

**NI 43-101 TECHNICAL REPORT PERTAINING TO:**

**MASSICOTTE PROPERTY**

**Northwestern Quebec**

**Selbaie and Matagami Mining Camp**

December 21, 2012

Modified on April 10, 2013

**Prepared for Canadian Metals Inc.**

Prepared by: Donald Théberge, Eng., P.Eng., M.B.A.

**DATE AND SIGNATURE PAGE**

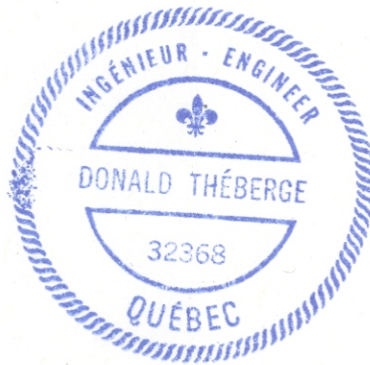
I, Donald Théberge, Eng., M.B.A., do hereby certify that:

- a) I am registered under the name Solumines, and my place of business is located at 54 De La Vigie, Lévis, Province of Quebec, G6V 5W2;
- b) I am the qualified person, responsible for the preparation of all the sections of the technical report entitled *“NI 43-101 Technical Report Pertaining to Massicotte Property, Northwestern Quebec, Selbaie and Matagami Mining Camp. Prepared for Canadian Metals Inc.”* dated December 21, 2012 and modified on April 10, 2013;
- c) I graduated with a degree in geological engineering from the University du Québec à Chicoutimi in 1978. I obtained a Master of Business Administration (M.B.A.) from Laval University in 1994. I am a member in good standing of the Ordre des Ingénieurs du Québec (No. 32368) and the Professional Engineers of Ontario (licence #100166433). I have worked as a geological engineer since my graduation in 1978. My relevant experience for the Massicotte project was acquired during my years working as a project geologist for Serem (1978-1981), as a senior geologist for Agnico-Eagle (1982-1989) and as a technical inspector for the C.E.I.P. program of Natural Resources Canada (1989-1990), and during the course of many mandates for junior exploration companies;
- d) I visited the property on October 2, 2012. One day was required for the visit. I used the old Selbaie Mine road and logging roads to check for outcrops on the different claim blocks. However, due to the thick overburden in this area, I saw no outcrops, excepted along the Harricana River at the junction with the Selbaie road bridge.
- e) I am responsible for all the sections of the technical report;
- f) I am independent of the issuer in accordance with Section 1.5 of NI 43-101;
- g) I have read the definition of “qualified person” set out in Regulation 43-101 respecting standards of disclosure for mineral project, and certify that by reason of my education, affiliation with a professional association (as defined in Regulation 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of Regulation 43-101;

- h) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that Instrument and Form;
- i) As of April 10, 2013, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this April 10, 2013

*Donald Th  berge*



\_\_\_\_\_  
Donald Th  berge, Eng., P.Eng., M.B.A.

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Schedule 1: Claims Description

## **ILLUSTRATIONS**



General view of the Selbaie road used to access the property

## **1.0) SUMMARY**

The property is located in NTS sheet 32E/09, 32E/15, and 32E/16. It covers parts of Gaudet, Beschefer, Bapst, Ste-Hélène, Aloigny, La Gauchetière, Desmazures and Joutel townships. It is made of 484 map-designated cells totalling 26,839,7 ha or 268,39 km<sup>2</sup>. The property has been divided into five blocks called Blocks A to E. Expiry dates range from January 10, 2014, to August 13, 2014. Exploration work in the amount of \$580,100 will be required on the next renewal, along with \$26,230.50 in mining duties, to keep the claims in good standing.

The property was acquired pursuant to two purchase agreements entered into on August 31, 2012, one with 9248-7792 Québec inc, 9257-1256 Québec inc., and Glenn Griesbach for Blocks A, B, C and D, and the other with China Metal Group for Block E. Neither purchase required any cash payment, but rather issuance of a total of 1.8M common shares of Canadian Metals for a 100% interest. The entire property is subject to a 2% NSR. One percent (1%) of the NSR can be bought back for \$1M for Blocks A, B, C, and D and \$500,000 for Block E.

To the knowledge of the author, there are no environmental liabilities pertaining to the Massicotte property. The only permit required to perform ground exploration, mainly drilling, is the usual forestry management permit. The company must also respect all the environmental laws applicable to the type of work done.

The property is easily accessible via the Selbaie Mine road and several old logging roads. All-terrain vehicles or helicopter support is required to access certain areas of the property. The town of Matagami is located about 45 km east of the property as the crow flies. Services and equipment not available at Matagami can be obtained from Amos, Val-d'Or or Rouyn-Noranda.

The first work on the property took place in 1948, with ground geophysical and geological surveys. These kinds of surveys plus airborne EM and Mag surveys prevailed until 1959, when the first drilling was done by Selco. From 1959 to 2003, no fewer than 15 companies, sometimes with their partners, drilled and reported at least 96 holes for a total of 18,460 m or 60,459 feet. Some holes, mainly on Block E, revealed alterations typical of volcanogenic massive sulphide (VMS) deposits. One hole drilled on Block C revealed anomalous gold values in the order of 226 ppb Au/7.5 m, and anomalous gold values over 88 m in sericitized and carbonatized intermediate volcanic rocks.

Geologically, the property is located in the Abitibi sub-province. It is underlain by a mix of volcanic and sedimentary rocks, cut by syn to late tectonic intrusives, and Proterozoic diabase dykes. Two

kinds of sedimentary rocks have been identified, the first made of conglomerate, mudstone and siltstone and the second, which is less important in term of quantity, composed of iron formation, argillite and pyroclastites. The sediments usually strike roughly E-W, excepted in the north part of the area, where they divide into two volcanic domains with a SE-NW orientation.

The volcanites range very widely in composition. They vary from rhyolitic to komatiitic. The komatiites occur mainly in the south part of the area, and form in part the Cartwright Hills. In the north part of the area, intermediate to mafic flows dominate, with felsic flows locally. There is no well-defined mineralized zone with estimated resources on the property. However, several anomalous gold values have been obtained in historical drill holes, along with massive sulphide (pyrite-pyrrhotite) intersections.

Two main types of orebodies should be considered for the exploration model on the Massicotte property:

- Massive sulphide (VMS) deposits of the Matagami / Selbaie type;
- Gold deposits of the Douay, or Casa Berardi type, associated with shear zones in volcanics/sediments.

The rock alterations already described in historical drilling, mainly on Block E, are typical of volcanogenic massive sulphide deposits. Alterations typical of VMS orebodies like sericite alteration, chlorite alteration in felsic rocks, the presence of chert, and felsic agglomerate have been reported on the property. Several intersections of massive sulphide in the form of pyrite and pyrrhotite further show the potential of the Massicotte property for this kind of orebody. VMS examples surrounding the property are the Selbaie Mine located approximately 15 to 20 km W of Block E, Phelps Dodge, Caber and Caber North, located from 2 to 6 km E of Blocks C and D.

The second type of deposit to consider is the Douay / Casa Berardi type. The Douay deposit is located about 3 km E of the two claims that are part of the D block to the south. The Douay deposit is hosted in felsic to mafic rocks, associated with a deformation zone and showing a strong carbonate-sericite alteration. Casa Berardi type deposits are characterized by gold mineralization in quartz veins, associated with a shear zone along a volcanic-sedimentary contact.

Canadian Metals has not initiated any exploration work since it acquired the property. The author cannot comment on sample preparation, analyses or security as these are not described in historical reports. It was also impossible to verify the historical data, as the old drill core is lost or impossible to verify. However, the author is of the opinion that the data used in the preparation of this report is



generally reliable. At present, there are no adjacent properties that could have a material impact on Massicotte property.

Orebodies observed in the area are all VMS-type deposits. Many holes drilled on the property show typical rocks and/or alteration associated with VMS-type deposit. Anomalous zinc values such as 1,863 ppm/4.5 m and 1869 ppm/2.1 m have been reported on Block A. On Block E, several sections of massive pyrite were observed along with rhyolite, chert and agglomerate. Rhyolite with chlorite and sericite schist was reported close to the contact with sedimentary rocks.

Anomalous gold values have been reported on Block C. This is particularly interesting in Hole 237-90-04, which returned 226 ppb Au/7.5 m. In this hole drilled by Total Energold in 1990, all the andesite and intermediate agglomerate units extending from 65.5 to 153.5 m are anomalous for gold and associated with sericite and carbonate alterations with 1-2% pyrite and pyrrhotite. On the east part of Block C, anomalous copper values in the order of 0.17%/3 m and 0.16%/3 m have been reported.

In conclusion, two main targets become apparent on the property in light of the currently-available information: massive sulphide deposits, mainly on Block E and C, and gold deposits on Block C.

Because of the deep overburden, a systematic geological survey is not recommended, excepted in the area where the Selbaie road crosses the Harricana River. A two-phase exploration program is suggested and has been adapted to the deep overburden. In Phase I, a deep penetrating helicopter-borne survey EM and magnetic survey is recommended. This survey should be done systematically on flight lines 200 m apart. This would be useful for locating massive sulphides and shear zones. A computerized geological compilation is also recommended to complement the information provided by the airborne survey, including the main historical ground geophysical surveys, the drill holes, including the gold and base metals assays and, when available, the lithochemical analyses, to locate areas that show typical VMS alteration.

Phase II will include ground follow-up on anomalous zones generated by the airborne survey and geological compilation. This follow-up would include line cutting, deep penetrating EM surveys, or IP if judged preferable, and approximately 3,000 m of drilling to test these anomalies.

The budget to complete both Phases I and II is shown on next page.

**Budget**

<b>Phase I: Airborne Survey, Compilation</b>				
<b>Work</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit cost</b>	<b>Total</b>
Program preparation	3	days	\$800	\$2 400
<b>Helicopter borne Survey</b>				
Mobilization - demobilization			\$13 000	\$13 000
Survey	800	km	\$140	\$112 000
Compilation				\$40 000
Geology, field verification				\$15 000
Report at the end of Phase I, and filing for statutory purposes				\$10 000
Contingencies 12%				\$23 088
	<b>Total Phase I</b>			<b>\$215 488</b>
<b>Phase II: Ground surveys and drilling</b>				
Program preparation	5	days	\$800	\$4 000
Line cutting, and ground surveys, provision of \$75,000				\$75 000
Diamond drilling (150\$/m all inclusive)	3000	m	\$150	\$450 000
Report at the end of Phase 2, and filing for statutory purposes				\$15 000
Contingencies (average of 12%)				\$65 280
	<b>Total Phase II</b>			<b>\$609 280</b>
	<b>Total Phase I and II</b>			<b>\$824 768</b>

## **2.0) INTRODUCTION**

### **2.1) RECIPIENT**

This technical report on the Massicotte property has been prepared at the request of Canadian Metals Inc. ("Canadian").

### **2.2) OBJECTIVES**

This report describes the scientific and technical information concerning the exploration activities, both historical and recent, carried out on the Massicotte property.

### **2.3) SOURCE OF DATA AND INFORMATION**

This report is based on the documentation provided by Canadian and the statutory work filed with the Quebec Ministry of Natural Resources and Wildlife (MRNFQ). A complete and detailed list of the documentation used is given in Item 23.0, "References".

### **2.4) SCOPE OF THE PERSONAL INSPECTION BY THE QUALIFIED PERSON**

The author visited the property on October 2, 2012. One day was required for the visit. The author used the old Selbaie Mine road and logging roads to check for outcrops on the different claim blocks. However, due to the thick overburden in this area, no outcrops were observed, excepted along the Harricana River at the junction with the Selbaie road bridge.

### **2.5) UNITS USED IN THIS REPORT**

Unless otherwise indicated, the units used in this report are in the metric system, amounts are in Canadian dollars, and coordinates are in the UTM system, Nad 83, Zone 17.

### **3.0) RELIANCE ON OTHER EXPERTS**

The author did not rely on other experts for the preparation of this report. Donald Théberge, Eng., M.B.A., is the person responsible for all the sections of this technical report. .

### **4.0) PROPERTY DESCRIPTION AND LOCATION**

#### ***4.1) AREA***

The property is made up of five claim blocks totalling 484 map-designated cells, for 26,839.7 ha.

#### ***4.2) LOCATION***

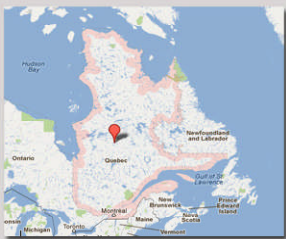
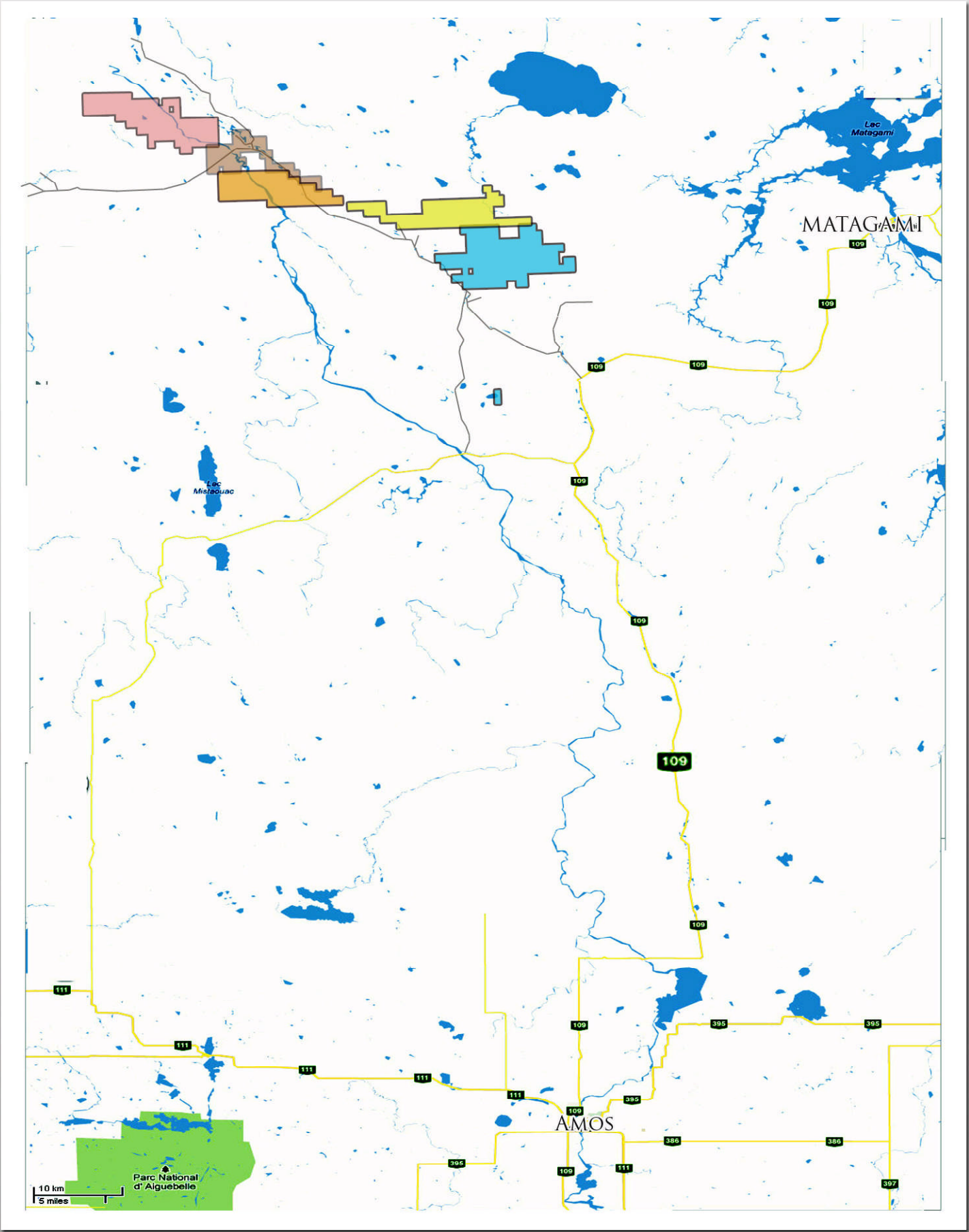
The property extends for more 50 km in a NW-SE direction, and covers parts of Desmazures, Aloigny, La Gauchetière, Ste-Hélène, Joutel, Bapst, Beschefer, Gaudet and Joutel townships. The south boundary of the property is located approximately 25 km NNE of the ghost town of Joutel. The north boundary of the property is situated 50 km farther to the NW. Geographically, the property is situated in NTS<sup>1</sup> sheet 32E09, 32E15 and 32E16 and centered on UTM coordinates 683,000E / 5,517,000N. The property location is shown in Figure 1, "Location Map".

#### ***4.3) TYPE OF MINERAL TENURE***

The Massicotte property consists of five claim blocks made up of 484 map-designated cells. Exploration work in the amount of \$580,100 is required to keep the claims in good standing; however, there is no accrued work registered on the claims. Mining duties of \$26,230.50 will be due on claim renewal. The claims are described in Appendix 1, "Claims Description", and illustrated in Figure 2, "Claims Map". Table 1 describes the expiry date, accumulated work, required work and mining duties for each claim block.

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<sup>1</sup> NTS: National Topographic System

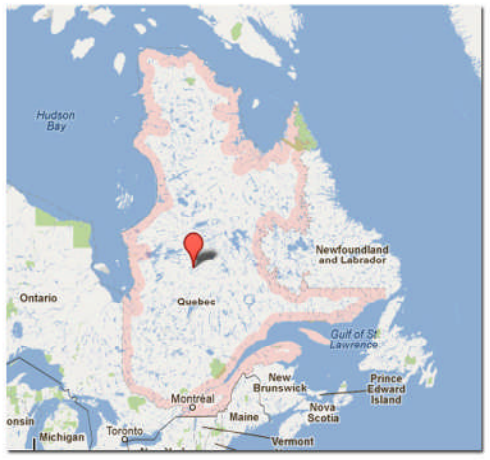
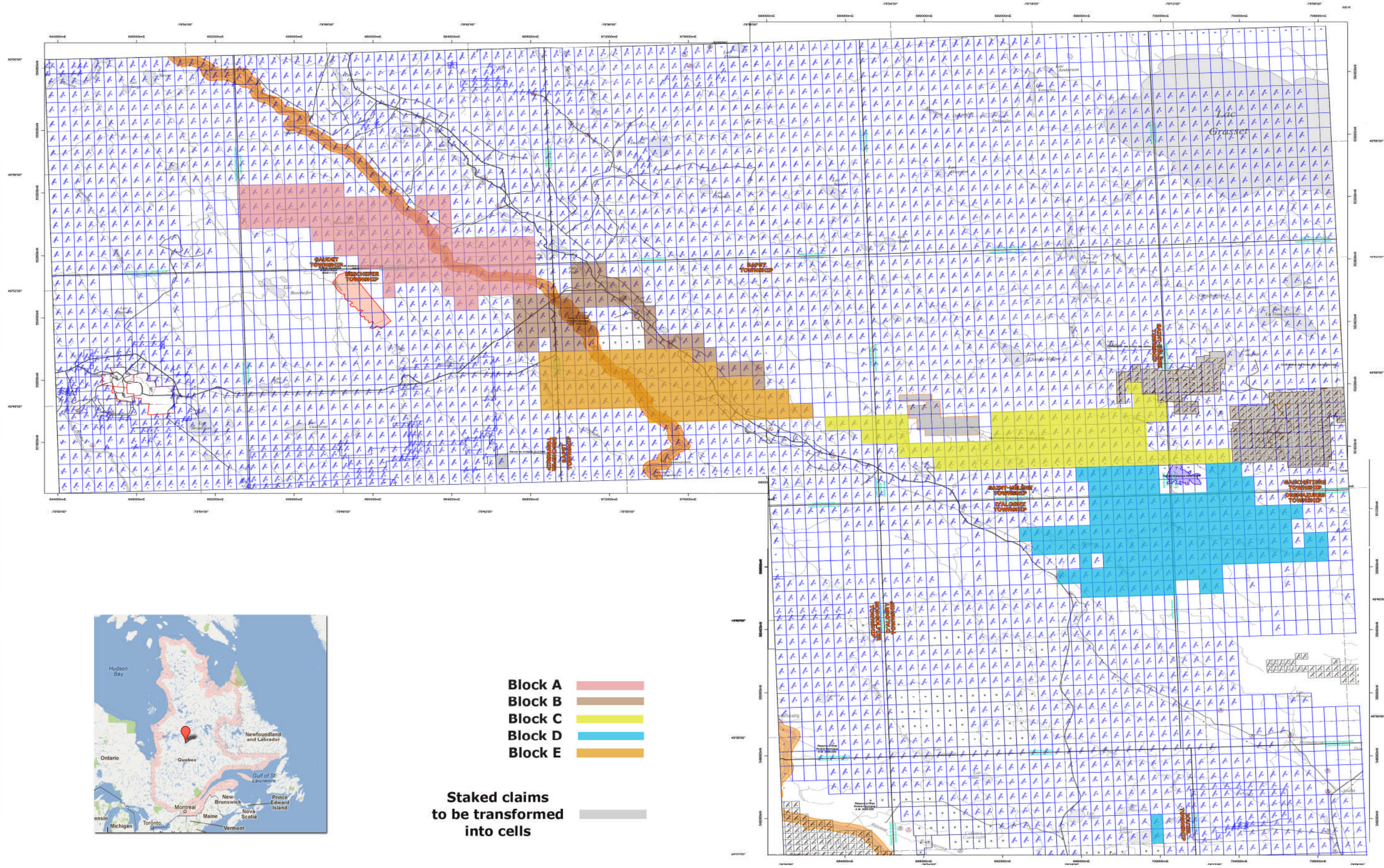


Roads

CANADIAN METALS INC.

**LOCATION MAP**  
Massicotte Property

PREPARED BY: *SOLUMINES*  
DATE: 09/19/2012



**Block A**   
**Block B**   
**Block C**   
**Block D**   
**Block E**   
 Staked claims  
 to be transformed  
 into cells



Ressources naturelles  
 et Faune  
**Québec**

**SCALE**  
 0 4000  
 METERS

**CANADIAN METALS INC.**

**CLAIMS MAP**  
 Massicotte Property

PREPARED BY: SOLUMINES  
 DATE: 09/19/2012

TABLE 1: CLAIMS

Block	Cells	Expiry date	Area (ha)	Accumulated work	Required work	Mining rights
A	111	From January 10, 2014 to June 21, 2014	6,159.88	\$0	\$133,200	\$6,021.75
B	54	From May 15, 2014 to July 18, 2014	2,999.96	\$0	\$64,800	\$2,929.50
C	90	From March 28, 2014 to August 13, 2014	4,929.30	\$0	\$107,300	\$4,856.00
D	148	From March 28, 2014 to June 21, 2014	8,246.88	\$0	\$177,600	\$8,029.00
E (China)	81	From March 14, 2014 to May 14, 2014	4,503.68	\$0	\$97,200	\$4,293
<b>Total</b>	<b>484</b>		<b>26,839.7</b>	<b>\$0</b>	<b>\$580,100</b>	<b>\$26,230.50</b>

In February 2013, 18 claims expiring in 2013 have been harmonized and their expiry date is now fixed on June 21, 2014. They are shown in yellow on schedule 1.

#### 4.4) NATURE AND EXTENT OF THE ISSUER'S TITLES

The property was acquired pursuant to two purchase agreements signed on August 31, 2012, the first signed jointly with 9248-7792 Québec inc., 9257-1256 Québec inc. and Glenn Griesbach, and the second with China Global Mining Group. The general terms of the agreements are summarized in Table 2 below.

TABLE 2: GENERAL TERMS OF THE OPTION AGREEMENT

Seller	Cash (\$)	Common Shares	Claim Block
9248-7792 Québec inc	\$0	600,000	A, B, C, D
9257-1256 Québec inc	\$0	400,000	A, B, C, D
Glenn Griesbach	\$0	500,000	A, B, C, D
China Global Mining Group	\$0	300,000	E
<b>Total</b>	<b>\$0</b>	<b>1,800,000</b>	

#### 4.5) PROPERTY BOUNDARIES

The property boundaries have not been surveyed. They are already defined by the NTS system coordinates.

#### 4.6) LOCATION OF THE MINERALIZED ZONES

There are no known mineralized zones with estimated resources on the Massicotte property.

#### 4.7) ROYALTIES

The sellers retain a 2% net smelter return (NSR) royalty; 1% of this NSR can be bought back by Canadian Metals for \$1M for Blocks A, B, C and D and for \$500,000 for Block E. Each seller's portion of NSR and amount payable to buy back the 1% is described in Table 3, "NSR".

**TABLE 3: NSR**

Seller	NSR (total 2%) divided between the sellers	1% can be bought back	Amount to pay to buy back the NSR	Claim Block
9248-7792	0,6%	0,3%	\$300,000	A, B, C, D
9257-1256	0,4%	0,2%	\$200,000	A, B, C, D
Glenn Griesbach	1%	0,5%	\$500,000	A, B, C, D
China Global Mining Group	2%	1%	\$500,000	E

#### 4.8) ENVIRONMENTAL LIABILITIES

To the knowledge of the author, there are no environmental liabilities pertaining to the Massicotte property.

#### 4.9) REQUIRED PERMITS

The only permit required to pursue exploration work on the property is the usual permit for forestry management. The company must also respect all the environmental laws applicable to the type of work done.

### **5.0) PHYSIOGRAPHY, ACCESSIBILITY, INFRASTRUCTURE AND CLIMATE**

#### **5.1) TOPOGRAPHY, ELEVATION, VEGETATION AND DRAINAGE**

The property shows a relatively flat topography, with a maximum elevation difference of 10 m between the highest and lowest points. The average elevation is approximately 260 m above sea level. Like much of the area, the property is covered by a mix of swamp and forest of spruce, birch and alder. Based on historical drilling, overburden thickness varies from 0 to a vertical depth of approximately 80 m.



## **5.2) ACCESSIBILITY**

The property is easily accessible via Route 109, which connects the town of Amos to the town of Matagami. About 130 km north of Amos, the route turns left onto the road leading to the now dismantled town of Joutel, and then right just east of the Harricana River onto the old Selbaie Mine road, now called the Villebois road. This road is paved up to the Harricana River where it becomes a gravel road leading to the now abandoned Selbaie Mine site. This road crosses the B and E claim blocks, and is in the immediate vicinity of Blocks A, C and D.

All terrain vehicles and/or helicopter support will be required to access parts of each claim blocks. Several old logging have been observed, mainly on Blocks A, B and E. For geological surveys and drilling, a camp will be required to optimize the field work.

## **5.3) INFRASTRUCTURE**

There is no mining infrastructure on the property. Matagami, with a population of 2,000, located 45 km east of the property as the crow flies or about 100 km by road, may provide some of the services and equipment required for the exploration programs. Any services and equipment not readily available in Matagami can be found in Amos, Val-d'Or or Rouyn-Noranda, 150 km S, 225 km SSE and 260 km SSW, respectively.

## **5.4) CLIMATE**

The area lies at the limit between the subarctic and humid continental climates. This climatic zone is characterized by long cold winters and short cool summers. Daily average temperatures range from -20°C in January to +16°C in July. Break-up usually occurs in early April and freeze-up in November. These are normal conditions for the Abitibi region, where exploration work is usually conducted year round.

## **6.0) HISTORY**

No resources have ever been estimated on the property, nor has production ever taken place.

### **6.1) GEOLOGICAL WORK BY THE QUEBEC GOVERNMENT**

The first work by the Quebec Government dates back to 1901 and consisted of a large-scale reconnaissance survey between the Lac St-Jean and Baie James areas. The next survey was produced by Longley about 40 years later in the Matagami and Grasset Lake area. The most interesting work really began around 1973, with airborne EM Input and magnetic surveys that delineated the conductive zones. These airborne surveys culminated in 2008 with the release of a Megatem and magnetic survey by the Quebec Ministry of Natural Resources. Unfortunately, this survey covered only part of the Massicotte property. Airborne EM Input anomalies have been compiled and are illustrated in Figure 3. The Megatem survey is illustrated in Figure 4.

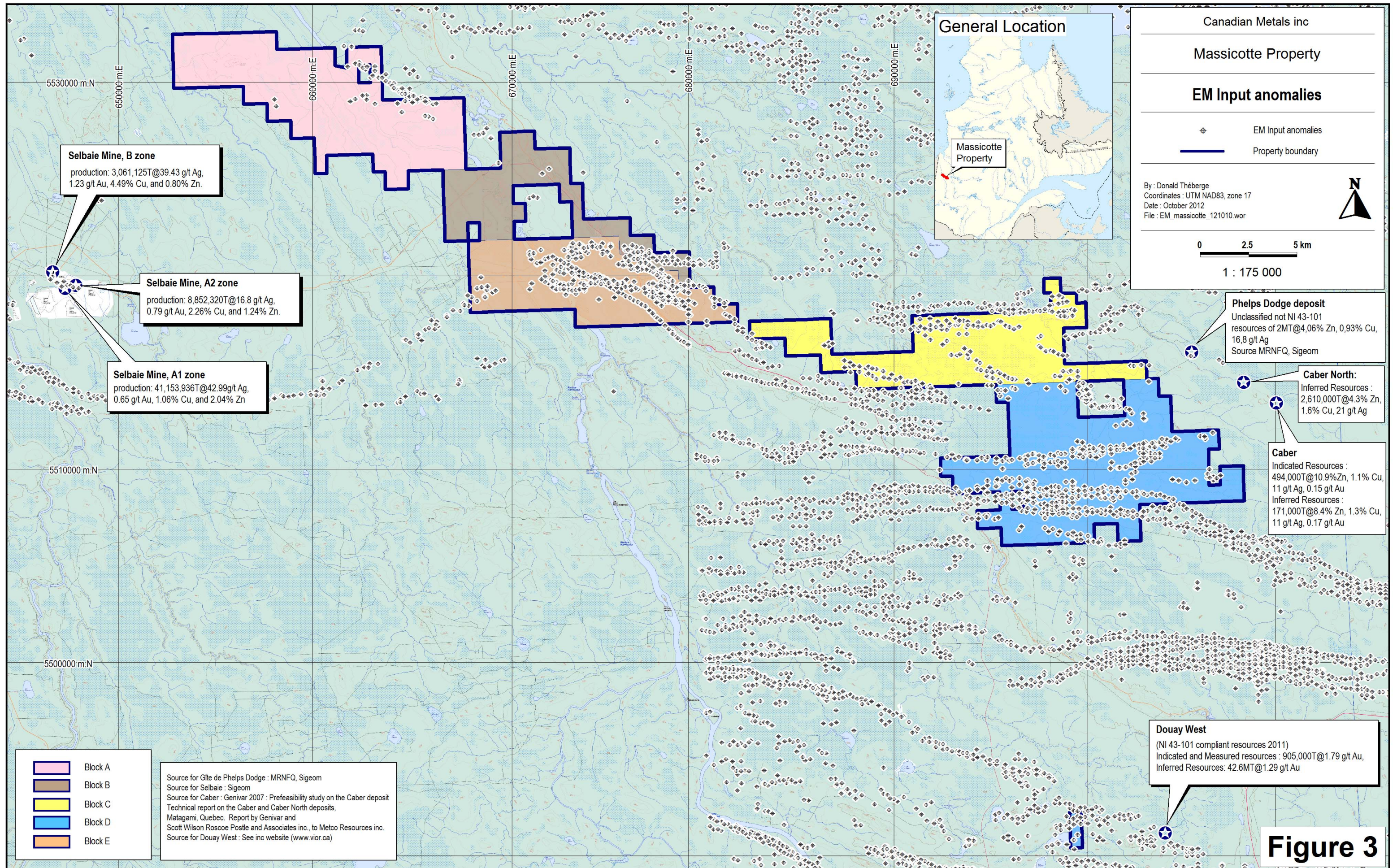
During the 1980s, several geochemical surveys were completed by Beaumier, and only isolated anomalies were identified on the property. In 1986-87, Lacroix mapped the area, including mainly the west part of the property. Unfortunately, very few outcrops were discovered. Finally, from 2005 to 2012, large-scale studies to assess the potential for orogenic gold deposit, massive sulphide (VMS) type orebodies and Cu, Au, Mo porphyry deposits were undertaken. They revealed high potential for VMS-type deposits over the A, E and D blocks. Figure 5, "Evaluation of the volcanogenic massive sulphides potential, Noranda type", shows a typical VMS-type deposit.

### **6.2) BY MINING AND/OR EXPLORATION COMPANIES**

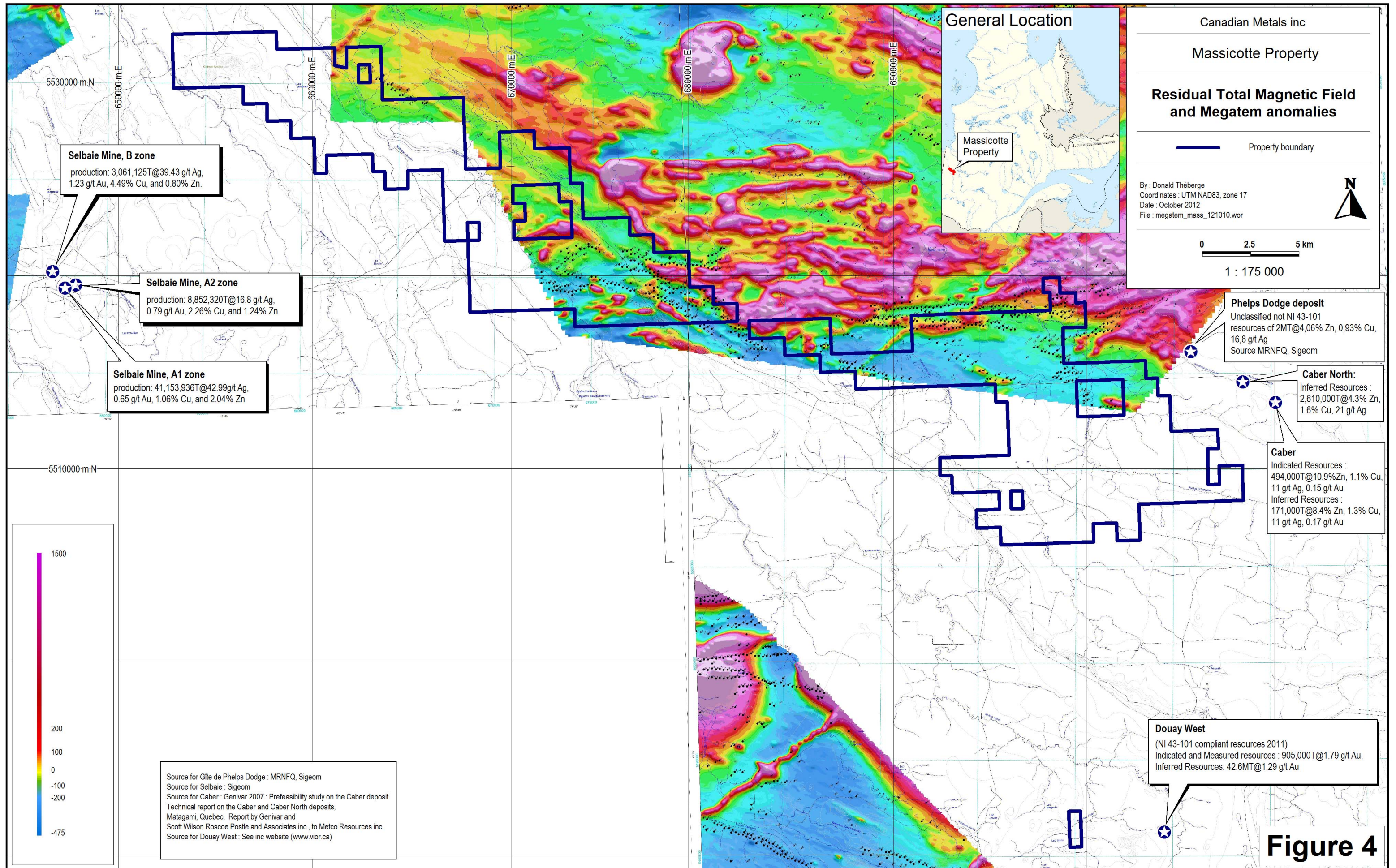
The first exploration work on the property and in its immediate vicinity was reported around 1948, with a magnetic and geological survey by Anglo-Huronian Ltd. From 1948 to 1959, the only exploration work reported consisted of ground and airborne geophysical and geological surveys. From 1959 to 2003, 96 holes totalling 18,460 m or 60,459' were drilled on the property, along with some deep penetrating EM surveys. The most relevant work is described more in detail below.

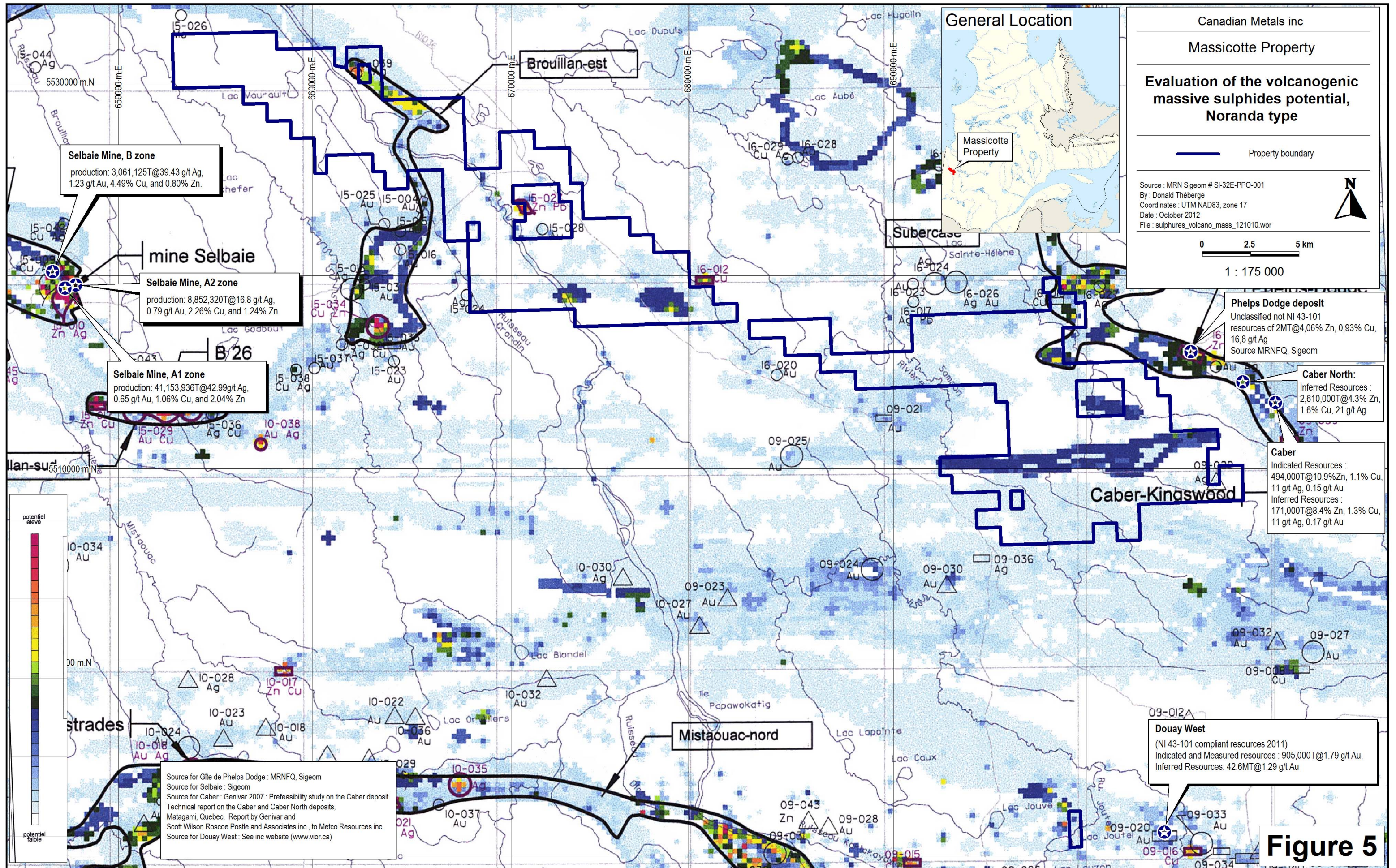
Selco Exploration Ltd., Selco Mining, Mine Selbaie, Les Métaux Billiton:

Over the years, Selco Exploration became Selco Mining, and then following the discovery of the Selbaie mine, Selco proceeded with the exploration work and finally, Billiton Metals acquired the Selbaie



**Figure 3**





mine and its surrounding exploration properties, and exploration resumed under the name Les Métaux Billiton. Drilling first took place in 1959 with one 115-m hole. Selco Mining resumed drilling in 1974, with four holes; one of these, Hole G-33-1, returned 70% sulphides over 0.6 m. No assays were recorded for these holes. From 1995 to 1997, Les Métaux Billiton drilled 11 holes on the Massicotte property. A gold value of 408 ppb was obtained from Hole 1172-97-17, drilled on Block E.

#### Noranda Exploration, Matagami Lake Mines:

At about the same time as Selco, from 1959 to 1965, Noranda Exploration drilled nine holes, all on the actual Block C of the Massicotte property. Low copper assays of less than 0.2% Cu were obtained. Hole MS-8 revealed 60% pyrite over 1 m. Several years later, in 1976, Matagami Lake Mines drilled four holes, including Hole #1 drilled on block E, which cut a chloritic rhyolite and iron formation. From 1981 to 1985, Noranda Exploration drilled three holes and a gold value of 0.4 g/t over 1.5 m was obtained from Hole #G-81-1.

#### Pennaroya Canada Ltd.

In 1968, Pennaroya Canada Ltd. completed ground Mag and EM surveys on parts of the E block. The year after, in 1969, Pennaroya drilled two holes totalling 312.5 m. Unfortunately, no assays are reported on the logs.

#### Phelps Dodge

From 1972 to 1974, following an airborne EM survey and ground geophysical surveys (IP, EM and Mag), Phelps Dodge drilled 10 holes for a total of 1,372.2 m, on Blocks C and D, located just west of the Phelps Dodge discovery<sup>2</sup> in the Matagami mining camp. However, for almost all the holes, no assay results are reported.

#### Kenn Development Corp.

From 1974 to 1976, Kennco drilled six holes, with three of them on Block B (534.3m) and three on Block E (725.2 m), for a total of 1,259.5 m. The most interesting geology was intersected on Block E, in Holes B-5, 6 and 7, with chert, rhyolite-chlorite-sericite schist and agglomerate. Short sections of massive pyrite were also reported. These three holes were drilled close to the contact with sedimentary rocks. No anomalous results are reported.

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<sup>2</sup> Phelps Dodge: 2Mt @ 4.06% Zn, 0.93% Cu and 16.8 g/t Ag. Historical resources, not NI 43-101. Source: the Quebec government's Sigeom website.

Falconbridge Nickel Mines Ltd.

Also in the mid-1970s, and more precisely in 1976, Falconbridge Nickel Mines Ltd. drilled seven holes totalling 1,183 m, all on Block E. Here too, favourable geology in the form of rhyolite, chert, agglomerate and sections of massive pyrite were intersected. No anomalous results were obtained.

Amoco Canada Ltd

In 1978, Amoco Canada drilled five holes for 888 m on Block C. The best intersections were 60% pyrite over 2.7 m in Hole MQ-78-18-1 and 80% pyrite over 2.8 m in Hole MQ-78-18-2. Graphitic argillite is also reported. Several slightly anomalous zinc values (less than 0.5%) were reported.

Canadian Nickel Company

In 1978, Canadian Nickel and Soquem completed a ground EM and Mag survey and one drill hole on Block D. No anomalous values were obtained. Two years later, in 1980, Canadian Nickel drilled three holes for a total of 366.1 m, all on Block C. Unfortunately, no assays were reported.

Teck Explorations Ltd.

From 1982 to 1984, Teck Explorations Ltd. drilled eight holes, four of them on Block C and the other four on Block E, for a total of 1,014.6 m. The EM conductors were usually explained by graphitic argillite and/or short sections of massive sulphides (pyrite-pyrrhotite). None of these holes revealed anomalous gold or base metal values.

Noramco Explorations Ltd.

In 1987, Noramco Explorations Inc. and its partners drilled five holes on Block B. The holes cut mainly graphitic shears. Two anomalous gold values were obtained, including 150 ppb Au over 1.5 m in Hole 1454-002 associated with a network of quartz carbonates veinlets and 250 ppb over 1.5 m in the same kind of environment, in Hole 1432-085.

Société d'Explorations Min. Mazarin I

Also in 1987, Mazarin did EM and Mag surveys, followed by one drill hole, on Block C. This drill hole cut mainly a sequence of sedimentary rocks with graphitic sections. No anomalous gold or base metal values were reported.

Bresea Resources and its partners

In 1988, Bresea drilled two holes on Block D. The EM conductor in one of the holes was explained by graphitic shale; the other one remains unexplained. The holes cut a sequence of volcanic and

sedimentary rocks. Very few assays were taken and no anomalous gold results were obtained. Base metals were not assayed for.

#### Total Energold

In 1990-1991, Total Energold Corp. completed ground geophysics (EM and Mag) and four drill holes on Block C. The EM conductors in each of these holes were explained by sections of graphitic argillite, sometimes with 15-20% pyrite and pyrrhotite. Anomalous gold values were obtained in Hole 237-90-01, with 226 ppb over 7.5 m, including up to 485 ppb Au over 1.5 m, associated with sericitized and carbonatized andesite with 1-2% finely disseminated pyrite and pyrrhotite. In fact, in this hole, all the andesite and intermediate agglomerate units extending from 65.5 m to 153.5 m are anomalous for gold.

#### Cameco Corp.

In 1992-1993, Cameco Corp. did ground and EM and Mag surveys, followed by two drill holes totalling 544 m, on Block E. EM conductors were explained by short sections of graphite and pyrite. The best gold value obtained was 66 ppb Au over 1.5 m in Hole BA 93-09.

#### Serem Gatro Canada

From 1992 to 1994, Serem Gatro Canada Inc. completed EM, Mag, IP and Pulse-EM (DeepEM) ground surveys, followed by six drill holes, all on Block A. EM conductors were usually explained by graphite and/or pyrite intersections. The best results were 1,863 ppm Zn and 257 ppm Cu over 4.5 m in Hole 93GA-A-01 and 1,869 ppm Zn and 419 ppm Cu over 2.1 m in Hole 93GA-A-04. A strong edge Pulse-EM anomaly was discovered in Hole 94GA-A-05, in the extension of the graphitic conductor.

#### Mines D'Or Virginia, Noranda Exploration Inc.

In 2003, Mines d'Or Virginia and Noranda Explorations Inc. drilled one hole on Block C. The EM anomaly was explained by 2 to 25% pyrrhotite with traces of pyrite, located in the brecciated facies of massive lava flows. No anomalous results were obtained.

Table 4 on the next page give a summary of the technical parameters of historical drilling on the property. Figure 6 shows the position of historical drill holes on the property.

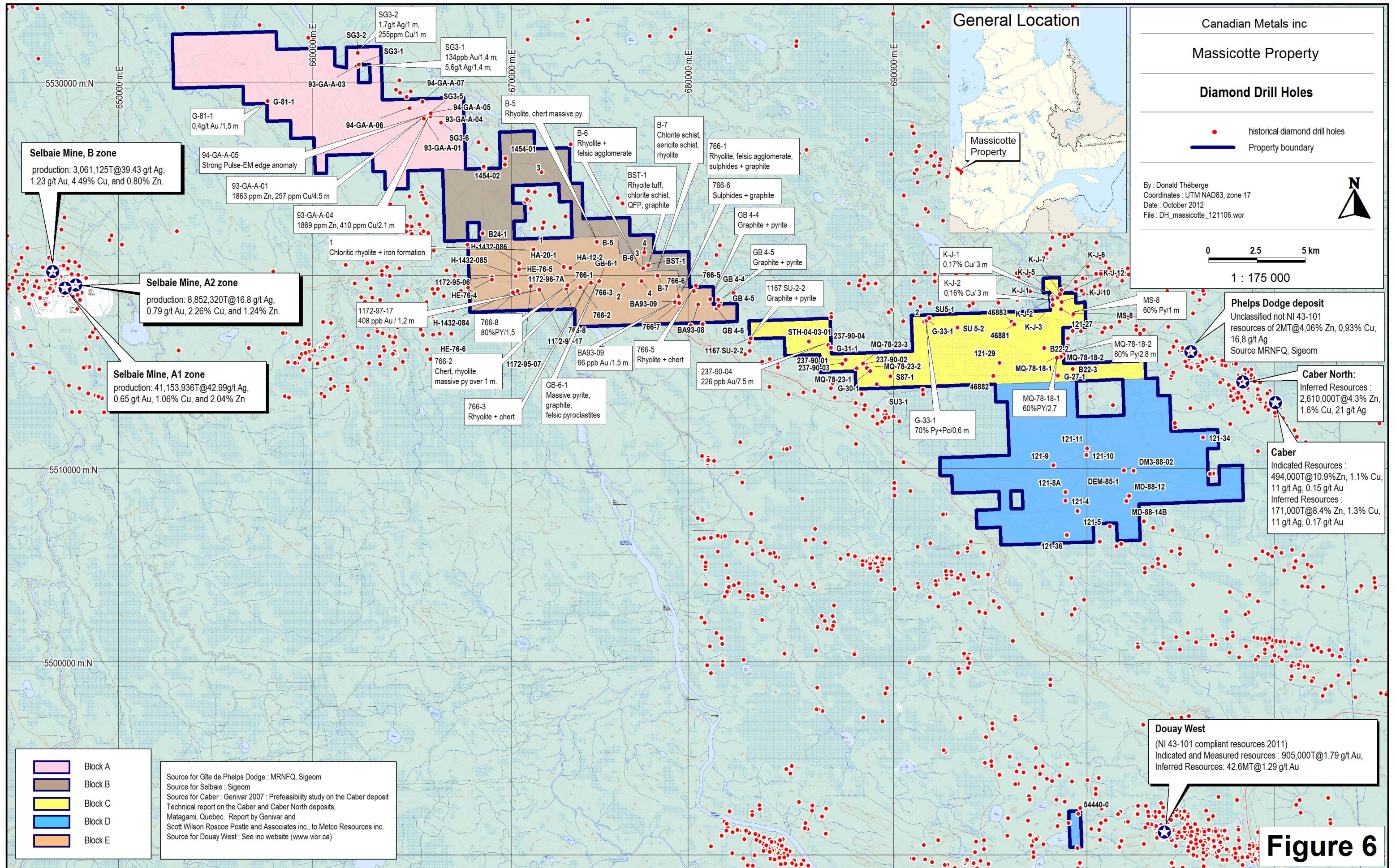


Table 4: Historical Drilling

Block	DDH #	GM #	Title #	Claim Holder	Year	Township	Zone	East	North	Az at collar	dip at collar	Overburden (m)	Length (m)	Remarks
C	2	GM 18822	2338974	SELCO EXPL CO LTD	1959	Ste-Hélène	17	692036	5517645	180	52	56	115	
C	K-J-1	GM 10193-B	2314018	NORANDA EXPL CO LTD	1959	STE-HELENE	17	698659	5518915	360	90	29	153	0,17%Cu/3
C	K-J-3	GM 10193-B	2314018	NORANDA EXPL CO LTD	1959	STE-HELENE	17	698679	5518493	360	90	39	162	
C	K-J-2	GM 10193-B	2314018	NORANDA EXPL CO LTD	1959	STE-HELENE	17	698684	5518810	360	90	23	145	0,16%Cu/3
C	K-J-5	GM 10193-B	2314018	NORANDA EXPL CO LTD	1959	STE-HELENE	17	698857	5518945	180	45	9	122	
C	K-J-6	GM 10193-B	2314018	NORANDA EXPL CO LTD	1959	STE-HELENE	17	699063	5519075	180	50	9	49	
C	K-J-7	GM 10193-B	2314018	NORANDA EXPL CO LTD	1959	STE-HELENE	17	699065	5519073	360	50	16	126	
C	K-J-12	GM 12505	2314018	NORANDA EXPL CO LTD	1962	Ste-Hélène	17	698940	5518899	360	45	26,8	152,4	No assays
C	K-J-10	GM 12505	2314019	NORANDA EXPL CO LTD	1962	Ste-Hélène	17	699143	5518656	180	50	16,5	168	No assays
C	MS-8	GM 17240	2339779	NORANDA EXPL CO LTD	1965	Ste-Hélène	17	699753	5518042	360	60	41	124	60%PY/1
E	HA-20-1	GM 23916	2344859	PENARROYA CANADA LTEE	1969	Bapst	17	673388	5520479	65	48	67,7	190,5	No assays
E	HA-12-2	GM 23916	2344859	PENARROYA CANADA LTEE	1969	Bapst	17	673731	5520428	260	45	44,2	122	No assays
D	121-5	GM 29673	2347885	PHELPS DODGE CORP OF CAN LTD	1972	Aloigny	17	699972	5507842	360	55	60	122	
D	121-29	GM 29673	2338967	PHELPS DODGE CORP OF CAN LTD	1973	Ste-Hélène	17	695933	5515520	180	65	61	168,3	No assays indicated
D	121-9	GM 29673	2338871	PHELPS DODGE CORP OF CAN LTD	1973	Aloigny	17	698717	5510207	360	50	31,7	151,5	No assays indicated
D	121-27	GM 29673	2314018	PHELPS DODGE CORP OF CAN LTD	1973	Ste-Hélène	17	699115	5518295	360	50	22,9	112,2	No assays indicated
D	121-8A	GM 29673	2347893	PHELPS DODGE CORP OF CAN LTD	1973	Aloigny	17	699345	5508816	360	60	39,6	106,7	No assays indicated
D	121-4	GM 29673	2347893	PHELPS DODGE CORP OF CAN LTD	1973	Aloigny	17	699349	5508377	360	55	49,4	118,6	No assays indicated
D	121-10	GM 29673	2339392	PHELPS DODGE CORP OF CAN LTD	1973	Aloigny	17	700433	5510744	15	60	41,5	152,4	No assays indicated
D	121-11	GM 29673	2345728	PHELPS DODGE CORP OF CAN LTD	1973	Aloigny	17	700455	5511087	15	50	55,8	138,7	No assays indicated
B	2	GM 31506	2338045	KENN DEV CORP	1974	Bapst	17	676466	5519576	180	65	101,8	177	
C	G-31-1	GM 30894	2338831	SELCO MINING CORP LTD	1974	Ste-Hélène	17	687205	5516293	180	50	27,4	99,7	No assays given
C	G-30-1	GM 30893	2338956	SELCO MINING CORP LTD	1974	Ste-Hélène	17	689232	5515084	180	50	62,2	108,5	Argillite with nodular pyrite
C	G-33-1	GM 30895	2338974	SELCO MINING CORP LTD	1974	Ste-Hélène	17	692151	5517706	360	50	41,2	110,4	70%SF/0,6
D	G-27-1	GM 30891	2345001	SELCO MINING CORP LTD	1974	Ste-Hélène	17	698958	5514846	180	50	64,3	106,7	No assays
D	121-36	GM 31714	2347876	PHELPS DODGE CORP OF CAN LTD	1974	Aloigny	17	699406	5506599	195	55	34,7	123,1	
D	121-34	GM 31714	2345736	PHELPS DODGE CORP OF CAN LTD	1974	Desmazures	17	706459	5511643	360	60	35,3	178,7	
B	3	GM 31506	2345237	KENN DEV CORP	1975	Bapst	17	677548	5521230	180	65	42,7	146,6	
B	4	GM 31506	2345237	KENN DEV CORP	1975	Bapst	17	677549	5521230	180	60	44,8	210,7	
A	HE-76-4	GM 32242	2344843	MATTAGAMI LAKE MINES LTD	1976	Beschefer	17	669679	5519817	360	50	52,4	162,5	
A	HE-76-6	GM 32242	2344846	MATTAGAMI LAKE MINES LTD	1976	Bapst	17	670998	5519232	180	50	21,3	93	
A	HE-76-5	GM 32242	2344855	MATTAGAMI LAKE MINES LTD	1976	Bapst	17	671081	5520344	360	50	47	153	
E	1	GM 32681	2344865	NORANDA EXPL CO LTD	1976	Bapst	17	671818	5521387	20	55	53,3	137,2	Chloritic rhyolite + iron formation
E	766-1	GM 32673	2344850	CLAIMS DAYKIN,FALCONBRIDGE NICKEL MINES LTD	1976	Bapst	17	673585	5519537	180	50	47,3	139,3	Rhyolite, felsic agglomerate, sulphides + graphite
E	766-2	GM 32673	2338041	CLAIMS DAYKIN,FALCONBRIDGE NICKEL MINES LTD	1976	Bapst	17	674248	5519419	180	55	22,8	256,1	Chert, rhyolite, massive py over 1 m.
E	766-3	GM 32673	2338042	CLAIMS DAYKIN,FALCONBRIDGE NICKEL MINES LTD	1976	Bapst	17	674793	5519659	180	55	68,6	168,9	Rhyolite + chert
E	B-5	GM 32492	2338058	KENN DEV CORP,KENNCO EXPLS [CANADA] LTD	1976	Bapst	17	675104	5521774	183	65	68,9	298	Rhyolite, chert massive py
E	B-6	GM 32492	2345231	KENN DEV CORP,KENNCO EXPLS [CANADA] LTD	1976	Bapst	17	677492	5520398	180	65	83,2	198,2	Rhyolite + felsic agglomerate
E	B-7	GM 32492	2338048	KENN DEV CORP,KENNCO EXPLS [CANADA] LTD	1976	Bapst	17	678244	5520024	180	65	72	229	Chlorite schist, sericite schist, rhyolite
E	766-6	GM 32673	2338040	CLAIMS DAYKIN,FALCONBRIDGE NICKEL MINES LTD	1976	Bapst	17	679329	5518947	200	70	53,4	178,7	Sulphides + graphite
E	766-7	GM 32673	2338040	CLAIMS DAYKIN,FALCONBRIDGE NICKEL MINES LTD	1976	Bapst	17	679360	5518608	200	70	53,4	186	
E	766-5	GM 32673	2338064	CLAIMS DAYKIN,FALCONBRIDGE NICKEL MINES LTD	1976	Bapst	17	680109	5519228	200	60	31,7	125	Rhyolite + chert
E	766-8	GM 33450	2344850	FALCONBRIDGE NICKEL MINES LTD	1977	Bapst	17	673518	5519360	180	50	18,3	129	80%PY/1,5
C	MQ-78-23-1	GM 36101	2338955	AMOCO CANADA PETROLEUM CO LTD	1978	Ste-Hélène	17	688539	5515229	180	55	63	121	
C	MQ-78-23-3	GM 36101	2338955	AMOCO CANADA PETROLEUM CO LTD	1978	Ste-Hélène	17	688864	5515471	180	55	70	107	
C	MQ-78-23-2	GM 36101	2338956	AMOCO CANADA PETROLEUM CO LTD	1978	Ste-Hélène	17	689059	5515247	180	55	73	366	
C	MQ-78-18-1	GM 36101	2345007	AMOCO CANADA PETROLEUM CO LTD	1978	Ste-Hélène	17	698901	5515780	180	60	37	109	60%PY/2,7
C	MQ-78-18-2	GM 36101	2345007	AMOCO CANADA PETROLEUM CO LTD	1978	Ste-Hélène	17	699114	5515837	180	60	35	185	80%PY/2,8
D	54440-0	GM 33952	2348513	CANADIAN NICKEL CO LTD,SOQUEM	1978	-	17	699998	5492168	45	55	43,9	112,8	
C	46882	GM 36440	2338949	CANADIAN NICKEL CO LTD	1980	Ste-Hélène	17	695611	5514839	200	55	12,2	183,2	
C	46883	GM 36440	2351188	CANADIAN NICKEL CO LTD	1980	Ste-Hélène	17	696552	5517652	215	55	34,15	94,5	
C	46881	GM 36440	2351188	CANADIAN NICKEL CO LTD	1980	Ste-Hélène	17	696687	5517508	180	55	21,3	88,4	
A	G-81-1	GM 42429	2350471	EXPLORATIONS NORANDA LTEE	1981	Gaudet	17	658072	5529074	360	60	72,5	183	0,4g/tAu/1,5

**Table 4: Historical Drilling**

Block	DDH #	GM #	Title #	Claim Holder	Year	Township	Zone	East	North	Az at collar	dip at collar	Overburden (m)	Length (m)	Remarks
E	GB-6-1	GM 40491	2338043	TECK EXPLS LTD	1982	Bapst	17	675229	5519737	185	60	70,7	172,5	Massive pyrite, graphite, felsic pyroclastites
C	SU3-1	GM 40493	2338939	TECK EXPLS LTD	1982	Ste-Hélène	17	689578	5514406	360	60	45,1	102,7	
C	SU5-1	GM 40493	2338974	TECK EXPLS LTD	1982	Ste-Hélène	17	692298	5517816	360	60	29,5	114	
C	1167 SU-2-2	GM 40492	2338832	TECK EXPLS LTD	1983	Bapst	17	683059	5516773	200	60	54,6	144,5	Graphite + pyrite
E	GB 4-4	GM 41438	2338065	TECK EXPLS LTD	1984	Bapst	17	680958	5518799	200	55	28	91,4	Graphite + pyrite
E	GB 4-6	GM 41438	2338062	TECK EXPLS LTD	1984	Bapst	17	681294	5518329	200	60	34,4	115,5	
E	GB 4-5	GM 41438	2338062	TECK EXPLS LTD	1984	Bapst	17	681408	5518465	200	55	22,5	160	Graphite + pyrite
C	SU 5-2	GM 41730	2338976	TECK EXPLS LTD	1984	Ste-Hélène	17	693748	5517339	150	60	29,5	114	
D	DEM-85-1	GM 42370	2342769	EXPLORATIONS NORANDA LTEE	1985	Desmazures	17	702372	5509937	360	55	63,4	178,7	
B	1454-02	GM 47607	2345073	EXPLORATION MIN GOLDEN DAY INC, EXPLORATIONS NORAMCO INC	1987	Bapst	17	670342	5525784	180	60	70	209	
B	1454-01	GM 47607	2345073	EXPLORATION MIN GOLDEN DAY INC, EXPLORATIONS NORAMCO INC	1987	Bapst	17	670364	5526103	360	60	65,4	263	
B	H-1432-084	GM 47614	2344845	EXPL MIN GOLDEN TRIANGLE INC, EXPLORATIONS NORAMCO INC	1987	Beschefer	17	670753	5519164	180	50	19,4	315	
B	H-1432-085	GM 47614	2344846	EXPL MIN GOLDEN TRIANGLE INC, EXPLORATIONS NORAMCO INC	1987	Beschefer	17	670890	5520000	360	50	56	324	
B	H-1432-086	GM 47614	2344855	EXPL MIN GOLDEN TRIANGLE INC, EXPLORATIONS NORAMCO INC	1987	Beschefer	17	671075	5520679	360	50	43	251	
C	S87-1	GM 46724	2338941	SOCIETE EXPL MINIERE MAZARIN I	1987	Ste-Hélène	17	690290	5514812	360	50	43	408,7	
D	MD-88-14B	GM 47196	2347896	CLAIMS KING, MARSTAN EXPLORERS LTD, AYREX RESOURCES LTD., BRESEA RESOURCES LTD	1988	Desmazures	17	702490	5508360	17	60	41,4	151,8	
D	MD-88-12	GM 47196	2347897	CLAIMS KING, MARSTAN EXPLORERS LTD, AYREX RESOURCES LTD., BRESEA RESOURCES LTD	1988	Desmazures	17	702634	5508632	17	60	23,5	167	
D	DM3-88-02	GM 47252	2342770	NORANDA INC, RESSOURCES AUDREY INC.	1988	Desmazures	17	702868	5509921	325	50	29,9	328	
B	BST-1	GM 49889	2345231	EXPLORATION KENNCO [CANADA], RESSOURCES BP Canada LTÉE	1990	Bapst	17	677759	5520561	210	60	60	282	Rhyolite tuff, chlorite schist, QFP, graphite
C	237-90-04	GM 50635	2338831	TOTAL ENERGOLD CORP	1990	Ste-Hélène	17	687072	5516437	135	50	28	234	226 ppbAu/7.5 m
C	237-90-03	GM 50635	2338953	TOTAL ENERGOLD CORP	1990	Ste-Hélène	17	687798	5515462	200	50	28	245	
C	237-90-01	GM 50635	2338954	TOTAL ENERGOLD CORP	1990	Ste-Hélène	17	687973	5515675	210	50	38	248	
C	237-90-02	GM 50635	2338955	TOTAL ENERGOLD CORP	1990	Ste-Hélène	17	688953	5515427	190	50	61	197	
E	BA93-09	GM 52228	2338039	PETRO-GASPE INC, SOCIETE EXPL MINIERE MAZARIN I, CAMECO CORP.	1992	Bapst	17	679135	5518658	180	60	61,6	280	66 ppb Au/1.5 m
A	93-GA-A-03	GM 52293	2330201	SEREM Gatro Canada Inc	1993	Bapst	17	662680	5530882	35	50	104,2	215,8	
A	93-GA-A-01	GM 52293	2316975	SEREM Gatro Canada Inc	1993	Bapst	17	666152	5528151	35	50	65,8	337,7	1863 ppm Zn, 257 ppm Cu/4.5 m
A	93-GA-A-04	GM 52293	2316978	SEREM Gatro Canada Inc	1993	Bapst	17	666482	5528267	215	50	67,2	289	1869 ppm Zn, 410 ppm Cu/2.1 m
E	BA93-08	GM 52228	2338064	PETRO-GASPE INC, SOCIETE EXPL MINIERE MAZARIN I, CAMECO CORP	1993	Bapst	17	680338	5518534	180	60	25	264	
A	94-GA-A-06	GM 52502	2330198	SEREM GATRO CANADA INC	1994	Gaudet	17	665420	5528699	215	50	68	245	
A	94-GA-A-07	GM 52502	2316977	SEREM GATRO CANADA INC	1994	Gaudet	17	666080	5529028	35	50	33,5	326	
A	94-GA-A-05	GM 52502	2316978	SEREM GATRO CANADA INC	1994	Gaudet	17	666506	5528418	215	50	74	430,5	Strong Pulse-EM edge anomaly
A	SG3-2	GM 54389	2316982	LES METAUX BILLITON CANADA INC	1995	Gaudet	17	662732	5531554	35	50	41,4	301	1,7g/tAg/1 255ppmCu/1
A	SG3-1	GM 54389	2316982	LES METAUX BILLITON CANADA INC	1995	Gaudet	17	662792	5530949	215	50	34	261	134ppbAu/1,4; 5,6g/tAg/1,4;
A	SG3-5	GM 54389	2316978	LES METAUX BILLITON CANADA INC	1995	Gaudet	17	666432	5528389	215	52	66	450	852ppmZn/1,4
A	SG3-6	GM 54389	2345079	LES METAUX BILLITON CANADA INC	1995	Gaudet	17	667032	5527949	215	52	49,2	387	0,27%Zn/0,5 0,25%Zn/0,5
E	1172-95-06	GM 53922	2344843	LES METAUX BILLITON CANADA INC, SOQUEM	1995	Bischofer	17	669666	5519942	360	50	81,7	318	
E	1172-95-07	GM 53922	2344847	LES METAUX BILLITON CANADA INC, SOQUEM	1995	Bischofer	17	671687	5519476	360	50	49,1	290,3	
E	B24-1	GM 54352	2345238	LES METAUX BILLITON CANADA INC	1996	Beschefer	17	669192	5522225	125	50	28,3	211,5	
C	B22-2	GM 54351	2345006	LES METAUX BILLITON CANADA INC	1996	Ste Hélène	17	698237	5516271	180	50	40,5	240	
C	B22-3	GM 54351	2345002	LES METAUX BILLITON CANADA INC	1996	Ste Hélène	17	699713	5515199	180	50	48	201	
E	1172-96-7A	GM 53922	2344847	LES METAUX BILLITON CANADA INC, SOQUEM	1996	Bischofer	17	671687	5519476	346	36		126,8	wedge in 95-07 at 173,7 m EOH at 300,5
E	1172-97-17	GM 56312	2344848	LES METAUX BILLITON CANADA INC, SOQUEM INC	1997	BAPST	17	672120	5519300	360	50	65	279	408 ppb Au / 1,2 m
C	STH-04-03-01	GM 60783	2338830	MINES D'OR VIRGINIA INC, NORANDA INC	2003	STE-HELENE	17	686068	5516612	310	55	39,5	225	
	96 holes												18459,9	



**Figure 6**

## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1) GENERAL GEOLOGICAL SETTING

The Massicotte property is located in the center-west part of Superior Province, which itself lies at the heart of the Canadian Shield. Superior Province extends from Manitoba to Quebec, and is mainly made up of Archean rocks. The general metamorphism is at the greenschist facies, except in the vicinity of intrusive bodies, where it can go to the amphibolite-to-granulite facies. In Quebec, the eastern extremity of Superior Province has been classified into the following sub-provinces, from south to north: Pontiac, Abitibi, Opatica, Nemiscau, Opinaca, La Grande, Ashuanipi, Bienville and Minto.<sup>3</sup> According to Card and Ciesielski (1986), the area covered by the property is located in the Abitibi sub-province. Figure 7, "Regional Geology", shows the position of the property within Superior Province.

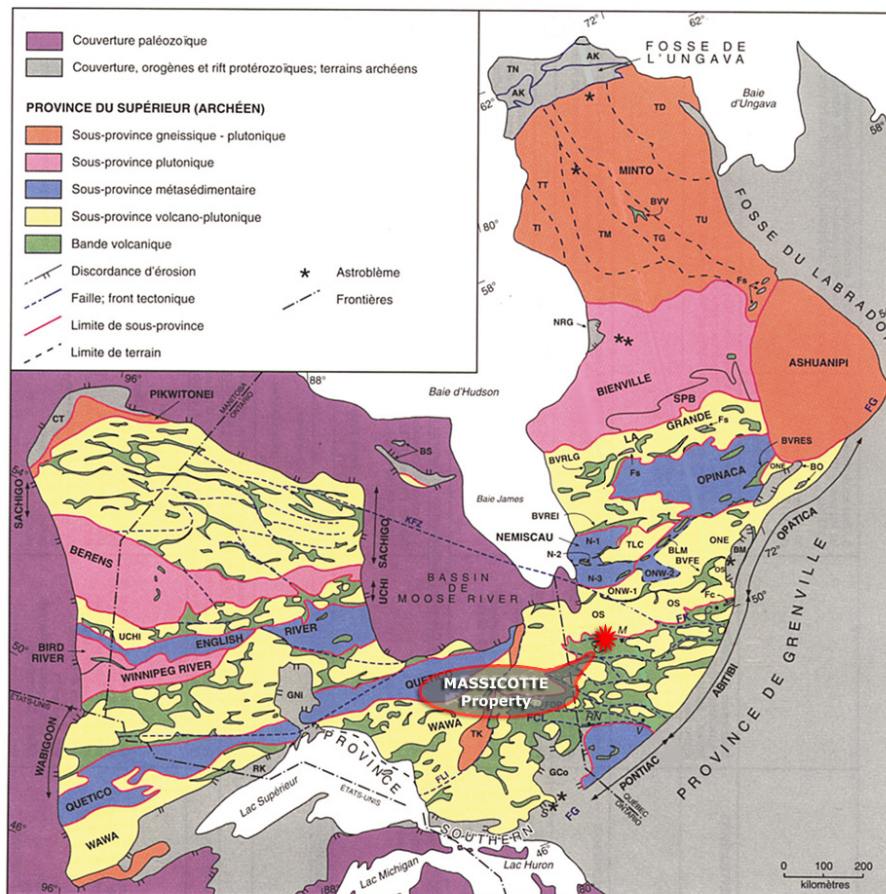


FIGURE 7: GENERAL GEOLOGY

<sup>3</sup> Classification by Hocq, M., in Géologie du Québec, MM 94-01

## **7.2) REGIONAL AND PROPERTY GEOLOGY**

The whole area is underlain by a mix of volcanic and sedimentary rocks, cut by syn to late tectonic intrusives, and Proterozoic diabase dykes. Two kinds of sedimentary rocks have been recognized. The first is made up of conglomerate, mudstone and siltstone, and the second, which is less significant in term of quantity, is composed of iron formation, argillite and pyroclastites. The sediments usually strike roughly E-W, excepted in the north part of the area, where they divide two volcanic domains with a SE-NW orientation.

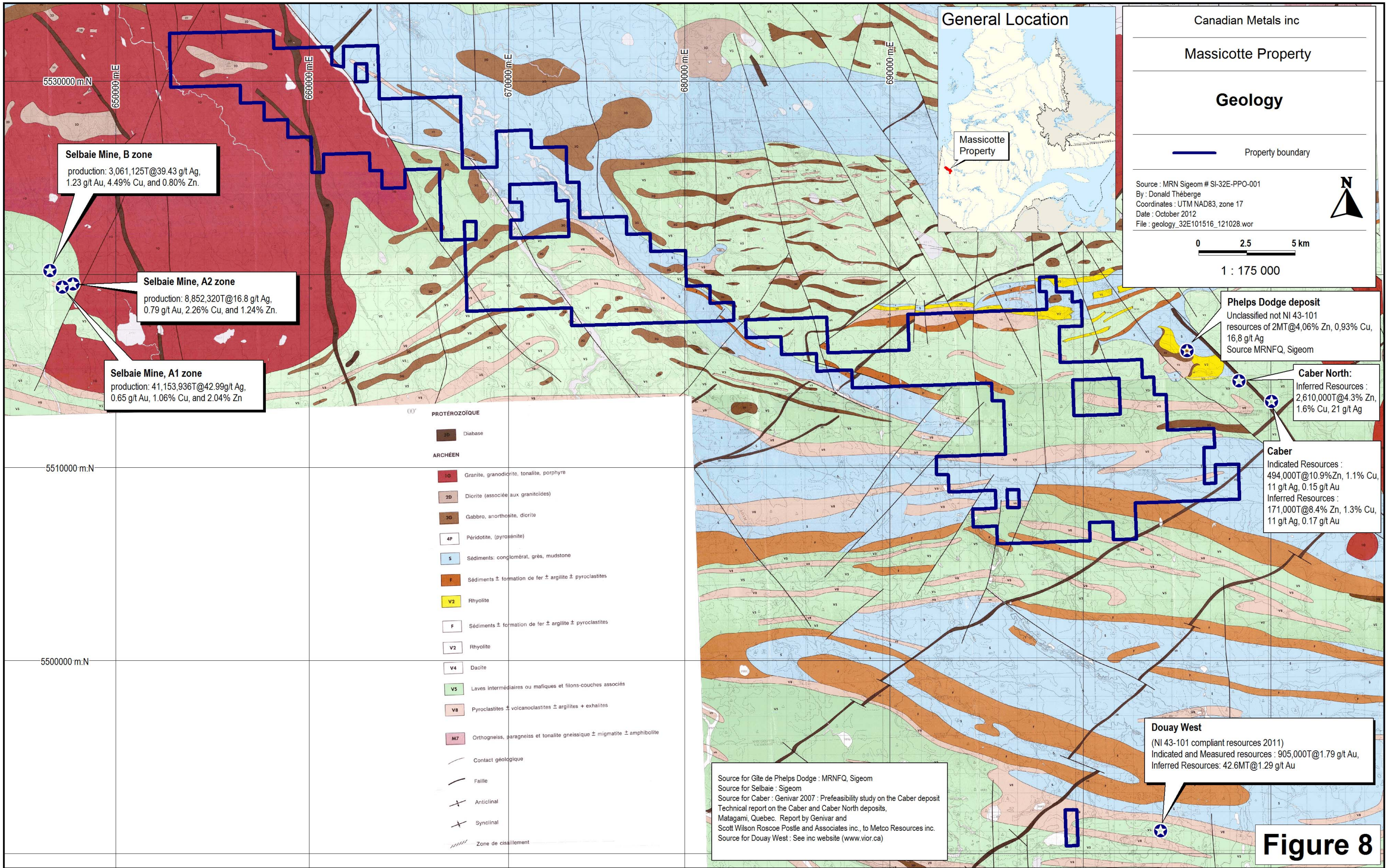
The volcanic rocks show a very wide range in composition, varying from rhyolitic to komatiitic. The komatiites occur mainly in the south part of the area, and form in part the Cartwright Hills. In the north part of the area, intermediate to mafic flows dominate, with locally felsic flows.

One main felsic intrusive occupies the NW part of the area. This is an important feature, as the Selbaie Mine is located in close proximity to the W. This intrusive can probably be considered as the heat source for the hydrothermal system responsible for the mineralization at the Selbaie Mine.

Many gabbro sills cross the area. They strike generally E-W, excepted in the west part of the area, where their orientation is often the same as the sedimentary unit of the second type. Late diabase dykes cut all the rock sequence in a NE-SW and N-S direction. The area is cut by two main fault systems, the first oriented NNW-SSE and showing a close relationship to the Phelps Dodge, Caber and Caber North deposits, and the second oriented NE-SW.

The property is underlain by all the geological units previously described. Block A covers the east part of the main NW intrusive, which in this area is in contact with sedimentary and volcanic rocks. Block B covers the contact between sedimentary and volcanic rocks. Block E is in the extension of Blocks A and B, and also covers the contact between the volcanic rocks and sediments, which is marked here by a pyroclastic horizon.

Blocks C and D host mainly volcanic rocks that contain a wide band of sediments in the south part of Block D. Two claims that are part of Block D are located about 10 km to the south, in the western strike of the Douay deposit. Regional and property geology are illustrated in Figure 8 on the next page.



Canadian Metals inc

Massicotte Property

### Geology

Property boundary

Source : MRN Sigeom # SI-32E-PP0-001  
 By : Donald Th  berge  
 Coordinates : UTM NAD83, zone 17  
 Date : October 2012  
 File : geology\_32E101516\_121028.wor



0 2.5 5 km

1 : 175 000

**Selbaie Mine, B zone**  
 production: 3,061,125T@39.43 g/t Ag,  
 1.23 g/t Au, 4.49% Cu, and 0.80% Zn.

**Selbaie Mine, A2 zone**  
 production: 8,852,320T@16.8 g/t Ag,  
 0.79 g/t Au, 2.26% Cu, and 1.24% Zn.

**Selbaie Mine, A1 zone**  
 production: 41,153,936T@42.99g/t Ag,  
 0.65 g/t Au, 1.06% Cu, and 2.04% Zn

**Phelps Dodge deposit**  
 Unclassified not NI 43-101  
 resources of 2MT@4.06% Zn, 0.93% Cu,  
 16.8 g/t Ag  
 Source MRNFQ, Sigeom

**Caber North:**  
 Inferred Resources :  
 2,610,000T@4.3% Zn,  
 1.6% Cu, 21 g/t Ag

**Caber**  
 Indicated Resources :  
 494,000T@10.9%Zn, 1.1% Cu,  
 11 g/t Ag, 0.15 g/t Au  
 Inferred Resources :  
 171,000T@8.4% Zn, 1.3% Cu,  
 11 g/t Ag, 0.17 g/t Au

**Douay West**  
 (NI 43-101 compliant resources 2011)  
 Indicated and Measured resources : 905,000T@1.79 g/t Au,  
 Inferred Resources: 42.6MT@1.29 g/t Au

- PROT  ROZOIQUE
- Diabase
- ARCH  EN
- 1G Granite, granodiorite, tonalite, porphyre
  - 2D Diorite (associ  e aux granito  ides)
  - 3G Gabbro, anorthosite, diorite
  - 4P P  ridotite, (pyrox  nite)
  - S S  diments: conglom  rat, gr  s, mudstone
  - F S  diments    formation de fer    argilite    pyroclastites
  - V2 Rhyolite
  - F S  diments    formation de fer    argilite    pyroclastites
  - V2 Rhyolite
  - V4 Dacite
  - V5 Laves interm  diaires ou mafiques et filons-couches associ  s
  - V8 Pyroclastites    volcanoclastites    argilites + exhalites
  - M7 Orthogneiss, paragneiss et tonalite gneissique    migmatite    amphibolite
- Contact g  ologique  
 --- Faille  
 --- Anticlinal  
 --- Synclinal  
 --- Zone de cisaillement

Source for G  te de Phelps Dodge : MRNFQ, Sigeom  
 Source for Selbaie : Sigeom  
 Source for Caber : Genivar 2007 : Prefeasibility study on the Caber deposit  
 Technical report on the Caber and Caber North deposits,  
 Matagami, Quebec. Report by Genivar and  
 Scott Wilson Roscoe Postle and Associates inc., to Metoo Resources inc.  
 Source for Douay West : See inc website (www.vior.ca)

**Figure 8**

#### **7.4) MINERALIZATION**

There is no well-defined mineralized zone with estimated resources on the property. However, several anomalous gold values have been obtained in historical drill holes, along with massive sulphide (pyrite-pyrrhotite) intersections.

#### **8.0) DEPOSIT TYPES**

Two main types of orebodies should be considered for the exploration model on the Massicotte property:

- Massive sulphide (VMS) deposits of the Matagami / Selbaie type;
- Gold deposits of the Douay, or Casa Berardi type, associated with shear zones in volcanics/sediments.

The rock alterations already described in historical drilling, mainly on Block E, are typical of volcanogenic massive sulphide deposits. Alterations typical of VMS orebodies, like sericite alteration, chlorite alteration in felsic rocks, the presence of chert, and felsic agglomerate have been reported on the property. Several intersections of massive sulphide in the form of pyrite and pyrrhotite further show the potential of the Massicotte property for this kind of orebody. VMS examples surrounding the property are the Selbaie Mine, located approximately 15 to 20 km W of Block E, and Phelps Dodge, Caber, and Caber North, which are located from 2 to 6 km east of Blocks C and D. Production and resources are described in Item 23, "Adjacent Properties".

Also in the VMS category, the Agnico-Eagle (Joutel) type gold-enriched VMS must also be considered. Agnico is actually unique in the sense that gold was the only economic mineral, but this kind of orebody may occur on the Massicotte property.

The second type of deposit to consider is the Douay / Casa Berardi type. The Douay deposit is located about 3 km E of the two claims that are part of the D Block to the south. From a geological standpoint, the Douay deposit is hosted in felsic to mafic rocks associated with a deformation zone and showing a strong carbonate-sericite alteration. Casa Berardi type deposits are characterized by gold mineralization in quartz veins, associated with a shear zone along a volcanic-sedimentary contact.

In conclusion, the best model to consider for the exploration of the property is the volcanogenic massive sulphide deposit of the Selbaie / Noranda type. However, if strong carbonate-sericite alterations are discovered, the Douay-type deposit should also be considered. The Casa Berardi type of deposit should be considered mainly in sedimentary rocks. In this area, the thick overburden is an additional challenge. Historical drill holes on the property revealed an average of 30-35 m of overburden, and up to 104 m (at -50°) on Block A. Outcrops can only be observed along the Harricana River in the vicinity of the Selbaie road bridge.

## **9.0) EXPLORATION**

Canadian Metals has not undertaken any exploration work since acquiring the property.

## **10.0) DRILLING**

### ***10.1) BY CANADIAN METALS***

Canadian Metals has not done any drilling since acquiring the property.

### ***10.2) HISTORICAL DRILLING***

Historical drilling is described in detail in Item 6.2, "Historical exploration work by mining and/or exploration companies".

## **11.0) SAMPLE PREPARATION, ANALYSES AND SECURITY**

Canadian Metals did not perform any sampling on the property. Sampling is reported in historical reports, mainly in drill holes. However, almost all these reports were written in accordance with common practice of the time, before NI 43-101 came into effect, and sample preparation, analyses and security are not described. Sometimes assays are not even reported.

## **12.0) DATA VERIFICATION**

It is impossible to verify the historical data. Only the old reports can be consulted, and they are usually incomplete by today's standards. Furthermore, the drill core from historical drilling is lost or



impossible to verify. The author had to rely on the reported exploration work alone. However, the author is of the opinion that the data used in this report is reliable.

### **ITEMS 13 TO 22**

Items 13 to 22 refer to properties at the development stage and do not apply to the Massicotte property. They are entitled as follows:

- 13.0) Mineral Processing and Metallurgical Testing;
- 14.0) Mineral Resource Estimates;
- 15.0) Mineral Reserve Estimate;
- 16.0) Mining Method;
- 17.0) Recovery Methods;
- 18.0) Project Infrastructure;
- 19.0) Market Studies and Contracts;
- 20.0) Environmental Studies, Permitting and Social or Community Impact;
- 21.0) Capital and Operating Costs;
- 22.0) Economic Analysis.

### **23.0) ADJACENT PROPERTIES**

Actually there are no adjacent properties that could have a material impact on the Massicotte property. However, four VMS deposits are located in the vicinity of the property: Phelps Dodge, Caber and Caber North are located 2 to 6 km east of Blocks C and D, and the Selbaie Mine is approximately 15 to 20 km west of Block E.

Just as a reminder, estimated resources for Caber, Caber North and Phelps Dodge are as follows:

*Caber (NI 43-101-compliant, Scott Wilson RPA, 2007)*

Category	Tonnes	Zn (%)	Cu (%)	Ag (g/t)	Au (g/t)	Pb (%)
Indicated	494,000	10.9	1.1	11	0.15	0.01
Inferred	171,000	8.4	1.3	11	0.17	0.01
<i>Caber North (NI 43-101-compliant, Scott Wilson RPA, 2007)</i>						
Category	Tonnes	Zn (%)	Cu (%)	Ag (g/t)	Au (g/t)	Pb (%)
Inferred	2,610,000	4.3	1.6	21		

<i>Phelps Dodge (unclassified historical resources, source MRNFQ, Sigeom)</i>						
Category	Tonnes	Zn (%)	Cu (%)	Ag (g/t)	Au (g/t)	Pb (%)
Not classified	2,000,000	4.06	0.93	16.8		

The Selbaie Mine produced Ag, Au, Cu and Zn from three zones, A1, A2 and B. Tonnage and grade are summarized hereafter.

<i>Selbaie Mine: production</i>					
	Tonnes	Ag (g/t)	Au (g/t)	Cu %	Zn %
B zone	3,061,125	39.43	1.23	4.49	0.8
A2 zone	8,852,320	16.8	0.79	2.26	1.24
A1 zone	41,153,936	42.99	0.65	1.06	2.04

Please note that the qualified person has been unable to verify the information on Phelps Dodge, and was involved in the prefeasibility study on Caber and Caber North, on behalf of Metco Resources Inc. The information is not necessarily indicative of the mineralization on the property.

## **24.0) OTHER RELEVANT DATA AND INFORMATION**

All the relevant data and information has been given in the preceding items.

## **25.0) INTERPRETATION AND CONCLUSIONS**

The Massicotte property covers a vast area of 268.39 km<sup>2</sup>. It is underlain by several different geological units, mainly made up of sediments and volcanic rocks intruded by gabbroic sills, and in the NW corner, by a granitic to granodioritic intrusion. Volcanic composition ranges from rhyolitic to basaltic. There are almost no outcrops on the property and the geology has to be extrapolated from diamond drilling and airborne surveys.

Orebody observed in the area are all VMS-type deposits; they are known as Caber, Caber North and Phelps Dodge to the east of the property, and the Selbaie Mine to the west. Many holes drilled on the property show typical rocks and/or alteration associated with VMS-type deposits. Anomalous zinc values, like 1,863 ppm over 4.5 m and 1,869 ppm over 2.1 m have been reported on Block A. On Block E, several sections of massive pyrite were observed along with rhyolite, chert and

agglomerate. Rhyolite with chlorite and sericite schist was reported close to the contact with sedimentary rocks.

Anomalous gold values have been reported on Block C. This is particularly interesting in Hole 237-90-04, which returned 226 ppb Au over 7.5 m. In this hole drilled by Total Energold in 1990, all the andesite and intermediate agglomerate units from 65.5 to 153.5 m are anomalous for gold and associated with sericite and carbonate alterations with 1-2% pyrite and pyrrhotite. On the east part of Block C, anomalous copper values in the order of 0.17% over 3 m and 0.16% over 3 m have been reported.

In conclusion, two main targets become apparent on the property in light of the information actually available: first, massive sulphide deposits mainly on Blocks E and C, and second, gold deposit on Block C. This picture may change as more information becomes available.

## **26.0) RECOMMENDATIONS**

Because of the deep overburden, a systematic geological survey is not recommended, excepted in the area where the Selbaie road crosses the Harricana River. A two-phase exploration program is suggested and has been adapted to the deep overburden. In Phase I, a deep-penetrating helicopter-borne EM and magnetic survey is recommended. This survey should be done systematically on flight lines 200 m apart. It will be useful for locating massive sulphides and shear zones. To complement the information provided by the airborne survey, a computerized geological compilation should be done, including the main historical ground geophysical surveys, the drill holes including gold and base metal assays and, when available, the lithochemical analyses, to locate areas that show typical VMS alterations.

Phase II would include ground follow-up on the anomalous zones generated by the airborne survey and geological compilation. This follow-up would include line cutting, deep-penetrating EM surveys, or IP if deemed preferable, and approximately 3,000 m of drilling to test these anomalies.

The budget for both Phases I and II is given on next page.

TABLE 5: BUDGET

<b>Phase I: Airborne Survey, Compilation</b>				
<b>Work</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit cost</b>	<b>Total</b>
Program preparation	3	days	\$800	\$2 400
<b>Helicopter borne Survey</b>				
Mobilization - demobilization			\$13 000	\$13 000
Survey	800	km	\$140	\$112 000
Compilation				\$40 000
Geology, field verification				\$15 000
Report at the end of Phase I, and filing for statutory purposes				\$10 000
Contingencies 12%				\$23 088
	<b>Total Phase I</b>			<b>\$215 488</b>
<b>Phase II: Ground surveys and drilling</b>				
Program preparation	5	days	\$800	\$4 000
Line cutting, and ground surveys, provision of \$75,000				\$75 000
Diamond drilling (150\$/m all inclusive)	3000	m	\$150	\$450 000
Report at the end of Phase 2, and filing for statutory purposes				\$15 000
Contingencies (average of 12%)				\$65 280
	<b>Total Phase II</b>			<b>\$609 280</b>
	<b>Total Phase I and II</b>			<b>\$824 768</b>

## **27.0) REFERENCES**

### **27.1) MRNFQ REPORTS**

O'Sullivan, Henry., 1901: Deuxième rapport sur l'étendue de pays, situé entre le Lac St-Jean et la Baie James. Ministère de la Colonisation du Québec. AP190101.

Longley, W, W., 1943: Kitchigama lake property, Abitibi territory. Geological report 12., RG 146 (A).

Questor Surveys Ltd., 1973: Levé aérien par Input MK VI. Région de la Rivière Turgeon. MRNFQ, DP 760

Questor Surveys Ltd., 1976: Airborne Input MK VI survey, Geologic Compilation, Joutel-Poirier area. MRNFQ, DP 430.

Beaumier, M., 1983: Pédogéochimie de la région de Brouillan, MERQ, DP 83-10.

Ministère de l'Énergie et des Ressources du Québec, 1983: Stratigraphie des ensembles volcano-sédimentaires archéens de l'Abitibi: État des connaissances. DV 83-11

Les Relevés Géophysiques inc., 1982: Rivière Turgeon, Joutel – Poirier, carte magnétique du champ total. MERQ, DP 83-14.

Questor Surveys Ltd., Les Relevés Géophysiques inc., 1983: Carte des anomalies Input, region Lac Grasset. MERQ. DP 84-26.

Kenting Earth Sciences Ltd., Les Relevés Géophysiques inc., 1984: Levé gradiométrique région de Matagami (32E09). MERQ., DV 85-14.

Kenting Earth Sciences Ltd., Les Relevés Géophysiques inc., 1984: Levé gradiométrique région de Matagami (32E15). MERQ., DV 85-16.

Kenting Earth Sciences Ltd., Les Relevés Géophysiques inc., 1984: Levé gradiométrique région de Matagami (32E16). MERQ., DV 85-17.

Beaumier, M., et al., 1985: Projet Harricana – Grasset, cartes géologiques, feuille lac Matagami – îles Bancroft (parties). MRNF., ET 85-08.

Beaumier, M., 1985: L'or dans l'humus région de Brouillan. Données complémentaires au DP 83-10. MERQ., MB 85-58.

Lacroix, S., 1986: Géologie de la region Harricana – Grasset. MERQ, DP 86-11.

Lacroix, S., 1986: Le district minier de Casa-Bérardi: Cycles volcaniques et/ou une autre faille de Cadillac. MERQ., MB 86-63.

Dion, D.J., Church, H., Lacroix, S., 1987: Levé de sismique refraction dans la region de Harricana-Turgeon. MERQ., DP 87-11.

- Beaumier, M., Henry, J., 1987: Aires d'intérêt géochimique – Abitibi- Témiscamingue. MERQ., DV 87-22.
- Lacroix, S., 1988: Géologie de la région de Harricana – Grasset, (demie-ouest), MERQ., DP 87-13.
- Lacroix, S., et al., 1989: Vers une image régionale du sillon Harricana-Turgeon (Matagami – Joutel – Casa-Bérardi). PRO 89-04.
- Piché, M., 1993: Étude de l'altération des roches volcaniques encaissantes à la mine Selbaie, canton de Brouillan – comté d'Abitibi – oust. MRNFQ., MB 93-52.
- Lacroix, S., 1994: Géologie de la partie oust du sillon Harricana – Turgeon, Abitibi. MRNQ., MB 94-54.
- Lacroix, S., 1994: Géologie de la partie oust du sillon Harricana-Turgeon, Abitibi. Annexe I, analyses lithogéochimiques. MRNFQ., MB 94-61.
- Moorhead, J., Girard, R., Boudreau, M. A., 1996: Anomalies aéromagnétiques circulaires possiblement reliées à des intrusions de kimberlite dans le nord-ouest québécois. MRNFQ., MB 93-49.
- Beaumier, M., Leduc, M., 1995: Géochimie des sols humiques région de la rivière Harricana (SNRC 32E). MB 95-55.
- Daigneault, R., 1996: Couloirs de déformation de la sous-province de l'Abitibi. MB 96-33.
- Lamothe, D., 2000: Évaluation du potentiel minéral – sulfures massifs volcanogènes (type Noranda), 32E, Joutel. SI-32E-PPO-001.
- Lamothe, D., et al., 2005: Évaluation du potentiel en minéralisation de type sulfures massifs volcanogènes (SMV) pour l'Abitibi. MRNFQ., EP 2005-01.
- Lamothe, D., Harris, J.R., 2006: Évaluation du potentiel en minéralisations de type or orogénique des roches archéennes de l'Abitibi. MRNFQ., EP 2006-01.
- L'Abbé, J.Y., Pilote, P., Lamothe, D., 2006: Évaluation du potentiel minéral pour les gîtes porphyriques de Cu, Au, Mo, de l'Abitibi. MRNFQ., EP 2006-03.
- Sanders Geophysics, Commission Géologique du Canada, 2008: Anomalie de Bouguer et dérivée première vertical de l'anomalie de Bouguer, Collines Gaudet (32E15) et Lac Grasset (32E16). MRNFQ, DP 2008-12
- Noranda Exploration, Mines d'Or Virginia., 2008: Cartes géophysiques couleurs, 32E15. MRNFQ., DP 2008-26.
- Noranda Exploration, Mines d'Or Virginia., 2008: Cartes géophysiques couleurs, 32E16. MRNFQ., DP 2008-27.
- Goutier, J., Melançon, M., 2010: Compilation géologique de la sous-province de l'Abitibi (version préliminaire). RP 2010-04.
- Lamothe, D., 2012: Volcanogenic massive sulphide potential in the Abitibi. 2011 version. MRNFQ., EP 2011-02.

## 27.2) ASSESSMENT REPORTS

Rocheblave, B., 1968: Magnétisme au sol, (zone III), permis Harricana. Pennaroya Canada Ltd., GM 23914.

Hansen, J.E., 1968 : Report on an electromagnetic ground survey on the Harricana River property. Pennaroya Canada Ltd., GM 23915.

Pennaroya Ltd., 1969: Sondage # HA-20-1 et HA-20-2. Pennaroya Canada Ltée.. GM 23916.

Bell, R.A., Misener, D.J., Woolham, R.W., 1974: Assessment report geophysics, project 121, Samson River. GM 29674.

Fleming, H.W., Jones, R.A., 1974: Diamond drill record. Kenn Dev. Corp. GM 31506.

Baldwin, L.A., Busch, D.J., Clarke, P.J., Nielsen, F.W., Ogryzlo, P., Sylvestre, V., 1975: Airborne electromagnetic survey, Matagami area. Phelps Dodge Corp of Canada Ltd., GM 31714.

Fleming, H.W., 1976: Diamond drill record, Bapst twp property. Kennco Expl. Canada Ltd., GM 32492.

Cloutier, J.P., 1976: Diamond drill record, Bapst claims, West Group. Falconbridge Nickel Mines Ltd., GM 32673.

McFarlane, R.L., 1976: Diamond drill core log, Bapst-1-74 property. Noranda Explorations Co. Ltd., GM 32681.

Zaveziczky, O., 1976: Diamond drill report, Harricana River project – East Group. Matagami Lake Mines Ltd., GM 32242.

Cloutier, J.P., 1977: Drilling report and compilation, Bapst claim groups. Falconbridge Nickel Mines Ltd., GM 33450.

Duncan, C., Gereghty, G.J., Manson, W.O., 1978: Magnetic and electromagnetic survey results. Canadian Nickel company Ltd., and Soquem. GM 33952.

Mclsaac, B., 1978: Diamond drill hole record, Matagami property. Amoco Canada Petroleum Co. Ltd., GM 36101.

MsIntosh, J.A., 1978: Diamond drill record, Amoco Canada property. MRNFQ. Amoco Canada Petroleum. GM 36102.

Duncan, C., Hannila, J.J., 1980: Diamond drilling. Canadian Nickel Co. Ltd., GM 36440.

Thorsen, K., 1982: Diamond drill logs, Gaudet-Beschefer property. Teck Expls. Ltd., GM 40491.

Fox, J., O'Connell J.G., 1982: Diamond drill log, Subercase property. Teck Expls. Ltd., GM 40493.

Fox, J., Thorsen, K., 1983: Diamond drill log, Gaudet-Beschefer property. Teck Expls. Ltd., GM 40492.

Hughes, T.N.J., Fox, J., 1984: Diamond drill log, Gaudet-Beschefer property. Teck Expls. Ltd., GM 41438.

Hughes, T., 1984: Diamond drill log, Subercase property. Teck Expls. Ltd., GM 41730.

Des Rivières, J., 1985: Compilation et géochimie sur la propriété Gaudet I. Explorations Noranda inc., GM 42429.

Berdusco, B.J., Janzen, J., Simard, R., 1987: Diamond drill log, Lac Dumais (P-1454) property. Explorations Min. Golden Day inc., Explorations Noramco inc., GM 47607.

Berdusco, B.J., Simard, R., Janzen, J., 1987: Diamond drill log, Angle River property (P-1432) property. Explorations Min. Golden Triangle, Explorations Noramco inc., GM 47614.

Bordusco, B.J., Janzen, J., Simard, R., 1987: Diamond drill log, lac Dumais (P.1454) property. Exploration Noramco inc., GM 47607.

Lahaye, R., 1988: Diamond drilling record, Desmazures twp property. Ayrex Resources Ltd, Bresea Resources Ltd GM 47196.

Zabez, B., 1990: Drill record, Bapst project. Explorations Kennco Canada Ltd., Ressources BP Canada Ltd. GM 49889.

Kenwood, J., 1991: Summary report, November 1990 – February 1991, geophysics and diamond drilling program, Ste-Hélène property. Total Energold Corp. GM 50635.

Koziol, M., Matthews, R., 1993: Report on 1993 ground geophysics and diamond drilling program, Bapst and Ste-Hélène projects. Petro-Gaspé inc., Soc. Expl. Min. Mazarin I. GM 52228.

De Corta, H., 1993: Campagne de forage, propriété Gaudet A, SEREM Gatro Canada inc., GM 52293.

De Corta, H., 1994: Campagne de forage, propriété Gaudet A, hiver 1994. SEREM Gatro inc. GM 52502.

Verschelden, R., 1997: Rapport de la campagne de forage, janvier – février- mars 1997. Soquem, projet Beschefer. GM 56312.

Lapointe, S., Dessureault, M., 2004: Rapport d'exploration minière projet Megatem JVI, blocs de Matagami Ouest et de Selbaie Ouest. Mines d'Or Virginia inc., Noranda inc. GM 60783.

Salmon, B., Lavigne, M., Gauthier, J., 2007: Prefeasibility study on the Caber Deposit – Technical Report on the Caber and Caber North Deposits, Matagami, Québec. Prepared for Metco Resources Inc., by Scott Wilson Roscoe Postle Associates inc., and Genivar, Limited Partnership. Metco Resources internal report, unpublished.

### **27.3) SEDAR REPORTS**

Salmon, B., Lecuyer, N.L., Live, P., 2011: Technical report on the Casa Berardi Mine, northwestern Quebec, Canada. Aurizon Mines Ltd.



## 27.4) GEOSCIENTIFIC PAPERS

**Jebrak, M., Marcoux, E., 2008:** Géologie des Ressources Minérales. Ressources Naturelles et Faune Québec, éditeur.

**Galley, A.G., Hannington, M.D., and Jonasson, I.R., 2007:** Volcanogenic Massive sulphide Deposits, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No 5., pp 141-161.

**Franklin, J.M., 1996:** Gîtes de sulfures massifs à métaux communs associés à des roches volcaniques; dans Géologie des types de gîtes minéraux du Canada, rev., par O.R Eckstrand, W.D. Sinclair, et R.I Thorpe. Commission géologique du Canada, géologie du Canada, no 8.

**Robert, F., 1996:** Quartz-carbonate vein gold, in Eckstrand, O.R., Sinclair, W.D.T., and Thorpe, R.I., eds., Geology of Canadian Mineral Deposit Types: Geological Survey of Canada, Geology of Canada No. 8; (see also The Geology of North America, vol P-1, Geological Society of America).

**Dubé, B., and Gosselin, P., 2007:** Greenstone-hosted quartz-carbonates vein deposits, in Goodfellow, W.D., ed., Mineral Deposits of Canada: Mineral Deposits of Canada: A Synthesis of Major Deposit Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No 5, p 49-73.

**Beakhouse, G.P. 2007:** Structurally controlled, magmatic hydrothermal model for Archean lode gold deposits: a working hypothesis; Ontario Geological Survey, Open File Report 6193, 133 p.

**Percival, J.A, 2007:** Geology and metallogeny of the Superior Province, Canada, in Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No 5, p 903-928.

**Robert, F., Brommecker, R., Bourne, B.T., Dobak, P.J., McEwan, C.J., Rowe, R.R., Zhou, X, 2007:** Models and Exploration Methods for Major Gold Deposits. In Proceedings of Exploration 07: Fifth Decennial International Conference on Mineral Exploration, edited by Milkreit, 2007 pp 691-711.

## SCHEDULE 1

### CLAIMS, TOTAL BLOCK A TO E

		<u>Area (ha)</u>	<u>Accumulated work</u>	<u>Required work</u>	<u>Mining rights</u>
<b>Total</b>	<b>484 cells</b>	<b>26,839.7</b>	<b>\$0</b>	<b>\$580,100</b>	<b>\$26,230.50</b>







Liste de claims Massicotte

Block	NTS Sheet	Title type	Title #	Expiry date	Area (Ha)	Accumulated work	Required work	Mining duties	Claim Holder	Constraint
B	NTS 32E15	CDC	2345097	15-May-14	55,54	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345098	15-May-14	55,54	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345099	15-May-14	55,54	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345100	15-May-14	55,54	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345101	15-May-14	55,53	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345102	15-May-14	55,53	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345103	15-May-14	55,53	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345231	16-May-14	55,59	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345232	16-May-14	55,59	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345233	16-May-14	55,59	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345234	16-May-14	55,59	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345235	16-May-14	55,58	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345236	16-May-14	55,58	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345237	16-May-14	55,58	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345238	16-May-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345239	16-May-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345240	16-May-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	Affected by: Protected area project
B	NTS 32E15	CDC	2345241	16-May-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345242	16-May-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345243	16-May-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345251	16-May-14	55,52	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345455	16-May-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2345456	16-May-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2355565	18-Jul-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2355566	18-Jul-14	55,57	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2355567	18-Jul-14	55,56	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2355568	18-Jul-14	55,55	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
B	NTS 32E15	CDC	2355569	18-Jul-14	55,55	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
<b>Total Block B</b>			<b>54</b>		<b>2999,96</b>	<b>\$0</b>	<b>\$64 800</b>	<b>\$2 929,50</b>		
Block	NTS Sheet	Title type	Title #	Expiry date	Area (Ha)	Accumulated work	Required work	Mining duties	Claim Holder	Constraint
C	NTS 32E16	CDC	2314018	21-Jun-14	55,25	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2314019	21-Jun-14	51,86	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2328069	21-Jun-14	23,88	\$0	\$500	\$27,75	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2328070	21-Jun-14	40,01	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338827	28-Mar-14	55,65	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338828	28-Mar-14	55,64	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338829	28-Mar-14	55,64	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338830	28-Mar-14	55,64	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338831	28-Mar-14	55,64	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338832	28-Mar-14	55,63	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338833	28-Mar-14	55,63	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338834	28-Mar-14	55,63	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338835	28-Mar-14	55,63	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338836	28-Mar-14	55,63	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
C	NTS 32E16	CDC	2338837	28-Mar-14	55,63	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	















### Liste de claims Massicotte

Block	NTS Sheet	Title type	Title #	Expiry date	Area (Ha)	Accumulated work	Required work	Mining duties	Claim Holder	Constraint
D	NTS 32E09	CDC	2347882	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347883	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347884	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347885	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347886	30-May-14	55,75	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347887	30-May-14	55,75	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347888	30-May-14	55,75	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347889	30-May-14	55,75	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347890	30-May-14	55,73	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347891	30-May-14	55,73	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347892	30-May-14	55,73	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347893	30-May-14	55,73	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347894	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347895	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347896	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347897	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347898	30-May-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347899	30-May-14	55,72	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347900	30-May-14	55,72	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347901	30-May-14	55,72	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347902	30-May-14	55,72	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347903	30-May-14	55,72	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347904	30-May-14	55,72	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2347905	30-May-14	55,72	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2348505	31-May-14	55,91	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2348513	31-May-14	55,91	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2349560	5-Jun-14	55,75	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2349562	5-Jun-14	55,74	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2349563	5-Jun-14	55,75	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
D	NTS 32E09	CDC	2350820	11-Jun-14	55,73	\$0	\$1 200	\$54,25	Les métaux canadiens inc.(Canadian Metals inc.)	
<b>Total Block D</b>			<b>148</b>		<b>8246,88</b>	<b>\$0</b>	<b>\$177 600</b>	<b>\$8 029,00</b>		
<b>Total all blocks</b>			<b>484</b>		<b>26839,7</b>	<b>\$0</b>	<b>\$580 100</b>	<b>\$26 230,50</b>		
Yellow: claims with expiry date harmonized										