

**NI 43-101 Technical Report  
Silica Potential Estimation of the  
La Chesnaye Lake Property,  
Baie-Comeau, Québec, Canada**



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Company  
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Effective Date: December 19<sup>th</sup> 2018  
Issue Date: December 19<sup>th</sup> 2018

## CERTIFICATE OF QUALIFIED PERSON

### Merouane Rachidi, Ph. D., P. Geo.

This certificate applies to the NI 43-101 Technical Report for Silica Potential Estimation of the La Chesnaye property, Baie-Comeau, Québec, Canada (the “Technical Report”), prepared for Canadian Metals Inc., issued on December 19, 2018 and effective on December 19, 2018.

I, Merouane Rachidi, P. Geo., Ph.D., do hereby certify that:

1. I am a Geologist and consultant with GoldMinds Geoservices Inc. with an office at 2999 Chemin Ste-Foy, Suite 200, Québec, Québec, Canada, G1W 3N3;
2. I am a graduate from Laval University in Québec city (Ph.D., in Geology, 2012) and I have practiced my profession continuously since that time. I am a registered member of the Ordre des Géologues du Québec, registration #1792, a registered member of APEGNB license # L5769, and member of APGO registered #2998. I have worked as a geologist since my graduation. My relevant experience for the purpose of the Technical Report is over five years of consulting in the field of exploration, mineral resource estimation, 3D orebody modeling, geology, mineral resource estimation and mine planning;
3. I have read the definition of “qualified person” set out in the NI 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
4. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
5. I am responsible and Co-author for the preparation of Chapters 1 to 27 of the Technical Report.
6. I have visited the property that is the subject to the present Technical Report in September 2017 and in November 2017.
7. I have had no prior involvement with the property that is the subject of the Technical Report.
8. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
9. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed this 19<sup>th</sup> day of December, 2018.

*Original Signed and Sealed “Merouane Rachidi”*

\_\_\_\_\_  
Merouane Rachidi, P. Geo., Ph. D.

## CERTIFICATE OF QUALIFIED PERSON

### Claude Duplessis, P. Eng.

This certificate applies to the NI 43-101 Technical Report for Silica Potential Estimation of the La Chesnaye property, Baie-Comeau, Québec, Canada (the “Technical Report”), prepared for Canadian Metals Inc., issued on December 19, 2018 and effective on December 19, 2018.

I, Claude Duplessis, P. Eng., do hereby certify that:

10. I am a senior engineer and consultant with GoldMinds Geoservices Inc. with an office at 2999 Chemin Ste-Foy, Suite 200, Québec, Québec, Canada, G1W 3N3;
11. I am a graduate from the University of Québec in Chicoutimi, Québec in 1988 with a B.Sc.A in geological engineering and I have practiced my profession continuously since that time, I am a registered member of the Ordre des ingénieurs du Québec, registration #45523, a registered member of APEGNB license #L5733 as well as in Ontario, Alberta and Newfoundland & Labrador. I have worked as an engineer for a total of 30 years since my graduation. My relevant experience for the purpose of the Technical Report is: Over 25 years of consulting in the field of exploration, mineral resource estimation, orebody modeling, engineering geology, mineral resource auditing, geotechnical engineering, mine planning and project economic analysis;
12. I have read the definition of “qualified person” set out in the NI 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
13. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
14. I am responsible and co-author for the preparation of Chapters 1 to 27 of the Technical Report.
15. I personally did not visit the property that is the subject to the Technical Report.
16. I have had no prior involvement with the property that is the subject of the Technical Report.
17. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
18. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed this 19<sup>th</sup> day of December, 2018.

*Original Signed and Sealed “Claude Duplessis”*

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Claude Duplessis, P. Eng.

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# 1 Summary

## 1.1 General

This technical report was prepared by GoldMinds Geoservices Inc. (GMG) for Canadian Metals Inc. (CME). This technical report describes the La Chesnaye Lake property using historical data and the recent data from the 2017 independent sampling and decrepitating test of 2018. It also presents a review of the history, the geology of the La Chesnaye Lake deposit and provides recommendations for the future work.

## 1.2 Property Description and Ownership

The property is located within NTS map sheet 22F08, in the regional municipality (MRC) of Manicouagan, within the Cote-Nord region of Quebec. The property is located at the coordinate 560 000N, 5 463 800E in UTM zone 19 (Figure 2).

According to Gestim, the La Chesnaye Lake Property is made of ten claims (CDC) 100% owned by Canadian Metals Inc., totalling a surface of 561.22 ha.

## 1.3 Local Resources and infrastructures

The La Chesnaye Lake property is located at approximately 15 km from the nearest town of Baie-Comeau. A deep-water port and railways are available in Baie-Comeau. Canadian Metals already have plan to build a processing factory in Baie-Comeau in order to process the ore from its flagship Langis project. The city of Baie-Comeau has a population of approximately 21,100. The area has a history of important forestry, mining and industrial industry. As such, experienced workforce is available in the region.

## 1.4 Geology and Mineralization

The La Chesnaye Lake property is situated within the Grenville subprovince. Its geology is characterized by a number of quartzite bands that are enclosed in gneiss and massives. The bands are generally oriented northeast-southwest.

The quartzite has a glassy appearance and its granulometry varies from fine to coarse. Feldspath, biotite, muscovite, ilmenite and hematite are the main components encountered. A centimetric layering disseminated can be seen inside numerous alternating white, grey and red (oxidation) bands overlap.

## 1.5 Exploration and Drilling

The 2017 exploration program was conducted by GoldMinds Geoservices and divided into two parts. The first part concern the manual drilling, four holes were drilled totaling 1.2 meters. The second phase concern the surface sampling. Four (4) grab samples were taken for metallurgical testing and six (6) smaller grab samples were also taken from outcrops for mineral analysis. The exploration program was started and completed in November 2017.

## 1.6 The Estimate of the Mineral Potential

The estimation of the mineral potential for the La Chesnaye property is around 2.5 to 3.0 million tonnes with an average of 97.97% SiO<sub>2</sub> (Table 1).

**Table 1: The potential <sup>1</sup> estimation of the La Chesnaye property**

Potential estimation of the La Chesnaye Lake	Area (ha)	Volume (m <sup>3</sup> )	Tonnes (million tonnes)	Grade (%SiO <sub>2</sub> )
Potential estimation	6.675	1,100,000	2.5 to 3.0	97.97

### 1 Cautionary Statements:

*Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade reported as Mineral Potential, is conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource.*

### 1.7 Interpretation and Conclusions

The results of the sampling program planned by GMG in 2017 have supported the historical database. The program help to define the range of the deposit and allow a preliminary mineral potential estimation for the La Chesnaye deposit.

The mineralized envelope is extended to an area of around 6.67 ha. And more exploration works is needed to more evaluate the property. The tonnage and the grade of the reported potential mineral estimate are uncertain in nature.

The decrepitation test was carried out to identify the samples behaviour in the furnace in 2018. The silica samples showing a less effect of decrepitation in a high temperature (1000°C) can be used for the production of Ferro silicon and Silica metals. According to the results of the decrepitation test (Table 9) the deposit of the La Chesnaye is not adapted for the production of Ferro silicon and/or Silica metals. Indeed it is necessary to redo the decrepitation test on deeper core samples (a drilling campaign to be planned) that are not affected by surface alteration which probably increase the effect of decrepitation on the samples.

## 1.8 Recommendations

There is a potential in the La Chesnaye Lake property and a drilling campaign with deeper diamond drilling holes will allow a better understanding of the deposit.

Before the start of the diamond drilling program GMG recommend a geological mapping at the La Chesnay site for a better understanding of the quartzite bands (thickness, orientation, etc...). A diamond drilling program is recommended at the La Chesnaye site, a total of 500 meters (100,000.00 CAD, all costs included) of drilling is recommended;

A total budget of around 125,000.00 CAD (100,000.00 CAD for drilling and 25,000.00 CAD for geological mapping) has to be dedicated for the next exploration works;

Drilling recommendation is dependent of geological mapping success.

It is recommended to prepare communication with local community, First Nation, MERN, MDDELCC to obtain authorizations for future works.

The access is an important factor to consider and could be difficult in eventual operation.

## 2 Introduction

### 2.1 Terms of Reference – Scope of Work

This technical report was prepared by GoldMinds Geoservices (GMG) for Canadian Metals (CME) to support the disclosure of the potential estimation for the La Chesnaye Lake property (“Property” or “Project”) compliant to the National Instrument 43-101. This report describes a review of the history, geology, sampling, data verification and provides recommendations for future works. The report presents also the basis and methodology used for the mineral potential estimation from historical and the new data. This report is the first NI 43-101 mineral potential estimation for the La Chesnaye Lake property.

#### **Cautionary Statements:**

*Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade reported as Mineral Potential, is conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource.*

This technical report was prepared according to the guidelines set under “Form 43-101F1 Technical Report” of National Instrument 43-101 Standards and Disclosure for Mineral Projects. The original certificate of qualification for the Qualified Persons responsible for this technical report have been supplied to Canadian Metals Inc. as separate documents and can also be found in the first pages of this report.

The scope of work as defined in the mandate of September 2017 and 2018 includes the supervision of the exploration campaign, geological logging, independent sampling, data validation/integration and the estimation of the mineral potential of the La Chesnaye property.

1. Site visit;
2. Compilation and verification/validation/integration of the historical and recent data;
3. Independent sampling;

5. Data validation/integration
6. Modelling and the potential estimation.
7. Preparation of a technical report.

## 2.2 Source of Information and personal inspection of the property

The information presented in this technical report comes from the historical data and the recent information acquired during the 2017 exploration campaign. The historical holes drilled since 1957 were integrated into the database. The most recent exploration campaign aimed to validate the historical data and for the preparation of first NI 43-101 mineral potential estimate of the property.

Mr. Merouane Rachidi Ph.D., P.Geo., is a Qualified Person (QP) as defined in NI 43-101. He visited the site twice, first in September 20<sup>th</sup> 2017 (for few days) and again in the November 2017. The first visit's goal was to identify access to the site. The second visit occurred during the exploration campaign in November 2017, to supervise drilling and to take independent grab sampling. Laboratory testing at the CTMP (at ThetfordMines) in 2018.

Information in this report is based on critical review of the documents, information and maps provided by the personnel of CME and independent 3rd parties like commercial laboratories, Quebec Ministry of Natural Resources and surveyors.

## 2.3 Units and Currency

All measurements in this report are presented in “International System of Units” (SI) metric units, including metric tonne (tonne or t) or gram (g) for weight, metre (m) or kilometre (km) for distance, hectare (ha) for area, and cubic metre (m<sup>3</sup>) for volume. All currency amounts are in Canadian Dollar (\$) unless otherwise stated. Abbreviations used in this report are listed in Table 2.

**Table 2: List of abbreviations**

GMG	GoldMinds Geoservices Inc.
CME	Canadian Metals Inc.
CTMP	Centre de Technologie Minérale et de Plasturgie inc.
QP	Qualified person
cm	centimetre
g	Gram
g/t	Gram per metric tonne
Ga	Billion years
ha	Hectare
kg	Kilogram
km	Kilometre
km/h	Kilometre per hour
µm	Micrometre
m	Metre
m <sup>3</sup>	Cubic metre
mm	Millimetre
Ma	Million years
NAD	North America Datum
NTS	National Topographic System
ppb	Parts per billion
ppm	Parts per million
SG	Specific Gravity
UTM	Universal Transverse Mercator
t or tonnes	Metric tonnes
t/m <sup>3</sup>	Tonne per cubic metre
%	Percent sign
\$	Canadian Dollar
°	Degree
°C	Degree Celsius
SiO <sub>2</sub>	Silicon dioxide, Silica

## 2.4 Data sources

All the historical drilling data was compiled by Canadian Metals. All sources of data used in this technical report are listed in section 27.0.

### **3 Reliance on Other Experts**

The authors of this technical report are not qualified to comment on issues related to legal agreements, royalties, permitting, taxation and environmental matters. The authors have relied upon the representations and documentations supplied by Canadian Metals Inc. The authors have reviewed the mining titles, their status, the legal agreements and technical data supplied by Canadian Metals, and public sources of relevant technical information.

This report is to be used by Canadian Metals as a technical report in conformity with the Canadian Securities Regulatory System. Use in whole or of any part of this document by a third party for purposes other than those of the Canadian Provincial Securities Act Legislation will be at the risk of the user.

Silica is not sold on public exchanges. Therefore, the price is established between the buyer and the seller. As such, this information is not public there is no silica price in this report.

The authors and the issuer are independent from the commercial laboratories used for the assays results.



## 4 Property, Description and Location

### 4.1 Property Description and Ownership

The property is located within NTS map sheet 22F08, in the municipality of Baie-Comeau, within the Regional Municipality (MRC) of Manicouagan, region of Côte-Nord. The property is approximately 15 kilometers north of the city of Baie-Comeau at latitude 49°19'27.91" N and longitude 68°10'22.54" W in UTM zone 19.



Figure 1: La Chesnaye Lake Property location map

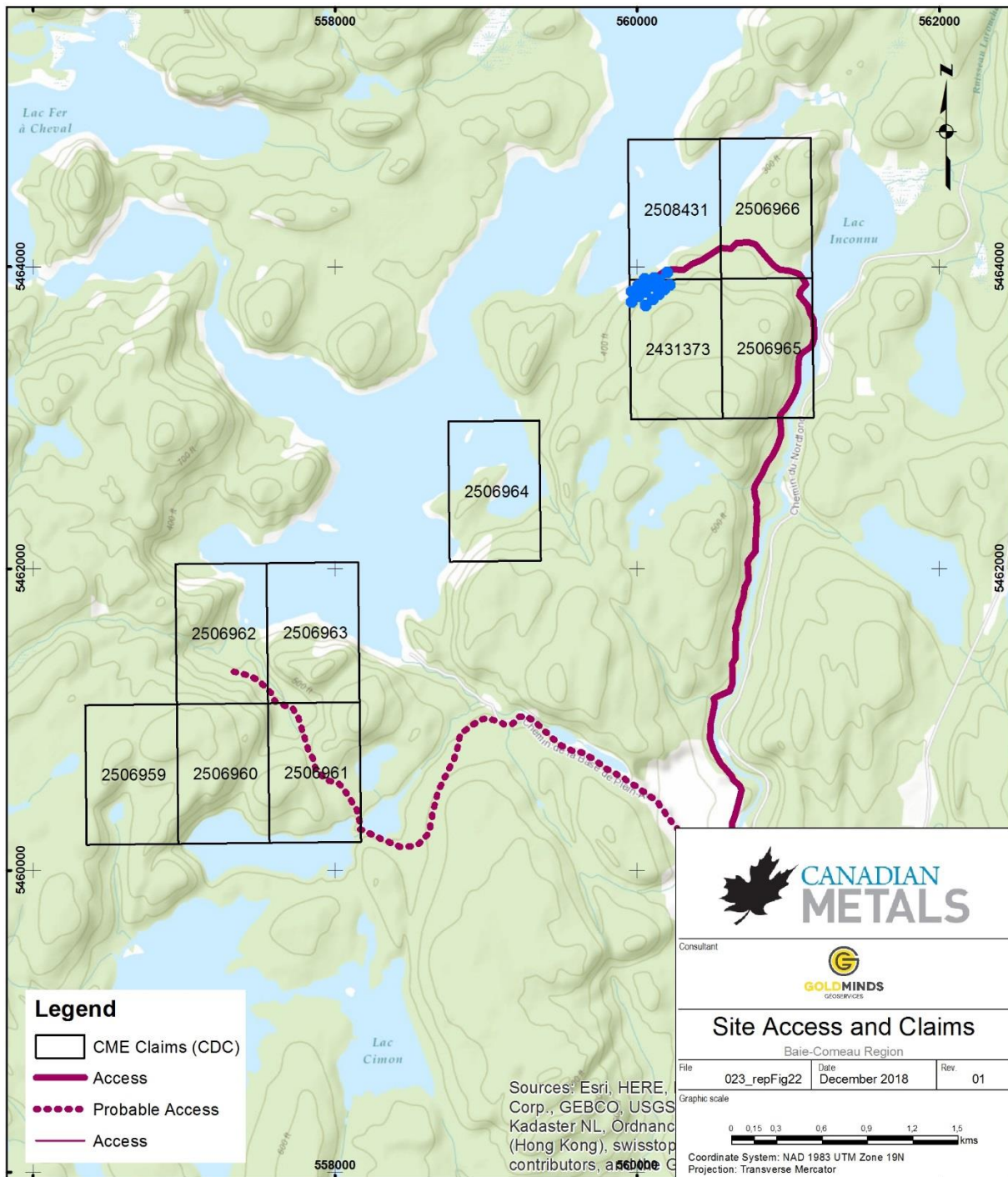


Figure 2: Claims of La Chesnaye Lake Property and CDC claims

The La Chesnaye Lake Property is made of ten (10) claims, totalling a surface area of 561.22 ha. According to Gestim, all the claims are 100% owned by Canadian Metals inc. All the claims are expiring in 2019 and only one claim (CDC 2508431) will expire in 2020. A summary of the tenure information as extracted from the Québec government GESTIM (Gestion des titres miniers) website (as of the effective date of this technical report) is presented in Table 3.

**Table 3: Claims information of the La Chesnaye Lake Property, 100% owned by CME**

Sheet	Type	Title No.	Area (Ha)	Required work (\$)	Required Fee (\$)	Expiry date
22F08	CDC	2431373	56.11	780	64.09	2019-07-21
22F08	CDC	2506959	56.14	780	64.09	2019-11-27
22F08	CDC	2506960	56.14	780	64.09	2019-11-27
22F08	CDC	2506961	56.14	780	64.09	2019-11-27
22F08	CDC	2506962	56.13	780	64.09	2019-11-27
22F08	CDC	2506963	56.13	780	64.09	2019-11-27
22F08	CDC	2506964	56.12	780	64.09	2019-11-27
22F08	CDC	2506965	56.11	780	64.09	2019-11-27
22F08	CDC	2506966	56.10	780	64.09	2019-11-27
22F08	CDC	2508431	56.10	780	64.09	2020-01-08

Table 3, was modified after GESTIM (Gestion des titres miniers – Gouvernement du Québec) downloaded November 30<sup>th</sup>, 2018.

The claims are map-designated and have pre-established positions. No legal survey of the claims is required.

## 4.2 Royalties Obligations

The authors are not aware if there is a royalty obligation on the La Chesney property.

## 4.3 Permits and Environmental Liabilities

As defined by the MERN website ([www.mern.gouv.qc.ca](http://www.mern.gouv.qc.ca)), the claim is the only valid exploration right in Québec. The claim gives the holder an exclusive right to search for mineral substances in the public domain on the land subjected to the claim, except within sand, gravel, clay, and other loose deposits. The term of a claim is two years from the day the claim is registered, and it can be renewed indefinitely providing the holder meets all the conditions set out in the Mining Act, including the obligation to invest a minimum amount required in exploration work as determined by the regulation. The Mining Act includes provisions to allow any amount disbursed to perform work, in excess of the prescribed requirements, to be applied to subsequent terms of the claim.

The authors are not aware if there are an environmental liabilities pertaining to the La Chesnaye Lake property.

The only permit required to carry out exploration on the property is the usual permit for forestry management. The company must also respect all the environmental laws applicable to the type of the exploration/exploitation works. An application for a new permit will be necessary for additional exploration activities.

## 5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

### 5.1 Accessibility

The La Chesnaye Lake property is road accessible by car via paved provincial Highway 138 and three (3) km on a gravel road Roland Munger to the ski resort Mount Ti-Basse. Then, seven and a half (7.5) km on an old bush road, now a cross-country ski trail, accessible by VTT and approximately two (2) km hiking in the bush to go around the mountain. A barge could also be used to get to the site. A dock is located two (2) km away from the ski resort, at the end of la Base de Plein Air road. Cars can be driven all the way to the marina.

Access to the Property may be troubled by heavy snow accumulation. The property could still be accessed by snowmobile in winter.

M. Rachidi P. Geo., visited the claims located to the east of the lake. The claims located to the south-west of the La Chesnaye Lake were not visited by GMG's geologist. As seen on the satellite maps, the property is accessible via the ski resort then by la Base de Plein Air road by car. Half way on the la Base de Plein Air road, take a turn to the left on a bush road. The quality of the road is unknown at the moment. But it would be practicable by VTT or by foot. Both sectors are accessible via the ski resort Mount Ti-Basse.

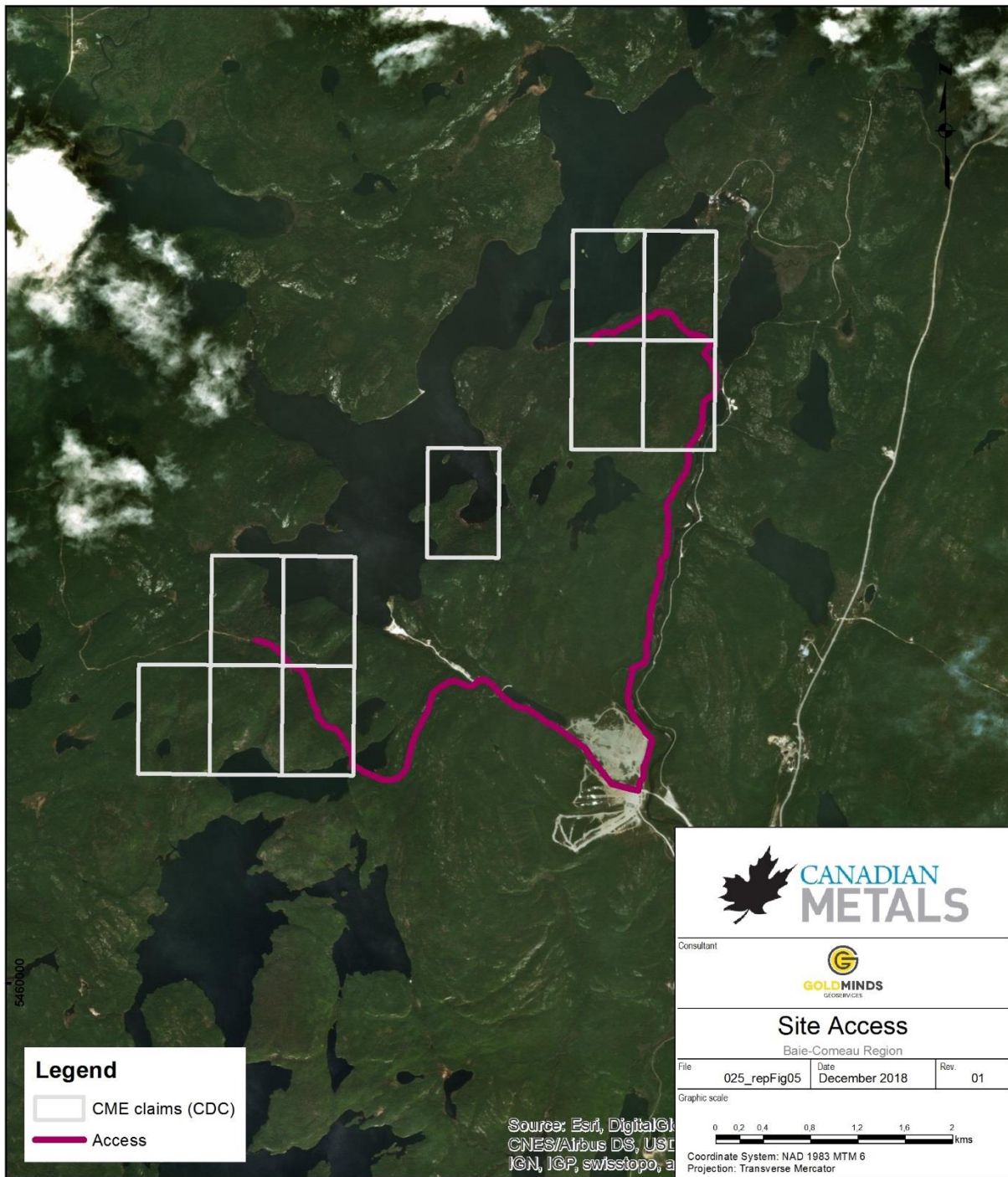


Figure 3: Aerial view of the Property's access road

## 5.2 Topography and Physiography

The La Chesnaye Lake Property is located on the northwestern slope of a 150-m high mountain. The La Chesnaye Lake is located on the northeastern side of the property. The lake's elevation is 63 m above mean sea level. The Property is entirely covered by thick forest dominated by conifers. Although, outcrops can be easily found across the property.

## 5.3 Climate

The closest climate data collection site is the Les Buissons station located at latitude 49°5'25" and longitude 68°19'20", in Pointe-aux-Outardes, 28km southwest of the property. Table 4 presents the 2017 monthly report from Environment Canada.

**Table 4: Temperature and Precipitation (°C)**

Month	Temperature Mean			Precipitation		
	Max. (°C)	Min. (°C)	Mean (°C)	Rain (mm)	Snow (cm)	Total (mm)
January	-5	-15.8	-10.4	7.8	52.6	60.4
February	-5	-17.1	-11.1	22	26.4	48.4
March	-2.8	-14.6	-8.8	2	82.4	84.4
April	4.9	-3.3	0.8	60.8	-	60.8
May	13.4	3.1	8.3	46.8	0	46.8
June	18.5	8	13.3	62.2	0	62.2
July	20.7	9.2	15	44	0	44
August	19.4	9.2	14.3	35	0	35
September	16.9	7.2	12.1	50	0	50
October	12	1.6	6.8	120.8	0	120.8
November	1.6	-6.8	-2.6	64.4	9.6	74
December	-6.3	-15.3	-10.8	0	21.8	21.8
<b>Annual</b>	-	-	-	515.8	-	708.6

#### 5.4 Local Resources and Infrastructures

The La Chesnaye Lake property is located at approximately 20 km from the nearest town of Baie-Comeau. A deep-water port and railways are available in Baie-Comeau. Canadian Metals already have plan to build a processing factory in Baie-Comeau in order to process the ore from its flagship Langis project.

The city of Baie-Comeau has a population of approximately 21,200. The area has a history of important forestry, mining and industrial industry. As such, experienced workforce is available in the region.



## 6 History

### 6.1 Previous exploration and drilling works

Geological mapping and exploration of the La Chesnaye Lake area of the Manicouagan Region by governmental institutions began with the investigations of Carl Faessler in 1933. A sample from La Chesnaye Lake graded 99.71% SiO<sub>2</sub> and 0.18% iron oxide. The biggest quartzite deposit identified by the author was located at 4.5 miles from the La Chesnaye lake, in the rivière des Anglais valley (Figure 4 and Figure 5).

In 1952, the Quebec North Shore Paper Company took 122 surface samples from four trenches, each weighing around 22.7 kg grading an average of 99.0% SiO<sub>2</sub>, 0.77% Al<sub>2</sub>O<sub>3</sub> and 0.22% Fe<sub>2</sub>O<sub>3</sub>. Twenty (21) additional surface samples were taken from outcrops. They returned average grades of 99.0% SiO<sub>2</sub>, 0.58% Al<sub>2</sub>O<sub>3</sub> and 0.58% Fe<sub>2</sub>O<sub>3</sub>.

In 1957, 15 diamond drill holes were drilled by the Quebec North Shore Paper Company. The historical sampling data show a high content of silica (SiO<sub>2</sub> between 98% and 99.71%).

The property was abandoned subsequent the exploration works done in 1985.

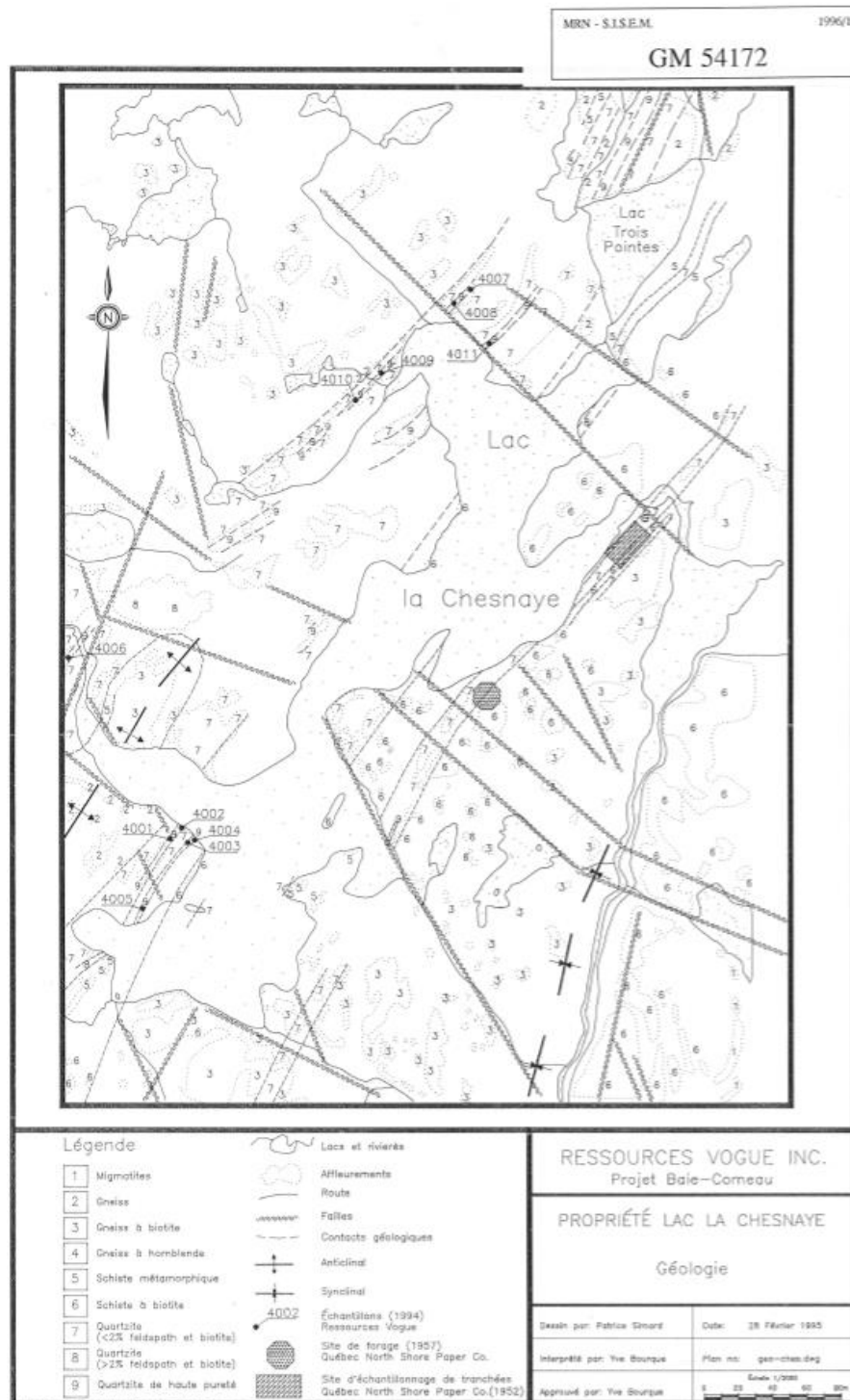


Figure 4: Location of historical work (source: Work Assessment report, La Chesnaye Lake property, 1995)

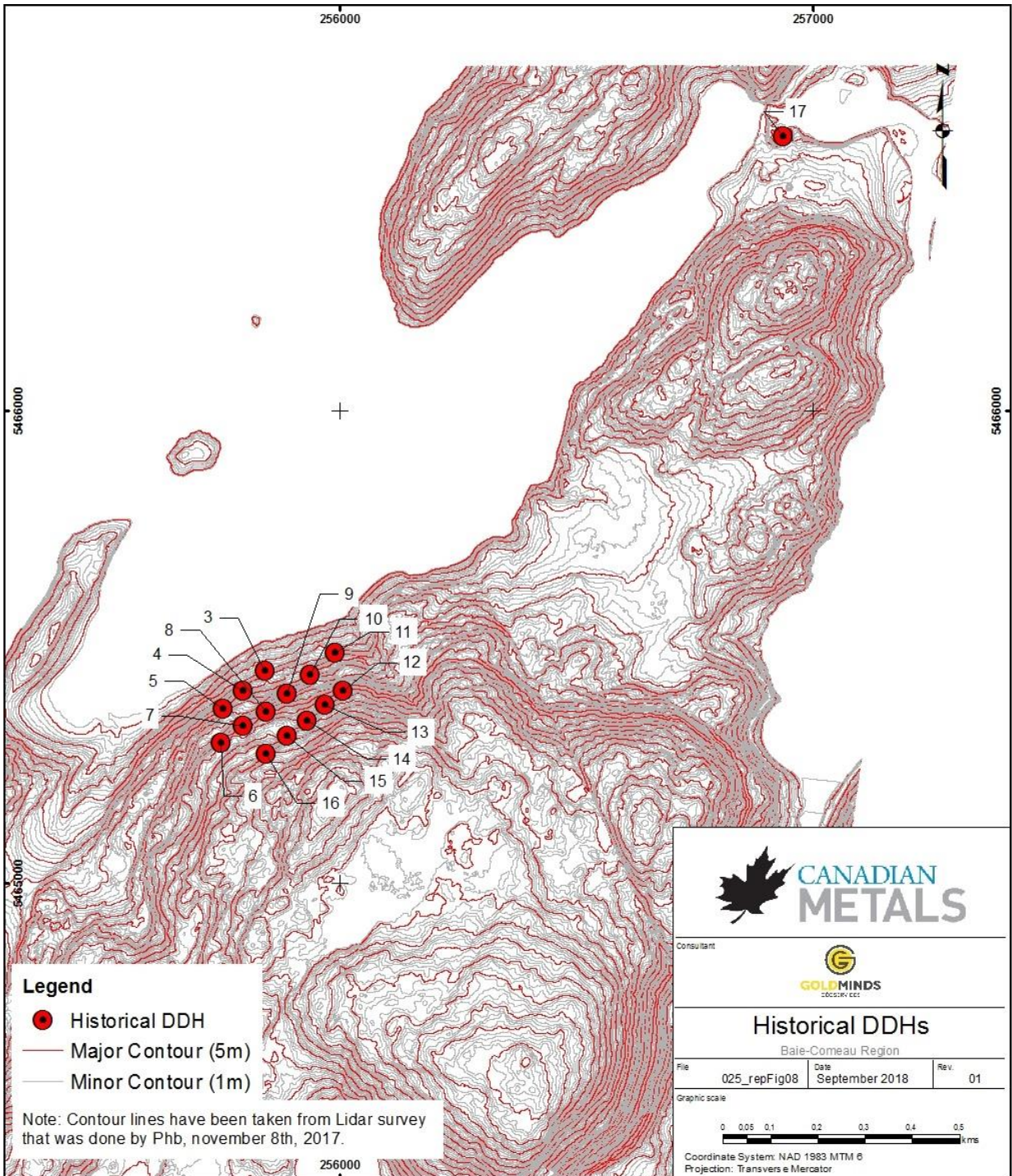


Figure 5: The historical diamond drill holes (DDH) localisation

## 6.2 Historical mineral resources

Quebec North Shore Paper Company, publish in the 20/10/1985 edition of the Northern Miner, the historical reserves\* of 3.5 Mt grading 98% SiO<sub>2</sub>\*.

*\* The historical estimation presented above are treated as historical information and the authors have not verified or done sufficient works to classify the historical estimate as current mineral resources or mineral reserves. These historical mineral resources do not refer to any category of sections 1.2 and 1.3 of the National Instrument 43-101 such as mineral resources or mineral reserves as stated in the Regulation 43-101 respecting standards of Disclosure for Mineral Projects (V-1.1, r.15) amended in May 2016 by the Autorité des Marchés Financiers (AMF). The issuer is not treating the above historical estimate as current mineral resources or mineral reserves.*

Ressources Vogue, did in 1994 an exploration work and sampled on the west side of the lake to verify the structural continuity of the quartzite. Sampled reported average grade of 99.18% in SiO<sub>2</sub> with contaminants (0.26% Al<sub>2</sub>O<sub>3</sub>, 0.10% Fe<sub>2</sub>O<sub>3</sub>, 0.14% K<sub>2</sub>O and 0.04% TiO<sub>2</sub>). Because of the hard accessibility and the rugged terrain, the authors do not recommend future work.

*\* The historical estimation presented above are treated as historical information and the authors have not verified or done sufficient works to classify the historical estimate as current mineral resources or mineral reserves. These historical mineral resources do not refer to any category of sections 1.2 and 1.3 of the National Instrument 43-101 such as mineral resources or mineral reserves as stated in the Regulation 43-101 respecting standards of Disclosure for Mineral Projects (V-1.1, r.15) amended in May 2016 by the Autorité des Marchés Financiers (AMF). The issuer is not treating the above historical estimate as current mineral resources or mineral reserves.*

## 7 Geological Setting and Mineralization

### 7.1 Regional Geology

The Lower Manicouagan river region is composed of Precambrian consolidated rocks which has the same characteristic as the Grenville sub province. A high quantity of highly metamorphized paragneiss and gneiss from unknown origin can be found with the plutonic rocks with compositions that ranges from diorite to granite (Figure 6, Figure 7 and Figure 8).

#### 7.1.1 Proterozoic

The oldest rock in the region are from the Proterozoic period and can be found as a heterogenous group of paragneiss. Their texture and structures suggest that they are primarily from sedimentary origin and, in smaller proportion, volcanic rock. The paragneiss are composed of alternating thin layers of quartz, plagioclase, some biotite and some hornblende that contains a little bit of quartz and feldspath. Gneiss and granitic gneiss are the most important rock group of the region. The composition, texture and structure of the rocks vary greatly but generally present a granitic aspect. This group possess numerous characteristic that are common to massive granitic rock as well as paragneiss. They present a more pronounced metamorphism than the paragneiss. The majority of the gneiss shows grey and pink colors produced by superficial alteration. The composition varies greatly, however the quartz, plagioclase, orthoclase, biotite and hornblende remain that main constituent.

Granitic rocks can be differentiated from each other by their texture and composition. That rock group, generally massive, contains granite, porphyric granite, granite to pyroxene, granodiorite, and in smaller proportion, syenite and quartz diorite. Generally, the contacts are not well defined.

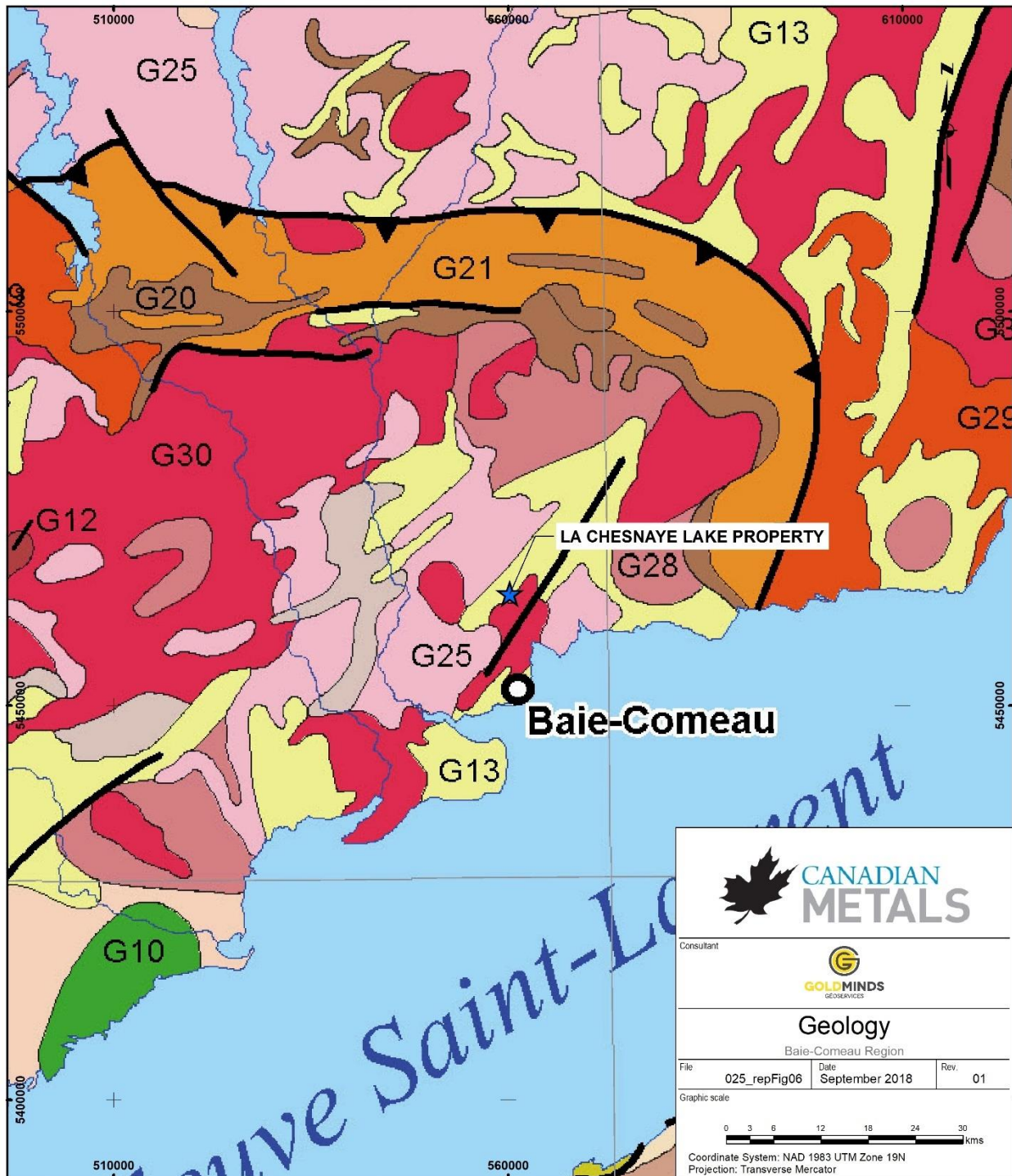


Figure 6: Geological map deposit (source : Work Assessment report, La Chesnaye Lake property, 1995)



Figure 7: Legend for Figure 8 (source : Work Assessment report, La Chesnaye Lake property, 1995)

### 7.1.2 Pleistocene and recent

Glacial streaks, flutes and rock polish constitute proofs of intense glacial action during the Pleistocene glaciation. A moraine made from blocks inside a sand and gravel matrix covers an important part of the region. These blocks come from typical rock in the region, however a number of pink and white quartzite and conglomerates from smaller rocks comes from the Otis mountain range in the north.

Marine clay containing Pleistocene fossils and outwash sand form terraces along the Saint-Lawrence River and along the lower rivers that flows into the Saint-Lawrence.

## 7.2 Local Geology

The lac La Chesnaye deposit corresponds to Bourdon complex (1491 Ma) composed mainly by paragneiss with biotite containing silimanite, cordierite, pyroxene, garnet and some graphite, migmatized paragneiss and migmatite of sedimentary origin (more than 50% of leucosomes). The northern limit of the property is mainly composed by white and grey quartzite. The Bourdon complex is affected by granite intrusions called ‘Granite de Éthier’. This later is mainly composed by white and grayish granite with garnet of medium granulometry oriented NE-SO parallel to the deformation of Chesnaye (Moukhsil et al., 2007; Figure 8).

To the west of the lac La Chesnaye, the property is limited by the Baie-Comeau complex (1101 +/- 18Ma) mainly composed by gneiss comprising tonalitic and granulite gneiss.



- Granite d'Étiér**
- mP<sub>eth</sub> Granite à grenat, de granulométrie moyenne et de couleur blanchâtre ou grisâtre
- Suite plutonique mafique de De La Blache (1327±16 Ma; Gobeil et al., 2002)**
- mP<sub>tba9</sub> Mangérite
  - mP<sub>tba6</sub> Gabbronorite, un peu de troctolite, de gabbronorite à olivine, de gabbronorite à oxydes de fer et de titane et d'apatite (DAGN), de leuconorite, de norite, de syénite, d'anorthosite et de mangerite
  - mP<sub>tba1</sub> Anorthosite à globules de leucotroctolite ou de leuconorite
  - mP<sub>tba2</sub> Leucotroctolite, un peu de troctolite, de leuconorite, de norite, d'anorthosite à globules de leucotroctolite et de leucotroctolite à globules d'anorthosite
  - mP<sub>tba1</sub> Anorthosite mégacrastique, un peu de leucotroctolite, de leuconorite ou de norite, d'anorthosite à globules de leucotroctolite et de leucotroctolite à globules d'anorthosite
- Complexe gneissique du Cap à l'Est (1391 ± 9/7 Ma; Hébert et van Breemen, 2004a)**
- mP<sub>cpe1</sub> Gneiss granitique, monzonitique, granitique, granodioritique et syénitique avec ou sans orthopyroxène, renfermant des enclaves d'anorthosite et de gabbro, des enclaves et/ou des fragments de dykes d'amphibolite et des écrans de roches supracrustales (paragneiss, quartzite, amphibolite, roches calcosilicatées)
  - mP<sub>cpe14</sub> Faciès mP<sub>cpe1</sub> très déformé (gneiss droit, couleur de déformation)
- Complexe de Hulot (1434 ± 64 Ma; Gobeil et al., 2002)**
- mP<sub>uk6</sub> Charnockite à biotite et hornblende, foliée, à grain grossier
  - mP<sub>uk5</sub> Granite à biotite et hornblende, folié, à grain moyen
  - mP<sub>uk4</sub> Granite et monzonite mégacrastiques, à biotite et à hornblende, parfois à orthopyroxène
  - mP<sub>uk3</sub> Tonalité à diorite contenant de la biotite et hornblende, grain moyen à grossier, foliée à gneissique. Enclaves de paragneiss, de roches calcosilicatées, d'amphibolite et de gneiss quartzofeldspathique
  - mP<sub>uk1</sub> Gneiss tonalitique à dioritique dérivé de la déformation et de la migmatitisation des faciès de mP<sub>uk2</sub> (enderbite foliée), mP<sub>uk3</sub> (tonalité à diorite), mP<sub>uk4</sub> (granite-monzonite), mP<sub>uk5</sub> (charnockite), mP<sub>uk7</sub> (brèche à matrice mangéritique). Renferme des radeaux de roches supracrustales (paragneiss, paragneiss migmatitisés et migmatite) et d'amphibolite
- Complexe de Bourdon (1491 Ma; David et al., en préparation)**
- mP<sub>bu4</sub> Paragneiss renfermant des niveaux centimétriques à métriques de roche à diopside (> 3 % calcosilicatées)
  - mP<sub>bu3</sub> Diatexite déformée à textures porphyroïde et porphyroblastique
  - mP<sub>bu2</sub> Quartzite de couleur blanchâtre ou grisâtre
  - mP<sub>bu1</sub> Paragneiss à biotite contenant un peu de sillimanite, de cordiérite, de pyroxène, de grenat et de graphite; paragneiss migmatitisés et migmatite d'origine sédimentaire (plus de 50 % de leucosomes), pegmatites roses (discordantes) et blanches (concordantes)
- Formation de Lac en Dentelle**
- mP<sub>dm1</sub> Roches calcosilicatées, niveaux minces de diopside, paragneiss et marbre
- Complexe de Baie-Comeau (1101 ± 18 Ma; David, 2007; David et al., 2009)**
- mP<sub>bcm</sub> Gneiss indifférenciés comprenant des gneiss tonalitiques, des gneiss granitiques et des gneiss granulitiques
  - mP<sub>bcm2</sub> Gneiss granitique
  - mP<sub>bcm1</sub> Gneiss granulitique de composition tonalitique

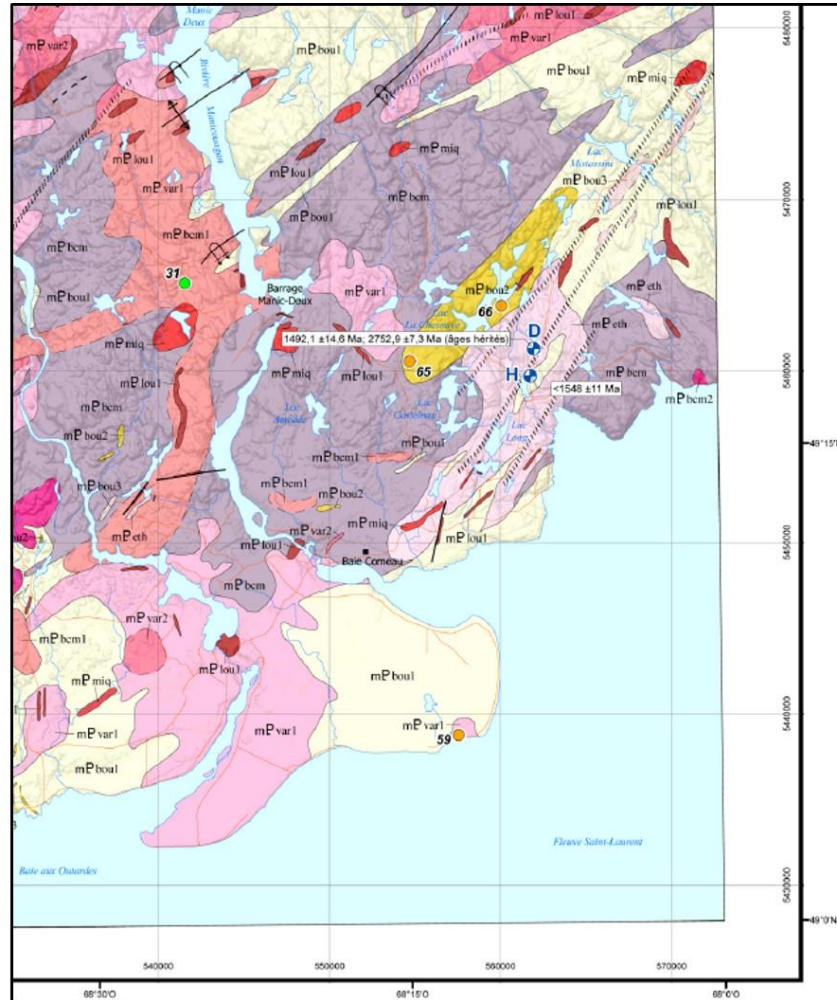


Figure 8: Regional Geology

## 8 Deposit Types

The geology of the La Chesnaye Lake property is characterised by the presence of a number of quartzite bands that are enclosed in gneiss. Those quartzite bands are generally oriented northeast-southwest with different length and width and are classified in three categories (Figure 9).

The first category (<2% feldspath and biotite) generally presents bands 200 m long and a width of over 100 m. The second category (>2% feldspath and biotite) is less abundant and can only be seen on the northeastern side of the lake. The third category (high quality quartzite) is included in the first category as bands with varying thickness and length varying from to 50 to 150 meters.



Figure 9: White to light grey quartzite, the La Chesnaye property

The quartzite has a glassy appearance and its granulometry varies from fine to coarse. Feldspath, biotite, muscovite, ilmenite and hematite are the main contaminants. A centimetric layering disseminated can be seen inside numerous alternating whites, grey and red (oxidation) bands overlap.

## 9 Exploration

### 9.1 Historical Exploration works

Exploration work has been done on the site since 1933. A hundred and twenty-two (122) samples were taken within four (4) trenches in 1952 and an additional twenty (21) sample was also taken. Forteen n (15) diamond drill holes were completed in 1957 for a total of 443 meters (Table 5). Some analysis results are present in historical reports but only incomplete information was found.

**Table 5: Diamond drill holes, campaign 1957 (UTM coordinates, NAD 83 zone 19)**

Hole name	Easting	Northing	Elevation	Azimuth	Dip	Length
3	560053,00	5463919,00	135	0	-90	30,48
4	560007,00	5463876,00	142	0	-90	30,48
5	559965,00	5463836,00	152	0	-90	31,39
6	559964,00	5463765,00	131	0	-90	17,68
7	560008,00	5463802,00	130	0	-90	30,48
8	560056,00	5463833,00	123	0	-90	30,48
9	560100,00	5463872,00	113	0	-90	30,18
10	560149,00	5463913,00	100	0	-90	30,48
11	560200,00	5463961,00	88	0	-90	31,39
12	560218,00	5463879,00	132	0	-90	30,78
13	560181,00	5463850,00	142	0	-90	30,78
14	560145,00	5463816,00	146	0	-90	34,14
15	560103,00	5463782,00	148	0	-90	35,66
16	560058,00	5463743,00	150	0	-90	30,48
17	561127,00	5465071,00	N/A	0	-90	18,59

## 9.2 The 2017 exploration program

The 2017 exploration campaign was the first exploration expenditure by Canadian Metals Inc. on the La Chesnaye Lake property. The campaign had two main goals. The first goal was to confirm the data from the 1957 drilling campaign and the second one was to acquire 25 kg samples for metallurgical testing.

During the 2017 exploration program ten surface samples were taken (Table 6). Four (4) grab samples (around 25 kg each sample) were taken for metallurgical testing and six smaller grab samples were also taken for grade and composition analysis (Figure 10).

**Table 6: The sampling data, 2017 campaign**

Name	UTM North (m)	UTM East (y)	Elevation (z)	Sample Type
GS17-01	560113	5463924	93	Metallurgical Test Sampling
GS17-02	560123	5463888	112	Metallurgical Test Sampling
GS17-03	560012	5463829	124	Metallurgical Test Sampling
GS17-04	560129	5463906	112	Metallurgical Test Sampling
S17-01	559993	5463843	106	Grab Sample
S17-02	560108	5463871	120	Grab Sample
S17-03	560077	5463890	106	Grab Sample
S17-04	560054	5463850	116	Grab Sample
S17-05	560039	5463839	120	Grab Sample
S17-06	560008	5463856	106	Grab Sample

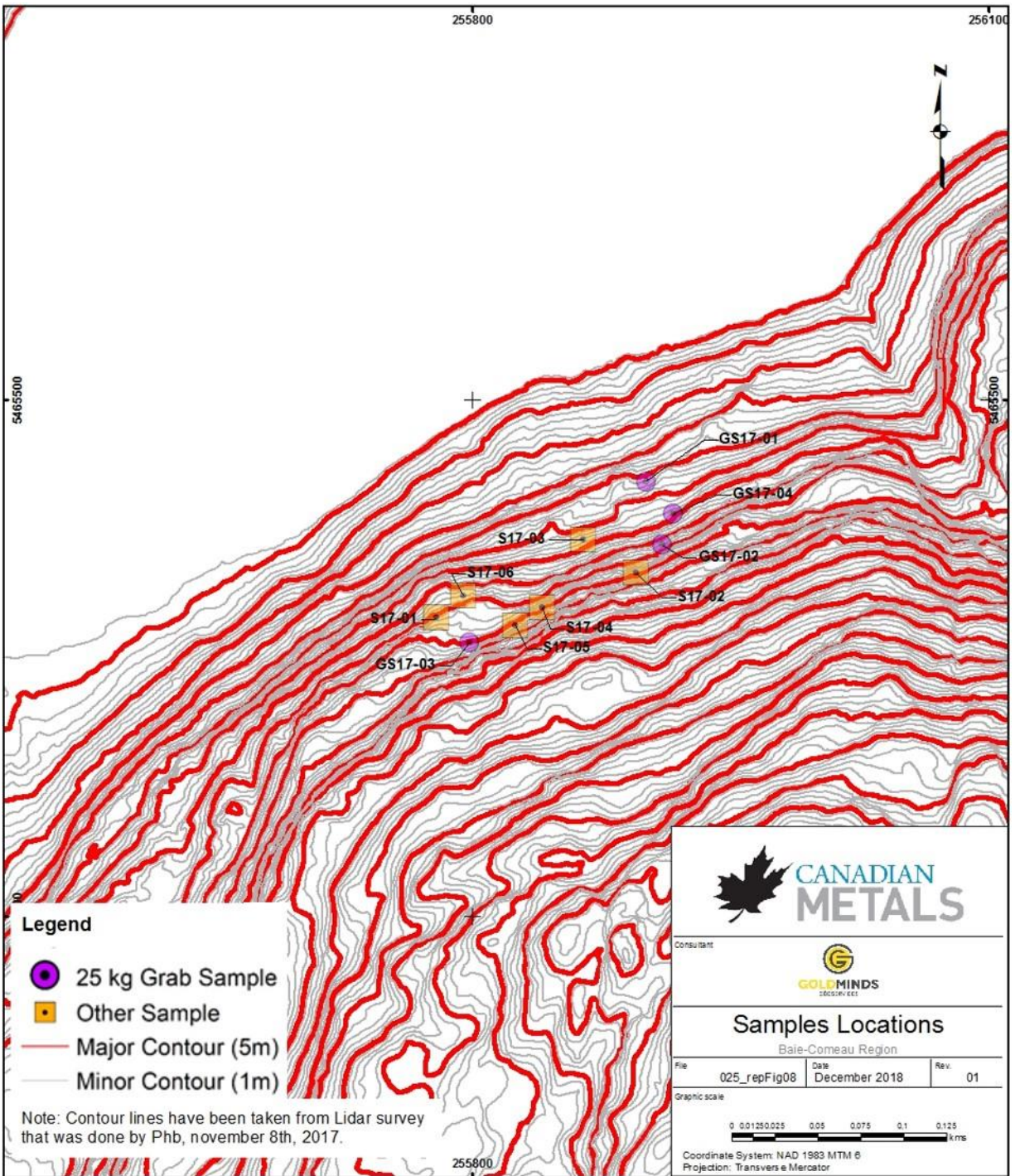


Figure 10: Location of samples taken by GMG in 2017

### 9.3 Additional work

#### 9.1.1 Line cutting

In order to access the site during the 2017 visit, GMG contacted La Coopérative forestière La Nord-Côtière, a forestry company to operate a trail in the forest, between the cross-country ski trail through most part of the site. The width of the line is around 1.5 meters (Figure 11).

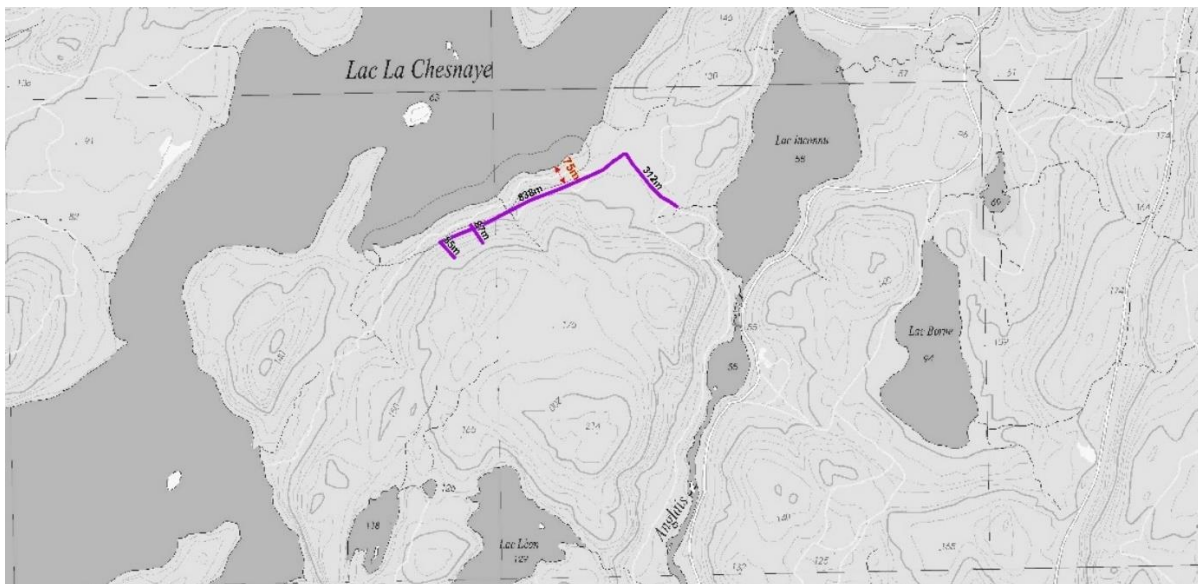


Figure 11: Proposed line cutting



Figure 12: Straight line cutting trees and vegetation with a chainsaw

### 9.1.2 Lidar Survey

Contour lines have been taken from Lidar survey done by Phb company in November 2017 (see Figure 10).

## 10 Drilling

The drilling program is done mid-November 2017 (from the 15<sup>th</sup> until the 18<sup>th</sup>). Four short holes were drilled (Figure 13 and Figure 14). Each drill core's length is around 0.3 meter for a total of 1.3 meter (BC 17-01, BC 17-02, BC 17-03 and BC 17-04) and 1.25 inch in diameter, see Table 7 for coordinates.

**Table 7: Collars details**

Name	UTM North (m)	UTM East (y)	Elevation (z)	Sample Type
BC17-01	560107	5463904	103	Drill Core
BC17-02	560128	5463890	113	Drill Core
BC17-03	560112	5463921	89	Drill Core
BC17-04	560066	5463904	99	Drill Core

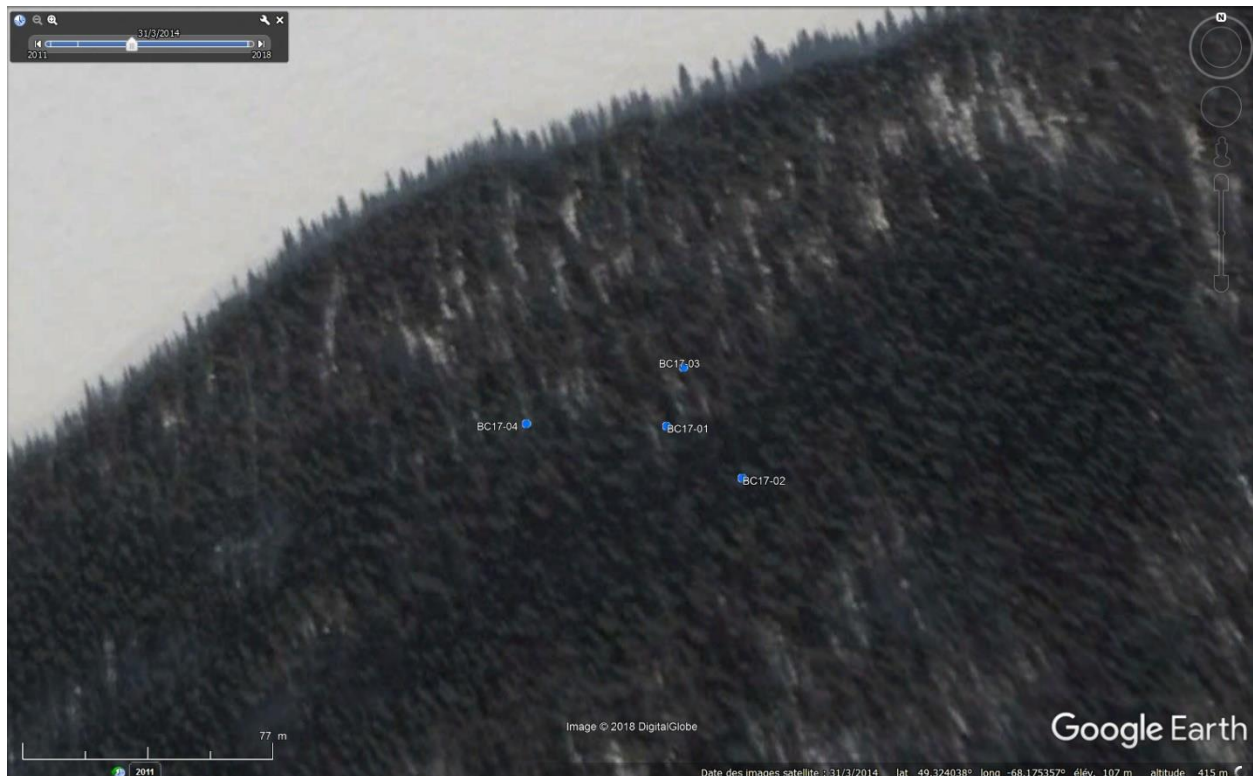


Figure 13: Drill holes location, The La Chesnaye property





Figure 14: The 2017 Drilling operation at The La Chesnaye property

## 11 Sample Preparation, Analyses and Security

Canadian Metals Inc. (CME) used ALS laboratory in Val-d’Or and CTMP in Thetford Mines (Centre de Technologie Minérale de Plasturgie Inc.). ALS is a commercial laboratory for sample preparation and analysis. ALS laboratory is well known in Quebec and they have a reliable industry reputation.

The ALS laboratory is accredited under ISO/IEC 17025:2017 certification and ISO 9001:2015. The Authors are not aware about the relation between the issuer and the ALS laboratory.

### 11.1 Sampling approach and methodology

#### Drill core samples

The extraction of the drill core took a lot of time. The manual drilling machine was not well adapted to the hardness of the deposit. Once the drilling core was extracted, the geologist took photos of the core, then the whole core was placed in a plastic bag adding a tag to ease identification and closed with a tie-wrap and sent back to the GMG’s office in Québec city (Figure 14).

The core samples was then sent for assaying to ALS laboratory tested for 13 major elements ( $Al_2O_3$ ,  $BaO$ ,  $CaO$ ,  $Cr_2O_3$ ,  $Fe_2O_3$ ,  $K_2O$ ,  $MgO$ ,  $MnO$ ,  $Na_2O$ ,  $P_2O_5$ ,  $SO_3$ ,  $SiO_2$ ,  $SrO$ ,  $TiO_2$ ) with XRF instrument.

#### Surface samples

From the La Chesnaye Lake property, a total of ten surface samples were taken. Four grab samples of around 25 kg each for metallurgical test and six smaller grab samples were also taken for grade and composition analysis (Figure 15). All samples were brought back to the office of GoldMinds Geoservices in Quebec City. They were cleaned with a brush and water to remove organic particles

and sent to the ALS laboratory in Val d'Or and to CTMP in Thetford Mines (Centre de Technologie Minérale de Plasturgie Inc.), (see Figure 17 and Figure 18).



Figure 15: GoldMinds team taking grab samples



Figure 16: Wet drill core sample (BC17-01 to BC-17-04)

The surface samples sent to the ALS laboratory were pulverised and tested for 13 major elements ( $\text{Al}_2\text{O}_3$ ,  $\text{BaO}$ ,  $\text{CaO}$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{K}_2\text{O}$ ,  $\text{MgO}$ ,  $\text{MnO}$ ,  $\text{Na}_2\text{O}$ ,  $\text{P}_2\text{O}_5$ ,  $\text{SO}_3$ ,  $\text{SiO}_2$ ,  $\text{SrO}$ ,  $\text{TiO}_2$ ) with XRF instrument. The samples sent to CTMP were heated to  $1000^\circ$  during 30 minutes for the decrepitation test.



Figure 17: Samples S 17-01 to S 17-02



Figure 18: Sample GS 17-01 to GS-17-04

## 11.2 Quality Assurance/Quality Control (QA/QC) program

Only few samples were gathered for less than two meters in total within the four manual drill holes. For that reason, no QA/QC program was put in place during the campaign.

### 11.3 Security

The core sampling and the surface sampling, sample preparation, sample handling and transport all followed a protocol established by GMG that included a strict chain of custody from sampling to the laboratory.

Samples were sent to ALS laboratory and to CTMP in sealed containers. The authors believes that the sampling preparation, security, and analytical procedures used by CME are consistent with generally accepted industry best practices and are therefore adequate to support the mineral potential estimation.

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## 12 Data Verification

### 12.1 Site Visit

In accordance with the National Instrument 43-101 guidelines, Merouane Rachidi, P. Geo., from GoldMinds Geoservices visited the property twice on September and November 2018. The second visit took place during active drilling and sampling. All aspects that could materially impact the integrity of the mineral potential database (sampling and database management) were verified while the visit to ascertain exploration procedures and protocols.

The visit is still current as no material change on exploration work has occurred since this last visit.

### 12.2 Independent verification sampling

The 2017 exploration program at the La Chesnaye property was established to verify the historical data on the property. GMG supervise the program and surface samples were all taken by M. Rachidi P. Geo., during the site visit. Assay results for the verification samples confirmed the presence of SiO<sub>2</sub> that range between 93.52% and 99.13 % SiO<sub>2</sub>.



## 13 Mineral Processing and Metallurgy Testing

Does not apply

## 14 Mineral Resource Estimates

The historical database and the recent drilling program of 2017 supplied to GoldMinds Geoservices Inc. does not allow to estimate the mineral resources of the La Chesnaye Lake property. Some important data are missing, like a recent diamond drilling program to evaluate the distribution of the quartzite in depth and along the property.

Until the Canadian Metals realises a diamond drilling campaign, GMG has estimated the mineral potential<sup>1</sup> of the La Chesnaye property using the historical data and the result of the recent sampling all presented in Section 24.

### 1 Cautionary Statements:

*Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade reported as Mineral Potential, is conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource.*

## 15 Mineral Reserves Estimates

Does not apply

## 16 Mining Methods

Does not apply

## 17 Recovery Methods

Does not apply

## **18 Project Infrastructure**

Does not apply

## **19 Market Studies and Contracts**

Does not apply

## **20 Environmental Studies, Permitting and Social or Community Impact**

Does not apply

## **21 Capital and Operating Costs**

Does not apply

## **22 Economic Analysis**

Does not apply

## 23 Adjacent Properties

The La Chesnaye property is composed by ten (10) claims, totaling a surface of 561.22 ha. A few individuals own claim in the region neighboring CME’s claim. The immediate neighbor to the La Chesnaye Lake property is a claims owned by Patricia Lafontaine, Michel Larouche, Guy Barette and Mario Bourque to the south west (Figure 19). The adjacent properties have been retrieved from Gestim website. The authors are not aware of significant exploration works by the others.

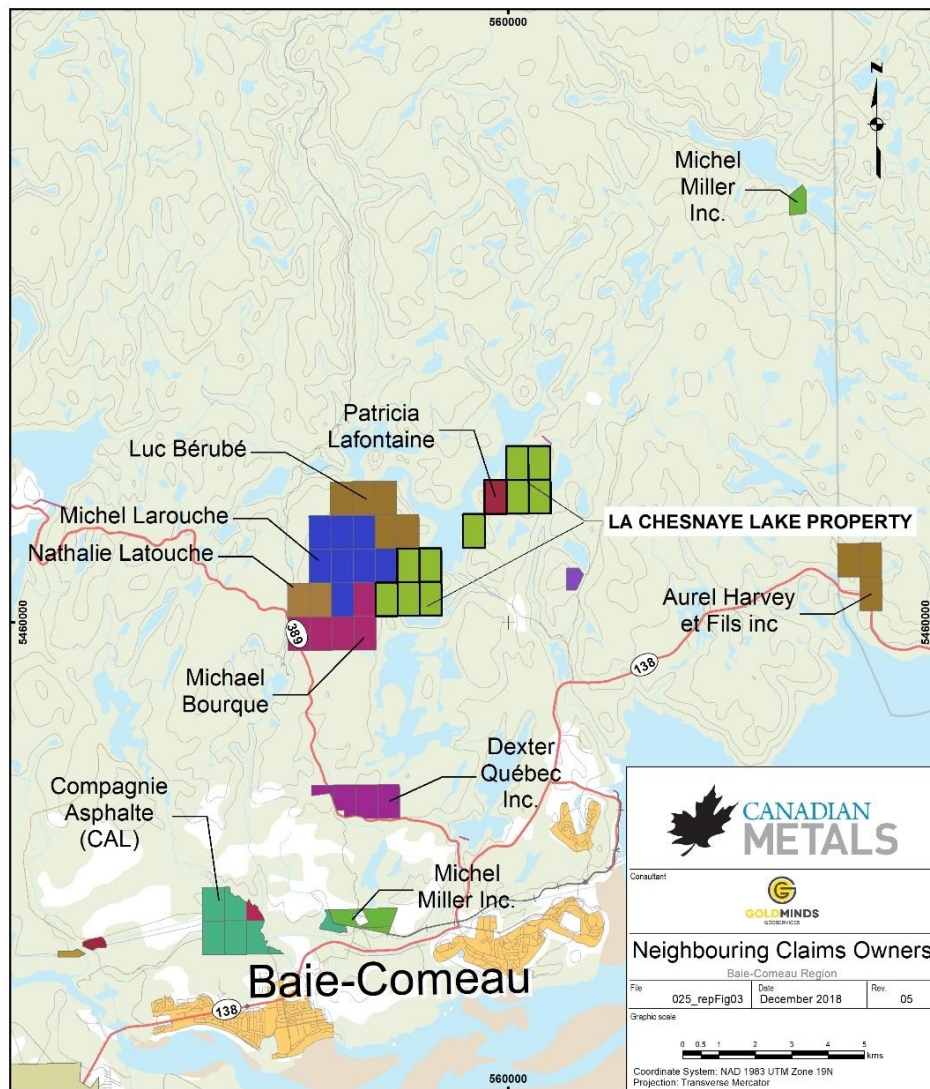


Figure 19: Properties adjacent to the La Chesnaye Lake property

## 24 Other Relevant Data and Information

### 24.1 Analytical Results

The drill core samples and the surface samples were analysed at ALS laboratory for 13 major elements ( $\text{Al}_2\text{O}_3$ ,  $\text{BaO}$ ,  $\text{CaO}$ ,  $\text{Cr}_2\text{O}_3$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{K}_2\text{O}$ ,  $\text{MgO}$ ,  $\text{MnO}$ ,  $\text{Na}_2\text{O}$ ,  $\text{P}_2\text{O}_5$ ,  $\text{SO}_3$ ,  $\text{SiO}_2$ ,  $\text{SrO}$ ,  $\text{TiO}_2$ ) with XRF instrument (Table 8).

**Table 8: List of the assay results (DC: drill core, GS: Grab samples, SS: surface sample)**

Samples	Sample Number	Type	$\text{SiO}_2$	$\text{Al}_2\text{O}_3$	$\text{BaO}$	$\text{CaO}$	$\text{Cr}_2\text{O}_3$	$\text{Fe}_2\text{O}_3$	$\text{K}_2\text{O}$	$\text{MgO}$	$\text{MnO}$	$\text{Na}_2\text{O}$	$\text{P}_2\text{O}_5$	$\text{SO}_3$	$\text{SrO}$	$\text{TiO}_2$
BC17-02	16338	DC	93,52	3,09	0,04	0,09	-0,01	0,79	1,14	0,18	0,01	0,4	0,02	0,05	-0,01	0,15
BC17-03	16339	DC	97,56	1,05	0,02	0,11	0,01	0,49	0,24	0,16	0,02	0,18	0,01	0,06	-0,01	0,05
BC17-04	16350	DC	97,61	1,05	0,02	0,03	-0,01	0,29	0,37	0,08	0,01	0,06	0,01	0,02	-0,01	0,04
GS17-01	16340	GS	98,26	0,64	0,02	0,01	-0,01	0,15	0,23	0,06	0,01	0,09	0,01	-0,01	-0,01	0,03
GS17-02	16341	GS	98,55	0,41	0,01	0,01	0,01	0,21	0,13	0,05	-0,01	0,04	0,01	-0,01	-0,01	0,04
GS17-03	16342	GS	97,8	0,87	0,01	0,03	0,01	0,37	0,16	0,12	0,01	0,16	0,01	-0,01	-0,01	0,07
GS17-04	16345	GS	98,7	0,66	0,01	0,01	0,01	0,16	0,12	0,05	0,01	0,17	0,01	-0,01	-0,01	0,03
S17-01	16343	SS	98,88	0,32	0,01	0,01	0,01	0,18	0,12	0,07	0,01	0,01	0,01	-0,01	-0,01	0,05
S17-02	16344	SS	99,13	0,18	0,01	0,02	-0,01	0,06	0,02	0,03	-0,01	0,04	0,01	-0,01	-0,01	0,02
S17-03	16346	SS	97,23	0,95	0,01	0,02	-0,01	0,19	0,23	0,04	0,01	0,21	0,02	0,01	-0,01	0,04
S17-04	16347	SS	98,79	0,31	0,01	0,01	0,01	0,16	0,09	0,03	-0,01	0,03	0,01	-0,01	-0,01	0,03
S17-05	16348	SS	98,6	0,68	0,01	0,01	-0,01	0,14	0,11	0,05	-0,01	0,17	0,01	-0,01	0,01	0,03
S17-06	16349	SS	99	0,38	0,01	0,01	-0,01	0,29	0,04	0,03	0,01	0,01	0,01	-0,01	0,01	0,03

The sample content of  $\text{SiO}_2\%$  range between 93.52% and 99.13%  $\text{SiO}_2$ .

Samples sent to CTMP were heated to  $1000^\circ$  during 30 minutes for the decrepitation test. The result of the decrepitation test is shown in Table 9 and Figure 20 to Figure 22. According to CPTM, the presence of mica in the sample explains the bursting of the sample. When heated the mica minerals swells and fragments the quartzite.

**Table 9: The results of the decrepitation test**

Samples	Weight before (gr)	Weight after (gr)	( + 12.5 mm ) gr	(- 12.5 mm ) gr	% +12,5mm	PAF %
GS 17-01	983.01	978.91	748.42	230.49	76,45%	0,42
GS 17-03	1018.73	1013.9	654.41	359.49	64.54%	0.47
GS 17-04	502.79	501.13	328.54	172.5	65.57%	0.33
GS 17-02	349.85	349.17	291.62	57.36	83.56%	0.19
GS 17-03	418.81	415.83	274.29	141.42	65.98%	0.71
S 17-01	431.55	429.56	288.88	140.6	67.26%	0.46
GS 17-04	415.18	412.5	274.6	137.9	66.57%	0.65



Figure 20: Pictures at the left were taken by CTMP after decrepitation test and to the right were taken before decrepitation test (samples GS 17-01, GS 17-02 and S 17-01)



Figure 21: Pictures taken by CTMP before (right) and after (left) decrepitation test



Figure 22: Pictures taken by CTMP before (at the right) and after (left) decrepitation test, (sample GS 17-04)

## 24.2 Modeling and Mineral Potential Estimate

After the compilation of the assay results taken from samples, grab samples and drill cores. A 3D wireframe envelope was modeled by GoldMinds Geoservices relied on the data available in the compiled database and taking into account the topography surface. The elevation of some collars were corrected to the elevation of the topography surface. The envelope was constructed by connecting directly the defined prisms (Figure 23 and Figure 24) on the sections in Genesis using the lithology description of the historical holes (Figure 24).

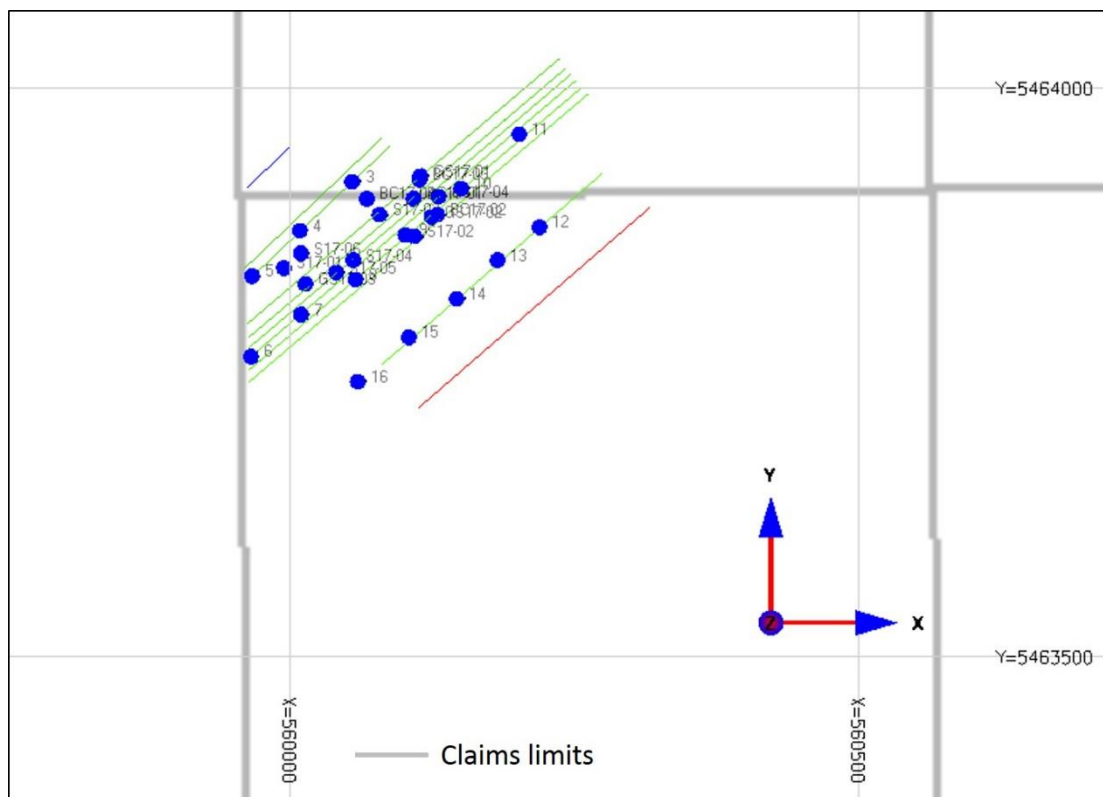


Figure 23: Plan view showing the distribution of the prisms



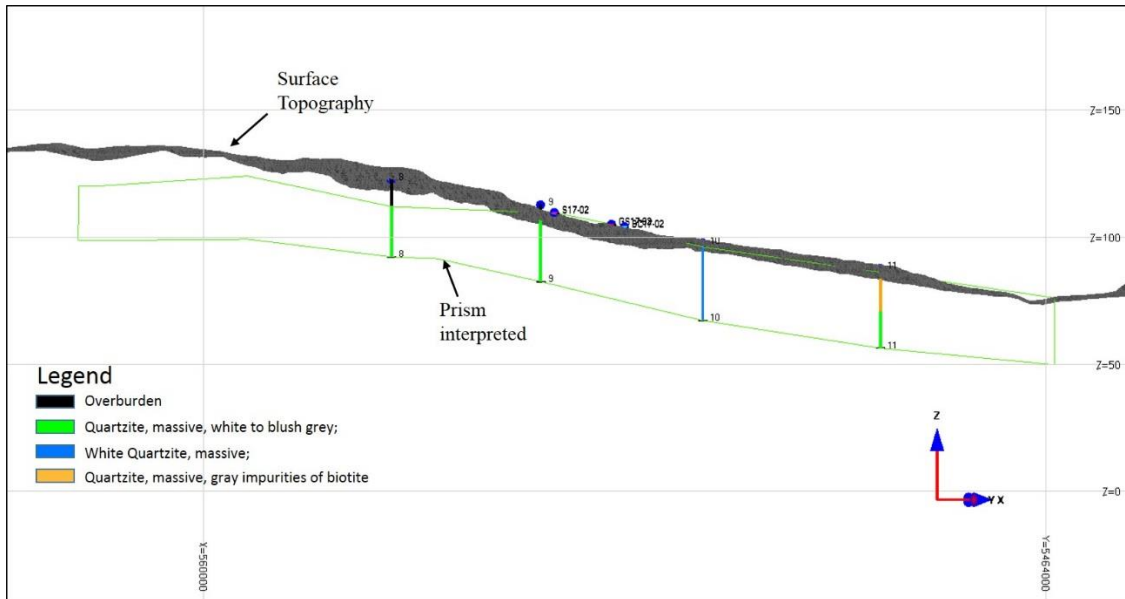


Figure 24: Section view showing the interpreted prism and the topographic surface

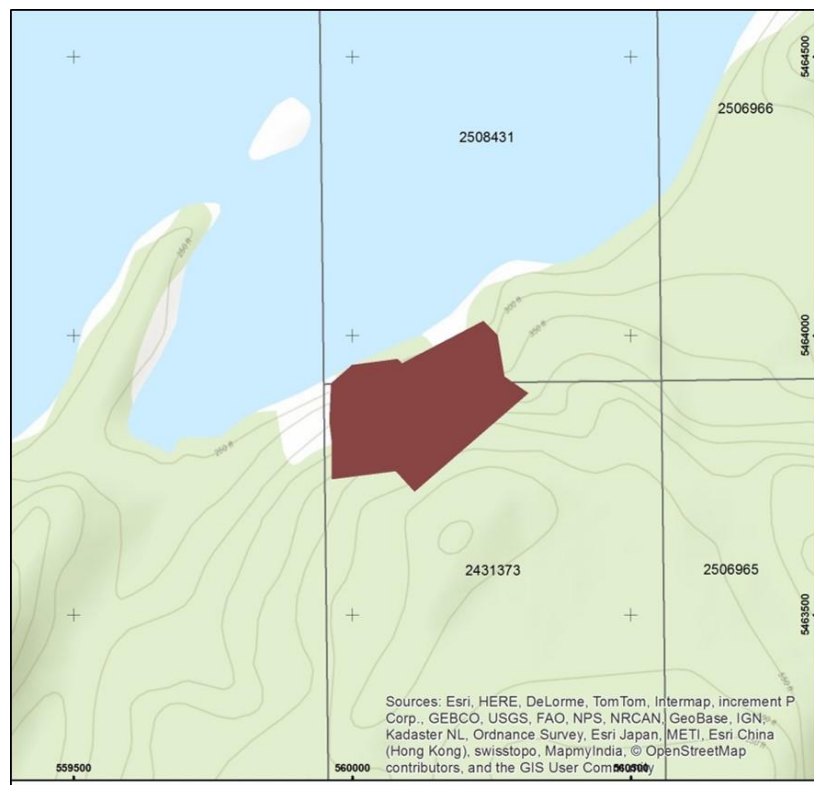


Figure 25: Plan view of the envelope localisation, the La Chesnaye property

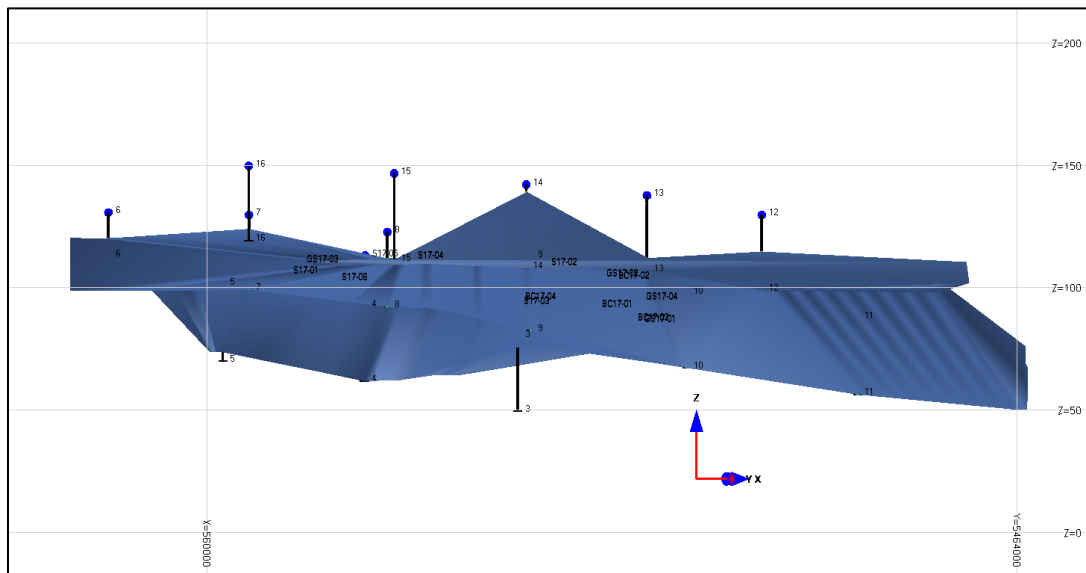


Figure 26: Section view of the 3D wireframe envelope, the La Chesnaye property

The maximum depth of the mineralized envelope is around Z-50m. The figures (Figure 25 and Figure 26) present the location and shape of the envelope used for the potential estimation of the La Chesnaye property. The envelope is localised over two claims (number 2508431 and 2431373, Figure 25).

A total of 13 analysis as well as the lithological description of 14 historical drill holes were used to evaluate the mineral potential of the La Chesnaye property. The recent sampling campaign realised by the GoldMinds’s geologist in 2017 present a variation of the silica content from 93.52% to 99.13% SiO<sub>2</sub> with an average of 97.97%. The potential <sup>(1)</sup> was calculated using the volume of the envelope and a fixed grade (97.97% SiO<sub>2</sub>) corresponding to the average of the 2017 assay results. In order to convert tonnage from the volumetric estimates a fixed density of 2.6 t/m<sup>3</sup> was used and which correspond to the quartz density.

### 1 Cautionary Statements:

*Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The potential quantity and grade reported as Mineral Potential, is conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource.*

The potential <sup>(1)</sup> estimated for the La Chesnaye property is around 2.5 to 3.0 million tonnes with an average of 97.97% SiO<sub>2</sub> (Table 10).

**Table 10: The potential estimation <sup>(1)</sup> of the La Chesnaye property**

Potential estimation of the La Chesnaye Lake	Area (ha)	Volume	Tonnes (million tonnes)	Grade (%SiO <sub>2</sub> )
Potential estimation	6.675	1,100,000	2.5 to 3.0	97.97

**1 Cautionary Statements:**

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## 25 Interpretation and Conclusions

The results of the sampling program planned by GMG in 2017 have supported the historical database. The program help to define the extent of the deposit and allow a preliminary mineral potential estimation for the La Chesnaye deposit.

The mineralized envelope is extended to an area of around 6.67 ha. and more exploration works is needed to evaluate the property. The tonnage and the grade of the reported potential mineral estimate are uncertain in nature.

The decrepitation test was carried out to identify the samples compartment in the furnace. The silica samples showing a less effect of decrepitation in a high temperature (1000°C) can be used for the production of Ferro silicon and Silica metals. According to the results of the decrepitation test (Table 9) the deposit of the La Chesnaye is not adapted for the production of Ferro silicon and/or Silica

metals. Indeed it is necessary to redo the decipitation test on deeper core samples that are not affected by surface alteration. The effect of this later may increase the effect of decrepitation on the quartz samples.

The site is not easily accessible for the drill machine the bush and the topography is rugged and steep.

## 26 Recommendations

There is a potential in the La Chesnaye Lake property and a diamond drilling campaign is needed on the La Chesnaye site for a better understanding of the silica mineralization extensions at depth. To test the mineral potential of the La Chesnaye, GMG propose the following:

- Before the start of the diamond drilling program GMG recommend a geological mapping at the La Chesnaye site for a better understanding of the quartzite bands (thickness, orientation, etc.). A line cutting and a mechanical stripping if needed is also recommended. A total budget of around 25,000.00 CAD has to be dedicated for the geological mapping and line cutting or stripping;
- A diamond drilling program at the La Chesnaye site, a total of 500 meters (100,000.00 CAD, all costs included) of drilling is recommended;
- All the drill holes have to be surveyed with a total station or differential GPS. Azimuth, dip and the length of each hole must be taken.
- It is recommended to carry density measurements on fresh cores during the next drilling program in order to monitor the density.
- Before the start of drilling, The CME has to set up a QA/QC control program using the standards, the blanks, the sample duplicate procedure and the laboratory standards.

Communication with local community, First Nation, MERN and MDDELCC to obtain authorizations for future works is recommended. Drilling recommendation is dependent of geological mapping success. The access is an important factor to consider and could prove difficult in an eventual operation.

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## 27 References

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**Sedar website:**

[www.sedar.com](http://www.sedar.com)