

NI 43-101 TECHNICAL REPORT, PERTAINING TO:

THE LAC DES MONTAGNES PROPERTY

James Bay area

NTS sheets 32N/07, 32N/08, 32N/09 and 32O/12

October 18, 2010

Prepared For: Nemaska Exploration Inc.

Prepared by: Yvan Bussières, Eng.,
Donald Théberge, Eng., M.B.A

2.0) SUMMARY

The Lac des Montagnes property is made of seven non-adjacent claim blocks containing 278 map-designated cells covering an area of 14,878.95 ha. They are located in NTS sheets 32N07, 32N08, 32N09 and 32O12. They are all registered in the name of Nemaska Exploration Inc. excepted for 24 claims registered in the name of Victor Cantore, which are in the process of being transferred to Nemaska Exploration. Their expiry dates range from January 2, 2011, to September 22, 2012. A minimum of \$346,600 in exploration expenditures will be required for the next claims renewal, along with mining duties of \$14,456. Some \$35,980 in excess credits is currently accumulated on the claims.

The property was acquired from Golden Goose Resources Inc. in 2009. Nemaska has now fulfilled all the conditions required to complete the acquisition of the claims. Golden Goose has a 2% NSR royalty, half of which can be bought back for \$1,000,000 within the first three years of the agreement. The NSR does not apply to the new claims designated by Nemaska.

To the knowledge of the author, there are no environmental liabilities pertaining to the Lac des Montagnes property. The only permit required to explore the property is the usual forestry management permit. There is no mineralized zone with identified resources reported on the property.

Three blocks, Nemiscau Lake, Caumont West Block, and Caumont East Block, must be accessed by helicopter. The Kename, Kachika, and Nemiscau Station blocks are accessible by road. The Valiquette-Duval block is accessible by road and/or boat, and old winter road along the SE shore of Lac des Montagnes can be used for winter drilling. There is no mining infrastructure on the property; however, the Relais Routier Nemiscau, where Nemaska personnel is housed, is located 12 km W of the Valiquette-Duval block.

Around 1963 to 1978, Valiquette mapped the NE part of the property on behalf of the MRNFQ¹, including the Kachika, Caumont East, Caumont West, Nemiscau Station and Valiquette-Duval blocks. Also on behalf of the MRNFQ, Wallach, and later Dubé, mapped the SW part of the property, which is made up of the Nemiscau Lake and Kename blocks.

From 1962 until now, 10 mining companies have conducted exploration work on at least one of the blocks of the property or in its immediate vicinity. Noranda was the first company to report exploration

¹ MRNFQ: Ministère des Ressources Naturelles et de la Faune du Québec.

work in 1962, just SW of the Caumont West block and on the Valiquette-Duval block. Two years later, Inco drilled eight holes on the Lac des Montagnes ultramafic formation, and discovered the chromite mineralization at the base of the ultramafic complex. Ten years later, Canex Placer completed several geophysical and geological surveys on Valiquette-Duval block, SE of the Nemiscau Lake block and SW of Caumont West block. They drilled only one hole, on the Valiquette-Duval block. Grab samples taken by Canex Placer returned up to 1.75% Ni and 1.42% Cu just south of Lac Valiquette.

The next work was reported by SDBJ from 1979 to 1982. They carried out geological, geophysical and geochemical orientation tests on the Valiquette-Duval block, mainly related to chromite exploration. Ten short holes totalling 270 m were also drilled, and all of them intersected chromite mineralization. No resource estimate was ever done. However, metallurgical testing on chromite samples revealed that gravimetric concentration by heavy liquids followed by magnetic separation did not significantly raise the Cr/Fe ratio in chromite concentrates.

From 1982 to 1987, no exploration is reported. In 1987, Fort Rupert Resources did geological mapping, sampling and Beep-Mat prospecting in the Lac Caumont area, close to the Caumont West block. Very low anomalous values were obtained for Ni, Cu, Pt and Pd. During the same period, Freewest Resources and Muscocho Explorations worked on the Valiquette-Duval block. Freewest focused its exploration work on the southeastern part of Lac des Montagnes and south of Lac Valiquette. Muscocho drilled 14 holes for a total of 1,517 m on the center and NE part of the Valiquette-Duval block. Both companies conducted several geological and geophysical surveys and Freewest did soil sampling. The best results obtained by Freewest are 36.55% Cr, 1 g/t Pd, 0.16 oz/t Au and 3.15% Cu in samples from Duval showings; Valquette showings returned 2 g/t Pd, 1.24% Ni and 1.58% Cu. All these samples were chip samples ranging in length from 1.05 to 0.3 m.

In 2002, Soquem completed geophysical surveys over a small grid south of the Nemiscau Lake block. One EM anomaly was discovered, but apparently never drilled. In 2007, Iamgold completed regional till and lake-bottom sediment surveys, followed by geological survey over the Lac des Canards property, just SE of the Valiquette-Duval block on the Lac des Montagnes property. The conclusion was that exploration, initially aimed at gold exploration, should be re-oriented towards the search for base metals and uranium. Finally, Golden Goose Resources reported a one-day field visit in 2009.

Over the years, 37 holes totalling 2,519.5 m have been drilled on Valiquette-Duval block, and seven holes for a total of 788.6 m have been drilled in the immediate vicinity of Caumont West block. No historical holes are reported on or close to the other five blocks.

The property is situated in the NE part of the Superior province, which itself lies in the heart of the Canadian Shield. The 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. More specifically, the property is located in the Lac des Montagnes volcano-sedimentary formation, between the Champion Lake granitoids and orthogneiss and the Opatica NE, which is made of orthogneiss and undifferentiated granitoids.

The Lac des Montagnes belt is several kilometres wide and oriented northeast, and is made up of a sequence of aluminous paragneiss and few amphibolites. These rocks are strongly deformed and cut by around 20% late granitoids (leucogranites and biotite-bearing white pegmatites). The Lac des Montagnes property covers a large area totalling more than 148 km². With the exception of one claim block, namely Nemiscau Station, which is mainly situated in granite, the other blocks cover parts of the Lac des Montagnes formation. In the area covered by the property, the formation is composed of amphibolite quartz-rich paragneiss,² biotite and sillimanite-bearing biotite schist, pegmatite, basalt and ultramafic intrusives. Geophysical surveys show the signature and extent of ultramafic intrusions and iron formations, with some of them confirmed by historical drilling.

Being quite diversified, the geology of the property has the potential to host eight different deposit types, as follow:

- Magmatic nickel-copper sulphide deposits associated with ultramafic intrusion
- Volcanogenic massive sulphide (VMS) deposits
- Exhalative massive sulphide in quartzite (Sedex) deposits
- Lithium (spodumene) bearing pegmatites
- Gold and gold-arsenic occurrences
- Chromite deposits
- Banded Iron (BIF) deposits
- Uranium and associated elements in pegmatites

Since acquiring the property, Nemaska has completed an airborne EM and Mag survey over the whole property, followed by prospecting, trenching, and channel and grab sampling. The best results were obtained on the Valiquette-Duval block, where values of up to 19.35 g/t Au, 308 g/t Ag, 1.00%

² Paragneiss: Gneiss formed from metamorphosed sediment.

As, 17.65% Cu and 4.8% were obtained.³ Other blocks on the property returned slightly anomalous values corresponding to several times the mineralized background.

To date, Nemaska has not done any drilling on the property. Historically, 37 holes totalling 2,519.5 m were drilled on Valiquette-Duval, and seven holes for 788.6 m on or in the immediate vicinity of the Caumont West block. Unfortunately, assay results were only given for a small number of them.

Sampling method and approach, sample preparation, analysis and security were conducted according to industry standards. No breach of security was reported by the preparation or analytical laboratories, and none was observed by the authors. The authors have verified the data available and concluded that it is sound and reliable.

The Lac des Montagnes property is located in the volcano-sedimentary formation of the same name, which contains the Nisk-1 Cu-Ni and Whabouchi Li-Be deposits. The majority of the claim blocks are underlain by amphibolite quartz-rich paragneiss, biotite and sillimanite bearing biotite schist, pegmatite, basalt and ultramafic intrusives. To date, the Valiquette-Duval block has revealed the best results. Nemaska has resampled and extended the historical showings by trenching and channel and grab sampling, and new showings have also been discovered. The historical work and current exploration program by Nemaska have shown the property's potential. A more advanced exploration program is strongly recommended on the property.

A two phase exploration program is recommended to explore the potential of the property. At phase I, a helicopter-borne EM and Mag survey followed by geology/prospecting, soil survey plus trenching and channel sampling are suggested on Caumont East and Caumont West Blocks. A diamond drilling campaign totalling 2,600 m on Valiquette and Duval showings will complete phase 1.

At phase II, 4,000 m of diamond drilling are recommended on Valiquette and Duval showings, to define the mineralized zones and their extension at depth. On Caumont East and West Blocks, 2,000 m of drilling are recommended over the anomalous areas defined by the soil survey and trenching.

Budget to realize the suggested work is given on next page.

³ Obtained from different samples.

Budget: Lac des Montagnes					
Phase 1	Quantity	Units	Unit Cost	Total	
Airborne survey, mob-demob				\$15,000	
Airborne EM/MAG - Caumont West	120	Km	\$100	\$12,000	
Geology and prospecting - Caumont East	5	Day	\$2,000	\$10,000	Helicopter supported
Geology and prospecting - Caumont West	5	Day	\$2,000	\$10,000	Helicopter supported
Soil survey - Caumont East	400	Sample	\$100	\$40,000	Helicopter supported
Soil survey - Caumont West	400	Sample	\$100	\$40,000	Helicopter supported
Trenching and sampling - Caumont East	20	Day	\$10,000	\$200,000	Camp supported
Trenching and sampling - Caumont West	20	Day	\$10,000	\$200,000	Camp supported
Report				\$20,000	
Drilling - Duval showing	1,200	m	\$200	\$240,000	
Drilling - Valiquette showing	1,400	m	\$200	\$280,000	
Geology, assays, etc., all included	2,600	m	\$25	\$65,000	
Report - end of Phase 1 (for NI 43-101 and assessment purposes)				\$20,000	
Contingency 15%				\$172,800	
Total Phase 1					\$1,324,800
Phase 2					
Drilling - Duval showing	2,000	m	\$200	\$400,000	
Drilling - Valiquette showing	2,000	m	\$200	\$400,000	
Drilling - Caumont East	1,000	m	\$200	\$100,000	
Drilling - Caumont West	1,000	m	\$200	\$100,000	
Geology, assays, etc., all included	6,000	m	\$25	\$150,000	
Report - end of Phase 2 (for NI 43-101 and assessment purposes)				\$20,000	
Contingency 15%				\$175,500	
Total Phase 2					\$1,345,500
				Total Phases 1 and 2	\$2,670,300

- 1.0) Title Page
- 2.0) Summary

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4.0) INTRODUCTION

4.a) Recipient

This NI 43-101 technical report on the Lac des Montagnes property has been prepared at the request of Nemaska Exploration Inc. (“Nemaska”).

4.b) Objectives

This report provides a summary of the scientific and technical information concerning the exploration activities, both historical and recent, carried out on the Lac des Montagnes property. Nemaska may use this report for the purpose of raising exploration funds as requested by regulatory authorities.

4.c) Source of Data and Information

This report is based on the statutory work filed with the MRNFQ, documents obtained from Nemaska and exploration carried out by Nemaska since it acquired the property.

4.d) Scope of the Personal Inspection by the Qualified Persons

Yvan Bussières Eng., and Donald Théberge, Eng., M.B.A., are responsible for all the sections of this technical report. Donald Théberge visited the property twice. The first visit occurred on September 20, 2009. The author was accompanied by Guy Bourassa and Michel Baril, president and chairman of Nemaska Exploration, respectively. At this time, a search was initiated to find the historical chromite showings, but unfortunately they were not found. About two hours were spent on the property. Entry and exit were by helicopter.

The second visit occurred on August 9, 2010. The author was accompanied by Guy Bourassa, president of Nemaska Exploration, Yvan Bussières, Eng., responsible for the exploration program, Wanda Cutler, public relations, and Guy Gasse, technician. We also met with the exploration team on the Valiquette-Duval block of the property. Several sulphide-mineralized outcrops were visited, and a couple of chromite showings were observed. About four hours were spent on the property. Access to the property was by pick-up truck, boat and all terrain vehicle. Exit was by helicopter.

Yvan Bussières was in charge of exploration for Nemaska. He supervised the exploration crew working on the Lac des Montagnes property and spent many days in the field from June 2010 until the production of this report.

5.0) RELIANCE ON OTHER EXPERTS

The authors relied on Réjean Paul, Eng., geophysicist, Olivier Letourneau B.Sc., and Marc Boivin, geophysicist, for the interpretation of the TDEM and magnetic airborne survey performed by GPR International. The authors, Yvan Bussières Eng., and Donald Théberge, Eng., M.B.A., are responsible for all the sections of this technical report.

In this report, all amounts are in Canadian dollars, data is in the metric system and coordinates are in UTM, Zone 18, NAD83 unless otherwise indicated.

6.0) PROPERTY DESCRIPTION AND LOCATION

6.a) Area

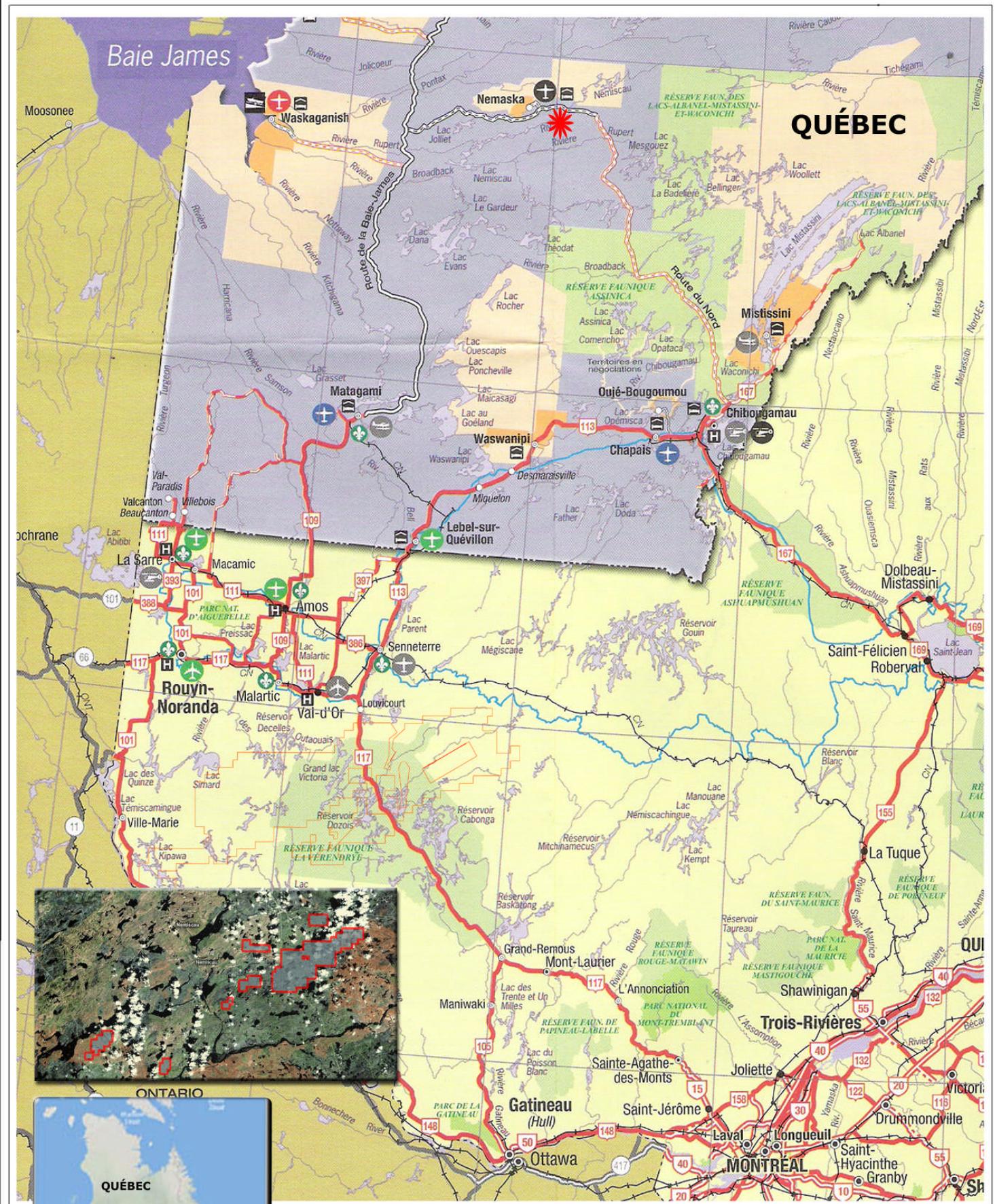
The Lac des Montagnes property is made up of seven non-adjacent claim blocks containing 278 map-designated cells covering an area of 14,878.95 ha or 148.79 km².

6.b) Location

The Lac des Montagnes property is located in NTS sheets 32N07, 32N08, 32N09 and 32O12. It is made of 7 claims blocks. The location of the property is shown in Figure 1, "Location Map".

6.c) Type of Mineral Tenure

The claims of the property are all registered in the name of Nemaska Exploration Inc., with the exception of 24 claims forming part of the Caumont West block, which are registered in the name of Victor Cantore and are currently in the process of being transferred to Nemaska Exploration Inc. Their expiry dates range from January 2, 2011 to September 22, 2012. A minimum of \$346,600 in exploration expenditures will be required for next claims renewal, along with mining duties of \$14,456. Some \$35,980 in excess credits is currently accumulated on the claims. The claims are described in Schedule 1 of this report and are shown in Figure 2, "Claims Map".



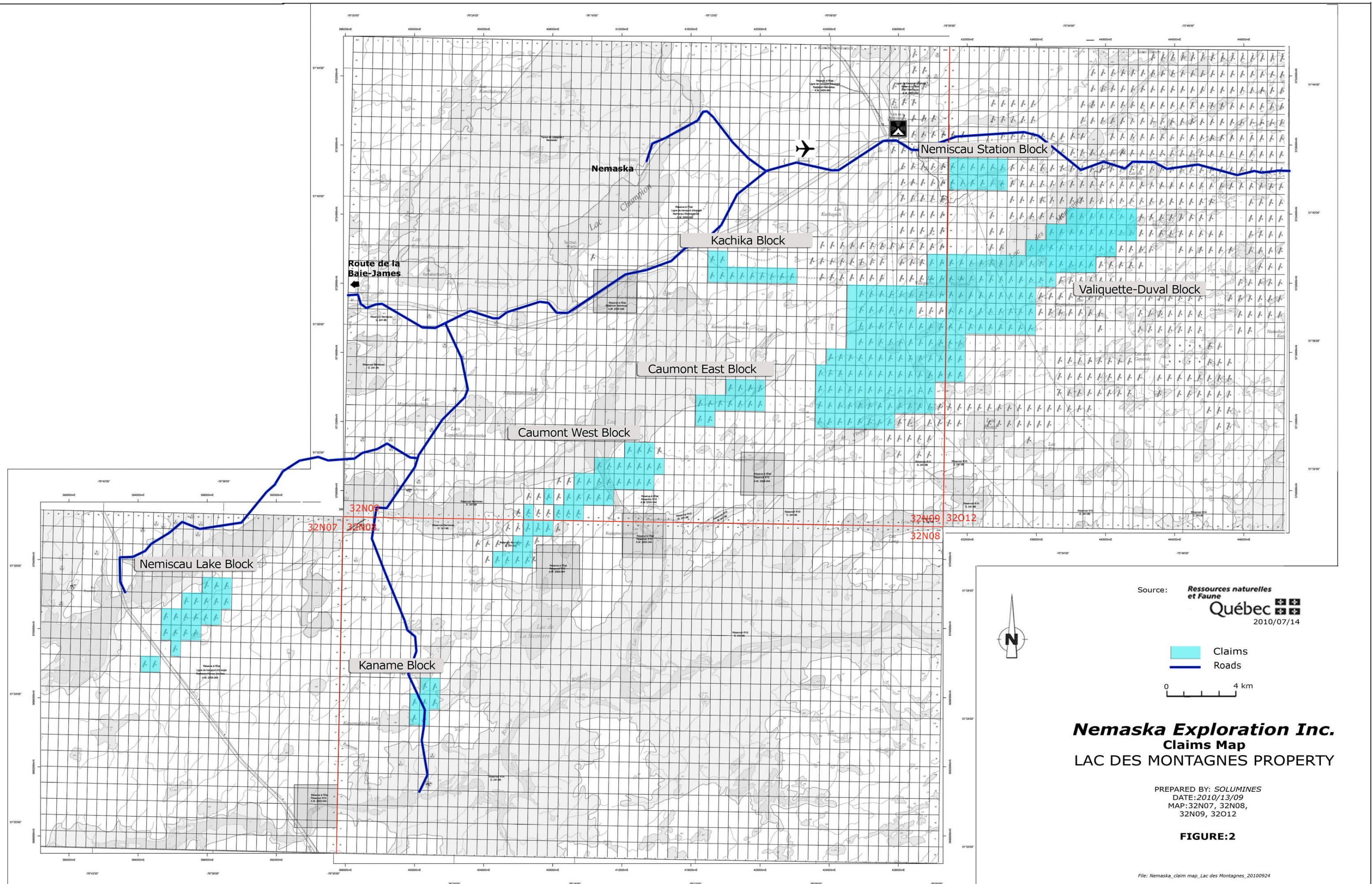
LAC DES MONTAGNES
PROPERTY

Scale

Nemaska Exploration Inc.
Location Map
LAC DES MONTAGNES

PREPARED BY: SOLUMINES
DATE: 2010/19/08

FIGURE: 1



6.d) Nature and Extent of Issuer's Titles

Most of the claims that form the Lac des Montagnes property were acquired by Nemaska Exploration from Golden Goose Resources in 2009. The conditions of the agreement are outlined below:

The agreement was signed with Golden Goose on August 12, 2009. This option covered all the 594 claims held by Golden Goose in the Nemiscau area, namely the Lac Levac and Lac des Montagnes properties, including the Nisk-1 Ni-Cu deposit located on Lac Levac property. The acquisition conditions were as follows:

"The Company (Nemaska Exploration Inc.,) has acquired a 100% interest in Lac Levac and Lac des Montagnes properties owned by the public company Golden Goose Resources Inc. The Company paid an amount of \$650,000 in cash and has issued \$1,500,000 in common shares of the Company at the price of the initial public offering of the Company (IPO), with a 30% discount. Each share issued is accompanied by a share purchase warrant allowing its holder to subscribe to one common share of the Company at the IPO price for a 24-month period from the issue date.

Golden Goose Resources Inc. will keep a 2% NSR royalty on the claims forming the properties of Lac Levac, Lac des Montagnes and part of the Whabouchi property, of which 1% can be bought for an amount of \$1,000,000 in cash within a three-year period following the acquisition.⁴

Since the acquisition of the Golden Goose claims, some have been abandoned and new claims have been designated. However, the royalty does not apply to the claims designated by Nemaska.

6.e) Property Boundaries

The property boundaries have not been surveyed. When a claim is acquired by map designation, there is no need to survey the cells boundaries, as they are already defined by the NTS geographical coordinate system.

6.f) Location of Mineralized Zones

No mineralized zones with identified resources have been reported on the property. However, two kinds of mineralization have been discovered over the years: chromite mineralization discovered SE

⁴ Excerpt from: Nemaska Exploration Inc., Unaudited Quarterly Financial Report, period ended March 31, 2010 and 2009.

of Lac des Montagnes, and Ni-Cu mineralization discovered SE of Lac des Montagnes and south of Lac Valiquette. Both types are located in an ultramafic geological environment.

6.g) Royalties

As described in Item 6.d, the claims acquired from Golden Goose are subject to a 2% NSR royalty, of which 1% can be bought back for \$1,000,000 within the first three years. From the 278 claims which form the property, 173 of them have been designated before November 2008, and are submitted to the Golden Goose NSR.

6.h) Environmental Liabilities

To the knowledge of the author, there are no environmental liabilities pertaining to the Lac des Montagnes property.

6.i) Required Permits

The only permit required to explore the property is the usual forestry management permit. The company should also respect all the environmental laws applicable to the type of work done.

7.0 PHYSIOGRAPHY, ACCESSIBILITY, INFRASTRUCTURES AND CLIMATE

7.a) Topography, Elevation, Vegetation and Drainage

The various blocks of the property show a relatively flat topography where the maximum difference in elevation between the lowest and highest point does not exceed 20 m, except on the Duval-Valiquette Block, close to the south east shore of Lac des Montagnes, where the difference in elevation can be up to 35 m. Like much of this area, the property is covered by a mix of swamp and forest, the latter consisting of black spruce. As observed in the holes drilled and in the vicinity of the property, the overburden thickness generally varies from 0 to 15 m. Finally, at this latitude, there is no permafrost.

7.b) Accessibility

The property is made of seven non-adjacent claim blocks, namely the Nemiscau Lake, Kename, Caumont West, Caumont East, Kachika, Nemiscau Station and Valiquette-Duval blocks. A Hydro-Quebec power line crosses the southern part of the Nemiscau Lake block in a NW/SE direction. It can be accessed by road to Lac Nemiscau, located close to the west boundary of the block, and then by boat.

The Kename block covers the eastern part of Lac Kanamakuskacik, SW of Lac de la Sicotière. It can be accessed by road. The Caumont West block can be accessed by plane, landing on Lac Caumont, or directly by helicopter. The Caumont East block can be accessed by helicopter. The Kachika block is accessed directly by the Route du Nord, which is located at the NW end of the claim block.

The Nemiscau Station block can be accessed by the Route du Nord road, which is located approximately 1 km north of its northern boundary, or by a Hydro-Quebec power line that crosses the SW part of the claim block. The most interesting geology on the Valiquette-Duval block is just SE of Lac des Montagnes and south of Lac Valiquette. It can be accessed via an old gravel road that links a power line to the southern part of Lac des Montagnes, but a boat is required to cross the southern part of Lac des Montagnes. An old winter road that can be used for winter drilling has been refurbished along the SE shore of Lac des Montagnes.

7.c) Infrastructure

There is no mining infrastructure on the property. However, Hydro-Québec has several facilities in the area of the property, including the Poste Albanel and Nemiscau electrical stations. The village of Nemaska and the CCDC⁵ Relais Routier Nemiscau, located 30 km and 12 km to the west of the Valiquette-Duval block, respectively, can also be used to house workers and service the property. The Nemiscau airport, located 18 km west of the Valiquette-Duval block, is serviced by Air Creebec and chartered flights. Figure 3 show the facilities in the Lac des Montagnes area.

7.d) Climate

The climate of the area is sub-arctic. This climatic zone is characterized by long, cold winters and short, cool summers. Daily average temperatures range from -20°C in January to +17°C in July. Break-up usually occurs early in June, and freeze-up in early November.



**Nemaska Exploration Inc.
Facilities
in the Lac des Montagnes Area
LAC DES MONTAGNES PROPERTY**

PREPARED BY: SOLUMINES
DATE: 2010/16/08

FIGURE: 3

8.0) HISTORY

8.1) Work Done by the Quebec Government

From 1963 to 1978, the Quebec Ministry of Natural Resources was active in the area, with geological mapping done at different scales by the following authors: Gillain and Remick (Map 1510), Valiquette (RP 500, RP 158), Wallach (DP 146) and Dubé (DP 278, DP 419, DPV 585). In 1963, William completed a master thesis entitled "Mountain Lake Chromite Deposits, Mistassini Territory".

The most useful mapping in relation to the Lac des Montagnes claims blocks was done by Valiquette and Dubé and respectively reported in Report # RP 158 and DPV 585. Figure 6 of this report, entitled "Property Geology", downloaded from the Sigeom⁶ files, is based on the Valiquette maps, and is still widely used in the industry.

8.2) Work Done by Mining Corporations

The first exploration work on the property was reported by Noranda Exploration in 1962. Noranda reported seven drill holes, with two of them just south west of Caumont West block, and four on the Valiquette-Duval block. In both cases, no assays are indicated on the logs. At this time, chromite or sulphide mineralization was not reported on the Valiquette-Duval block.

Inco was the first company to intersect chromite mineralization in holes drilled on the Lac des Montagnes ultramafic intrusion in 1963 and 1964. Unfortunately, no assays are indicated on the logs. Canex Placer was the next company to explore the area and more particularly the Valiquette-Duval block, from 1973 to 1975. Emphasis was mainly on Ni/Cu mineralization in the ultramafic intrusion, and values of up to 1.75% Ni and 1.42% Cu were obtained in grab samples. Only one hole was drilled on the Valiquette-Duval block and returned very low Ni values.

From 1979 to 1982, SDBJ completed several geological and geophysical surveys over the Valiquette-Duval block. Their exploration efforts focused mainly on the chromite mineralization. SDBJ even carried out a metallurgical study whose results indicate that the Cr/Fe ratio in chromite concentrate cannot be raised by simple magnetic and gravity methods. SDBJ also drilled 10 holes.

⁶ Sigeom: Quebec Ministry of Natural Resources Database.

Chromite mineralization was intersected in each of them, but no Cr assays are reported. The chromite mineralization is described as follows:

- Zone A: Between line 3+00 W to 4+00 W, a bench of 0.5 m of massive chromite within a sequence of 2 m of layered chromite;
- Zone B: Between line 1+80 W to 0+61 E, two benches of massive chromite totalling a 1.5 m sequence which is discontinuous and displaced by faults.

In 1987, Fort Rupert Resources Inc. completed geological mapping and sampling immediately SW of Caumont West block. Very low anomalous values for Ni, Cu, Pt and Pd were obtained. At the same time, Freewest Resources and Muscocho Explorations completed exploration programs on Valiquette-Duval block. Freewest did Mag, VLF and soil sampling surveys. Muscocho realized Mag and VLF surveys followed by 14 drill holes in the NE part of the Valiquette-Duval block, outside the chromite mineralization zones. The best value obtained was 2,479 ppb Au in Hole ML-88-09. Finally, in 2009 Golden Goose Resources paid a one day field visit to the Valiquette-Duval block on the Lac des Montagnes property.

It is also worth mentioning that Soquem did HLEM and Mag surveying in 2002 over a small grid south of Nemiscau Lake block. One EM anomaly was discovered. In 2007, Iamgold held the Lac des Canards property, located immediately SE of the Valiquette-Duval block and carried out regional till and lake-bottom sediment sampling, along with geological surveying. Iamgold concluded that the gold potential was limited and exploration should be oriented towards the search for base metals and uranium.

Exploration work is described more in detail and in chronological order below.

NORANDA EXPLORATION:

1962:

GM 12655: Noranda reported seven drill holes. Three of them, numbered C62-1, 2 and 3 and totalling 343 m, were drilled just south of Caumont Lake, close to the SW boundary of the Caumont West block. Metasediment, pegmatite, ultramafic and quartz biotite gneiss were intercepted. No assays are reported. The four other holes, numbered M62-1 to 4 and totalling 332 m, were drilled close to the SE shore of Lac des Montagnes. Pegmatite, quartz biotite gneiss hornblendite, granite and metasediments were mainly intercepted. Ultramafic rocks were traversed only in Hole M62-1, serpentine was frequent, and sulphide content of up to 15% over 15 cm was observed. Unfortunately, no assays are reported.

INCO

1963:

GM 16448 D: Drilling of two holes for 42 m. They are located approximately 4 km NE of the Kename block, or 2 km west of Lac de la Sicotière. Metasediments were mainly traversed. A few disseminated sulphides and graphite explained the geophysical conductors. No anomalous results are reported.

GM 16448 E: A log of Hole 24053, drilled approximately 5 km SE of the Caumont West block, is reported. Metasediment predominates. The best values obtained were 0.1% Cu and 0.05% Ni over 1.4 m.

1964:

GM 15631: Eight holes totalling 263 m were drilled by Noranda on the Lac des Montagnes ultramafic formation. Ultramafic and chlorite schist were the main units intercepted. Massive chromite is reported in the majority of the holes. Unfortunately, the rock description is quite brief, and no assays are reported.

CANEX PLACER LTD.

1973:

GM 34021: Geological reconnaissance of the ultramafic rock formation was carried out, mainly east of Lac Nemiscau or 7 km WSW of the Caumont West block, and on the south shore of Lac Valiquette, where a grab sample from a 4-foot-wide massive sulphide horizon returned 0.99% Ni and 0.53% Cu.

1974:

GM 34022: Airborne EM and Mag survey. Three areas were surveyed, the first east of Lac Nemiscau, the second over Lac des Montagnes and Lac Valiquette and the third over the Lac Voirdy area. Several anomalies were located.

GM 34023: HLEM and Mag survey were completed over anomalies detected by the airborne survey reported in GM 34022. South of Lac Caumont, on Grid B-1, a 40-foot-wide EM conductor was detected. A surface showing from this conductor returned a grab sample containing 1.02% Cu. On Grid B-2, a 60-foot-wide conductor lies at the contact between metavolcanics and gabbroic rocks. SE of Lac Valiquette and Lac des Montagnes, on Grid C-6, a reasonably strong conductor at least 1,000 feet along strike was discovered.

1975:

GM 34024: Four holes were drilled south of Lac Caumont. They generally hit basalt, amphibolite, pegmatite and ultramafic in the form of peridotite. The best value was obtained in Hole B-1-1, with

0.46% Ni and 0.84% Cu over 1.03 m associated with disseminated and massive sulphides. One hole, Hole C-8-1, was drilled in the Lac des Montagnes area but did not reveal anomalous values.

GM 34025: Geological, Mag, EM survey and sampling was carried out just south of Lac Valiquette. The following results were obtained: a grab sample returned 1.75% Ni and 1.42% Cu, a chip sample across 10 feet revealed 0.55% Ni and 0.19% Cu, and another chip sample taken 30 feet west of the preceding one, also across 10 feet, returned 1.59% Ni and 0.56% Cu.

SDBJ

1979:

GM 38184: Reconnaissance survey over the Lac des Montagnes ultramafic formations.

1980:

GM 37998: Search for lithium-bearing pegmatites from the lake-bottom sediment anomalies. Other than the Lac des Montagnes pegmatite (Nemaska Exploration's Whabouchi project), the Lac Caumont area was explored, a 25 ppm Li anomaly being located in Lac Caumont. The area was flown by helicopter and white pegmatites were seen close to the south extremity of Lac Caumont, but they were neither mapped nor prospected.

GM 57940: Ground EM and Mag surveys, followed by a geological survey, and 10 DDH numbered NE80-1 to 10, totalling 270 m. No assays for Ni, Cu, Cr or Au are indicated.

1981:

GM 37999: Same description as GM 57940.

GM 38445: Airborne EM and Mag survey over the Lac des Montagnes area.

GM 38446: Ground and Mag survey over a grid of lines located at least 5 km east of the Lac des Montagnes property.

GM 38450: Detail mapping of the chromite horizons and sampling for a metallurgical test. No assay results given.

1982:

GM 37999: Metallurgical test on chromite samples from Lac des Montagnes. Gravimetric concentration by heavy liquids followed by a magnetic separation did not raise the Cr/Fe ratio in a chromite concentrate significantly.

GM 57795: Geochemical orientation tests around the Lac des Montagnes chromite deposit. Tests included lake-bottom sediments, till, heavy minerals, etc. The most efficient method was non-organic soil sampling, which outlined the Cr anomaly up to 2 km down-ice from the deposit.

GM 57797: New work plan for metallurgical testing on chromite samples from the Lac des Montagnes deposit.

FORT RUPERT RESOURCES LTD.1987:

GM 45890: Geological mapping, sampling and Beep-Mat prospecting in the Lac Caumont area, close to the Caumont West block on the Lac des Montagnes property. Ultramafic rock containing layers of sulphides were located. Very low anomalous values were obtained for Ni, Cu, Pt and Pd.

FREEWEST RESOURCES INC.1987:

GM 44642: Gradient magnetometer survey south of Lac Valiquette, also covering the Valiquette showing. Two structural lineaments were delimited on the property.

GM 45765: VLF-EM and total field magnetometer survey. On the east grid, SE of Lac des Montagnes, two conductive regions were found. On the west grid, south of Lac Valiquette, a moderate conductor was found, and could represent a magnetite-pyrrhotite-bearing fracture zone.

GM 46904: 757 soil samples were analyzed for Au, Cu, Ni, As, V and Cr, and 39 anomalous gold samples associated with 18 weak-to-strong As anomalies were obtained. Good association between Au and As is observed on the east grid, adjacent to Lac des Montagnes. Cr, Ni, and Cu were useful in delineating the ultramafic rocks and some amphibolites. Rock sampling over mineralized part of the outcrops revealed the following results:

Table 1: Best Results Obtained by Freewest (1987)

Element	Assay	Width (m)	Location
Cr	36.55%	1.05	Mountain Lake
Pd	1010 ppb	0.22	Mountain Lake
Pt	196 ppb	0.22	Mountain Lake
Au	0.16 oz/t	0.55	Mountain Lake south
Cu	3.15%	0.15	Mountain Lake south
Pd	2121 ppb	0.30	Valiquette
Pt	429 ppb	0.50	Valiquette
Cu	1.58%	0.30	Valiquette
Ni	1.24%	0.30	Valiquette

1988:

GM 48499: IP survey over the Lac des Montagnes grid. Survey used a dipole-dipole electrode configuration with a separation of 25 m and n=1 to 6. Several anomalies were found in an area previously mapped as meta-sediments.

MUSCOCHO EXPLORATIONS LTD1987:

GM 44641: Magnetic gradiometer survey over the Lac des Montagnes property.

1988:

GM 46065: 108.5 km of VLF-EM survey over the Lac des Montagnes grid. Several moderate conductors were located.

GM 47429: Fourteen drill holes totalling 1,517.14 m. Several massive sulphides intersections were obtained but are generally less than 1 m in width (core length). Best values were as follows:

Hole ML-88-9, from 29.6 to 30.12 m, 2479 ppb Au, in a gabbro;

Hole ML-88-10, from 17.87 to 18.5 m, 100 ppb Au and >2,000 ppm As in a pegmatite;

Hole ML-88-11, from 24.03 to 24.33 m, 5,603 ppm Cr in a qtz-fhs paragneiss altered in fuchsite.

SOQUEM2002:

GM 60504: HLEM and Mag survey over a small grid south of the Nemiscau Lake block. One EM anomaly was discovered in the north part of the grid.

IAMGOLD2007:

GM 63288: Regional till sampling over the Lac des Canards property, located just ESE of the Valiquette-Duval block.

GM 63289: Lake-bottom sediment survey over the Lac des Canards property. Only one gold anomaly was discovered. The arsenic background is about five times higher than usual.

GM 63290: Geological survey over the Lac des Canards property. The conclusion was that the gold potential is limited, and exploration should be reoriented towards the search for base metals and uranium.

GOLDEN GOOSE RESOURCES INC.2009:

GM 64573: Report on a one-day field visit.

9.0) GEOLOGICAL SETTING**9.1) Regional Geology**

The Lac des Montagnes property is located in the northeastern part of the Superior province, which itself lies in the heart of the Canadian Shield. The 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 the 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.⁷ According to Card and Ciesielski (1986), the area covered by the property is located in the Opinaca or Nemiscau sub-province. Figure 4, “Regional Geology”, shows the position of the property within the Superior province.

9.2) Local Geology

The Lac des Montagnes property is located in the Lac des Montagnes volcano-sedimentary formation, between the Champion Lake granitoids and orthogneiss and the Opatica NE, which is made up of orthogneiss and undifferentiated granitoids. The Lac des Montagnes belt is several kilometres wide and oriented northeast, and is made up of a sequence of aluminous paragneiss and amphibolites (basaltic lavas, ultramafic sills and flows). These rocks are strongly deformed and cut by around 20% late granitoids (leucogranites and biotite-bearing white pegmatites). The position of the property relative to the Lac des Montagnes belt and the Champion Lake and Opatica NE terranes is shown in Figure 5, “Local Geology”.

9.2) Geological Setting

The property is located in the middle part of the Lac des Montagnes formation. In the area covered by the blocks of the Lac des Montagnes property, its width varies from 2 km on the Nemiscau Lake block to 8 km in the vicinity of the Valiquette-Duval block.

The property covers a large area totalling more than 148 km². With the exception of one claim block, namely Nemiscau Station, which is mainly underlain by granite, the other blocks cover parts of the Lac des Montagnes formation.

The Lac des Montagnes volcano-sedimentary formation is oriented in a northeast direction. In the area covered by the property, it is composed of amphibolite quartz-rich paragneiss,⁸ biotite and sillimanite-bearing biotite schist, pegmatite, basalt and ultramafic intrusives. Geophysical surveys show the signature and extent of ultramafic intrusions and iron formations, with some of them confirmed by historical drilling. The area NW of the Lac des Montagnes formation is mainly made of orthogneiss intruded by granite, while the area SE of the same formation is mainly composed of paragneiss, also intruded by granite. The relative age of the formations is indicated in Table 2 below. The property geology is illustrated in Figure 6 and the regional magnetic survey is illustrated in Figure 7, “Regional Magnetic Survey”.

⁷ Classification by Hocq, M., in Géologie du Québec, MM 94-01

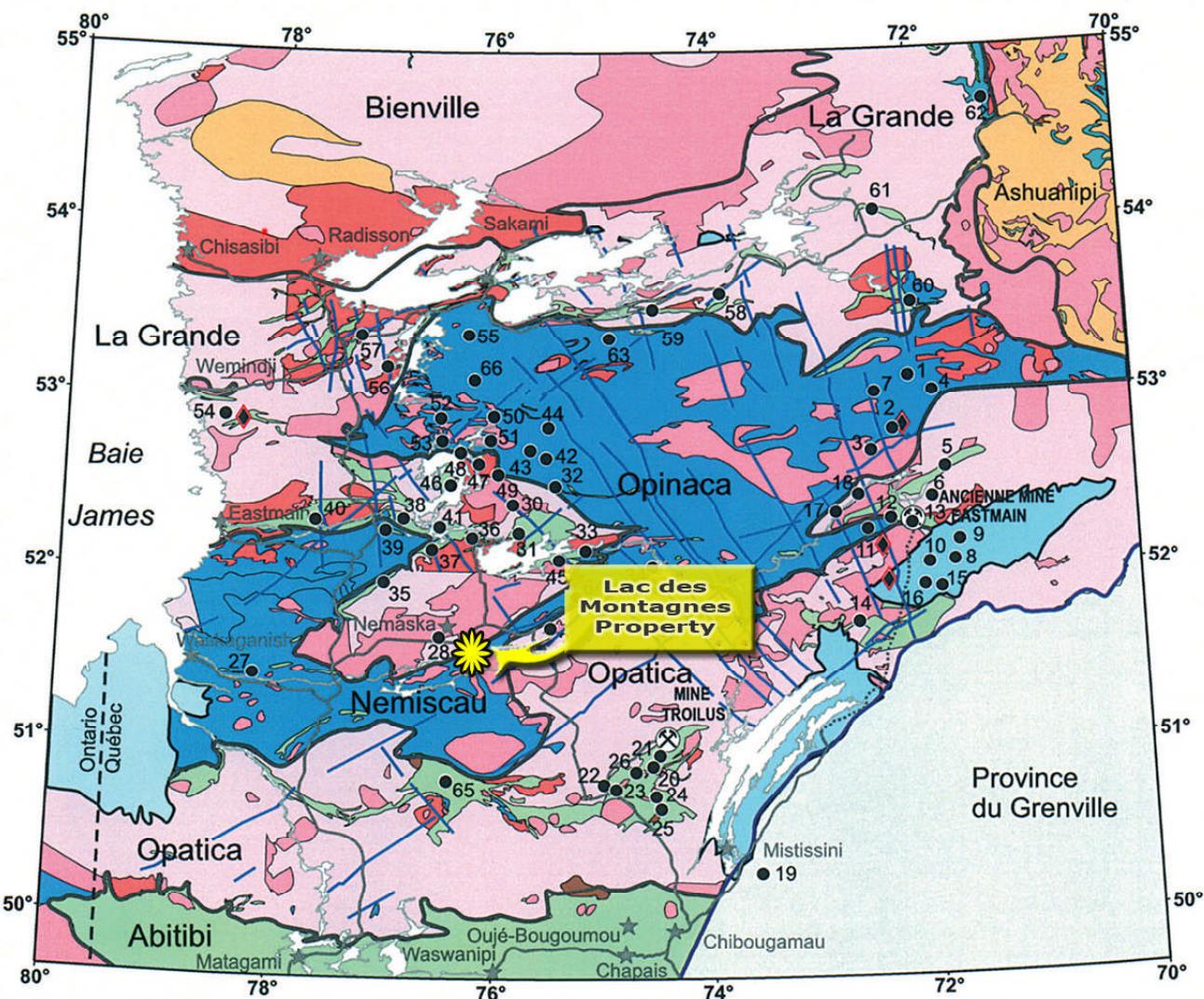
⁸ Paragneiss: Gneiss formed from metamorphosed sediment.

Table 2: Formations⁹

Pleistocene and Holocene	Moraines, eskers, alluvial deposits and string bogs
	10 - Diabase
	9 – White or pink granite, alaskite, quartz monzonite, pink pegmatite and aplite
	8 – White anatexis granite containing 10% to 40% of paragneiss or amphibolite enclaves. White pegmatites
	7 – Porphyric granodiorite
	6 – Hornblende gneiss
	5 – Granodiorite, tonalite, trondhjemite, a few diorites, gneissic and migmatized facies
Precambrian	4 – Migmatites, made up of 40% to 70% paragneiss and/or amphibolite with white or pink granite mobilizate
	3 – Biotite and chlorite-bearing paragneiss or schist - with biotite, muscovite, (cordierite or sillimanite or andalousite); - with biotite, garnet, (cordierite or sillimanite or andalousite); - with biotite, cordierite, sillimanite, andalousite; - with biotite, sillimanite, andalousite and staurolite; - metasomatic rock and quartz rich paragneiss.
	2 – Metavolcanic rocks, associated tuffs and paragneiss amphibolite and a few ultramafic rocks
	1 – Ultramafic rocks, peridotites, serpentinites, actinote and tremolite bearing rocks.

⁹ Dubé, C.Y., 1978: Région des lacs Champion, Tésécau et de la rivière Rupert, territoires de Mistassini et d'Abitibi. Rapport final. DPV 585.

QUÉBEC



Paléozoïque

Roches sédimentaires

Protérozoïque

Roches sédimentaires
clastiques et dolomitiques

Dykes de diabase

Archéen

Granite et paragneiss

Paragneiss

Tonalite, monzodiorite et monzonite

Gabbro et diorite

Séquence volcano-sédimentaire

Granulite

Socle tonalitique (gneiss et tonalite)

Route

Route d'hiver

Roches kimberlitiques

Mines



LAC DES MONTAGNES PROPERTY

0 50 100 km

Excerpt from DV 2006-01, MRNFQ 2005

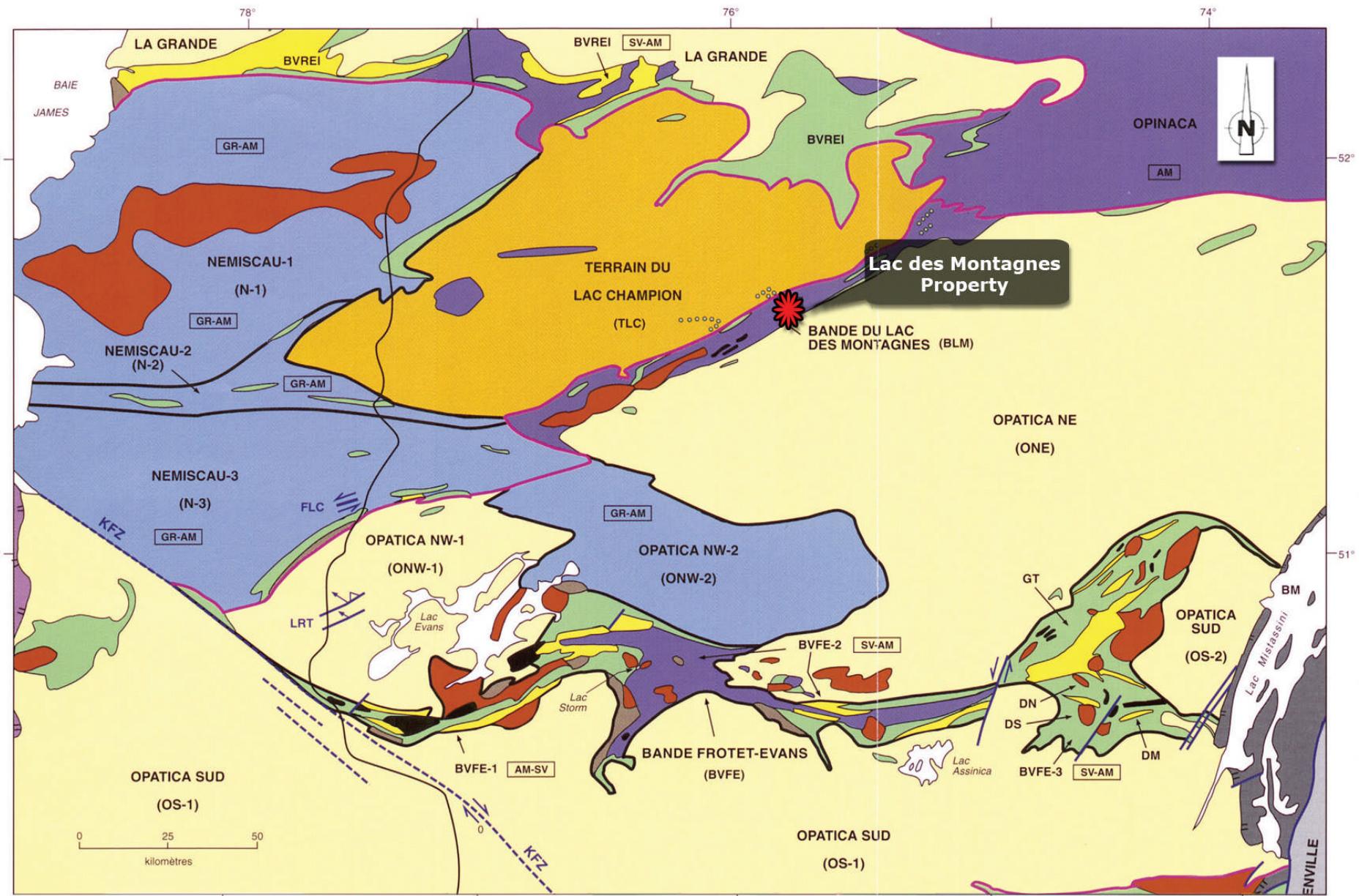
Nemaska Exploration Inc.
Regional Geology

LAC DES MONTAGNES PROPERTY

PREPARED BY: SOLUMINES
DATE: 2010/20/10

FIGURE:4

FILE: nemaskaexploration_lacdsmontagnes Regionalgeology_2010/2010



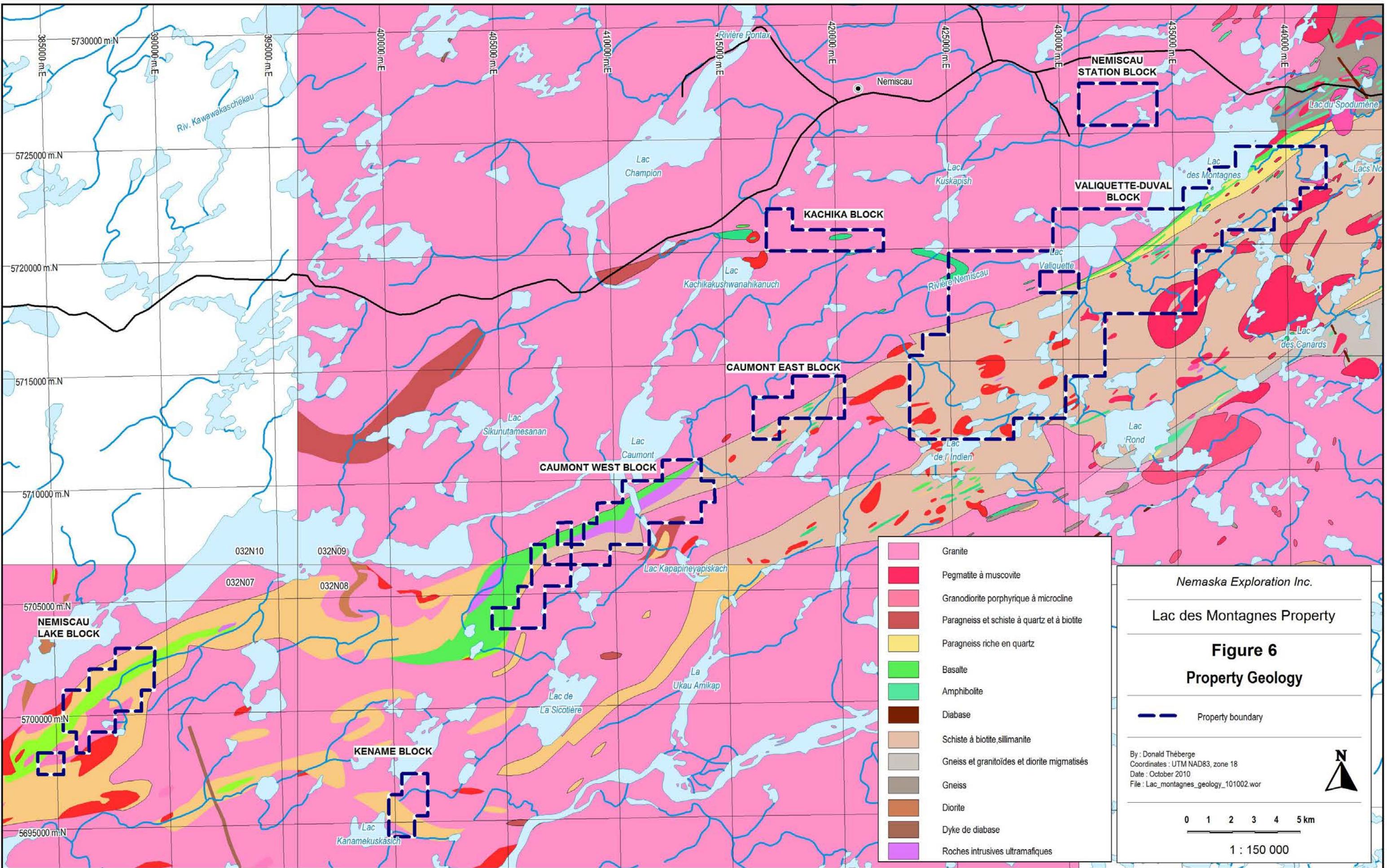
ARCHÉEN	
PALÉOZOIQUE	Volcanites felsiques
GRENVILLE	Granitoïdes tardifs
SUPÉRIEUR	Ultramafites
Couvertures protérozoïques	Gabbros/diorites
	Roches sédimentaires; paragneiss (faciès SV, AM)
	Paragneiss; migmatites (faciès AM, GR)
	Granitoïdes; orthogneiss
	Orthogneiss; granitoïdes non différenciés

- Volcanites felsiques
- Granitoïdes tardifs
- Ultramafites
- Gabbros/diorites
- Roches sédimentaires; paragneiss (faciès SV, AM)
- Paragneiss; migmatites (faciès AM, GR)
- Discordance d'érosion; paléoréolite
- Faille
- Cisaillement dextre
- Cisaillement senestre
- Faille inverse avec linéation d'étirement
- Limite de sous-province
- Limite de terrain
- Route

Nemaska Exploration Inc. Local Geology LAC DES MONTAGNES PROPERTY

PREPARED BY: SOLUMINES
DATE: 2010/03/09

FIGURE: 5



Nemaska Exploration Inc.

Lac des Montagnes Property

Figure 6

Property Geology

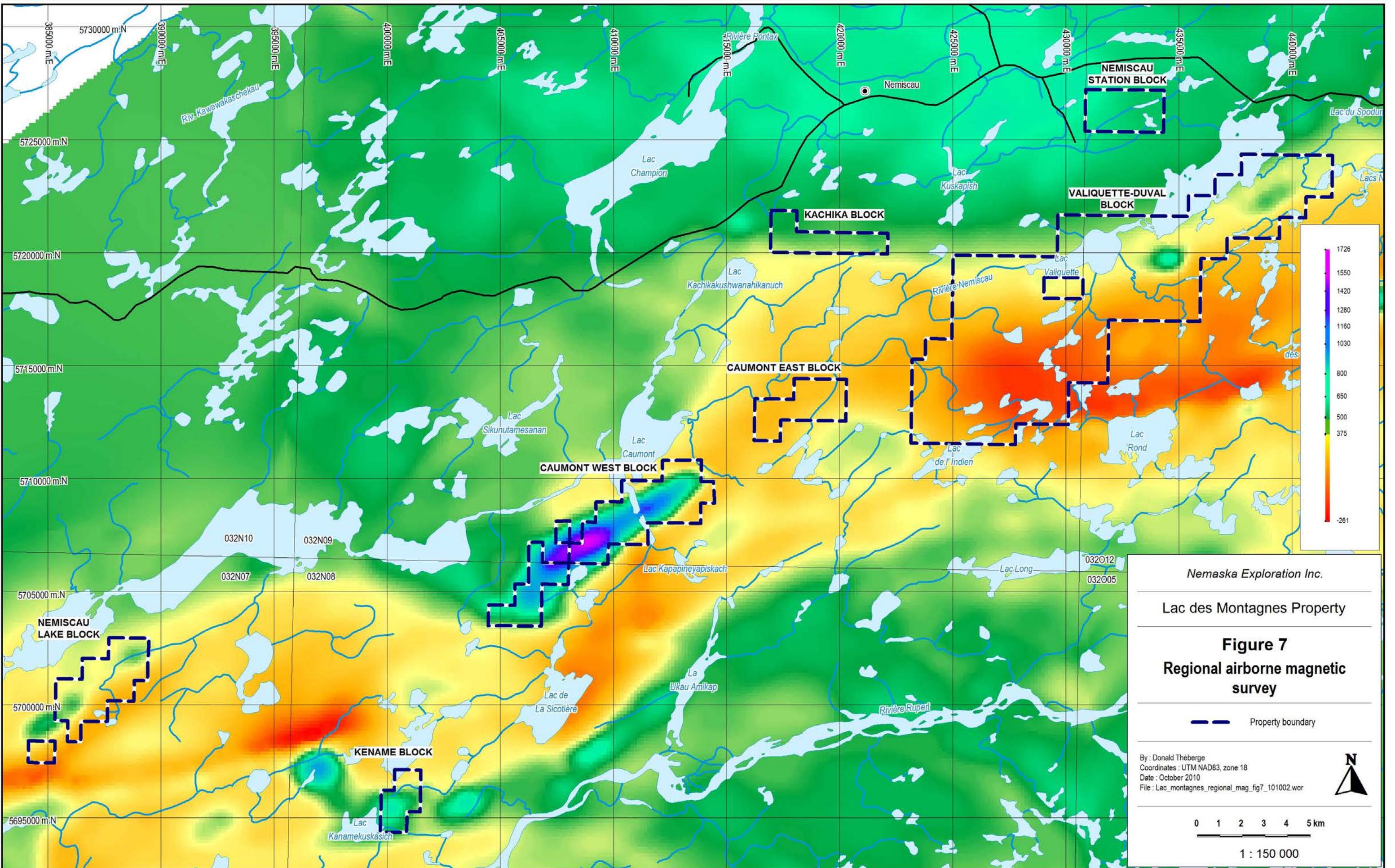
— Property boundary



By : Donald Théberge
Coordinates : UTM NAD83, zone 18
Date : October 2010
File : Lac_montagnes_geology_10100.wor

0 1 2 3 4 5 km

1 : 150 000



10.0) DEPOSIT TYPES

The geology of the property is complex and still partly unexplored. At this point, the following eight types of deposit may occur on the property.

- Magmatic nickel-copper sulphide deposits associated with an ultramafic intrusion

The Nisk-1 Ni-Cu deposit, owned by Nemaska Exploration, is located approximately 18 km ENE of the E boundary of the Valiquette-Duval block. It is associated with an ultramafic intrusion. NI 43-101 compliant resources were estimated in 2008 by RSW Inc., and returned the following results:

Table 3: Nisk-1 Deposit NI 43-101 Resource Estimate

Category	Tonnes	% Ni	% Cu	% Co	g/t Pd	g/t Pt
Measured	1,255,000	1.09	0.56	0.07	1.1	0.20
Indicated	783,000	1.0	0.53	0.06	0.91	0.29
Inferred	1,053,000	0.81	0.32	0.06	1.06	0.50

For now, ultramafic intrusions are known to occur on the Valiquette-Duval block, and south of Lac Caumont, close to the Caumont West block.

Please note that the authors have verified the information, which is reliable; however, this information is not necessarily indicative of the mineralization on the property.

- Chromite Deposits

Since the early sixties, chromite occurrences have been known to occur in the Lac des Montagnes area, close to the SE shore of Lac des Montagnes, at the base of an ultramafic intrusion. Over the years, Noranda, Inco, Canex Placer, SDBJ, Freewest and Muscocho Explorations have worked on these chromite showings. In 1978, SDBJ reported a grade of 30.87% Cr with 11.84% Fe in a grab sample, for a Cr/Fe ration of 2.6. In 1988, Freewest obtained 36.55% Cr in a chip sample, over a length of 1.05 m. Metallurgical testing was done by SDBJ in 1982 on samples from the same area. The conclusion was as follows: "Gravimetric concentration by heavy liquids followed by a magnetic separation did not raise the Cr/Fe ratio in a chromite concentrate significantly." However, no resource estimate has ever been done on these deposits.

The description of the chromite mineralization is as follows:

- Zone A: Between line 3+00 W to 4+00 W, a bench of 0.5 m of massive chromite within a sequence of 2 m of layered chromite;
- Zone B: Between line 1+80 W to 0+61 E, two benches of massive chromite totalling a 1.5 m sequence which is discontinuous and displaced by faults.
- Lithium (spodumene)-Bearing Pegmatites

The Whabouchi lithium / beryl deposit owned by Nemaska Exploration is located approximately 2 km north of the north boundary of Lac des Montagnes property. NI 43-101 compliant resources were estimated by SGS in 2010 and stand as follow:

Table 4: Whabouchi, NI 43-101 Resources Estimate

Category	Tonnes	Li ₂ O %	Beo (ppm)
Measured	1,885,000	1.60	458
Indicated	7,889,000	1.64	446
Inferred	15,396,000	1.57	420

White pegmatites have been reported in the Lac Caumont area, but as far as we know, they have never been mapped.

Please note that the authors have verified the information, which is reliable, however, this information is not necessarily indicative of the mineralization on the property.

- Volcanogenic Massive Sulphide (VMS) Deposits

As the property covers part of the Lac des Montagnes volcano-sedimentary formation, volcanogenic massive sulphide (VMS) type deposits associated with metamorphosed intermediate-to-felsic volcanics should be considered. Known examples of this type of deposit, albeit in less metamorphosed formations, are the Horne Mine in Rouyn-Noranda and the Matagami Lake Mine in Matagami.

- Exhalative Massive Sulphide in Quartzite (Sedex) Deposits

During the geological survey done in the summer of 2010, exhalative massive sulphide in quartzite (Sedex) was observed on the Caumont West, Caumont East and Valiquette-Duval blocks. This type of mineralization was also seen in the area of Voirdye Lake (Lac Levac property 25 km to the east) and in the area of Bourier Lake (Lac Arques Property 50 km to the east). Given the results of 2010 summer geology, it appears that the Lac des Montagnes volcano-sedimentary formation contains a disrupted horizon of exhalative massive sulphide traced over 90

km along the formation and still open at both ends. There are no known examples of this type of deposit in Archean rocks.

- Banded Iron Formation (BIF) Deposits

During the geological survey done in the summer of 2010, a banded iron formation (BIF) was observed on Caumont West, Caumont East and Valiquette-Duval Block. The iron beds were included within amphibolite quartz-rich paragneiss,¹⁰ biotite and sillimanite-bearing biotite schist. Known examples of this type of deposit are the Wabush and Fermont mines in the Labrador trough.

- Gold and Gold-Arsenic Occurrences

Hole ML-88-9, drilled by Muscocho Explorations in 1988, returned 2,479 ppb Au over 0.52 m, and Hole ML-88-10 returned 100 ppb Au and >2,000 ppm As in a pegmatite. Both holes were drilled on the Valiquette-Duval block.

- Uranium and Associated Elements in Pegmatites

Several uranium occurrences have been recognized in the region. One of them is situated on of Nemaska Exploration's Lac Arques property, and has returned 1,189 ppm ThO₂ and 565 ppm U₃O₈. This occurrence is located approximately 43 km NE of the Valiquette-Duval block on the Lac des Montagnes property. In 1982, SDBJ (GM 38447) reported the discovery of radioactive blocks in the Lac Lacroix area, about 30 km ESE of the eastern boundary of the Valiquette-Duval block on the property. In the same area, SDBJ discovered two water sources, named Zita and Maria. The first returned a grade of 0.8% uranium. SDBJ speculates that uranium enrichment is probably due to uranium-bearing pegmatites and/or pink granites.

11.0) MINERALIZATION

No mineralization with evaluated resources yet exists on the property. However, chromite, Ni/Cu, Au, Pt and Pd mineralization have been reported in historical work to the SE shore of Lac des Montagnes and close to the south shore of Lac Valiquette, both located on the Valiquette-Duval block on the property. The mineralization is described in item 8.0, History.

¹⁰ Paragneiss: Gneiss formed from metamorphosed sediment.

12.0) EXPLORATION

Since Nemaska acquired the property, the following exploration work has been completed:

Table 5: Exploration Work Completed by Nemaska

Date	Block	Work
March 2010	Valiquette-Duval	Helicopter-borne EM and magnetometer survey
	Nemiscau Lake	
	Nemiscau Station	
	Kachika	
	Kename	
	Caumont West	
Summer 2010	Caumont East	Helicopter-borne EM and magnetometer survey over part of the block
	Nemiscau Lake	6 days of prospecting
	Kename	2 days of prospecting
	Kachika	3 days of prospecting
	Nemiscau Station	2 days of prospecting
	Caumont West	6 days of prospecting
	Caumont East	4 days of prospecting
	Valiquette-Duval	Geological surveying and prospecting, stripping and sampling

This exploration work is described below.

12.1 Helicopter-Borne Survey

From March 22 to 31, 2010, Geophysics GPR International Inc. flew a helicopter-borne magnetic and time-domain electromagnetic geophysical survey over the Lac des Montagnes project. The survey covered four claim blocks located in NTS sheets 32N/07, 32N/08, 32N/09 and 32O/12, for a total coverage of 2,464.8 line-km.

Results for the four blocks surveyed were as follows:

Lac des Montagnes 1 – Whabouchi, covering Nemaska Exploration's Whabouchi property, the Main Block, plus blocks 32O12 North, 32N09 center and 32N09 South. GPR concludes that:

"A larger volume of mafic metavolcanic rocks are interpreted in comparison with the known geological map. Most of the interpreted EM conductors are located in the west end of the survey grid. In general, these conductors are associated with interpreted ultramafic or mafic volcanic rocks. An unidentified magnetic rock unit is interpreted in the central part of the survey grid. This interpreted unit has some similarities with some of the metavolcanic units. A buried sub-circular feature has also been interpreted in the central part of the grid. This feature is linked with a subtle inflection point of the unidentified geological unit. This area can be interpreted to be prospective for exploration of gold and base metals."

Lac des Montagnes 2 corresponds to the Kachika block in this report. Interpretation of the airborne survey by GPR is as follow:

"A larger volume of mafic metavolcanic rocks are interpreted in comparison with the known geological map. Most of the interpreted EM conductors are associated with the interpreted mafic metavolcanic rocks."

Lac des Montagnes 3 corresponds to the Kename block in this report. Interpretation by GPR is exactly the same as for Lac des Montagnes 2, which is as follows: *"A larger volume of mafic metavolcanic rocks are interpreted in comparison with the known geological map. Most of the interpreted EM conductors are associated with the interpreted mafic metavolcanic rocks."*

The block named Lac des Montagnes 4 by GPR, corresponds to the Nemiscau Lake block as described in this report. Results as described by GPR are as follows: *"An extended mafic metavolcanic unit is interpreted in the middle of the survey grid. Only a few EM conductors are interpreted on the survey. They formed small and isolated groups of anomalies either in the mafic volcanic unit and paragneiss unit. A discordant magnetic unit oriented N340° is visible in the northwest part of the grid. This anomaly is interpreted to be a diabase dyke. No direct exploration targets were generated over this interpretation exercise. However a more detailed compilation may highlight some areas for mineral exploration."*

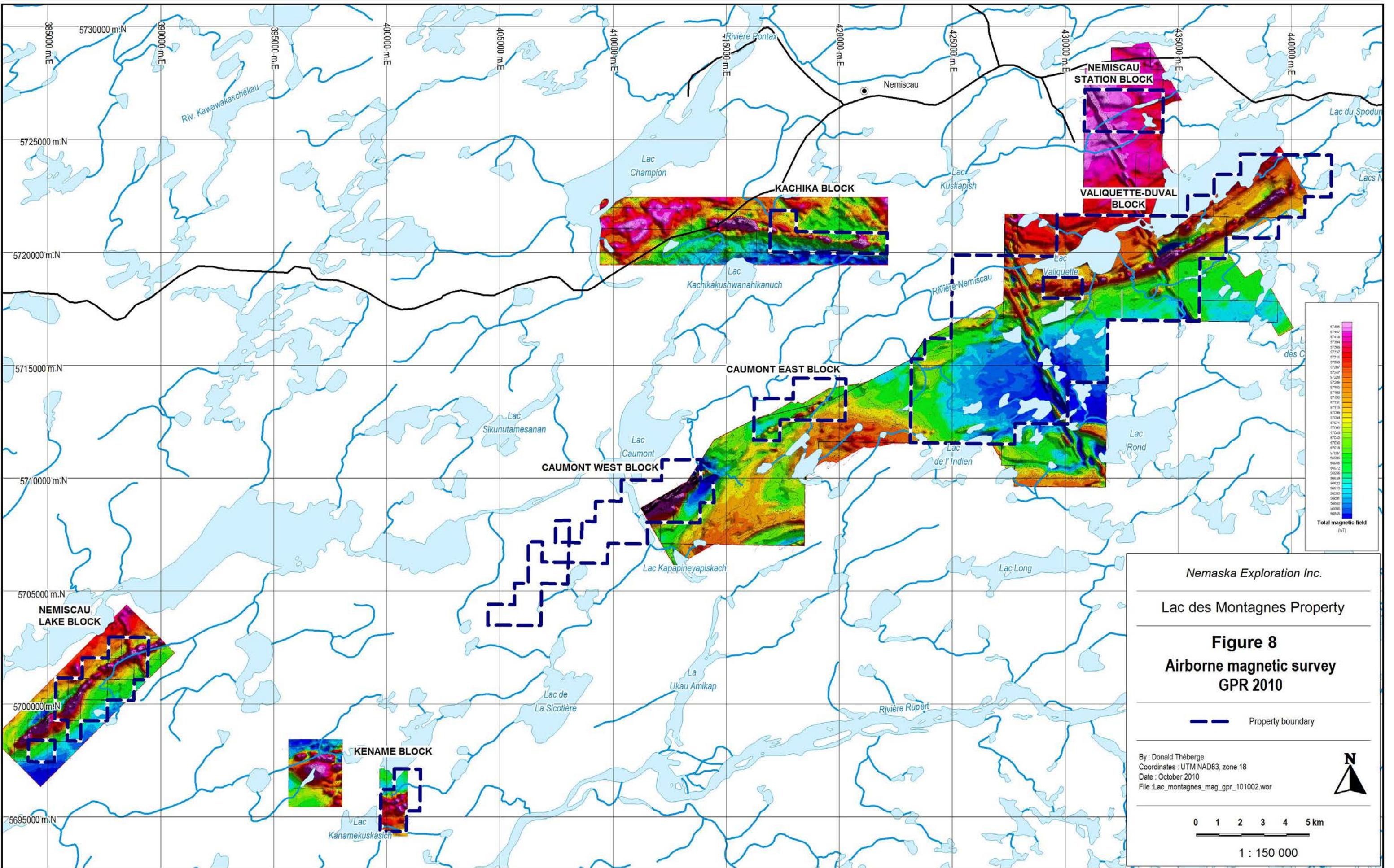
Airborne survey is illustrated in figure 8.

12.2) Prospecting and Sampling

Prospecting and sampling were done over the seven claim blocks, namely Nemiscau Lake, Kename, Caumont West, Caumont East, Kachika, Nemiscau Station and Valiquette-Duval. Nemaska's geologists are currently working on geological interpretation and map production, which were not ready in time for the production of this report. Each claim block is described hereafter, going from W to E.

12.2.1) NEMISCAU LAKE:

Six days were spent prospecting on this claim block. Mainly paragneiss, gabbro, peridotite, pegmatite, rusty zones and a magnetite iron formation were observed. From the nine samples taken and analyzed, only one returned an anomalous result, being 2,860 ppm NI (0.268%, in serpentinized peridotite with traces of pyrrhotite).



12.2.2) KENAME

Two days were spent prospecting on Kename. Mainly pegmatite and paragneiss were observed. Magnetite-rich iron formations were also discovered, sometimes as remnants in a granite or injected by pink pegmatites. Four samples were taken and analyzed for 36 elements. No anomalous results were obtained.

12.2.3) KACHICA

Three days of prospecting were required on Kachika. Peridotite outcrops were sampled. No samples were taken directly on this claim block. However, two were taken immediately W of the claim block. One of them returned a slightly anomalous value of 1,210 ppm (0.12%) Ni and 1,710 ppm (0.17%) Cr.

12.2.4) NEMISCAU STATION

Two days were used to prospect the Nemiscau Station claim block. Two samples were analyzed. One of them, numbered 16074, returned a slightly anomalous value for gold, with 28 ppb.

12.2.5) VALIQUETTE-DUVAL

Valiquette–Duval is the main block of the Lac des Montagnes property. The Duval showings are located in a zone of altered pyroxenite containing disseminated to semi-massive sulphides. Prospecting, geophysical surveying, stripping and channel sampling were done on these showings. Mineralization is included inside altered and sheared pyroxenite and gabbros, varying in thickness from 40 to 70 m. These shear zones show a general strike of 045° with a SE dip. This unit is located between a peridotite intrusion to the north and a band of pegmatite to the south.

12.2.6) CAUMONT EAST:

Four days were spent prospecting on the Caumont East block. This area has few outcrops but with a Beep Mat EM and Mag detector the crews found beeping sites and, after digging generally 0.5 m of overburden, they got to mineralized quartzite. The mineralization consisted of 5 to 15% pyrrhotite, pyrite and traces of chalcopyrite. Nine samples were taken and analyzed. All the samples were anomalous in copper (168 to 735 ppm Cu) and zinc (112 to 1,095 ppm Zn). What is remarkable for this site is the fact that the copper content is equal to or double the zinc content. From all sites with mineralization in quartzite, that is the first one with this copper/zinc ratio. This could be an indicator of a proximal source of mineralization.

12.2.6) CAUMONT WEST:

Six days were spent prospecting on the Caumont West Block. This area generally outcrops well. Almost all types of rock appear in this area. The crew identified pegmatite, paragneiss, gabbro, diorite, banded iron formation, peridotite and mineralized quartzite. The western part of block is more mixed rock. The eastern part of block outcrops less and consists of more mineralized quartzite.

Again, the Beep Mat EM and Mag detector helped the crews find beeping site and, after digging generally 0.5 m of overburden, they got to mineralized quartzite. The mineralization consisted of 1 to 20% pyrrhotite, pyrite and trace chalcopyrite. Four samples were taken and analyzed. Three of these samples were mineralized quartzite. The three samples were anomalous in copper (50 to 330 ppm Cu) and zinc (166 to 299 ppm Zn). The fourth sample is a pyroxenite. This sample carried 997 ppm Cr, 874 ppm Cu and 886 ppm Ni. More geology has to be done to assess the ultramafic intrusion in this area.

Sampling revealed at least 82 samples, both channel and grab, anomalous for at least one of the following elements: Au, Pt, Pd, Ag, As, Cr, Ni, and P. No anomalous results were obtained for Pb. A list of all the anomalous samples can be found in Schedule 2 to this report.

13.0) DRILLING

No diamond drilling has been done by Nemaska Exploration since it acquired the property. Historical drilling has been reported on Valiquette-Duval block, with 37 holes totalling 2,520 m drilled by Noranda, Inco, Canex Placer SDBJ and Muscocho from 1962 to 1988. No drill holes are reported on the other blocks of the property. However, seven holes totalling 788 m were drilled in the immediate vicinity of the Caumont West block by Noranda and Canex Placer.

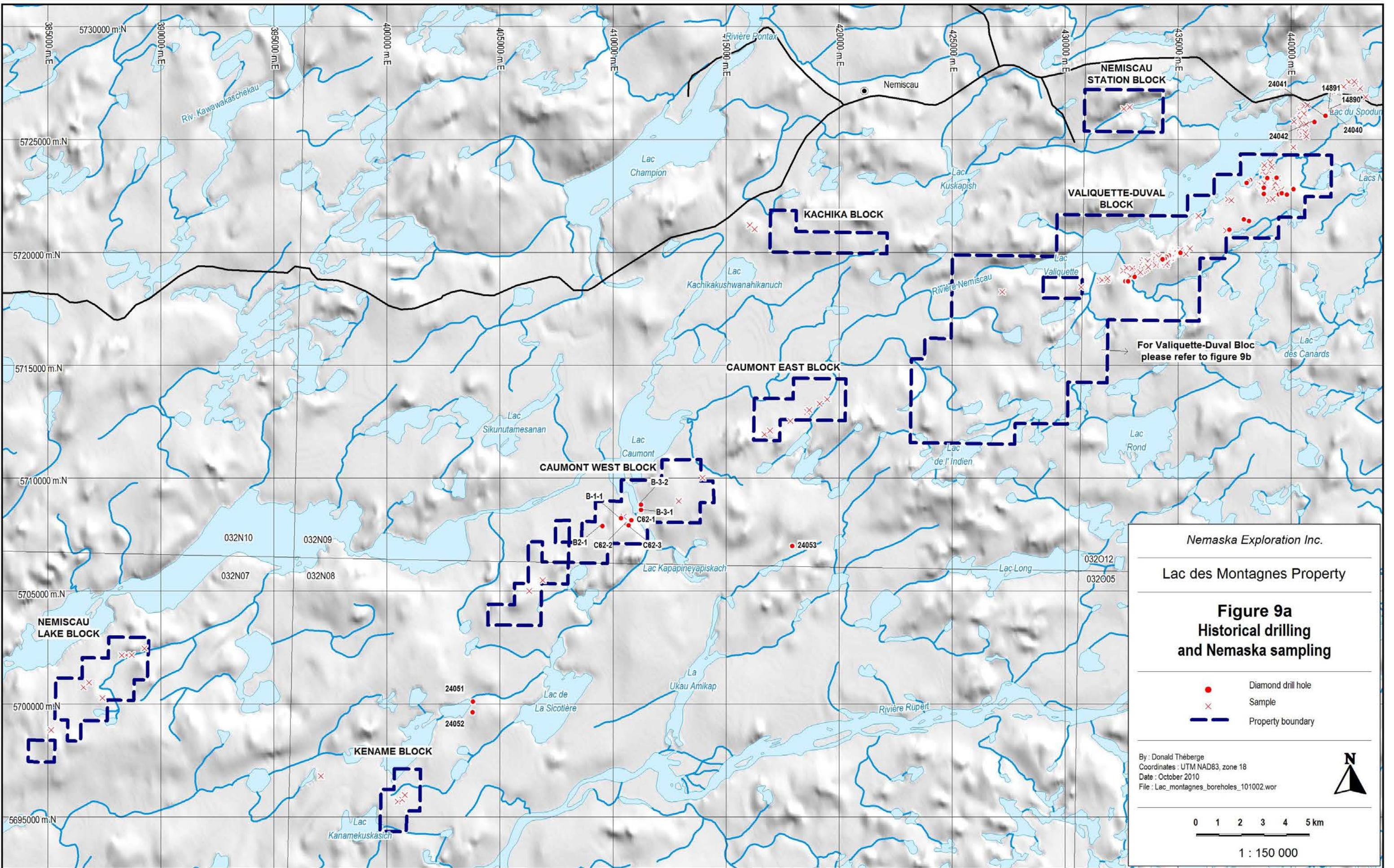
Diamond drill results have been compiled and are shown in Table 6 of this report. Hole position is indicated on Map 9a, "Lac des Montagnes Property, Historical drilling" and Map 9b, "Historical Drilling and Nemaska Sampling, Valiquette-Duval Block".

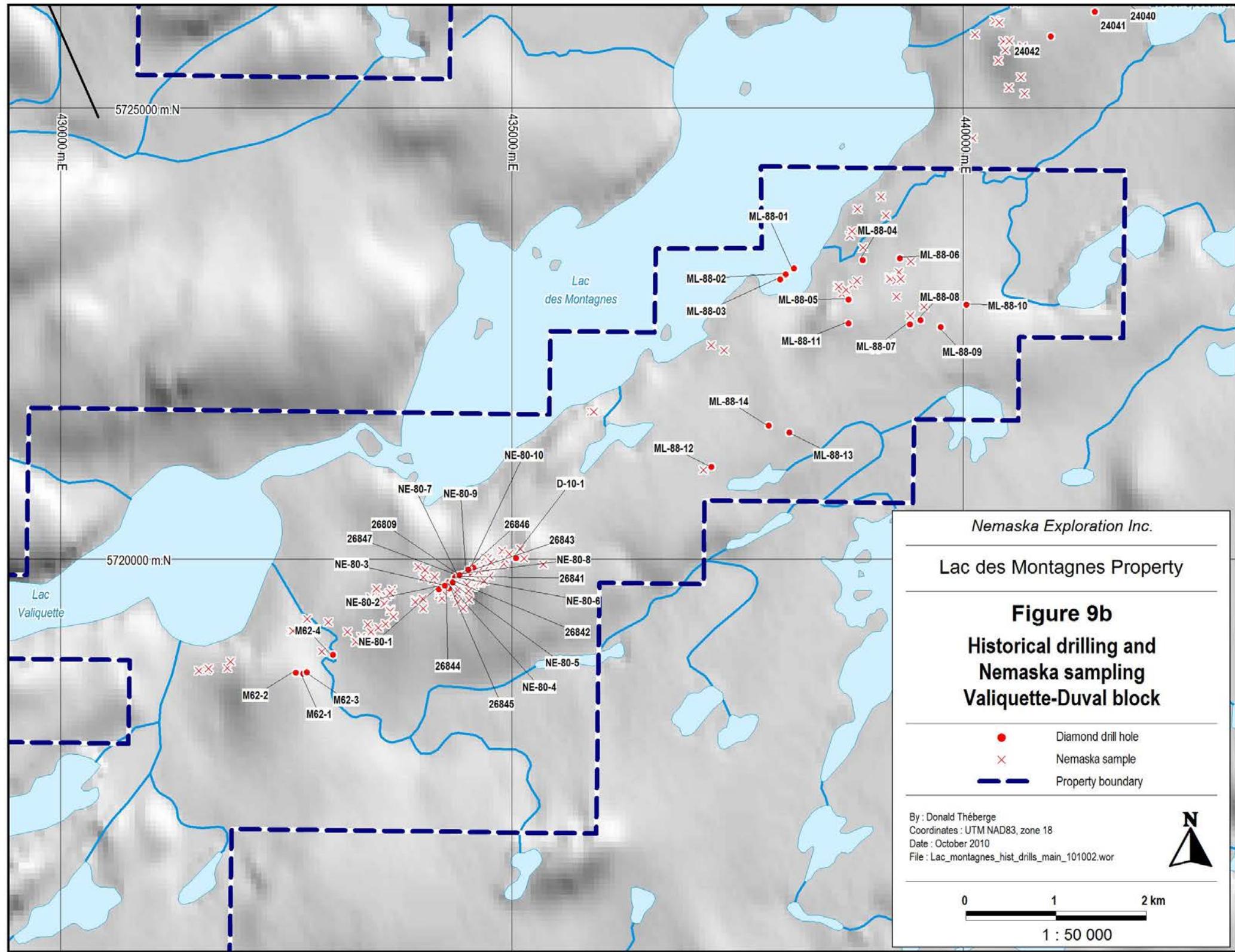
Table 6: Historical Diamond Drilling

On the Valiquette-Duval Block											
Hole #	Year	Company	GM	UTM E	UTM N	Az	Dip	O/B depth (m)	Length (m)	Remarks	
M62-1	1962	Noranda	12655	432,658	5,718,737	340	-45	4.3	62.2	No assays indicated. Ultramafic rocks reported.	
M62-2	1962	Noranda	12655	432,577	5,718,750	160	-30	0	83.8	No assays indicated. Amphibolite rocks reported.	
M62-3	1962	Noranda	12655	432,700	5,718,755	340	-45	4	63.1	No assays indicated. Pegmatite and gneiss traversed.	
M62-4	1962	Noranda	12655	432,990	5,718,948	340	-30	1.1	123.2	No assays indicated. Pegmatite, gneiss and meta-sediments traversed.	
26809	1964	Inco	15631	434,409	5,719,827	360	-60	3.7	32	No assays. Chromite from: 14.9 to 15; 26.6 to 28.4 and 29.3 to 29.5	
26841	1964	Inco	15631	434,384	5,719,805	360	-50	0	39.9	No assays. Chromite from 22 to 22.5	
26842	1964	Inco	15631	434,331	5,719,771	360	-60	0	37.2	No assays. Carbonate rocks from 28.2 to 29.4	
26843	1964	Inco	15631	434,495	5,719,858	360	-57	0	29.6	No assays. Chromite from 20.1 to 20.2	
26844	1964	Inco	15631	434,274	5,719,682	360	-57	0	31.4	No assays. Chromite from 27.5 to 27.8	
26845	1964	Inco	15631	434,296	5,719,729	360	-57	0	30.8	No assays. Chromite from 15.3 to 15.6	
26846	1964	Inco	15631	434,447	5,719,837	360	-57	0	32	No assays. Cut quartzite, chlorite schist and peridotite.	
26847	1964	Inco	15631	434,379	5,719,825	360	-57	0	30.5	No assays. Chromite from 14.6 to 15.2 and 29.8 to 30.5, hole stopped in chromite.	
C-8-1	1975	Canex Placer	34024	435,016	5,720,018	335	-45	3	136.6	Very low Ni values. Cut ultramafic and meta-sediments.	
NE 80-1	1980	SDBJ	57940	434,160	5,719,672	330	-45	0	23.5	Chromite from 7.7 to 9.8 and 15.2 to 15.7 m.	
NE 80-2	1980	SDBJ	57940	434,180	5,719,678	330	-45	0	29.3	Chromite from 10.5 to 11.9	
NE 80-3	1980	SDBJ	57940	434,227	5,719,716	330	-45	0	28	Chromite from 22.2 to 22.3 m.	
NE 80-4	1980	SDBJ	57940	434,269	5,719,748	330	-60	0	26.5	No chromite	
NE 80-5	1980	SDBJ	57940	434,313	5,719,752	330	-50	0	42.4	No chromite	
NE 80-6	1980	SDBJ	57940	434,341	5,719,804	330	-60	0	15.2	Chromite from 12 to 14.7 m.	
NE 80-7	1980	SDBJ	57940	434,390	5,719,830	330	-60	0	19.2	Chromite from 5.7 to 7.9; 13.4-15.2, and 16.2 to 16.3 m.	
NE 80-8	1980	SDBJ	57940	434,430	5,719,837	333	-60	3.8	29	Chromite from 9.4-9.9, 15.5-16.2 and 17.8 to 18.1 m.	
NE 80-9	1980	SDBJ	57940	434,488	5,719,837	337	-60	0	23.8	Chromite from 13.6-15.5 and 20.9 to 22.1 m.	
NE 80-10	1980	SDBJ	57940	434,543	5,719,915	340	-50	0	32.9	Chromite from 29.3 - 30.5 and 31.3 to 31.4 m.	
ML-88-01	1988	Muscocho	47429	438,092	5,723,228	315	-50	13.4	128	102.5-109.42 high Zn background.	
Hole #	Year	Company	GM	UTM E	UTM N	Az	Dip	O/B depth (m)	Length (m)	Remarks	
ML-88-02	1988	Muscocho	47429	438,002	5,723,166	315	-50	9.1	114.6	Mainly qtz-fhs paragneiss and mafic volcanics.	
ML-88-03	1988	Muscocho	47429	437,939	5,723,110	315	-50	11	121.22	Mainly qtz-fhs paragneiss and mafic volcanics, sometimes pillowied.	
ML-88-04	1988	Muscocho	47429	438,856	5,723,322	315	-50	2.4	88.1	51.19-51.33, massive sulphides, 50% Py, 50% Po.	
ML-88-05	1988	Muscocho	47429	438,696	5,222,887	315	-45	3	133.4	105.8-106.43 m, 80% Py.	
ML-88-06	1988	Muscocho	47429	439,266	5,723,340	315	-50	2.4	110.3	93.12-99 m, pyrite mineralization with sericite alteration.	
ML-88-07	1988	Muscocho	47429	439,379	5,722,610	315	-50	1.8	136.6	14.24-24.62: 5-10% magnetite; 108.28-119.3: 2-3% Py + 5% magnetite in a qtz-biotite paragneiss.	

Table 6: Historical Diamond Drilling

ML-88-08	1988	Muscocho	47429	439,496	5,722,656	315	-45	1.8	105.8	70.05-70.75: 3750 ppm As; 71.28-71.88: 3000 ppm As.
ML-88-09	1988	Muscocho	47429	439,721	5,722,581	315	-50	1.8	90.22	29.6-30.12: 2479 ppb Au, in a metagabbro.
ML-88-10	1988	Muscocho	47429	440,006	5,722,827	315	-50	7.62	78.3	Few sulphides.
ML-88-11	1988	Muscocho	47429	438,699	5,722,622	315	-50	4.4	111.9	24.03-24.33: 5603 ppm Cr.
ML-88-12	1988	Muscocho	47429	437,181	5,721,032	315	-50	1.2	90.5	Mainly qtz-fhs paragneiss
ML-88-13	1988	Muscocho	47429	438,043	5,721,413	315	-50	37.58	90.5	Granite and gneiss
ML-88-14	1988	Muscocho	47429	437,816	5,721,485	315	-50	1.2	118	Biotite schist and gabbro.
Total		37 holes							2519.5 m	
Caumont West Block										
Hole #	Year	Company	GM	UTM E	UTM N	Az	Dip	O/B depth (m)	Length (m)	Remarks
C62-1	1962	Noranda	12655	410,728	5,708,178	164	-45	0.9	114.3	No assays. Drilled WSW of the claim block
C62-2	1962	Noranda	12655	410,528	5,707,991	164	-45	4.3	114.3	No assays. Drilled WSW of the claim block
C62-3	1962	Noranda	12655	410,595	5,707,940	164	-45	7.6	114.3	No assays. Drilled WSW of the claim block
B-1-1	1975	Canex Placer	34024	410,271	5,708,270	150	-45	4.6	112.2	Mainly cut ultramafic rocks. Best values of 0.15% Ni, 1.10% Cu from 40.9 to 41.6 and 1.2% Ni, 0.21% Cu from 41.6 to 41.9
B-2-1	1975	Canex Placer	34024	409,447	5,707,915	150	-45	10.4	109.1	Cut amphibolite and silicified volcanics. Background values only.
B-3-1	1975	Canex Placer	34024	411,157	5,708,628	330	-45	6.4	115.9	Cut amphibolite, qtz biotite schist and quartzite. Best values of 0.73% Zn, 0.93% Pb from 75.3 to 75.9
B-3-2	1975	Canex Placer	34024	411,147	5,708,857	150	-45	9.1	108.5	Background values only. Cut ultramafic, amphibolites and meta-sediments.
Total		7 holes							788.6	





14.0) SAMPLING METHOD AND APPROACH

During the 2010 summer, Nemaska Exploration had geological teams in the field for geological mapping and prospecting. Each party was lead by a geologist. These teams were supervised by Yvan Bussières, Eng., a qualified person under National Instrument 43-101. The sampling method and approach were as follows:

Sampling was done using a hammer and cold chisel. Samples were made up of representative rock, for an average weight of 1 kg. Samples were taken by a team member and put into a plastic bag. Another team member then identified the samples, sealed the sample bag, registered the sample position with a GPS (Garmin 60 Csx) and continuously updated the sample list. Every step in the sampling process was performed under the direct supervision of a geologist.

For all the sites sampled, emphasis was put on conductive zones found using the Beep-Mat prospecting carpet. Conductor wall rocks were not systematically sampled. These samples should be considered as representative of the outcropping EM anomaly. The sealed samples were put in bags and sealed for transportation. The bags remained sealed until their delivery to the preparation laboratory managed by the Table Jamésienne de Concertation Minière (TJCM),¹¹ located in Chibougamau. Samples were usually transported to Chibougamau by Nemaska personnel. Several samples were delivered to ALS Chemex in Val-d'Or by Nemaska personnel. The authors confirm that the samples were collected in accordance with industry standards for random, non-systematic sampling, and that they are representative of the outcrops sampled.

¹¹ Table Jamésienne de Concertation Minière is translated into English on their website <http://www.tjcm.ca/> as James Bay Joint Action Mining Committee.

15.0) SAMPLE PREPARATION, ANALYSIS AND SECURITY

15.1) Sample Preparation

Samples were dried, crushed, weighed and pulverised by the TJCM laboratory. This non-profit organisation has set up a preparation laboratory to fill the needs of the exploration industry in the James Bay area. D. Théberge visited the preparation room in January 2010. He checked equipment compliance, preparation methods and expertise of the personnel and was satisfied with the existing quality control program.

On arrival to the preparation laboratory, samples are placed in numerical order, and a reception list is prepared. This list is then compared to the shipping list prepared by Nemaska. Any difference between the Nemaska list and the laboratory list or irregularity in sample condition or bag sealing was immediately reported to Nemaska.

All the prepared pulps (300 g/sample, 85% passing 200 mesh) were then sent to the laboratory via the secure services of Canada Post, if sent to SGS Lakefield, or by bus via the Expedibus service if sent to ALS Chemex in Val-d'Or. Preparation protocol can be consulted in Schedule 3.

15.2) Analysis

Pegmatites samples were systematically sent to SGS Lakefield for multi-elements analysis, including Li and Be analysis. Other samples were sent to ALS Chemex in Val-d'Or for multi-element and/or whole rock analysis. Both laboratories are accredited ISO/IEC 17025. All the pulps from the analyses are kept by SGS Lakefield and ALS Chemex for a 90-day period, after which they are returned to Nemaska. All the preparation rejects are kept at the TJCM preparation laboratory in Chibougamau also for a 90-day period, then returned to Nemaska.

Quality control by Nemaska consisted of duplicates of analyses done by ALS Chemex and also analyzed by SGS. However, Nemaska is in the process of performing quality control with blanks and duplicates on the existing pulps stored by TJCM in Chibougamau.

The analytical method and quality control used by each laboratories are described in Schedules 4 and 5 to this report. A summary of the results obtained from the duplicates analysis is included in Schedule 6. Generally, the results are adequate. Minor discrepancies are seen due to non-identical analytical methods used by ALS and SGS.

15.3 Security

All the samples were handled by Nemaska, TJCM and laboratory personnel. In the field, samples were bagged and sealed under the supervision of a geologist. No broken sample bag seals were reported either by the TJCM preparation laboratory or the SGS Lakefield and ALS Chemex laboratories. The authors do not believe that any breach of security occurred during the entire sampling and analysis process.

16.0) DATA VERIFICATION

For the Lac des Montagnes project, data verification involved sampling, analysis, geological description and GPS location. Sampling and analysis are described in detail in the preceding item. Geological descriptions and GPS locations have been verified by the authors and correspond to the earlier data recorded on the property by Nemaska. The authors are of the opinion that the data collected on the property by Nemaska is sound and reliable.

17.0) ADJACENT PROPERTIES

The Whabouchi lithium/beryl deposit owned by Nemaska Exploration is located approximately 2 km north of the northern boundary of the Valiquette-Duval block. NI 43-101 compliant resources were estimated by SGS in 2010 and stand as follow:

Category	Tonnes	Li2O %	Beo (ppm)
Measured	1,885,000	1.60	458
Indicated	7,889,000	1.64	446
Inferred	15,396,000	1.57	420

The lithium / beryl deposit is located in a white pegmatite, known since the early sixties. White pegmatites have also been reported in the Lac Caumont area, but as far as we know, have never been mapped.

Please note that one of the authors, D. Théberge, produced a report entitled "NI 43-101 Qualifying Report, Pertaining to Whabouchi Property, James Bay Area, NTS Sheet 32O12, prepared for Nemaska Exploration and dated October 2, 2009". D. Théberge supervised a drilling campaign on the Whabouchi project during January 2010, and Y. Bussières supervised the same drilling program from February to April 2010, and all the subsequent exploration work on Whabouchi. However, the above information is not necessarily indicative of the mineralization on Lac des Montagnes property.

18.0) MINERAL PROCESSING AND METALLURGICAL TESTING

As the property is still in an early exploration stage, mineral processing and metallurgical testing have never been done.

19.0) MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

As the property is still in an early exploration stage, mineral resources and mineral reserves have never been estimated.

20.0) OTHER RELEVANT DATA AND INFORMATION

All the relevant data and information is provided in the previous sections.

21.0) INTERPRETATION AND CONCLUSIONS

The Lac des Montagnes property is located in the Lac des Montagnes volcano-sedimentary formation, which contains the Nisk-1 Cu-Ni deposit and the recently-discovered Whabouchi Li-Be deposit. Six of the seven claim blocks of the property are underlain by paragneiss and intermediate to ultramafic volcanics and intrusive; one of them seems to be located in gneissic formations containing remnant of Lac des Montagnes formation.

Nemaska acquired the Lac des Montagnes property in 2009, and has since completed an airborne magnetic and electromagnetic survey covering almost all the blocks of the property, with the exception of Caumont East and West. Prospecting on the various blocks, except for Valiquette-Duval, revealed an interesting geological environment with ultramafic rocks, magnetite-rich iron formations, pegmatites and paragneiss. However, only a few slightly anomalous samples were obtained. The best one returned 0.26% Ni in a grab sample from the Nemiscau Lake block.

To date, the best results have been obtained on the Valiquette-Duval block. The historical showings were extended by trenching and channel sampling, and new ones were discovered. Exceptional results in many instances exceeding historical results were reported, and are summarized in Table 7 below, and illustrated in figure 10, "Sampling best results, Valiquette-Duval Block".

Table 7: Best Results, Valiquette-Duval¹²(assays received until October 14, 2010)

Sample	Easting	Northing	Description	Au	Pt	Pd	Ag	As	Cr	Cu	Ni
#				g/t	g/t	g/t	g/t	ppm	ppm	ppm	ppm
16051	434496	5719728	Duval showing. 80% PO and 20% CP over 10 cm	18.4	0.006	0.57	115	4610	118	60900	12250
16351	434500	5719724	Massive sulphide (CP-PO-BO) DUVAL 1	19.4	0.007	0.39	308	4030	123	65400	8130
16352	434630	5719866	Silicified gabbro. 10 to 15% chalcopyrite DUVAL 2	2.29	0.01	0.01	37	317	164	79100	387
16353	434656	5719901	Silicified gabbro. 2 to 5% chalcopyrite. Traces of arsenopyrite DUVAL 3	0.22	0.015	0.23	4.5	10000	189	3880	21300
16478	434661	5719899	Gabbroic pyroxenite with 15% pyrrhotite. 8% chalcopyrite and 2% arsenopyrite. CHANNEL B DUVAL	0.15	N/A	N/A	4.4	N/A	N/A	10250	5240
16530	431533	5718770	Resampling of the Valiquette showing. +50% pyrrhotite. 1 to 5% chalcopyrite	0.02	0.086	1.66	1.5	12	741	1920	10000
16562	434623	5719856	Rusty quartz vein 10 cm wide in a gabbro. 5 to 20% chalcopyrite and 1 to 2% pyrite. Traces of tourmaline also. Duval extension. Structure at 190/85 W	0.34	0.012	0.02	8.9	1170	322	15950	521
16774	434660	5719894	Silicified gabbro with 10 to 15% chalcopyrite (veinlets and disseminated) DUVAL 3	0.08	-0.01	0.01	15	714	136	16100	543
16775	434633	5719871	Very rusty silicified gabbro. Semi-massive to massive mineralization (30 to 60% chalcopyrite. 5% bornite). Altered sample DUVAL 2	0.36	0.005	0	72	176	120	176500	517
16776	434633	5719871	Very rusty silicified gabbro. Semi-massive mineralization and veinlets (5 to 15% chalcopyrite). Fresh sample DUVAL 2	0.76	0.008	0.01	13	487	189	21900	487
16783	434656	5719902	Very silicified gabbro with 20 to 25% arsenopyrite and 1% chalcopyrite DUVAL 3	0.27	0.007	0.46	1.6	10000	191	2030	48700
16902	434628	5719866	Shear zone with 5% chalcopyrite and 2% tourmaline TRENCH 5B	0.09	0.012	0.01	13	127	332	19100	201
16903	434658	5719895	Biotite-rich shear zone. 7% chalcopyrite and 1% tourmaline. TRENCH 6	0.66	0.022	0.24	7.7	5570	344	16400	2320

The Duval showings are located in a zone of altered pyroxenite containing disseminated to semi-massive sulphides. Mineralization is included inside altered and sheared pyroxenite and gabbros, varying in thickness from 40 to 70 m. These shear zones show a general strike of 045° with a SE dip. Historical work and the current exploration program by Nemaska have clearly shown the potential of the property, and a more advanced exploration program is strongly recommended on the property.

¹² 10,000 ppm=1%



Sample #	Easting	Northing	Sample Type	Au	Pt	Pd	Ag	As	Cr	Cu	Ni	P
16051	434496	5719728	Grab	18.35	0.005	0.57	115	4610	118	6,09%	1.22%	1970
16351	434500	5719724	Grab	19.35	0.007	0.39	308	4030	123	6,54%	0.81%	2030
16352	434630	5719866	Grab	2.28	0,01	0,01	37	317	164	7,91%	387	1070
16353	434656	5719901	Grab	0.224	0,015	0.23	4,5	1%	189	3880	2,13%	4440
16468	434633	5719870	Channel A	1.32	N/A	N/A	3,8	N/A	N/A	5270	129	N/A
16478	434661	5719899	Channel B	0.148	N/A	N/A	4,4	N/A	N/A	1,02%	0,52%	N/A
16482	434663	5719897	Channel B	0.127	N/A	N/A	3	N/A	N/A	0,87%	3910	N/A
16503	434126	5719777	Grab	0,003	0,683	0,05	1,3	7	3880	1155	168	130
16530	431533	5718770	Grab	0,016	0,086	1,66	1,5	12	741	1920	1%	30
16531	431884	5718870	Grab	0,019	0,057	0,69	9,8	38	290	1985	0,59%	20
16558	434309	5719549	Grab	-0,001	0,719	0,04	-0,5	7	1%	6	944	10
16562	434623	5719856	Grab	0,342	0,012	0,02	8,9	1170	322	1,59%	521	610
16686	434773	5719876	Grab	0,066	0,237	0,67	1,2	1140	450	2790	1230	20
16788	434355	5719554	Grab	0,03	0,048	0,27	4,5	235	174	0,90%	1585	20
16774	434680	5719894	Grab	0,08	-0,01	0,01	15	714	136	1,61%	543	20
16775	434633	5719871	Grab	0,362	0,005	0	72	176	120	17,85%	517	1270
16776	434633	5719871	Grab	0,761	0,008	0,01	13	487	189	2,19%	487	860
16783	434656	5719902	Grab	0,27	0,007	0,46	1,6	1%	191	2030	4,87%	196
16902	434628	5719868	Grab	0,068	0,012	0,01	13	127	332	1,31%	201	650
16903	434658	5719895	Grab	0,663	0,022	0,24	7,7	5570	344	1,64%	2320	10

Lac des Montagnes

Nemaska Exploration Inc.

Lac des Montagnes Property

Figure 10
Sampling, best results
Valiquette-Duval block

× Sample
— Property boundary

By: Donald Théberge
Coordinates : UTM NAD83, zone 18
Date : October 2010
File : Lac_montagnes_samples_101002.wor



0 1 2 km
1 : 50 000

22.0) RECOMMENDATIONS AND BUDGET

A two-phase exploration program is recommended to explore the potential of the property:

Phase 1

- Helicopter EM and MAG surveys on Caumont East and Caumont West blocks
- 10 days of geology/prospecting on Caumont East and Caumont West blocks
- Soil surveys on Caumont East and Caumont West blocks
- 40 days of trenching and channel sampling on Caumont East and Caumont West blocks
- Diamond drilling campaign on Valiquette and Duval showings, with 2, 600 m budgeted for this purpose.

Phase 2

- Diamond drilling campaign on the Valiquette and Duval showings to define the mineralized zones and test their extensions at depth. We suggest 4,000 m of drilling to complete this phase.
- Diamond drilling campaign on the Caumont East and Caumont West blocks over the soil surveys and trenching. We recommend 2,000 m of drilling.

Budget to realize the suggested work is given on next page.

Budget: Lac des Montagnes					
Phase 1	Quantity	Units	Unit Cost	Total	
Airborne survey, mob-demob				\$15,000	
Airborne EM/MAG - Caumont West	120	Km	\$100	\$12,000	
Geology and prospecting - Caumont East	5	Day	\$2,000	\$10,000	Helicopter supported
Geology and prospecting - Caumont West	5	Day	\$2,000	\$10,000	Helicopter supported
Soil survey - Caumont East	400	Sample	\$100	\$40,000	Helicopter supported
Soil survey - Caumont West	400	Sample	\$100	\$40,000	Helicopter supported
Trenching and sampling - Caumont East	20	Day	\$10,000	\$200,000	Camp supported
Trenching and sampling - Caumont West	20	Day	\$10,000	\$200,000	Camp supported
Report				\$20,000	
Drilling - Duval showing	1,200	m	\$200	\$240,000	
Drilling - Valiquette showing	1,400	m	\$200	\$280,000	
Geology, assays, etc., all included	2,600	m	\$25	\$65,000	
Report - end of Phase 1 (for NI 43-101 and assessment purposes)				\$20,000	
Contingency 15%				\$172,800	
Total Phase 1					\$1,324,800
Phase 2					
Drilling - Duval showing	2,000	m	\$200	\$400,000	
Drilling - Valiquette showing	2,000	m	\$200	\$400,000	
Drilling - Caumont East	1,000	m	\$200	\$100,000	
Drilling - Caumont West	1,000	m	\$200	\$100,000	
Geology, assays, etc., all included	6,000	m	\$25	\$150,000	
Report - end of Phase 2 (for NI 43-101 and assessment purposes)				\$20,000	
Contingency 15%				\$175,500	
Total Phase 2					\$1,345,500
				Total Phases 1 and 2	\$2,670,300

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24.0) DATE AND SIGNATURE PAGE

This technical report is dated October 18, 2010, and is signed by the authors.

(Signed and Sealed)

Yvan Bussières, Eng., Donald Théberge, Eng., M.B.A. October 18, 2010

25.0) ADDITIONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT PROPERTIES AND PRODUCTION PROPERTIES

This item does not apply to the Lac des Montagnes property.

26.0) ILLUSTRATIONS

Outcrop stripped by hand



Remnants of pillow in a basalt outcrop



One of the Duval showing

SCHEDULE 1
CLAIMS LIST

NTS Sheet	Title #	Expiry date	Area (Ha)	Excess credits	Required work	Mining duties	GGR 2% NSR	Constraint
Nemiscau Lake Block								
NTS 32N07	2160850	Jun 12, 2012	53.7	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2160851	Jun 12, 2012	53.7	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2160852	Jun 12, 2012	53.69	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2160853	Jun 12, 2012	53.69	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2160854	Jun 12, 2012	53.69	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2160855	Jun 12, 2012	53.68	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2160856	Jun 12, 2012	53.68	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2160857	Jun 12, 2012	53.67	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2160858	Jun 12, 2012	53.67	\$0.00	\$1,200	\$52	yes	
NTS 32N07	2229615	May 5, 2012	53.72	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229616	May 5, 2012	53.72	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229617	May 5, 2012	53.71	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229618	May 5, 2012	53.7	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229619	May 5, 2012	53.7	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229620	May 5, 2012	53.69	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229621	May 5, 2012	53.69	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229622	May 5, 2012	53.69	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229623	May 5, 2012	53.68	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229624	May 5, 2012	53.68	\$0.00	\$1,200	\$52	no	
NTS 32N07	2229625	May 5, 2012	53.68	\$0.00	\$1,200	\$52	no	
NTS 32N07	2238398	Jun 16, 2012	53.67	\$0.00	\$1,200	\$52	no	
Total	21		1127.5	\$0.00	\$25,200	\$1,092		
Kename Block								
NTS 32N08	2160860	Jun 12, 2012	53.74	\$0.00	\$1,200	\$52	yes	
NTS 32N08	2160861	Jun 12, 2012	53.74	\$0.00	\$1,200	\$52	yes	
NTS 32N08	2160862	Jun 12, 2012	53.73	\$0.00	\$1,200	\$52	yes	
NTS 32N08	2160863	Jun 12, 2012	53.73	\$0.00	\$1,200	\$52	yes	
NTS 32N08	2238865	Jun 28, 2012	53.73	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N08	2238866	Jun 28, 2012	53.72	\$0.00	\$1,200	\$52	no	
NTS 32N08	2238867	Jun 28, 2012	53.72	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
Total	7		376.11	\$0.00	\$8,400	\$364		
Caumont West Block								
NTS 32N09	2161825	Jun 19, 2012	53.59	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2161826	Jun 19, 2012	53.59	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2161835	Jun 19, 2012	53.58	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2250963	Sep 22, 2012	53.6	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2250964	Sep 22, 2012	53.59	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2250965	Sep 22, 2012	53.59	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2250966	Sep 22, 2012	53.6	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250967	Sep 22, 2012	53.57	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250968	Sep 22, 2012	53.59	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2250969	Sep 22, 2012	53.57	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250970	Sep 22, 2012	53.58	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250971	Sep 22, 2012	53.57	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2250972	Sep 22, 2012	53.58	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250930	Sep 22, 2012	53.61	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250931	Sep 22, 2012	53.61	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250932	Sep 22, 2012	53.61	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250933	Sep 22, 2012	53.64	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250934	Sep 22, 2012	53.64	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250935	Sep 22, 2012	53.64	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250936	Sep 22, 2012	53.64	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250937	Sep 22, 2012	53.63	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250938	Sep 22, 2012	53.63	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250939	Sep 22, 2012	53.62	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250940	Sep 22, 2012	53.62	\$0.00	\$1,200	\$52	no	
NTS 32N08	2250941	Sep 22, 2012	53.62	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250942	Sep 22, 2012	53.59	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2250943	Sep 22, 2012	53.59	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250944	Sep 22, 2012	53.59	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250948	Sep 22, 2012	53.58	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2250955	Sep 22, 2012	53.58	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250956	Sep 22, 2012	53.58	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250957	Sep 22, 2012	53.6	\$0.00	\$1,200	\$52	no	

NTS Sheet	Title #	Expiry date	Area (Ha)	Excess credits	Required work	Mining duties	GGR 2% NSR	Constraint
NTS 32N09	2250958	Sep 22, 2012	53.6	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250959	Sep 22, 2012	53.6	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250960	Sep 22, 2012	53.59	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2250961	Sep 22, 2012	53.61	\$0.00	\$1,200	\$52	no	
NTS 32N09	2250962	Sep 22, 2012	53.62	\$0.00	\$1,200	\$52	no	
Total	37		1983.24	\$0.00	\$44,400	\$1,924		
Caumont East Block								
NTS 32N09	2162163	Jun 22, 2012	53.54	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2238880	Jun 28, 2012	53.54	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238881	Jun 28, 2012	53.54	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238882	Jun 28, 2012	53.54	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238883	Jun 28, 2012	53.54	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238884	Jun 28, 2012	53.54	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238885	Jun 28, 2012	53.54	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238886	Jun 28, 2012	53.53	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238887	Jun 28, 2012	53.53	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238888	Jun 28, 2012	53.53	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
NTS 32N09	2238889	Jun 28, 2012	53.53	\$0.00	\$1,200	\$52	no	Affected by : Hydroelectric installations
Total	11		588.9	\$0.00	\$13,200	\$572		
Kachika Block								
NTS 32N09	2160871	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160872	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160873	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160874	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160875	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160876	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160877	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160878	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160879	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160890	Jun 12, 2012	53.46	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160891	Jun 12, 2012	53.46	\$0.00	\$1,200	\$52	yes	
Total	11		588.15	\$0.00	\$13,200	\$572		
Nemiscau Station Block								
NTS 32O12	2162206	Jun 22, 2012	53.41	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162207	Jun 22, 2012	53.41	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162208	Jun 22, 2012	53.41	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162209	Jun 22, 2012	53.41	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162210	Jun 22, 2012	53.41	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162211	Jun 22, 2012	53.41	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162212	Jun 22, 2012	53.4	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162213	Jun 22, 2012	53.4	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162214	Jun 22, 2012	53.4	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162215	Jun 22, 2012	53.4	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162216	Jun 22, 2012	53.4	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2162217	Jun 22, 2012	53.4	\$0.00	\$1,200	\$52	yes	
Total	12		640.86	\$0.00	\$14,400	\$624		
Valiquette-Duval Block								
NTS 32N09	2160763	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160764	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160765	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160766	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160767	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160768	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160769	Jun 12, 2012	53.48	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160770	Jun 12, 2012	53.48	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160771	Jun 12, 2012	53.48	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160772	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160773	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160774	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160775	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160776	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160777	Jun 12, 2012	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32N09	2160778	Jun 12, 2012	53.46	\$0.00	\$1,200	\$52	yes	

NTS Sheet	Title #	Expiry date	Area (Ha)	Excess credits	Required work	Mining duties	GGR 2% NSR	Constraint
NTS 32N09	2238877	Jun 28, 2012	53.52	\$0.00	\$1,200	\$52	no	
NTS 32N09	2238878	Jun 28, 2012	53.52	\$0.00	\$1,200	\$52	no	
NTS 32N09	2238879	Jun 28, 2012	53.52	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239840	Jul 6, 2012	53.49	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239841	Jul 6, 2012	53.49	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239842	Jul 6, 2012	53.49	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239843	Jul 6, 2012	53.48	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239844	Jul 6, 2012	53.48	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239845	Jul 6, 2012	53.48	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239846	Jul 6, 2012	53.47	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239847	Jul 6, 2012	53.47	\$0.00	\$1,200	\$52	no	
NTS 32N09	2239848	Jul 6, 2012	53.47	\$0.00	\$1,200	\$52	no	
NTS 32O12	101254	Nov 2, 2011	53.42	\$1,217.00	\$1,200	\$52	yes	
NTS 32O12	101255	Nov 2, 2011	53.42	\$1,217.00	\$1,200	\$52	yes	
NTS 32O12	101256	Nov 2, 2011	53.43	\$487.00	\$1,200	\$52	yes	
NTS 32O12	101257	Nov 2, 2011	53.43	\$122.00	\$1,200	\$52	yes	
NTS 32O12	101258	Nov 2, 2011	53.44	\$748.00	\$1,200	\$52	yes	
NTS 32O12	101259	Nov 2, 2011	53.44	\$748.00	\$1,200	\$52	yes	
NTS 32O12	101260	Nov 2, 2011	53.45	\$750.00	\$1,200	\$52	yes	
NTS 32O12	101261	Nov 2, 2011	53.46	\$750.00	\$1,200	\$52	yes	
NTS 32O12	101262	Nov 2, 2011	53.46	\$750.00	\$1,200	\$52	yes	
NTS 32O12	101263	Nov 2, 2011	53.46	\$809.79	\$1,200	\$52	yes	
NTS 32O12	1133857	Apr 15, 2011	53.44	\$748.00	\$2,500	\$52	yes	
NTS 32O12	1133858	Apr 15, 2011	53.44	\$748.00	\$2,500	\$52	yes	
NTS 32O12	1133859	Apr 15, 2011	53.44	\$748.00	\$2,500	\$52	yes	
NTS 32O12	1133860	Apr 15, 2011	53.43	\$748.00	\$2,500	\$52	yes	
NTS 32O12	1133861	Apr 15, 2011	53.43	\$2,436.00	\$2,500	\$52	yes	
NTS 32O12	1133862	Apr 15, 2011	53.43	\$748.00	\$2,500	\$52	yes	
NTS 32O12	1133863	Apr 15, 2011	53.43	\$1,357.00	\$2,500	\$52	yes	
NTS 32O12	1133864	Apr 15, 2011	53.43	\$1,470.00	\$2,500	\$52	yes	
NTS 32O12	1133868	Apr 15, 2011	53.42	\$1,815.00	\$2,500	\$52	yes	
NTS 32O12	1133869	Apr 15, 2011	53.42	\$1,217.00	\$2,500	\$52	yes	
NTS 32O12	2045631	Jan 2, 2011	53.48	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2045632	Jan 2, 2011	53.48	\$0.57	\$1,200	\$52	yes	
NTS 32O12	2045633	Jan 2, 2011	53.48	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2045641	Jan 2, 2011	53.47	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2045642	Jan 2, 2011	53.47	\$112.00	\$1,200	\$52	yes	
NTS 32O12	2045643	Jan 2, 2011	53.47	\$300.00	\$1,200	\$52	yes	
NTS 32O12	2045644	Jan 2, 2011	53.47	\$300.00	\$1,200	\$52	yes	
NTS 32O12	2045645	Jan 2, 2011	53.47	\$300.00	\$1,200	\$52	yes	
NTS 32O12	2045646	Jan 2, 2011	53.47	\$300.00	\$1,200	\$52	yes	
NTS 32O12	2045651	Jan 2, 2011	53.46	\$300.00	\$1,200	\$52	yes	
NTS 32O12	2045652	Jan 2, 2011	53.46	\$300.00	\$1,200	\$52	yes	
NTS 32O12	2141600	Jan 23, 2012	53.47	\$750.00	\$1,200	\$52	yes	
NTS 32O12	2141601	Jan 23, 2012	53.47	\$300.00	\$1,200	\$52	yes	
NTS 32O12	2141602	Jan 23, 2012	53.46	\$300.00	\$1,200	\$52	yes	
NTS 32O12	2141603	Jan 23, 2012	53.46	\$302.14	\$1,200	\$52	yes	
NTS 32O12	2141604	Jan 23, 2012	53.45	\$749.00	\$1,200	\$52	yes	
NTS 32O12	2141605	Jan 23, 2012	53.45	\$749.00	\$1,200	\$52	yes	
NTS 32O12	2141606	Jan 23, 2012	53.45	\$749.00	\$1,200	\$52	yes	
NTS 32O12	2141607	Jan 23, 2012	53.45	\$749.00	\$1,200	\$52	yes	
NTS 32O12	2141608	Jan 23, 2012	53.45	\$749.00	\$1,200	\$52	yes	
NTS 32O12	2160784	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160785	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160786	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160787	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160788	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160789	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160790	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160791	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160792	Jun 12, 2012	53.49	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160799	Jun 12, 2012	53.45	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160800	Jun 12, 2012	53.45	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160801	Jun 12, 2012	53.45	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2160802	Jun 12, 2012	53.45	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2161867	Jun 19, 2012	53.52	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2161868	Jun 19, 2012	53.52	\$0.00	\$1,200	\$52	yes	

NTS Sheet	Title #	Expiry date	Area (Ha)	Excess credits	Required work	Mining duties	GG 2% NSR	Constraint
NTS 32O12	2161869	Jun 19, 2012	53.51	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2161870	Jun 19, 2012	53.51	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2161871	Jun 19, 2012	53.5	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2161872	Jun 19, 2012	53.5	\$0.00	\$1,200	\$52	yes	
NTS 32O12	2181990	Apr 1, 2011	53.48	\$38.00	\$1,200	\$52	no	
NTS 32O12	2181991	Apr 1, 2011	53.48	\$38.00	\$1,200	\$52	no	
NTS 32O12	2181992	Apr 1, 2011	53.48	\$0.00	\$1,200	\$52	no	
NTS 32O12	2181992	Apr 1, 2011	53.48	\$0.00	\$1,200	\$52	no	
NTS 32O12	2181993	Apr 1, 2011	53.48	\$300.00	\$1,200	\$52	no	
NTS 32O12	2181993	Apr 1, 2011	53.48	\$300.00	\$1,200	\$52	no	
NTS 32O12	2181994	Apr 1, 2011	53.48	\$300.00	\$1,200	\$52	no	
NTS 32O12	2181995	Apr 1, 2011	53.48	\$300.00	\$1,200	\$52	no	
NTS 32O12	2181996	Apr 1, 2011	53.47	\$0.00	\$1,200	\$52	no	
NTS 32O12	2181997	Apr 1, 2011	53.46	\$150.00	\$1,200	\$52	no	
NTS 32O12	2181998	Apr 1, 2011	53.46	\$300.00	\$1,200	\$52	no	
NTS 32O12	2181999	Apr 1, 2011	53.46	\$300.00	\$1,200	\$52	no	
NTS 32O12	2182000	Apr 1, 2011	53.46	\$300.00	\$1,200	\$52	no	
NTS 32O12	2189687	Sep 21, 2011	53.45	\$748.00	\$1,200	\$52	no	
NTS 32O12	2189688	Sep 21, 2011	53.45	\$710.00	\$1,200	\$52	no	
NTS 32O12	2189689	Sep 21, 2011	53.45	\$524.00	\$1,200	\$52	no	
NTS 32O12	2189690	Sep 21, 2011	53.45	\$300.00	\$1,200	\$52	no	
NTS 32O12	2189691	Sep 21, 2011	53.45	\$75.00	\$1,200	\$52	no	
NTS 32O12	2189694	Sep 21, 2011	53.43	\$749.00	\$1,200	\$52	no	
NTS 32O12	2189695	Sep 21, 2011	53.43	\$749.00	\$1,200	\$52	no	
NTS 32O12	2189696	Sep 21, 2011	53.42	\$749.00	\$1,200	\$52	no	
NTS 32O12	2189697	Sep 21, 2011	53.42	\$749.00	\$1,200	\$52	no	
NTS 32O12	2189698	Sep 21, 2011	53.42	\$1,358.00	\$1,200	\$52	no	
NTS 32O12	2241047	Jul 15, 2012	53.44	\$0.00	\$1,200	\$52	no	
NTS 32O12	2241048	Jul 15, 2012	53.44	\$0.00	\$1,200	\$52	no	
Total	179		9574.19	\$35,980.50	\$227,800	\$9,308		
Total all blocks	278		14878.95	\$35,981	\$346,600	\$14,456		

SCHEDULE 2

LAC DES MONTAGNES, ANOMALOUS SAMPLES

Sample #	Easting	Northing	Description		Sample Type	Au ppm	Pt ppm	Pd ppm	Ag ppm	As ppm	Cr ppm	Cu ppm	Ni ppm	P ppm	Pb ppm
15501	434038.32	5719889.47	Granitoïde riche en quartz avec 10% Fucshite. Zone à Fucshite.	Litho	Grab	-0.001	-0.005	0.001	-0.5	-5	10000	7	110	20	7
15504	416060.89	5721229.37	Péridotite. Analyse totale pour potentiel à Sulfure	Litho	Grab	0.001	-0.005	0.004	-0.5	-5	1710	32	1210	110	3
15506	431639.76	5718795.25	Dyke secondaire de Péridotite aphanitique noir verdâtre. légèrement magnétique. avec Biotite et Phlogopite	Litho	Grab	-0.001	-0.005	0.031	-0.2	5	283	40	1030	250	2
15507	431534.99	5718767.67	Péridotite envoyé à l'analyse totale pour voir le background des éléments de l'indice Valiquette	Litho	Grab	0.003	0.034	0.109	-0.2	12	1355	346	726	30	-2
15508	434588.27	5719867.84	Péridotite avec 1 à 2% PO analyse complète pour potentiel à sulfure	Litho	Grab	0.004	-0.005	0.003	-0.5	-5	3220	15	1270	50	-2
15601	440577	5726166	Péridotite avec texture en relief et une bande plus rouillée (altérée)	Litho	Grab	-0.001	-0.005	0.002	-0.5	-5	4090	16	1310	40	-2
15602	440512	5725750	Péridotite très dense avec croûte d'altération brunâtre	Litho	Grab	-0.001	-0.005	0.003	-0.5	-5	1400	17	1700	50	-2
15603	440444	5725744	Pyroxénite avec grains d'amphiboles blanches	Litho	Grab	-0.001	0.008	0.008	-0.5	-5	1970	78	1610	110	5
16051	434495.97	5719728.13	Indice Duval. 80% PO et 20% CP sur 10 cm	Min	Grab	18.35	0.006	0.566	115	4610	118	60900	12250	1970	-2
16351	434499.75	5719723.65	Sulfure massif (CP-PO-BO) DUVAL 1	Min. PGM(Au)	Grab	19.35	0.007	0.389	308	4030	123	65400	8130	2030	-2
16352	434630.43	5719865.9	Gabbro silicifié. 10 à 15% chalcopyrite DUVAL 2	Min. PGM(Au)	Grab	2.29	0.01	0.012	37	317	164	79100	387	1070	3
16353	434656.37	5719901.26	Gabbro silicifié. 2 à 5% de chalcopyrite. traces d'arsénopyrite DUVAL 3	Min. PGM(Au)	Grab	0.224	0.015	0.232	4.5	10000	189	3880	21300	4440	-2
16466	434632.99	5719870.01	Gabbro avec 1 à 2% chalcopyrite. 1% pyrrhotite et traces d'arsénopyrite. RAINURE A DUVAL	Min. PGM(Au)	Channel A	0.133	N/A	N/A	1.6	N/A	N/A	3930	422	N/A	N/A
16467	434633.24	5719869.69	Pyroxénite gabbroïque avec 1 à 2% chalcopyrite. 1% pyrrhotite et traces d'arsénopyrite. RAINURE A DUVAL	Min. PGM(Au)	Channel A	0.395	N/A	N/A	2.2	N/A	N/A	3260	276	N/A	N/A
16468	434633.23	5719869.72	Pyroxénite gabbroïque avec 2 à 3% chalcopyrite en amas. RAINURE A DUVAL	Min. PGM(Au)	Channel A	1.32	N/A	N/A	3.8	N/A	N/A	5270	129	N/A	N/A
16469	434633.23	5719869.78	Pyroxénite gabbroïque avec 3 à 4% chalcopyrite en amas. traces de pyrrhotite et traces de bornite. RAINURE A DUVAL	Min. PGM(Au)	Channel A	0.097	N/A	N/A	2	N/A	N/A	5050	123	N/A	N/A
16477	434659.72	5719901.06	Pyroxénite foncée avec 10% pyrrhotite. 5% chalcopyrite et traces d'arsénopyrite. RAINURE B DUVAL	Min. PGM(Au)	Channel B	0.314	N/A	N/A	2.7	N/A	N/A	5260	4840	N/A	N/A
16478	434660.97	5719899.43	Pyroxénite gabbroïque avec 15% pyrrhotite. 8% chalcopyrite et 2% arsénopyrite. RAINURE B DUVAL	Min. PGM(Au)	Channel B	0.148	N/A	N/A	4.4	N/A	N/A	10250	5240	N/A	N/A
16482	434662.7	5719897.1	Pyroxénite avec 5% chalcopyrite. 3% arsénopyrite. 1% pyrrhotite. 1% pyrite (en amas) RAINURE B DUVAL	Min. PGM(Au)	Channel B	0.127	N/A	N/A	3	N/A	N/A	6730	3910	N/A	N/A
16483	434662.82	5719896.98	Gabbro avec 3% pyrrhotite. 2% chalcopyrite. traces d'arsénopyrite. RAINURE B DUVAL	Min. PGM(Au)	Channel B	0.041	N/A	N/A	0.4	N/A	N/A	1565	876	N/A	N/A
16486	434663.05	5719896.06	Pyroxénite gabbroïque avec 1% pyrrhotite et 1% chalcopyrite. RAINURE B DUVAL	Min. PGM(Au)	Channel B	0.023	N/A	N/A	0.6	N/A	N/A	1365	248	N/A	N/A
16491	434663.41	5719894.72	Pyroxénite gabbroïque avec 1% pyrrhotite et traces de chalcopyrite. RAINURE B DUVAL	Min. PGM(Au)	Channel B	0.022	N/A	N/A	0.7	N/A	N/A	1235	356	N/A	N/A
16493	434663.45	5719894.53	Pyroxénite gabbroïque avec 2% pyrrhotite et 1% chalcopyrite disséminés. RAINURE B DUVAL	Min. PGM(Au)	Channel B	0.032	N/A	N/A	0.9	N/A	N/A	1680	556	N/A	N/A
16494	434663.43	5719894.45	Pyroxénite gabbroïque avec 1% pyrrhotite et traces de chalcopyrite. RAINURE B DUVAL	Min. PGM(Au)	Channel B	0.017	N/A	N/A	0.6	N/A	N/A	1255	470	N/A	N/A
16495	434649.94	5719893.01	Gabbro avec 3% chalcopyrite. 3% pyrrhotite et 1% arsénopyrite. RAINURE C DUVAL	Min. PGM(Au)	Channel C	0.011	N/A	N/A	0.9	N/A	N/A	1575	467	N/A	N/A
16496	434649.54	5719892.9	Gabbro avec 4% pyrrhotite. 3% chalcopyrite et 1% arsénopyrite. RAINURE C DUVAL	Min. PGM(Au)	Channel C	0.061	N/A	N/A	2.2	N/A	N/A	4200	850	N/A	N/A
16502	434038.32	5719889.47	Conducteur trouvé au BipMat. zone très cisaillée de 10 cm large. présence de Graphite	Min. PGM (Au)	Grab	-0.001	-0.005	0.001	-0.5	-5	10000	6	101	20	-2

Sample #	Easting	Northing	Description		Sample Type	Au ppm	Pt ppm	Pd ppm	Ag ppm	As ppm	Cr ppm	Cu ppm	Ni ppm	P ppm	Pb ppm
16503	434126	5719777	Conducteur trouvé au BipMat. Structure rouillée de 10 cm à 040/90 avec 1 à 2% PY+CP. couche de 1 cm de Fucshite dans la schisto. présence de Graphite.	Min. PGM (Au)	Grab	0.003	0.683	0.052	1.3	7	3880	1155	168	130	15
16504	434018	5719808	Zone à Fucshite dans une Pegmatite très déformée	Min. PGM (Au)	Grab	-0.001	-0.005	0.002	-0.5	5	6340	9	43	20	4
16505	434202	5719650	Péridotite fraîche avec 20% Serpentine. roche très magnétique	Min. PGM	Grab	-0.001	0.012	0.044	-0.5	28	4670	1	1865	40	3
16506	434236	5719648	Conducteur trouvé au BipMat. zone rouillée très cisaillée de 30 cm large à Fucshite encaissée dans un paragneiss. présence de Graphite	Min. PGM (Au)	Grab	-0.001	0.014	0.008	-0.5	7	4870	38	1325	40	5
16507	434148	5719812	Zone rouillée de 30 cm. 1% CP. présence de Fucshite	Min. PGM (Au)	Grab	0.005	0.012	0.089	2.1	117	2480	450	95	80	7
16508	433499.96	5719678.39	Structure silicifié de 50 cm minimum à 060/90 avec 1 à 2% PY+CP	Min. PGM (Au)	Grab	0.012	0.083	0.266	0.8	42	385	539	580	250	13
16510	433636.74	5719622.36	Zone à Fucshite avec jusqu'à 50% Fucshite.	Min. PGM (Au)	Grab	-0.001	-0.005	0.001	-0.5	-5	6130	3	19	150	4
16512	433653.06	5719442.86	Péridotite avec excès de Magnétite. 5% d' un minéral métallique à éclat blanc et apparence violet. Tr Sulfures millimétrique.	Min. PGM	Grab	0.001	0.029	0.125	-0.5	54	10000	235	1640	50	2
16522	388493.01	5702194.09	Péridotite serpentiniisée. 5 à 10% veine de Chrysotile de 5 à 50 mm. Tr PO	Min. PGM	Grab	-0.001	-0.005	-0.001	-0.5	86	500	1	2860	40	-2
16528	431625.62	5718774.6	Trace à 2% Sulfures dans une fracture de la Péridotite LPR0610-002 à 007	Min. PGM (Au)	Grab	0.002	0.007	0.022	0.3	38	843	296	1485	50	2
16530	431532.61	5718769.65	Ré-échantillonnage de l'indice Valiquette. +50% Pyrrhotite. 1 à 5% Calcopirite	Min	Grab	0.016	0.086	1.655	1.5	12	741	1920	10000	30	-2
16531	431884.4	5718870.32	Zone rouillée conductrice dans la Péridotite LPR0611-047 à 053. 10% PO et 5% CP	Min. PGM (Au)	Grab	0.019	0.057	0.685	9.6	38	290	1985	5980	20	6
16532	431849.25	5718798.79	Paragneiss avec traces de Pyrite	Min. PGM (Au)	Grab	0.001	-0.005	0.004	0.5	1605	320	88	82	320	177
16535	433272.73	5719091.26	Paragneiss magnétique au contact avec méta basalte. 10 à 20% PY	Min. PGM (Au)	Grab	0.009	-0.005	0.001	0.2	53	302	66	77	1140	7
16536	433331.75	5719145.17	Zone silicifiée dans Paragneiss avec 20% Pyrite. bonne structure pour l'Au. présence d'une matrice noir aphanitique	Min. PGM (Au)	Grab	0.371	-0.005	0.002	0.5	10000	129	243	177	1200	8
16538	433439.28	5719200.07	Zone silicifiée dans Paragneiss avec traces Pyrite. même structure que LPR0612-101	Min. PGM (Au)	Grab	0.043	0.006	0.02	0.3	10000	124	165	88	580	5
16547	434444.9	5719690.5	Pyroxénite non-silicifiée. plan de déformation faible. zone de transition de la silicification. Tr à 1% Chalcopirite et Pyrrhotite. Tr Bornite	Métaux. Au	Grab	0.003	0.268	0.393	0.6	588	454	950	535	30	4
16548	434588.27	5719867.84	Péridotite avec 1 à 2% PO	Métaux. Au. PGM	Grab	0.003	-0.005	0.002	-0.5	14	2640	20	1170	40	4
16549	434584.14	5719916.77	Péridotite silicifiée avec traces de Pyrite. 2% MT. patine blanche 1m large sur 3m long	Métaux. Au	Grab	0.003	0.005	0.019	-0.5	12	2800	50	1105	10	-2
16550	434700.65	5719932.37	Cisaillement rouillé dans la Péridotite. 1 à 5% Pyrite	Métaux. Au	Grab	0.114	-0.005	0.007	3.6	10	69	6610	2880	120	-2
16552	435908.34	5721640.77	Roche ultramafique très magnétique(5000 BipMat) sur le bord du lac des Montagnes. 1% PO et traces de Chalcopirite	Métaux. Au	Grab	0.009	-0.005	0.002	0.5	27	3530	42	1355	40	-2
16555	437125.47	5720992.28	Zone cisaiillée et rouillée de 15 cm large avec Fucshite. Chalcopirite et Pyrrhotite. continue sur 10 mètres. dans du Paragneiss au contact avec la Pegmatite. Contact à 045/90	Métaux. Au	Grab	0.003	-0.005	0.001	0.5	295	3800	453	66	380	12

Sample #	Easting	Northing	Description		Sample Type	Au ppm	Pt ppm	Pd ppm	Ag ppm	As ppm	Cr ppm	Cu ppm	Ni ppm	P ppm	Pb ppm
16558	434308.56	5719648.96	Bande grise de 5 cm large et 2 m long dans la Péridotite. très magnétique. chromite avec plus de Fer	Métaux. Au	Grab	-0.001	0.719	0.038	-0.5	7	10000	6	944	10	-2
16561	434529.05	5719556.74	Zone silicifiée avec 5% Pyrite	Métaux. Au	Grab	0.101	0.009	0.006	0.5	10000	497	865	126	860	12
16562	434623.31	5719856.33	Veine Quartz rouillée 10 cm large dans un gabbro. 5 à 20% Chalcopyrite et 1 à 2% Pyrite. traces de Tourmaline également. extension Duval. structure à 190/85 W	Métaux. Au	Grab	0.342	0.012	0.017	8.9	1170	322	15950	521	610	6
16563	434576.23	5719780.29	Pyroxénite silicifiée. traces à 1% Chalcopyrite. traces Pyrrhotite	Métaux. Au	Grab	0.064	0.017	0.057	1.5	598	348	1690	275	20	-2
16685	434735.82	5720016.61	péridotite avec 60% amphiboles (trémolite/actinolite)	I4I	Grab	0.001	0.016	0.001	-0.5	25	2650	13	1110	20	-2
16686	434773.42	5719976.07	grains fins. schisteux. sulfurs ont commencé à migrer sur le long des foliations- site déjà blasté. 2% sulfur. CP. PO. AS	I4B	Grab	0.066	0.237	0.669	1.2	1140	450	2790	1230	20	-2
16687	434733.6	5719927	site du blastage. trenché 0.5m dans la direction N-S. très rouille. minéralisation des fois dans les grains de TL	I4B	Grab	0.035	0.048	0.117	0.9	344	304	1400	282	10	-2
16688	434764.94	5719965.11	site dynamité. roche foliée avec remobilisation des sulfures. 1 grain de bornite.CP. AS. PO	I4B	Grab	0.045	0.159	0.455	0.7	2390	489	1270	1240	20	-2
16695	434704.19	5720022.42	couleur très foncé. un peu de serpentine. jusqu'à 5% MT	I4I	Grab	0.002	-0.005	0.011	-0.5	12	3430	13	1750	60	-2
16708	440538	5726195	Veine de quartz minéralisée (PY. CP)	Min. PGM(Au)	Grab	0.092	-0.005	-0.001	0.9	-5	529	222	40	10	9
16718	440467	5725647	Péridotite avec surface peu orangée avec 1% de sulfures	Min. PGM	Grab	-0.001	-0.005	-0.001	-0.5	-5	739	2	1680	30	-2
16723	440387	5725531	Péridotite pâle mais très magnétique. avec 1% SF < mm; témoin 2	Min. PGM	Grab	0.002	-0.005	-0.001	-0.2	161	491	5	1550	60	-2
16758	434496.62	5719709.41	Pyroxénite silicifiée avec traces de sulfures	Min. PGM(Au)	Grab	0.006	0.022	0.059	0.6	-5	416	95	140	100	-2
16764	434586.2	5719796.3	Pyroxénite silicifiée avec 2% de sulfures (chalcopyrite et pyrrhotite)	Min. PGM(Au)	Grab	0.054	0.042	0.094	1.7	5920	272	2360	666	20	18
16765	434591.5	5719793.07	Pyroxénite silicifiée à tourmaline et biotite avec traces d'arsénopyrite(?)	Min. PGM(Au)	Grab	0.007	0.067	0.176	-0.5	643	454	16	455	30	-2
16766	434354.91	5719653.96	Zone rouillée dans un grand affleurement de pyroxénite silicifiée. minéralisation disséminée (10% de sulfures (chalcopyrite. pyrite et pyrrhotite))	Min. PGM(Au)	Grab	0.03	0.048	0.272	4.5	235	174	9070	1585	20	12
16768	434646.83	5719860.34	Pyroxénite silicifiée avec 1% de sulfures (chalcopyrite et pyrite)	Min. PGM(Au)	Grab	0.001	0.023	0.025	-0.5	43	357	349	187	10	-2
16769	434372.83	5719669.63	Pyroxénite silicifiée avec 3% de chalcopyrite. 3% de pyrrhotite. traces de bornite et traces de cuivre natif	Min. PGM(Au)	Grab	0.006	0.056	0.142	-0.5	-5	241	611	353	10	-2
16774	434660.17	5719893.63	Gabbro silicifié avec 10 à 15% de chalcopyrite (veinules et disséminée) DUVAL 3	Min. PGM(Au)	Grab	0.08	-0.005	0.008	15.1	714	136	16100	543	20	-2
16775	434633.43	5719870.83	Gabbro silicifié très rouillé. minéralisation semi-massive à massive (30 à 60 % chalcopyrite. 5% bornite). échantillon altéré DUVAL 2	Min. PGM(Au)	Grab	0.362	0.005	0.004	72	176	120	176500	517	1270	4
16776	434633.43	5719870.83	Gabbro silicifié très rouillé. minéralisation semi-massive et veinules (5 à 15% chalcopyrite). échantillon frais DUVAL 2	Min. PGM(Au)	Grab	0.761	0.008	0.008	13.4	487	189	21900	487	860	-2
16783	434656.28	5719902.02	Gabbro très silicifié avec 20 à 25% d'arsénopyrite et 1% de chalcopyrite DUVAL 3	Min. PGM(Au)	Grab	0.27	0.007	0.455	1.6	10000	191	2030	48700	10000	2
16785	434661.12	5719882.88	Gabbro avec 5% de tourmaline. 1% de pyrrhotite et traces de chalcopyrite	Min. PGM(Au)	Grab	0.014	0.021	0.052	0.8	60	548	908	401	30	-2
16797	434797.06	5719956.52	hautement silicifiée avec apatite. pyrite. chalcopyrite site du blastage. trenché 0.5m dans la direction N-S. très rouille.	I4B	Grab	0.015	0.047	0.126	1.2	3470	196	1970	538	30	-2
16798	434744.65	5719948.47	3% sulfur. CP. PO. AS	I4B	Grab	0.054	0.164	0.356	0.8	811	543	2540	809	60	2
16799	434744.65	5719948.47	site du blastage. trenché 0.5m dans la direction N-S. très rouille. 3% sulfur. CP. PO. AS	I4B	Grab	0.064	0.176	0.429	1.1	1105	497	2050	783	20	5

SCHEDULE 3
PREPARATION PROTOCOL



Procédures d'opération en salle de préparation des roches

Préparation des échantillons

Concassage

- 1-** Réception des échantillons : dans un premier temps inscrire les informations de base sur la feuille de travail intitulée "**Préparation des roches**". Placer les sacs d'échantillon sur la table en ordre numérique. Inscrire le poids respectif de chaque échantillon sur la feuille intitulée "**Rapport client**".
 - a.** Noter les échantillons manquants ou les échantillons en surplus sur la feuille de travail et le rapporter au responsable du laboratoire. Noter également les instructions concernant les métaux à analyser ainsi que la méthode d'analyse demandée par le client. Si l'information ne figure pas sur le bon de commande du client ou s'il n'y a pas de bon de commande qui accompagne les échantillons, communiquer avec le client afin d'avoir des consignes claires.
 - b.** Vider chaque échantillon dans un moule métallique en faisant suivre son étiquette d'identification numérotée. Les sacs non percés et sans humidité peuvent être réutilisés pour le même échantillon. Inscrire le numéro de l'échantillon sur le sac.
 - c.** Placer les échantillons humides dans le séchoir toujours en ordre numérique.
- 2-** Vérifier l'équipement avant chaque quart de travail et rapporter immédiatement au responsable du laboratoire tout équipement nécessitant de l'entretien ou des réparations. Étant donné que le concasseur possède un système de lubrification automatique, s'assurer visuellement du bon fonctionnement de celui-ci avant de débuter le travail.
- 3-** S'assurer que le concasseur, la station de séparation et les moules sont propres avant de commencer. S'ils ne le sont pas, procéder au nettoyage avec l'air comprimé.
- 4-** Démarrer la ventilation.
- 5-** Démarrer le concasseur. NE JAMAIS LAISSER LE CONCASSEUR EN MARCHE SANS SURVEILLANCE.
- 6-** S'assurer que le tiroir est bien placé sous la chute avant de mettre l'échantillon dans le réceptacle du concasseur. Si deux échantillons sont versés en même temps dans le concasseur par erreur, le noter sur la feuille de travail et aviser le responsable du laboratoire avant de procéder. Au besoin, utiliser le bâton destiné à cet effet pour pousser le matériel dans le concasseur.
- 7-** Attendre que l'échantillon soit complètement broyé puis arrêter le concasseur
- 8-** Nettoyer le concasseur par le haut à l'air comprimé avant de procéder avec le prochain échantillon.

Séparation

9- S'assurer que les récipients soient bien placés sous les chutes du séparateur. Placer le tiroir contenant la roche concassée contre le réceptacle du séparateur de manière à ce qu'il soit bien ajusté. Verser l'échantillon broyé dans le séparateur. Lors de la séparation de l'échantillon, le matériel concassé doit être réparti uniformément dans le séparateur pour assurer l'homogénéité du sous-échantillon.

10- Répéter l'opération en renversant le récipient de gauche dans le séparateur jusqu'à l'obtention d'un sous-échantillon de 250 à 400 grammes. Utiliser le récipient étalon qui est marqué de façon à contenir le poids spécifique du sous-échantillon. Ce contenant doit être soigneusement nettoyé à l'air comprimé entre chaque échantillon.

Ne jamais ajuster la taille du sous-échantillon en ajoutant ou en enlevant du matériel manuellement sans passer par le séparateur pour obtenir la bonne quantité. La séparation des échantillons à l'aide du séparateur assure que le sous-échantillon est représentatif de l'échantillon complet.

11- Placer le sous-échantillon de 250-400 grammes dans son moule métallique et l'étiquette numérotée correspondante dans le sac numéroté qui recevra la pulpe.

12- Placer le reste de l'échantillon inutilisé (le rejet) dans le sac plastique d'origine numéroté et le sceller avec une attache (type *Tie Rap*). Placer le sac de rejet dans le sac d'entreposage (type poche blanche en *fabrene*) préalablement identifié au nom de la compagnie du client. Une fois rempli, ce sac sera déposé dans une boîte d'entreposage identifiée par un numéro afin d'assurer la confidentialité des clients.

OU

Quand le bon de commande d'un client le précise, préparer un duplicata de l'échantillon. Procéder alors au concassage et à la séparation tel que décrit précédemment. Placer le premier sous-échantillon de 250-400 grammes dans un moule métallique. Séparer à nouveau le rejet pour produire un second sous-échantillon de 250-400 grammes et le mettre dans un second moule accompagné de son propre sac et de son étiquette d'identification numérotée. Puis, faire tel que dans le paragraphe ci-haut.

13- Nettoyer le séparateur, les moules métalliques et la station de rejet à l'air comprimé.

14- Répéter la procédure pour le prochain échantillon. À noter que les échantillons sont broyés à un minimum de 75 % passant 2 millimètres (9 mesh) à moins d'indication contraire du client. Si il y a des questions concernant un échantillon, ne pas hésiter à demander au responsable du laboratoire.

Pulvérisation au palet et anneau

15- Vérification de l'appareil.

16- S'assurer que le pulvérisateur, la station de travail, le bol, le palet et l'anneau sont propres avant l'utilisation. S'ils ne le sont pas, procéder au nettoyage tel que décrit à l'étape 27.

17- Démarrer la ventilation.

18- Placer l'anneau et le palet dans le bol du pulvérisateur. Placer ensuite le sous-échantillon concassé dans le bol du pulvérisateur.

Il arrive que certains échantillons collent aux parois des bols, au palet et à l'anneau. Il faut apprendre à les reconnaître. Ajouter alors environ 2 ml d'éthanol pour empêcher la poudre de coller.

19- Mettre le couvercle sur le bol, placer le bol dans le pulvérisateur et fermer le couvercle de l'habitacle du pulvériseur.

20- Démarrer le pulvérisateur et s'assurer que le minuteur est réglé.

Étant donné que le temps de pulvérisation varie en fonction du type de roche :

En début de contrat :

- a. Le premier échantillon est systématiquement pulvérisé pendant 3 minutes.
- b. Une vérification granulométrique de la pulpe est ensuite effectuée à l'aide d'une tamisette (Spartan de Fritsch 8") et du tamis adéquat pour la granulométrie de matériel recherchée. Cette granulométrie varie d'un laboratoire d'analyse à l'autre. Il faut donc s'assurer que le matériel est pulvérisé suivant les normes du laboratoire d'analyse choisi par le client auquel seront acheminées les pulpes.
- c. Le temps de pulvérisation devra être augmenté ou diminué selon le résultat granulométrique afin d'obtenir la grosseur de particules voulue. La grosseur des particules est régie en termes de % de mesh et/ou micron selon la demande du client.

En cours de contrat :

- d. Lorsque les échantillons traités sont similaires, une vérification de la granulométrie de la pulpe est effectuée à tous les 10 échantillons. Une vérification plus serrée est effectuée lorsque le type de matériel change. Tous les résultats de ces vérifications sont enregistrés sur une feuille de bord qui peut être consultée en tout temps par le client qui en fait la demande.

- 21-** Quand le temps de pulvérisation est terminé, retirer le bol du pulvérisateur et le placer sur la station de finition (homogénéisation et nettoyage).
- 22-** Retirer le couvercle, le palet et l'anneau du bol de pulvérisation et verser l'échantillon sur une feuille de papier (type Kraft 18"). Brosser doucement le bol de pulvérisation, le palet et l'anneau à l'aide d'un pinceau afin de récupérer le maximum de particules pulvérisées.
- 23-** Rouler l'échantillon 40 fois sur lui-même pour fin d'homogénéisation et le déposer ensuite dans son sac numéroté. La feuille de papier utilisée pour l'homogénéisation est alors jetée et une nouvelle feuille sera utilisée pour chaque échantillon. Le pinceau sera également bien secoué et nettoyé entre chaque échantillon.
- 24-** Placer le sac contenant la pulpe dans un bac propre en suivant l'ordre numérique des échantillons.
- 25-** Remettre l'anneau et le palet dans le bol et ajouter environ 100 grammes d'agent de nettoyage (silice). Remettre le couvercle et replacer le bol dans le pulvérisateur. Démarrer le pulvérisateur et le faire tourner pendant 10 à 15 secondes ou jusqu'à ce qu'il soit propre.
- 26-** Retirer le bol du pulvérisateur, retirer le couvercle, et jeter l'agent nettoyant dans la poubelle destinée à cette fin.
- 27-** Nettoyer le bol, le couvercle, l'anneau et le palet avec la balayeuse puis avec l'air comprimé pour nettoyer à fond le bol, le couvercle, l'anneau et le palet.
- 28-** Lorsque les bacs contenant les sacs de pulpe sont pleins ils sont alors dirigés dans l'autre pièce pour la mise en boîte et l'expédition.

À la fin du quart de travail, nettoyer à fond la station de travail et ranger les outils et les récipients à leur place attitrée.

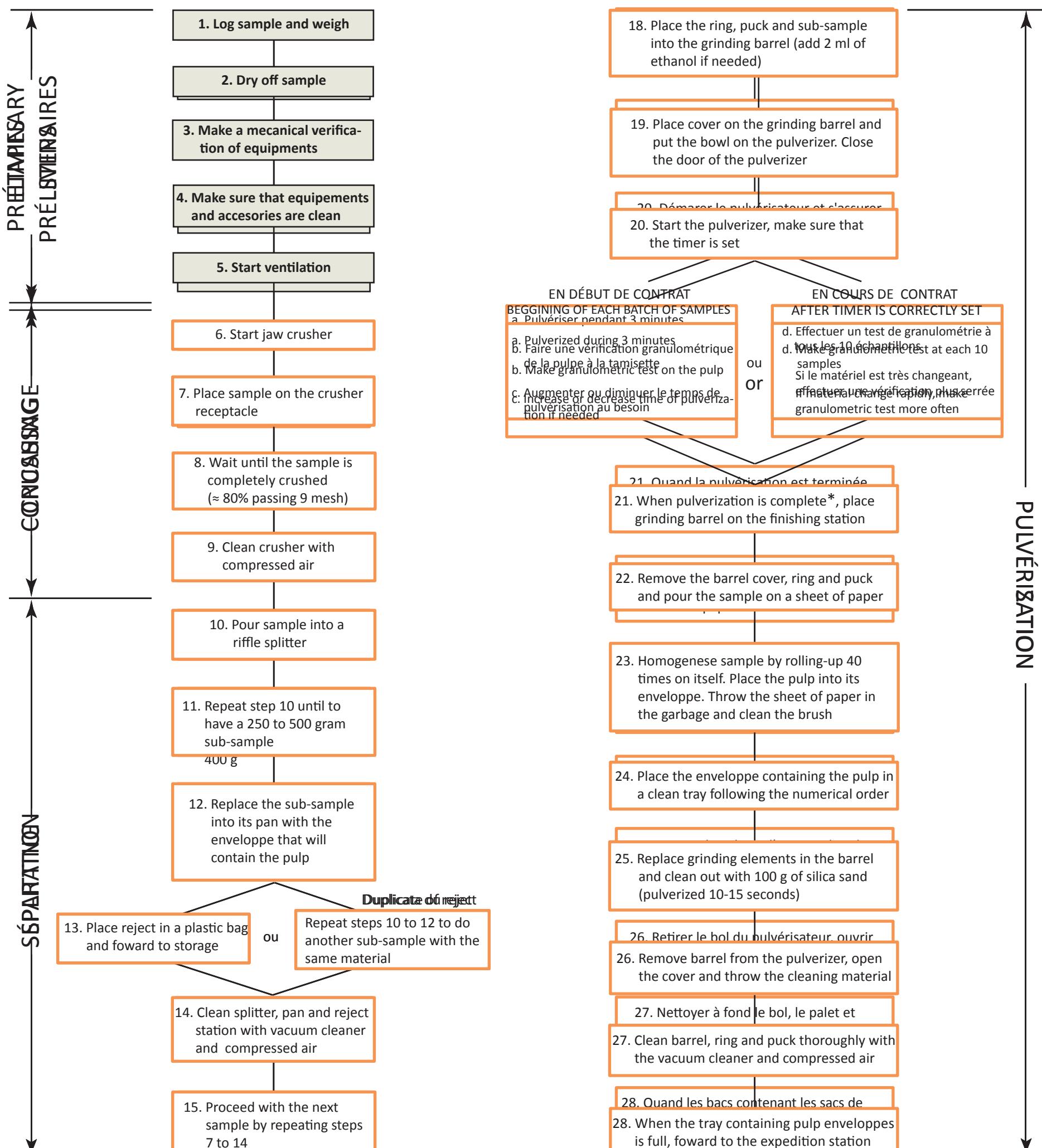
Mise en boîte et expédition

- 1-** Pour la mise en boîte, chacun des sacs est scellé puis replié sur lui-même à l'endroit où se situe le rabat. Ils sont ensuite soigneusement placés en ordre numérique dans une boîte d'expédition et accompagnés d'une feuille de réquisition du laboratoire choisi par le client, spécifiant les métaux à être analysés et s'il y a lieu, la méthode d'analyse à utiliser.
- 2-** Sur chaque boîte la personne responsable doit inscrire le numéro des échantillons.
- 3-** La boîte ou les boîtes sont ensuite emballées convenablement.
 - a.** Chacune d'elle doit d'abord être scellée avec du ruban adhésif.
 - b.** Elles sont ensuite enveloppées d'une solide pellicule plastique élastique afin d'être étanche.
 - c.** Elles sont à nouveau scellées avec du ruban adhésif.
- 4-** Une fois bien emballé, le colis est pesé et mesuré.
- 5-** Sauf indication contraire de la part du client, un bon d'expédition est produit via le service d'outil en ligne sécurisé de Poste Canada sous notre compte client. Nous obtenons ainsi un numéro de repérage qui nous permet de suivre le colis en tout temps durant son expédition.

Le colis peut également être envoyé par autobus via le service Expéibus. Le colis est alors apporté par le technicien au terminus de Chibougamau.

N. B. : Le présent protocole peut être adapté à la demande d'un client à la condition que cette modification n'entraîne aucun temps de traitement, manipulation ou coût supplémentaire. Dans le cas contraire, le tarif par échantillon sera révisé à la hausse.

ORGANIGRAMME DE PRÉPARATION DE PRÉPARATOIRE D'Échantillons
AU CENTRE D'ÉTUDE APPLIQUÉE DU QUATERNaire



Fin du quart de travail / End of work shift

Nettoyer à fond les stat travail, les appareillages	Clean work station, equipments and tools thoroughly at the end of each shift
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N.B: À chaque fin de préparation partielle granulométrique, la pulpe doit être analysée par granulométrie par le laboratoire qui en fera l'analyse. La pulpe doit être analysée si au moins 75% de matériel passant 2 mm. La pulpe est quant à elle amenée à la granulométrie requise par le laboratoire qui en fera l'analyse.

SCHEDULE 4
ANALYTICAL PROTOCOL ALS CHEMEX



Sample Preparation - Logging Samples Received as Pulps

All pulp samples received at ALS Chemex are furnished with a bar code label attached to the original sample bag. The system will also accept client supplied bar coded labels that are attached to sampling bags in the field. The label is scanned and the weight of the sample is recorded together with additional information such as date, time, equipment used and operator name. The scanning procedure is used for each subsequent activity involving the sample from preparation to analysis, through to storage or disposal of the pulp.

At least one out of every 50 samples is selected at random for routine pulp QC tests (LOG-QC). For routine pulps, the specification is 85 % passing a 75 micron screen. Other specifications may be checked as per client requirements.

Method Code	Specifications	Description
LOG-23	85 % < 75 µm	Log received sample pulp in tracking system (Sample pulps received with bar code labels attached).
LOG-24	85 % < 75 µm	Log received sample pulp in tracking system (Sample pulps received without bar code labels attached).
LOG-25	95 % < 106 µm	Log received sample pulp in tracking system (Sample pulps received with bar code labels attached).
LOG-26	95 % < 106 µm	Log received sample pulp in tracking system (Sample pulps received without bar code labels attached).
LOG-QC	See method specifications	Testing Procedure for samples received as pulp.

Fire Assay Procedure – Ag-GRA21, Ag-GRA22, Au-GRA21 and Au-GRA22

Precious Metals Gravimetric Analysis Methods

Sample Decomposition: Fire Assay Fusion (FA-FUSAG1,
FA-FUSAG2, FA-FUSGV1 and FA-FUSGV2)

Analytical Method: Gravimetric

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents in order to produce a lead button. The lead button containing the precious metals is cupelled to remove the lead. The remaining gold and silver bead is parted in dilute nitric acid, annealed and weighed as gold. Silver, if requested, is then determined by the difference in weights.

Method Code	Element	Symbol	Units	Sample Weight (g)	Detection Limit	Upper Limit
Ag-GRA21	Silver	Ag	ppm	30	5	10,000
Ag-GRA22	Silver	Ag	ppm	50	5	10,000
Au-GRA21	Gold	Au	ppm	30	0.05	1000
Au-GRA22	Gold	Au	ppm	50	0.05	1000



Fire Assay Procedure – Au-AA23 & Au-AA24

Fire Assay Fusion, AAS Finish

Sample Decomposition: Fire Assay Fusion (FA-FUS01 & FA-FUS02)

Analytical Method: Atomic Absorption Spectroscopy (AAS)

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in 0.5 mL dilute nitric acid in the microwave oven, 0.5 mL concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 mL with de-mineralized water, and analyzed by atomic absorption spectroscopy against matrix-matched standards.

Method Code	Element	Symbol	Units	Sample Weight (g)	Lower Limit	Upper Limit	Default Overlimit Method
Au-AA23	Gold	Au	ppm	30	0.005	10.0	Au-GRA21
Au-AA24	Gold	Au	ppm	50	0.005	10.0	Au-GRA22

Geochemical Procedure – ME-AA45
Atomic Absorption Spectroscopy – Aqua Regia Digestion

Sample Decomposition: HNO₃ – HCl Aqua Regia Digestion (GEO-AR01)
Analytical Method: Atomic Absorption Spectroscopy (AAS)

A prepared sample (0.50 g) is digested with aqua regia for 45 minutes in a graphite heating block. After cooling, the resulting solution is diluted to 12.5 mL with demineralized water, mixed and analysed by atomic absorption spectrometry.

Note: Although some base metals may dissolve quantitatively in the majority of geological matrices, data reported from an aqua regia digestion should be considered as representing only the leachable portion of a particular analyte. The recovery percentage of many analytes from more resistive minerals can be very low, but the acid leachable portion can be an excellent exploration too.

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Silver	Ag	ppm	0.2	100	Ag-AA46
Arsenic	As	ppm	5	10000	As-AA46
Cobalt	Co	ppm	1	10000	Co-AA62
Copper	Cu	ppm	1	10000	Cu-AA46
Molybdenum	Mo	ppm	1	10000	Mo-AA46
Nickel	Ni	ppm	1	10000	Ni-AA62
Lead	Pb	ppm	1	10000	Pb-AA46
Zinc	Zn	ppm	1	10000	Zn-AA46

Whole Rock Geochemistry – ME-ICP06 and OA-GRA05
Analysis of major oxides by ICP-AES

ME-ICP06

Sample Decomposition: Lithium Metaborate/Lithium Tetraborate
 (LiBO₂/Li₂B₄O₇) Fusion* (FUS-LI01)
Analytical Method: Inductively Coupled Plasma - Atomic
 Emission Spectroscopy (ICP-AES)

A prepared sample (0.200 g) is added to lithium metaborate/lithium tetraborate flux (0.90 g), mixed well and fused in a furnace at 1000°C. The resulting melt is then cooled and dissolved in 100 mL of 4% nitric acid/2% hydrochloric acid. This solution is then analyzed by ICP-AES and the results are corrected for spectral inter-element interferences. Oxide concentration is calculated from the determined elemental concentration and the result is reported in that format.

Element	Symbol	Units	Lower Limit	Upper Limit
Aluminum	Al ₂ O ₃	%	0.01	100
Barium	BaO	%	0.01	100
Calcium	CaO	%	0.01	100
Chromium	Cr ₂ O ₃	%	0.01	100
Iron	Fe ₂ O ₃	%	0.01	100
Magnesium	MgO	%	0.01	100
Manganese	MnO	%	0.01	100
Phosphorus	P ₂ O ₅	%	0.01	100
Potassium	K ₂ O	%	0.01	100
Silicon	SiO ₂	%	0.01	100
Sodium	Na ₂ O	%	0.01	100
Strontium	SrO	%	0.01	100
Titanium	TiO ₂	%	0.01	100

***Note:** For samples that are high in sulphides, we may substitute a peroxide fusion in order to obtain better results.

OA-GRA05, ME-GRA05

Sample Decomposition: Thermal decomposition Furnace or TGA
(OA-GRA05 or ME-GRA05)
Analytical Method: Gravimetric

If required, the total oxide content is determined from the ICP analyte concentrations and loss on Ignition (L.O.I.) values. A prepared sample (1.0 g) is placed in an oven at 1000°C for one hour, cooled and then weighed. The percent loss on ignition is calculated from the difference in weight.

Method Code	Parameter	Symbol	Units	Lower Limit	Upper Limit
OA-GRA05	Loss on Ignition (Furnace)	LOI	%	0.01	100
ME-GRA05	Loss on Ignition (TGA)	Moisture	%	0.01	100
		LOI	%	0.01	100



Geochemical Procedure - ME-ICP41

Trace Level Methods Using Conventional ICP-AES Analysis

Sample Decomposition:

Nitric Aqua Regia Digestion (GEO-AR01)

Analytical Method:

Inductively Coupled Plasma - Atomic

Emission Spectroscopy (ICP - AES)

A prepared sample is digested with aqua regia in a graphite heating block. After cooling, the resulting solution is diluted to 12.5 mL with deionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. The analytical results are corrected for inter-element spectral interferences.

NOTE: In the majority of geological matrices, data reported from an aqua regia leach should be considered as representing only the leachable portion of the particular analyte.

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Silver	Ag	ppm	0.2	100	Ag-OG46
Aluminum	Al	%	0.01	25	
Arsenic	As	ppm	2	10000	
Boron	B	ppm	10	10000	
Barium	Ba	ppm	10	10000	
Beryllium	Be	ppm	0.5	1000	
Bismuth	Bi	ppm	2	10000	
Calcium	Ca	%	0.01	25	
Cadmium	Cd	ppm	0.5	1000	
Cobalt	Co	ppm	1	10000	
Chromium	Cr	ppm	1	10000	
Copper	Cu	ppm	1	10000	Cu-OG46
Iron	Fe	%	0.01	50	



Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Gallium	Ga	ppm	10	10000	
Mercury	Hg	ppm	1	10000	
Potassium	K	%	0.01	10	
Lanthanum	La	ppm	10	10000	
Magnesium	Mg	%	0.01	25	
Manganese	Mn	ppm	5	50000	
Molybdenum	Mo	ppm	1	10000	
Sodium	Na	%	0.01	10	
Nickel	Ni	ppm	1	10000	
Phosphorus	P	ppm	10	10000	
Lead	Pb	ppm	2	10000	Pb-OG46
Sulfur	S	%	0.01	10	
Antimony	Sb	ppm	2	10000	
Scandium	Sc	ppm	1	10000	
Strontium	Sr	ppm	1	10000	
Thorium	Th	ppm	20	10000	
Titanium	Ti	%	0.01	10	
Thallium	Tl	ppm	10	10000	
Uranium	U	ppm	10	10000	
Vanadium	V	ppm	1	10000	
Tungsten	W	ppm	10	10000	
Zinc	Zn	ppm	2	10000	Zn-OG46



Elements listed below are available upon request

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Cerium	Ce	ppm	10	10000	
Hafnium	Hf	ppm	10	10000	
Indium	In	ppm	10	10000	
Lithium	Li	ppm	10	10000	
Niobium	Nb	ppm	10	10000	
Rubidium	Rb	ppm	10	10000	
Selenium	Se	ppm	10	10000	
Silicon	Si	ppm	10	10000	
Tin	Sn	ppm	10	10000	
Tantalum	Ta	ppm	10	10000	
Tellurium	Te	ppm	10	10000	
Yttrium	Y	ppm	10	10000	
Zirconium	Zr	ppm	5	10000	



Geochemical Procedure – ME-ICP61

Trace Level Methods Using Conventional ICP-AES Analysis

Sample Decomposition: HNO₃-HClO₄-HF-HCl digestion, HCl Leach (GEO-4ACID)

Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)

A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by inductively coupled plasma-atomic emission spectrometry. Results are corrected for spectral interelement interferences.

NOTE: Four acid digestions are able to dissolve most minerals; however, although the term “*near-total*” is used, depending on the sample matrix, not all elements are quantitatively extracted.

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Silver	Ag	ppm	0.5	100	Ag-OG62
Aluminum	Al	%	0.01	50	
Arsenic	As	ppm	5	10000	
Barium	Ba	ppm	10	10000	
Beryllium	Be	ppm	0.5	1000	
Bismuth	Bi	ppm	2	10000	
Calcium	Ca	%	0.01	50	
Cadmium	Cd	ppm	0.5	500	
Cobalt	Co	ppm	1	10000	Co-OG62
Chromium	Cr	ppm	1	10000	
Copper	Cu	ppm	1	10000	Cu-OG62



Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Iron	Fe	%	0.01	50	
Gallium	Ga	ppm	10	10000	
Potassium	K	%	0.01	10	
Lanthanum	La	ppm	10	10000	
Magnesium	Mg	%	0.01	50	
Manganese	Mn	ppm	5	100000	
Molybdenum	Mo	ppm	1	10000	Mo-OG62
Sodium	Na	%	0.01	10	
Nickel	Ni	ppm	1	10000	Ni-OG62
Phosphorus	P	ppm	10	10000	
Lead	Pb	ppm	2	10000	Pb-OG62
Sulphur	S	%	0.01	10	
Antimony	Sb	ppm	5	10000	
Scandium	Sc	ppm	1	10000	
Strontium	Sr	ppm	1	10000	
Thorium	Th	ppm	20	10000	
Titanium	Ti	%	0.01	10	
Thallium	Tl	ppm	10	10000	
Uranium	U	ppm	10	10000	
Vanadium	V	ppm	1	10000	
Tungsten	W	ppm	10	10000	
Zinc	Zn	ppm	2	10000	Zn-OG62



Elements listed below are available upon request

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Lithium	Li	ppm	10	10000	
Niobium	Nb	ppm	5	2000	
Rubidium	Rb	ppm	10	10000	
Selenium	Se	ppm	10	1000	
Tin	Sn	ppm	10	10000	
Tantalum	Ta	ppm	10	10000	
Tellurium	Te	ppm	10	10000	
Yttrium	Y	ppm	10	10000	
Zirconium	Zr	ppm	5	500	

Geochemical Procedure - ME-MS81

Ultra-Trace Level Methods

Sample Decomposition:

Lithium Metaborate Fusion (FUS-LI01)

Analytical Method:

Inductively Coupled Plasma - Mass Spectroscopy (ICP - MS)

A prepared sample (0.200 g) is added to lithium metaborate flux (0.90 g), mixed well and fused in a furnace at 1000°C. The resulting melt is then cooled and dissolved in 100 mL of 4% HNO₃ / 2% HCl solution. This solution is then analyzed by inductively coupled plasma - mass spectrometry.

Element	Symbol	Units	Lower Limit	Upper Limit
Silver*	Ag	ppm	1	1000
Barium	Ba	ppm	0.5	10000
Cerium	Ce	ppm	0.5	10000
Cobalt*	Co	ppm	0.5	10000
Chromium	Cr	ppm	10	10000
Cesium	Cs	ppm	0.01	10000
Copper*	Cu	ppm	5	10000
Dysprosium	Dy	ppm	0.05	1000
Erbium	Er	ppm	0.03	1000
Europium	Eu	ppm	0.03	1000
Gallium	Ga	ppm	0.1	1000
Gadolinium	Gd	ppm	0.05	1000
Hafnium	Hf	ppm	0.2	10000
Holmium	Ho	ppm	0.01	1000
Lanthanum	La	ppm	0.5	10000
Lutetium	Lu	ppm	0.01	1000

Element	Symbol	Units	Lower Limit	Upper Limit
Molybdenum*	Mo	ppm	2	10000
Niobium	Nb	ppm	0.2	10000
Neodymium	Nd	ppm	0.1	10000
Nickel*	Ni	ppm	5	10000
Lead*	Pb	ppm	5	10000
Praseodymium	Pr	ppm	0.03	1000
Rubidium	Rb	ppm	0.2	10000
Samarium	Sm	ppm	0.03	1000
Tin	Sn	ppm	1	10000
Strontium	Sr	ppm	0.1	10000
Tantalum	Ta	ppm	0.1	10000
Terbium	Tb	ppm	0.01	1000
Thorium	Th	ppm	0.05	1000
Thallium	Tl	ppm	0.5	1000
Thulium	Tm	ppm	0.01	1000
Uranium	U	ppm	0.05	1000
Vanadium	V	ppm	5	10000
Tungsten	W	ppm	1	10000
Yttrium	Y	ppm	0.5	10000
Ytterbium	Yb	ppm	0.03	1000
Zinc*	Zn	ppm	5	10000
Zirconium	Zr	ppm	2	10000

***Note:** Some base metal oxides and sulfides may not be completely decomposed by the lithium borate fusion. Results for Ag, Co, Cu, Mo, Ni, Pb, and Zn will not likely be quantitative by this method.

Adding Base Metals – ME-AQ81, ME-4ACD81

Sample Decomposition: Aqua Regia (GEO-AR01) or 4-acid (GEO-4ACID)

Analytical Method: Inductively Coupled Plasma – Atomic Emission spectroscopy (ICP - AES)

The lithium metaborate fusion is not the preferred method for the determination of base metals. Many sulfides and some metal oxides are only partially decomposed by the borate fusion and some elements such as cadmium and zinc can be volatilized.

Base metals can be reported with ME-MS81 for either an aqua regia digestion (**ME-AQ81**) or a four acid digestion (**ME-4ACD81**). The four acid digestion is preferred when the targets include more resistive mineralization such as that associated with nickel and cobalt.

Element	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	0.5	100
Arsenic	As	ppm	5	10000
Cadmium	Cd	ppm	0.5	10000
Cobalt	Co	ppm	1	10000
Copper	Cu	ppm	1	10000
Mercury**	Hg	ppm	1	10000
Molybdenum	Mo	ppm	1	10000
Nickel	Ni	ppm	1	10000
Lead	Pb	ppm	1	10000
Zinc	Zn	ppm	2	10000

**Hg is only offered with the aqua regia digestion.



Assay Procedure – ME-OG62
**Ore Grade Elements by Four Acid Digestion Using
Conventional ICP-AES Analysis**

Sample Decomposition: HNO₃-HClO₄-HF-HCl Digestion (ASY-4A01)
Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)*

Assays for the evaluation of ores and high-grade materials are optimized for accuracy and precision at high concentrations. Ultra high concentration samples (> 15 -20%) may require the use of methods such as titrimetric and gravimetric analysis, in order to achieve maximum accuracy.

A prepared sample is digested with nitric, perchloric, hydrofluoric, and hydrochloric acids, and then evaporated to incipient dryness. Hydrochloric acid and de-ionized water is added for further digestion, and the sample is heated for an additional allotted time. The sample is cooled to room temperature and transferred to a volumetric flask (100 mL). The resulting solution is diluted to volume with de-ionized water, homogenized and the solution is analyzed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry.

***NOTE:** ICP-AES is the default finish technique for ME-OG62. However, under some conditions and at the discretion of the laboratory an AA finish may be substituted. The certificate will clearly reflect which instrument finish was used.

Element	Symbol	Units	Lower Limit	Upper Limit
Silver	Ag	ppm	1	1500
Arsenic	As	%	0.01	30
Bismuth	Bi	%	0.01	30
Cadmium	Cd	%	0.0001	10
Cobalt	Co	%	0.001	20



Element	Symbol	Units	Lower Limit	Upper Limit
Chromium	Cr	%	0.002	30
Copper	Cu	%	0.001	40
Iron	Fe	%	0.01	100
Manganese	Mn	%	0.01	50
Molybdenum	Mo	%	0.001	10
Nickel	Ni	%	0.001	30
Lead	Pb	%	0.001	20
Zinc	Zn	%	0.001	30

Geochemical Procedure - PGM-ICP23 and PGM-ICP24 **Precious Metals Analysis Methods**

Sample Decomposition: Fire Assay Fusion (FA-FUSPG1,
FA-FUSPG2)

Analytical Method: Inductively Coupled Plasma – Atomic
Emission Spectrometry (ICP-AES)

A prepared sample (30 – 50 g) is fused with a mixture of lead oxide, sodium carbonate, borax and silica, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead. The bead is digested for 2 minutes at high power by microwave in dilute nitric acid. The solution is cooled and hydrochloric acid is added. The solution is digested for an additional 2 minutes at half power by microwave. The digested solution is then cooled, diluted to 4 mL with 2 % hydrochloric acid, homogenized and then analyzed for gold, platinum and palladium by inductively coupled plasma – atomic emission spectrometry.

Method Code	Element	Symbol	Units	Sample Mass (g)	Lower Limit	Upper Limit	Default Overlimit Method
PGM-ICP23	Gold	Au	ppm	30	0.001	10	Au-GRA21
PGM-ICP23	Platinum	Pt	ppm	30	0.005	10	PGM-ICP27
PGM-ICP23	Palladium	Pd	ppm	30	0.001	10	PGM-ICP27
PGM-ICP24	Gold	Au	ppm	50	0.001	10	Au-GRA21
PGM-ICP24	Platinum	Pt	ppm	50	0.005	10	PGM-ICP27
PGM-ICP24	Palladium	Pd	ppm	50	0.001	10	PGM-ICP27

SCHEDULE 5

ANALYTICAL PROTOCOL SGS

ICM90A:

Determination of Fifty-five (55) Elements in Geological Samples using Sodium Peroxide Fusion and a Combination of Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

1. Parameter(s) measured, unit(s):

Silver (Ag); Aluminum (Al); Arsenic (As); Boron (B); Barium (Ba); Beryllium (Be); Bismuth (Bi); Calcium (Ca); Cadmium (Cd); Cerium (Ce); Chromium (Cr); Cobalt (Co); Cesium (Cs); Copper (Cu); Dysprosium (Dy); Erbium (Er); Europium (Eu); Iron (Fe); Gallium (Ga); Gadolinium (Gd); Germanium (Ge); Hafnium (Hf); Holmium (Ho); Indium (In); Potassium (K); Lanthanum (La); Lithium (Li); Lutetium (Lu); Magnesium (Mg); Manganese (Mn); Molybdenum (Mo); Niobium (Nb); Neodymium (Nd); Nickel (Ni); Phosphorus (P); Lead (Pb); Praseodymium (Pr); Rubidium (Rb); Scandium (Sc); Samarium (Sm); Tin(Sn); Strontium (Sr); Tantalum (Ta); Terbium (Tb); Thallium (Tl); Thorium (Th); Titanium (Ti); Thulium (Tm); Uranium (U); Vanadium(V); Tungsten(W); Yttrium (Y); Ytterbium (Yb); Zinc (Zn); Zirconium (Zr) : ppm and %

2. Typical sample size:

0.10 g

3. Type of sample applicable (media):

Crushed and Pulverized rocks, soils and sediments

4. Sample preparation technique used:

Crushed and pulverized rock, soil and /or sediment samples are fused by Sodium peroxide in graphite crucibles and dissolved using dilute HNO₃.

During digestion the sample is split into 2 and half is given to ICP-OES and the other half is given to ICP-MS.

5. Method of analysis used:

The digested sample solution is analyzed by inductively coupled plasma Optical Emission Spectrometer (ICP-OES) and inductively coupled plasma Mass Spectrometer (ICP-MS). Samples are analyzed against known calibration materials to provide quantitative analysis of the original sample.

6. Data reduction by:

The results are exported via computer, on line, data fed to the SGS Laboratory Information Management System (SLIM) with secure audit trail.

7. Figures of Merit:

This method has been fully validated for the range of samples typically analyzed. Method validation includes the use of certified reference materials, replicates and blanks to calculate accuracy, precision, linearity, range, limit of detection, limit of quantification, specificity and measurement uncertainty.

Element	Reporting Limit (ppm)						
Ag	1.00	Er	0.05	Mn	10	Tb	0.05
Al	0.01(%)	Eu	0.05	Mo	2.00	Th	0.10
As	30	Fe	0.01(%)	Nb	1.00	Ti	0.01(%)
Ba	0.50	Ga	1.00	Nd	0.10	Tl	0.50
Be	5.00	Gd	0.05	Ni	5.00	Tm	0.05

Element	Reporting Limit (ppm)						
Bi	0.10	Ge	1.00	P	0.01(%)	U	0.05
Ca	0.01(%)	Hf	1.00	Pb	5.00	V	5.00
Cd	0.20	Ho	0.05	Pr	0.05	W	1.00
Ce	0.10	In	0.20	Rb	0.20	Y	0.50
Co	0.50	K	0.01(%)	Sc	5.00	Yb	0.10
Cr	10	La	0.10	Sm	0.10	Zn	5.00
Cs	0.10	Li	10	Sn	1.00	Zr	0.50
Cu	5.00	Lu	0.05	Sr	0.10		
Dy	0.05	Mg	0.01(%)	Ta	0.50		

The estimated Measurement Uncertainty (MU) has been established for the following base metal parameters of this method at the following concentration ranges and is based on laboratory replicate data (comprising of different samples, analysts, laboratory conditions, equipment, etc.,)

Estimated Measurement Uncertainty (MU) +/- (ppm)

Concentration Range (ppm)	Element	Concentration (ppm)	Element	Concentration (ppm)	Element	Concentration (ppm)
0.05 - 0.25 ppm	Ag		As		Ba	
0.25 - 0.50 ppm						
0.5 – 2.5 ppm		0.6931				0.731946
2.5 – 5.0 ppm		0.9944				1.125989
5.0 – 25 ppm				2.2704		1.377073
25 - 50 ppm				3.7062		1.917075
50 -250 ppm				16.5297		6.39321
250 – 500 ppm						12.84899
500 – 2500 ppm						32.72326
2500 – 5000 ppm						97.18658
0.05 - 0.25 ppm	Be		Bi	0.032878	Cd	
0.25 - 0.50 ppm				0.0615		0.11453
0.5 – 2.5 ppm				0.169924		0.21918
2.5 – 5.0 ppm				0.4480		0.37862
5.0 – 25 ppm		0.669509		1.318571		1.099363
25 - 50 ppm		4.483023		3.029663		
50 -250 ppm		9.848143		7.855977		
250 – 500 ppm						
500 – 2500 ppm						
2500 – 5000 ppm						
0.05 - 0.25 ppm	Ce		Co	0.08131	Cr	
0.25 - 0.50 ppm				0.159567		
0.5 – 2.5 ppm		0.211115		0.32661		
2.5 – 5.0 ppm		0.715622		0.436596		4.366711
5.0 – 25 ppm		0.890837		2.454314		6.280422
25 - 50 ppm		1.638983		4.606485		10.90949
50 -250 ppm		4.484443				30.42994
250 – 500 ppm						60.49221
500 – 2500 ppm						
2500 – 5000 ppm						

0.05 - 0.25ppm	Cs	0.057182	Cu		Dy	0.047289
0.25 - 0.50 ppm		0.086314				0.05236
0.5 – 2.5 ppm		0.142073				0.113318
2.5 – 5.0 ppm		0.322706				
5.0 – 25 ppm		0.44628		1.046988		0.392534
25 - 50 ppm		1.959416		3.195025		
50 -250 ppm		4.995059		7.385633		
250 – 500 ppm		11.47666				
500 – 2500 ppm						
2500 – 5000 ppm						
0.05 - 0.25ppm	Er	0.025473	Eu	0.020645	Ga	
0.25 - 0.50 ppm		0.051552		0.050865		
0.5 – 2.5 ppm		0.176311		0.089462		0.367444
2.5 – 5.0 ppm		0.215674				0.529379
5.0 – 25 ppm		0.7981		0.771359		0.888822
25 - 50 ppm						1.659712
50 -250 ppm		8.853189				4.085391
250 – 500 ppm						
500 – 2500 ppm						
2500 – 5000 ppm						
0.05 - 0.25ppm	Gd	0.044682	Ge		Hf	
0.25 - 0.50 ppm		0.056546				
0.5 – 2.5 ppm		0.113922		0.185841		0.346687
2.5 – 5.0 ppm		0.315314		0.230459		0.261564
5.0 – 25 ppm		0.893597		0.921092		1.606503
25 - 50 ppm		TBD				
50 -250 ppm		9.689842				
250 – 500 ppm						
500 – 2500 ppm						
2500 – 5000 ppm						
0.05 - 0.25ppm	Ho	0.013376	In		La	0.056709
0.25 - 0.50 ppm		0.044264				0.063105
0.5 – 2.5 ppm		0.04961		0.221676		0.187084
2.5 – 5.0 ppm						0.189511
5.0 – 25 ppm						0.666292
25 - 50 ppm						1.426959
50 -250 ppm		3.908226				
250 – 500 ppm						10.45104
500 – 2500 ppm						77.43765
2500 – 5000 ppm						
0.05 - 0.25ppm	Li		Lu	0.018346	Mn	
0.25 - 0.50 ppm				0.035913		
0.5 – 2.5 ppm				0.132876		
2.5 – 5.0 ppm						
5.0 – 25 ppm		1.672568				3.407691
25 - 50 ppm		3.535235				7.282542
50 -250 ppm		6.599281				16.02434
250 – 500 ppm		14.56647				38.65566
500 – 2500 ppm		41.88392				108.519
2500 – 5000 ppm		190.3097				
5000 - 25000 ppm		453.7326				

0.05 - 0.25 ppm						
0.25 - 0.50 ppm						0.092466
0.5 – 2.5 ppm		0.217599		0.32418		0.173652
2.5 – 5.0 ppm		0.510872		0.191314		0.413716
5.0 – 25 ppm		0.940644		0.698331		
25 – 50 ppm		2.03401		3.012882		1.53025
50 -250 ppm		5.443961		12.14397		4.38649
250 – 500 ppm						
500 – 2500 ppm				106.743		58.06495
2500 – 5000 ppm						
0.05 - 0.25 ppm						0.024664
0.25 - 0.50 ppm						0.054043
0.5 – 2.5 ppm						0.105083
2.5 – 5.0 ppm						0.231189
5.0 – 25 ppm		2.87038		1.683587		0.768758
25 – 50 ppm		3.745684		4.985428		
50 -250 ppm		8.810247		7.791781		
250 – 500 ppm		24.90757		23.56788		
500 – 2500 ppm						
2500 – 5000 ppm						
0.05 - 0.25 ppm						
0.25 - 0.50 ppm						
0.5 – 2.5 ppm		0.287604		0.140455		
2.5 – 5.0 ppm		0.538006		0.27757		0.599676
5.0 – 25 ppm		0.653149		0.942717		2.27187
25 – 50 ppm		1.398444				
50 -250 ppm		6.61988				
250 – 500 ppm		16.16728				
500 – 2500 ppm		57.98209				
2500 – 5000 ppm		184.5826				
0.05 - 0.25 ppm		0.038091				
0.25 - 0.50 ppm		0.081065				
0.5 – 2.5 ppm		0.186861		0.723596		
2.5 – 5.0 ppm		0.23763		0.851477		
5.0 – 25 ppm		0.792076		0.851653		1.189068
25 – 50 ppm				3.28263		2.136811
50 -250 ppm		9.772889		9.549912		4.976979
250 – 500 ppm				26.87868		18.7175
500 – 2500 ppm						41.56371
2500 – 5000 ppm						
0.05 - 0.25 ppm				0.017546		0.03058
0.25 - 0.50 ppm				0.038088		0.062868
0.5 – 2.5 ppm		0.102164		0.119618		0.164533
2.5 – 5.0 ppm		0.414192				0.185561
5.0 – 25 ppm		1.896906				0.737212
25 – 50 ppm		3.058458		1.632933		2.196419
50 -250 ppm		8.954532				8.453535
250 – 500 ppm						
500 – 2500 ppm						
2500 – 5000 ppm						

0.05 - 0.25 ppm	Tl	Tm	0.024218	U	0.030155
0.25 - 0.50 ppm			0.040276		0.064108
0.5 – 2.5 ppm			0.112212		0.124005
2.5 – 5.0 ppm					0.219119
5.0 – 25 ppm					0.849722
25 – 50 ppm			1.603656		1.854839
50 -250 ppm					9.798346
250 – 500 ppm					
500 – 2500 ppm					
2500 – 5000 ppm					
0.05 - 0.25 ppm	V	W		Y	
0.25 - 0.50 ppm					
0.5 – 2.5 ppm			0.084581		0.265339
2.5 – 5.0 ppm			0.20112		0.302959
5.0 – 25 ppm			0.706248		1.192084
25 – 50 ppm			1.664823		2.430986
50 -250 ppm			5.63884		4.700853
250 – 500 ppm					
500 – 2500 ppm					
2500 – 5000 ppm					
0.05 - 0.25 ppm	Yb	Zn		Zr	
0.25 - 0.50 ppm			0.029101		
0.5 – 2.5 ppm			0.05748		0.555347
2.5 – 5.0 ppm			0.179688		0.853473
5.0 – 25 ppm			0.233002		1.875124
25 – 50 ppm			0.643671		3.021955
50 -250 ppm			3.673607		6.832223
250 – 500 ppm			6.516897		22.90411
500 – 2500 ppm					
2500 – 5000 ppm					

8. Quality control:

Instrument calibration is performed for each batch or work order and calibration checks are analyzed within each analytical run. Quality control materials include method blanks, replicates and reference materials and are randomly inserted with the frequency set according to method protocols at ~14%. Quality assurance measures of precision and accuracy are verified statistically using SLIM control charts with set criteria for data acceptance. Data that fails is subject to investigation and repeated as necessary.

9. Accreditation:

The Standards Council of Canada has accredited this test in conformance with the requirements of ISO/IEC 17025. See www.scc.ca for scope of accreditation

SCHEDULE 6
VERIFICATION ANALYZES ALS VS SGS

Verification analyzes ALS vs SGS

Sample #	Easting	Northing	Au	Pt	Pd	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb
			ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	
15509	435351.76	5719949.24	0.003	-0.005	-0.001	-0.5	8.51	6	140	1	2	0.37	-0.5		2	162		2	0.58	40	2.56	-10		0.14	95	-1	4	7	900	9	-0.01	-5
15509						-1	9.28	14	141	-5	4	0.5	-0.2	2	1.1	350	10.2	-5	0.54		2.6		20	0.12	110	2		11	900	13	0.2	
16556	435097.89	5720121.85	0.028	-0.005	-0.001	-0.5	5.88	2310	70	131.5	23	0.32	-0.5		5	261		8	1.53	20	1.28	-10		0.36	961	1	2.26	12	410	10	0.01	-5
16556						-1	5.68	1640	73.9	135	17.8	0.3	0.2	3.4	5.2	470	27.1	5	1.39		1.7		70	0.37	870	3		18	500	7	0.3	
16759	434522.09	5719655.18	0.001	-0.005	-0.001	-0.5	7.07	6590	20	1.4	-2	0.61	-0.5		1	197		-1	1.03	20	1.11	-10		0.05	1110	-1	3.46	1	700	12	0.01	-5
16579						-1	7.72	5990	21.8	-5	2.8	0.7	0.3	1.8	1.1	550	4.2	5	1.19		1.4		40	0.06	1310	-2		10	800	9	0.2	
16760	434491.15	5719647.33	0.011	-0.005	-0.001	-0.5	6.96	10000	50	2	4	0.45	-0.5		1	227		1	1.08	30	1.07	-10		0.03	234	-1	3.38	-1	720	12	0.03	-5
16760						-1	6.78	11000	47.2	-5	6.2	0.4	-0.2	1.4	0.9	430	3.3	-5	0.93		1.1		20	0.04	240	-2		11	700	11	0.9	
16772	434462.06	5719462.16	0.106	-0.005	-0.001	-0.5	7.05	55	380	1.5	47	0.35	-0.5		2	269		4	0.7	20	4.98	-10		0.09	176	1	2.37	4	740	24	0.01	8
16772						-1	6.93	59	367	-5	40.2	0.3	-0.2	5	1.5	440	6.1	-5	0.52		5.3		10	0.09	180	-2		12	700	21	0.1	
16773	434513	5719654	0.002	-0.005	0.001	-0.5	6.73	4140	10	1.6	18	0.65	-0.5		2	374		4	1.01	20	0.95	10		0.12	176	1	3.76	4	750	16	0.01	7
16773						-1	6.59	3870	12	-5	12.9	0.7	-0.2	12.7	1.7	320	5.2	-5	1.03		1		60	0.12	180	2		10	800	11	0.2	
16777	434568.01	5719698.97	0.011	-0.005	-0.001	0.9	6.47	2310	20	1.5	6	0.31	-0.5		1	261		264	0.92	30	1.22	-10		0.06	993	20	2.69	6	530	18	0.04	-5
16777						-1	7.26	2310	21.5	-5	9.6	0.4	0.4	2.5	1.5	340	4.2	268	0.88		1.4		30	0.07	1150	26		13	600	12	0.3	
16778	434582.5	5719713.42	0.005	-0.005	-0.001	-0.5	7.24	1005	50	39.3	4	0.35	-0.5		3	203		32	0.68	30	2.45	-10		0.08	825	16	3.35	8	890	16	0.02	-5
16778						-1	7.6	874	54	39	3.7	0.4	0.3	1.8	2.7	260	7	31	0.68		2.6		40	0.09	910	22		11	900	18	0.3	
16779	434613.59	5719742.45	0.004	-0.005	-0.001	-0.5	7.26	1670	20	1.8	6	0.35	-0.5		1	210		25	0.72	30	2.04	-10		0.04	985	18	3.44	5	790	13	0.01	-5
16779						-1	7.42	1400	21.5	-5	4	0.3	0.3	3.1	1.4	280	5.7	15	0.69		2.1		30	0.04	1030	23		10	700	15	0.3	
16786	434650.84	5719747.01	0.002	-0.005	-0.001	-0.5	6.13	5680	50	1.3	16	0.32	-0.5		3	354		12	1.17	30	2.25	10		0.15	162	1	1.85	21	510	17	0.01	-5
16786						-1	5.84	4530	54.2	-5	16.1	0.3	-0.2	21.7	1.4	450	6.9	6	1.04		2.3		60	0.14	170	5		13	500	16	0.6	
16787	434658.57	5719764.91	0.002	-0.005	-0.001	-0.5	8.26	1535	70	2.7	3	0.49	-0.5		3	181		20	0.61	30	2.04	10		0.06	216	1	4.31	13	860	20	-0.01	-5
16787						-1	8.02	1100	66.1	-5	1.8	0.5	-0.2	5.9	1.1	250	4.2	7	0.54		2.1		30	0.05	210	5		10	0.08	17	0.3	
16788	434713.15	5719853.56	0.003	-0.005	-0.001	-0.5	7.09	-5	20	23	-2	0.69	-0.5		-1	258		5	0.46	30	0.51	10		0.07	176	-1	4.79	6	750	11	-0.01	-5
16788						-1	7.41	6	27.8	24	-0.1	0.7	-0.2	1.9	0.7	320	4.3	-5	0.42		0.5		30	0.07	180	7		7	700	15	0.3	
16791	434694.37	5719871.36	0.001	-0.005	-0.001	-0.5	10.6	348	100	4.4	2	6.93	-0.5		2	97		78	0.46	20	0.21	-10		0.08	105	-1	3.94	13	240	-2	0.04	-5
16791						-1	14	253	93.9	-5	-0.1	6.5	-0.2	1.2	2.4	120	22.7	78	0.49		0.2		70	0.11	110	4		17	300	7	0.2	
16792	434695.95	5719875.32	-0.001	-0.005	0.001	-0.5	11.1	6	760	3.9	-2	3.93	-0.5		2	157		4	0.7	20	1.29	10		0.6	155	13	4.12	8	990	-2	-0.01	-5
16792						-1	13.8	7	708	-5	-0.1	3.7	-0.2	4.2	2.9	200	49.7	8	0.82		1.3		230	0.96	180	16		13	900	9	0.1	
	Sc	Sr	Th	Ti	Tl	U	V	W	Zn	Dy	Er	Eu	Ga	Gd	Ge	Hf	Ho	In	La	Lu	Nb	Nd	Pr	Rb	Sm	Sn	Ta	Tb	Tm	Y	Yb	Zr
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
15509	6	76	-20	0.02	-10	10	3	10	6																							
15509	-5	95.3	0.9	0.02	0.6	1.3	5	9	18	0.18	0.11	0.15	33	0.17	2	2	-0.05	-0.2	1.2	0.06	15	0.										

Verification analyzes ALS vs SGS