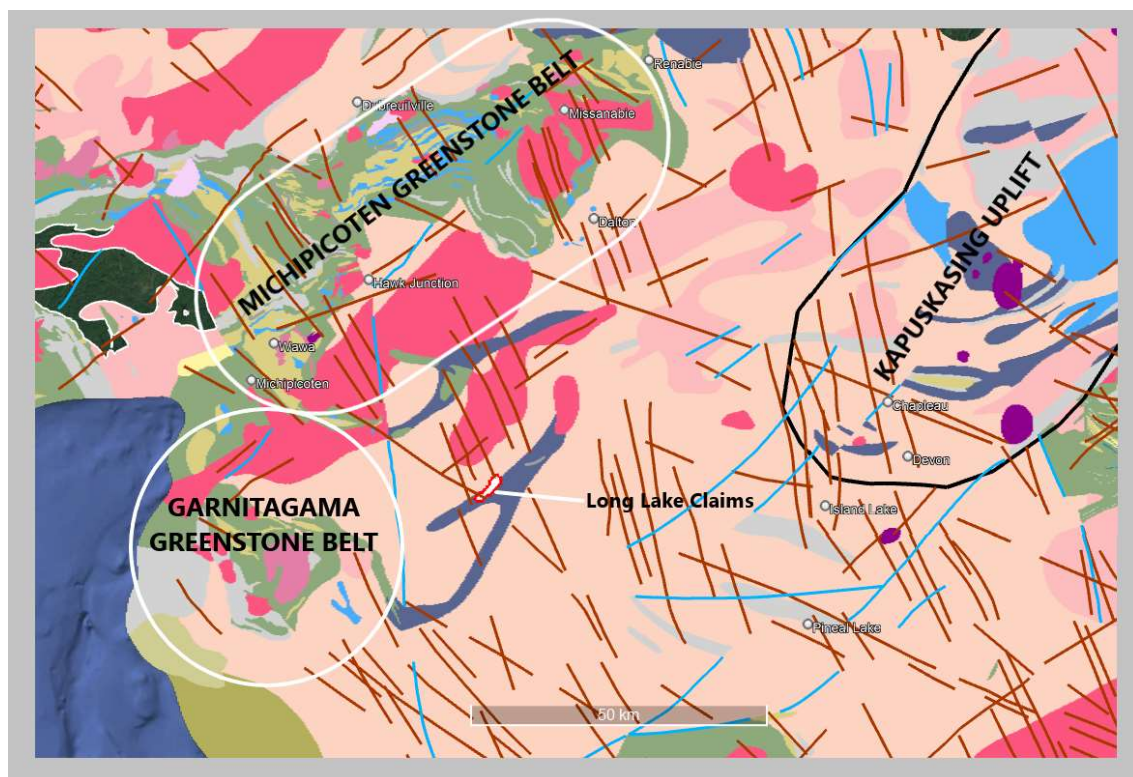


Figure 6.4 Local Geology

The presence of mafic metavolcanics and iron formation in the mapped “migmatite belt” in the Long Lake claim area indicates that they are a continuation of the Garnitagama Greenstone Belt though now highly metamorphosed. The Wawa subprovince is composed of two linear concentrations, or zones of greenstone belts:

- 1) one along its northern border with the Quetico subprovince, comprising the Shebandowan, Schreiber-Hemlo, Manitowadge-Hornepayne, White River, Dayohessarah, and Kabinakagarni greenstone belts; and
- 2) a second in the south-central portion of the Wawa subprovince, including the Mishibishu, Michipicoten, and Gamitagama greenstone belts (Figure 6.4).

These supracrustal zones are composed dominantly of mafic volcanic rocks, with subordinate ultramafic, intermediate, and felsic flows. Sedimentary rocks are predominantly siliciclastic turbiditic wackes and shales, with minor conglomerates, iron formations, cherts, and carbonates. The two linear concentrations of greenstone belts are separated by domains of tonalite-trondhjemite-granodioritic (TTG) plutonic rocks. For the Wawa subprovince, geological relationships between lithotectonic assemblages and greenstone belts suggest that the various greenstone belts were tectonically assembled prior to the coalescence of the subprovinces of the Superior Province (Williams et al., 1991)

On a local scale there are underlain dominantly by suites of rocks of metavolcanic, metasedimentary and plutonic origin of Archean age. are 4 major sedimentary and metavolcanic rock types recognized within the Michipicoten greenstone belt. These are:

1. intermediate to mafic metavolcanic rocks;
2. intermediate to felsic metavolcanic rocks;
3. clastic metasedimentary rocks;
4. chemical metasedimentary rocks.

Intermediate to mafic metavolcanic rock is exposed throughout most of the greenstone belt. The intermediate to felsic metavolcanic rocks are less widespread and restricted to belts and blocks scattered across the greenstone belt. The intermediate to mafic and felsic metavolcanic rocks were deposited during 2 major, and a third minor, volcanic cycles. The materials of the 2 major volcanic cycles range in composition from tholeiitic basalt to calc-alkalic felsic volcanics (Thurston 1986). Materials of the third minor volcanic cycle represent basaltic to peridotitic komatiite volcanism followed by calc-alkalic felsic volcanism (Sage and Heather 1991)

Metasedimentary rocks are more common in the west than in the east. They were deposited within a marine alluvial fan depositional environment and were subsequently buried by materials of a shallow braided stream environment (Neale 1981, Thomas 1984). The metasedimentary rocks consist of either conglomerate, wacke or siltstone or argillite (Sage and Heather 1991).

Iron formation is the dominant chemical metasedimentary rock found within the greenstone belt and most commonly is found in the southwestern, central and northeastern parts of the study area. The iron formation consists of 5 facies that include, in ascending order:

1. siderite (carbonate facies);
2. pyrite (sulphide facies);
3. chert-magnetite wacke (oxide facies);
4. argillite-pyrite-graphite;
5. facies where calcite occasionally substitutes for siderite (Sage and Heather 1991).

Origin of the iron formation is summarized by Sage and Heather (1991). Several stocks are scattered across the greenstone belt and range in composition from trondhjemite to granodiorite to granite. All are younger than the surrounding supracrustal rocks and may have been emplaced at the same time

as the felsic intrusive rocks external to the greenstone belt. Surrounding the supracrustal rocks are felsic intrusive rocks that range in composition from tonalite and trondhjemite to granite (Sage and Heather 1991). Felsic intrusive rocks on the south side of the greenstone belt are older than the same rocks on the north side. Within the felsic intrusive rocks to the southeast is a thin belt of migmatized supracrustal rocks (Ontario Geological Survey 1991).

At present, two tectonic models have been set forth as possible histories for the Early to Middle Archean rocks of the Superior province. The first suggests the Superior province may have formed by repeated accretion of terranes as a result of subduction in a compressional margin (Hoffman, 1989; Williams et al., 1991). This model is supported by seismic, structural and geological data (Calvert et al., 1995; Calvert and Ludden, 1999; Thurston, 2002). Under this model, deformation within the Michipicoten Greenstone Belt resulted from subsequent accretion of volcanic arcs during formation of the belt, and by accretion of the Wawa subprovince to the Superior Craton nucleus (Arias, 1996). The volcanic rocks of Wawa are interpreted to be allochthonous assemblages of island and continental arcs (Sylvester et al., 1987), tectonically transported to their present position (Thurston, 2002). 16 An alternative model calls for an autochthonous origin for the Michipicoten Greenstone Belt, with greenstones being accumulated in place, erupting through and being deposited upon older units (Thurston, 2002; Ayer et al., 2003). Under this model, the Superior Province would have experienced orderly, autochthonous progression from platforms through rifting of continental fragments, and late assembly during the Kenoran orogeny. This interpretation of all cycles of Michipicoten volcanics as intra-cratonic magmatism is supported by geochemical evidence, which records crustal geochemical signatures and significant contributions from continental passive margin sources (Sage and Lightfoot, 1996).

6.2 Property Geology

The greater part of the claim group is underlain by migmatized supracrustal rocks including metavolcanic rocks, minor metasedimentary rocks including iron formation, mafic gneisses of uncertain protolith, granitic gneisses of the Wawa gneiss domain. The northwest corner of the claims is underlain by tonalite to granodiorite-foliated to gneissic-with minor supracrustal inclusions of the gneissic tonalite suite (Figure 6.5).

Leahy, Rupert, Giblin and Giguere in 1971 mapped four different rock types (Figure 6.6):

1. Massive granitic rocks - Eastern claims
2. Mafic metavolcanics with interbedded undifferentiated metasediment - Central Claims
3. Iron formation – Central claims
4. Felsic, granitic, dioritic & trondhjemitic gneisses – Western claims

A number of lineaments were also mapped in 1971 plus others added to the maps based on recent satellite data. The prominent northeast-southwest lineaments mark the lithological contact of the metavolcanic and also the gneiss/granite boundary (Figure 6.6).

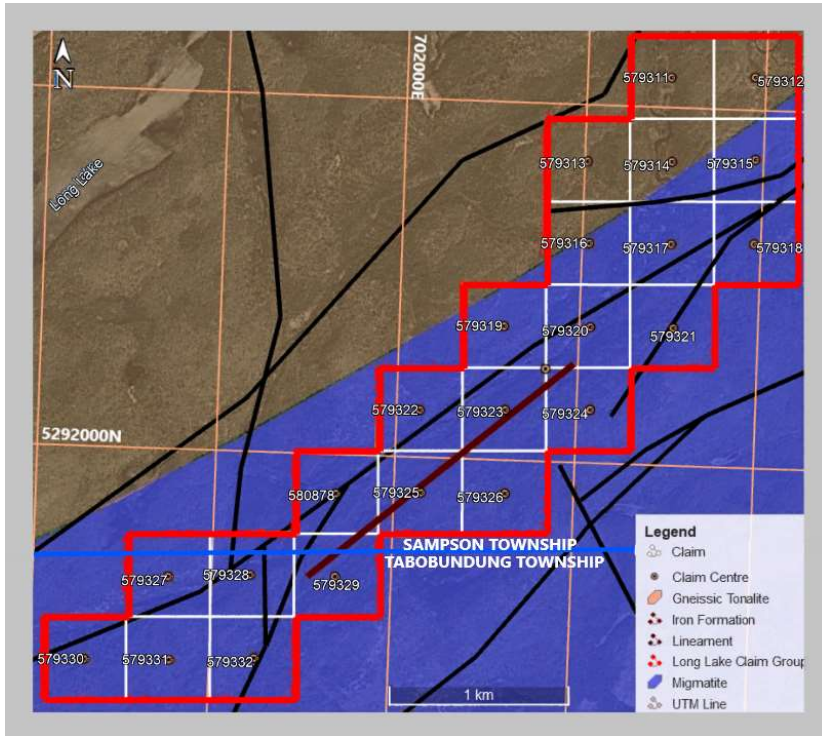


Figure 6.5 Long Lake Claims - Geology

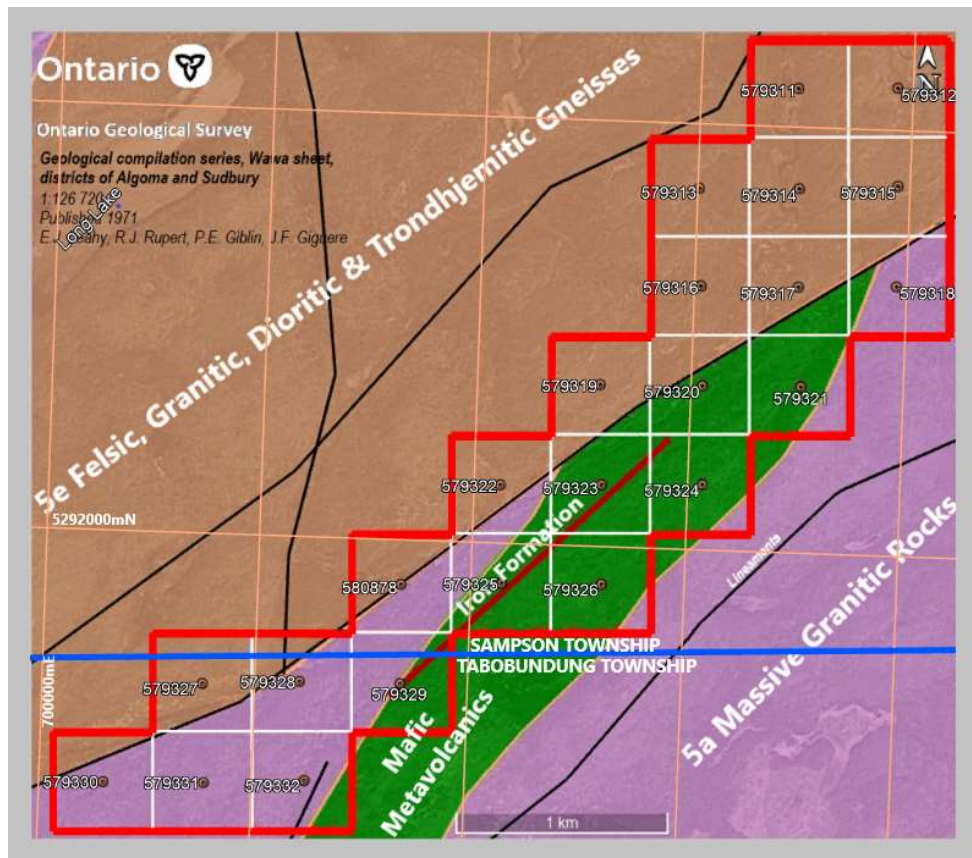


Figure 6.6: Long Lake Claims - 1971 Geology

6.3 Mineralization

No mineralization reported on the Long Lake claims apart from:

- Iron Formation - three claims - 579323, 579325 & 579329
- a single molybdenum occurrence a few kilometres east of the claims
- trace gold and copper reported from drill holes to the northeast of the claims (Figure 5.1).
- The Surluga gold camp of the Michipicoten greenstone belt is located 40kms to the northwest.

7.0 Exploration

LWIR imagery is collected by the Japanese Aster satellite which was launched in December 1999. The spatial resolution is 90 m and five spectral bands of thermal reflectance's are collected in the range 8.29, 8.63, 9.07, 10.66 and 11.32 microns and on August 16th 2021 was downloaded from the Japanese Space Agency site [MADAS - AIST \(gsj.jp\)](http://MADAS-AIST(gsj.jp)) for the Long Lake Claim area by Aster Funds Ltd, Toronto, Ontario.

Between August 20th and August 31st processing of the imagery using proprietary algorithms was undertaken followed by interpretation of a long wave infrared spectral analysis survey over the claims. As well, Quadratic Determinant Classifiers (QDFC) were constructed for specific gold deposits/occurrences in the Michipicoten Greenstone Belt. Target Vector Minerals (TVM's) were identified and mapped for gold, base metals and metallics. The QDFC and TVM overlap mapping was undertaken between September 1st and September 10th 2021.

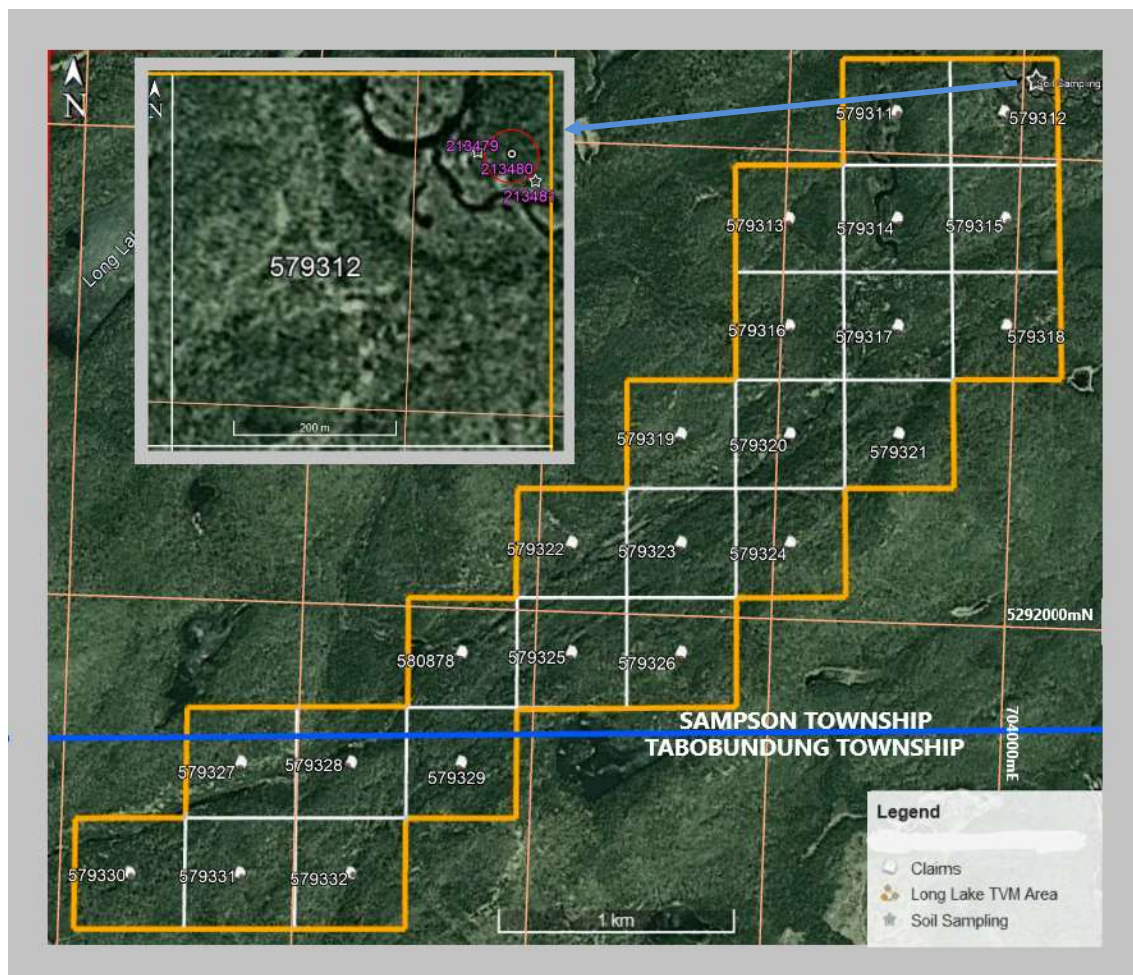


Figure 7.1: Aster Satellite Survey Area + Soil /Rock Sampling

A site visit was made on the 29th and 30th October 2021 and three samples (2 soil+1 rock) were taken and analysed.

7.1 Spectral Analysis (LWIR and/or SWIR)

Aster Funds Ltd offers bespoke proprietary spectral analyses of deposit-relevant mineral abundance and distribution on exploration and mining properties. Aster Funds Ltd takes the Long Wave Infrared (LWIR) and/or Short-Wave Infrared (SWIR) thermal signals and processes them through proprietary methods to stitch Aster scenes together, leaving out cloud and cloud shadow; water bodies; vegetation; and overburden. The Spectral Analysis of the resultant scene is used to map mineral 'endmembers' over client exploration and mining properties. The ground-penetrating nature of infrared radiation in the long-wave bands and the emissive properties of minerals allows for sixteen (16) spectral LWIR/SWIR endmembers to be derived for each survey area from outcrops, shallow cover and beneath vegetation and overburden (Figures 7.2 to 7.17). It is as if the Client property is analyzed for geological and deposit relevant exploration from the basis of 100% outcrop.

For the Long Wave Infrared survey, the minimum resolvable unit (pixel) is 90m x 90m and the signal emanates from the bedrock. If Aster Short Wave Infrared is used, the minimum resolvable distance is 30m x 30m, but the signal emanates from the first millimetre of surface content, whatever it may be. Satellite revisit time to a particular area is about two weeks, giving a digital reference time series for any physical point. Historical spectral analysis surveys are available for Long Wave Infrared to the present day and Short-Wave Infrared (SWIR) to 2008 for the Aster Terra satellite. However, the European Sentinel satellites are currently acquiring SWIR/VNIR data with up to 10 metre resolution.

Some of the minerals and elements that have been used in previous Spectral Analysis surveys include: alunite, tourmaline, quartz, and kaolinite for epithermal gold deposits; augite, epidote, and goethite for host rocks in which volcanogenic massive sulphides and base metals deposits are found; pyrrhotite and pyrite for nickel and copper deposits; and monticellite for diamond deposits. Other searches can be made subsequent to the initial search to define specific deposit-type minerals.

7.2 Quadratic Determinant Classifier Function

A quadratic determinant classifier is a descriptive term for a statistical classification based on multivariate statistical analysis. It is designed to separate thermal spectral from mineral deposits/occurrences from the rest of the coverage image, be it short wave infrared or long wave infrared.

Two Gaussian distributions are estimated; one, with the voxel values of the spectral imaging from areas with no mineralization of the type sought. Second, with the voxel values of the area that is acting as the source for data, in this instance, specific gold deposits in the Goudreau Gold Camp and numerous occurrences in the Michipicoten Greenstone Belt.

An n-dimensional regression is then performed using a quadratic equation in which the independent variables are the 16 minerals in the search area. A quadratic surface is estimated which includes the 16 minerals as orthogonal axes (in that each acts independently of any other one).

Values above the quadratic surface are plotted in terms of intensity and distribution, as they represent dependencies based on the source data. Values below the quadratic surface are not plotted, as they are deemed to represent areas in which there are no dependencies of data and thus do not represent valid exploration areas.

For the gold QDFC Predictor-Fingerprint mapping four and fourteen different gold deposits in the Goudreau gold camp and two hundred and eighty-one gold occurrences throughout the Michipicoten Greenstone Belt were selected as trainers:

1. Four (4) gold deposits: The Magino, Kremzar, Cline and Edwards
2. Fourteen (14) drilled gold areas: 8 Prospects & 6 Occurrences excluding the 4 deposits above in the Goudreau Gold Camp
3. Two hundred and eighty-one (281) gold occurrences from drilled to trenched outcrops within the greenstone belt.

Figures 7.2 to 7.17 overleaf show the mineral distribution and abundance maps for each of the long wave infrared minerals identified on the Long Lake Claim Block. The various endmember mineral colour patterns on the maps reflect the degree of endmember abundance from low endmember abundance (blue) to high endmember abundance (red). White areas reflect absence of the endmember.

Figures 7.18 to 7.20 overleaf show the different QDFC predictor-fingerprint target maps for each of the different gold trainers used. The gold QDFC predictor-fingerprint target maps are colour coded to visually assist with correlation to the LWIR fingerprint of the trainer deposit(s) where the warmer the colour the greater the correlation. In summary, *“the end product is known as a LWIR QDFC predictor/fingerprint target map which outlines areas in the spectral survey area that have the same/similar LWIR fingerprint as the trainer mineral deposit(s). The degree of correlation with the trainer deposit(s) is shown by the warmer the map colours the higher the prediction of mineralization where for example red colours equate with a greater than 90% correlation with the deposit(s) used as trainers.”*

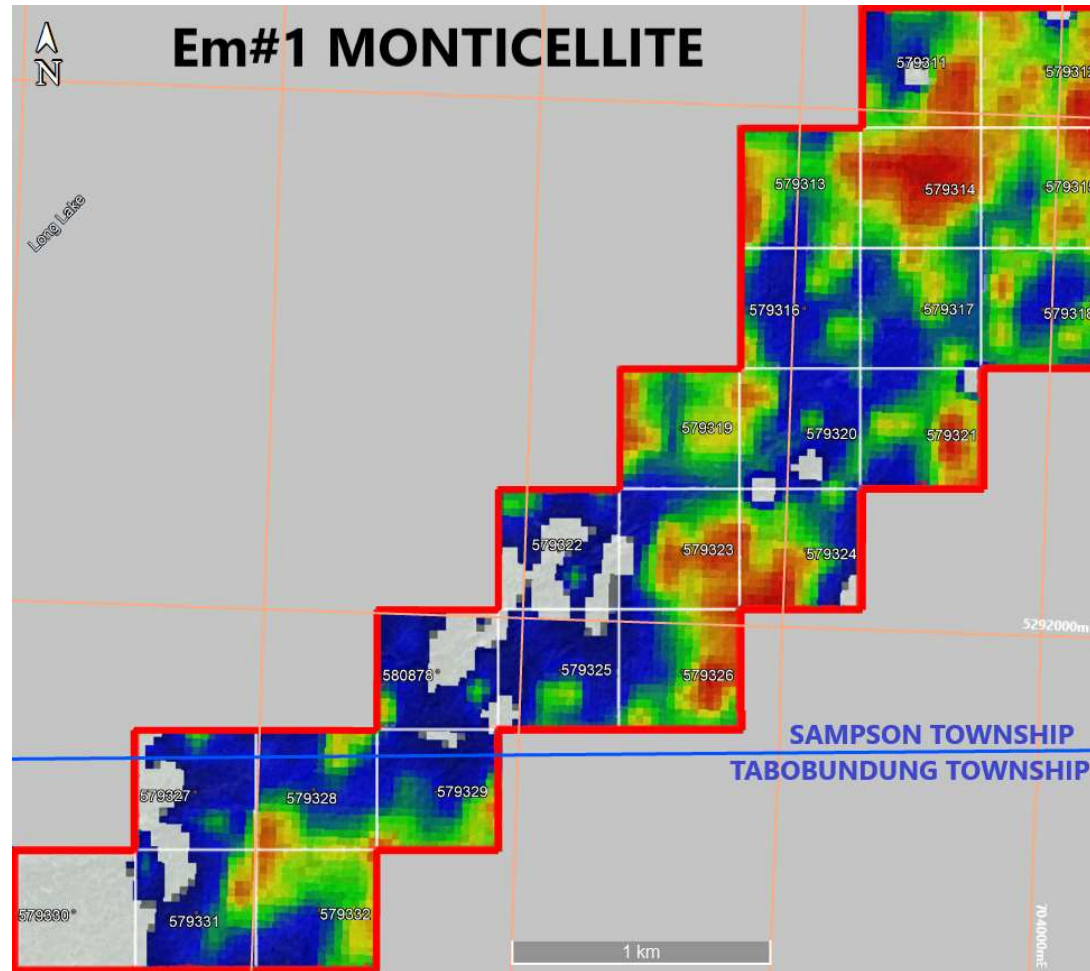


Figure 7.2 Long Wave Infrared Survey; Monticellite Abundance Map

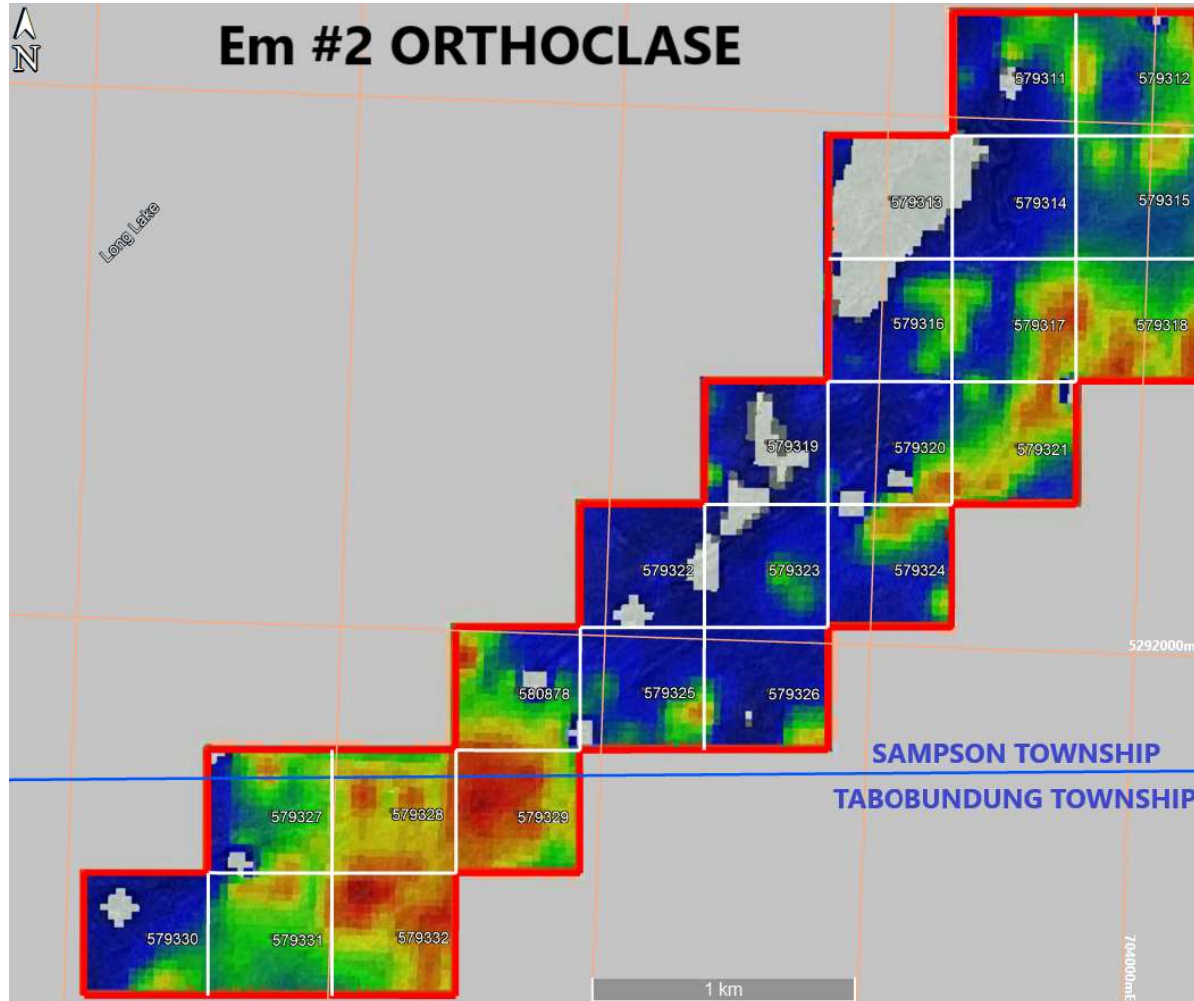


Figure 7.3 Long Wave Infrared Survey; Orthoclase Abundance Map

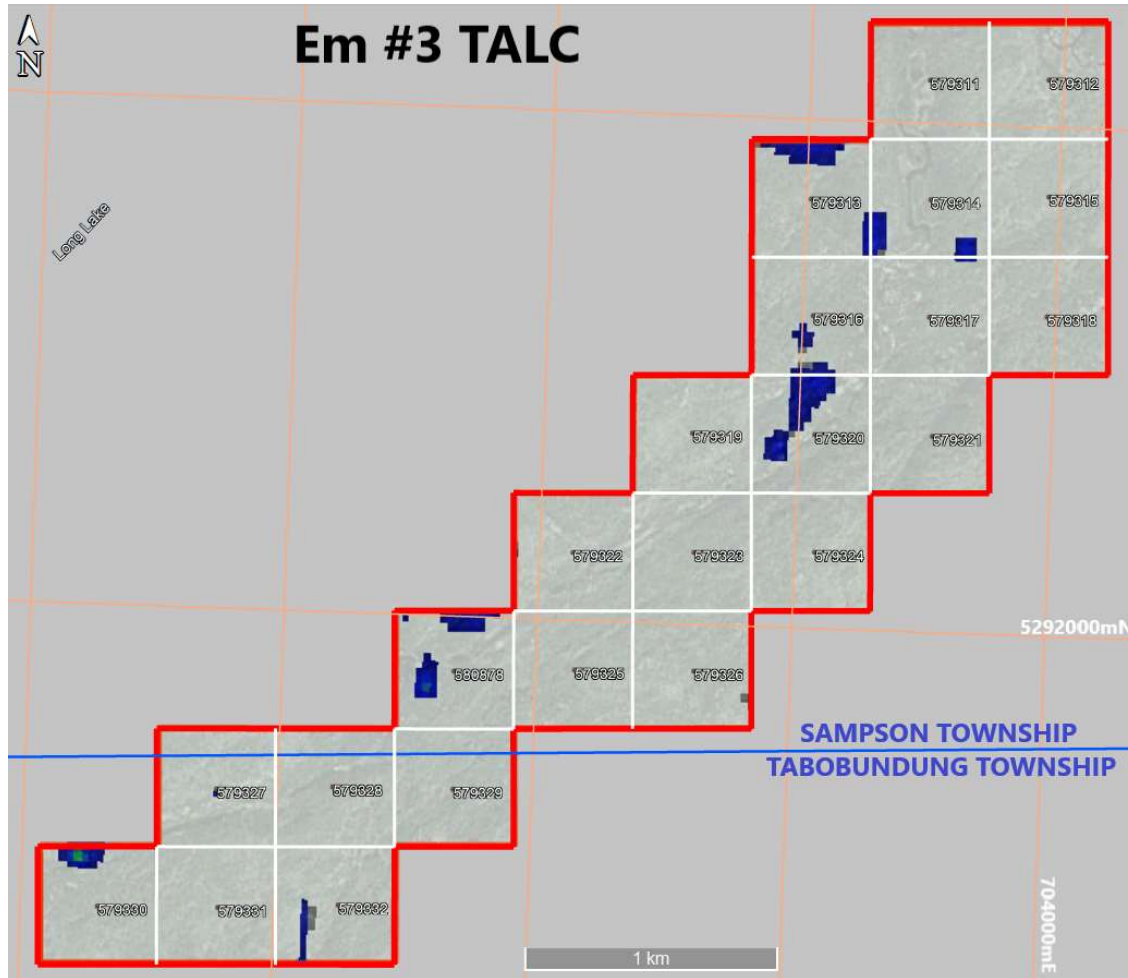


Figure 7.4 Long Wave Infrared Survey; Talc Abundance Map

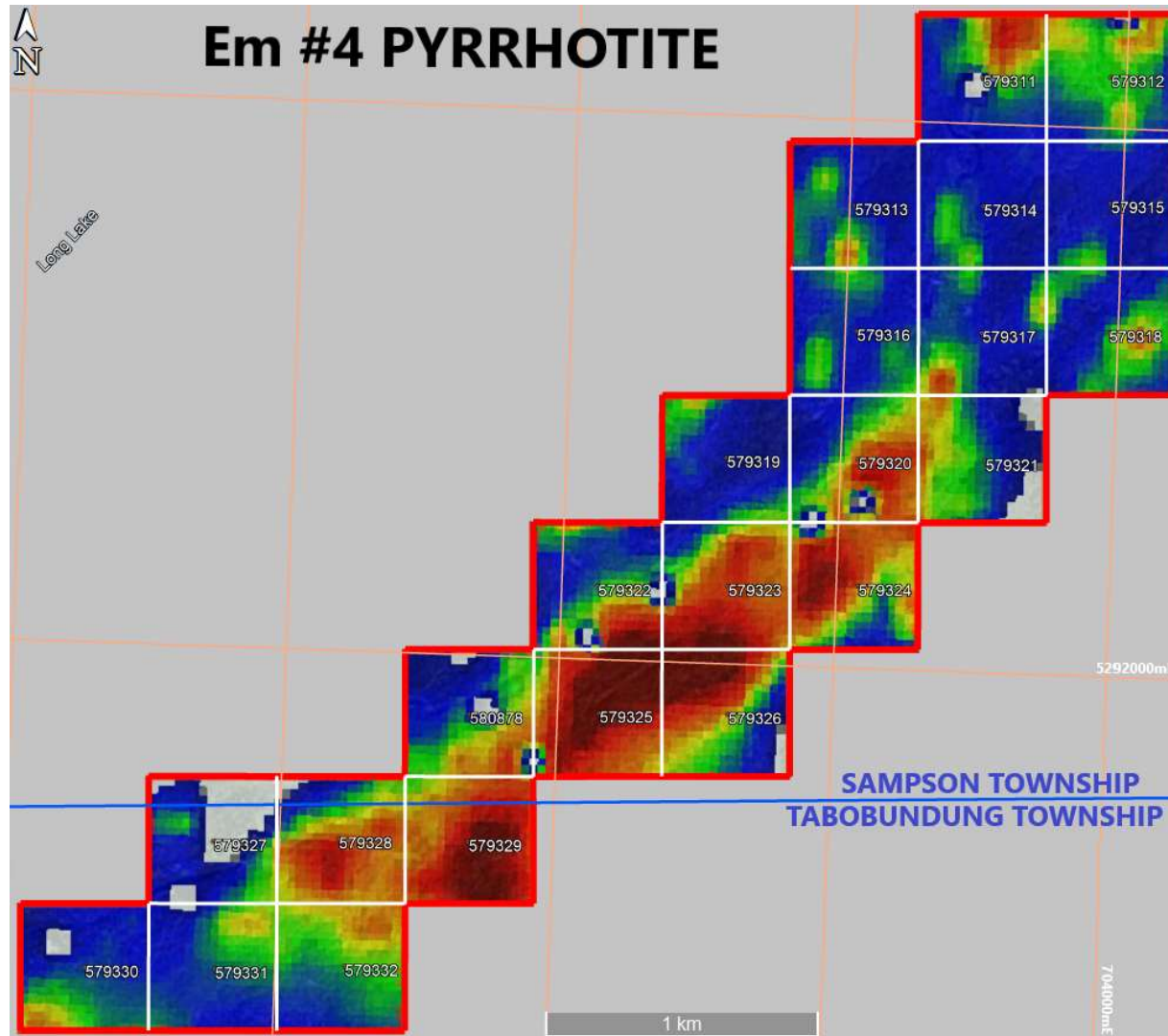


Figure 7.5 Long Wave Infrared Survey; Pyrrhotite Abundance map

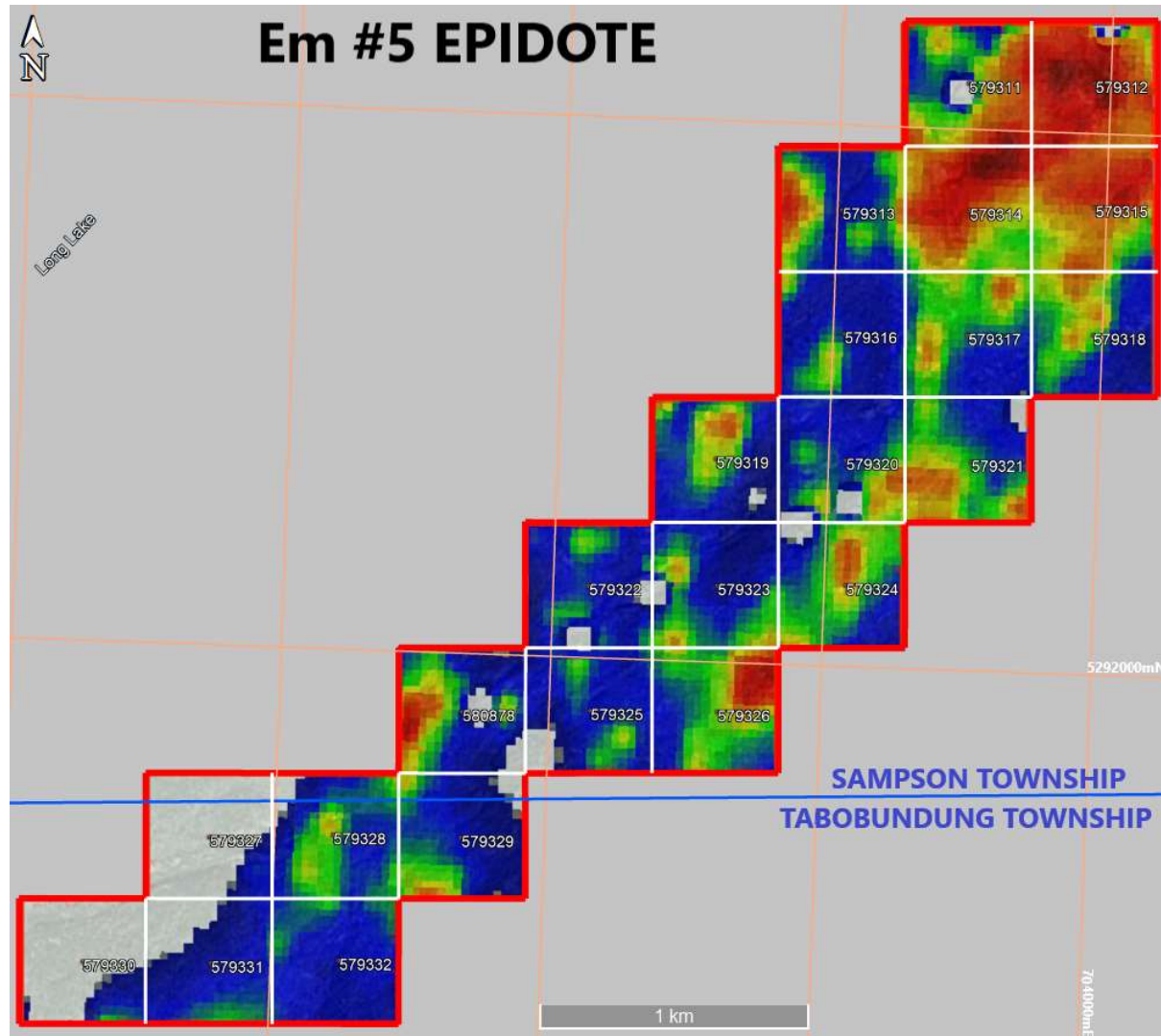


Figure 7.6 Long Wave Infrared Survey; Epidote Abundance Map

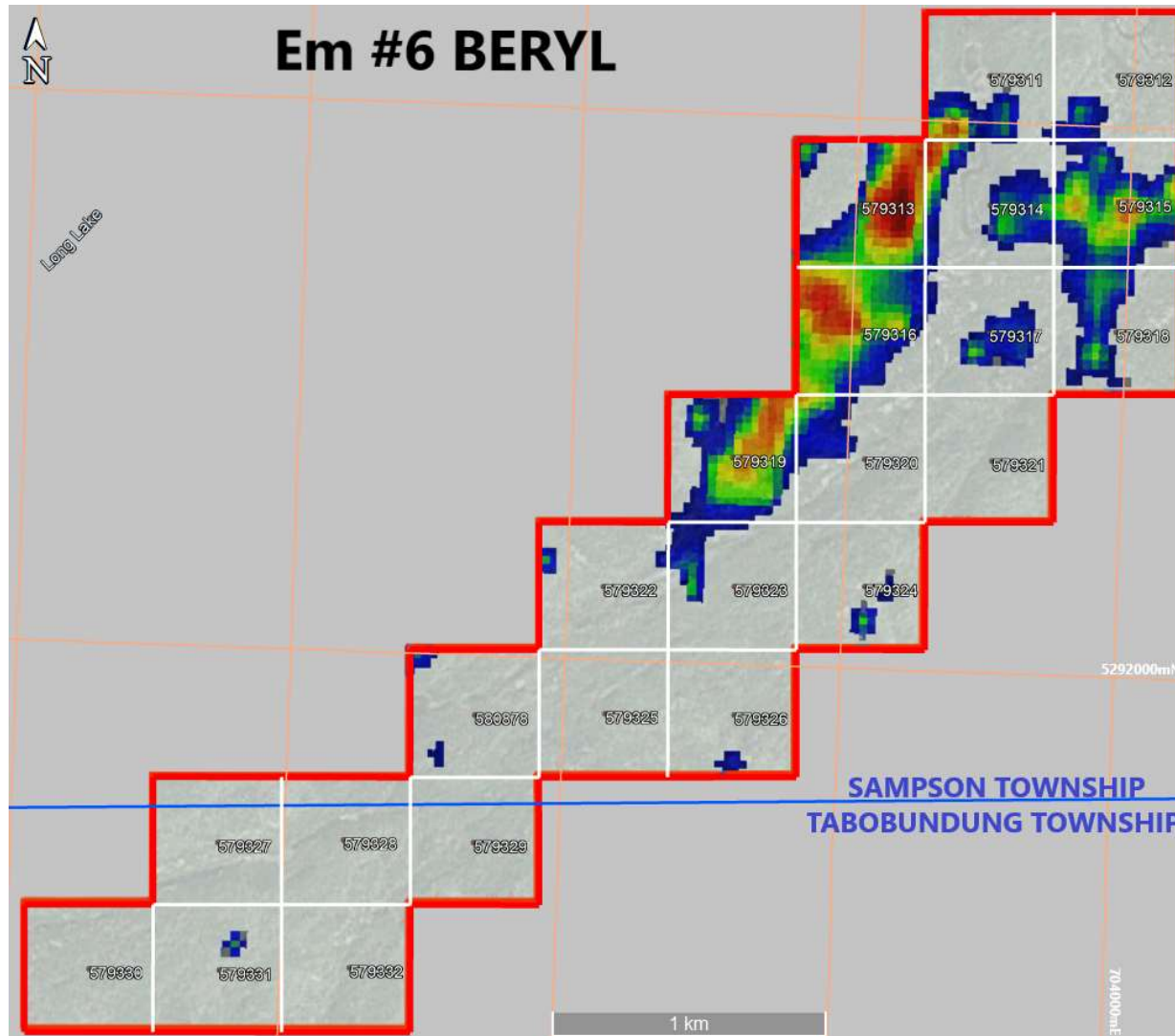


Figure 7.7 Long Wave Infrared Survey; Beryl Abundance Map

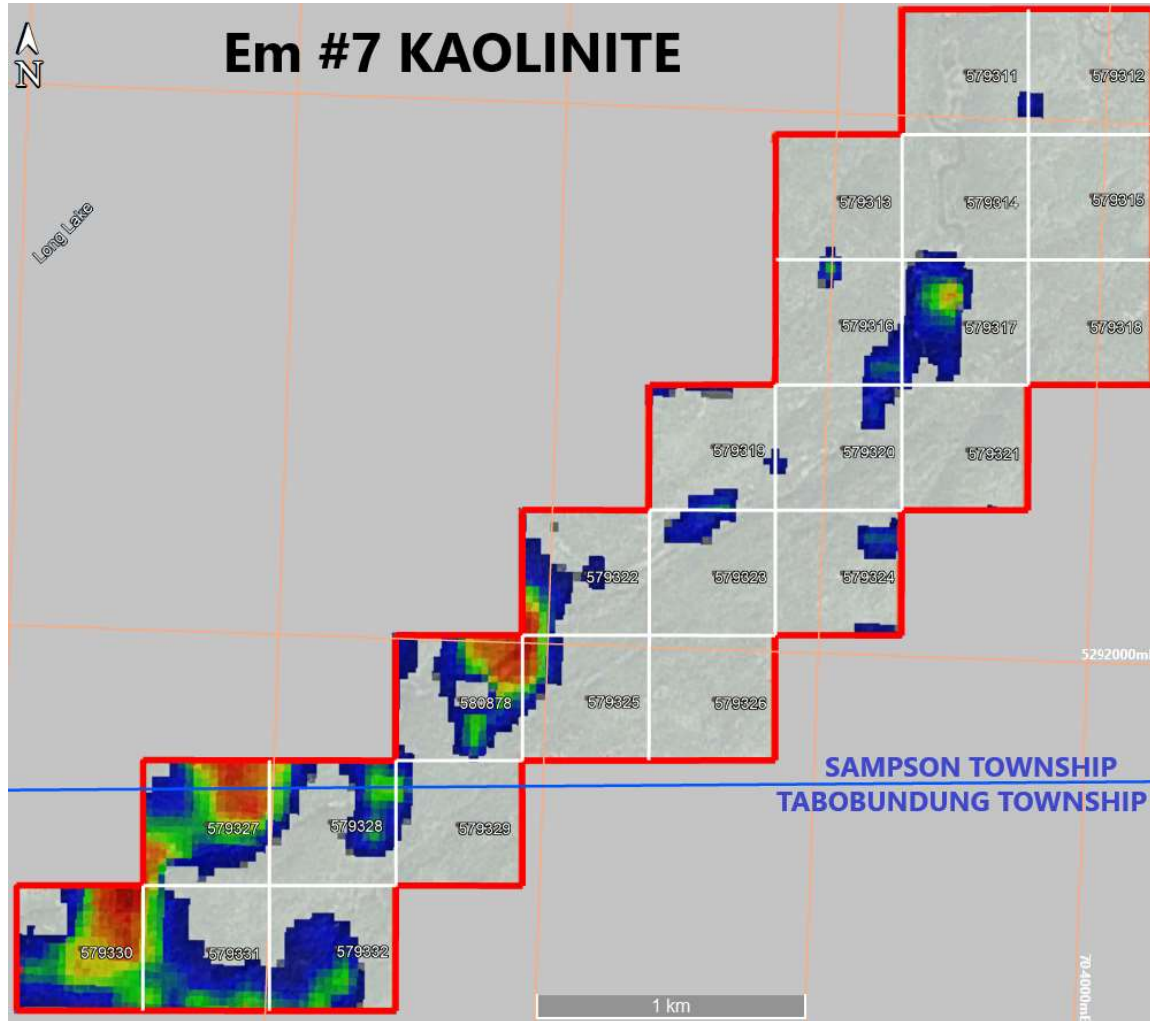


Figure 7.8 Long Wave Infrared Survey; Kaolinite Abundance Map

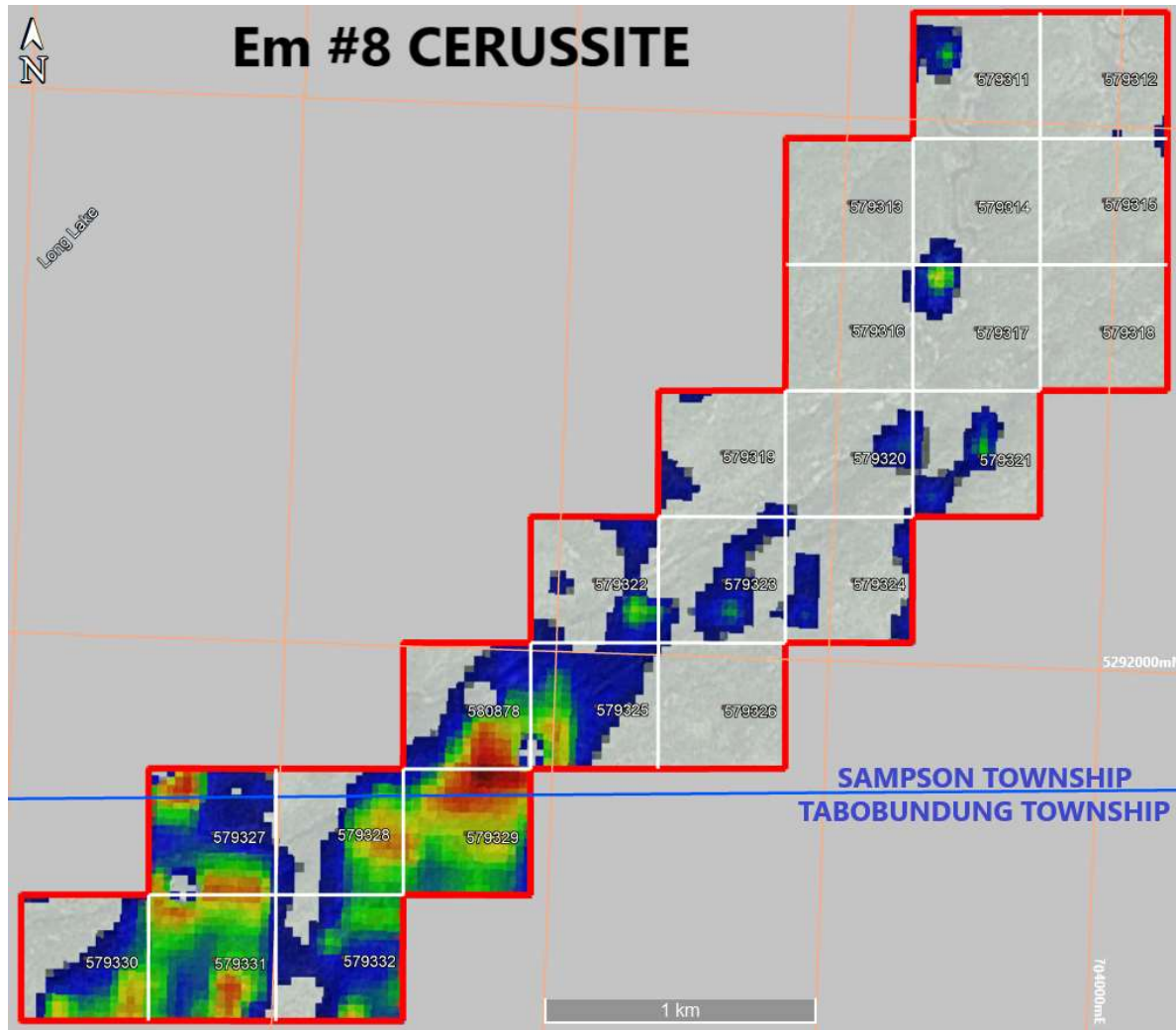


Figure 7.9 Long Wave Infrared Survey; Cerussite Abundance Map

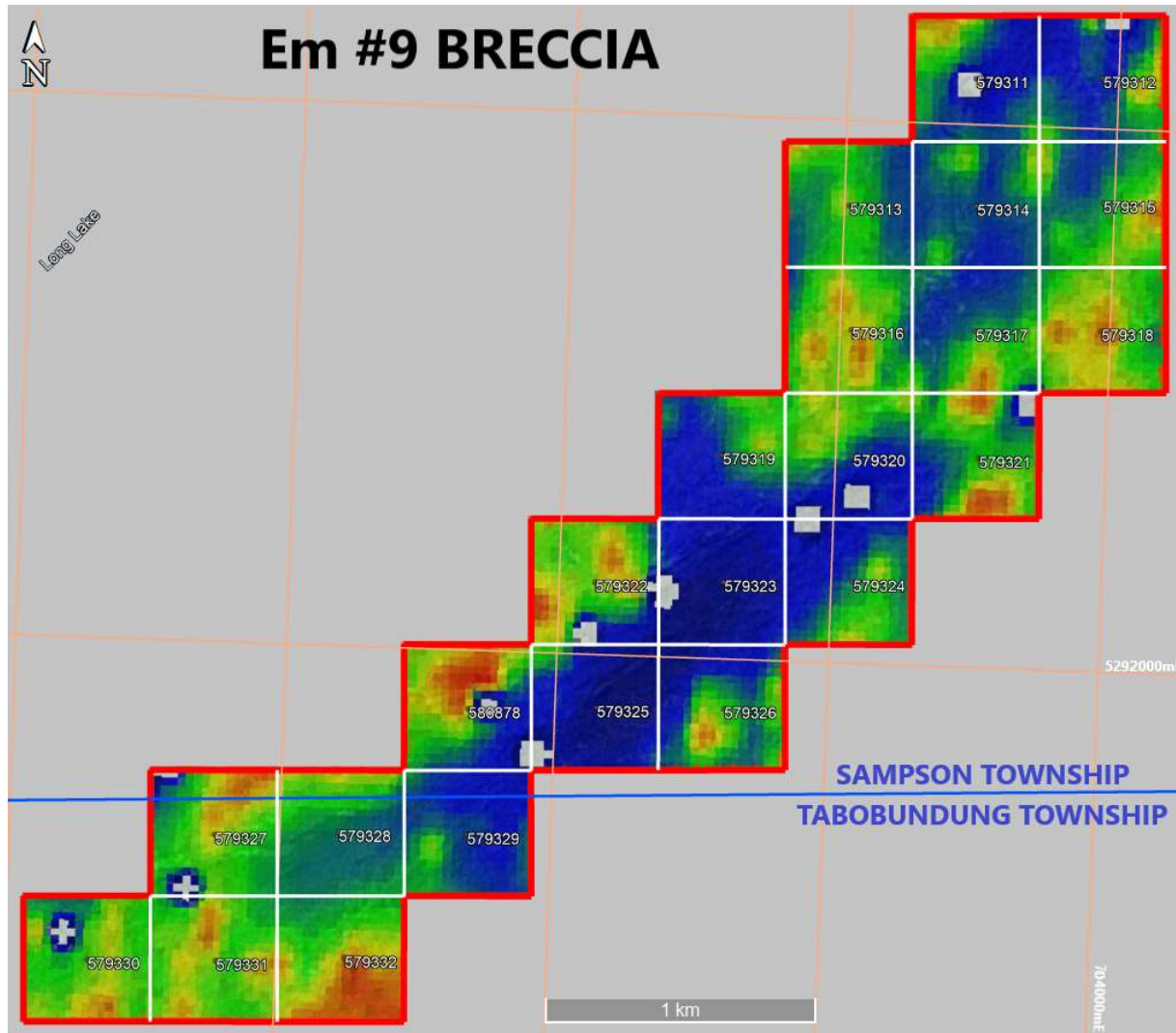


Figure 7.10 Long Wave Infrared Survey; Breccia Abundance Map

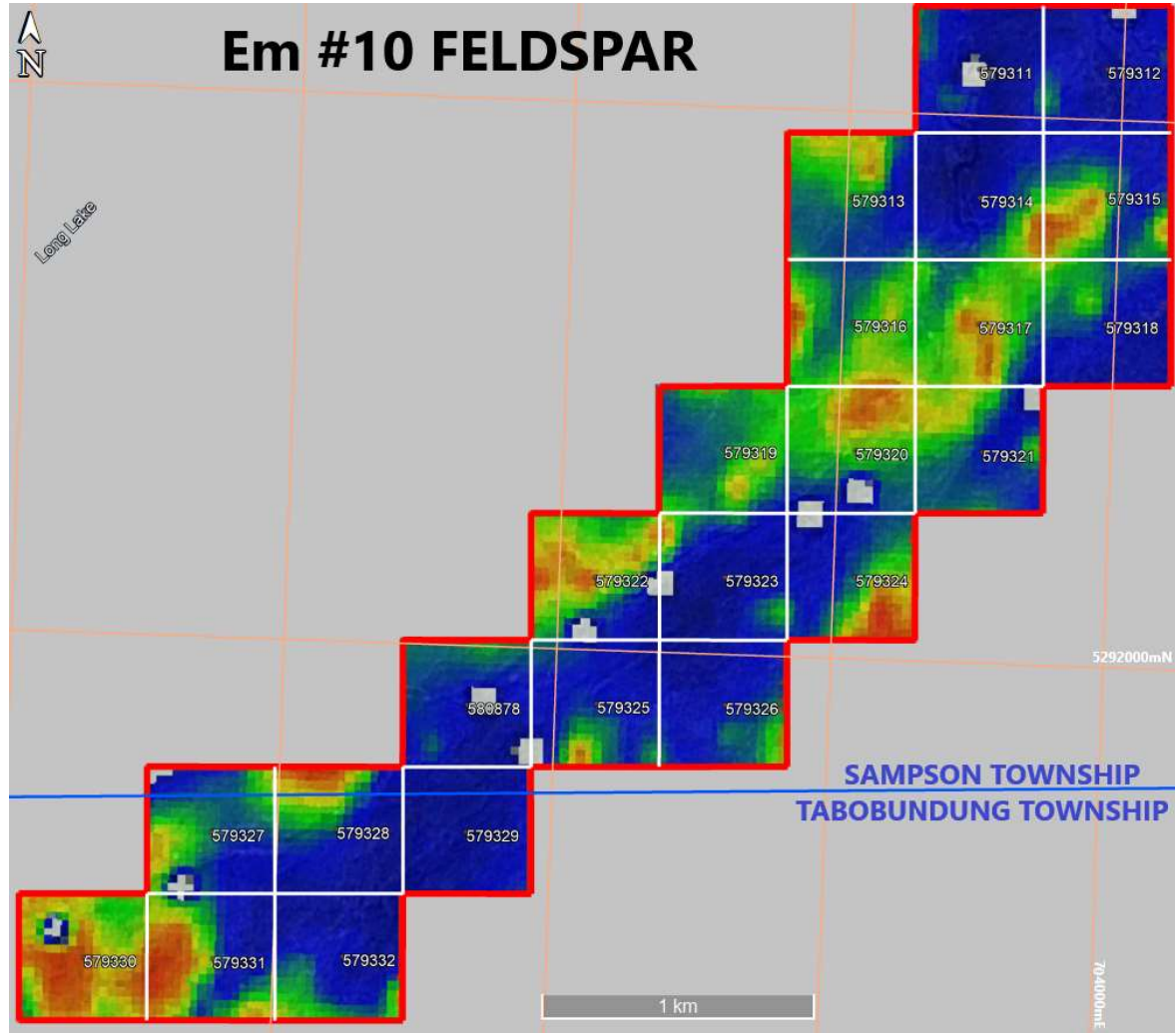


Figure 7.11 Long Wave Infrared Survey; Feldspar Abundance Map

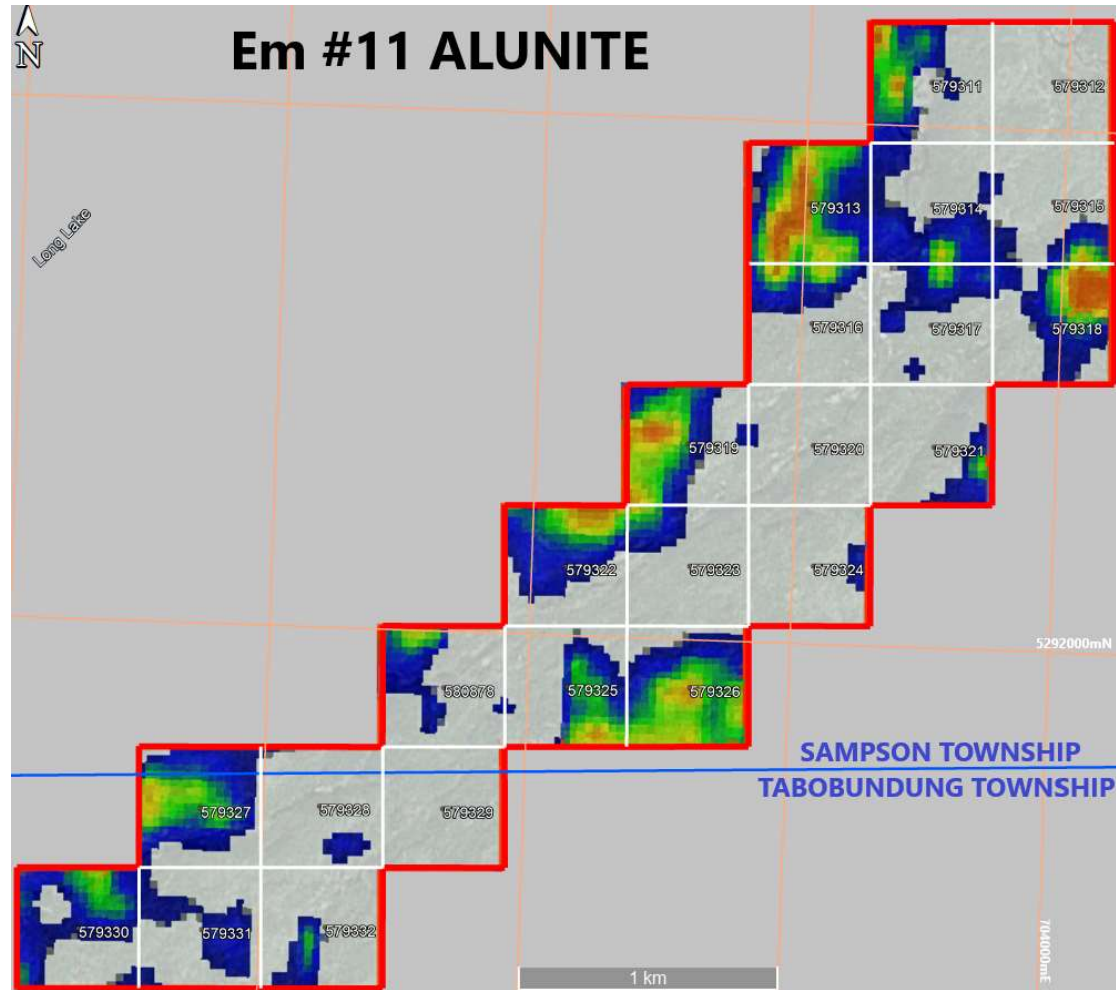


Figure 7.12 Long Wave Infrared Survey; Alunite Abundance Map

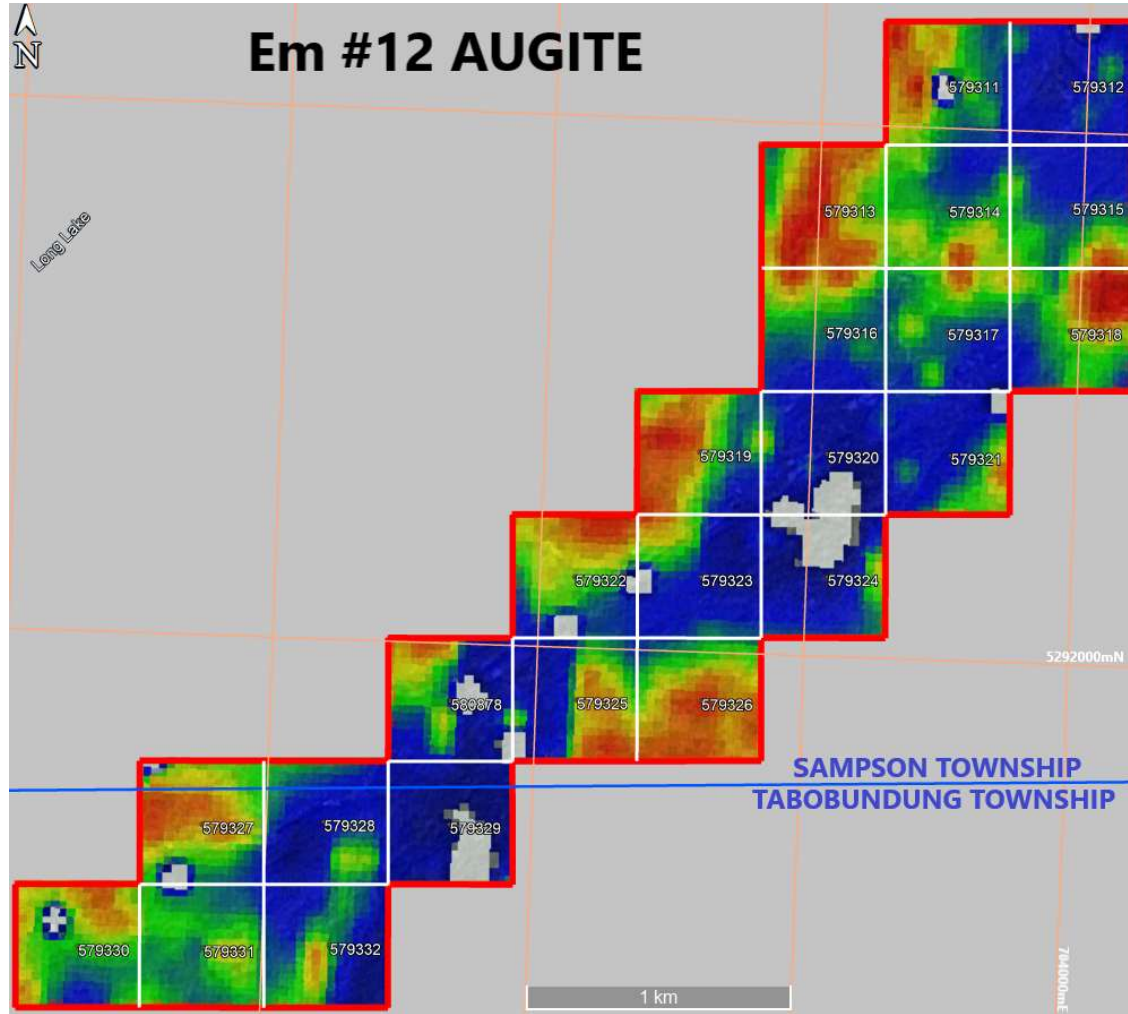


Figure 7.13 Long Wave Infrared Survey; Augite Abundance Map

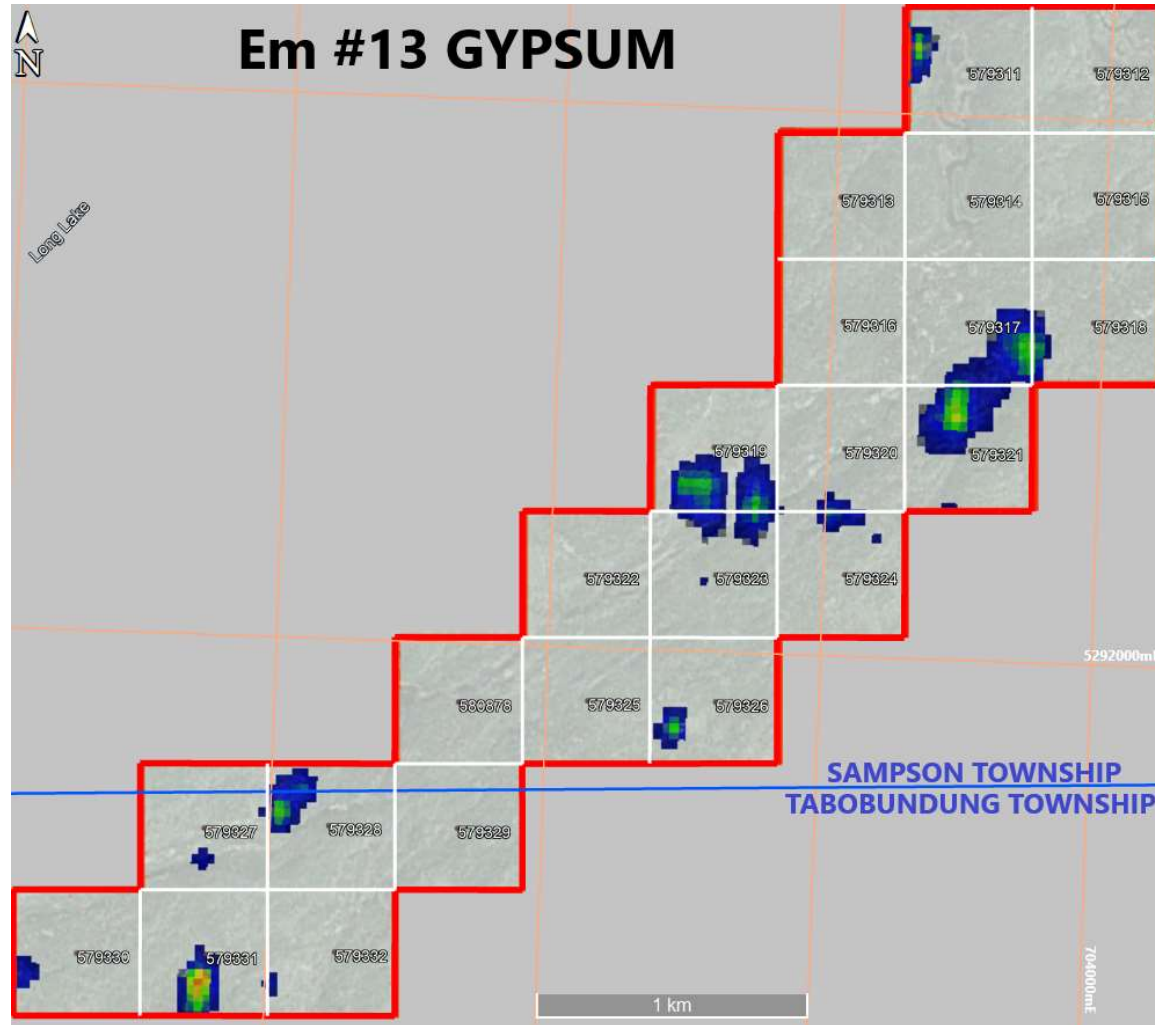


Figure 7.14 Long Wave Infrared Survey; Gypsum Abundance Map

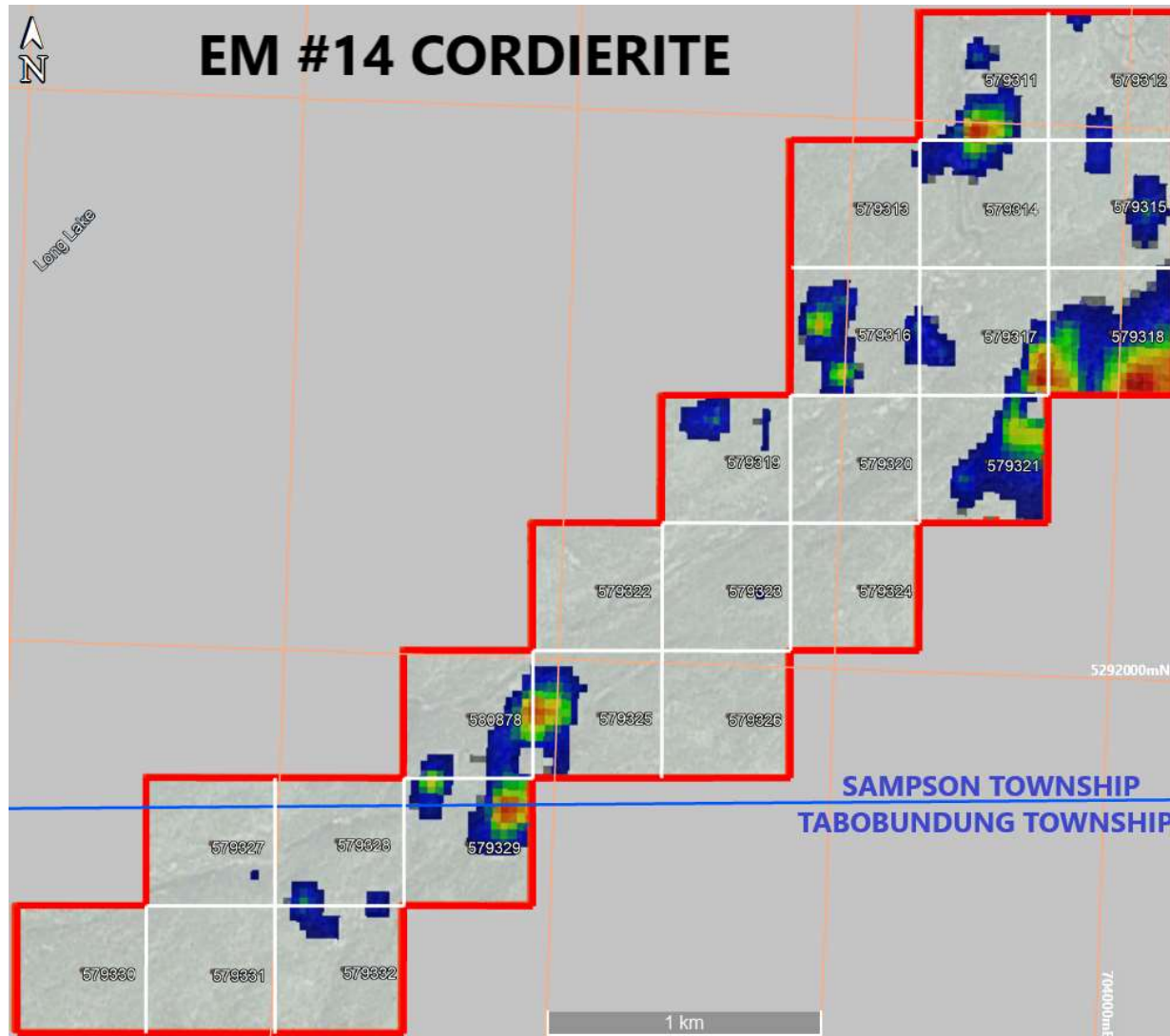


Figure 7.15 Long Wave Infrared Survey; Cordierite Abundance Map

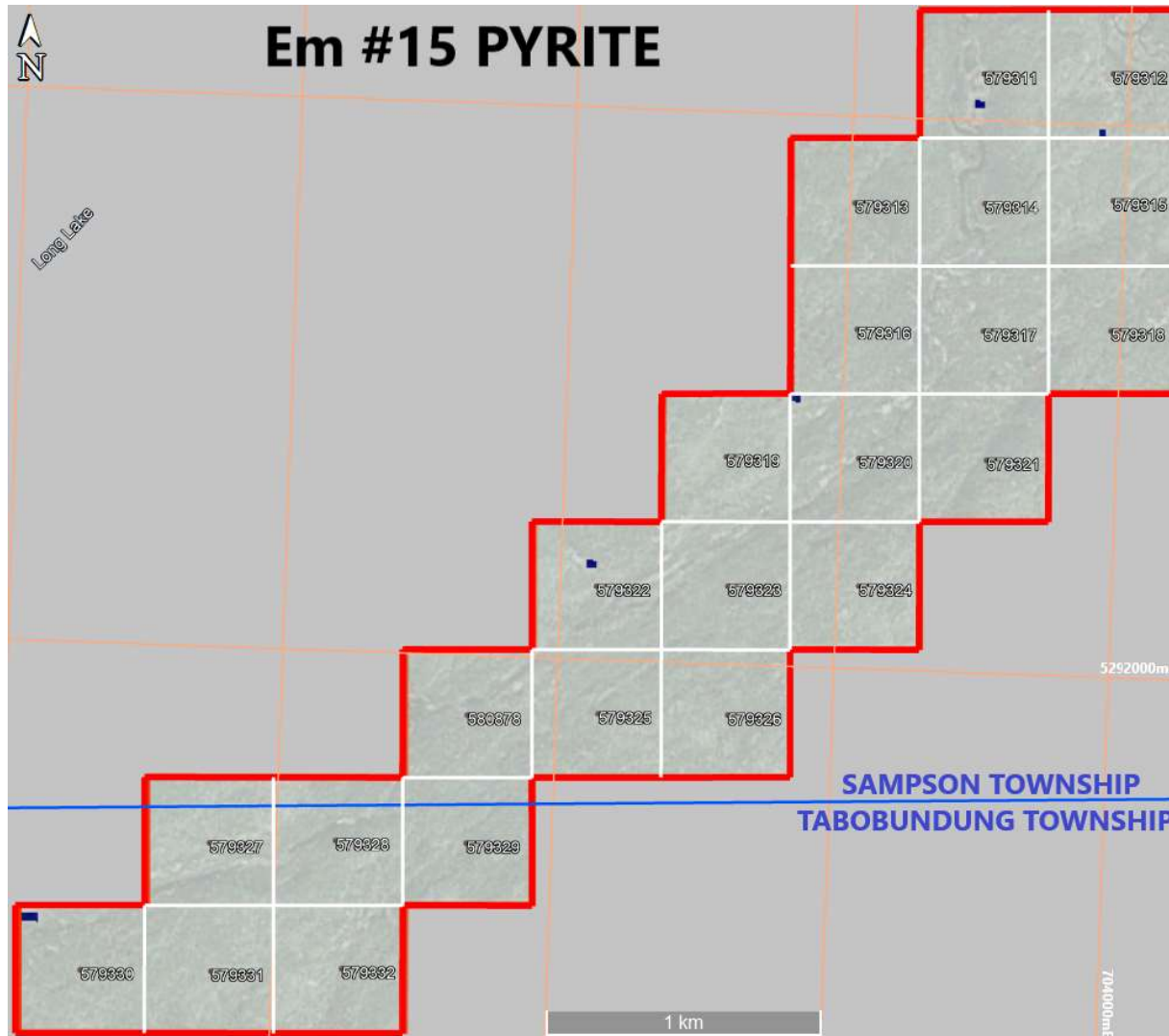


Figure 7.16 Long Wave Infrared Survey; Pyrite Abundance Map

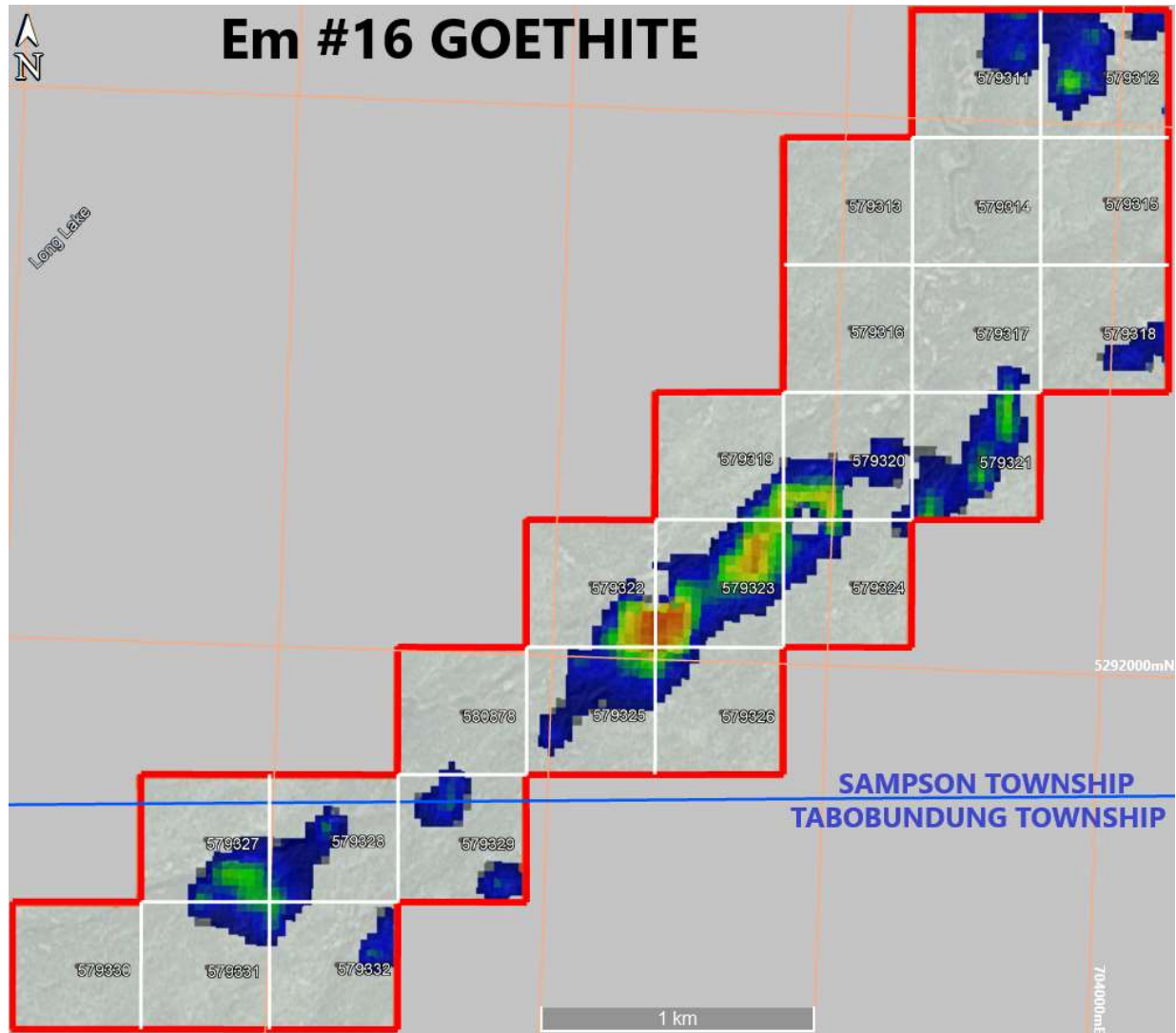


Figure 7.17 Long Wave Infrared Survey; Goethite Abundance Map

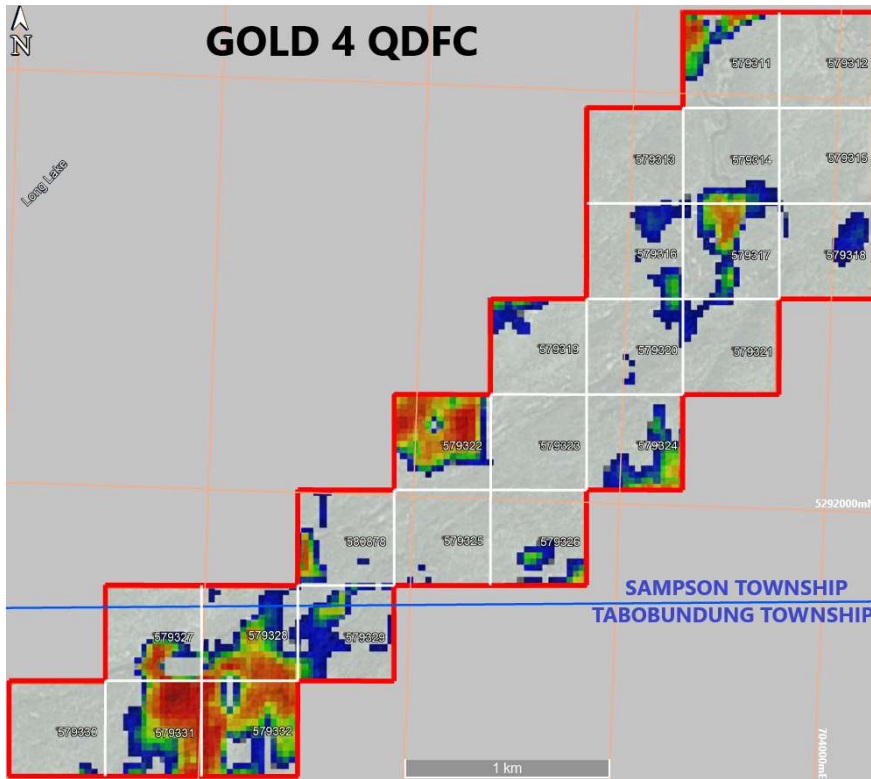


Figure 7.18 Gold QDFC Predictor Target Map – Trained on 4 Deposits

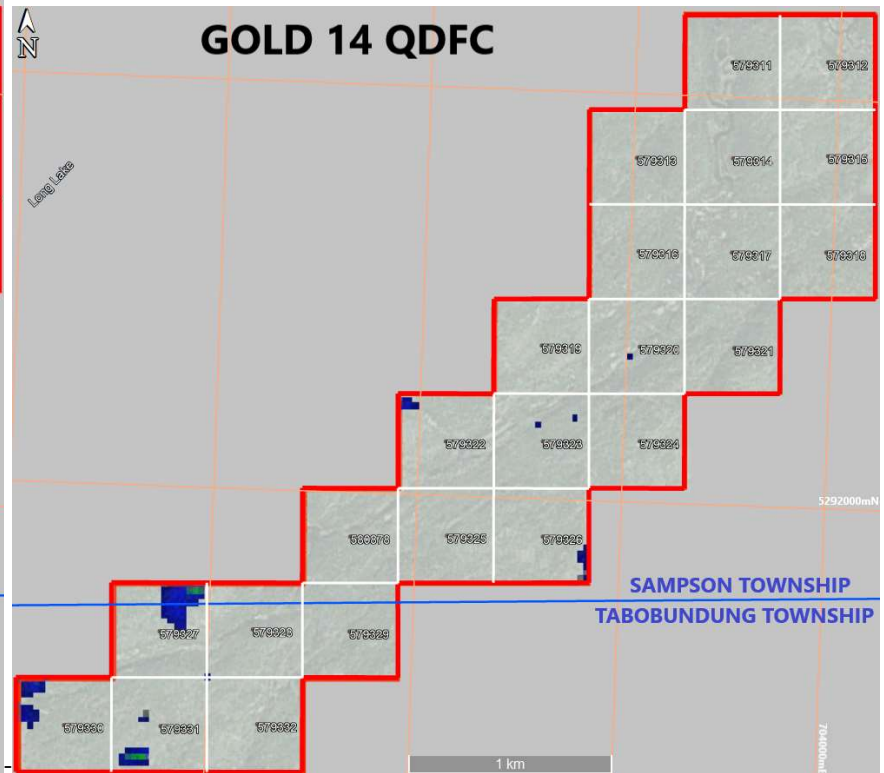


Figure 7.19 Gold QDFC Predictor Target Map Trained on 14 Deposits

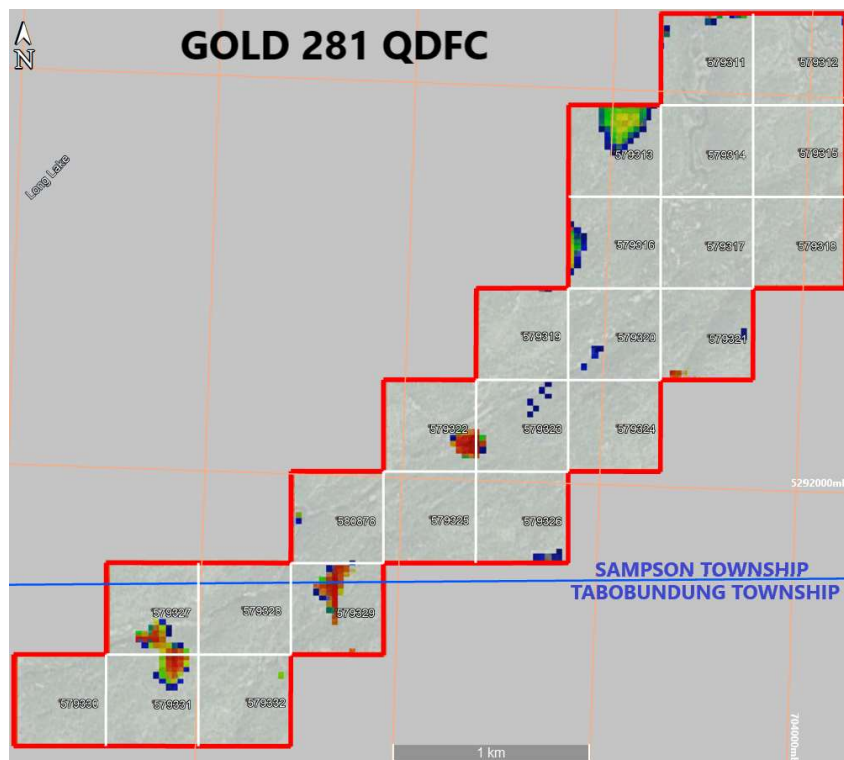


Figure 7.20 Gold QDFC Predictor Target Map – Trained on 281

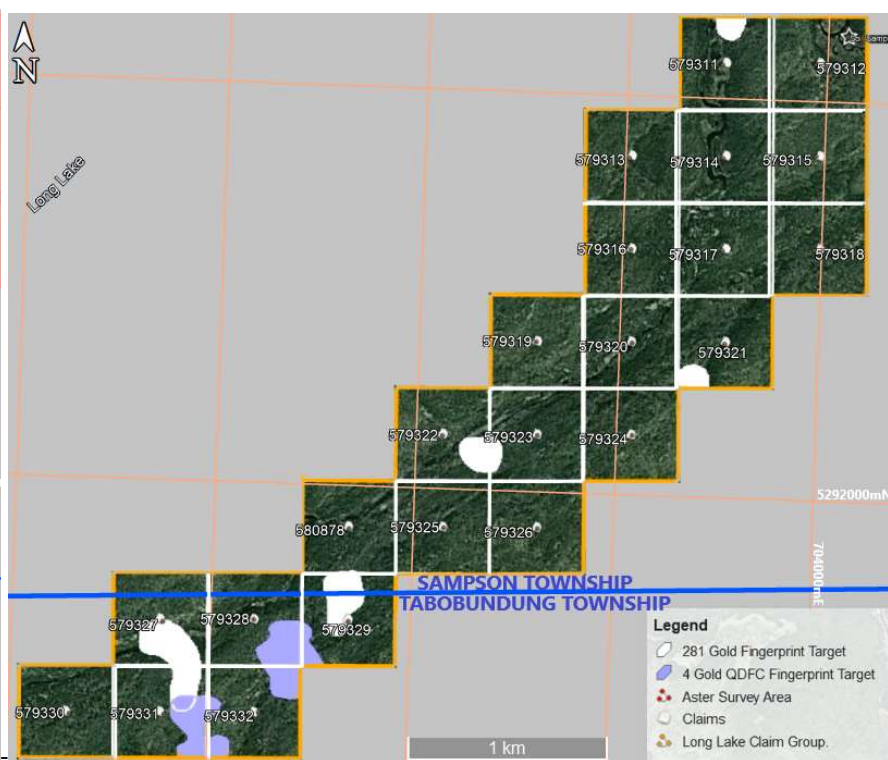


Figure 7.21 Summary: Gold QDFC Predictor Fingerprint Targets

7.3 Prospecting and Sampling

The author and Mr. Fred Archibald P. Geo attempted to access the claims on October 29th 2021 by taking the southern logging road, downed tress approximately 24 kilometres from Hwy 101 blocked access. Returned to Hwy 101 drove east to the new logging roads off HWY 101 some 3 kilometres west of the HWY 101/651 junction (Figure 4.1). After approximately 10-15 kilometres, progress was stopped due to Ministry restrictions as documented in Figure 7.22 below until the following day Saturday October 30th 2021. Please see Appendix 1 for sample location and Appendix 3 for daily log.



Figure 7.22 Notice

Access was achieved the following day by following the same road to its end some 600metres due east of the NW corner of the claim group (Figure 7.1). Two samples of reddish yellow fluvioglacial material were taken for geochemical analysis on claim #579312 (Figures 7.1 & 7.23), sample numbers #213479 and #213481. In addition to the soil samples a number of small granite boulders, cobbles were chip sampled (Sample #213480) within the same vicinity. Results are shown in Figure 23 below

Report Number: A21-21153																														
Report Date: 20/12/2021																														
Analyte Symbol	Ti	S	P	Li	Be	B	Na	Mg	Al	K	Bi	Ca	Sc	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge							
Unit Symbol	%	%	%	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm						
Detection Limit	0.001	1	0.001	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	1	1	0.01	0.1	0.1	0.2	0.1	0.02	0.1							
Analysis Method	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS						
213479 Soil	0.084	< 1	0.045	7.5	0.3	4	0.049	0.19	1.23	0.06	0.07	0.43	2.9	30	22	208	1.53	3.9	10	4	26.5	4.39	< 0.1							
213480 Rock	0.192	< 1	0.055	22.8	0.2	7	0.138	0.83	1.39	0.13	0.11	1.14	4.3	50	11	323	2.58	11.1	17.3	47.5	54.5	7.36	< 0.1							
213481 Soil	0.105	< 1	0.045	8.7	0.3	5	0.068	0.29	1.46	0.08	0.08	0.37	3.6	38	23	170	1.93	4.5	11.2	7.5	20.5	4.65	< 0.1							
Report Number: A21-21153																														
Report Date: 20/12/2021																														
Analyte Symbol	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Te	Cs	Ba	La	Ce	Cd	Pr	Nd	Sm	Se	Eu	Gd							
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm						
Detection Limit	0.1	0.1	0.5	0.01	0.1	0.1	0.01	0.002	0.02	0.05	0.02	0.02	0.02	0.5	0.5	0.01	0.01	0.1	0.02	0.1	0.1	0.1	0.1	0.1						
Analysis Method	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS						
213479 Soil	0.8	6.5	19.4	3.46	2.3	1.6	0.36	0.075	< 0.02	0.51	0.03	< 0.02	0.75	37.6	8.2	18.5	0.07	2	7.77	1.5	0.6	0.3	1.2							
213480 Rock	0.6	7.5	53.7	3.11	1.3	0.3	0.19	0.047	< 0.02	0.45	< 0.02	< 0.02	0.93	35.4	22.6	43.7	0.02	4	13.5	1.8	0.4	0.4	1.2							
213481 Soil	1.5	5.2	29	4.13	2.4	1	0.35	0.029	< 0.02	0.56	0.02	< 0.02	0.52	26.6	7	16.7	0.09	1.7	6.81	1.2	0.7	0.3	1.1							
Report Number: A21-21153																														
Report Date: 20/12/2021																														
Analyte Symbol	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Au	Tl	Pb	Th	U	Hg													
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb													
Detection Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.001	0.5	0.02	0.1	0.1	0.1	10													
Analysis Method	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS												
213479 Soil	0.2	0.7	0.1	0.4	< 0.1	0.3	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	2.1	0.05	4.4	2.4	0.4	30													
213480 Rock	0.1	0.6	0.1	0.3	< 0.1	0.3	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	1.5	0.05	2.8	3.8	0.2	< 10													
213481 Soil	0.2	0.8	0.2	0.4	< 0.1	0.4	< 0.1	< 0.1	< 0.05	0.4	< 0.001	2.9	0.04	4.2	2.7	0.5	20													

Figure 7.23 Geochemistry Results Table

8.0 Interpretation

The relatively coarse spectral and spatial resolution of Aster means that identification of specific minerals is tentative and needs to be viewed in conjunction with other exploration datasets, geological models and geochemical samples. In essence, the imagery requires extensive ground confirmation of this or any interpretation.

The 90m resolution of Aster Funds Ltd anomalies means that identification of specific minerals is done on comparison to industry accepted reference spectra, not field identification. This analysis is an input to a diversified exploration strategy with geoscientific models and geochemical/geophysical inputs. The imagery and analysis herein always require ground verification in project mapping.

8.1 Target Vector Minerals

The LWIR Target Vector Minerals identified for gold and copper-nickel mineralization in a survey area may be used in many different ways to define target areas for mineral exploration.

To define specific target areas for different elements/commodities, in a spectral survey area, a number of TVM methods are used:

- **Direct Mineral Vector** An example is Sphalerite. This is a sulphide ore mineral for zinc and as such can be used as TVM's™ for zinc by outlining areas of high abundance which become target area(s) for exploration. Similarly, pyrrhotite is a well known pathfinder mineral for nickel that can be used directly to define target areas where spectral surveys show it in high abundance.
- **Metallic Target Vector Minerals** Where more than three metallic oxide/sulphide/carbonate mineral endmembers occur, they can be used as TVM's to outline target areas of metallic concentration by using the TVM overlap method. In the Long Lake survey area, four metallic TVM's are present: Pyrrhotite, Cerussite, Goethite and Pyrite.
- **Conceptual Target Vector Minerals** If geological data suggests an environment for a commodity deposit type is present but has not been found nor mapped, then specific minerals (ore, gangue, pathfinder, alteration etc.) associated with the particular deposit type can be used as Target Vector Minerals, if present in the raw data.
- **Commodity Specific Target Vector Minerals**– If mineral occurrences are present in the survey area then TVM's can be identified for each commodity and also for each mineralization style for that commodity (vein, fault, breccia).The relevant TVM data, for example vein gold, is utilized by overlapping the TVM's identified for vein gold either as mineral outlines or anomalies. Once plotted the overlap areas are coloured. This technique further defines potential mineral trends and target areas for exploration in specific areas for gold exploration. When combined with geology, geophysics and geochemistry then target areas for exploration can be further defined and ranked.

8.2 Direct LWIR Mineral Target Vectors

Cerussite is a lead carbonate mineral can be used directly as TVM's for lead and zinc by outlining areas of high abundance as target area(s) for exploration. Similarly pyrrhotite is known as a pathfinder mineral for nickel and is present with the gold in the survey area. On the property cerussite abundance is seen in Figure 7.8 where there are two small areas of low to moderate abundance while high abundance pyrrhotite is present as an one kilometre long NE trendind zone (Figure 7.4).

8.3 LWIR Metallic Target Vector Minerals

The Aster LWIR survey mapped four metallic minerals in the survey area:

- Em#4 is interpreted as Pyrrhotite (iron sulphide) with a 100% correlation coefficient.
- Em#8 identified as Cerussite (lead carbonate) with an 80% correlation coefficient.
- Em#15 equates to Pyrite another iron sulphide with a 97% correlation coefficient
- Em#16, interpreted as Goethite (iron oxide) with a 96% correlation coefficient.

The "metallic's "- sulphides, an oxide and a carbonate indicate that mineralization processes were active in the survey area. Their abundance maps can be directly used to assist in defining areas for exploration. Where more than three metallic oxide/sulphide/carbonate mineral endmembers occur they can be used as TVM's to outline target areas of metallic concentration by using the TVM overlap method.

Utilizing the TVM overlap methodology, a metallic TVM overlap map was produced for the claim group (Figure 8.1 overleaf). A number of the metallic minerals in the claim area were mapped as being of high abundance (yellow, red colour) and a high abundance metallic TVM Overlap map was also produced (Figure 8.2).

Metallic TVM Overlap mapping shows a distinct 3.8 kilometre northeast-southwest trend of two (white) and three (blue) metallic overlap from the southern claim boundary to claim #579318 in the NE. Only scattered two metallic TVM Overlap areas were mapped in the NE quarter of the claim group.

TVM mapping utilizing areas of high metallic mineral abundances outlined six areas of two TVM Overlap with four of these coincident with the mapped iron formation. The remaining two areas appear along strike of the iron formation indicatining possible continuence southwards to the claim boundary.

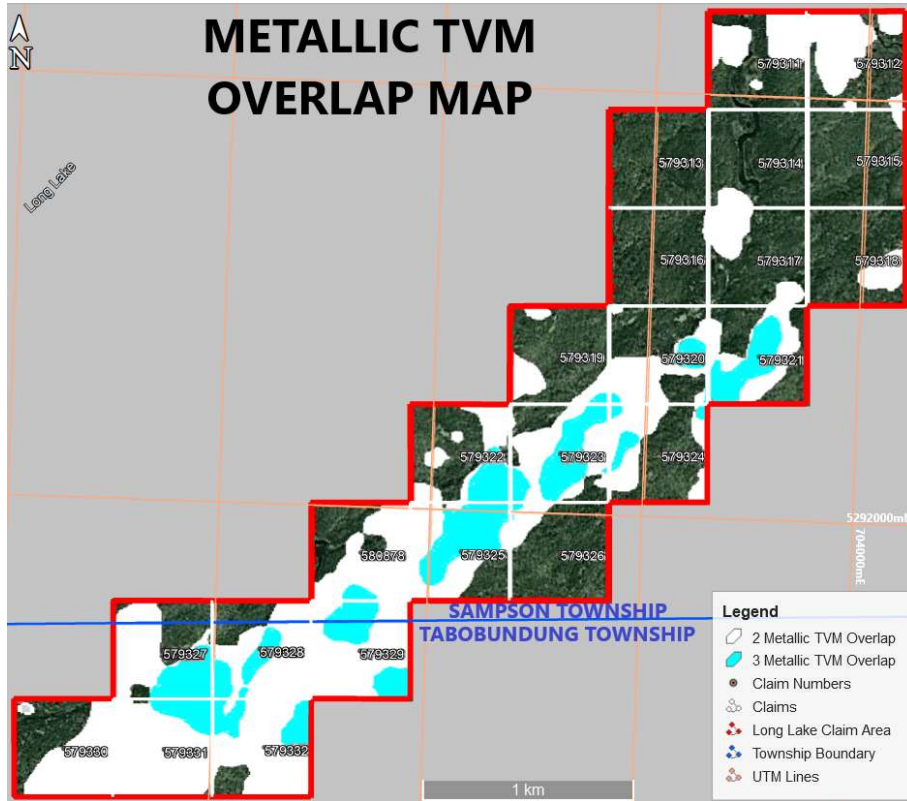


Figure 8.1 LWIR Metallic TVM Overlap Map

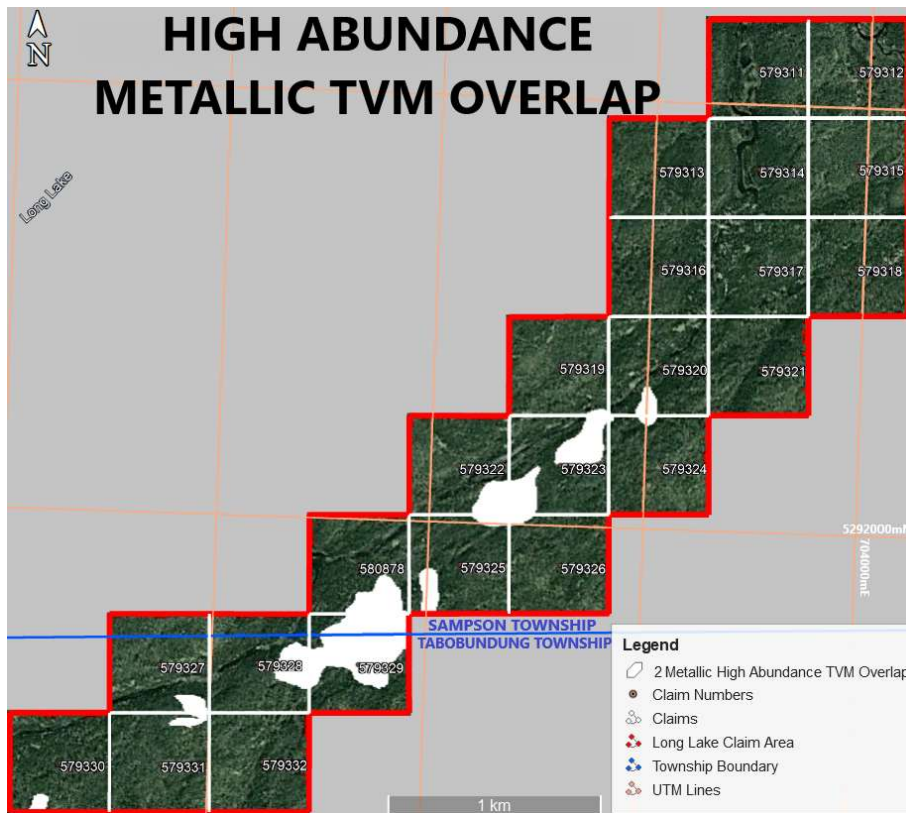


Figure 8.2 LWIR High Abundance Metallic TVM Overlap Map

8.4 Commodity Specific Target Vector Minerals (LWIR)

Numerous gold deposits, one active gold mine, two gold deposits under mine construction and hundreds of gold occurrences are present in the Michipicoten Greenstone Belt.

Gold TVM's were determined and a gold TVM Overlap map was produced for the claims area.

8.4.1 Gold

Seven endmember minerals spatially associated with the gold occurrences were identified as target vector minerals (TVM's) for gold:

- Em#1 is interpreted as Monticellite (Calcium magnesium silicate) with a 95% correlation coefficient.
- Em#2 is interpreted as Orthoclase (K-Feldspar) with a 95% correlation coefficient.
- Em#4 is interpreted as Pyrrhotite (iron sulphide) with a 100% correlation coefficient.
- Em#5 is identified as Epidote (Calcium iron silicate) with a 96% correlation coefficient.
- Em#8 identified as Cerussite (lead carbonate) with an 80% correlation coefficient.
- Em#15 equates to Pyrite another iron sulphide with a 97% correlation coefficient
- Em#16, interpreted as goethite (iron oxide) with a 96% correlation coefficient.

and they are in order of dominance:

Pyrrhotite >= Epidote > Orthoclase = Monticellite >= Cerussite > Pyrite > Goethite

The gold TVM Overlap response is similar to the metallic TVM Overlap mapping within the Long Lake claim group though numerous areas of 6 (red) out of 7 gold TVM Overlap were mapped in two areas of the claim group (Figure 8.3).

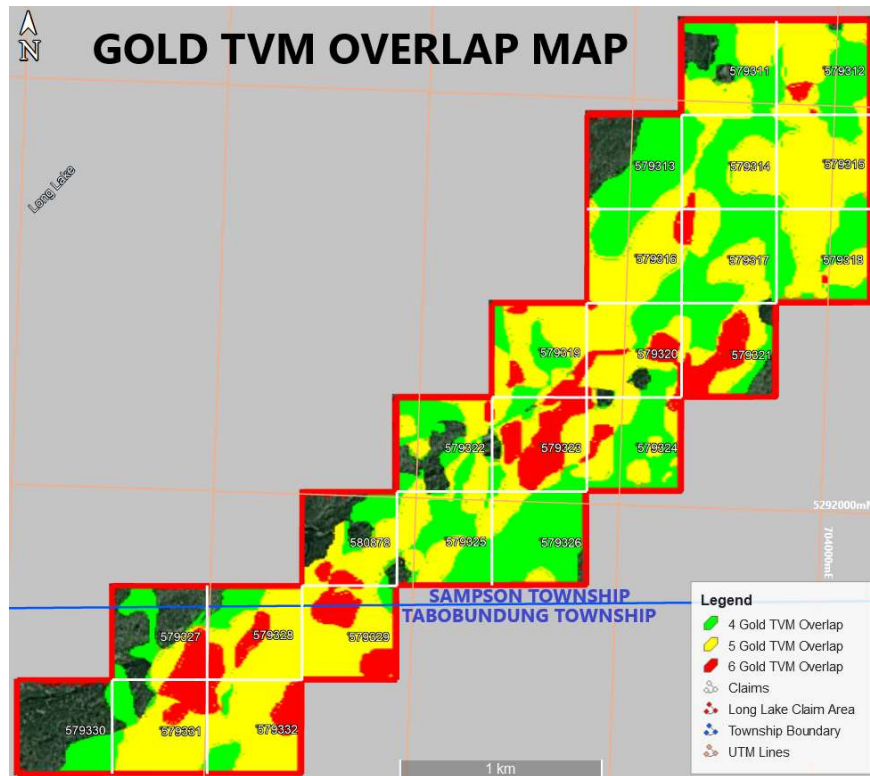


Figure 8.3 Gold TVM Overlap Map

The gold TVM Overlap map is in essence a gold prospectivity map of the claims and identified two gold target areas at either end of the mapped iron formation as shown in Figure 8.4 below

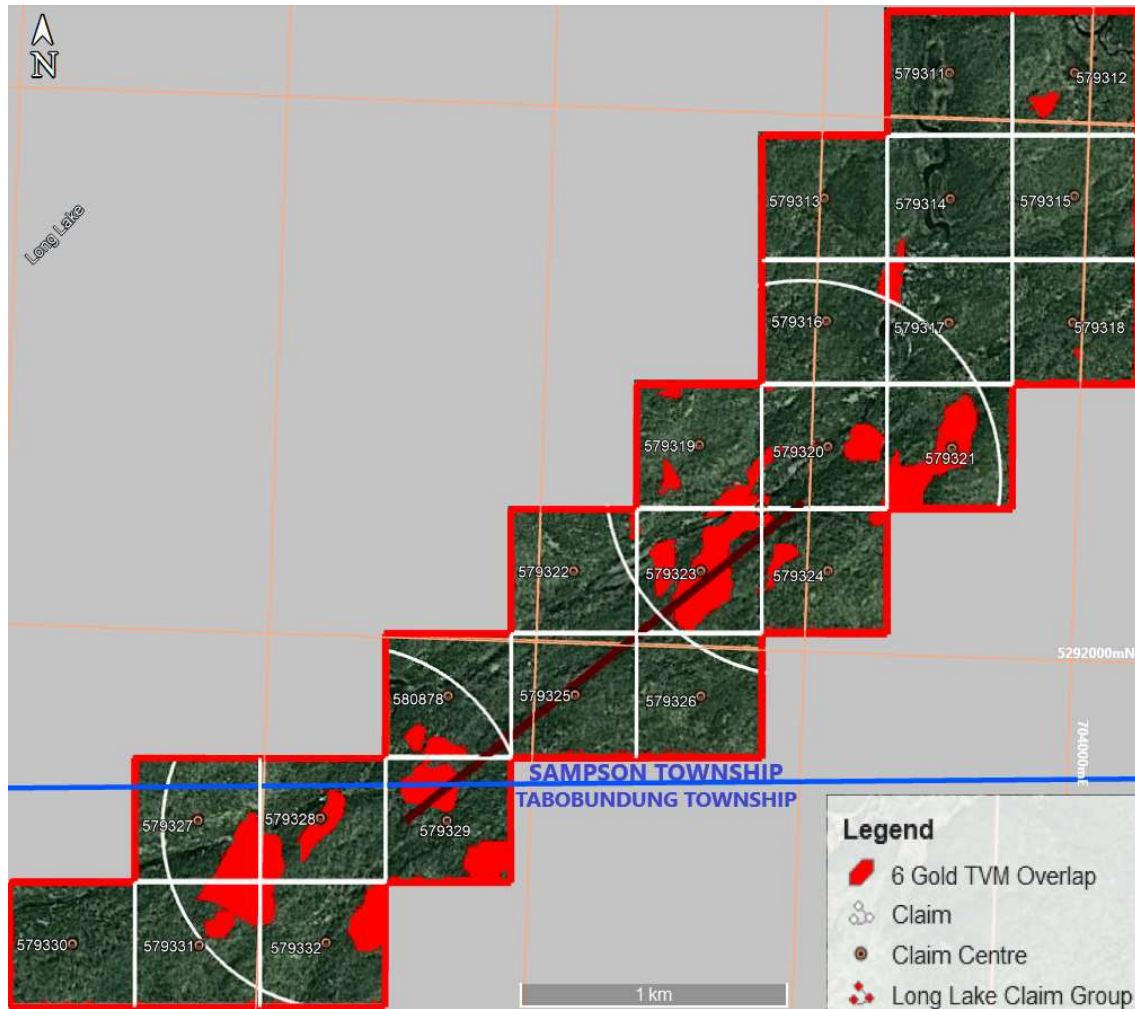


Figure 8.4 LWIR Gold TVM Overlap Exploration Target Areas.

9.0 Conclusions

Proprietary algorithms were applied to collect and categorize the spectral reflectance and emissivity emanating from the rocks over the Long Lake property. Spectral LWIR frequencies so collected were correlated against a reference database of rocks, minerals, and other substances from Johns Hopkins University.

Aster Funds Ltd LWIR Target Vector Minerals (TVM) were identified for gold (6) and metallics (4). Processing and plotting of the LWIR TVM overlap data on the Long Lake property outlined a number of Gold and Metallic targets principally in the southern half of the claim block.

The high abundance metallic targets are spatially related to the iron formation and in essence map the iron formation.

Gold TVM Overlap mapping clearly shows two gold TVM target areas with six of six TVM's located on the north and south outcrop terminations/extremities of the mapped iron formation.

QDFC predictor target maps were produced for:

- Gold based on the Magino, Kremzar, Cline and Edwards deposits
- Gold based on fourteen drilled gold prospects (Goudreau gold camp)
- Gold based on known mineral occurrences (281) Michipicoten Greenstone Belt.

The Long Lake gold LWIR QDFC predictive results for the claim group show that five of the seven gold QDFC targets are coincident with a number of gold TVM overlap targets, in the southern claims #579327, #579328, #579329, #579331 and #579332.

No elevated elements/metals found in the rock sample and the two soils samples.

In summary, the interpreted Aster LWIR TVM and QDFC data outlined two main gold exploration areas from sixty five to eighty hectares in size. .

All spectral data and interpretations should be integrated with other exploration datasets such as geochemistry, geophysics (gravity, magnetics, radiometric) as well lithological and structural interpretations for better results.

The various mineral abundances presented in this report need to be correlated with geological information and fieldwork to improve the interpretation and generate other reliable exploration targets.

10.0 Recommendations

Field follow-up work is recommended. Details:

- Detailed prospecting of the two gold TVM Overlap exploration target areas.
- Selected rock chip sampling of outcrops in the target areas
- Soil Sampling traverses across the iron formation and target areas.

11.0 Cited References

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Sage, R.P. 1993. Ontario Geological Survey Open File Report 5586, Geology of Chabanel, Esquega, Lastheels and McMurray Townships, District of Algoma 1993

APPENDIX I

SAMPLE LOCATIONS

LONG LAKE CLAIMS SAMPLING							
DATE	SAMPLE TYPE	SAMPLE NUMBER	CLAIM NUMBER	UTM ZONE	EASTINGS	NORTHINGS	SAMPLE DESCRIPTION
30/10/2021	SOIL	213479	579312	16 T	704075.00 m E	5294327.00 m N	Reddish brown/yellowish fluvioglacial soil
30/10/2021	ROCK	213480	579312	16 T	704117.55 m E	5294326.00 m N	Cobbles, small boulders granite, scattered, chip sampled
30/10/2021	SOIL	213481	579312	16 T	704147.12 m E	5294292.97 m N	Reddish brown/yellowish fluvioglacial soil

APPENDIX II

LABORATORY RESULTS

SAMPLES: 213479 – 213484 (Long Lake & Ghost Lake)

#213479; #213480 & # 213481 = Long Lake Claims



Report No.: **A21-21153**
 Report Date: **20-Dec-21**
 Date Submitted: **10-Nov-21**
 Your Reference:

STEEL AND ASSOCIATES
10 MALVERN CT
BRAMPTON ON L6W 1H1
Canada

ATTN: JIM STEEL

CERTIFICATE OF ANALYSIS

6 Rock samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
UT-1-0.5g	GOP Ultratrace-1 (Aqua Regia ICPMS)	2021-12-02 14:29:03

REPORT **A21-21153**

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. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Assays are recommended for values above the upper limit. The Au from AR-MS is for information purposes, for accurate Au fire assay 1A2 should be requested.



LabID: 266

ACTIVATION LABORATORIES LTD.

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 E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

CERTIFIED BY:

Emmanuel Esemé, Ph.D.
 Quality Control Coordinator

Results

Activation Laboratories Ltd.

Report: A21-21153

Analyte Symbol	Ti	S	P	Li	Be	B	Na	Mg	Al	K	Bi	Ca	Sc	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge
Unit Symbol	%	%	%	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	1	0.001	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	1	1	0.01	0.1	0.1	0.2	0.1	0.02	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
213479	0.084	<1	0.045	7.5	0.3	4	0.049	0.19	1.23	0.06	0.07	0.43	2.9	30	22	208	1.53	3.9	10.0	4.0	26.5	4.39	<0.1
213480	0.192	<1	0.055	22.8	0.2	7	0.138	0.83	1.39	0.13	0.11	1.14	4.3	50	11	323	2.58	11.1	17.3	47.5	54.5	7.36	<0.1
213481	0.105	<1	0.045	8.7	0.3	5	0.068	0.29	1.46	0.08	0.08	0.37	3.6	38	23	170	1.93	4.5	11.2	7.5	20.5	4.65	<0.1
213482	0.096	<1	0.017	12.2	0.4	3	0.024	2.90	3.51	0.03	<0.02	0.97	21.9	220	37	1300	8.48	43.5	81.7	110	90.6	13.4	<0.1
213483	0.003	<1	0.065	8.4	<0.1	3	0.098	0.50	0.92	0.04	<0.02	0.33	5.3	26	18	504	2.86	9.7	19.0	4.7	53.4	4.76	<0.1
213484	0.169	<1	0.015	6.0	0.4	3	0.013	2.03	2.56	0.02	0.60	14.1	9.2	114	73	2030	4.96	27.0	63.6	155	61.2	6.56	<0.1

Results

Activation Laboratories Ltd.

Report: A21-21153

Analyte Symbol	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Te	Cs	Ba	La	Ce	Cd	Pr	Nd	Sm	Se	Eu	Gd	
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.1	0.5	0.01	0.1	0.1	0.01	0.002	0.02	0.05	0.02	0.02	0.02	0.5	0.5	0.01	0.01	0.1	0.02	0.1	0.1	0.1	0.1	
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
213479	0.8	6.5	19.4	3.46	2.3	1.6	0.36	0.075	<0.02	0.51	0.03	<0.02	0.75	37.6	8.2	18.5	0.07	2.0	7.77	1.5	0.6	0.3	1.2	
213480	0.6	7.5	53.7	3.11	1.3	0.3	0.19	0.047	<0.02	0.45	<0.02	<0.02	0.93	35.4	22.6	43.7	0.02	4.0	13.5	1.8	0.4	0.4	1.2	
213481	1.5	5.2	29.0	4.13	2.4	1.0	0.35	0.029	<0.02	0.56	0.02	<0.02	0.52	26.6	7.0	16.7	0.09	1.7	6.81	1.2	0.7	0.3	1.1	
213482	1.7	1.9	20.6	6.06	1.2	<0.1	0.15	0.047	0.06	0.12	<0.02	<0.02	0.20	42.1	2.8	4.80	0.09	0.9	4.43	0.9	0.4	0.3	1.2	
213483	1.6	1.2	11.5	3.65	0.7	<0.1	0.21	0.021	<0.02	0.11	<0.02	<0.02	0.07	26.3	13.8	31.2	0.06	3.3	12.4	2.3	0.5	0.5	1.5	
213484	1.4	1.2	143	9.53	0.9	<0.1	0.25	0.047	<0.02	0.20	0.08	<0.02	0.05	9.1	1.2	2.92	0.24	0.4	2.33	0.8	0.7	0.4	1.1	

Results

Activation Laboratories Ltd.

Report: A21-21153

Analyte Symbol	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Au	Tl	Pb	Th	U	Hg
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.001	0.5	0.02	0.1	0.1	0.1	10
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
213479	0.2	0.7	0.1	0.4	<0.1	0.3	<0.1	<0.1	<0.05	<0.1	<0.001	2.1	0.05	4.4	2.4	0.4	30
213480	0.1	0.6	0.1	0.3	<0.1	0.3	<0.1	<0.1	<0.05	<0.1	<0.001	1.5	0.05	2.8	3.8	0.2	<10
213481	0.2	0.8	0.2	0.4	<0.1	0.4	<0.1	<0.1	<0.05	0.4	<0.001	2.9	0.04	4.2	2.7	0.5	20
213482	0.2	1.2	0.2	0.7	<0.1	0.6	<0.1	<0.1	<0.05	<0.1	<0.001	4.3	0.02	1.2	1.5	<0.1	<10
213483	0.2	0.8	0.1	0.4	<0.1	0.3	<0.1	<0.1	<0.05	<0.1	<0.001	1.0	<0.02	0.5	1.3	0.2	<10
213484	0.3	1.7	0.3	1.1	0.2	1.0	0.2	<0.1	<0.05	<0.1	0.001	7.4	<0.02	1.8	0.9	<0.1	<10

Samples #: **213479 - 213481: Long Lake Claims**
 213482 - 213484: Ghost Lake Claims

Analyte Symbol	Ti	S	P	Li	Be	B	Na	Mg	Al	K	Bi	Ca	Sc	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge
Unit Symbol	%	%	%	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	1	0.001	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	1	1	0.01	0.1	0.1	0.2	0.1	0.02	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
OREAS 45d (Aqua Regia) Meas		< 1	0.034	15.6			0.032	0.17	5.12	0.10	0.24	0.09	40.9	172	437	387	13.7	26.0	186	337	33.9	15.7	
OREAS 45d (Aqua Regia) Cert		0.045	0.035	11.9			0.031	0.144	4.860	0.097	0.30	0.09	41.50	201.0	467	400.000	13.650	26.2	176.0	345.0	30.6	17.9	
OREAS 922 (AQUA REGIA) Meas		< 1	0.068	22.6	0.7		0.021	1.33	2.60	0.39	12.1	0.37	3.8	30	43	751	5.25	18.9	33.7	2190	258	7.26	< 0.1
OREAS 922 (AQUA REGIA) Cert		0.386	0.063	22.8	0.65		0.021	1.33	2.72	0.376	10.3	0.324	3.15	29.4	40.7	730	5.05	19.4	34.3	2176	256	7.62	0.10
OREAS 922 (AQUA REGIA) Meas		< 1	0.063	22.0	0.7		0.021	1.28	2.54	0.37	9.09	0.35	3.4	29	41	724	4.92	17.4	32.6	2080	247	6.89	< 0.1
OREAS 922 (AQUA REGIA) Cert		0.386	0.063	22.8	0.65		0.021	1.33	2.72	0.376	10.3	0.324	3.15	29.4	40.7	730	5.05	19.4	34.3	2176	256	7.62	0.10
OREAS 923 (AQUA REGIA) Meas		< 1	0.065	22.9	0.7			1.41	2.60	0.40	22.2	0.41	4.2	33	42	920	6.04	22.0	37.0	4680	333	8.50	
OREAS 923 (AQUA REGIA) Cert		0.684	0.061	23.4	0.61			1.43	2.80	0.322	21.8	0.326	3.09	30.6	39.4	850	5.91	22.2	32.7	4248	335	8.01	
OREAS 907 (Aqua Regia) Meas	0.018	< 1	0.021	4.9	0.9		0.078	0.18	1.11	0.30	22.8	0.26	2.2	5	8	326	8.34	44.4	4.9	6690	147	15.3	
OREAS 907 (Aqua Regia) Cert	0.0170	0.0660	0.0240	4.05	0.870		0.0860	0.221	0.945	0.286	22.3	0.280	2.16	5.12	8.59	330	8.18	43.7	4.74	6370	139	14.7	
Oreas 621 (Aqua Regia) Meas		4	0.027	7.0	0.5		0.153	0.43	1.57	0.33	4.18	1.62	2.3	12	37	542	3.48	29.4	29.5	3850	> 5000	10.7	
Oreas 621 (Aqua Regia) Cert		4.50	0.0335	8.17	0.530		0.160	0.436	1.60	0.333	3.85	1.65	2.20	10.9	31.3	520	3.43	27.9	25.8	3660	51700	9.29	
Oreas 621 (Aqua Regia) Meas		5	0.035	6.7	0.5		0.152	0.44	1.55	0.31	3.88	1.55	2.4	11	28	523	3.50	29.5	24.3	3670	> 5000	9.42	
Oreas 621 (Aqua Regia) Cert		4.50	0.0335	8.17	0.530		0.160	0.436	1.60	0.333	3.85	1.65	2.20	10.9	31.3	520	3.43	27.9	25.8	3660	51700	9.29	
Oreas 621 (Aqua Regia) Meas		4	0.028	6.6	0.5		0.146	0.43	1.62	0.29	3.74	1.57	2.5	11	29	490	3.30	27.3	23.7	3550	> 5000	8.97	
Oreas 621 (Aqua Regia) Cert		4.50	0.0335	8.17	0.530		0.160	0.436	1.60	0.333	3.85	1.65	2.20	10.9	31.3	520	3.43	27.9	25.8	3660	51700	9.29	
OREAS 263 (Aqua Regia) Meas		< 1	0.046	21.5	1.3		0.078	0.64	1.98	0.40	0.62	1.05	3.8	26	55	507	3.61	33.6	72.7	90.5	136	4.57	
OREAS 263 (Aqua Regia) Cert		0.126	0.0410	20.1	1.22		0.0790	0.593	1.29	0.288	0.570	1.03	3.52	22.8	48.0	490	3.68	31.0	72.0	87.0	127	4.92	
OREAS 263 (Aqua Regia) Meas		< 1	0.043	18.7	1.1		0.071	0.60	1.68	0.35	0.58	1.01	3.6	24	53	465	3.49	28.2	68.6	84.2	127	4.43	
OREAS 263 (Aqua Regia) Cert		0.126	0.0410	20.1	1.22		0.0790	0.593	1.29	0.288	0.570	1.03	3.52	22.8	48.0	490	3.68	31.0	72.0	87.0	127	4.92	
OREAS 130 (Aqua Regia) Meas	0.028	6	0.094	29.7				0.94	1.13	0.50	3.01	1.71	3.7	35	24	1650	7.43	26.7	34.1	231	> 5000	4.64	
OREAS 130 (Aqua Regia) Cert	0.0270	6.02	0.0860	29.9				0.892	1.10	0.500	3.05	1.81	3.42	33.1	23.2	1630	7.27	27.1	35.2	226	16900	4.78	
OREAS 130 (Aqua Regia) Meas	0.028	6	0.092	31.4				0.93	1.18	0.49	3.05	1.67	3.8	36	24	1620	7.17	26.2	34.2	235	> 5000	4.61	
OREAS 130 (Aqua Regia) Cert	0.0270	6.02	0.0860	29.9				0.892	1.10	0.500	3.05	1.81	3.42	33.1	23.2	1630	7.27	27.1	35.2	226	16900	4.78	

QC

Activation Laboratories Ltd.

Report: A21-21153

Analyte Symbol	Ti	S	P	Li	Be	B	Na	Mg	Al	K	Bi	Ca	Sc	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge
Unit Symbol	%	%	%	ppm	ppm	ppm	%	%	%	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.001	1	0.001	0.1	0.1	1	0.001	0.01	0.01	0.01	0.02	0.01	0.1	1	1	1	0.01	0.1	0.1	0.2	0.1	0.02	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
OREAS 153b (Aqua Regia) Meas	0.053	1	0.056	3.9	0.2		0.156	1.50	2.50	0.39	1.79	1.41	11.8	156	17	262	3.71	15.5	11.9	7020	113	8.19	
OREAS 153b (Aqua Regia) Cert	0.0500	1.27	0.0470	3.28	0.180		0.148	1.47	2.28	0.365	1.81	1.32	9.98	153	16.2	240	3.60	14.9	11.1	6700	118	8.06	
OREAS 153b (Aqua Regia) Meas	0.048	1	0.046	3.5	0.2		0.147	1.49	2.33	0.32	1.72	1.23	10.1	149	16	250	3.64	14.8	10.9	6700	117	7.40	
OREAS 153b (Aqua Regia) Cert	0.0500	1.27	0.0470	3.28	0.180		0.148	1.47	2.28	0.365	1.81	1.32	9.98	153	16.2	240	3.60	14.9	11.1	6700	118	8.06	
Creas 623 (Aqua Regia) Meas		10	0.045	9.6	0.4		0.068	1.13	1.64	0.17	17.9	1.09	4.6	16	20	572	13.6	223	17.5	>10000	>5000	12.3	
Creas 623 (Aqua Regia) Cert		8.75	0.0400	10.0	0.370		0.0680	1.11	1.80	0.175	16.9	1.09	4.63	15.8	19.4	570	13.0	216	15.6	17200	10100	11.9	
Creas 623 (Aqua Regia) Meas		9	0.042	9.1	0.4		0.072	1.11	1.61	0.16	17.2	1.02	4.9	15	22	542	12.8	215	16.1	>10000	>5000	12.4	
Creas 623 (Aqua Regia) Cert		8.75	0.0400	10.0	0.370		0.0680	1.11	1.80	0.175	16.9	1.09	4.63	15.8	19.4	570	13.0	216	15.6	17200	10100	11.9	
OREAS 521 (Aqua Regia) Meas	0.151	2	0.089	17.0	0.6		0.050	1.24	1.44	0.53	6.65	4.06	10.3	214	35	3390	22.3	443	75.5	6470	28.6	14.3	0.2
OREAS 521 (Aqua Regia) Cert	0.141	2	0.081	16.7	0.5		0.045	1.10	1.44	0.53	5.84	3.66	10.0	200	33	3000	20.0	374	68.0	5990	23.6	14.3	0.3
OREAS 521 (Aqua Regia) Meas	0.132	2	0.085	16.2	0.5		0.055	1.14	1.34	0.49	5.74	3.63	10.3	199	34	3250	21.6	405	72.3	6060	26.0	11.8	<0.1
OREAS 521 (Aqua Regia) Cert	0.141	2	0.081	16.7	0.5		0.045	1.10	1.44	0.53	5.84	3.66	10.0	200	33	3000	20.0	374	68.0	5990	23.6	14.3	0.3
Method Blank	<0.001	<1	<0.001	<0.1	<0.1	4	0.008	<0.01	<0.01	<0.01	<0.02	<0.01	<0.1	1	<1	<1	<0.01	<0.1	<0.1	0.3	0.8	0.09	<0.1
Method Blank	<0.001	<1	<0.001	<0.1	<0.1	2	0.005	<0.01	<0.01	<0.01	<0.02	<0.01	<0.1	1	<1	<1	<0.01	<0.1	<0.1	0.2	0.4	0.07	<0.1
Method Blank	<0.001	<1	<0.001	<0.1	<0.1	4	0.006	<0.01	<0.01	<0.01	<0.02	<0.01	<0.1	<1	<1	<1	<0.01	<0.1	<0.1	0.2	0.3	0.05	<0.1
Method Blank	<0.001	<1	<0.001	<0.1	<0.1	5	0.005	<0.01	<0.01	<0.01	<0.02	<0.01	<0.1	<1	<1	<1	<0.01	<0.1	<0.1	0.3	0.8	0.04	<0.1
Method Blank	<0.001	<1	<0.001	<0.1	<0.1	3	0.007	<0.01	<0.01	<0.01	<0.02	<0.01	<0.1	<1	<1	<1	<0.01	<0.1	<0.1	<0.2	0.2	0.10	<0.1

Analyte Symbol	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Te	Cs	Ba	La	Ce	Cd	Pr	Nd	Sm	Se	Eu	Gd
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.1	0.5	0.01	0.1	0.1	0.01	0.002	0.02	0.05	0.02	0.02	0.02	0.5	0.5	0.01	0.01	0.1	0.02	0.1	0.1	0.1	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
OREAS 45d (Aqua Regia) Meas	4.0	19.4	12.2	3.97					0.07	1.71				80.1	10.0	23.1							
OREAS 45d (Aqua Regia) Cert	6.50	20.9	11.0	5.08					0.085	1.950				80	9.960	24.8							
OREAS 922 (AQUA REGIA) Meas	6.7	23.7	16.6	18.3	10.1	0.6	0.93	0.739	0.24	4.05	0.69		1.97	73.2	36.5	72.0	0.26	7.6	29.0	6.0	2.4		4.7
OREAS 922 (AQUA REGIA) Cert	6.12	22.7	15.0	16.0	22.3	0.35	0.69	0.851	0.24	3.83	0.57		1.76	70	32.5	63	0.28	7.33	27.5	4.98	3.44		4.44
OREAS 922 (AQUA REGIA) Meas	5.1	23.1	15.7	17.8	4.8	0.7	0.63	0.747	0.27	3.87	0.63		1.85	75.5	35.0	69.6	0.27	7.4	27.4	5.1	2.4		4.6
OREAS 922 (AQUA REGIA) Cert	6.12	22.7	15.0	16.0	22.3	0.35	0.69	0.851	0.24	3.83	0.57		1.76	70	32.5	63	0.28	7.33	27.5	4.98	3.44		4.44
OREAS 923 (AQUA REGIA) Meas	7.6	23.5	14.2	19.1	3.3		0.86	1.70	0.41	6.51	0.11		1.38	18.4	33.6	70.6	0.43	7.9	30.8	5.2	7.1		4.5
OREAS 923 (AQUA REGIA) Cert	7.07	19.6	13.6	14.3	22.5		0.84	1.62	0.45	5.99	0.58		1.56	54	30.0	60	0.40	6.79	25.4	4.34	5.99		4.07
OREAS 907 (Aqua Regia) Meas	35.1	18.6	13.3	6.73	4.8		5.62	1.24	2.46	2.57	2.53	0.27	1.36	253	37.8	73.6	0.57	7.6	28.4	5.1	8.8	1.0	3.6
OREAS 907 (Aqua Regia) Cert	37.0	16.7	11.7	6.52	43.7		5.64	1.30	2.35	2.34	2.28	0.230	1.17	225	36.1	73.0	0.540	7.36	27.8	4.79	9.05	0.950	3.45
OREAS 621 (Aqua Regia) Meas	81.4		18.1	8.01	11.4		15.2	71.0	1.77	3.16	88.1		1.01		20.0	45.9	309					4.9	
OREAS 621 (Aqua Regia) Cert	75.0		18.9	6.87	55.0		13.3	68.0	1.73	2.68	107		1.01		19.4	39.6	278					5.64	
OREAS 621 (Aqua Regia) Meas	72.9		17.8	7.07	64.0		13.0	62.2	1.79	2.71	118		1.06		18.1	39.2	295					3.5	
OREAS 621 (Aqua Regia) Cert	75.0		18.9	6.87	55.0		13.3	68.0	1.73	2.68	107		1.01		19.4	39.6	278					5.64	
OREAS 621 (Aqua Regia) Meas	68.8		14.6	6.76	6.3		12.1	59.4	1.71	2.44	47.4		1.01		16.4	37.4	275					3.9	
OREAS 621 (Aqua Regia) Cert	75.0		18.9	6.87	55.0		13.3	68.0	1.73	2.68	107		1.01		19.4	39.6	278					5.64	
OREAS 263 (Aqua Regia) Meas	31.8		19.6	12.3			0.62	0.323	0.03		8.08	0.22		201			0.34				5.4		0.9 4.0
OREAS 263 (Aqua Regia) Cert	30.8		16.9	12.0			0.570	0.285	0.0290		7.37	0.210		175			0.270				4.41		0.850 3.89
OREAS 263 (Aqua Regia) Meas	28.0		18.1	10.8			0.58	0.282	0.03		7.77	0.20		189			0.27				3.6		0.8 3.8
OREAS 263 (Aqua Regia) Cert	30.8		16.9	12.0			0.570	0.285	0.0290		7.37	0.210		175			0.270				4.41		0.850 3.89
OREAS 130 (Aqua Regia) Meas	196	43.4	21.0	12.4	27.6		7.53	5.75	0.21		4.70	0.18	3.13		23.2	51.0	31.7	5.6					3.4
OREAS 130 (Aqua Regia) Cert	205	41.6	23.2	13.0	19.0		8.25	6.27	0.200		4.69	0.170	2.96		26.4	54.0	28.8	5.93					3.53
OREAS 130 (Aqua Regia) Meas	190	43.9	21.5	12.0	17.7		7.59	5.61	0.21		2.59	0.15	3.03		22.9	50.7	30.8	5.4					3.4
OREAS 130 (Aqua Regia) Cert	205	41.6	23.2	13.0	19.0		8.25	6.27	0.200		4.69	0.170	2.96		26.4	54.0	28.8	5.93					3.53

QC

Activation Laboratories Ltd.

Report: A21-21153

Analyte Symbol	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Te	Cs	Ba	La	Ce	Cd	Pr	Nd	Sm	Se	Eu	Gd
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.1	0.1	0.5	0.01	0.1	0.1	0.01	0.002	0.02	0.05	0.02	0.02	0.02	0.5	0.5	0.01	0.01	0.1	0.02	0.1	0.1	0.1	0.1
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
OREAS 153b (Aqua Regia) Meas	79.9	7.0	32.9	9.11	0.6		166	1.47	0.19	2.47	0.26	0.20	0.16	14.3	3.5	9.57	0.23		6.81	1.7	12.7		
OREAS 153b (Aqua Regia) Cert	80.0	7.34	31.4	9.38	0.860		156	1.40	0.210	3.27	2.12	0.250	0.260	22.8	3.79	9.11	0.240		6.31	1.71	10.5		
OREAS 153b (Aqua Regia) Meas	75.2	6.4	35.8	8.21	0.9		149	1.35	0.23	3.11	2.37	0.25	0.21	25.4	3.9	9.01	0.20		5.89	1.8	10.2		
OREAS 153b (Aqua Regia) Cert	80.0	7.34	31.4	9.38	0.860		156	1.40	0.210	3.27	2.12	0.250	0.260	22.8	3.79	9.11	0.240		6.31	1.71	10.5		
Oreas 623 (Aqua Regia) Meas	77.8		14.6	8.04	60.4		9.35	18.9	2.14	4.10	22.3	0.63	0.80		18.0	38.2	58.4					19.7	
Oreas 623 (Aqua Regia) Cert	76.0		14.2	7.43	50.0		8.38	20.4	1.94	4.07	20.2	0.570	0.750		17.9	36.4	52.0					18.6	
Oreas 623 (Aqua Regia) Meas	75.1		14.6	7.81	59.5		9.07	18.4	2.09	4.00	22.1	0.53	0.79		17.5	37.0	55.4					18.7	
Oreas 623 (Aqua Regia) Cert	76.0		14.2	7.43	50.0		8.38	20.4	1.94	4.07	20.2	0.570	0.750		17.9	36.4	52.0					18.6	
OREAS 521 (Aqua Regia) Meas	361	31.6	38.5	15.5	28.8	0.8	157	0.901	0.17	6.29	4.57	0.85	0.51		127	121						2.6	
OREAS 521 (Aqua Regia) Cert	333	31.8	54.0	15.0	38.3	0.5	133	0.817	0.17	5.78	3.65	0.74	0.55		147	121						2.4	
OREAS 521 (Aqua Regia) Meas	320	28.9	35.6	13.1	24.8	0.6	132	0.780	0.16	5.67	4.17	0.70	0.52		118	113						1.7	
OREAS 521 (Aqua Regia) Cert	333	31.8	54.0	15.0	38.3	0.5	133	0.817	0.17	5.78	3.65	0.74	0.55		147	121						2.4	
Method Blank	0.3	< 0.1	< 0.5	< 0.01	< 0.1	< 0.1	0.03	0.004	< 0.02	0.09	0.10	0.02	< 0.02	3.2	< 0.5	0.02	< 0.01	< 0.1	< 0.02	< 0.1	0.2	< 0.1	< 0.1
Method Blank	0.3	< 0.1	< 0.5	< 0.01	< 0.1	< 0.1	0.02	0.004	< 0.02	< 0.05	0.05	< 0.02	< 0.02	2.0	< 0.5	< 0.01	0.02	< 0.1	0.02	< 0.1	0.2	< 0.1	< 0.1
Method Blank	0.5	< 0.1	< 0.5	< 0.01	< 0.1	< 0.1	0.06	0.002	< 0.02	< 0.05	0.05	< 0.02	< 0.02	2.5	< 0.5	< 0.01	< 0.01	< 0.1	< 0.02	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank	0.7	< 0.1	< 0.5	< 0.01	< 0.1	< 0.1	0.03	0.003	< 0.02	< 0.05	0.03	< 0.02	< 0.02	2.2	< 0.5	< 0.01	0.02	< 0.1	< 0.02	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank	0.7	< 0.1	< 0.5	< 0.01	0.2	< 0.1	0.02	0.005	< 0.02	0.09	< 0.02	0.02	< 0.02	2.8	< 0.5	< 0.01	0.01	< 0.1	< 0.02	< 0.1	0.5	< 0.1	< 0.1

Analyte Symbol	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Au	Tl	Pb	Th	U	Hg
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.001	0.5	0.02	0.1	0.1	0.1	10
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
OREAS 45d (Aqua Regia) Meas												16.2		17.9	10.6	1.4	
OREAS 45d (Aqua Regia) Cert												21		17.00	11.3	1.64	
OREAS 922 (AQUA REGIA) Meas	0.7							0.2		1.4			0.17	68.3	16.3	2.2	
OREAS 922 (AQUA REGIA) Cert	0.62							0.61		1.12			0.14	60	14.5	1.98	
OREAS 922 (AQUA REGIA) Meas	0.7							< 0.1		1.3			0.16	66.5	15.5	2.1	
OREAS 922 (AQUA REGIA) Cert	0.62							0.61		1.12			0.14	60	14.5	1.98	
OREAS 923 (AQUA REGIA) Meas	0.7							< 0.1		2.1			0.17	81.4	15.3	2.2	
OREAS 923 (AQUA REGIA) Cert	0.54							0.60		1.96			0.12	81	14.3	1.80	
OREAS 907 (Aqua Regia) Meas	0.4	1.6	0.2	0.6	< 0.1	0.3	< 0.1	< 0.1		1.0		112	0.13	37.9	9.1	2.3	
OREAS 907 (Aqua Regia) Cert	0.430	1.63	0.210	0.430	0.0490	0.290	0.0390	1.09		0.980		101	0.120	34.1	8.04	2.15	
Oreas 621 (Aqua Regia) Meas	0.4					0.7	< 0.1	0.1		0.9		1390	0.78	> 5000	5.2	1.7	4160
Oreas 621 (Aqua Regia) Cert	0.330					0.520	0.0780	1.43		1.00		1230	0.770	13600	5.91	1.63	3930
Oreas 621 (Aqua Regia) Meas	0.3					0.6	< 0.1	1.6		1.1		1320	0.76	> 5000	5.3	1.6	3830
Oreas 621 (Aqua Regia) Cert	0.330					0.520	0.0780	1.43		1.00		1230	0.770	13600	5.91	1.63	3930
Oreas 621 (Aqua Regia) Meas	0.3					0.6	< 0.1	< 0.1		0.7		1290	0.75	> 5000	4.9	1.6	3800
Oreas 621 (Aqua Regia) Cert	0.330					0.520	0.0780	1.43		1.00		1230	0.770	13600	5.91	1.63	3930
OREAS 263 (Aqua Regia) Meas	0.5	2.6	0.5	1.3		1.1							0.59	38.8	12.7	1.4	210
OREAS 263 (Aqua Regia) Cert	0.500	2.64	0.430	1.29		0.990							0.530	34.0	10.6	1.28	170
OREAS 263 (Aqua Regia) Meas	0.5	2.5	0.4	1.1		1.0							0.54	38.4	11.6	1.2	180
OREAS 263 (Aqua Regia) Cert	0.500	2.64	0.430	1.29		0.990							0.530	34.0	10.6	1.28	170
OREAS 130 (Aqua Regia) Meas			0.4				0.2	0.8		1.6			5.39	1430	10.1	8.1	610
OREAS 130 (Aqua Regia) Cert			0.480				0.150	0.610		1.40			5.92	1300	10.3	8.36	670
OREAS 130 (Aqua Regia) Meas			0.4				0.2	0.3		1.3			3.62	1400	10.2	8.1	640
OREAS 130 (Aqua Regia) Cert			0.480				0.150	0.610		1.40			5.92	1300	10.3	8.36	670

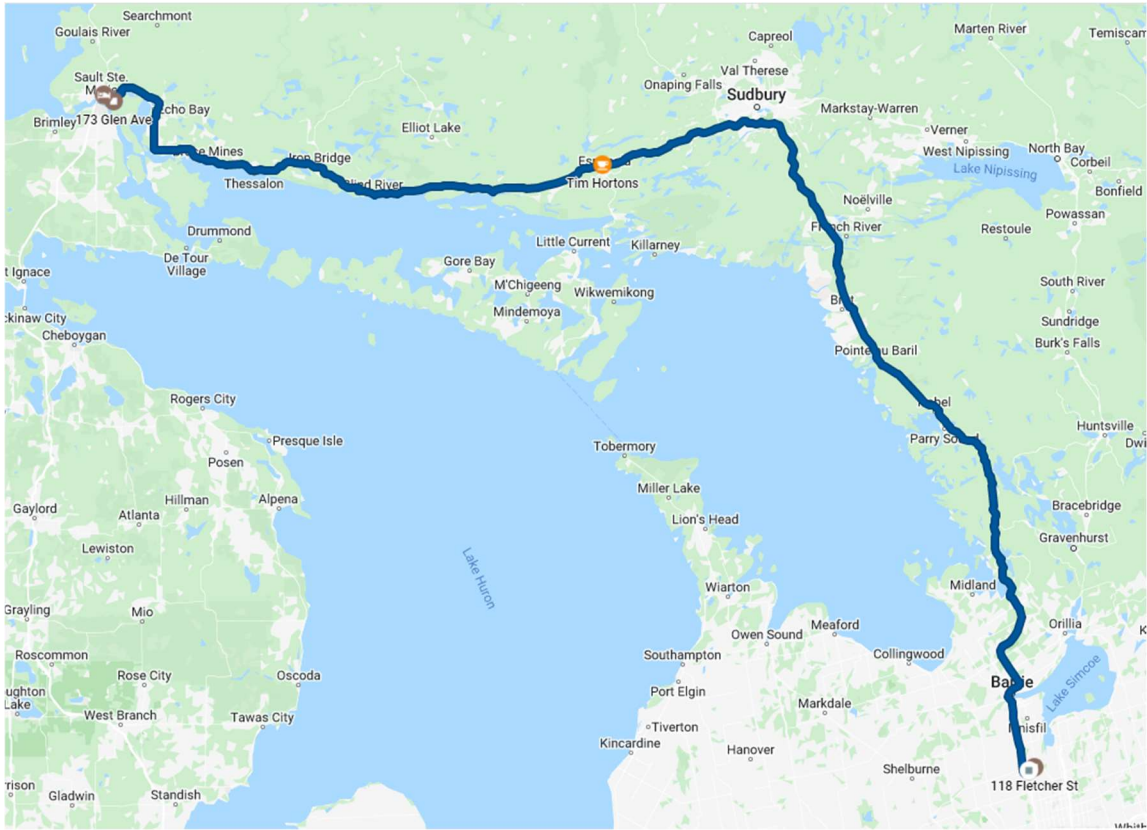
Analyte Symbol	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Re	Au	Tl	Pb	Th	U	Hg
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppb
Lower Limit	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.001	0.5	0.02	0.1	0.1	0.1	10
Method Code	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS	AR-MS
OREAS 153b (Aqua Regia) Meas	0.3	1.7			0.1	0.8	0.1				0.182	327	0.07	13.0	0.3	< 0.1	90
OREAS 153b (Aqua Regia) Cert	0.310	1.92			0.130	0.83	0.110				0.170	320	0.0640	12.4	0.350	0.0610	66.0
OREAS 153b (Aqua Regia) Meas	0.3	1.6			0.1	0.8	0.1				0.187	339	0.07	14.0	0.4	< 0.1	40
OREAS 153b (Aqua Regia) Cert	0.310	1.92			0.130	0.83	0.110				0.170	320	0.0640	12.4	0.350	0.0610	66.0
Oreas 623 (Aqua Regia) Meas	0.3					0.9	0.1	1.7		2.9		674	0.27	2750	5.1	1.5	730
Oreas 623 (Aqua Regia) Cert	0.340					0.800	0.120	1.32		2.62		797	0.260	2520	4.72	1.43	830
Oreas 623 (Aqua Regia) Meas	0.3					0.8	0.1	1.7		2.9		842	0.26	2610	5.0	1.5	730
Oreas 623 (Aqua Regia) Cert	0.340					0.800	0.120	1.32		2.62		797	0.260	2520	4.72	1.43	830
OREAS 521 (Aqua Regia) Meas	0.5					1.5	0.2	0.5		87.7		390	0.11	9.7	7.2	27.6	
OREAS 521 (Aqua Regia) Cert	0.5					1.5	0.2	1		71.0		365	0.11	9.0	7.8	26.2	
OREAS 521 (Aqua Regia) Meas	0.5					1.4	0.2	0.4		73.3		366	0.11	9.6	6.6	26.0	
OREAS 521 (Aqua Regia) Cert	0.5					1.5	0.2	1		71.0		365	0.11	9.0	7.8	26.2	
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 0.5	< 0.02	0.2	< 0.1	< 0.1	20
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	0.6	< 0.02	< 0.1	< 0.1	< 0.1	< 10
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 0.5	< 0.02	< 0.1	< 0.1	< 0.1	< 10
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	< 0.5	< 0.02	0.2	< 0.1	< 0.1	< 10
Method Blank	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.001	1.5	< 0.02	0.3	< 0.1	< 0.1	20

APPENDIX III

DAILY LOG

Long Lake Claims & Ghost Lake

October 28th – November 1st 2021



Sault Ste. Marie

Thursday, October 28, 2021



7h 10min

118 Fletcher St 7:49 AM
 118 Fletcher St, Bradford, ON L3Z 2Y9

Driving 5 mins
 via Northgate Dr and Holland St W

Bradford 7:54 AM - 8:01 AM
 Bradford West Gwillimbury, ON

Driving 3 hrs, 58 mins
 via ON-400 N

Tim Hortons 11:50 AM - 12:00 AM

Sault Ste. Marie
 Oct 28–29, 2021

28 **Thursday**
 October 2021

Friday, October 29, 2021

 9h 34min

 **Quattro Hotel & Conf. Centre, Ascend Hotel Collection** 7:44 AM 

 Pizzatecca + Take Away

 Add a stop in Quattro Hotel & Conf. Centre, Ascend Hotel Collection

 **Driving** 2 hrs, 20 mins 

via Trans-Canada Hwy/ON-17 N

 **Tim Hortons** 10:04 AM - 10:16 AM 

92 Mission Rd, Wawa, ON P0S 1K0

 **Driving** 7 hrs, 12 mins 

Sault Ste. Marie
Oct 28-29, 2021



28 Thursday
October 2021

29 Friday
October 2021



Saturday, October 30, 2021

 10h 12min

 **Best Northern Motel and Restaurant** 7:11 AM 

150 ON-17, Wawa, ON P0S 1K0

 **Driving - 258 km** 9 hrs, 41 mins 

via Trans-Canada Hwy/ON-17 S



+ 11 MORE

Sault Ste. Marie
Oct 30-Nov 2, 2021

30 Saturday
October 2021

31

DAILY LOG - FIELD VISIT OCTOBER 2021				
DATE	ACTIVITY	DISTANCE	PROJECT	COMMENT
		Kms		
Oct. 28th 2021	Driving to Sault Ste Marie (7:49am-3:29pm)	630	Ghost Lake, Long Lake	Jim Steel P.Geo; Fred Archibald P. Geo & John Ryder P. Geo
Oct. 29th 2021	Sault Ste Marie to Wawa (7:44 am-10:04 am)	228	Ghost Lake, Long Lake	Fred Archibald P. Geo & John Ryder P. Geo
	Accessing Long Lake Claims (10:04 am-2:15 pm)	191	Long Lake	Anjigami logging road, tree down after 22kms. Attempted access, logging road to east off Hwy 101, 10kms to 711365.
	To Wawa from Long Lake #711365 point	71	Long Lake	
Oct. 30th 2021	Wawa to Ghost Lake Claims (7:11- 10:50am)	17	Ghost Lake	Fred Archibald P. Geo & John Ryder P. Geo on site, sampling
	To Long Lake claims (10:50am -3:45pm)	115	Long Lake	Fred Archibald P. Geo & John Ryder P. Geo on site, sampling
	To Sault Ste Marie	321	Long Lake	Fred Archibald P. Geo & John Ryder P. Geo
Oct. 31st 2021	Sault Ste Marie - Wawa	n/a	Dalton	Jim Steel P.Geo; Fred Archibald P. Geo & John Ryder P. Geo
Nov. 1st 2021	Sault Ste Marie	n/a	Dalton	First Nations Meeting Chief & DeputyChief
Nov. 2nd 2021	Sault Ste Marie to Bradford	630	Ghost Lake, Long Lake	Jim Steel P.Geo; Fred Archibald P. Geo & John Ryder P. Geo
Total Kms		2,202		
	Kms to Wawa & return Bradford	1,809	Ghost Lake, Long Lake	
	Kms Long Lake	377	Long Lake	
	Kms Ghost lake	17	Ghost Lake	
	Total Claims	31	Ghost Lake, Long Lake	
	Pro Rata Kilometres			
	Long Lake	1,342	Long Lake	
	Ghost Lake	467	Ghost Lake	
Total Kms	Long Lake	1,719	Long Lake	
Total Kms	Ghost Lake	483	Ghost Lake	
Total Kms		2,202		

APPENDIX IV

HISTORY

Data for SAMPSON

4 Assessment Files

Report Number	Year	Company	Property	Work Type
20000004988	1963	Franc R Joubin & Associates		Electromagnetic
41N09NE0003	1961	Unknown		Geological Survey / Mapping
41N16SE0011	1961	Ontario Min Of Mines		Prospecting By Licence Holder
41N16SE0012	1961	Unknown		Geological Survey / Mapping

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29 Maps

Publication	Links	Year	Title	Scale
P3533	↓ 📄	2004	Tectonometamorphic Map of Ontario	1:500000
M2669	↓ 📄	2002	Precambrian Geology Compilation Series - Michipicoten Sheet	1:250000
M2573	↓ 📄	2001	Quaternary Geology, Franz-Manitowik Lake-Kinniwabi Lake Area	1:50000
P3321	↓ 📄	1995	Known Kimberlites of Eastern Ontario	various
M2583	↓ 📄	1992	Tectonic assemblages of Ontario, explanatory notes and legend	
M2582	↓ 📄	1992	Chart D-Paleozoic and Mesozoic depositional sequences and events in Ontario/Distribution of Paleozoic and Mesozoic depositional sequences	
M2581	↓ 📄	1992	Chart C-Proterozoic tectonic assemblages, plutonic suites, and events in Ontario	
M2579	↓ 📄	1992	Chart A-Archean tectonic assemblages, plutonic suites, and events in Ontario	
M2577	↓ 📄	1992	Tectonic assemblages of Ontario, east-central sheet	1:1000000
M2580	↓ 📄	1992	Chart B-Archean tectonic assemblages, plutonic suites, and events in Ontario	
M2555	↓ 📄	1991	Quaternary geology of Ontario, east-central sheet	1:1000000
M2545	↓ 📄	1991	Bedrock geology of Ontario, explanatory notes and legend	1:0
M2543	↓ 📄	1991	Bedrock geology of Ontario, east-central sheet	1:1000000
M2518	↓ 📄	1987	Surficial geology of northern Ontario	1:1200000
M2506	↓ 📄	1986	Geological highway map, northern Ontario	1:1600000
M2440	↓ 📄	1981	Geological highway map, northern Ontario	1:1600000
M2391	↓ 📄	1979	Ontario geological map, explanatory text, legend, diagrams, title, scale	1:0
M5010	↓ 📄	1979	Northern Ontario engineering geology terrain study, data base map, Michipicoten, NTS 41N/NE	1:100000
M2393	↓ 📄	1978	Ontario geological map, east central sheet	1:1013760
M2389	↓ 📄	1977	Ontario, geology and principal minerals	1:4224000
M2220	↓ 📄	1972	Manitouwadge-Wawa sheet, geological compilation series, Algoma, Cochrane, Sudbury and Thunder Bay districts	1:253440
P0640	↓ 📄	1971	Geological compilation series, Wawa sheet, districts of Algoma and Sudbury	1:126720
M2196	↓ 📄	1971	Ontario geological map, explanatory text, legend, diagrams, title, scale	1:0
M2198	↓ 📄	1971	Ontario geological map, east central sheet	1:1013760
M2103	↓ 📄	1966	Ontario geology and principal minerals	1:4224000
MS465	↓ 📄	1965	Algoma, Sudbury, Timiskaming and Nipissing, surficial geology	1:506880
M1958B	↓ 📄	1958	Geological map of the Province of Ontario	1:1267200
M1946-03	↓ 📄	1946	Geological map of the Province of Ontario	1:1267200
ARM09A	↓ 📄	1900	Map of parts of the districts of Algoma and Nipissing, showing the upper basins of the Moose, Ottawa and Michipicoten rivers	1:506880

TABOBONDUNG TOWNSHIP

4 Assessment Files

Report Number	Year	Company	Property	Work Type
20000003199	2006-2007	Larry J Salo		Airborne Electromagnetic Very Low Frequency, Airborne Magnetometer, Airborne Radiometric
41N09NE0003	1961	Unknown		Geological Survey / Mapping
41N09NE0005	1961	Unknown		Geological Survey / Mapping
41N09NW0005	1961	Unknown		Regional or Reconnaissance Ground Exploration

28 Maps

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M2582	↓ 📄	1992	Chart D-Paleozoic and Mesozoic depositional sequences and events in Ontario/Distribution of Paleozoic and Mesozoic depositional sequences	
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M2577	↓ 📄	1992	Tectonic assemblages of Ontario, east-central sheet	1:1000000
M2580	↓ 📄	1992	Chart B-Archean tectonic assemblages, plutonic suites, and events in Ontario	
M2555	↓ 📄	1991	Quaternary geology of Ontario, east-central sheet	1:1000000
M2545	↓ 📄	1991	Bedrock geology of Ontario, explanatory notes and legend	1:0
M2543	↓ 📄	1991	Bedrock geology of Ontario, east-central sheet	1:1000000
M2518	↓ 📄	1987	Surficial geology of northern Ontario	1:1200000
M2506	↓ 📄	1986	Geological highway map, northern Ontario	1:1600000
M2440	↓ 📄	1981	Geological highway map, northern Ontario	1:1600000
M2391	↓ 📄	1979	Ontario geological map, explanatory text, legend, diagrams, title, scale	1:0
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ASTER SURVEY COSTINGS		LONG LAKE CLAIM GROUP	
ASTER SURVEY COSTS		US\$	CDN\$
	BASIC FEE - DATA ACQUISITION	\$500.00	
	LWIR 16 TIFS PROCESSING	\$4,608.00	
	QDFC PROCESSING MAPPING	\$1,890.00	
	LDFC PROCESSING MAPPING	\$0.00	
	TVM OUTLINING	\$760.00	
	TVM MAPPING	\$600.00	
	SUB TOTAL (BOC US Exchange Rate 1.2651, Sept. 15th 2021)	\$8,358.00	\$10,573.71
	HST 13%		\$1,374.58
A	SUB-TOTAL		\$11,948.29
	SITE VISIT COSTS		CDN\$
	GEOLOGISTS FIELD VISITS ON SITE 1 MAN DAYS	\$600.00	\$600.00
	Kilometres (Pro-rata)	\$0.56	\$751.52
	FOOD & LODGINGS (50% Long Lake, 50% Ghost Lake)		
	OCTOBER 29th 2021 WAWA		\$135.60
	OCTOBER 28th & 30th 2021 SAULT STE. MARIE		\$270.48
	ASSAYING COSTS (50% Long Lake, 50% Ghost Lake)		
	ActLabs A21-21153		\$114.42
	REPORTING		
	ASSESSMENT REPORT		\$2,825.00
B	SUB-TOTAL		\$4,697.02
C	TOTAL EXPENDITURES CDN\$		\$16,645.31
	TOTAL WORK REQUIRED		\$9,200.00
	RESERVE		\$7,445.31

SUMMARY OF EXPENDITURES

Expenditure Details (Receipt entries)

Primary Cost Category		Secondary Cost Category	Work Performed		Invoice	Invoice Reference #	Invoice Date	Billing Unit	Unit Price	# Units	Total Cost (No Tax)	Rounded	Invoice Reference #	
Primary Exploration Activity	Work Subtype	Associated Cost Type	Start Date	End Date										
Remote Sensing Imagery	Imagery		September 15, 2021	September 15, 2021	Aster Funds Ltd	2059	September 15, 2021	Each	\$ 10,573.71	1.00	\$ 10,573.71	\$ 10,574.00	1	
		Assays	November 10, 2021	November 10, 2021	Actlabs	A21-21153	December 21, 2021	Each	\$ 33.75	3.00	\$ 101.25	\$ 101.00	2	
		Report/Map	February 1, 2022	February 12, 2022	Ryder and Associates	2201	February 12, 2022	Each	\$ 2,500.00	1.00	\$ 2,500.00	\$ 2,500.00	3	
Prospecting	Grass Roots Prospecting		October 29, 2021	October 30, 2021	J. Steel, F. Archibald, J. Ryder			Day	\$ 1,200.00	0.50	\$ 600.00	\$ 600.00		
		Lodging	October 29, 2021	October 30, 2021	Best Northern	31234869	October 29, 2021	Each	\$ 60.00	2.00	\$ 120.00	\$ 120.00	4	
		Food	October 29, 2021	October 29, 2021	Kinnawabi Pines		October 29, 2021	Each	\$ 90.97	1.00	\$ 90.97	\$ 91.00	5	
		Lodging	October 28, 2021	October 30, 2021	Quattro Suites and Conf Centre	783577628	October 30, 2021	Day	\$ 111.38	2.00	\$ 222.76	\$ 223.00	6	
		Food	October 31, 2021	October 31, 2021	Vinoteca		October 31, 2021	Each	\$ 15.00	1.00	\$ 15.00	\$ 15.00	7	
		Personal Transportation	October 28, 2021	November 2, 2021	J. Steel, F. Archibald, J. Ryder		November 2, 2021	KM	\$ 0.50	1719.00	\$ 859.50	\$ 860.00		
											Total	\$ 15,083.19	\$ 15,084.00	