

A.C.A. HOWE INTERNATIONAL Mining and Geological Consultants

## COMPETENT PERSON'S REPORT ON THE NORTH HEMLO PROPERTY IN **ONTARIO, CANADA**

for FIRST CLASS METALS LIMITED

by ACA HOWE INTERNATIONAL LIMITED

**Authors:** Daniel Rubiolo Ph.D., P.Geo Bruce MacLachlan P.Geo (Limited) **Report Date:** 15<sup>th</sup> April 2022

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### 1. SUMMARY

#### 1.1. INTRODUCTION

ACA Howe International Limited (ACA Howe) has prepared this Competent Person's Report (CPR) on the North Hemlo property in Ontario, Canada, on behalf of First Class Metals Limited (FCM). ACA Howe understands that FCM will use the CPR in support of a listing on the London Stock Exchange (LSE).

FCM is a UK registered company with a strategy to develop and acquire base, precious and energy metal projects in North America with potential for growth and value creation over the medium to long term. Through its 100% owned Canadian subsidiary, First Class Metals Canada Inc, FCM holds seven blocks of mineral claims in Ontario. The largest of these, and the focus of this Report as the qualifying property, is North Hemlo.

This Report has been co-authored by Daniel Rubiolo Ph.D., P.Geo and Bruce MacLachlan P.Geo (Limited). Both of the authors have significant experience in mineral exploration and the deposit types being explored for by FCM. The authors visited the North Hemlo property, and the Sugar Cube, Esa and McKellar properties also held by FCM, from 22<sup>nd</sup> August to 3<sup>rd</sup> September 2021. A second visit was made to the Esa property in October 2021.

This Report has been amended from ACA Howe's original unpublished report on the North Hemlo property (dated 13<sup>th</sup> January 2022 and with an effective date of 20<sup>th</sup> October 2021) to include four single cell mining claims acquired by FCM on 27<sup>th</sup> January 2022. These claims now form part of the North Hemlo property.

#### 1.2. PROPERTY DESCRIPTION AND LOCATION

The North Hemlo property is located northeast of Lake Superior in northeastern Ontario, approximately 30 kilometres south of the town of Manitouwadge and approximately 20 kilometres northeast of the Hemlo Gold Mine. The centre of the North Hemlo property is at approximately 595300mE and 5418000mN (NAD83, UTM zone 16 north).

The North Hemlo property consists of 427 claims and has an area of 89.6 km<sup>2</sup>. FCM has the right to conduct early-stage prospecting in the North Hemlo property. A minimum expenditure of CAD\$400 per claim is required to retain the claims, resulting in a total of CAD\$170,800 for the North Hemlo property.

FCM signed a Joint Venture (JV) agreement with Tyko Resources, a subsidiary of Palladium One Mining Inc., which applies to the Pezim II area of the North Hemlo property, allowing them to Earn-In to the area over a three year period as follows:



- (a) Year 1 Canadian Exploration Expenses in the amount of not less than CAD \$25,000 on or before the 1st anniversary of the Effective Date.
- (b) Year 2 additional Canadian Exploration Expenses in the amount of not less than \$135,000 (for an aggregate amount of \$160,000) on or before the second anniversary of the Effective Date to earn a 51% interest.
- (c) Year 3 additional Canadian Exploration Expenses in the amount of not less than \$165,000 (for an aggregate amount of not less than \$325,000) and by preparing a National Instrument 43-101 ("NI43-101") Technical Report with respect to the Earn-In Properties on or before the third anniversary of the Effective Date to earn an additional 29% (for a total aggregate 80% interest).

ACA Howe understands that there are in essence three royalty regimes that are incumbent on all or parts of the North Hemlo property:

- First Class Metals Canada Inc. has a JV agreement with Tyko Resources Inc. on the Pezim II block of claims. This could ultimately reach a point whereby FCM receives a 1% NSR, which can be bought for CAD \$1 Million payable in shares or cash.
- FCM and First Class Metals Canada Inc. has entered into purchase agreements with James Knowles and Ayub Bodi on various claim blocks within the North Hemlo property. As part of the agreement the claims attract a 2% NSR and FCM and First Class Metals Canada Inc. may purchase 50% of the 2% NSR anytime by making cash payment of CAD \$500,000.
- As a consequence of the property (claims) for shares agreement that FCM entered into with Power Metal Resources Plc and Power Metals Canada Inc, FCM assumed the underlying 2% NSR agreements with the original vendors to Power Metals. There are underlying NSR agreements on the non-qualifying properties as well as the North Hemlo property, all of which are 2% and the owner (now FCM) may purchase 50% of the 2% NSR anytime by making cash payment of CAD \$500,000.

# 1.3. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The North Hemlo property is located approximately 30 km south of the town of Manitouwadge, Ontario and 13 km east of Highway 614. Access to the property is best achieved by turning east off Highway 614 on to the Dead Otter Lake Road.

The town of Marathon, approximately 30 km to the west can provide most non-technical exploration supplies such as groceries, fuel, hardware, stationery and wood, etc. Thunder Bay, located about 4 hours' drive further west can provide technical supplies as well as geological, geophysical contractors / consultants and assay laboratories.



The North Hemlo Property is located within the Canadian Shield, which is a major physiographic division of Canada. The properties are situated in areas of swamps, small lakes, and moderate to steep hills, with scattered to locally moderate outcrop. Elevation across the project area ranges from approximately 330 to 480 m.

## 1.4. HISTORY

Historical exploration on North Hemlo property dates back to 1962 when McIntyre Porcupine Mines Limited conducted geological mapping of their Wabikoba Lake properties. Intermittent exploration was carried afterwards until the discovery of the Hemlo Gold deposit was made in the early 1980's. From 1983 - 2011 several small to moderate size exploration programmes were carried out on the North Hemlo Property. The history of each area forming part of the North Hemlo property is described below:

## Pezim 1 Claim Group:

- 1965 An airborne geophysical survey was conducted to the northeast of the dotted lake area.
- 2000-2002 Southern Era Resources Ltd conducted a combined geological mapping & geophysical surveying programme on their Manitouwadge properties, which cut into the Pezim I and Hemlo North claim groups.

#### **Pezim II Claim Group:**

• No historical work which has been identified.

#### Hemlo North Claim Group:

- 1983 Clear Mines Limited engaged in geological mapping and soil geochemical analysis of their claims within the vicinity of Dotted Lake.
- 1984 Osprey Resources Ltd acting on behalf of Clear Mines Limited conducted a geophysical survey on the Dotted Lake group of claims throughout March-June 1984.
- 1991 A series of holes were drilled by Noranda Exploration Company Limited in order to constrain the nature of the geology of the Dotted Lake property, with drillhole DL-91-2 being located within the Hemlo North block just north of the access road which runs through the claim. Noranda Exploration Company Limited also conducted a geophysical survey of their Dotted/Pinegrove Lake properties



#### Wabikoba Claim Group:

- 1931 The general geology of the Heron Bay-White Lake area was described by J.E. Thomson (Thomson, 1931).
- 1962 McIntyre Porcupine Mines Limited, conducted geological mapping of their Wabikoba Lake properties. The boundary of the mapping partially encompasses the southern section of the Wabikoba claim group.
- 1964-1965 V.G. Milne conducted mapping in the Black River area for the Ontario Department of Mines (Milne, 1968).
- 1966 Falconbridge Limited, conducted geophysical work on their Dead Otter Lake claims which extended southwest from Dead Otter Lake encompassing the western section of the Wabikoba claim group.
- 1983 Harlain Resources Ltd. carried out a ground VLF and electromagnetic surveys, as well as a soil geochemical survey on their Hemlo Project claims, covering an area that now lies in the western part of the current Wabikoba claim group
- 1983-1984 Eden Roc Mineral Corporation conducted a geological and geochemical soil survey on their Firetower Gold Property to the south of Dead Otter Lake, in an area partially covered by the Wabikoba claim group.
- 1983-1985 Kilembe Resources Inc. conducted geological mapping, ground magnetic and VLF surveying on their ground which covers part of the current Wabikoba claim block immediately west of Theresa Lake. In 1985, the main VLF conductors were surveyed again and a small geochemical survey was completed.
- 1984 Commissioned by Cassex Resources Limited, Maisonneuve Energy Materials Inc conducted a series of VLF electromagnetic surveys on the Theresa Lake property, extending westwards onto the eastern side of the Wabikoba claim block.
- 1984 Chavin of Canada Ltd., New McManus Red Lake Gold Mines Ltd., and Corporate Oil & Gas Ltd. carried out geological, geophysical and soil geochemical surveys, covering 111 claims in an area that now corresponds to part of the current Wabikoba claim group centred on Dead Otter Lake.
- 1987 Noranda Exploration conducted geological mapping, humus sampling, and a magnetometer survey on the Shiningtree claim group, consisting of 30 contiguous claims on the south shore of Dead Otter Lake, covering a portion of the central part of the current Wabikoba claim group.
- 1991 James Martin conducted prospecting and trenching on his and Costy Bumbu's claims around Theresa Lake, some of which overlap with the southeast corner of the current Wabikoba claim block.
- 1995 Hemlo Gold Mines Inc. conducted an exploration programme on the Placer Option (Qued) claim group, comprised of data compilation and diamond drilling.



- 1996 Battle Mountain Canada Ltd. acquired the Theresa Lake claims of James Martin and Costy Bumbu in 1996 and completed sampling of the west shore of Theresa Lake.
- 1996 Crowbush Minerals Inc. engaged in a geophysical survey of their Firetower gold property based within the vicinity of Wabikoba Lake.
- 2010 Big Bar Gold Corporation commissioned Larder Geophysics Ltd to conduct a magnetometer survey over the Hemlo North Property, near Wabikoba Lake.
- 2011 Entourage Metals conducted a geochemical analysis of their claims within the Hemlo North Property, centred around Wabikoba Lake.

Anomalous trends and features have been identified by previous explorers through the work described above. The most significant assay results from the historical work are in the Wabikoba claim group and include 3.1 g/t Au in a zone of quartz veins and porphyry dykes to the west of Dead Otter Lake, 5,700 ppm Cu in a 40-60 cm zone of sulphide mineralisation in mafic metavolcanics and 153 ppb Au, 3.04% Cu and 292 ppm Zn in the Theresa Lake area.

## 1.5. GEOLOGICAL SETTING AND MINERALISATION

The North Hemlo property is located in the northeastern portion of the Schreiber-Hemlo Greenstone belt. The supracrustal rocks of the Schreiber-Hemlo greenstone belt are metamorphosed volcano-sedimentary rocks of mafic, intermediate and felsic composition ranging in age from ~2720 Ma to ~2688 Ma (Corfu & Muir, 1989; Lin, 2001). Metamorphic grades increase from upper greenschist facies in the western part of the belt to middle amphibolite facies in the eastern part of the belt. Based on titanite age dating, the regional amphibolite-facies metamorphism occurred between ~2678 and ~2676 Ma (Corfu & Muir, 1989b; Lin, 2001).

The rocks in the east of the North Hemlo property strike at an azimuth of  $\sim 110^{\circ}$  and the rock units to the west of the property trend to the southwest with an azimuth of  $\sim 230^{\circ}$ . Cross-cutting structures on northeast and northwest trends have been interpreted.

Outcrops are scarce in the property areas. Lithologies identified on the North Hemlo property during field work are mostly gneisses in amphibolite metamorphic facies. Amphibolitic gneisses grade into amphibolite and into meta-graywackes, depending on hornblende content. Gneisses show common lit-par-lit texture, and near contact to granitoid stocks seems to be gradual, turning to massive and migmatitic, and meanwhile granitoids are gneissose. It was not possible to identify primary features as are described in other part of the greenstone belt, due to strong deformation and higher metamorphic grade. Rocks have undergone different deformation stages and are partially isoclinally folded.

The limited exploration work completed to date has not located any economic gold or polymetallic mineralisation on the Property. The interpreted relationships of rock types, structures and intrusives are poorly understood due to the paucity of ground exploration and overburden cover.



However, the limited exploration by FCM, supported by the historic exploration, has indicated that the mineralisation models being followed have merit: the Hemlo deposit / model is a shear hosted, gold dominant polymetallic deposit, with some controversy as to whether it is stratiform or stratabound, possibly a gold rich VMS derivative.

## **1.6. DEPOSIT TYPES**

The main deposit types being explored for by FCM are the same styles as the nearby Hemlo and Sugar Zone deposits.

The mineralogy of the Hemlo deposit is not 'typical' of many shear zone-hosted orogenic/ mesothermal gold deposits in that the gold mineralisation is accompanied by significant amounts of base metal and there is close association with an apparent syngenetic (?) zone of barite-rich rock. Therefore, the data suggests that the Hemlo mineralisation may have originated as a precious metalrich VMS deposit that has been successfully changed by subsequent deformation and remobilisation. This has been seen elsewhere in the Abitibi (e.g. Akasaba, Sigma district) (Starling, 2021).

The Sugar Zone deposit is interpreted as an orogenic, mesothermal gold deposit in a zone of high strain within the Belt. The deposit is hosted in medium-metamorphic grade (amphibolite) rocks that exhibit ductile deformation and have been intruded by felsite and porphyry sills. The gold is associated with silica-sulphide-potassic alteration.

Other styles of mineralisation reported in the area are as follows:

- Batholith contact zones gold, copper, molybdenum.
- Shear-hosted gold and base metals.
- Zinc-lead-silver veins.
- Gold and base metals associated with banded iron formation.
- Volcanogenic massive sulphide (VMS).

## 1.7. EXPLORATION

In January 2021, FCM geoscientists completed a comprehensive search and compilation of the available historical data in order to guide future exploration programmes. From this work FCM interpreted the major lithological units, dykes, faults, structural blocks and potential shear zones in the area. These features were used to target early-stage prospecting.

In May 2021, FCM geoscientists completed two visits to the Wabikoba area of the North Hemlo property to determine access routes and complete early-stage prospecting. Nine rock grab samples were sent for analysis by fire assay for gold and ICP for a suite of 38 elements at Activation Laboratories (Actlabs) in Timmins, Ontario. No samples from the early-stage prospecting returned anomalous gold, silver, molybdenum or lead grades, though elevated copper levels were reported from



quartz vein / carbonate in sample 542416 and elevated lead grades were reported from mafic volcanic in samples 542411 and 542412.

In September 2021, Dr Tony Starling of Telluris Consulting completed a desktop structural review of the FCM properties, utilising ALOS 30 m digital elevation data, Landsat TM imagery and regional geophysical data. The study resulted in the interpretation of features such as major structures, minor structures, brittle faults, foliation/banding and dykes. The report by Telluris Consulting (2021) describes the Wabikoba area of the North Hemlo property as follows:

- The area covers the northern part of the North Limb greenstone belt.
- Is traversed by northwest and northeast trending brittle faults and dykes.
- In addition, there is an interpreted major west-northwest trending lineament shown in the regional geophysical data.
- The curvature of the greenstone belt to the west into the north-south to north-northeast structural corridor suggests that the development of high-strain shear zones as splays into this corridor may be present in the southwest of the area.

## **1.8. DATA VERIFICATION**

In late August 2021, ACA Howe's Senior Associate Geoscientists, Bruce MacLachlan and Daniel Rubiolo, completed a prospecting and sampling programme on behalf of FCM, including three days in the Wabikoba area of the North Hemlo property.

As no significant mineralised zones have been identified by FCM to date, no direct verification of FCM's sample results was completed and instead, historical showings, prospective geology and magnetic features were targeted. Twenty-four rock grab samples were assayed for gold by fire assay with an atomic absorption or gravimetric finish (method 1A-2 or 1A-3) and multi-element ICP-OES and ICP-MS analysis. These early-stage exploration samples were mainly below detection limit for gold, with only two samples above 10 ppb Au (11 ppb and 44 ppb Au). However, based on the location and lithologies observed during the visit, the North Hemlo property is considered to be prospective for the deposit types described in Section 8. A more extensive, systematic exploration programme is required in order to fully assess the economic potential of historical showings and other targets.

## **1.9. ADJACENT PROPERTIES**

The North Hemlo property is contiguous to several exploration properties. The property is located only 15 km north of the Barrick multimillion ounce Hemlo mine and 70 km west of the Harte gold mine. These operating gold mines are described below although they are not contiguous to the North Hemlo property.

ACA Howe cautions that the authors have not verified the following information and note that the information is not necessarily indicative of the mineralisation on the North Hemlo property.



Operations at the Hemlo Mine have produced over 21 million ounces of gold to December 2016, having been in operation continuously for more than 30 years. Underground Mineral Reserves at the Williams Mine are projected to sustain the underground mine operations until 2021 at an average production rate of approximately 3,600 tpd. The Hemlo open pit has been mined since 1989 and has produced over 2.8 million ounces of gold.

The Reserves and Resources of the Hemlo mine (2020) as per the Barrick website are shown in the table below:

Summary of Resources and Reserves at the Hemlo Mine (2020)			
Category	Gold Ounces		
Proven and Probable Reserves	1.5 MOz		
Measured and Indicated Resources (inclusive of Reserves)	3.3 MOz		
Inferred Resources	900,000 Oz		

The Sugar Zone Property Mine (Harte Gold) entered commercial production in 2019 and has an anticipated mine life of approximately 13 years at current production levels. Mineral Resources and Mineral Reserves at the Sugar Zone Mine (2020) as shown on the Harte Gold website are shown in the table below.

Summary of Resources and Reserves at the Sugar Zone Mine (2020)						
Mineral Resource Estimate						
Tonnes (kt)Grade (g/t Au)Ounces Au (k						
Indicated	2,803	11.87	1,070			
Inferred 1,866 9.45			567			
Probable Mineral Reserve as of 31 <sup>st</sup> December 2020						
	Tonnes (kt)Grade (g/t Au)Ounces Au (koz					
Sugar Zone	1,994	7.59	487			
Middle	1,460	6.62	311			
Total 3,454 7.18		7.18	797			
Note: Mineral Resource ounces are inclusive of Mineral Reserve ounces						



Other properties adjacent to the North Hemlo property include:

- Tyko Ni-Cu-PGE Project (Palladium One).
- Panther Metals claims.
- North Limb claim block (Hemlo Explorers).
- Emperor Metals claims.
- Ongold Invest claims.
- Ryan Kalt claims.

#### 1.10. CONCLUSIONS AND RECOMMENDATIONS

The North Hemlo Property is underlain by the Hemlo-Schreiber Greenstone Belt which hosts the prolific Hemlo Gold Deposit as well as many other gold, base metal and PGE showings and occurrences. Much of the North Hemlo Property has seen very little mineral exploration in recent years and has not been subject to a systematic exploration approach.

FCM may be able to take advantage of more modern exploration techniques such as High-Resolution Geophysical Surveys, Soil Geochemistry such as (MMI) Mobile Metal Ion and (SGH) Soil-Gas-Hydrocarbon Techniques and others which should help better define Target Areas of Interest on the property.

Project-specific risks and uncertainties with the exploration of the North Hemlo property are as follows:

- There are no known environmental, permitting, legal, taxation, socio-economic, marketing or political risks to the ability to perform the work recommended in Section 20, though the timing of the work could be impacted by delays to permitting.
- The project is at an early stage and no Mineral Resources have been reported by FCM or previous owners of the North Hemlo property. It is not known whether further exploration will result in the reporting of a Mineral Resource.
- Subsequent to the completion of the programme outlined below and in Section 20, further exploration will be dependent on additional fund raising.

A systematic exploration approach utilising a mix of new and old exploration techniques is recommended on the North Hemlo Property, including the following:

- Compilation of historical data.
- Ground truthing of historical anomalies.
- Systematic traverses of the property especially where regional / district trends cut the property.



- Rock chip / channel sampling of prospective outcrops.
- Soil sampling in areas of prospective 'float'.
- Stripping and sampling as required.
- Drilling of the most prospective 2-3 sites.

NOTE: the proposed work programme also includes geophysics. This may be completed prior to the systematic ground reconnaissance, and if so the field exploration would also ground truth any geophysical anomalies identified.

The budget for the work is estimated at CAD\$298,815.



## 2. INTRODUCTION

ACA Howe International Limited (ACA Howe) has prepared this Competent Person's Report (CPR) on the North Hemlo property in Ontario, Canada, on behalf of First Class Metals Limited (FCM).

The purpose of this CPR is to provide a summary of the geology, potential styles of mineralisation and exploration completed in the North Hemlo property, as well as other relevant information such as location, access and infrastructure. Recommendations for further work are provided in Section 20. ACA Howe understands that FCM will use the CPR in support of a listing on the London Stock Exchange (LSE).

The CPR was prepared in accordance with the relevant rules and guidelines issued by the Financial Conduct Authority (FCA) and the European Securities and Markets Authority (ESMA). In addition, the CPR conforms to the guidelines dictated by the Canadian National Instrument 43-101 (NI 43-101) Form 43-101F1.

This Report has been amended from ACA Howe's original unpublished report on the North Hemlo property (dated 13<sup>th</sup> January 2022 and with an effective date of 20<sup>th</sup> October 2021) to include four single cell mining claims acquired by FCM on 27<sup>th</sup> January 2022. These claims now form part of the North Hemlo property.

## 2.1. FIRST CLASS METALS LIMITED

## 2.1.1. COMPANY DESCRIPTION

First Class Metals Limited has a registered and trading address of address of Suite 16 Freckleton Business Centre, Freckleton Street, Blackburn, Lancashire BB2 2AL United Kingdom. FCM is currently a private limited company and is seeking a listing on the Standard List of the London Stock exchange.

#### 2.1.2. MEMBERS OF THE BOARD

The following persons currently comprise the Board of Directors: Marc Sale (Chief Executive Officer), James Knowles (Executive Chairman), Ayub Bodi (Executive Director), Danesh Varma (Finance Director) and Marc Bamber (Non-Executive Director).

#### 2.1.3. COMPANY STRATEGY

First Class Metals' strategy is to develop and acquire projects within the natural resources sector in North America with potential for growth and value creation, over the medium to long term. Reflecting the Board's experience, it is seeking opportunities in base, precious and energy metals.

FCM, through its 100% owned Canadian registered subsidiary, First Class Metals Inc., holds 7 blocks of mineral claims, the largest of which is North Hemlo, the qualifying property. Blocks range in size



from 14 claims (3 km<sup>2</sup>) to 427 claims, (89.6 km<sup>2</sup>), for a total of 861 claims and 181.7 km<sup>2</sup>. All of the claims are located within the Schreiber-Hemlo and the Dayohessarah greenstone belts of the Archaen Abitibi-Wawa Subprovince of the Superior craton.

Table 1 shows details of the FCM claims and the minimum expenditure required to retain the blocks. The minimum expenditure required for the 861 claims is CAD\$346,000. The exploration programme and budget for the non-qualifying properties has not yet been finalised by FCM, but ACA Howe understands that sufficient funds will be raised and allocated to cover the assessment work required to maintain these claims. FCM's budget for the next phase of work on the North Hemlo property is shown in Section 20.

Table 1: Minimum annual expenditure in areas owned by FCM				
Area	Area Number of Claims Claim Types		Minimum Annual Expenditure (CAD\$)	
North Hemlo property	427	Single Cell Mining Claims	170,800	
Sugar Cube	205	Single Cell Mining Claims	82,000	
Esa	86	1 Multi-cell Mining Claim, 85 Single Cell Mining Claims	38,800	
McKellar 58 9 Boundary Cell Mining Claims, Single Cell Mining Claims			20,400	
Magical	Magical 14 Single Cell Mining Claims		5,600	
Enable	41	41 Single Cell Mining Claims	16,400	
Coco East	30	30 Single Cell Mining Claims	12,000	

The North Hemlo property is described in detail in Section 4. Figures and tables detailing all seven claim blocks are shown in Appendix 1.

## 2.2. PROPERTY INSPECTION

Bruce MacLachlan and Daniel Rubiolo, Senior Associates of ACA Howe, visited the North Hemlo property and selected other claims held by FCM (Sugar Cube, Esa, and McKellar blocks) from 22<sup>nd</sup> August to 3<sup>rd</sup> September 2021 (MacLachlan & Rubiolo, 2021). Twenty-four samples were taken in the North Hemlo property, which were sent for analysis at Activation Laboratories Ltd ("Actlabs") in Timmins, Ontario. The visit also provided the opportunity to gather information on potential styles of mineralisation, access routes to the property and existing infrastructure in the surrounding area.



#### 2.3. DATA ASSESSMENT AND REPORT WRITING

This Report has been co-authored by:

- Daniel Rubiolo Ph.D., P.Geo 29 years' experience in geosciences since graduating with a Ph.D., including mineral exploration, property reviews and detailed mapping in Canada and the Americas. He has worked for junior and major companies on base and precious metals, iron ore, potash and uranium exploration and magmatic and hydrothermal porphyry, VMS and orogenic gold in Archean greenstone belts.
- Bruce MacLachlan P.Geo (Limited) 38 years' experience in exploration, including being a member of the teams who discovered the Eagle River Deposit, the Sugar Zone Mine and the BAM Gold Deposit. He has a wide range of experience involving grassroots to advanced projects and has carried out mineral exploration in Ontario, Quebec, Manitoba, Saskatchewan and Nunavut. Between 2016 and 2020 Bruce carried out numerous exploration programmes for another junior mining company in the Hemlo Greenstone Belt where he co-discovered a number of new gold showings.

Data was provided to ACA Howe via email. The report draws on information obtained during the site visit by Bruce MacLachlan and Daniel Rubiolo, and exploration completed by FCM and previous owners. The exploration database was reviewed and validated as far as possible, and ACA Howe received full co-operation and assistance from FCM personnel during the preparation of this report. All units are metric unless otherwise stated. The map coordinates shown are NAD83, UTM zone 16 north.

#### 2.4. ACA HOWE INTERNATIONAL LIMITED

ACA Howe is an independent geological and mining consultancy based in the United Kingdom. ACA Howe, its directors, employees and associates neither has nor holds:

- Any rights to subscribe for shares in FCM either now or in the future.
- Any vested interests in any concessions held by FCM or any adjacent concessions.
- Any rights to subscribe to any interests in any of the concessions held by FCM either now or in the future.
- Any vested interests in either any concessions held by FCM or any adjacent concessions.
- Any right to subscribe to any interests or concessions adjacent to those held by FCM, either now or in the future.
- The Authors' only financial interest is the right to charge professional fees at normal commercial rates, plus normal overhead costs, for work carried out in connection with the investigations reported here. Payment of professional fees is not dependent either on project success or project financing.



### 2.5. LIMITATIONS

ACA Howe has utilised information provided by FCM, which includes data from previous explorers in the area. ACA Howe has made every reasonable attempt to verify the accuracy and reliability of the data and information provided, and to identify areas of possible error or uncertainty. To the best of its knowledge these details are in accordance with the facts and contain no omission likely to affect the success of the project. ACA Howe, its directors, employees and associates accept no liability for the omission of information or data which has not been brought to their attention or for errors in data and information which have not been possible to identify.

The business of mining and mineral exploration, development and production by their nature contain significant risks. Given the nature of the mining business many factors may be subject to change over relatively short periods of time and as such actual results may be significantly more or less favourable. Except as specifically required by law, ACA Howe and its directors accept no liability for any losses arising from reliance upon the information presented in this technical report. As of the publication date of this document, ACA Howe and FCM are not aware of any likely or pending adverse effect as to business, operations, properties, assets or condition, financial or any other material change, which may arise within the six months following the publication of this report.

## 3. RELIANCE ON OTHER EXPERTS

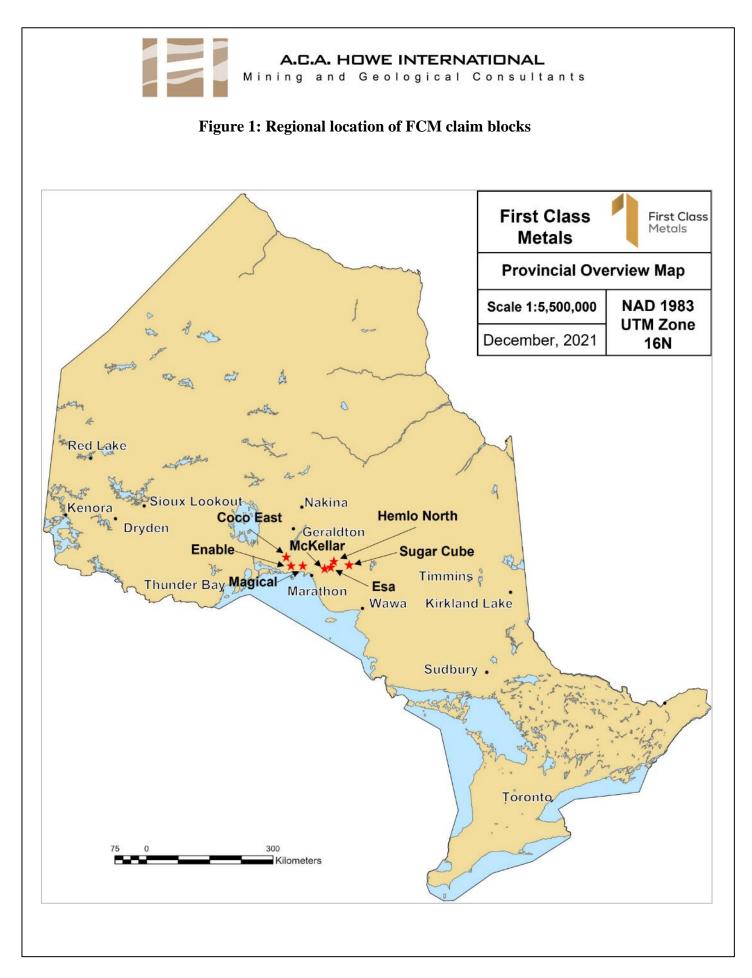
ACA Howe has relied on a legal opinion on the validity of the claims, which was obtained by FCM in January 2022. The document is entitled "First Class Metals Canada Inc. – Opinion on Unpatented Mining Claims" and was written by mining law firm Peterson McVicar LLP.

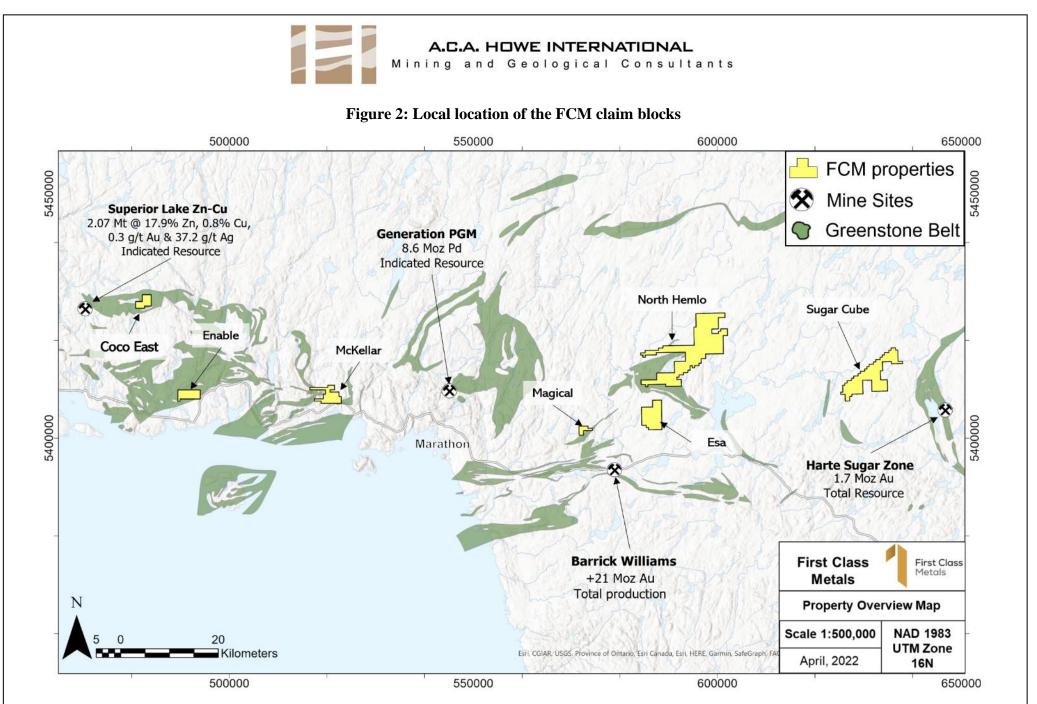
Information on mineral rights, taxes, royalties and environmental aspects were provided to ACA Howe by FCM by online data transfer by James Knowles, Executive Director of FCM, on 12<sup>th</sup> July 2021. Additional data was sent via email by James Knowles during the course of ACA Howe's work. This information has been confirmed as being current by FCM at the date of the report. In addition, ACA Howe has utilised GIS files showing the claim locations which were downloaded from the from the Ministry of Northern Development, Mines, Natural Resources and Forestry website. Sections 4 and 4.1 are entirely dependent on the legal opinion and information provided by FCM.

## 4. PROPERTY DESCRIPTION AND LOCATION

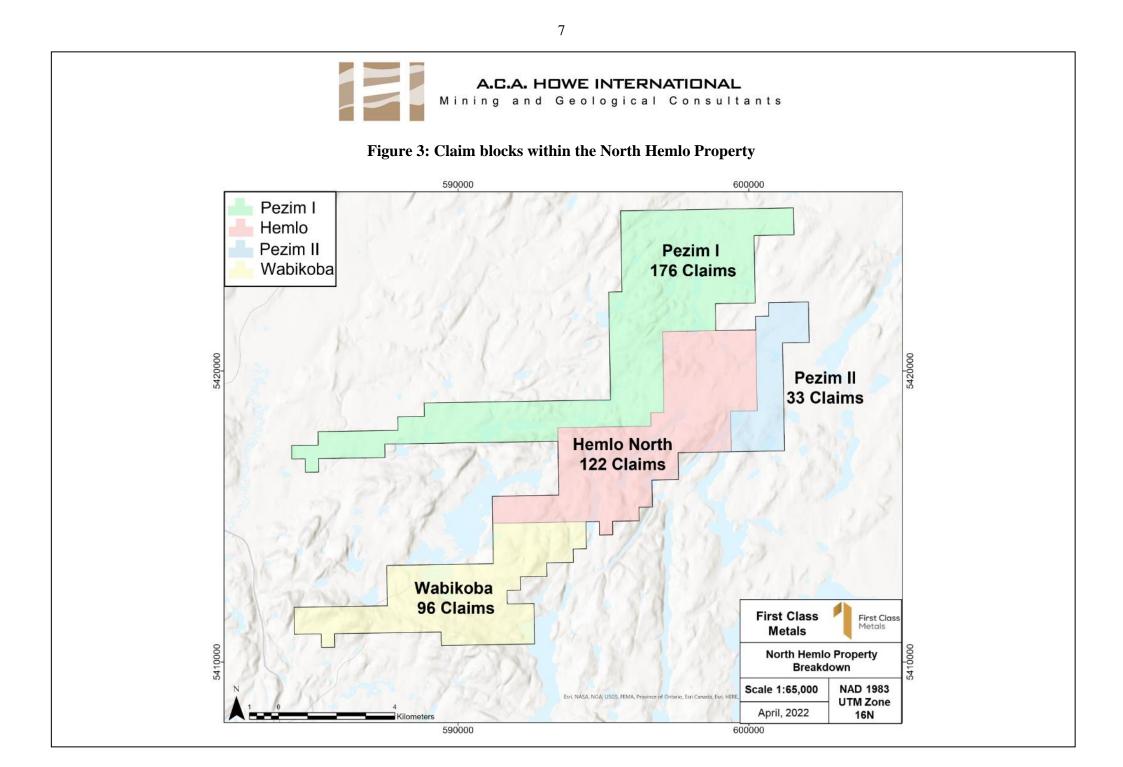
First Class Metals Canada Inc.'s North Hemlo property is located northeast of Lake Superior in northeastern Ontario (Figure 1). The North Hemlo property is situated approximately 30 kilometres south of the town of Manitouwadge and approximately 20 kilometres northeast of the Hemlo Gold Mine (Figure 2). The centre of the North Hemlo property is at approximately 595300mE and 5418000mN (NAD83, UTM zone 16 north). The North Hemlo property comprises 427 Single Cell Mining Claims and covers an area of 89.6 km<sup>2</sup> (Figure 2). The North Hemlo property can be divided into four separate areas as shown on (Figure 3).







#### 



## 4.1. CLAIM DETAILS

FCM's wholly owned subsidiary, First Class Metals Canada Inc., is the owner of 427 Single Cell Mining Claims in the North Hemlo property. Claim details are described below and are shown in Appendix 1:

- Claim types: 427 Single Cell Mining Claims.
- Area: 89.6 km<sup>2</sup>.
- Obligations to retain claims: Minimum expenditure of CAD\$400 per claim (total of CAD\$170,800 for the North Hemlo property). Assessment reports must be submitted to the Ontario Geological Survey on completion of work programmes on the property.
- Royalties: See Section 4.1.2 below.
- Surface rights: FCM is not aware of any surface right interests that exist in the North Hemlo property. See Section 4.2.11 for general information on surface rights.
- Legal access: There are no restrictions on legal access to the North Hemlo property.
- Permits required to conduct work: FCM has the right to conduct early-stage prospecting in the North Hemlo property. Additional permits will be required for the programme outlined in Section 20.
- Environmental liabilities: No environmental liabilities exist in the North Hemlo property.

## 4.1.1. PEZIM II OPTION AGREEMENT

FCM has signed a Joint Venture (JV) agreement with Tyko Resources Inc (the "Optionee" below), a subsidiary of Palladium One Mining Inc., which applies to the Pezim II area of the North Hemlo property.

The Optionee will earn the Earned Interest by incurring Canadian Exploration Expenses in relation to the Earn-In Properties as follows:

- (a) Year 1 Canadian Exploration Expenses in the amount of not less than CAD \$25,000 on or before the 1st anniversary of the Effective Date.
- (b) Year 2 additional Canadian Exploration Expenses in the amount of not less than \$135,000 (for an aggregate amount of \$160,000) on or before the second anniversary of the Effective Date to earn a 51% interest.
- (c) Year 3 additional Canadian Exploration Expenses in the amount of not less than \$165,000 (for an aggregate amount of not less than \$325,000) and by preparing a National Instrument 43-101 ("NI43-101") Technical Report with respect to the Earn-In Properties on or before the third anniversary of the Effective Date to earn an additional 29% (for a total aggregate 80% interest).



The Parties will enter into a joint venture agreement on mutually agreeable terms, provided that such agreement will contain customary terms, conditions, representations, warranties and other covenants for a joint venture arrangement of such nature and will also incorporate the following terms:

- Should the Optionee wish to earn up to an 80% interest, it will continue to be the sole funder and operator of exploration activities until such time as it earns the 80% interest.
- Upon the Optionee earning an 80% interest (or 51% interest if the Optionee chooses not to seek to earn an 80% interest), in the Earn-In Properties, each Party shall thereafter be required to fund all future exploration, development and operating activities in proportion to their respective interest.
- The parties will work cooperatively to exercise the Buy-Back Right at such time as is mutually agreed by the parties and each party shall fund the buy back on a pro rata basis reflecting the parties' respective interest in the Joint Venture at the time that the Buy-Back Right is exercised.
- If a Party is unable or unwilling to fund their portion of the future expenditures, then that Party's interest will be diluted by 1% for every \$10,000 in expenditures that they do not contribute. If a Party's interest falls below 10% then the joint venture shall automatically terminate and their remaining interest will convert to a 1% NSR with a \$1,000,000 buy back favouring the other non-diluted party (the "Surviving Party") at any time in cash or stock.

FCM is not aware of any other significant factors that may affect title, or the right or ability to perform work on the North Hemlo property.

## 4.1.2. ROYALTIES

ACA Howe understands that there are in essence three royalty regimes that are incumbent on all or parts of the Hemlo North property (as well as some of the non-qualifying properties) (Table 2):

- First Class Metals Canada Inc. has a JV agreement with Tyko Resources Inc. on the Pezim II block of claims. This could ultimately reach a point whereby FCM receives a 1% NSR, which can be bought for CAD \$1 Million payable in shares or cash.
- FCM and First Class Metals Canada Inc. has entered into purchase agreements with James Knowles and Ayub Bodi on various claim blocks within the North Hemlo property. As part of the agreement the claims attract a 2% NSR and FCM and First Class Metals Canada Inc. may purchase 50% of the 2% NSR anytime by making a cash payment of CAD \$500,000.
- As a consequence of the property (claims) for shares agreement that FCM entered into with Power Metal Resources Plc and Power Metals Canada Inc, FCM assumed the underlying 2% NSR agreements with the original vendors to Power Metals. There are underlying NSR agreements on the non-qualifying properties as well as the North Hemlo property, all of which are 2% and the owner (now FCM) may purchase 50% of the 2% NSR anytime by making a cash payment of CAD \$500,000.



Table 2: NSR agreements on claims owned by FCM					
Claim block	Claims details	Claim Owner	NSR Owner	NSR %	Buy Back (CAD\$) / comments
Pezim II	624162 - 624172 and 631648 - 631669	First Class Metals Canada Inc	First Class Metals Canada Inc (potential future NSR, which may result from JV with Tyko Resources, as described above)	1.00%	\$1 million, payable in cash and stock
North Hemlo, McKellar, Enable, Magical, Coco East		First Class Metals Canada Inc	Brian Fowler and Gerard Buchanan		Claims acquired from Power Metal Resources Plc and Power Metals Canada Inc, who are not able to purchase properties within 25 km. First Class Metals Canada Inc has assumed underlying NSR commitments
North Hemlo property	122 single cell claims	First Class Metals Canada Inc	Ayub Bodi and James Knowles	2.00%	The Claim Owner may purchase 1% anytime by making cash payment of \$500k
Hemlo North - Wabikoba Area	593720 to 593734	First Class Metals Canada Inc	North American Exploration Inc. and Silver Water Capital Corp.	2.00%	The Claim Owner may purchase 1% anytime by making cash payment of \$500k
Hemlo North - Wabikoba Area	129 single cell claims, 563370 to 563498	First Class Metals Canada Inc	Ayub Bodi and James Knowles	2.00%	
Hemlo North, Pezim I, Olga Lake & Black River	41 single cell claims, 634019 to 634054 and 635648 to 634651	First Class Metals Canada Inc	Ayub Bodi and James Knowles	2.00%	The Claim Owner may purchase 1% anytime by making cash payment of \$500k
Hemlo North Mining camp Pezim 2	Pezim 2, 33 single cell claims, 624162 to 624172 and 631648 to 631669	First Class Metals Canada Inc	Ayub Bodi and James Knowles	2.00%	The Claim Owner may purchase 1% anytime by making cash payment of \$500k
Hemlo North Mining camp Pezim 1 Area	119 single cell claims, 634019 to 634054 and 635636 to 635659 and 637310 to 637344 and 640187 to 640252	First Class Metals Canada Inc	Ayub Bodi and James Knowles	2.00%	The Claim Owner may purchase 1% anytime by making cash payment of \$500k



For the purposes of the above agreements an NSR is defined as follows:

Net Smelter Returns are defined as the net amount of money received by the Buyers for its own account from the sale of ore or ore concentrates or other products from the Property to a smelter or other ore buyer after deduction of the aggregate of all reasonable: a. smelter and refining charges, ore treatment charges, penalties and charges made by the purchaser of ore or concentrates; b. transportation costs which may be incurred in connection with the transportation of ore or concentrates; c. umpire charges which the purchaser may be required to pay; d. reasonable charges, costs and commissions of marketing and selling; and e. taxes (excluding for certainty, income taxes) and assessments including without limitation, any severance, royalty, net proceeds tax, production or other similar or related charge, payment or fee that may be assessed by any federal, state, municipal or other government or entity with respect to the sale of ore, ore concentrate or other products from the Property.

## 4.2. MINING ACT

#### 4.2.1. SUMMARY

In the Province of Ontario, mineral exploration and mining is largely regulated by the provincial government, with the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) and the Ontario Ministry of Natural Resources (OMNR) acting as the two main overseeing bodies. The Canadian federal government may also be involved in the mining process where aboriginal matters arise or where the lands in question are federally regulated, as is the case in respect of uranium mining or when the lands are classified as navigable bodies of water. Mining rights and regulations are enshrined in the Mining Act, RSO. 1990, c M.14. Over the years it has been heavily modified, and the current version is dated 1st July 2019 and is available in full for reference and inspection on the Ontario.ca website. There are three basic types of mining tenure that can be acquired in Ontario: x Mining Claim; x Mining Lease; x Freehold Interest in land or a Patent.

#### 4.2.2. **DEFINITIONS**

Crown Land: land that belongs to the province of Ontario. It does NOT include:

- a) Land, the surface rights, mining rights or mining and surface rights of which are under lease or licence of occupation from the Crown.
- b) Land in the actual use or occupation of the Crown, the Crown in right of Canada, or of a department of the Government of Canada or a ministry of the Government of Ontario.
- c) Land, the use of which is withdrawn or set apart or appropriated for a public purpose.
- d) Land held by a ministry of the Government of Ontario.

Licensee: A person who holds a prospector's licence, issued under the Mining Act or a renewal thereof.



**Mining Claim**: A parcel of land, including land under water, that has been electronically staked, and recorded by the Provincial Mining Recorder.

Mining Operations: Any excavation or working of the ground to collect minerals.

**Mining Recorder**: An employee of the Ministry of Northern Development and Mines (MNDM), appointed for a specific mining area who is the first contact when dealing with compliance with the Mining Act. Duties include recording and filing Mining Claims and applications, issuing prospector's licences, hearing and deciding disputes.

**Mining Rights**: Are the rights to minerals located in, on or under the land. Also referred to as Mineral Rights.

Prospecting - the investigating of, or searching for, minerals.

**Prospecting and Prospector's Licence** - any person who is 18 years or older may obtain a prospector's licence, which shall be effective as of the date it is obtained online and shall expire on the day before the fifth anniversary of that date.

## 4.2.3. STAKING PROCESS AND CLAIM HOLDINGS

The Mining Lands Administration System (MLAS) was implemented in Ontario during 2018 and replaces the old, 'on-the-ground' staking process. Prospectors may now select predefined cell blocks using a web-based GIS portal to delineate their Mining Claims rather than visiting the site and hammering wooden stakes into the ground. This makes staking possible 24 hours a day, seven days a week, from anywhere in the world.

The Ontario Mineral Tenure Grid now splits the Province up into more than 5.2 million cells on a latitude and longitude grid, ranging in size from 17.7 ha in the north to 24 ha in the south due to the convergence of the grid towards the North Pole. All the Mining Claims in Ontario that existed prior to the modernisation (legacy claims) have been converted to what are now known as cell claims or boundary claims. A cell claim is a mining claim that relates to all the land included in one or more cells on the tenure grid, (single and multi-cell claims are therefore available). A boundary claim is a claim that is made up of only a part or parts of one or more cells. Boundary claims were created for two circumstances: if the holder of a Mining Claim applied to keep the legacy claims separate from each other; or if there were two legacy claims held by separate owners within one cell. There were several consequences of the implementation of this system. Legacy mining exploration claims/leases were re-drawn to fit within a strict grid square system and some boundaries did not fall on a new grid cell boundary.



#### 4.2.4. MINING CLAIMS

Mining Claims can only be obtained by an entity that holds a prospector's licence from the MNDM. A licensed prospector is permitted to enter onto provincial Crown and private lands that are open for exploration and stake a claim on those lands. A mining claim can be transferred, charged or mortgaged by the prospector without obtaining any consents. Notice of the change of owner of the mining claim or charge thereof should be recorded in the mining registry maintained by the MNDM.

A prospector's licence does not entitle the holder to roam and prospect on land for which they do not hold a mining claim. The holder of a prospector's licence may prospect for minerals and register a mining claim on any:

- a) Crown lands, surveyed or un-surveyed.
- b) Lands, the mines, minerals or mining rights whereof have been reserved by the Crown in the location, sale, patent or lease of such lands where they have been located, sold, patented or leased after 6th May 1913.
- c) Land, not at the time registered as a mining claim, including a mining claim that has lapsed or been abandoned, cancelled or forfeited if the cells related to that claim have not been re-opened for Mining Claims registration.
- d) Land, not at the time included in a part of a boundary cell that is outside of the limits of any boundary claims registered with respect to the boundary cell.
- e) No mining claim shall be registered on any land:
  - i. For which the mining rights have been sold, located, leased or included in a licence of occupation; ii. for which an application brought in good faith is pending in the Ministry of Natural Resources under the Public Lands Act or any other Act, and in which the applicant may acquire the minerals that are included in the application.
  - ii. Where the Minister or the Minister of Transportation certifies that the land is required for the development of water power or for a highway or for some other purpose in the public interest.
  - iii. In an Indian reserve, except as provided by The Indian Lands Act, 1924.
  - iv. Within 45 metres of a church, cemetery, or burial ground.
  - v. That is located in the Far North, if a community-based land use plan has designated the lands for a use inconsistent with mineral exploration and development.

On 10th April 2018, Ontario converted its manual system of ground and paper staking and maintaining unpatented Mining Claims to an online system. All active, unpatented claims were converted from their legally defined location by claim posts on the ground or by township survey to a cell-based provincial grid. Mining Claims are now legally defined by their cell position on the grid and coordinate location in the MLAS map viewer. The unpatented Mining Claims (cell Mining Claims) held by the



Company do not confer upon the Company any right, title, interest or claims in or to the Mining Claims other than the right to proceed as is in the Mining Act (Ontario). Upon registering cell Mining Claims (cells), the Company must perform and file exploration assessment work and apply on those cells assessment work credits to maintain them in good standing. Until a mining lease for the Mining Claims is issued, the Company does not have the right to remove or otherwise dispose of any minerals found in, upon or under the mining claim. A holder of a prospectors licence, who wishes to register a mining claim, must access the MLAS and register a cell claim electronically by identifying the cells on the provincial grid that are to be included in the claim.

A licensee may register a cell claim in relation to:

- a) A single cell on the provincial grid that is not a boundary cell; or
- b) Two or more cells on the provincial grid that are not boundary cells, subject to any limitations that may be prescribed or set out in the directives established by the Minister. All legacy claims have been delineated on the provincial grid then converted to Mining Claims registered in the Mining Claims registry. As a function of the transition of pre-conversion ground staked claims to the new MLAS system based on provincial grid squares, many new concession areas now consist two types of mining claim; the Single Cell Mining Claim (SCMC) which is a new grid based claim which exists wholly within the pre-conversion area and is hold outright by the registered keeper; and Boundary Cell Mining Claim (BCMC) which is a grid based claim cell which straddled the border between two or more pre-conversion claim areas which may have been held by one or more entity. The ownership of the BCMC in MLAS is sub-divided between the pre-conversion holders in a proportion linked to the old claim boundaries. The spend commitments and renewal fees of the BCMC are divided in the same proportions. Where one or more party relinquishes their rights to a BCMC those will be transitioned over to the other holder/s until such time as there is only one holder and the BCMC becomes a SCMC.

#### 4.2.5. ASSESSMENT WORK REGULATION

Once the mining claim has been recorded, the prospector is permitted to conduct exploratory and assessment work on the subject lands. In order to maintain a mining claim, yearly work requirements must be met. The Assessment Work regulation lists what qualifies as assessment work. This includes conducting geophysical, geochemical, and geological surveys, physical work such as overburden stripping and bedrock trenching, exploratory drilling and MNDM approved rehabilitation work. Depending on the intensity of such work, either an Exploration Plan is submitted, or an Exploration Permit is sought. As of 1st November 2012, Aboriginal consultation expenses and a prescribed credit for the submission of GPS georeferencing data can also be used towards assessment work credits. Prospecting and regional surveys performed on Crown lands before the registration of a mining claim are eligible for assessment work credits in such manner as is prescribed. The first unit of assessment work of \$400/~20 ha (minimum expenditure), is required by the second anniversary date of the recording of the cell and an additional unit is required to be performed and filed for each year thereafter to maintain a claim. Excess work from one year can be carried forward and applied to work in future years. Claim holders must file yearly reports of the assessment work that they completed. Failure to



perform the requisite work or to file the forms will result in a claim being forfeited and the lands being reopened for claiming. No minerals may be extracted from lands that are the subject of a mining claim – the prospector must possess either a mining lease or a freehold interest to mine the land. As of 1st November 2012, claim holders in Ontario can pay a fee in lieu of actually fulfilling the assessment work requirements, subject to certain restrictions. Payments cannot be used for the first unit of required assessment work and they cannot be used in consecutive years. Moreover, these payments cannot be carried forward to future years or credited towards the assessment requirements for obtaining a mining lease. Every mining claim holder shall submit a report of the assessment work done and of any payments made for the purpose of compliance together with such other information as may be prescribed. This report must be received by the MNDM on or before the anniversary date of the mining claim.

## 4.2.6. EXPLORATION PLAN

Before undertaking certain early exploration activities, an Exploration Plan must be submitted and notification provided to any surface rights owners. Aboriginal communities potentially affected by activities proposed in an exploration plan are notified by the Ministry of Energy, Northern Development and Mines (ENDM) and have an opportunity to provide feedback before the proposed activities can be carried out. Effective 1st April 2013, exploration plans became mandatory for prescribed activities.

Such prescribed activities include:

- Line cutting that is a width of 1.5 m or less.
- Geophysical surveys on the ground requiring the use of a generator.
- Mechanised stripping a total surface area of less than 100 m2 within a 200 m radius.
- Excavation of bedrock (pitting and trenching) that removes from 1 m3 up to 3 m3 of material within a 200 m radius.
- Use of a drill that weighs less than 150 kg. Uniquely, an Early Exploration Plan Activity Information sheet is available in the ENDM website which graphically shows the prescribed activities and gives excellent practical advice to claim holders.

## 4.2.7. EXPLORATION PERMIT

More invasive or larger-scale exploration activities require an Exploration Permit. Those activities are only allowed to take place once the permit has been approved by ENDM. Surface rights owners must be notified when applying for a permit. Aboriginal communities potentially affected by the exploration permit activities are to be consulted and given the opportunity to provide comments and feedback before a decision is made on the permit. Effective 1st April 2013 exploration permits became mandatory for prescribed activities.



An Exploration Permit permits the holder to carry out prescribed exploration activities at specific times and in specific locations. Such activities include:

- Line cutting that is a width greater than 1.5 m.
- Mechanised stripping of a total surface area of greater than 100 m<sup>2</sup> within a 200 m radius (and below advanced exploration thresholds).
- Excavation of bedrock (pitting and trenching) that removes more than 3 m3 of material within a 200 m radius.
- Use of a drill that weighs more than 150 kg.

Other non-prescribed activities that can be conducted on Mining Claim but must still be listed in the Exploration Plan or Permit Application process include:

- Ground geophysical surveys without a generator.
- Construction of exploration camps.
- Installation of trails for access.
- Installation of roads.
- Airborne geophysical surveys.
- Land samples less than 1 m<sup>3</sup>.

Holders of a Mining Claim should be aware that receiving an exploration permit does not exempt them from following and complying with other existing laws and regulatory requirements. Examples of approvals which may be needed are permits to take water (Ministry of the Environment, Conservation and Parks (MECP)), road construction permits (Ministry of Natural Resources and Forestry (MNRF)), and Department of Fisheries and Oceans (DFO) approvals related to fish habitats.

#### 4.2.8. MINING LEASES

Upon compliance with the Mining Act and the regulations and upon payment of the rent for the first year, the holder of a mining claim is entitled to a lease of the claim enabling them to extract minerals.

The application and payment for a lease may not be made to a recorder until the applicant:

- 1) Has performed the fifth prescribed unit of assessment work on a mining claim or, if a regulation provides that payment may be made in place of performing some or all assessment work, has made the payment and performed the work as required by the regulation; and
- 2) Has reported any assessment work performed and, if necessary, has received approval for the work.



A mining lease has a term of twenty-one years at the prescribed rental, payable in advance, for the first year and at the prescribed rate for each subsequent year. The Minister shall refuse to renew a lease unless:

- a) the production of minerals has occurred continuously for more than one year since the issuance or last renewal of the lease; or
- b) the lessee has demonstrated to the satisfaction of the Minister a reasonable effort to bring the property into production.

The application for a mining lease must specify whether it requests a lease of mining and surface rights or mining rights only and requires the payment of fees.

A mining lease can be renewed by the lessee upon submission of an application to the MNDM within 90 days before the expiry date of the lease, provided that the lessee provides the documentation and satisfies the criteria set forth in the Act in respect of a lease renewal.

A mining lease cannot be transferred or mortgaged by the lessee without the prior written consent of the MNDM. The consent process generally takes between two and six weeks and requires the lessee to submit various documentation and pay a fee.

## 4.2.9. FREEHOLD MINING LANDS (MINING PATENT)

Another type of tenure is a mining patent issued by the Crown. This enables the holder to obtain a freehold interest in the minerals themselves. Historically, mining patents were frequently granted but, more recently, MNDM has moved towards mining leases. MNDM still retains the power to issue mining patents, but only in special circumstances. Prospectors often prefer mining leases as there is less risk of environmental liability. If a patent is desired, prospectors can also apply to the Ministry of Natural Resources for this type of tenure. A mining patent can include surface and mining rights or mining rights only. As the holder of a mining patent enjoys the freehold interest in the lands that are the subject of such patent, no consents are required for the patentee to transfer or mortgage those lands.

#### 4.2.10. ADVANCED EXPLORATION

Field exploration involves the on-site investigation of local geology. Large-scale field exploration which meets a certain list of criteria is considered 'advanced exploration'. Advanced exploration is subject to additional requirements and regulations.

All mineral-bearing material removed from the land during advanced exploration must be used for evaluation purposes. Advanced exploration can occur on either a mining claim or leased land. Written permission from the Mineral Exploration and Development Section is required in order to test the mineral content of material removed from land which has not been leased.



Fieldwork is classified as advanced exploration if it involves one or more of the following activities:

- The excavation of an exploratory shaft, adit or decline.
- The extraction of material in excess of the prescribed quantity whether the extraction involves the disturbance or movement of prescribed material located above or below the surface of the ground.
- The installation of a mill for test purposes.
- Any other prescribed work.

The types of prescribed work currently include:

- Exploration carried out underground involving the construction of new mine workings or expanding the dimensions of existing mine workings.
- Exploration involving the reopening of underground mine workings by the removal of fixed or permanently fastened caps or bulkheads, or involving the excavation of backfilled shafts, raises, adits or portals.
- Exploration that may alter, destroy, remove or impair any rehabilitation work made in accordance with Part VII of the Act, or a filed closure plan.
- Excavation of material in excess of 1,000 tonnes.
- Surface stripping on mining lands where the surface area over which the surface stripping is carried out is greater than 10,000 m2, or where the volume of surface stripping is greater than 10,000 m<sup>3</sup>, except where all of the following are satisfied:
  - Surface stripping is carried out in two or more separate areas on the mining lands.
  - $\circ~$  The edges of each area where surface stripping is carried out are separated by a minimum of 500 m.
  - In each area where surface stripping is carried out the surface area over which the surface stripping is carried out is not greater than 10,000m<sup>2</sup>, and the volume of surface stripping is not greater than 10,000 m<sup>3</sup>.
  - Surface stripping on any mining lands of an area in excess of 2,500 m<sup>2</sup> or volume in excess of 2,500 m<sup>3</sup>, if any of the activity occurs less than 100 m from a body of water.

Before beginning advanced exploration, certain requirements must be met. These requirements include:

- Converting existing Mining Claims into leases to acquire title and ownership to the land.
- Submitting a Notice of Project Status to the Mineral Exploration and Development Section.



- Consulting with all required parties.
- Filing a closure plan with accompanying financial assurance and achieving certification.
- Acquiring all required permits/approvals from ministries, agencies and government organisations.

### 4.2.11. SURFACE RIGHTS

Surface rights may be sold or granted to a mining operation if the surface rights are necessary for the carrying out of mining operations. The Minister will determine the scope of the surface right so granted. If the lessee or owner of mining rights or the holder of a mining licence requires the use of surface rights within or outside the limits of lands covered by the lease, patent or licence of occupation for the mining rights, the Minister may lease to that person any available surface rights for the purpose of mining or mining exploration. Subject to the statutory and common law rights of the surface owner, the holder of an unpatented mining claim has the right prior to any subsequent right to the use of the surface rights for prospecting and efficient exploration, development and operation of the mines, minerals and mining rights. This is a broad right that permits entry onto privately-owned lands and virtually any kind of activity necessary for mineral exploration, development and extraction. The holder can consent to the disposition of surface rights under the Public Lands Act and the surface rights may be dealt with as provided in that Act [s, 51(2)]. The Minister may require a survey of the surface rights which will be provided at the expense of the person who has acquired the surface rights. In certain circumstances of national or provincial interest an Alienation Notice may be granted which withdraws the surface land rights land from prospecting sale or lease. Withdrawal orders do not affect pre-existing mining rights and tenure such as Mining Claims, mining leases or mining licences of occupation in the area withdrawn except that if any such pre-existing mining rights and tenure revert to the Crown subsequent to the date and time of this Order, they shall automatically be considered to be withdrawn by this Order.

#### Alienated Ground

There is no known 'alienated land' within the claims of the North Hemlo property. An alienated area exists on the northern edge of the Wabikoba claim block.

#### 4.2.12. ABORIGINAL CONSIDERATIONS

Pursuant to the Mining Act, its regulations and the Crown's duty to consult, the Ontario Ministry of Energy, Northern Development and Mines (ENDM) notifies Aboriginal communities which may exercise Aboriginal or treaty rights in the area of the proposed early exploration activities. The ENDM identifies these communities based on their current understanding, which continues to develop over time.

Aboriginal communities are notified of permit applications that have been submitted. Any comments they may have with respect to potential adverse effects of proposed activities on their Aboriginal or



treaty rights are provided to the ENDM. Depending on comments received, the ENDM may require the proponent's direct participation in the consultation process to further explain the proposed activities or to discus and consider adjustments to mitigate potential adverse effects. The ENDM provides specific direction in this regard on a case-by-case basis.

Proponents of exploration and development activities may also benefit from developing their own relationships with Aboriginal communities, which the ENDM encourages. Proponents who wish to contact Aboriginal communities which may be affected by proposed exploration activities in advance of submitting an exploration permit application should contact the ENDM for guidance on which communities. If any, to contact.

FCM has confirmed to ACA Howe that they are engaging a private Community Liaison company in order to make contact with and explain exploration activities ahead of any invasive, permit related exploration activities.

## 4.2.13. PERMITTING / LEGAL CONSIDERATIONS

Legislation and Considerations in addition to the ENDM regulations must be followed; examples of several of these are below. This list is not exhaustive.

- Work permits the Ministry of Natural Resources and Forestry (MNRF) requires Crown Land Work Permits for various work types on Crown land and shore lands, such as for road construction, water crossings, construction of buildings, cutting timber, and other activities.
- Access the local MNRF office will post when public forest access roads are closed or inaccessible and note that private forest access roads may not be accessible unless under terms and conditions of an agreement with the land holder.
- Camps For setting up a tented camp near or on the project area, the MNRF has Camping on Crown Land guidelines to follow. If setting up a temporary camp with buildings, a work permit from MNRF may be needed. Relevant MNRF guidelines for fire restrictions will also affect camps. Regulations and legislation regarding endangered species or species at risk may apply to a project area.
- Natural heritage the MNRF's online Natural Heritage Map will show environmental and natural criteria that must be considered when planning a project.
- Blasting explosives are regulated by Natural Resources Canada and a permit is required for their purchase. If the explosives quantities exceed 75 kg, a magazine licence is required to store the explosives.
- Health & safety there are extensive health and safety requirements for personnel working in bush or exploration camps (see Occupational Health and Safety Act requirements). For working in the bush there are guidelines published by Workplace Safety North. The Prospectors and Developers Association of Canada (PDAC) provides a Health and Safety in



Exploration Toolkit (EHS) which offers excellent advice on general safety principles, emergency response, survival and much more.

- Abandoned mines if a project is close to an inactive or abandoned mine site, one may need to contact the Ministry of Labour for safety precautions. The ENDM Abandoned Mines database can be used to determine the location of known mining hazards near a project. Note that it is an offence under the Mining Act to alter, destroy, remove, or impair rehabilitation work, unless the consent of the Minister has been granted. If exploring on a rehabilitated site, consent is required from ENDM prior to any work that may alter, destroy, remove or impair any rehabilitation work that has been completed.
- Municipalities some projects may be within Municipal boundaries, and subject to their bylaws; the local municipality should be contacted to confirm that an exploration property is zoned for mining. The Ministry of Municipal Affairs and Housing has developed a provincial policy which contains sections on mineral resources and human-made (mine) hazards.
- Waterways proposed work to be undertaken in a navigable waterway must first receive approvals from Transport Canada and is guided by the Navigation Protection Act Navigable Water Works Regulations.
- Drilling prior to performing any drilling, the Ministry of Labour (MOL) must be contacted regarding workplace safety and health standards that must be met and require a Notice of Operation of a Test Drill.
- Water sources Ontario Water Resources Act water well regulations may apply to a project and a permit may be needed to take water.
- Environment consideration should be given to the guidelines and principles set out in the PDAC's Environmental Excellence in Exploration (E3). PDAC toolkits are available to ensure an exploration programme is governed according to the following three major issues of today: social responsibility, excellence in environmental stewardship, and following current health and safety principles.
- All prescribed exploration activities must be carried out and rehabilitated as per the Provincial Standards for Early Exploration.



# 5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

## 5.1. ACCESSIBILITY

The North Hemlo property is located approximately 30 km south of the town of Manitouwadge, Ontario and 13 km east of Highway 614 (Figure 4). Access to the property is best achieved by turning east off Highway 614 on to the Dead Otter Lake Road. Access to the central portion of the property and immediately east of Highway 614 is best achieved by travelling along the Lunny Lake Road for approximately 4.5 km by truck at which point one will intersect the Dead Otter Lake Road, then travel approximately 3.4 km northeast to the southwest shore of Dead Otter Lake.

## 5.2. CLIMATE, VEGETATION, FAUNA AND FIELD SEASON

Climate in the area is typical of Northern Ontario, with cold winters and warm summers. Average January minimum temperatures range from -18°C to -32°C, and average July temperatures are between 24°C and 32°C. Total mean precipitation is about 1,000 mm per year, falling mainly between May and October with the highest rain precipitation in September. Snow precipitation occurs between October and May, but is persistent between November and March, when monthly average snowfall can reach 30mm. Lakes, rivers and swamps will often be frozen during this period and should be safe to work on from December to March. The Köppen-Geiger climate classification for Marathon is "Dfb" (Warm Summer Continental Climate) and for White River is "Dfc". (Continental Subarctic Climate). Exploration work can be carried out (subject to snow and freezing) for most of the year. Certain mapping, mechanised stripping, and soil sampling activities are best performed in snow-free conditions, whereas drilling can occur at any time of the year.

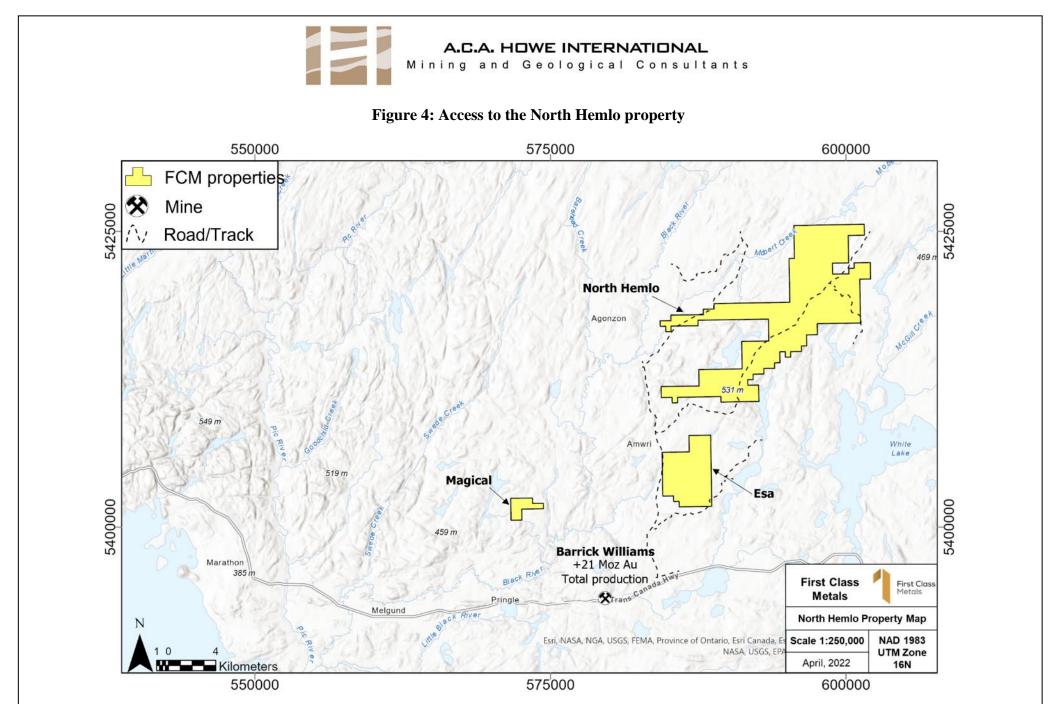
Vegetation is generally comprised by a variety of second growth trees. Vegetation in the area consists of a mix of spruce, balsam, birch, cedar and alders. Significant water bodies include Little Dead Otter, Dotted, Musher, Philip, Davis, Valentine, and Rita Lakes. Locally there are bear and moose.

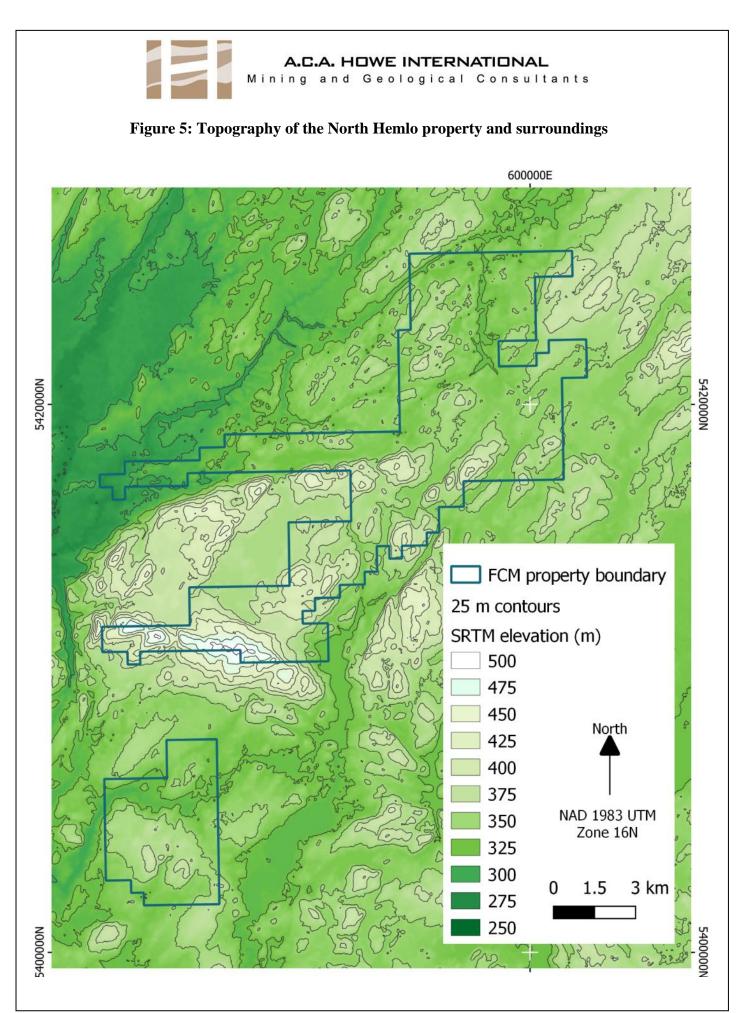
# 5.3. PHYSIOGRAPHY

The North Hemlo property is located within the Canadian Shield, which is a major physiographic division of Canada. The properties are situated in areas of swamps, small lakes, and moderate to steep hills, with scattered to locally moderate outcrop. Elevation across the project area ranges from approximately 300 to 500 m (Figure 5).

A number of lakes and rivers are found across the property, including Dead Otter Lake, Dotted Lake and Theresa Lake.







### 5.4. LOCAL RESOURCES AND INFRASTRUCTURE

The town of Marathon (Figure 4 above), approximately 30 km to the west can provide most nontechnical exploration supplies such as groceries, fuel, hardware, stationery and wood, etc. Thunder Bay, located about 4 hours' drive further west can provide technical supplies as well as geological, geophysical contractors / consultants and assay laboratories. Vehicle hire and servicing is also available in both towns. Additionally, a mining lands office and resident geologist from the Ontario Geological Survey are stationed in Thunder Bay. International airports are found in both Thunder Bay and Sault Str. Marie to the east, both providing regular services to Toronto as well as air freight / cargo services. However, the Thunder Bay airport and facilities are far larger. Whilst there are no scheduled air services from Marathon (there is a paved strip 'airport' on Highway 17, immediately north of the town), private charter flights do operate. Wilderness helicopters is a company offering charter helicopter flights from Marathon.

#### 6. HISTORY

In September 2021, FCM acquired the Power Metals Hemlo North property, which had truncated the Pezim I, Pezim II and Wabikoba blocks, subsequently connecting these properties into a single contiguous block (the North Hemlo property) (Figure 3 above). An additional four claims were acquired by FCM in January 2022, extending the Wabikoba block. Whilst now a contiguous block of 427 Single Cell Mining Claims spanning 89.6 km<sup>2</sup>, for ease of reference the historical exploration is detailed by the constituent claim blocks and shown on Figure 6, with the exception of Pezim II for which no historical work was identified.

## 6.1. PEZIM I CLAIM GROUP (176 CLAIMS)

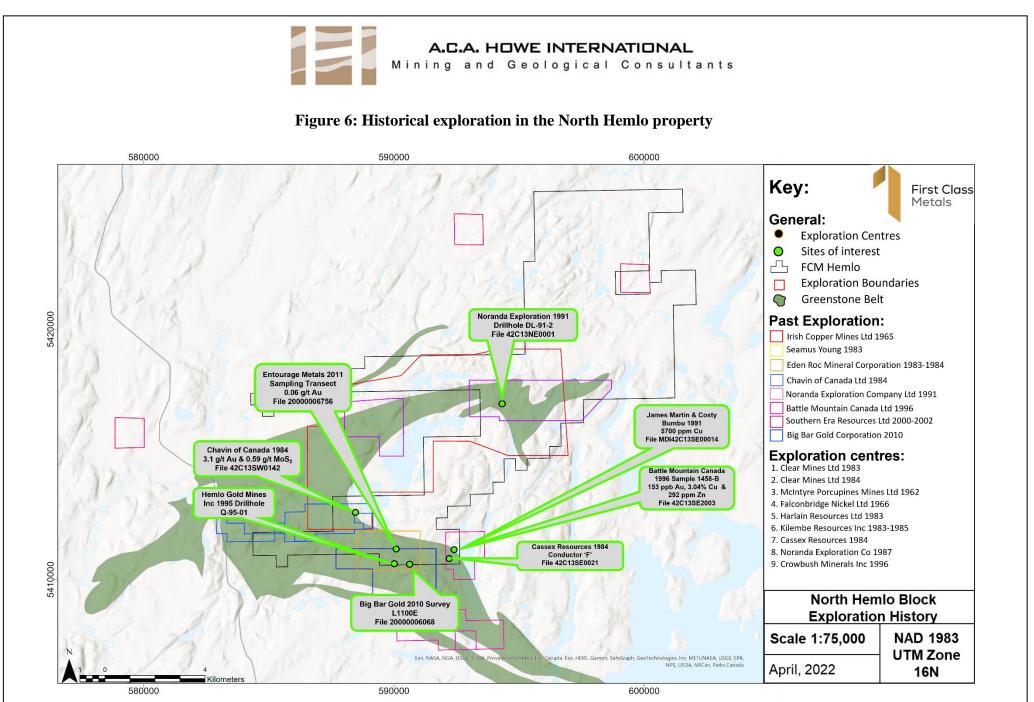
**1965:** Canadian Aero Minerals Limited conducted an airborne geophysical survey to the north-east of the Dotted Lake area, cutting into the North Hemlo and Pezim I claim groups. The results of the survey indicated a series of weak conductors, which were either probable or possible surface conductors indicating metalliferous deposits; however, an area of interest was identified 'zone 5' located within the Pezim I claim group to the northeast of Dotted Lake, which was perceived as a potential sulphide conductor (Canadian Aero Mineral Surveys, 1965, file 42C13NE0008).

**2000-2002:** Southern Era Resources Ltd conducted a combined geological mapping & geophysical surveying programme on their Manitouwadge properties, which cut into both the Pezim I and Hemlo North claim groups. The results of the exploration programme indicated the potential for kimberlite pipes within their property and it was concluded that extensive till and stream sampling were not 'an effective tool' for sampling the mineral potential of the area (Jones, P., 2002, File 42F04NE2008).

## 6.2. PEZIM II CLAIM GROUP (33 CLAIMS)

No historical work which has been identified for the Pezim II claim group.





## 6.3. HEMLO NORTH CLAIM GROUP (122 CLAIMS)

**1983:** Clear Mines Limited engaged in geological mapping and soil geochemical analysis of their claims within the vicinity of Dotted Lake. The easternmost geochemical surveys DW1124-DW1076 which cut into the western side of the Hemlo North block displayed assay results of **50 ppm Cu and 15 ppb Au** (Clear Mines limited, 1983, file 42C13NE0007).

**1984:** Osprey Resources Ltd acting on behalf of Clear Mines Limited conducted a geophysical survey on the Dotted Lake group of claims throughout March-June 1984. The geophysical survey built upon the 1983 geochemical analyses taken within the region and detected anomalies corresponding with Line L72 which held the geochemical readings aforementioned above (Clear Mines Limited, 1984, file 42C13NE8756).

**1991:** A series of holes were drilled by Noranda Exploration Company Limited in order to constrain the nature of the geology of the Dotted Lake property, with drillhole DL-91-2 being located within the Hemlo North block just north of the access road which runs through the claim (Noranda Exploration Company Ltd, 1991, file 42C13NE0001).

Noranda Exploration Company Limited also conducted a geophysical survey of their Dotted/Pinegrove Lake properties. Magnetic anomaly M1 which was detected was believed to coincide with the Fairservice Zinc occurrence with M1b being perceived to run along strike. Conductor anomaly V1b also corresponded with the magnetic anomaly M1 and was interpreted as the apparent strike of the zinc showing at Fairservice. Anomalies M1b and V1b all enter the Hemlo North claim block, being located on the western edge of the block near Dotted Lake (Noranda Exploration Company Ltd, 1991, file 42C13NE0002).

# 6.4. WABIKOBA CLAIM GROUP (96 CLAIMS)

**1931:** The general geology of the Heron Bay-White Lake area was described by J.E. Thomson (Thomson, 1931).

**1962:** McIntyre Porcupine Mines Limited, conducted geological mapping of their Wabikoba Lake properties. The boundary of the mapping partially encompasses the southern section of the Wabikoba claim group (Skrecky, A., 1962, file 42C13SW0089).

**1964-1965:** V.G. Milne conducted mapping in the Black River area for the Ontario Department of Mines (Milne, 1968)

**1966:** Falconbridge Limited, conducted geophysical work on their Dead Otter Lake claims which extended southwest from Dead Otter Lake encompassing the western section of the Wabikoba claim group. The results of the geophysical survey conducted by largely indicated low conductive anomalies across the property which the Wabikoba claims group is located (Falconbridge Nickel Limited, 1967, file 42C13SW0080).



**1983:** Harlain Resources Ltd. carried out a ground VLF and electromagnetic surveys, as well as a soil geochemical survey on their Hemlo Project claims, covering an area that now lies in the western part of the current Wabikoba claim group. A grid consisting of 38.1 miles of base and cross lines was cut and used to carry out the surveys. Two major magnetic zones were noted, and ten electromagnetic anomalies were outlined. Of these, six were thought more likely to be related to conductive bedrock. 2500 soil samples were collected on the claims and analysed for 26 elements. Anomalous values were investigated but no additional mineralisation was discovered besides a copper-zinc showing in the southwest part of the claims, off the current Wabikoba property. The showing was not highlighted very well by the soil geochemical data except for somewhat anomalous zinc. Five drillholes were recommended to test the zinc/copper showing (Giroux, 1983, file 42C13SW0038).

**1983-1984:** Eden Roc Mineral Corporation conducted a geological and geochemical soil survey on their Firetower Gold Property, which consisted of 32 contiguous claims covering an area that is now partially covered by the central portion of the Wabikoba claim group south of Dead Otter Lake. The property was found to be underlain by four main rock units: biotite granodiorite in the northern part, mafic volcanics, felsic dykes, and diabase dykes. Several small shears at 120 degrees were documented. 1278 soil samples, including swamp samples, humus and B horizon, were collected at 100-foot intervals on grid lines, and analysed for Au and Mo. It appears that up to 130 ppb Au was obtained, although values on the soil map can be difficult to read, and up to 73 ppm Mo among a cluster of other anomalous samples (Allan, 1983, file 42C13SW0037)

**1983-1985:** During 1983 and 1984, Kilembe Resources Inc. conducted geological mapping, ground magnetic and VLF surveying on their ground which covers part of the current Wabikoba claim block immediately west of Theresa Lake. In 1985, the main VLF conductors were surveyed again and a small geochemical survey was completed which did not reveal any mineralised trends (Labreque, 1985, file 42C13SE0063)

**1984:** Commissioned by Cassex Resources Limited, Maisonneuve Energy Materials Inc conducted a series of VLF electromagnetic surveys on the Theresa Lake property, extending westwards onto the eastern side of the Wabikoba Claim block. It was concluded that the northeastern section (which resides to the west of Theresa Lake and subsequently intrudes into the Wabikoba claim block) contained five strong conductors with two of these conductors being related to sulphide shear zones within the property (McKee, 1984, file 42C13SE0021).

Chavin of Canada Ltd., New McManus Red Lake Gold Mines Ltd., and Corporate Oil & Gas Ltd. carried out geological, geophysical and soil geochemical surveys, covering 111 claims in an area that now corresponds to part of the current Wabikoba claim group centred on Dead Otter Lake. Of note on the current North Hemlo property was the discovery of a zone of quartz veins and porphyry dykes conformable to mafic shear planes immediately west of Dead Otter Lake which returned up to 3.1 g/t Au and 0.59% MoS2 and was stripped for 400 feet along strike. Soil geochemical anomalies up to 23 ppb Au were obtained in this area, as well as northwest-southeast-trending electromagnetic anomalies (Page, 1984, file 42C13SW0142).



**1987:** From late May to early July, Noranda Exploration conducted geological mapping, humus sampling, and a magnetometer survey on the Shiningtree claim group, consisting of 30 contiguous claims on the south shore of Dead Otter Lake, covering a portion of the central part of the current Wabikoba claim group. Results of the programme were described as 'discouraging'. It appears that up to 23 ppb Au and 16 ppm As was obtained from humus samples (Hearn, 1987, file 42C13SW0111).

**1991:** James Martin conducted prospecting and trenching on his and Costy Bumbu's claims around Theresa Lake, some of which overlap with the southeast corner of the current Wabikoba claim block. Prospecting resulted in the discovery of a main copper occurrence and possible parallel zones, subsequently targeted by a series of trenches (Martin, 1992, file 42C13SE0004). The government MDI describes the main occurrence as a narrow (40-60 cm) zone of sulphide mineralisation hosted within mafic metavolcanic rocks, possibly representing a narrow, interflow iron formation. It returned up to 5700 ppm Cu. Stripping 20 m southwest of the main zone exposed similar copper-bearing rocks, suggesting a second, subparallel zone (MDI42C13SE00014).

**1995:** Between October-December Hemlo Gold Mines Inc. conducted an exploration programme on the Placer Option (Qued) claim group, comprised of data compilation and diamond drilling. Diamond drillhole Q-95-01 indicated 'Hemlo Style' mineralisation and was considered as an area with 'excellent exploration potential' (Schultz, 1996, file 42C13SW0143).

**1996:** Battle Mountain Canada Ltd. acquired the Theresa Lake claims of James Martin and Costy Bumbu in 1996. Sampling of the west shore of Theresa Lake yielded up to 153 ppb Au, 3.04% Cu & 292 ppm Zn (Grant, 1998, MENDM file 42C13SE2003).

Between May-June 1996 Crowbush Minerals Inc. engaged in a geophysical survey of their Firetower gold property based within the vicinity of Wabikoba Lake. The survey was comprised of line cutting and geophysical surveying programmes, which extend eastwards into the Wabikoba claim property, with the maximum westerly extent of the surveying reaching Dead Otter Lake. Two of the 'zones' identified extend into the Wabikoba property and represent geophysical trends. It was identified that Zone A, was potentially related to a band of iron rich metasediments or a granitic dyke like feature and that Zone B, which also runs into the property displayed definitive magnetic anomalies likely again being associated with a dyke unit (Grant, 1996, file 42C13SW0154).

**2010:** From December 6<sup>th</sup> – December 15<sup>th</sup> Big Bar Gold Corporation commissioned Larder Geophysics Ltd to conduct a magnetometer survey over the Hemlo North Property, near Wabikoba Lake. The survey conducted cut into the eastern section of the Wabikoba property currently held by First Class Metals PLC, with line L1100 detecting significant magnetic anomalies within the eastern section of the Wabikoba claim group (Larder Geophysics Ltd, 2010, file 2000006068)

**2011:** Entourage Metals conducted a geochemical analysis of their claims within the Hemlo North Property, centred around Wabikoba Lake. 22 outcrop samples and 561 soil samples were collected between September-October comprising part of a preliminary exploration programe. Soil samples



acquired within the southeastern section of the Wabikoba claim group reported values of up to 0.06 g/t Au (Marsh, 2011, file 20000006251).

# 7. GEOLOGICAL SETTING AND MINERALISATION

# 7.1. **REGIONAL GEOLOGY**

The Hemlo North property is situated in the northeastern portion of the Archean Schreiber-Hemlo greenstone belt within the Wawa-Abitibi Terrane of the central Superior Province of the Canadian Shield (Figure 7). The Wawa-Abitibi Terrane accreted to the Superior Province during the 2,690 Ma Shebandowan Orogeny and is a volcanic-plutonic belt consisting of 2.89 to 2.72 Ga rocks. The belt is bounded to the north, south and east by large granitoid batholiths. The Coldwell Alkaline Complex (1109 Ma) intrudes the Schreiber-Hemlo Greenstone Belt and separates it into two segments. The western limit of the greenstone belt, and possible continuity with the Terrace Bay-Schreiber greenstone belt, is obscured by this alkalic intrusion and the waters of Lake Superior.

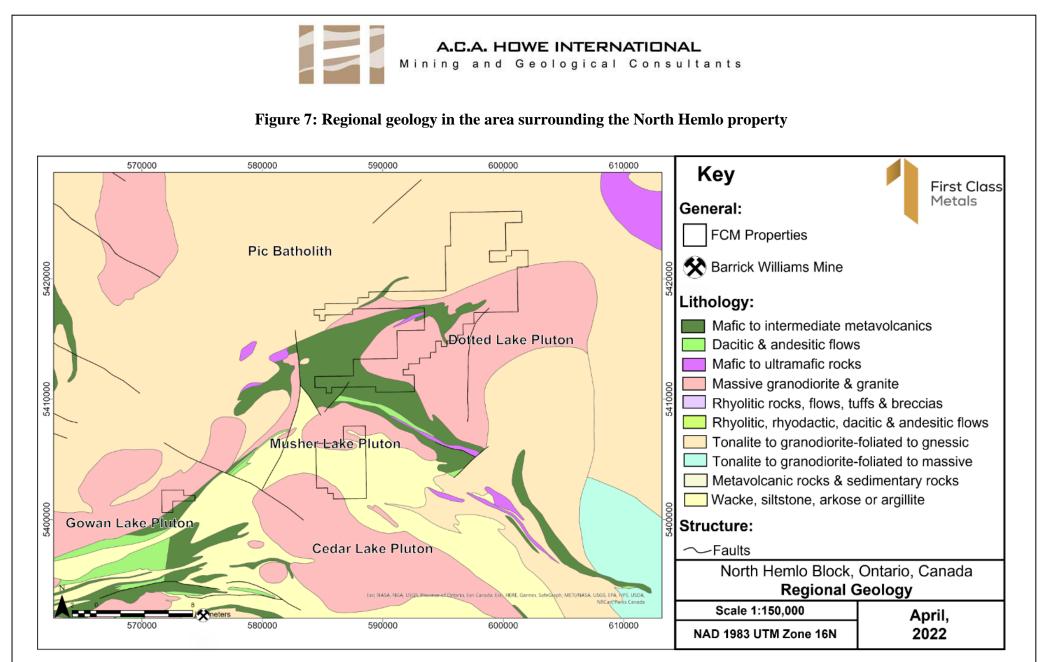
The following description of the regional geology draws heavily on the paper by Muir 2002.

The eastern portion of the Schreiber-Hemlo greenstone belt is the Hemlo section, known as the Hemlo greenstone belt. The Hemlo greenstone belt is a synclinorium, containing tholeiitic mafic volcanic rocks and metasedimentary supracrustal rocks, which are sandwiched between the Pukaskwa Gneissic Complex to the south and the Black-Pic Batholith/Gowan Lake Pluton to the north.

The greenstone belt is intruded by granodioritic-tonalitic plutons and related dykes. Major plutons include the Pukaskwa Intrusive Complex, the Heron Bay Pluton, the Cedar Lake Pluton and the Gowan Lake Pluton. A marginal gneissic phase of the Pukaskwa complex yielded a U-Pb zircon age of ~2719 Ma. An internal phase of the complex, the Heron Bay Pluton and the Cedar Lake Pluton yielded U-Pb zircon ages of ~2688 Ma. The Gowan Lake pluton yielded a U-Pb zircon age of ~2678 Ma (Corfu & Muir, 1989a; Lin, 2001). The western side of the Hemlo greenstone belt is predominately composed of massive to pillowed tholeiitic basalt flows and felsic to intermediate calc-alkalic pyroclastic rocks with related sedimentary deposits and the eastern side of the belt consists predominately of turbiditic wacke to mudstone and minor conglomerate. The Hemlo greenstone belt is intruded by granodiorites of the Heron Bay Pluton and the Cedar Lake Pluton and phases of post-Archean diabase dykes. The rock units of the Hemlo greenstone belt have an easterly strike with steep to vertical dips. The Hemlo greenstone belt differs from some of the other nearby greenstone belts in its small percentage of, or lack of, ultramafic rocks.

The supracrustal rocks in the Hemlo greenstone belt are multiply deformed with large scale folds and shear zones with two main structural stages recognised. There are several east-westerly trending shear/fault zones in the region, the major ones being the Lake Superior shear zone and the Hemlo fault zone, which may be joined. The main mineralisation of the Hemlo Gold Deposit is associated with this fault system. Regional metamorphism ranges from lower greenschist facies in the western side of the greenstone belt to upper amphibolite facies in the eastern side of the greenstone belt.





West of the Hemlo deposit, the greenstone belt is composed predominantly of volcanic units, whereas towards Hemlo, there is an increasing abundance of sedimentary rocks (Muir, 1982).

In the immediate area of the Hemlo deposit, sediments have been interpreted to occur in a Timiskaming-type environment at 2690 Ma (Jackson et al., 1998). Late granitoid rocks have intruded the supracrustal rocks. These units include discordant granodiorite plutons such as the Cedar Lake Pluton (2688 Ma) and the Cedar Creek Stock (2684 Ma, Corfu and Muir, 1989), both located north of the Hemlo deposit. The Heron Bay Pluton (2688 Ma; Corfu and Muir, 1989) intrudes metavolcanic rocks southwest of Hemlo. The Gowan Lake Pluton (2678 Ma; Corfu and Muir, 1989) is a crescentic pluton at the northern boundary of the Hemlo-Heron Bay segment with the Black Pic Batholith. At the Hemlo deposit, numerous dykes of feldspar porphyry (2677 Ma; Davis, 1998) intrude the rocks. Proterozoic diabase dykes cut all rocks throughout the belt (Caldbick 2017).

Structurally, the first major deformation of the area (D1) resulted in the development of a penetrative foliation defined by medium-grade metamorphic minerals and a few map scale folds. The second major phase of deformation (D2) resulted in map scale folding of the D1 fabric and possibly some of the metamorphic zones (Muir et al., 1999). D1 affected rocks older than 2688 Ma while D2 affected rocks older than 2675 Ma (Jackson et al., 1998). Consequently, both the greenstone and the older granitoid bodies (e.g. Pukaskwa Gneissic Complex) were deformed together during D1 and D2, forming a relatively open synclinorium with complex internal structural patterns (Muir et al., 1999). Westward plunging linear structures and westward decreasing metamorphic grade indicate that Archean crustal depth increases eastwards. Numerous feldspar porphyry dykes intrude throughout the area and Proterozoic diabase dykes cut all rock types.

# 7.2. GEOLOGY OF THE NORTH HEMLO PROPERTY

The North Hemlo property is located in the *north limb* of the Hemlo greenstone belt (Jackson, 1998). Price (2008) reported that the volcano-sedimentary rocks occur in an antiformal pattern. The rocks to the east strike at an azimuth of  $\sim 110^{\circ}$  and the rock units to the west of the property trend to the southwest with an azimuth of  $\sim 230^{\circ}$ . Cross-cutting structures on northeast and northwest trends have been interpreted (Figure 8). The supracrustal volcano-sedimentary rocks originally composed of basalts, intermediate volcanic rocks, porphyritic intrusions, fragmental and sedimentary rocks have undergone amphibolite-grade metamorphism. The supracrustal rocks have been intruded by granitoid stocks and are sandwiched by the Musher Lake Pluton to the south and the Dotted Lake Batholith to the north. The Musher Lake Pluton is poorly exposed but appears to consist primarily of tonalite with minor, widely distributed dioritic enclaves. A preliminary U-Pb age of 2679 Ma was obtained from tonalite in this area. The Dotted Lake Batholith is dominated by a single, megascopically homogenous, biotite leuco-tonalite to leucogranodiorite. A sample selected from the interior of the batholith yielded a U-Pb zircon age of approximately 2697 Ma (Jackson, 1998).

Price (2008) described the area to consist of metamorphosed mafic, intermediate, and felsic volcanic and sedimentary rocks, referencing amygdaloidal and pillowed flows with minor interbedded tuff and tuff breccia, and amphibolite. Intermediate to felsic volcanic rocks, massive rhyodacite, rhyolite,



porphyritic units with quartz eyes with sericitic alteration, flows of interbedded crystal tuff, conglomerate, lithic wacke, arenites, shale, and graphitic shale were noted (Price, 2008).

In the eastern part of the property, in the Theresa Lake area, Price (2008) describes mafic meta-volcanic rocks consisting of pillowed basaltic flows, which grade into fine-medium and then coarse-grained amphibolites. Pillow lavas, interflow sediments, tuff, and iron formation are intermixed within the mafic flow. A calc-silicate unit intermixed with felsic to intermediate flows and pyroclastic rocks overlies the mafic volcanics. This sequence grades into a thick succession of metasediments, consisting of conglomerates and greywacke.

Outcrops are scarce in the property area. Lithologies identified on the North Hemlo property during field work were mostly gneisses in amphibolite metamorphic facies. Amphibolitic gneisses grade into amphibolite and into meta-graywackes, depending on hornblende content. Gneisses show common lit-par-lit texture, and near contact to granitoid stocks seems to be gradual, turning to massive and migmatitic, and meanwhile granitoids are gneissose. It was not possible to identify primary features as are described in other part of the greenstone belt, due to strong deformation and higher metamorphic grade. Rocks have undergone different deformation stages and are partially isoclinally folded.

## 7.3. MINERALISATION

The limited exploration work completed to date has not located any significant gold or polymetallic mineralisation on the Property. The interpreted relationships of rock types, structures and intrusives are poorly understood due to the paucity of ground exploration and overburden cover. However, the limited exploration by FCM, supported by the historic exploration, has indicated that the mineralisation models being followed have merit: the Hemlo deposit / model is a shear hosted, gold dominant polymetallic deposit, with some controversy as to whether it is stratiform or stratabound, possibly a gold rich VMS derivative.

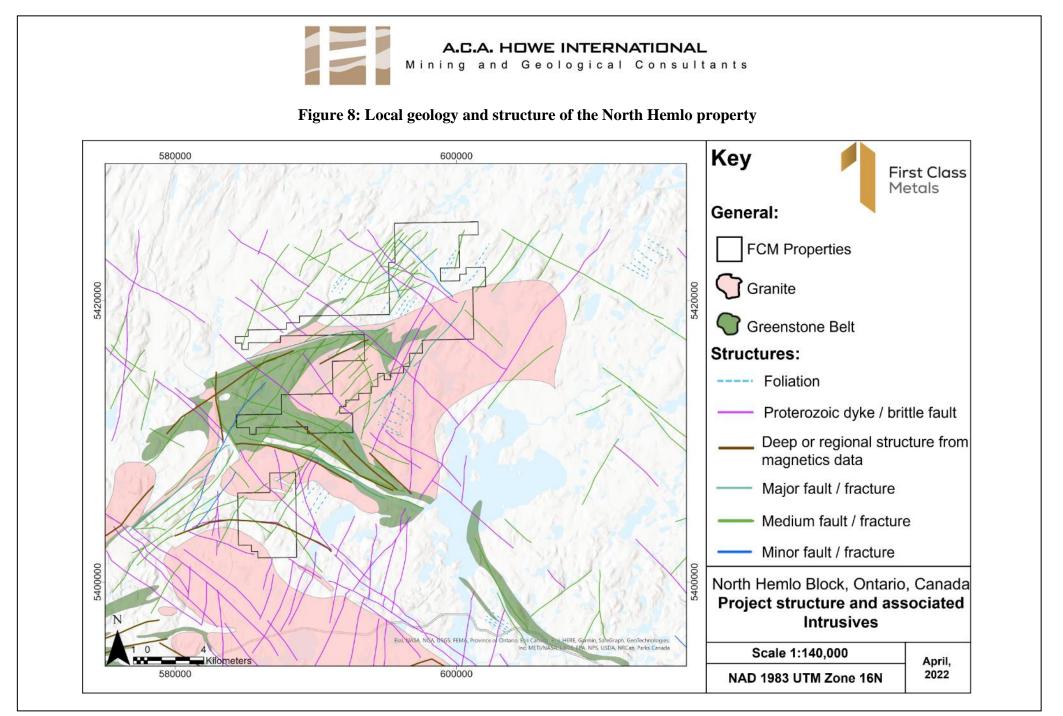
A 1984 report on exploration on the North Hemlo property states:

"a zone of quartz veins and porphyry dykes conformable to mafic shear planes which returned up to 3.1 g/t Au and 0.59% MoS<sub>2</sub> and was stripped for 400 feet along strike. Soil geochemical anomalies up to 23 ppb Au were obtained in this area, as well as northwest-southeast-trending electromagnetic anomalies", (Page, 1984, file 42C13SW0142).

Other mineralisation on the Property could be interpreted as having potential for the Tyko (polymetallic – base metal) style mineralisation is recorded:

"Prospecting resulted in the discovery of a main copper occurrence and possible parallel zones, subsequently targeted by a series of trenches. The government MDI describes the main occurrence as a narrow (40-60 cm) zone of sulphide mineralization hosted within mafic metavolcanic rocks, possibly representing a narrow, interflow iron formation. It returned up to 5700 ppm Cu. Stripping 20 m southwest of the main zone exposed similar copper-bearing rocks, suggesting a second, subparallel zone (MDI42C13SE00014)."





#### 8. DEPOSIT TYPES

#### 8.1. HEMLO DEPOSIT TYPE

The mineralogy of the Hemlo deposit is not 'typical' of many shear zone-hosted orogenic/ mesothermal gold deposits in that the gold mineralisation is accompanied by significant amounts of base metal and there is close association with an apparent syngenetic(?) zone of barite-rich rock. Therefore, the data suggests that the Hemlo mineralisation may have originated as a precious metalrich VMS deposit that has been successfully changed by subsequent deformation and remobilisation. This has been seen elsewhere in the Abitibi (e.g. Akasaba, Sigma district) (Starling, 2021).

The following Hemlo Deposit Overview is based upon a paper on the geology and gold deposits of the Hemlo area (Muir et al., 1995).

The Hemlo deposit lies at or near the contact between felsic to intermediate quartz-feldspar-phyric rocks and clastic sedimentary rocks on the south arm of the Heron Bay Sequence. The ore zones are enclosed by intermediate to felsic lapilli tuff which is underlain by massive rhyodacite and quartz-eye felsic crystal tuff. The hanging wall consists of siltstone, argillite, conglomerate and minor felsic tuff which have been described as pyroclastic subvolcanic and metasedimentary rocks. The rocks generally strike between 290-295° and dip between 60 and 70° to the northeast. Evidence has been presented that the Hemlo Deposit occurs within a major ductile, dextral shear zone. The authors concur that the deposit is largely hosted within a 290° striking strained, transposed and juxtaposed lithotectonic supracrustral divisions which lie in a generally east-west striking greenstone belt.

The deposit itself has not been proven to be stratiform or stratabound as earlier workers suggest but may prove to be more related to brittle-ductile shear zones. Underground mapping has confirmed the existence of parallel mineralised zones within both the metavolcanic and metasedimentary rocks as well as mineralised zones which crosscut the metavolcanic-metasedimentary contact. Alteration, collectively, is in the form of varying degrees of microclinitisation, sericitisation, silicification, carbonatisation, albitisation, pyritisation and tourmalinisation. Significant amounts of barite, green vanadian muscovite and molybdenite are common in the altered rocks.

Over the course of the last 30 years, since the discovery of the Hemlo Deposit, several metallogenic models have been postulated. Earlier workers favoured syngenetic, exhalative models in which mineralisation was penecontemporaneous with volcanism. Later workers proposed a porphyry deposit model and a skarn model though the earliest observations in the Hemlo camp suggested a close relationship between regional structure, local faults and shear zones, porphyries, alteration and gold mineralisation.

There is in addition, some debate as to the timing of gold mineralisation relative to deformation events and this may be resolved, it has been suggested, by earlier workers comparing features related to different deformation and/or alteration and metamorphic events. It has been further noted that the deposit may have been affected by at least two generations of structural events. In reviewing the various Hemlo genetic models, that more recent research and evidence led to the recognition of features



which tend not to favour the earlier syngenetic models but more strongly support ore deposition by hydrothermal fluids within or near a ductile shear zone which occurs within the Hemlo deposit, however, neither a temporal association between the mineralising event and the porphyritic intrusions and/or ductile shearing has been confirmed. Neither, indeed, has it been established whether the deposit formed prior to regional metamorphism, pre or syn-metamorphism or post-metamorphism (Muir, Schneiders and Smyk, 1995).

Over the past 30 years since the discovery of the Hemlo deposit, various genetic models have been proffered, none of which have adequately addressed all the complexities of the Hemlo deposit. Undoubtedly, a combination of these models may indeed be the case as the Hemlo deposit certainly lends itself to a unique deposit not one conforming to one genetic model.

# 8.2. OROGENIC, MESOTHERMAL DEPOSIT TYPE

The other significant deposit in the region is the Sugar Zone deposit which is interpreted as an orogenic, mesothermal gold deposit in a zone of high strain within the Belt. The deposit is hosted in mediummetamorphic grade (amphibolite) rocks that exhibit ductile deformation and have been intruded by felsite and porphyry sills. The gold is associated with silica-sulphide-potassic alteration.

Other styles of mineralisation reported in the area are described below.

# 8.3. BATHOLITH CONTACT ZONE TYPES

# 8.3.1. GOLD MINERALISATION

Gold mineralisation, with minor silver, molybdenum and copper mineralisation, is associated with the Terrace Bay Batholith and other granitoid rocks in the area. Mineralisation occurs in sulphide-bearing quartz (+carbonate) veins hosted within altered mafic and felsic metavolcanics rocks and in altered granitoid rocks adjacent to the veins. Veins are often associated with faults, fractures and shear zones.

The veins are typically straight, with sharp contacts and occur in parallel sets and in "stockwork" arrangements. Patterson et al. (1985) suggest the veins formed as a result of contact metamorphism of the country rock in a metamorphic-hydrothermal system. The quartz veins are white and glassy varying from cm to m scale. Mineralisation consists of pyrite, pyrrhotite, magnetite, chalcopyrite, galena, molybdenite, chalcopyrite, tellurides, graphite, silver and gold. Accessory minerals include sericite, chlorite, carbonate, epidote and hematite. Molybdenite, chalcopyrite, silver and gold are found within the altered host rocks.

# 8.3.2. COPPER – MOLYBDENUM MINERALISATION

This type of mineralisation may represent a sub-type of the gold-bearing veins associated with batholith contact zones. The copper-molybdenum bearing veins are predominantly hosted in metavolcanics and occur in quartz veins, quartz-feldspar offshoots and aplitic and pegmatitic dykes. The veins are lenticular and discontinuous, displaying a banded, laminated or crack-seal texture.



Mineralisation consists of chalcopyrite, molybdenite, pyrite, pyrrhotite, silver and minor gold. Accessory minerals include chlorite, carbonate, sericite and hematite. Alteration of the host rocks includes sericitisation, silicification and hematisation. A magmatic-hydrothermal system is suggested by Patterson et al. (1985) for the origin of the copper-molybdenum veins.

# 8.4. SHEAR-HOSTED GOLD AND BASE METALS

Gold mineralisation occurs in quartz and carbonate veins within shear zones, fractures, cleavage dilation zones and in strained rocks surrounding plutons throughout the greenstone belt. These deposits are described as structurally controlled and related to predominantly northwest/southeast striking shear zones. Mineralisation occurs in the shear zones and in silicate and carbonate-altered haloes adjacent to the veins. The metavolcanic-metasedimentary (and BIF in some locations) host rocks have undergone sericitisation, silicification and carbonisation. The gold is associated with silver, copper, zinc, lead and molybdenum and multiple phases of veins are present. It is also noted from descriptions of the occurrences that quartz veins commonly occur along contacts of felsic dykes and the metavolcanic rocks. There also appears to be an association of shear zone-hosted mineralisation and quartz and/or feldspar porphyritic felsic dykes. These dykes are abundant around Schreiber and northwest of the Terrace Bay Batholith but are uncommon elsewhere in the greenstone belt.

# 8.5. ZINC-LEAD-SILVER VEINS TYPE

Zinc, lead, and silver mineralisation (with minor copper and gold) is associated with north- to northeast-striking faults near Schreiber and concentrated within narrow carbonate and quartz veins within metavolcanic and metasedimentary rocks. Mineralisation occurs as massive sulphides in irregularly shaped veins, and in sulphide-bearing quartz veins. Mineralisation generally consists of massive sphalerite and galena, with minor chalcopyrite and gold mineralisation. Accessory minerals include quartz, epidote, chlorite, sericite, and ankerite.

# 8.6. GOLD AND BASE METALS ASSOCIATED WITH BIF

Gold and base metal mineralisation is often associated with Algoma-type banded iron formation (BIF) and related chemical clastic sedimentary rocks. Both oxide and sulphide iron formations are interlayered with sedimentary and volcanic rocks. Sulphide-mineralised rocks occur near and along the upper contact of the metavolcanic rocks (circa 2.720 Ga). The host rocks to mineralisation are sulphide-facies iron formation and chert, interbedded with felsic volcaniclastic rocks and garnet-bearing mafic metavolcanic rocks.

# 8.7. PORPHYRY CONTACT ZONE TYPE

Gold mineralisation with subsidiary silver, zinc, copper, lead, and molybdenum occur in quartzcarbonate veins and are spatially associated with felsic porphyries and hosted by a variety of rock types. Gold and base metal mineralisation is associated with quartz and/or carbonate veins near the more extrusive phases of the porphyry, suggesting a remobilised, syngenetic exhalative origin. Copper,



molybdenum, and variable gold mineralisation is associated with lower levels of the porphyry, suggesting an epithermal magmatic origin.

## 8.8. VOLCANOGENIC MASSIVE SULPHIDE DEPOSITS

It is worth mentioning the VMS style of mineralisation given the discussion over the Hemlo style of mineralisation as well as the prevalence of VMS deposits in the grater Superior geological Province Volcanogenic massive sulphide (VMS) deposits, also known as volcanic-hosted massive sulphide, volcanic-associated massive sulphide, or seafloor massive sulphide deposits, are important sources of copper, zinc, lead, gold, and silver (Cu, Zn, Pb, Au, and Ag). These deposits form at or near the seafloor where circulating hydrothermal fluids driven by magmatic heat are quenched through mixing with bottom waters or porewaters in near-seafloor lithologies. Massive sulphide lenses vary widely in shape and size and may be pod like or sheet like. They are generally stratiform and may occur as multiple lenses.

Massive ore in VMS deposits consists of >40 percent sulphides, usually pyrite, pyrrhotite, chalcopyrite, sphalerite, and galena; non-sulphide gangue typically consists of quartz, barite, anhydrite, iron (Fe) oxides, chlorite, sericite, talc, and their metamorphosed equivalents. Ore composition may be Pb-Zn-, Cu-Zn-, or Pb-Cu-Zn-dominated, and some deposits are zoned vertically and laterally.

Many deposits have stringer or feeder zones beneath the massive zone that consist of crosscutting veins and veinlets of sulphides in a matrix of pervasively altered host rock and gangue. Alteration zonation in the host rocks surrounding the deposits is usually well-developed and include advanced argillic (kaolinite, alunite), argillic (illite, sericite), sericitic (sericite, quartz), chloritic (chlorite, quartz), and propylitic (carbonate, epidote, chlorite) types.

An unusual feature of VMS deposits is the common association of stratiform "exhalative" deposits precipitated from hydrothermal fluids emanating into bottom waters. These deposits may extend well beyond the margins of massive sulphide and are typically composed of silica, iron, and manganese oxides, carbonates, sulphates, sulphides, and tourmaline.



## 9. EXPLORATION

FCM has completed GIS compilation and target generation, and two early-stage prospecting visits in 2021. In addition, ACA Howe geoscientists completed additional prospecting and sampling in the North Hemlo property (as well as other claim blocks owned by FCM) in August 2021. The results and interpretation of this work are described in Section 12.

## 9.1. GIS COMPILATION AND TARGET GENERATION

In January 2021, FCM geoscientists completed a comprehensive search and compilation of the available historical data in order to guide future exploration programmes. The work included the following:

- Detailed reviews of historical assessment reports in the area.
- Maps showing previous work were georeferenced and relevant data were digitised as separate layers.
- Layers for claim holdings, surface features, topography, satellite imagery, government mapping, mineral occurrences and airborne geophysics were included as separate layers.
- Known deposits and their alteration haloes were digitised to act as a target template.

From the above, FCM geoscientists interpreted the major lithological units, dykes, faults, structural blocks and potential shear zones in the area. These features were used to target the early-stage prospecting described below.

# 9.2. EARLY-STAGE PROSPECTING

In May 2021, FCM geoscientists completed two visits to the Wabikoba area of the North Hemlo property in order to determine access routes and complete early-stage prospecting. The main rock types encountered and sampled during the visit are shown in Table 3. Nine rock grab samples were sent for analysis by fire assay for gold and ICP for a suite of 38 elements at Activation Laboratories (Actlabs) in Timmins, Ontario. Results are shown in Table 3 (note that only selected elements from the ICP analysis are shown).

	Table 3: May 2021 assay results										
Sample ID	Easting	Northing	Au g/t	Ag ppm	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Rock Type		
542407	588469.58	5412639.9	< 0.005	< 0.2	11	4	< 2	26	Syenite/porphyry		
542408	588816.18	5412642.7	< 0.005	< 0.2	3	1	< 2	8	Mafic volcanic		
542409	588797.95	5412638.6	< 0.005	< 0.2	6	2	3	20	Syenite/porphyry		



	Table 3: May 2021 assay results									
Sample ID	Easting	Northing	Au g/t	Ag ppm	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Rock Type	
542410	588771.75	5412601	< 0.005	< 0.2	37	< 1	< 2	133	Mafic volcanic	
542411	588773.83	5412594.7	< 0.005	< 0.2	54	< 1	2	100	Mafic volcanic	
542412	588794.88	5412640.2	< 0.005	< 0.2	10	2	< 2	5	Quartz vein	
542414	587064.33	5411901.2	0.005	< 0.2	102	< 1	< 2	26	Mafic volcanic	
542415	587007.67	5411788.5	< 0.005	< 0.2	2	1	< 2	7	Quartz vein	
542416	587125	5411144	< 0.005	< 0.2	459	1	< 2	11	Quartz vein/carbonate (?)	

No samples from the early-stage prospecting returned anomalous gold, silver, molybdenum or lead grades, though elevated copper levels were reported from quartz vein / carbonate in sample 542416 and elevated lead grades were reported from mafic volcanic in samples 542411 and 542412. The rock grab samples were taken selectively in areas with the potential for gold mineralisation. There are no other known factors that may have resulted in sample biases. Sample locations are shown on Figure 9.

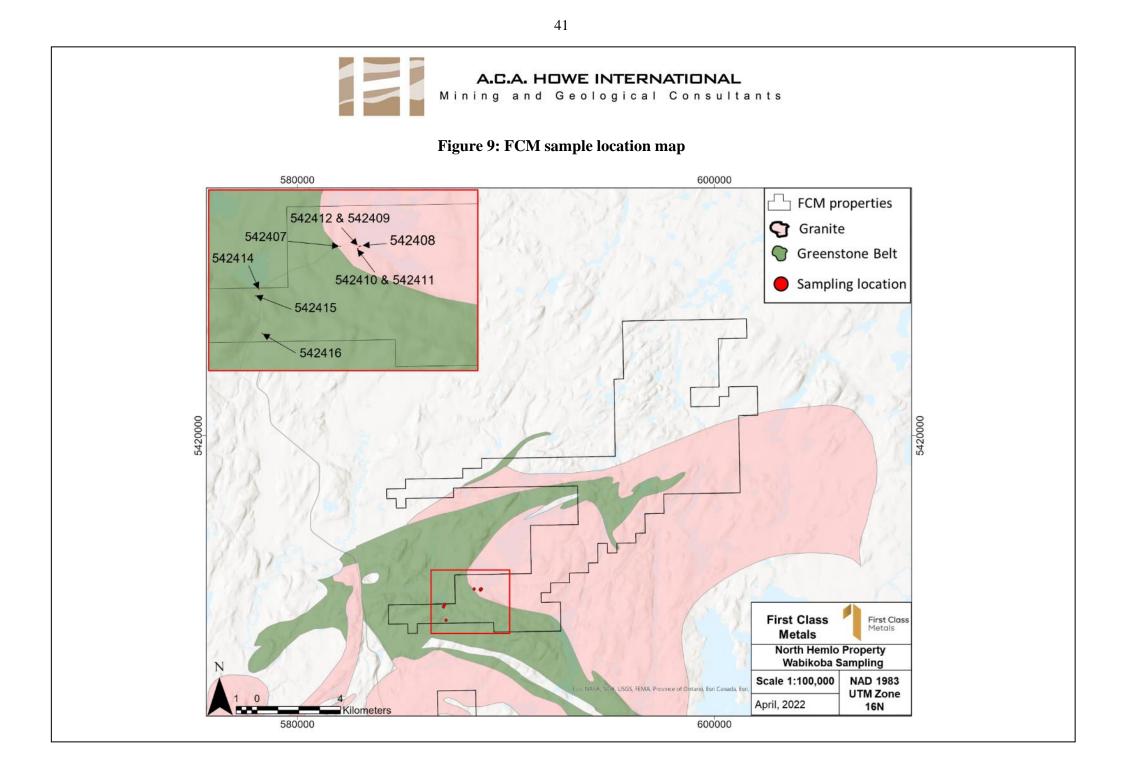
# 9.3. STRUCTURAL INTERPRETATION

In September 2021, Dr Tony Starling of Telluris Consulting completed a desktop structural review of the FCM properties, utilising ALOS 30 m digital elevation data, Landsat TM imagery and regional geophysical data. The data was interpreted at a range of magnifications in order to differentiate regional from local-scale structures. The study resulted in the interpretation of features such as major structures, minor structures, brittle faults, foliation/banding and dykes (features from the interpretation in the area of the North Hemlo property are shown on Figure 8 above). The report by Telluris Consulting (2021) describes the Wabikoba area of the North Hemlo property as follows:

- The area covers the northern part of the North Limb greenstone belt.
- Is traversed by northwest and northeast trending brittle faults and dykes.
- In addition, there is an interpreted major west-northwest trending lineament shown in the regional geophysical data.
- The curvature of the greenstone belt to the west into the north-south to north-northeast structural corridor suggests that the development of high-strain shear zones as splays into this corridor may be present in the southwest of the area.

Since the completion of the study, FCM has acquired the Hemlo North claim block in the centre of the North Hemlo property. The greenstone belt is interpreted to be present in the Hemlo North claim block and is cut by intersecting northeast and northwest trending structures. A sliver of greenstone belt is also shown in the western part of the Pezim 1 claim block in the north of the North Hemlo property.





#### 10. DRILLING

No drilling has been completed by FCM.

## 11. SAMPLE PREPARATION, ANALYSES AND SECURITY

#### **11.1. ONSITE PROCEDURES**

All samples were bagged, labelled and sealed onsite before being transported to Actlabs in Timmins. Sample locations were recorded using a handheld GPS. ACA Howe considers the sampling and sample security measures described by FCM to be sufficient.

## **11.2. LABORATORY PROCEDURES**

Samples were sent for analysis at Actlabs in Timmins and were prepared as follows:

- Samples crushed to 80% passing 2 mm.
- Riffle split 250 g.
- Pulverised to 90% passing 105 microns.

The samples were then analysed using the following methods:

- Gold method 1A2 analysis of 30 g of sample for gold by fire assay with an atomic absorption finish. Detection limits for the method are 5 to 5,000 ppb Au.
- Suite of 38 elements QOP AquaGeo (method 1E3) multi-element analysis using aqua regia extraction on 0.5 g of sample, followed by inductively coupled plasma (ICP) atomic emission spectrometry.

Actlabs is independent of FCM and acts as a service provider as required.

ACA Howe considers the laboratories and analytical methods utilised to be appropriate for the analysis of the samples listed in Section 9.2.

# 11.3. QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

No QA/QC samples were inserted into the sample sequence by FCM. ACA Howe considers this to be acceptable given the early stage of the prospecting.



## **12. DATA VERIFICATION**

#### 12.1. ONSITE DATA VERIFICATION

In late August 2021, ACA Howe's Senior Associate Geoscientists, Bruce MacLachlan and Daniel Rubiolo, completed a prospecting and sampling programme on behalf of FCM, including three days in the Wabikoba area of the North Hemlo property (Wabikoba claim block shown on Figure 3 above) (MacLachlan & Rubiolo, 2021). Several locations were visited in the Wabikoba area, targeting historical showings, prospective geology and magnetic features. A second visit was made to the Esa area in October 2021.

All the work and sample locations were defined using a handheld Garmin GPS. The measurements were plotted using UTM: NAD 83 in Zone 16 metric coordinates. GPS tracks were downloaded daily, saved as separate files by date and type (foot traverse, ATV, truck) and plotted. All samples were routinely entered in an Excel database then imported into MapInfo for reviewing current work and planning future programmes.

A total of 24 rock-grab samples were collected in the Wabikoba area (Figure 10) and were individually bagged and labelled, before being put into rice bags and driven to Actlabs in Timmins. The samples were assayed for gold by fire assay with an atomic absorption or gravimetric finish (method 1A-2 or 1A-3) and multi-element ICP-OES and ICP-MS analysis. Gold and selected ICP assays are shown in Table 4. Two standards and two blanks were included in the sample sequence. Analysis of the QA/QC samples returned acceptable results as follows:

- OREAS standard 229b certified grade of 11.95 g/t Au, reported grade of 12 g/t Au.
- OREAS standard 228b certified grade of 8.57 g/t Au, reported grade of 8.59 g/t Au.
- Two blanks below the detection limit of 5 ppb Au.

Four grab samples (B25806-B25809) were collected in the southwestern part of the property close to MDI showing 42C13SW00009, which is a narrow rusty pyritic shear zone in mafic metavolcanic rocks. Samples consisted of talus float boulders of quartz veins and amphibolitic gneiss with trace pyrite, all returning **<5 ppb Au**.

Three grab samples (B25823-B25825) were collected on the west shore of Dead Otter Lake. These consisted of quartz veins up to 1m wide trending ~070 degrees, with local limonite staining. Only sample B25825 returned gold grades above detection limit (**11 ppb Au**, with **1.96 ppm Ag**, **7.71 ppm Bi**, **1.12 ppm Te** and **386 ppm Cu**).

Eleven grab samples (B25810-B25820) were collected west of Dead Otter Lake close to MDI showing 42C13SW00017, which is a zone of quartz feldspar porphyry dykes and quartz veins conformable to a mafic shear, containing fracture-controlled pyrite, molybdenite and chalcopyrite, historically yielding up to **3.1 g/t Au** and **0.59% Mo**. Samples consisted largely of quartz veins with variable limonite staining and up to 3% pyrite. Only samples B25812 and B25820 returned gold grades above



detection limit (**5 and 7 ppb Au**). Ranges for other elements include 0.09 to 337 ppm Mo, **0.02 to 2.65 ppm Bi**, below detection limit to **0.32 ppm Te**, and **16 to 243 ppm Cr** (B25814).

Six grab samples (B25826-B25831) were collected in the eastern part of the property on the west shore of Theresa Lake, in the vicinity of MDI showing 42C13SE00014, or the 'Theresa Lake Copper' showing, where a series of historical trenches were dug with samples returning up to **3.04% Cu**, **292 ppm Zn**, **153 ppb Au**, and **19.6 ppm Ag**. Sampling from the present programme returned results ranging from below detection limit to **44 ppb Au** (sample B25831 from blast rock consisting of biotite schist with 1% fine pyrite). Samples also returned **0.08 to 1.11 ppm Ag** and 183 to **1590 ppm Cu**.

No samples in the vicinity of MDI showing 42C13SW00017 west of Dead Otter Lake returned anomalous Au, despite historical values up to 3.1 g/t Au being reported. However, samples returned anomalous Mo, which is consistent with historical sampling. This is still a target of merit but will need a larger programme to define the historical zone and attempt to extend it.

# **12.2. SUITABILITY OF THE DATA**

As no significant mineralised zones have been identified by FCM to date, no direct verification of FCM's sample results was completed. Early-stage exploration samples taken independently by ACA Howe did not return significant anomalous results. However, based on the location and lithologies observed during the visit, the North Hemlo property is considered to be prospective for the deposit types described in Section 8. A more extensive, systematic exploration programme is required in order to fully assess the potential of historical showings and other targets.

In addition to the site visit, ACA Howe has reviewed data and reports from exploration completed by FCM and by previous owners and considers it to be suitable for the purposes used in this report.



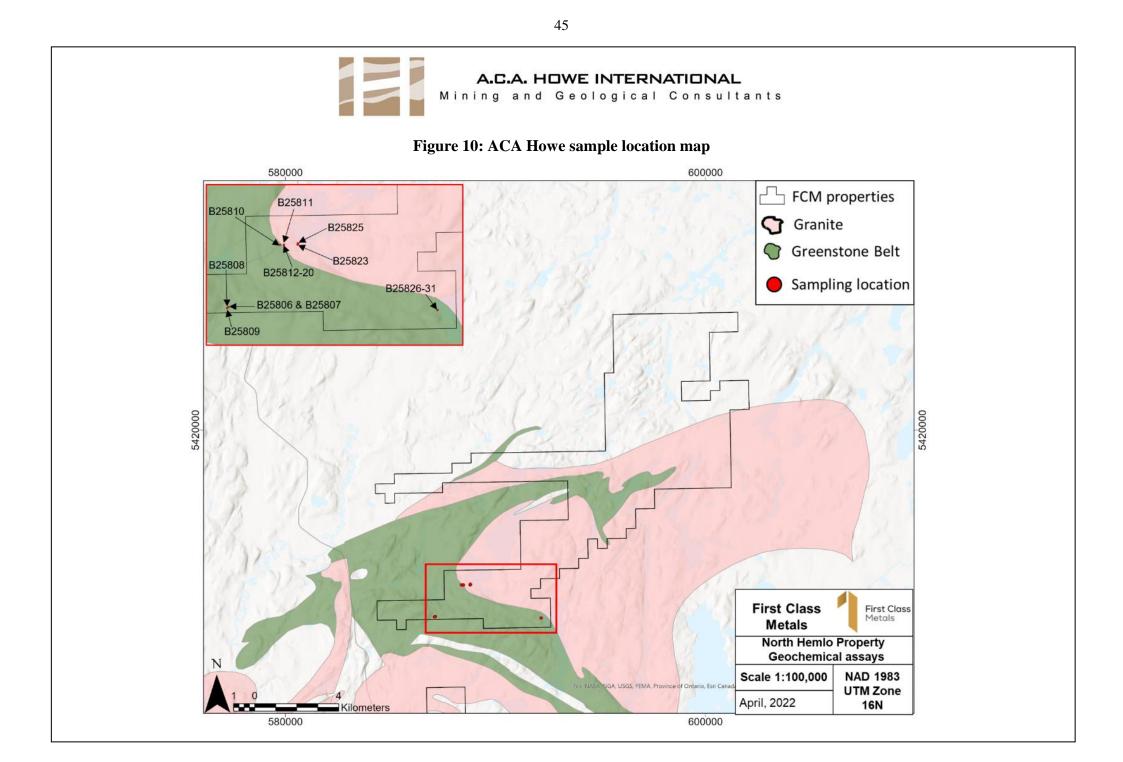


					Table	4: Augu	st 2021 s	sample r	esults a	and descripti	ons	
Sample ID	Claim Cell	Easting	Northing	Au ppb	Ag ppm	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Rock Type	Description	Source
B25806	593733	587142	5411136	<5	<0.01	2.4	1.42	0.7	5	Quartz Vein	Glassy quartz veinlet in subangular talus boulders of mafic, biotite amphibolitic schist (some smoky quartz).	Talus Float
B25807	593733	587142.2	5411136.2	<5	0.08	172	0.67	1.6	79	Quartz Vein	Smokey quartz veinlet in mafic, amphibolitic schist (actinolite?), trace pyrite.	Talus Float
B25808	593732	587103	5411114	<5	0.03	69.8	0.83	1.0	14	Quartz Vein	Talus boulders, 2 m size, quartz vein 0.1 m wide, grey, sugary, trace pyrite.	Talus Float
B25809	593732	587096	5411110	<5	0.12	19.5	0.24	2.6	125	Gneiss	Amphibolitic gneiss, weakly sheared, 1 mm quartz rusty augen in massive, green amphibolite, trace pyrite.	Talus Float
B25810	563489	588384	5412638	<5	0.06	48.1	0.24	1.5	78	Gneiss	Quartz augen, dark coloured gneiss, up to 1% pyrite along gneissosity 160/45 E, white quartz vein, banded w/sugary texture, 0.2 m sheared at hanging wall.	Outcrop
B25811	563489	588469	5412640	<5	0.03	21.7	0.09	3.0	81	Diabase	Gabbro, pyrrhotite 0.05%, plagioclase, magnetic, ophitic texture.	Outcrop



	Table 4: August 2021 sample results and descriptions											
Sample ID	Claim Cell	Easting	Northing	Au ppb	Ag ppm	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Rock Type	Description	Source
B25812	563489	588468	5412625	7	0.02	10.2	5.75	0.3	<2	Quartz Vein	White glassy quartz vein striking 110 degrees. Host rock massive mafic meta- greywacke gneiss, crystaloblasts of possible cordierite, gneissosity striking 150 degrees.	Outcrop
B25813	563489	588469	5412625	<5	0.17	36.5	12.6	0.8	19	Quartz Vein	Glassy to yellowish quartz, hematite, pyrite 0.5% cubic crystals.	Outcrop
B25814	563489	588469.5	5412624.9	<5	0.28	128	22.0	14.0	102	Quartz Vein	Grey quartz, biotitic rock, sheared, trace pyrite.	Outcrop
B25815	563489	588470	5412625.2	<5	0.01	4.0	58.6	0.4	5	Quartz Vein	White glassy quartz (limonite staining).	Outcrop
B25816	563489	588470.5	5412624.7	<5	0.26	54.0	69.7	0.4	6	Quartz Vein	Quartz, vuggy, trace pyrite, trace arsenopyrite, tourmaline, in glassy quartz, white to orange quartz vein in mafic gneiss host rock.	Outcrop
B25817	563489	588470.5	5412625.16	<5	0.03	5.1	106	0.2	8	Quartz Vein	White quartz, sugary, banded biotitic host rock, trace pyrite, biotite layers, ribbon texture, limonite staining.	Outcrop

					Table	4: Augu	ist 2021 s	sample r	esults a	and descripti	ons	
Sample ID	Claim Cell	Easting	Northing	Au ppb	Ag ppm	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Rock Type	Description	Source
B25818	563489	588471.1	5412624.73	<5	0.08	16.6	337	0.2	14	Quartz Vein	White glassy quartz.	Outcrop
B25819	563489	588471.5	5412624.4	<5	0.12	117	8.00	0.6	3	Quartz Vein	White grey-glassy Quartz, up to 3% pyrite, limonite staining.	Outcrop
B25820	563489	588472.2	5412623.97	5	0.39	101	16.2	0.2	35	Quartz Vein	White sugary quartz w/bands of biotite in host rock.	Outcrop
B25821	261773	522506	5407878	<5	0.09	13.9	0.79	11.6	81	Mafic Schist	Biotite mafic schist, good foliation, trace pyrite, magnetite and pyrrhotite 1%, foliation 260/85 NW.	Outcrop
B25822	261774	522824	5407362	6	0.06	127	0.14	2.5	90	Mafic Schist	Biotite schist, good foliation, magnetite + pyrrhotite 1%, trace pyrite, foliation 300/85 NE.	Outcrop
B25823	563491	588796	5412639	<5	<0.01	15.7	1.30	<0.5	<2	Quartz vein	White quartz vein, massive glassy, 1 m wide, 060/80 SE, parallel to sheeted quartz veins.	Outcrop
B25824	563491	588821	5412660	<5	<0.01	3.1	1.58	<0.5	<2	Quartz vein	White quartz, 0.1 m wide, folded lenticular vein, axial plane of folds 090 degrees (along shore of Dead Otter Lake).	Outcrop



	Table 4: August 2021 sample results and descriptions											
Sample ID	Claim Cell	Easting	Northing	Au ppb	Ag ppm	Cu ppm	Mo ppm	Pb ppm	Zn ppm	Rock Type	Description	Source
B25825	563491	588799	5412677	11	1.96	386	1.92	1.9	<2	Quartz vein	White quartz w/ limonite, ochre-orange colour, 0.6 m wide, 070 degrees (at shore lake).	Outcrop
B25826	563472	592171	5411064	<5	0.16	465	0.20	2.1	86	Biotite Schist	Outcrop, foliated, fine grained, mafic schist, 1% pyrite, rusty.	Outcrop
B25827	563472	592173	5411066	<5	0.08	183	0.26	2.2	81	Biotite Schist	Blast rock located 2 m northeast of B25826.	Outcrop
B25828	563472	592174	5411065	9	0.17	510	2.00	4.3	54	Biotite Schist	Blast rock, sericite alteration, pyrite- pyrrhotite 2%, located 1 m southeast of sample B25827.	Outcrop
B25829	563472	592177.5	5411067	8	0.69	1590	0.85	5.2	31	Biotite Schist	Blast rock, fine grained, magnetite, located 2 m northeast of sample B25830.	Outcrop
B25830	563472	592175.5	5411065	<5	0.43	874	0.59	3.9	41	Biotite Schist	Blast rock, rusty, fine grained, located 1.5 m east of sample B25828.	Outcrop
B25831	563472	592181	5411065	44	1.11	1550	0.69	2.1	81	Biotite Schist	Blast rock, fine grained, pyrite 1%, located 10 m east of sample B25826.	Outcrop



## 13. MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical testing has been completed by FCM.

### 14. MINERAL RESOURCE ESTIMATES

No mineral resources have been identified by FCM.

## **15. MINERAL RESERVE ESTIMATES**

No mineral reserves have been identified by FCM.

# 16. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

It is understood that FCM is in the process of applying for Exploration Permits (see Section 4). As part of this process the designated activity will be advised to the local Indigenous Community by the MLAS. ACA Howe is advised that FCM is in the process on engaging a liaison officer to communicate directly with the three First Nations Communities whose Traditional lands cover the North Hemlo property.

## **17. ADJACENT PROPERTIES**

The North Hemlo property is contiguous to several exploration properties (Figure 11) and is only 15 km north of Barrick's multimillion ounce Hemlo mine and 70 km west of the Harte gold mine. These operating gold mines are described below although they are not contiguous to the North Hemlo property. The Hemlo to North (limb) Hemlo Harte / Sugar Zone area is considered to be prospective for both shear hosted / orogenic gold occurrences as well as nickel (PGE) Voisey style mineralisation and possibly VMS style deposits.

## **17.1. BARRICK HEMLO MINE**

The rocks hosting the Hemlo Gold Deposit are highly deformed Archean metasedimentary rocks, felsic igneous rocks, and to a lesser extent, heterolithic mafic fragmental rocks. Multiple horizons collectively form a thin (5 to 50 m wide) and tabular (~3 km long by >2 km deep) orebody, that dips steeply ( $60^{\circ}$  to  $70^{\circ}$ ) to the northeast. The wedge-shape thickens from east to west corresponding to a general decrease in the average grade. In longitudinal section, the deposit shows a moderate plunge to the west and a horseshoe shape near the surface. Surface exposure of the ore is minor. The two principal ore zones (Main and Lower) are neither stratabound nor stratiform (Muir, 2002). The ore is shear hosted and consists primarily of disseminated native gold in several mineralised zones near the contact between quartz-feldspar porphyry and metasedimentary rocks. Metasedimentary rocks (pelite,



greywacke, arenite, marl, mafic fragmental rocks, and baritic sediment) host most of the ore. Ore types are potassium-feldspar-, muscovite- or barite-rich with 1-5% disseminated pyrite and up to 2% molybdenite (average ~0.16% at Golden Giant). The main high grade ore zone is often characterised by its blue colour due to the presence of significant amounts of barite. It is unclear whether the barite is originally sedimentary.

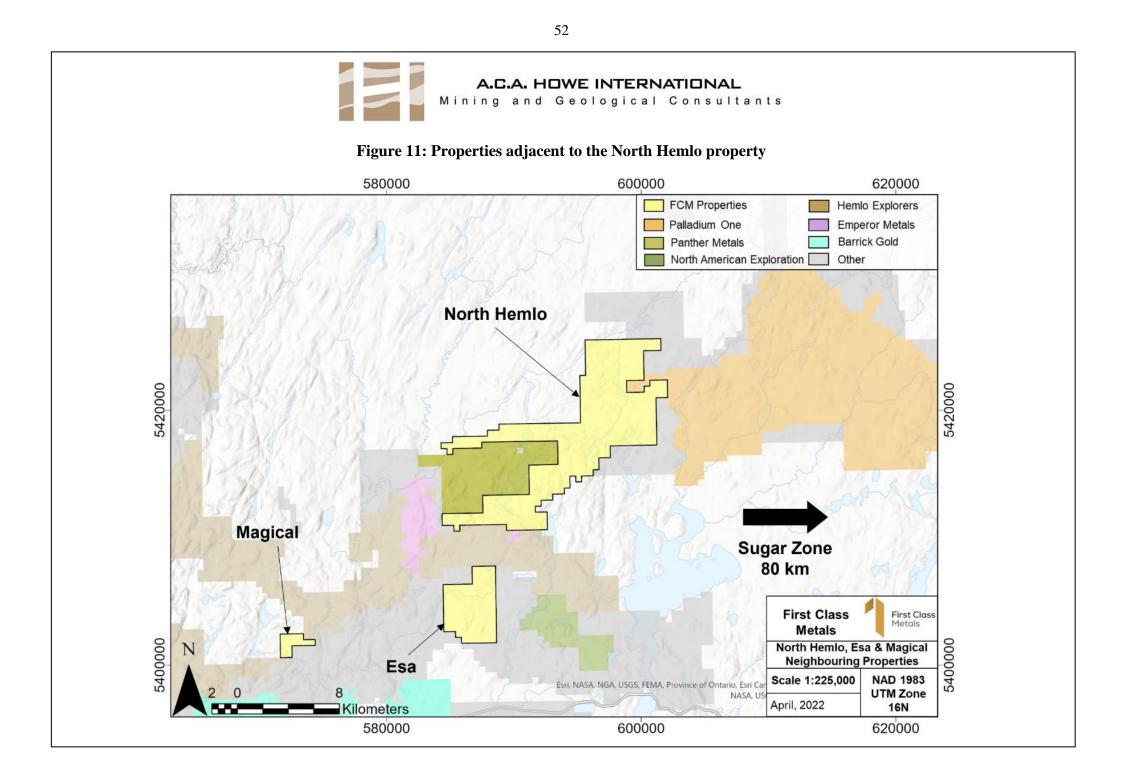
Operations at the Hemlo Mine have produced over 21 million ounces of gold to December 2016, having been in operation continuously for more than 30 years. Past underground production came from Williams, Golden Giant, and David Bell underground mines stretching over a length of two kilometres and a vertical distance of approximately 1,500 m below surface. Golden Giant and David Bell mines are now closed. Underground Mineral Reserves at the Williams Mine were projected to sustain the underground mine operations until 2021 at an average production rate of approximately 3,600 tpd. The Hemlo open pit has been mined since 1989 and has produced over 2.8 million ounces of gold.

The Reserves and Resources of the Hemlo mine (Barrick Gold, 2020) are shown in Table 5.

Table 5: Summary of Resources and Reserves at the Hemlo Mine (2020)								
Category	Gold Ounces							
Proven and Probable Reserves	1.5 MOz							
Measured and Indicated Resources (inclusive of Reserves)	3.3 MOz							
Inferred Resources	900,000 Oz							

ACA Howe cautions that the authors have not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the North Hemlo property.





## 17.2. HARTE GOLD CORP SUGAR ZONE MINE

The Sugar Zone Property is located in the Dayohessarah Greenstone Belt of late Archean (ca. 2.7 Ga) age that is part of the Abitibi-Wawa Subprovince of the Superior Province. The belt is approximately 36 km in length and varies in width from 1.5 to 5.5 km. Principal lithologies in the belt are moderate to highly deformed metamorphosed volcanic, volcanoclastic and sediments that have been enclosed and intruded by tonalitic to granodioritic quartz-porphyry plutons.

The Sugar Zone Mine entered commercial production in 2019 and has an anticipated mine life of approximately 13 years at current production levels. The mine is currently producing from the Sugar Zone North and South areas. Development is underway to the Middle Zone, which will open up a whole new mining area, expected by mid-2021.

Mineral Resource and Mineral Reserves at the Sugar Zone Mine (2020) as shown on the Harte Gold website are shown in Table 6.

Table 6: Sumn	Table 6: Summary of Resources and Reserves at the Sugar Zone Mine (December,2020)								
Mineral Resource Estimate									
	Tonnes (kt)	Grade (g/t Au)	Ounces Au (koz)						
Indicated	2,803	11.87	1,070						
Inferred	1,866	9.45	567						
	Probabl	e Mineral Reserve	•						
	Tonnes (kt)	Grade (g/t Au)	Ounces Au (koz)						
Sugar Zone	1,994	7.59	487						
Middle	1,460	6.62	311						
Total 3,454 7.18 797									
Note: Mineral Resource ounces are inclusive of Mineral Reserve ounces									

ACA Howe cautions that the authors have not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the North Hemlo property.

# **17.3. PALLADIUM ONE**

Palladium One has a large land holding (Tyko property) to the east (and north) of the North Hemlo property. The prospective geology identified on the Palladium One ground is considered to extend onto the Pezim I component of FCM's North Hemlo property, so much so that in September 2021 FCM and Palladium One signed a Joint Venture agreement under which Palladium One has the right to earn 80% of the Pezim I claim block (Section 4 above).



The following is extracted from the Palladium One website:

The Tyko Ni-Cu-PGE Project is located approximately 65 kilometres northeast of the town of Marathon in Ontario, Canada. Tyko is an early stage, high sulphide tenor, nickel-copper (2:1 ratio) project with the most recent drill hole intercepts including **10.1% Ni equivalent over 3.8 metres** (8.1% Ni, 2.9% Cu, 0.1% Co, 0.61 g/t Pd, 0.71 g/t Pt, and 0.02 g/t Au) in hole TK-20-023.

The RJ showing is the nearest drilled prospect to the boundary of FCM's Pezim I claim block and highlighted results are as follows:

- TK-16-006: 13.4 m at 1.03% Ni, 0.55% Cu, 0.75 ppm PGM + Au.
- TK-16-010: 6.2 m at 1.06% Ni, 0.35% Cu, 0.65 ppm PGM + Au.
- TK-16-011: 6 m at 1.47% Ni, 0.49% Cu, 0.71 ppm PGM + Au.

Preliminary results of the recently completed 100 metre spaced 3,100 line-kilometre VTEMmax airborne survey have identified four significant multi-line EM anomalies on the Tyko Copper-Nickel Project. This survey is the largest and most sensitive EM survey ever flown on the Tyko Project. The survey detected the at surface high-grade Smoke Lake zone producing a 600 m (7 line) EM anomaly. In addition, a weak single line EM anomaly successfully detected the RJ zone. This is noteworthy as the RJ zone hosts blebby to locally net textured sulphide and had not been detected by three previous airborne EM surveys. This speaks to the sensitivity of the VTEMmax system and its potential to identify targets that were missed by less sensitive historic EM surveys.

The survey also outlined the **West Pickle Lake Anomaly** which is on the Pezim II claim block, part of the North Hemlo property.

ACA Howe cautions that the authors have not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the North Hemlo property.

## **17.4. PANTHER METALS**

The Panther Metals (Panther) claims sit immediately to the west of the North Hemlo property. Panther acquired the claims in July 2020, the following is taken from the Panther Metals website:

Historic results from the claim block include:

- Gold prospects on the property include results of 23.3 g/t Au over 0.3 m and 9.02 g/t Au over 0.4 m from channel sampling.
- Reconnaissance rock-chip grades of up to 16.95 g/t Au along a 2 km shear zone have been recorded, in addition to anomalous geochemistry for both gold and base-metals.



The historical trench TR-10-4 which is orientated broadly north-south, was constructed to investigate gold in soil anomalies (up to 0.48 ppm Au) from earlier soil sampling in 2008. Tr-10-4 intersected two narrow shear zones containing mineralised granodiorite with up to 10% pyrite, strong sericite alteration and localised quartz eyes. An additional 2010 prospecting sample from the area of Tr-10-4 reportedly returned 16.95 g/t Au and 7.7 g/t Ag.

Panther chip sampling within Tr-10-4 (reported 5<sup>th</sup> November 2020) verified the historical mineralised intervals, returning 18.9 g/t Au & 0.94g/t Ag, and 9.37 g/t Au & 1.73 g/t Ag.

The planned PD-DL21-01 drill hole also coincides with an anomalous magnetic geophysical feature outlined by Panther's airborne magnetic and electromagnetic geophysical survey (results reported 22<sup>nd</sup> February 2021), at the boundary of an intense magnetic low, mapped as a sheared felsic intrusive pluton (Dotted Lake Batholith) contact, abutting an intense magnetic high interpreted to represent an ultramafic intrusive. Mafic volcanic and metavolcanic rocks of the Hemlo Assemblage outcrop to the north of Tr-10-4 and the drill pad.

The planned drilling at Dotted Lake consists of a single NQ (47.6 mm) core hole (PD-DL21-01), planned at 400 m deep, inclined 45 degrees and orientated directly below a 147 m long, average 2 m deep, historical trench (Tr-10-4).

The purpose of the drill hole is to investigate the stratigraphy in the vicinity of interpreted sheared felsic/ultramafic intrusive contacts, whilst testing for the vertical extensions of shear hosted gold mineralisation seen in surface trenching.

ACA Howe cautions that the authors have not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the North Hemlo property.

# **17.5. HEMLO EXPLORERS**

The Hemlo Explorers Inc. 'North Limb' claim block is located immediately south of and contiguous with part of the FCM North Hemlo property.

Hemlo Explorers has recently completed a 10,000 m drilling programme across 20 holes to a depth of around 650 m. A large element of their drilling campaign is within the historic 'Armand Volcanic Trend' which is 250 m to 500 m from the edge of FCM's Wabikoba claim block of the North Hemlo property.

Hemlo Explorers have undertaken several drill programmes on their claims, the highlights from which are shown below (reproduced from the Hemlo Explorers website):

- 22 kilometres of underexplored felsic assemblages in an interpreted thrust fault environment with gold occurrences found in diamond drilling, surface grab and soil samples.
- North Limb rock units, alteration and mineralisation resemble Hemlo Deposit attributes.



- Historical exploration efforts since the Hemlo Deposit discovery in 1981 saw fragmented mining claim ownership with disjointed programmes that lacked modern day surveys and elemental analysis.
- Diamond drill programmes, where assays were submitted for record, did return gold intercepts in felsic to intermediate volcanic horizons and altered sediments similar to that of the Hemlo Deposit setting.
- A recent 3D compilation of all drill data, surface samples, and geophysics have generated target areas for gold mineralisation.

ACA Howe cautions that the authors have not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the North Hemlo property.

## **17.6. EMPEROR METALS**

The Emperor Metals Pine Grove 1,620 ha project area is situated on the western portion of the North Hemlo property. The following highlights are extracted from the Emperor Metals website and online presentation:

Located along a series of major regional structures within the Hemlo-Schreiber Greenstone Belt that hosts the Hemlo Gold Mine (~15 km to the south of Pine Grove) and containing similar host rocks to the Hemlo Gold Mine. Regional occurrences define east-west and north-south mineralised trends No recent exploration activity has been recorded.

ACA Howe cautions that the authors have not verified the information above and notes that the information is not necessarily indicative of the mineralisation on the North Hemlo property.

## 17.7. ONGOLD INVEST

Ongold Invest hold the ground to the northeast of the North Hemlo property. OnGold is a private Irish company. No information on recent exploration on the property is available to ACA Howe.

## 17.8. RYAN KALT

Ryan Kalt is a prospector who holds the ground to the southeast of the North Hemlo property. No information on recent exploration on the property is available to ACA Howe.

## 18. OTHER RELEVANT DATA AND INFORMATION

Not applicable.



### **19. INTERPRETATIONS AND CONCLUSIONS**

The North Hemlo property is underlain by the Hemlo-Schreiber Greenstone Belt which hosts the prolific Hemlo Gold Deposit as well as many other gold, base metal and PGE showings and occurrences. Much of the North Hemlo property has seen very little mineral exploration in recent years and has not been subject to a systematic exploration approach.

On-going forestry logging operations in the vicinity of the North Hemlo property is making access to potential areas of interest much easier than in the past when the Hemlo Gold Rush occurred in the early 1980's. In addition, forestry operations often expose new outcrops and or mineralised float which could be of interest.

FCM may be able to take advantage of more modern exploration methods such as High Resolution Geophysical Surveys, Soil Geochemistry such as Mobile Metal Ion (MMI) and Soil-Gas-Hydrocarbon (SGH) Techniques and others which should help better define target areas of interest on the property.

Project-specific risks and uncertainties with the exploration of the North Hemlo property are as follows:

- There are no known environmental, permitting, legal, taxation, socio-economic, marketing or political risks to the ability to perform the work recommended in Section 20, though the timing of the work could be impacted by delays to permitting.
- The project is at an early stage and no Mineral Resources have been reported by FCM or previous owners of the North Hemlo property. It is not known whether further exploration will result in the reporting of a Mineral Resource.
- Subsequent to the completion of the programme outlined in Section 20, further exploration will be dependent on additional fund raising.



### 20. RECOMMENDATIONS

The North Hemlo property has not been the focus of any concerted exploration efforts but sections of the property have been covered by both focused and district-scale exploration programmes, such as geophysics.

It is therefore recommended that a comprehensive and exhaustive data review and compilation is completed with all data assimilated into a GIS database with georeferencing of all available data. Once this compilation is complete it will allow a more focussed ground reconnaissance of the property to be conducted without repeating previous work.

Whilst this data assimilation will highlight previous 'showings' and prospective geology there will undoubtedly be tracts of the property with no comprehensive exploration or exploration using contemporary methodology to current industry best practice guidelines.

In view of the above the following programme is recommended:

- Compilation of historical data.
- Ground truthing of historical anomalies.
- Systematic traverses of the property especially where regional / district trends cut the property.
- Rock chip / channel sampling of prospective outcrops.
- Soil sampling in areas of prospective 'float'.
- Stripping and sampling as required.
- Drilling of the most prospective 2-3 sites.

NOTE: the proposed work programme also includes geophysics. This may be completed prior to the systematic ground reconnaissance, and if so the field exploration would also ground truth any geophysical anomalies identified.

The budget for the proposed programme is presented in Table 7.



	Table 7: Proposition	sed budget for	the North H	emlo property ir	n 2022	
Work Type	Details	Units	Unit Cost (CAD\$)	Sub-total (CAD\$)	Sub-total by category (CAD\$)	Comments
Labour						
Compilation	Geoscientist	25	\$ 700	\$ 17,500		
	Drafting	50	\$ 80	\$ 4,000		
	Technician (data entry etc.)	10	\$ 350	\$ 3,500		
				\$ 25,000	\$ 25,000	
Labour						
Field	Geoscientist	40	\$ 700	\$ 28,000		Includes prospecting, mapping, soil and trench mapping & sampling, core logging and sampling
	Technician	40	\$ 550	\$ 22,000		
				\$ 50,000	\$ 50,000	
Geophysics						
Field	Drone / Ground Mag	6	\$ 1,500	\$ 9,000		6 days at \$1500/day is all inclusive (labour, travel & report)
				\$ 9,000	\$ 9,000	
Stainning						
Stripping	Back hoe	2	\$ 1,500	\$ 3,000		Mob / de-mob (float each way)
	Back hoe	25	\$ 150	\$ 3,750		Stripping 25hrs @\$150/hr



	Table 7: Proposed b	uuget ioi	une			property n		
Work Type	Details Units Units Unit Cost (CAD\$)		Sub-total (CAD\$)		Sub-total by category (CAD\$)	Comments		
					\$	6,750	\$ 6,750	
Drilling	Drilling (All up coring, mob/de-mob, core boxes etc.)	500	\$	220	\$	110,000		
					\$	110,000	\$ 110,000	
Room & Board								
	Meals & Groceries	80	\$	50	\$	4,000		
	Accommodations	2	\$	4,500	\$	9,000		
					\$	13,000	\$ 13,000	
Travel								
	Mileage	9000	\$	0.80	\$	7,200		
					\$	7,200	\$ 7,200	
Rentals								
	Equipment rentals (rock saws, pump, hose etc.)	10	\$	150	\$	1,500		10 days
	ATV	2	\$	2,500	\$	5,000		2 bikes x 2 months
					\$	6,500	\$ 6,500	
Supplies								
	Diamond blades	2	\$	400	\$	800		
	Supplies (flagging, sample bags, batteries, gas for rock saw, ATV etc).	40	\$	75	\$	3,000		
					\$	3,800	\$ 3,800	
Assays	Grab Sample Analysis	100	\$	50	\$	5,000		



Work Type	Details	Units	Unit Cost (CAD\$)	Sub-total (CAD\$)	Sub-total by category (CAD\$)	Comments
	Soil Sample Analysis	400	\$ 45	\$ 18,000		
	Drill Core Sample Analysis	150	\$ 50	\$ 7,500		
	Sample shipping	1	\$ 1,000	\$ 1,000		
				\$ 31,500	\$ 31,500	
Reporting	Labour	7	\$ 700	\$ 4,900		Assessment quality report
	Drafting	50	\$ 80	\$ 4,000		
				\$ 8,900	\$ 8,900	
	Sub-total				\$ 271,650	
	Contingency		10%		\$ 27,165	
				Total Phase 1	\$ 298,815	



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### 22. DATE AND SIGNATURE PAGE



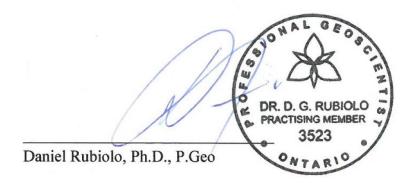
#### **CERTIFICATE OF AUTHOR**

I, Daniel Rubiolo, do hereby certify that:

- 1. I am a Senior Associate geoscientist of, and carried out this assignment for, A.C.A. Howe International Limited Registered Office: The Mill, Pury Hill Business Park, Alderton Road, Towcester, Northants, NN12 7LS, UK.
- I graduated with a *Geólogo* degree from the National University of Cordoba (Argentina) in 1984, and with a *Dr. rer. nat.* degree from the Technical University of Clausthal (Germany) in 1992. I am a practising member of the Association of Professional Geoscientists of Ontario (APGO Licence # 3523).
- 3. I have practiced my profession continuously since graduation. I have been involved in mineral exploration, property reviews and regional geology in Argentina, Canada, Chile, Colombia, Mexico, and Peru. I have experience conducting exploration throughout Latin America and Canada encompassing regional reconnaissance through to drill programmes in various geological settings with base and precious metals, iron, potash, and uranium, including magmatic, hydrothermal, porphyry, VMS, and orogenic gold deposit types in Archean greenstone belts.
- 4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
- 5. I am a co-author and have joint responsibility for Sections 1-22 of the Report titled "Competent Person's Report on the North Hemlo Property in Ontario, Canada", dated 15<sup>th</sup> April 2022 relating to the Property held in Canada by First Class Metals Ltd. I visited the project from August 23<sup>rd</sup> to September 3<sup>rd</sup>, 2021.
- 6. I have had no prior involvement in the North Hemlo property.
- 7. I am independent of First Class Metals Ltd., applying all of the tests in section 1.5 of National Instrument 43-101.
- 8. As of the date of this certificate, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed and I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission to disclose which makes the Report misleading.



Dated this 15<sup>th</sup> April 2022.







# **CERTIFICATE OF AUTHOR**

I, Bruce MacLachlan, do hereby certify that:

- 1. I am a Senior Associate geoscientist of, and carried out this assignment for, A.C.A. Howe International Limited Registered Office: The Mill, Pury Hill Business Park, Alderton Road, Towcester, Northants, NN12 7LS, UK.
- 2. I have been a practising member of the Association of Professional Geoscientists of Ontario (APGO Licence # 1025) since 3<sup>rd</sup> September 2003 and have the designation of P.Geo (Limited).
- 3. I began my career with Noranda Exploration Company Limited in 1983 based out of the Noranda Exploration office at the Hemlo mine site. I have held the position of Geological Technician / Prospector with Noranda, Hemlo Gold and Battle Mountain Gold, Project Manager with CanAlaska Uranium and Exploration Manager with Noront Resources and Rare Earth Metals.

I was a key member of the discovery teams who discovered numerous occurrences including the Eagle River Deposit located near Wawa Ontario (Wesdome), the Sugar Zone Mine north of White River (Harte Gold) and the BAM Gold Deposit north of Armstrong (Landore). I have a wide range of experience involving grassroots to advanced projects and have carried out mineral exploration in Ontario, Quebec, Manitoba, Saskatchewan and Nunavut.

Between 2016 and 2020, I carried out numerous exploration programmes for another junior mining company in the Hemlo Greenstone Belt where I co-discovered a number of new gold showings.

- 4. I do not fulfil all of the requirements to be a "qualified person" for the purposes of NI 43-101 as I have not completed a degree or equivalent qualification in geology. However, I have significant experience in the exploration and assessment of the deposit types and area of Ontario being explored by FCM.
- 5. I am a co-author and have joint responsibility for Sections 1-22 of the Report titled "Competent Person's Report on the North Hemlo Property in Ontario, Canada", dated 15<sup>th</sup> April 2022 relating to the Property held in Canada by First Class Metals Ltd. I visited the project from August 23<sup>rd</sup> to September 3<sup>rd</sup>, 2021.
- 6. I have had no prior involvement in the North Hemlo property.
- 7. I am independent of First Class Metals Ltd applying all of the tests in section 1.5 of National Instrument 43-101.



8. As of the date of this certificate, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed and I am not aware of any material fact or material change with respect to the subject matter of the Report that is not reflected in the Report, the omission to disclose which makes the Report misleading.

Dated this 15<sup>th</sup> April 2022.

LINIFTED MEMBER AGHLAN 5 Bruce MacLachla ON 0 T R A



Appendix 1: Details of claims owned by First Class Metals Canada Inc.



Area	Owner	Number of Claims	Claim Types	Minimum Expenditure (CAD)
North Hemlo property	First Class Metals Canada Inc.	427	427 Single Cell Mining Claims	170,800
Sugar Cube	First Class Metals Canada Inc.	205	205 Single Cell Mining Claims	82,000
Esa	First Class Metals Canada Inc.	86	1 Multi-cell Mining Claim, 85 Single Cell Mining Claims	38,800
McKellar	First Class Metals Canada Inc.	58	<ul><li>9 Boundary Cell Mining Claims,</li><li>49 Single Cell Mining Claims</li></ul>	20,400
Magical	First Class Metals Canada Inc.	14	14 Single Cell Mining Claims	5,600
Enable	First Class Metals Canada Inc.	41	41 Single Cell Mining Claims	16,400
Coco East	First Class Metals Canada Inc.	30	30 Single Cell Mining Claims	12,000



## 585000 590000 600000 595000 First Class 5425000 First Class Metals 5425000 Metals North Hemlo Property Cells Scale 1:60,000 NAD 1983 UTM Zone February 2022 16N 5420000 5420000 5415000 5415000 5410000 5410000 n, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, NRCan, Parks Canada Esri, NASA, NGA, USGS, FEMA, Province of Ontario, Esri Canada, Esri, HERE, Gar Kilometers 590000 585000 595000 600000

#### NORTH HEMLO PROPERTY



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
563456	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563457	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563458	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563459	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563460	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563461	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563462	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563463	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563464	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563465	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563466	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563467	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563468	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563469	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563470	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563471	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563472	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563473	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563474	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563475	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563476	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563477	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563478	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563479	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563480	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563481	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563482	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563483	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563484	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563485	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563486	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563487	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563488	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563489	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563490	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563491	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563492	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563493	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563494	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563495	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563496	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2118
563497	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119
563498	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2119



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
593720	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593721	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593722	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593723	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593724	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593725	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593726	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593727	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593728	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593729	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593730	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593731	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593732	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593733	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
593734	Single Cell Mining Claim	03/06/2020	03/06/2023	400	0.2119
600777	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600778	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600779	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600780	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2116
600781	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600782	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600783	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2116
600784	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600785	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600786	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600787	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2116
600788	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600789	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2116
600790	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600791	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600792	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2116
600793	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600794	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600795	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600796	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600797	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600798	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600799	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600800	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2116
600801	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600802	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117
600803	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2116
600804	Single Cell Mining Claim	24/07/2020	24/07/2023	400	0.2117



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
619200	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619201	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619202	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619203	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619204	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619205	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619206	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619207	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619208	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619209	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619210	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619211	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619212	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619213	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619214	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619215	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619216	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619217	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619218	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
619219	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619220	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2116
619221	Single Cell Mining Claim	16/11/2020	16/11/2022	400	0.2117
621875	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621876	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621877	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621878	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
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621880	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621881	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621882	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621883	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621884	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621885	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621886	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621887	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621888	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621889	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621890	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621891	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621892	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621893	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621894	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621895	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
621896	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621897	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621898	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621899	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621900	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621901	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621902	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621903	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
621904	Single Cell Mining Claim	03/12/2020	03/12/2022	400	0.2117
623956	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623957	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623958	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623959	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623960	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623961	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623962	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623963	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623964	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623965	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623966	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623967	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623968	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623969	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623970	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623971	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623972	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623973	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623974	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623975	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623976	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623977	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623978	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623979	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623980	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623981	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623982	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623983	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623984	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623985	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623986	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623987	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623988	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623989	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
623990	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623991	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623992	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623993	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623994	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623995	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2115
623996	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
623997	Single Cell Mining Claim	12/12/2020	12/12/2022	400	0.2116
624162	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2114
624163	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2114
624164	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2114
624165	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2115
624166	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2115
624167	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2115
624168	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2115
624169	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2115
624170	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2115
624171	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2115
624172	Single Cell Mining Claim	14/12/2020	14/12/2022	400	0.2115
631648	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2115
631649	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631650	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631651	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631652	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2115
631653	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631654	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631655	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631656	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631657	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631658	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631659	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2117
631660	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631661	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631662	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631663	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2117
631664	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631665	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631666	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2117
631667	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631668	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2116
631669	Single Cell Mining Claim	21/01/2021	21/01/2023	400	0.2117
632033	Single Cell Mining Claim	23/01/2021	23/01/2023	400	0.2117
632992	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
632993	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2119
632994	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2119
632995	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2119
632996	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2119
632997	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
632998	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
632999	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633000	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633001	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633002	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633003	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633004	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633005	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633006	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633007	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633008	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633009	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633010	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633011	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633012	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633013	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633014	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633015	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633016	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633017	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633018	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633019	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2117
633020	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.1655
633021	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.1588
633022	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2110
633023	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.2118
633024	Single Cell Mining Claim	30/01/2021	30/01/2023	400	0.1866
634019	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2117
634020	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634021	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634022	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634023	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634024	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634025	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634026	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634027	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634028	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634029	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
634030	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634031	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634032	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634033	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634034	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634035	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634036	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634037	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634038	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634039	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634040	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634041	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634042	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634043	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634044	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2117
634045	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2117
634046	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2117
634047	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2117
634048	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2117
634049	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2117
634050	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2117
634051	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634052	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634053	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
634054	Single Cell Mining Claim	05/02/2021	05/02/2023	400	0.2116
635636	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.1791
635637	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635638	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635639	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635640	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635641	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635642	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635643	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635644	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635645	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635646	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635647	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635648	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635649	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635650	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635651	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635652	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635653	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
635654	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635655	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635656	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635657	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635658	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
635659	Single Cell Mining Claim	07/02/2021	07/02/2023	400	0.2116
637310	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637311	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637312	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637313	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637314	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637315	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637316	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637317	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637318	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637319	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637320	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.0905
637321	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.0942
637322	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2114
637323	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2114
637324	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2114
637325	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2114
637326	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2114
637327	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2114
637328	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2114
637329	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637330	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637331	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637332	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637333	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637334	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637335	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637336	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.0979
637337	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.1016
637338	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637339	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637340	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637341	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637342	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637343	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.2115
637344	Single Cell Mining Claim	15/02/2021	15/02/2023	400	0.1053
640187	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640188	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115



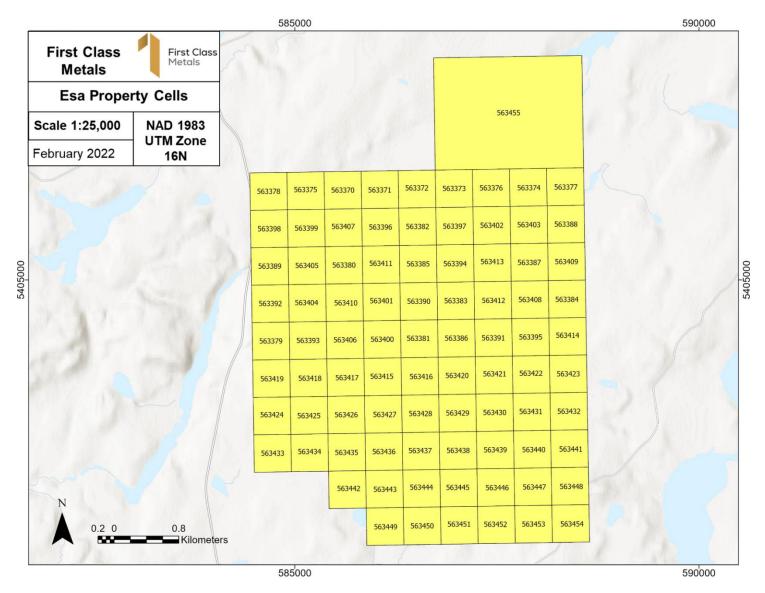
Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
640189	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640190	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640191	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640192	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640193	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640194	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640195	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640196	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2115
640197	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640198	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640199	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640200	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640201	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640202	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640203	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640204	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640205	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640206	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640207	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640208	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640209	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640210	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640211	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640212	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640213	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640214	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640215	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640216	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640217	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640218	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640219	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640220	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640221	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640222	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2113
640223	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640224	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640225	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640226	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640227	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640228	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640229	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640230	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640231	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
640232	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640233	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640234	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640235	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640236	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640237	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640238	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640239	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640240	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640241	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640242	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640243	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640244	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640245	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640246	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640247	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640248	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640249	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640250	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640251	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
640252	Single Cell Mining Claim	02/03/2021	02/03/2023	400	0.2114
677827	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677828	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677829	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677830	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677831	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677832	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677833	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677834	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677835	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677836	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677837	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677838	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677839	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677840	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
677841	Single Cell Mining Claim	23/09/2021	23/09/2023	400	0.2116
702854	Single Cell Mining Claim	27/01/2022	27/01/2024	400	0.2118
702855	Single Cell Mining Claim	27/01/2022	27/01/2024	400	0.2118
702856	Single Cell Mining Claim	27/01/2022	27/01/2024	400	0.2119
702857	Single Cell Mining Claim	27/01/2022	27/01/2024	400	0.2119



#### ESA CLAIM BLOCK





Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
563370	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563371	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563372	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563373	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563374	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563375	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563376	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563377	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563378	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563379	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563380	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563381	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563382	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563383	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563384	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563385	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563386	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563387	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563388	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563389	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563390	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563391	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563392	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563393	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563394	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563395	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563396	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563397	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563398	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563399	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563400	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563401	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563402	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563403	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563404	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563405	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563406	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563407	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563408	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563409	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563410	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563411	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563412	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
563413	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563414	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563415	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563416	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563417	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563418	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563419	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563420	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563421	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563422	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563423	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2121
563424	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563425	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563426	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563427	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563428	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563429	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563430	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563431	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563432	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563433	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563434	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563435	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563436	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563437	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563438	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563439	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563440	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563441	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563442	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563443	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563444	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563445	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563446	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563447	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563448	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2122
563449	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2123
563450	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2123
563451	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2123
563452	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2123
563453	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2123
563454	Single Cell Mining Claim	03/11/2019	03/11/2022	400	0.2123
563455	Multi Cell Mining Claim	03/11/2019	03/11/2022	4800	2.5445



625000 630000 635000 First Class First Class Metals Metals 50633 65063 Sugar Cube Property Cells NAD 1983 Scale 1:45,000 UTM Zone February 2022 16N 65067 5067 5415000 5415000 5410000 5410000 43045 643 43055 6430 4305 N Esri, NASA, NGA, USGS, FEMA, Province of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, 0.25 0 1 Kilometers NPS, USDA, NRCan, Parks Canada 625000 630000 635000

# SUGAR CUBE CLAIM BLOCK



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
642914	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1629
642915	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1900
642916	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642917	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642918	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642919	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1644
642920	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642921	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642922	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642923	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642924	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642925	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1860
642926	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642927	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642928	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642929	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642930	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642931	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642932	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1903
642933	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642934	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642935	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642936	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642937	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642938	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642939	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642940	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1622
642941	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642942	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642943	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642944	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642945	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642946	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642947	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642948	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642949	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1898
642950	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642951	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642952	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642953	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642954	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642955	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642956	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
642957	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642958	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2118
642959	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642960	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642961	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642962	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642963	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642964	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642965	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642966	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642967	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642968	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642969	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642970	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642971	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642972	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642973	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642974	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642975	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642976	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642977	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642978	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642979	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642980	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642981	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1635
642982	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1909
642983	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642984	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1692
642985	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642986	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642987	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642988	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1910
642989	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642990	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642991	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642992	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
642993	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1578
642994	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
642995	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
642996	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
642997	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
642998	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
642999	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2088



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
643000	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643001	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643002	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643003	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643004	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643005	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643006	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643007	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643008	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643009	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643010	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643011	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.1570
643012	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643013	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643014	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643015	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643016	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643017	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643018	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643019	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643020	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643021	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643022	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2121
643023	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2121
643024	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643025	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643026	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643027	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643028	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643029	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643030	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643031	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643032	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643033	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643034	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643035	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643036	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643037	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643038	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643039	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643040	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643041	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643042	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120

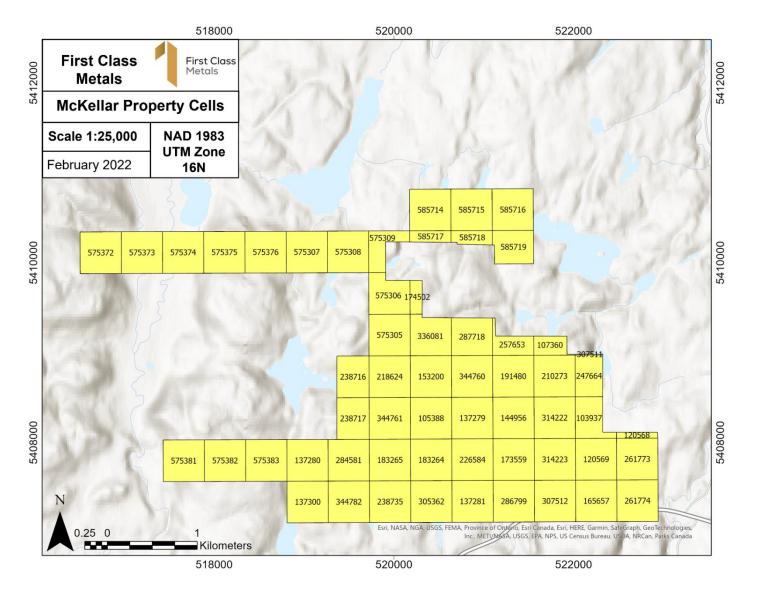


Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
643043	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643044	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643045	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643046	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643047	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643048	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643049	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643050	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643051	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2119
643052	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643053	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643054	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643055	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643056	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643057	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
643058	Single Cell Mining Claim	12/03/2021	12/03/2023	400	0.2120
650633	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.1600
650634	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.1605
650635	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650636	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650637	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650638	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.1936
650639	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.1659
650640	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650641	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650642	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650643	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650644	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650645	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650646	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650647	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650648	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650649	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650650	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650651	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.1862
650652	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.1903
650653	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650654	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650655	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650656	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650657	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650658	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650659	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
650660	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650661	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650662	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650663	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650664	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650665	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650666	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650667	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650668	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2117
650669	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2118
650670	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2118
650671	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2118
650672	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2118
650673	Single Cell Mining Claim	12/04/2021	12/04/2023	400	0.2118
657810	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657811	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657812	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657813	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657814	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657815	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657816	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657817	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657818	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657819	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657820	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657821	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2119
657822	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657823	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657824	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657825	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657826	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657827	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120
657828	Single Cell Mining Claim	21/05/2021	21/05/2023	400	0.2120





#### MCKELLAR CLAIM BLOCK



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
105388	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
107360	Single Cell Mining Claim	10/04/2018	07/12/2022	200	0.0793
120569	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
137279	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
137280	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
137300	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
144956	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
153200	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2119
165657	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
173559	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
174502	Single Cell Mining Claim	10/04/2018	20/12/2022	200	0.0506
183264	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
183265	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
191480	Single Cell Mining Claim	10/04/2018	07/06/2024	400	0.2119
210273	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2119
218624	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2119
226584	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
238735	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
257653	Single Cell Mining Claim	10/04/2018	20/12/2022	200	0.1048
261773	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
261774	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
287718	Single Cell Mining Claim	10/04/2018	20/12/2022	200	0.1917
305362	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
307512	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
314222	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
314223	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
336081	Single Cell Mining Claim	10/04/2018	20/12/2022	200	0.1989
344760	Single Cell Mining Claim	10/04/2018	07/06/2024	400	0.2119
344761	Single Cell Mining Claim	10/04/2018	07/06/2023	400	0.2120
344782	Single Cell Mining Claim	10/04/2018	07/12/2022	400	0.2120
575305	Single Cell Mining Claim	04/02/2020	04/02/2023	400	0.2120
575306	Single Cell Mining Claim	04/02/2020	04/02/2023	400	0.1883
575307	Single Cell Mining Claim	04/02/2020	04/02/2023	400	0.2119
575308	Single Cell Mining Claim	04/02/2020	04/02/2023	400	0.2119
575309	Single Cell Mining Claim	04/02/2020	04/02/2023	400	0.1200
575372	Single Cell Mining Claim	05/02/2020	05/02/2023	400	0.2119
575373	Single Cell Mining Claim	05/02/2020	05/02/2023	400	0.2119
575374	Single Cell Mining Claim	05/02/2020	05/02/2023	400	0.2119
575375	Single Cell Mining Claim	05/02/2020	05/02/2023	400	0.2119
575376	Single Cell Mining Claim	05/02/2020	05/02/2023	400	0.2119
575381	Single Cell Mining Claim	05/02/2020	05/02/2023	400	0.2120
575382	Single Cell Mining Claim	05/02/2020	05/02/2023	400	0.2120
575383	Single Cell Mining Claim	05/02/2020	05/02/2023	400	0.2120



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
585714	Single Cell Mining Claim	26/04/2020	26/04/2023	400	0.2119
585715	Single Cell Mining Claim	26/04/2020	26/04/2023	400	0.2119
585716	Single Cell Mining Claim	26/04/2020	26/04/2023	400	0.2119
585717	Single Cell Mining Claim	26/04/2020	26/04/2023	400	0.0578
585718	Single Cell Mining Claim	26/04/2020	26/04/2023	400	0.0694
585719	Single Cell Mining Claim	26/04/2020	26/04/2023	400	0.1646
103937	Boundary Cell Mining Claim	10/04/2018	07/12/2022	200	0.1517
120568	Boundary Cell Mining Claim	10/04/2018	07/12/2022	200	0.0308
137281	Boundary Cell Mining Claim	10/04/2018	07/12/2022	200	0.2120
238716	Boundary Cell Mining Claim	10/04/2018	07/06/2023	200	0.1651
238717	Boundary Cell Mining Claim	10/04/2018	07/12/2022	200	0.1659
247664	Boundary Cell Mining Claim	10/04/2018	07/12/2022	200	0.1420
284581	Boundary Cell Mining Claim	10/04/2018	07/12/2022	200	0.2120
286799	Boundary Cell Mining Claim	10/04/2018	07/12/2022	200	0.2120
307511	Boundary Cell Mining Claim	10/04/2018	07/12/2022	200	0.0031



#### 570,000 575000 First Class First Class Metals Metals **Magical Property Cells** NAD 1983 Scale 1:15,000 UTM Zone February 2022 16N 601068 601057 601067 601062 601065 601058 601069 601060 601061 601059 601063 601064 601056 601066 N

### MAGICAL CLAIM BLOCK



0.25 0

1000

570000

Kilometers

5400000

Competent Person's Report on the North Hemlo Property in Ontario, Canada On Behalf of First Class Metals Limited

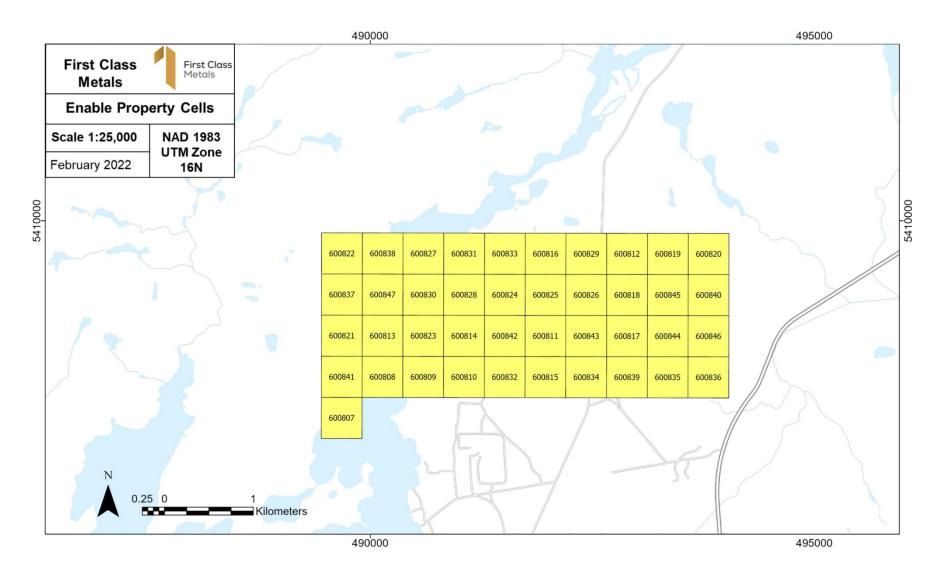
575000

5400000

Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km²)
601056	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2122
601057	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2122
601058	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2123
601059	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2123
601060	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2123
601061	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2123
601062	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2122
601063	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2123
601064	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2123
601065	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2123
601066	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2122
601067	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2122
601068	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2122
601069	Single Cell Mining Claim	27/07/2020	27/07/2022	400	0.2123



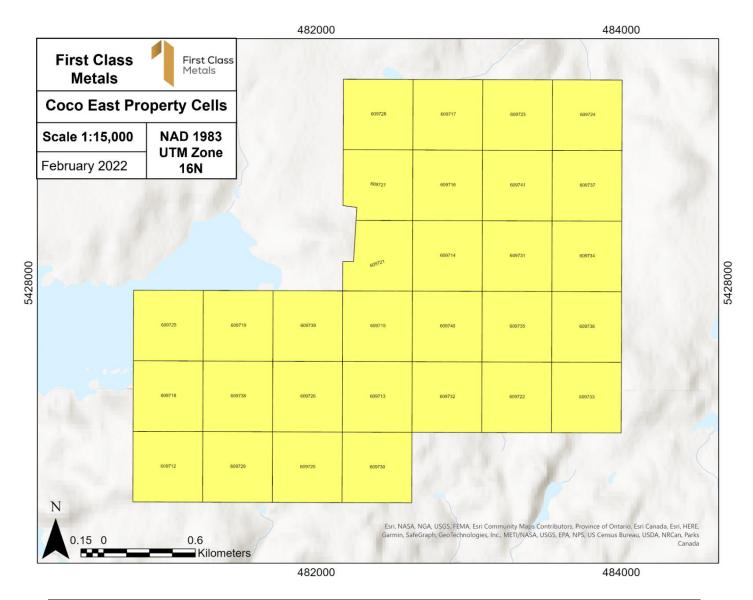
#### **ENABLE CLAIM BLOCK**





Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km <sup>2</sup> )
600807	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600808	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600809	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600810	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600811	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600812	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600813	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600814	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600815	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600816	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600817	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600818	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600819	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600820	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600821	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600822	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600823	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600824	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600825	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600826	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600827	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600828	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600829	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600830	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600831	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600832	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600833	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600834	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600835	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600836	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600837	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600838	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600839	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600840	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600841	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600842	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600843	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600844	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600845	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120
600846	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2119
600847	Single Cell Mining Claim	25/07/2020	25/07/2022	400	0.2120





## COCO EAST CLAIM BLOCK



Tenure No.	Туре	Issue Date	Renewal Date	Minimum Annual Expenditure (CAD\$)	Area (km²)
609712	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609713	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609714	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609715	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609716	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609717	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609718	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609719	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609720	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609721	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.1902
609722	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609723	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609724	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609725	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609726	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609727	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2032
609728	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609729	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609730	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609731	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609732	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609733	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609734	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609735	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609736	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609737	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112
609738	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609739	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609740	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2113
609741	Single Cell Mining Claim	20/08/2020	20/08/2022	400	0.2112

