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NTS: 23B/11
Easting: 624885 E
Northing: 6831337 N

**GEOLOGICAL REPORT
ON THE ECONOMIC POTENTIAL OF
FERMONT GRAPHITE PROSPECTS
Basset Township
Northern Quebec**

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APPENDIXES

APPENDIX A

Description Report of the Fermont (site 3, 5, and 6 prospect)
(Ministry of Natural Resources of Quebec)

APPENDIX B

Description Report of the Fermont (site 7 & 9) prospect
(Ministry of Natural Resources of Quebec)

APPENDIX C

Description Report of the Fermont (site 11) prospect
(Ministry of Natural Resources of Quebec)

APPENDIX D

Description Report of Lake Knife prospect -R
(Ministry of Natural Resources of Quebec)

APPENDIX E

Description Report of Lake Knife deposit
(Ministry of Natural Resources of Quebec)

1.0 INTRODUCTION

Between October 15 and November 10th 2017, the writer conducted a geological research on the graphite potential of the Fermont property located in the northern part of Quebec.

The purpose of the report is to summarize the previous exploration work programs completed on the property and the regional area by different exploration companies as well as investigating the economic potential of the property.

Geological information in this report is gathered from all available geological, geochemical and diamond drilling data of previous exploration programs and results completed on the property between 1959 and 2014.

Government assessment reports, regional geological information and claim data are all gathered from the Ministry of Natural Resources of Quebec.

2.0 LOCATION & ACCESS (Figure 1&2)

The Fermont property (Figures 1 & 2) is located in the heart of Canada's premier iron ore mining district, the Labrador Trough. The property is easily accessible and located close to power, roads and two railways connecting to three ports on Quebec's north shore of the St. Lawrence Seaway. The property is well located with respect to Highways, access roads and railway; it is only 10 kilometers by road from the mining center of Fermont where all facilities essential for large scale production are close at hand allowing for servicing a major mining project.

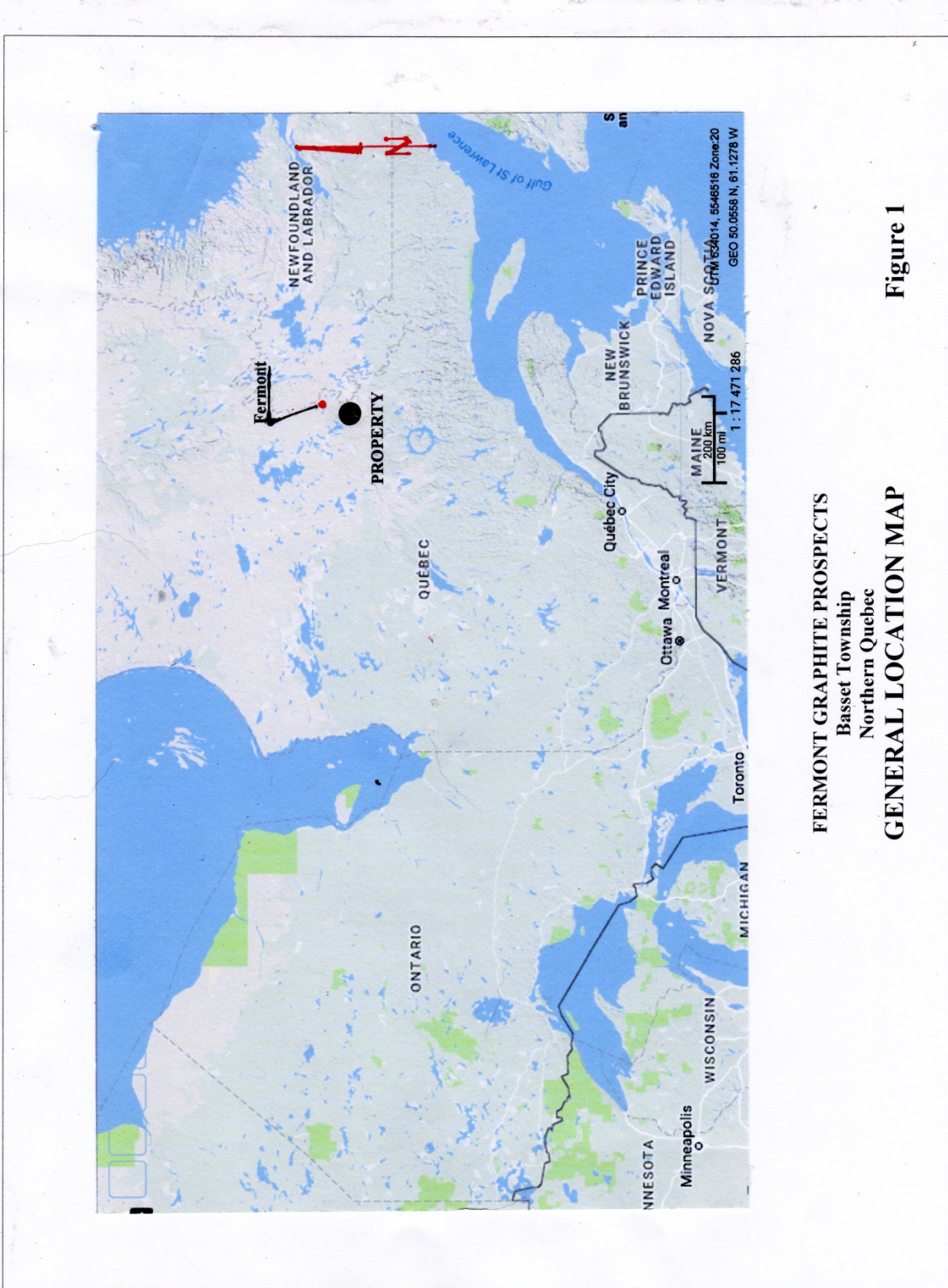
The property is reachable by paved road from the town of Fermont by travelling north for 3 kilometers to connect with Highway 389 then by following the same route going west for 10 kilometers, then travelling south on route paved road for approximately another 20 kilometers to reach the central part of the property and approximately one kilometer north of the Fermont graphite drill sites 7&9. Railway line is located just 25 kilometers north of the property.

The Fermont property lies within the Canadian Shield; topography of the property is moderate with areas of high ground at the far south end, gradually decreasing

towards the northwest. Elevation is about 1,750 feet above sea level and local relief being 500 to 600 feet. The terrain has been glaciated with remnant glacial debris in varying amounts as surficial material.

The climate around the general area of the property is characterized by mild summer and long winter, generally extending from late October until late April, daily mean winter temperatures average -24 and -22° in January and February, snowfall in November, December and January generally exceeds 50 cm per month while the mean average temperature in summer is 11-12°. Vegetation is usually spruce, tamarack and poplar the dominant trees.

Glaciation left a veneer of moraine boulder till and eskers covering the local bedrock. These glacial deposits dominate the local topography and control most of the surface drainage. Lakes, swamps and grassy meadows fill bedrock and drift depressions.



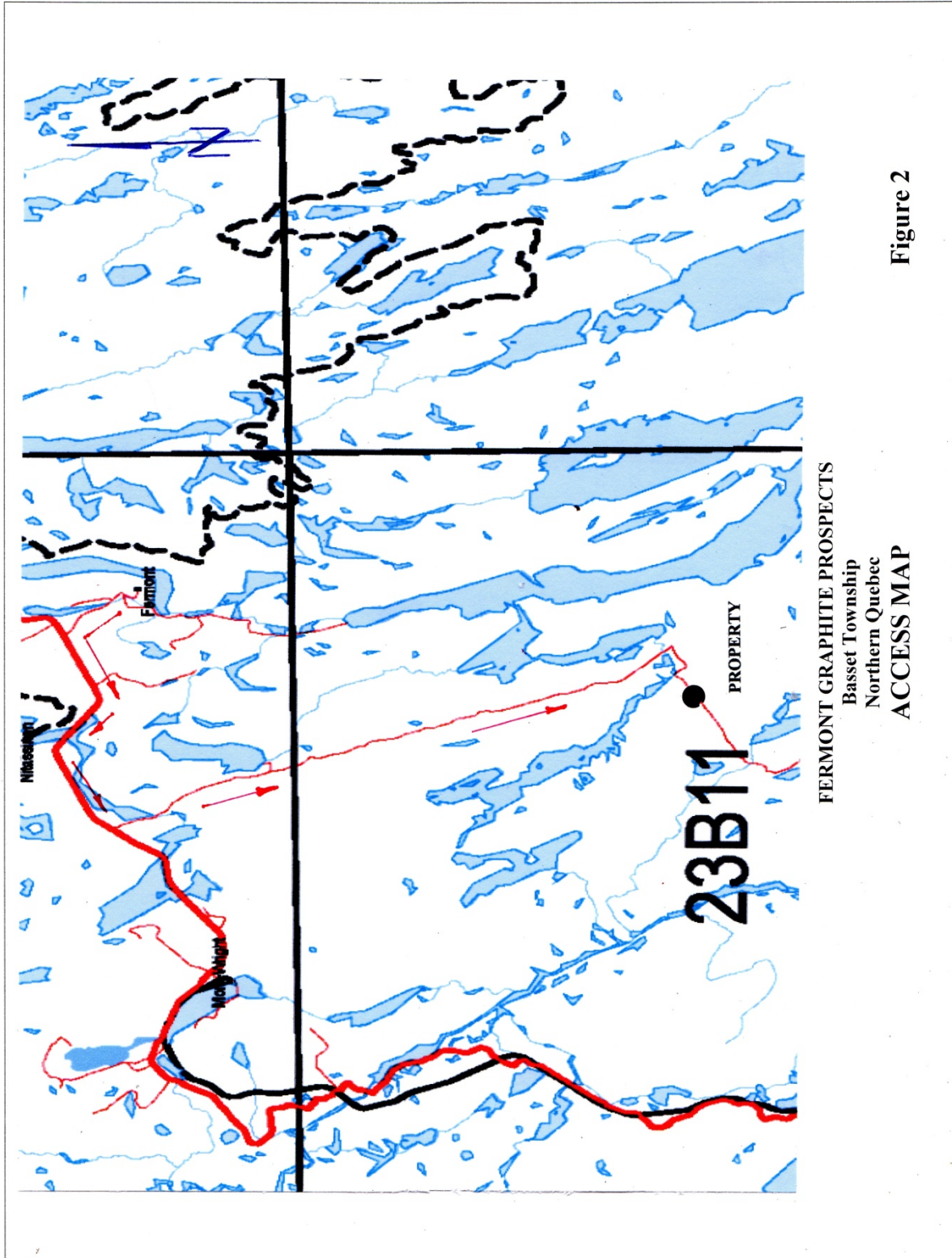


Figure 2

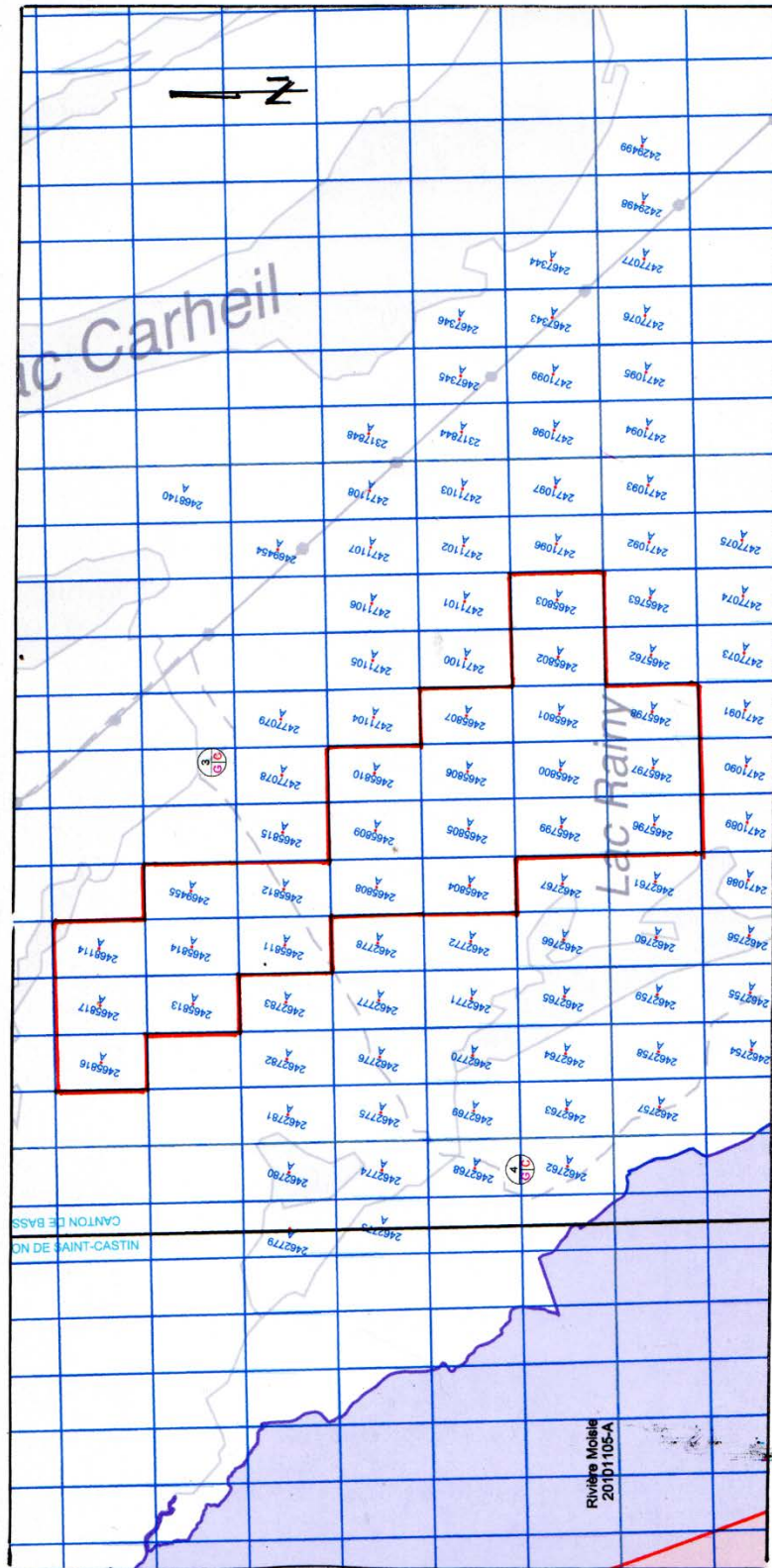
3.0 PROPERTY STATUS (Figure 3&4)

The property consists of twenty three contiguous claims covering a total of 1,203 hectares located in map sheet area 23B/11. The property is centered at GPS 624933 E - 5831522 N close to the Fermont 7&9 drill site which is centered at G.P.S 624885 E-5831337 N.

Permanent claim data is as follow:

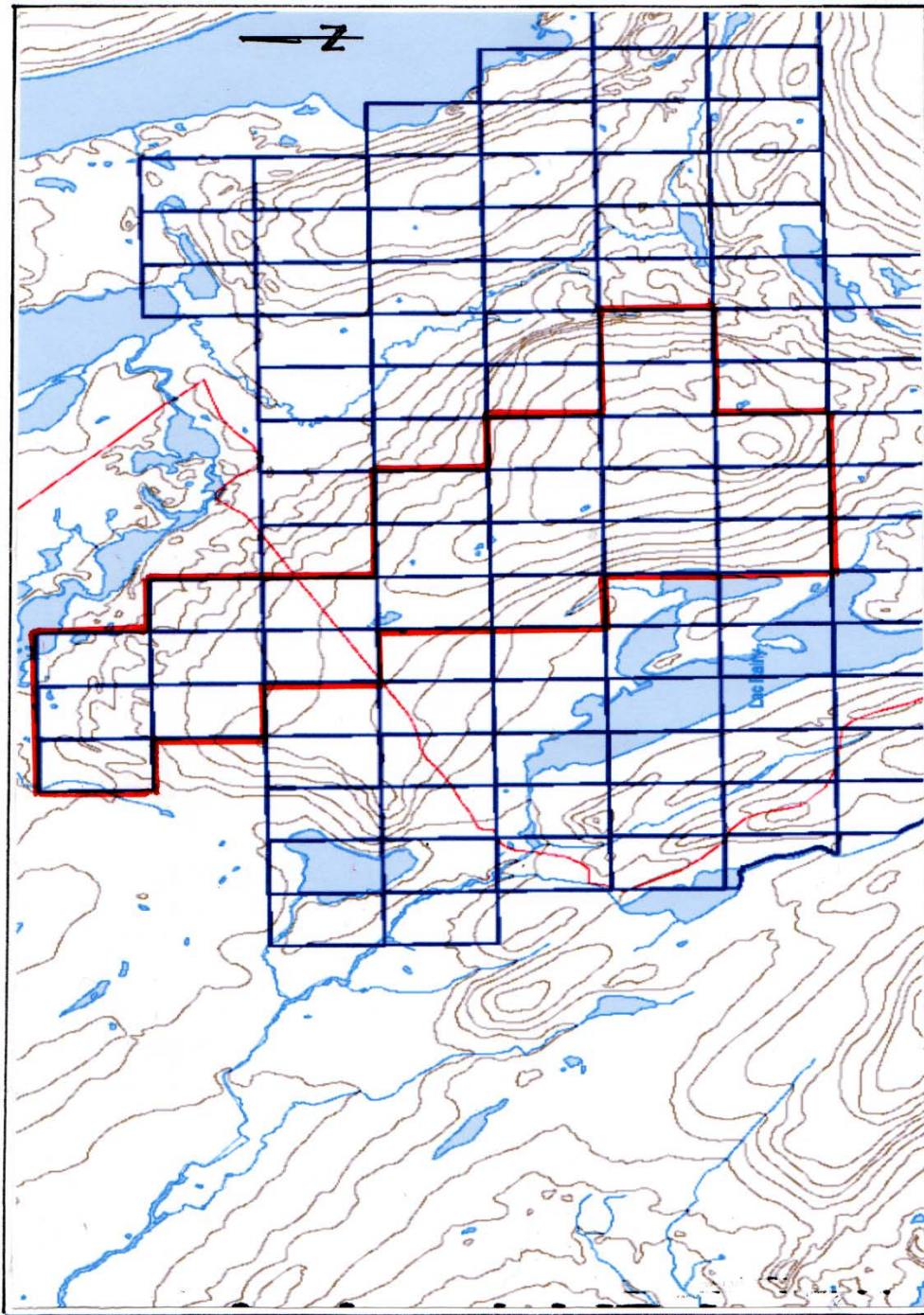
CDC #	ROW	COLUMN	AREA (hec)	EX DATE
2465816	18	38	52.28	2018/10/12
2465817	18	39	52.28	2018/10/12
2468114	18	40	52.28	2018/11/06
2465813	17	39	52.29	2018/10/12
2465814	17	40	52.29	2018/10/12
2469455	17	41	52.29	2018/11/14
2465811	16	40	52.30	2018/10/12
2465812	16	41	52.30	2018/10/12
2465808	15	41	52.31	2018/10/12
2465809	15	42	52.31	2018/10/12
2465810	15	43	52.31	2018/10/12
2465804	14	41	52.32	2018/10/12
2465805	14	42	52.32	2018/10/12
2465806	14	43	52.32	2018/10/12
2465807	14	44	52.32	2018/10/12
2465799	13	42	52.33	2018/10/12
2465800	13	43	52.33	2018/10/12
2465801	13	44	52.33	2018/10/12
2465802	13	45	52.33	2018/10/12
2465803	13	46	52.33	2018/10/12
2465796	12	42	52.34	2018/10/12
2465797	12	43	52.34	2018/10/12
2465798	12	44	52.34	2018/10/12

The total area of the property is 12.03 square kilometers, 1,203 hectares. According to Quebec government records, no part of the land covered by the property is restricted from exploration activities.



FERMONT GRAPHITE PROSPECTS
Basset Township
Northern Quebec
CLAIM MAP

Figure 3



FERMONT GRAPHITE PROSPECTS
Basset Township
Northern Quebec
TOPOGRAPHIC CLAIM MAP

Figure 4

4.0 WHAT IS GRAPHITE?

4.1 BACKGROUND

Carbon has two natural crystalline allotropic forms: graphite and diamond. Each has its own distinct crystal structure and properties.

Graphite derives its name from the Greek word "graphein", to write. The material is generally greyish-black, opaque and has a lustrous black sheen. It is unique in that it has properties of both a metal and a non-metal. It is flexible but not elastic, has a high thermal and electrical conductivity, and is highly refractory and chemically inert. Graphite has a low adsorption of X-rays and neutrons making it a particularly useful material in nuclear applications.

The unusual combination of properties is due its crystal structure. (Figure 1.) The carbon atoms are arranged hexagonally in a planar condensed ring system. The layers are stacked parallel to each other. The atoms within the rings are bonded covalently, whilst the layers are loosely bonded together by van der Waals forces. The high degree of anisotropy in graphite results from the two types of bonding acting in different crystallographic directions. For example, graphite's ability to form a solid film lubricant comes from these two contrasting chemical bonds. The fact that weak Van der Waals forces govern the bonding between individual layers permits the layers to slide over one another making it an ideal lubricant. World production of graphite was estimated to be about 602,000 tons in 2000, with China being the biggest producer followed by India, Brazil, Mexico and then the Czech Republic.

Graphite Classifications

There are two main classifications of graphite, natural and synthetic.

Natural Graphite

Natural Graphite is a mineral consisting of graphitic carbon. It varies considerably in crystallinity. Most commercial (natural) graphite is mined and often contains other minerals. Subsequent to mining the graphite often requires a considerable amount of mineral processing such as froth flotation to concentrate the graphite. Natural graphite is an excellent conductor of heat and electricity. It is stable over a wide range of temperatures. Graphite is a highly refractory material with a high melting point (3650°C.)

Natural graphite is subdivided into three types of material:

- *Amorphous*
- *Flake*
- *High Crystalline*

Amorphous Graphite

Amorphous graphite is the least graphitic of the natural graphite. However, the term "amorphous" is a misnomer since the material is still crystalline. Amorphous graphite is found as minute particles in beds of mesomorphic rocks such as coal, slate or shale deposits. The graphite content ranges from 25% to 85% dependent on the geological conditions.

Amorphous graphite is extracted using conventional mining techniques and occurs primarily in Mexico, North Korea, South Korea and Austria.

Flake Graphite

Flake graphite is found in metamorphic rocks uniformly distributed through the body of the ore or in concentrated lens shaped pockets. Carbon concentrations vary between 5% and 40%. Graphite flake occurs as a scaly or lamella form in certain metamorphic rocks such as limestone, gneisses and schists.

Flake graphite is removed by froth flotation. "As floated" graphite contains between 80% and 90% graphite. Flake graphite is produced with >98% through chemical beneficiation processes. Flake graphite occurs in most parts of the world.

Crystalline Graphite

Crystalline vein graphite is believed to originate from crude oil deposits that through time, temperature and pressure have converted to graphite. Vein graphite fissures are typically between 1cm and 1 m thick, and are typically > 90% pure. Although this form of graphite is found all over the world, it is only commercially mined in Sri Lanka by conventional shaft or surface mining techniques.

Synthetic Graphite

Synthetic graphite can be produced from coke and pitch. It tends to be of higher purity though not as crystalline as natural graphite. There are essentially two types of synthetic graphite. The first is electrographite, which is pure carbon produced from calcined petroleum coke and coal tar pitches in an electric furnace. The second type of synthetic graphite is produced by heating calcined petroleum pitch to 2800°C. On the whole synthetic graphite tends to be of a lower density, higher porosity and higher electrical resistance. Its increased porosity makes it unsuitable for refractory applications

Synthetic Graphite consists mainly of graphitic carbon that has been obtained by graphitization, heat treatment of non-graphitic carbon, or by chemical vapor deposition from hydrocarbons at temperatures above 2100K.

4.2 APPLICATIONS

Refractory Materials

Due to its high temperature stability and chemical inertness graphite is a good candidate for a refractory material. It is used in the production of refractory bricks and in the production of “Mag-carbon” refractory bricks (Mg-C.) Graphite is also used to manufacture crucibles, ladles and moulds for containing molten metals. Additionally graphite is one of the most common materials used in the production of functional refractories for the continuous casting of steel. In this application graphite flake is mixed with alumina and zirconia and then isostatically pressed to form components such as stopper rods, subentry nozzles and ladle shrouds used in both regulating flow of molten steel and protecting against oxidation. This type of material may also be used as shielding for pyrometers.

In the production of iron, graphite blocks are used to form part of the lining of the blast furnace. Its structural strength at temperature, thermal shock resistance, high thermal conductivity, low thermal expansion and good chemical resistance are of paramount importance in this application.

The electrodes used in many electrical metallurgical furnaces are manufactured from graphite such as the electric arc furnaces used for processing steel.

Chemical Industry

There are many high temperature uses for graphite in the chemical industry such as in the production of phosphorus and calcium carbide in arc furnaces. Graphite is used as anodes in some aqueous electrolytic processes such as in the production of halogens (chlorine and fluorine.)

Nuclear Industry

High purity electrographite is used in large amounts for the production of moderator rods and reflector components in nuclear reactors. Their suitability arises from their low absorption of neutrons, high thermal conductivity and their high strength at temperature.

Electrical Applications

The main application for graphite as an electrical material is in the manufacture of carbon brushes in electric motors. In this application the performance and lifetime of the component is very dependent on grade and structure.

Mechanical Applications

Graphite is used widely as an engineering material over a variety of applications. Applications include piston rings, thrust bearings, journal bearings and vanes. Carbon based seals are used in the shafts and fuel pumps of many aircraft jet engines.

4.3 GRAPHIT DEMAND

Demand for graphite (carbon) used as anode material in lithium ion batteries is set to increase by over 200% in the next four years as global cell production surges on the back of maturing pure electric vehicle demand and the inception of the utility storage market.

*New data from **Benchmark Mineral Intelligence** forecasts the anode market – which is nearly exclusively served by naturally sourced spherical graphite and synthetically produced graphite – to increase from 80,000 tpa in 2015 to at least 250,000 tpa by the end of 2020 while the market could be as large as 400,000 tpa in the most bullish of cases with no supply restrictions.*

*Taking the most conservative case, **Benchmark** estimates that over 360,000 tonnes of medium flake graphite will be needed as a feedstock source for the spherical material by 2020. This is nearly a doubling of the flake concentrate market in 2015 should the natural-to-synthetic demand proportions remain the same in 2020.*

At present, China produces 100% of the world's spherical graphite which is predominately sourced from mines in Heilongjiang province in the country's north-east.

Demand is being underpinned by major expansions in the lithium ion battery industry that are underway worldwide as the sector matures from megawatt plants to gigawatt scale operations.

***Benchmark** is tracking at least 12 lithium ion megafactories worldwide, seven of which are located in China and two in the US. By far the largest plant under construction is Tesla Motors' Gigafactory 1 in Nevada – a \$5bn investment set to reach its 35GWh capacity by 2020.*

However, nearly 70% of new lithium ion battery demand for raw materials will be coming from China as the country's major cell manufactures, such as ATL and Lishen, expand their operations in a race to become the world's lowest cost producer.

*Investments in new lithium ion battery capacity out to 2020 are in excess of \$12billion and rising according to **Benchmark** data.*

This is set to have a significant impact on demand for graphite anode material as cell manufacturers seek to lock up long term supplies of the material.

5.0 PROPERTY HISTORY AND PREVIOUS WORK (Figure 5, 6 &7)

In 1959:

The earliest record of work completed in the regional area dates back to 1959 when the first graphite zone (Lake Knife) deposit was discovered by D.L. Murphy, a geologist during the summer geological mapping of the area. The discovery zone was described as a three feet wide zone of almost pure graphite on the west shore of Lake Knife. Murphy also mentioned that high grade graphite occurrence was common in the mica-schist rocks covering the area.

Between 1959 and 1989:

No work done on the regional area or on the subject property.

In 1989:

Mazarin Mining Inc. conducted an exploration field work of prospecting, line cutting and ground Mag, EM and V.L.F survey on the lake knife property the work led to the discovery of Lake Knife prospect (Indice R) on the subject property.

In 1990:

An electromagnetic survey airborne system flown over a portion of the Fermont property reveals a multitude of several conductors are associated with iron formations. Keeping in mind the geological similarity with Lake Knife graphite deposit and the Fermont property, it is quite possible that some of these conductors are related to crystalline graphite contents. Thus a combination of surface geological prospecting accompanied by a surface electromagnetic type can have a good degree of success in detecting outcrops of graphite bodies.

In 1992: (GM 39974 &GM 39976)

Mazarin Mining Inc. conducted another exploration field work consisting of prospecting, line cutting, trenching and ground Mag, EM and V.L.F survey on the Fermont and Lake Knife properties intending to explain the electromagnetic conductivity of the rocks that correspond to the graphitic mineralization. The work performed consisted 20.35 km of cut lines, 17.1 km of EM ground survey and trenching. A total 54 samples were analyzed for carbon graphite Cg.

Due to the thickness of the overburden, the trenching program was not effective enough to uncover and investigate graphite mineralization beyond certain depth. Work completed by Mazarin Mining was successful to establish the correspondence between EM rock conductivity and graphitic mineralization. The

electromagnetic survey succeeded to delineate several E.M.H. anomalies showing high level of conductivity, given that the density of graphite is lower compared to the surrounding rocks; gravimetric method would be most effective to follow the E.M.H. anomaly zones.

In 1992:

Lake Rainy graphite prospect, Fermont graphite (site 7.9), Fermont graphite (site 11), Fermont graphite (site 3, 5, 6) and Lake Knife graphite prospects were discovered.

Between 1992 and 2012:

No work done on the property

In 2012: (GM68233)

Nevado Resources Corporation acquired 340 mineral claims in the Fermont area covering the subject property. During the summer until early winter of 2012 an exploration program including prospecting, rock sampling, ground and airborne geophysical survey followed by diamond drilling in order to verify the nature of several electromagnetic conductor that could be held graphitic mineralization located on the property. Results of the 2012 rock sampling program were as follow:

Rock sampling results:

Easting	Northing	Sample #	Cgr %
625324	5830663	1555101	6.26
625326	5830658	1555102	8.31
625530	5830249	1555103	1.94
625700	5830157	1555104	0.02
625699	5830155	1555105	2.57
625713	5830157	1555106	1.78
625889	5830063	1555107	12.15
625888	5830064	1555108	11.15
626783	5830264	1555109	16.8
626902	5830288	1555110	15.45
627296	5829783	1555111	1.38
627284	5829723	1555112	2.43
627284	5829723	1555112	2.43
627303	5829494	1555113	5.33

627323	5829488	1555114	4.97
624667	5831200	1555116	20.3
625531	5830247	1911130	3.91
625332	5830659	1911131	12.05
626381	5829130	1555901	0.2

The above prospecting and rock sampling program has confirmed the presence of graphite mineralization with interesting crystalline graphite contents however the general exposure being very poor,

A total of 70.5 kilometers of high frequency Beep Mat survey controlled by GPS was carried out on 200 meters spacing grid lines. The largest anomalies obtained represent all graphite prospects and several old trenches. The Beep Mat penetrates only a few meters and often an underground water source create weak anomalies called hydraulic anomaly that confuse the interpretation.

The majority of the property area is covered with thick glacial deposit of thick and there are less than 5% of outcrops, in addition the region of Fermont is very rainy and the surface is covered with thick layer of foam up to 50 cm of thickness. The surface prospecting and the Beep Mat have helped to solve some clues about graphite mineralization, but in general these techniques are poorly adapted to this type of terrain and do not allow to properly evaluate the potential of the property.

A helicopter TDEM electromagnetic and magnetic survey was carried out on the Fermont property by GPR International Inc. G.P.R International introduced in 2011 its new helicopter TDEM system with its wide loop, the TDEM system is a high resolution electromagnetic system has high penetration of over 600,000 NIA. This low altitude survey with a line spacing of 200 meters and the precise positioning with GPR differential altimeter has detected more than 467 electromagnetic anomalies many of which are very strong. Figures 5& 6 show the interpreted results of the Mag and electromagnetic airborne survey

A preliminary diamond drilling program of four drill holes was initiated to test 200 meters conductor located at the Fermont site 7 & 9. A total of 1,071 meters of NQ diamond drilling was completed. Drill holes information and drilling results are shown below:

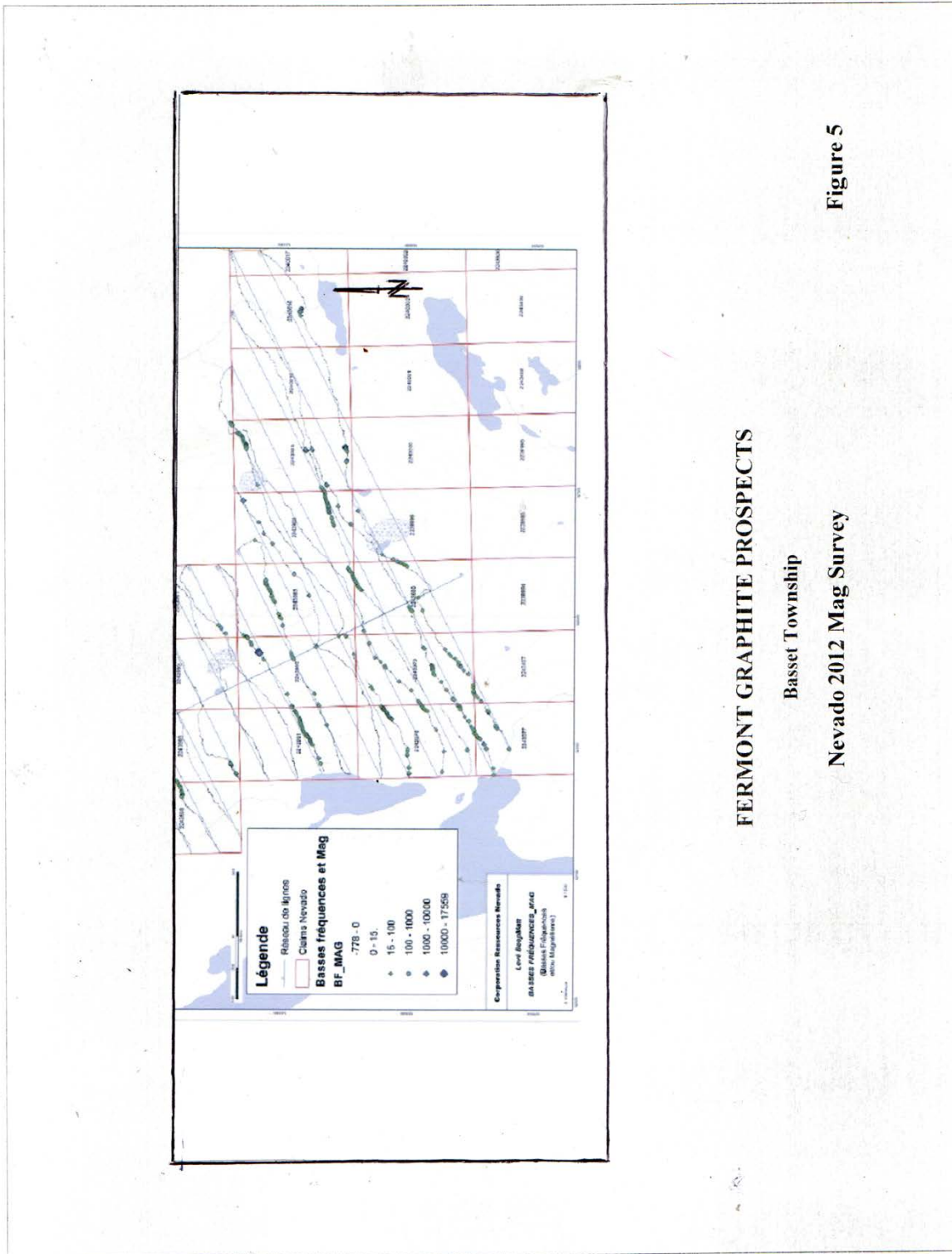
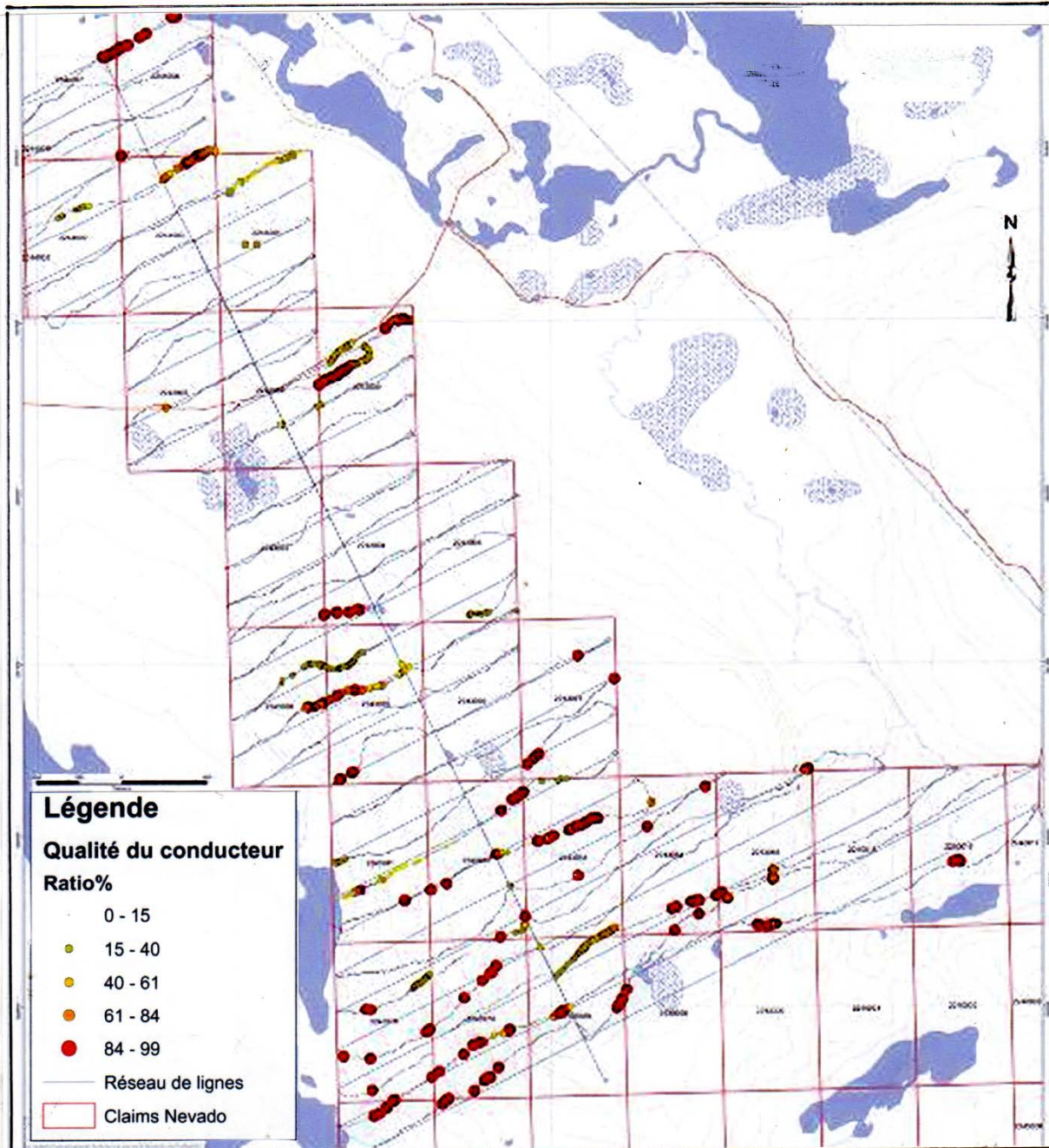


Figure 5

FERMONT GRAPHITE PROSPECTS

Basset Township

Nevado 2012 Mag Survey



FERMONT GRAPHITE PROSPECTS
2012 ELECTROMAGNETIC SURVEY
(After Nevada)

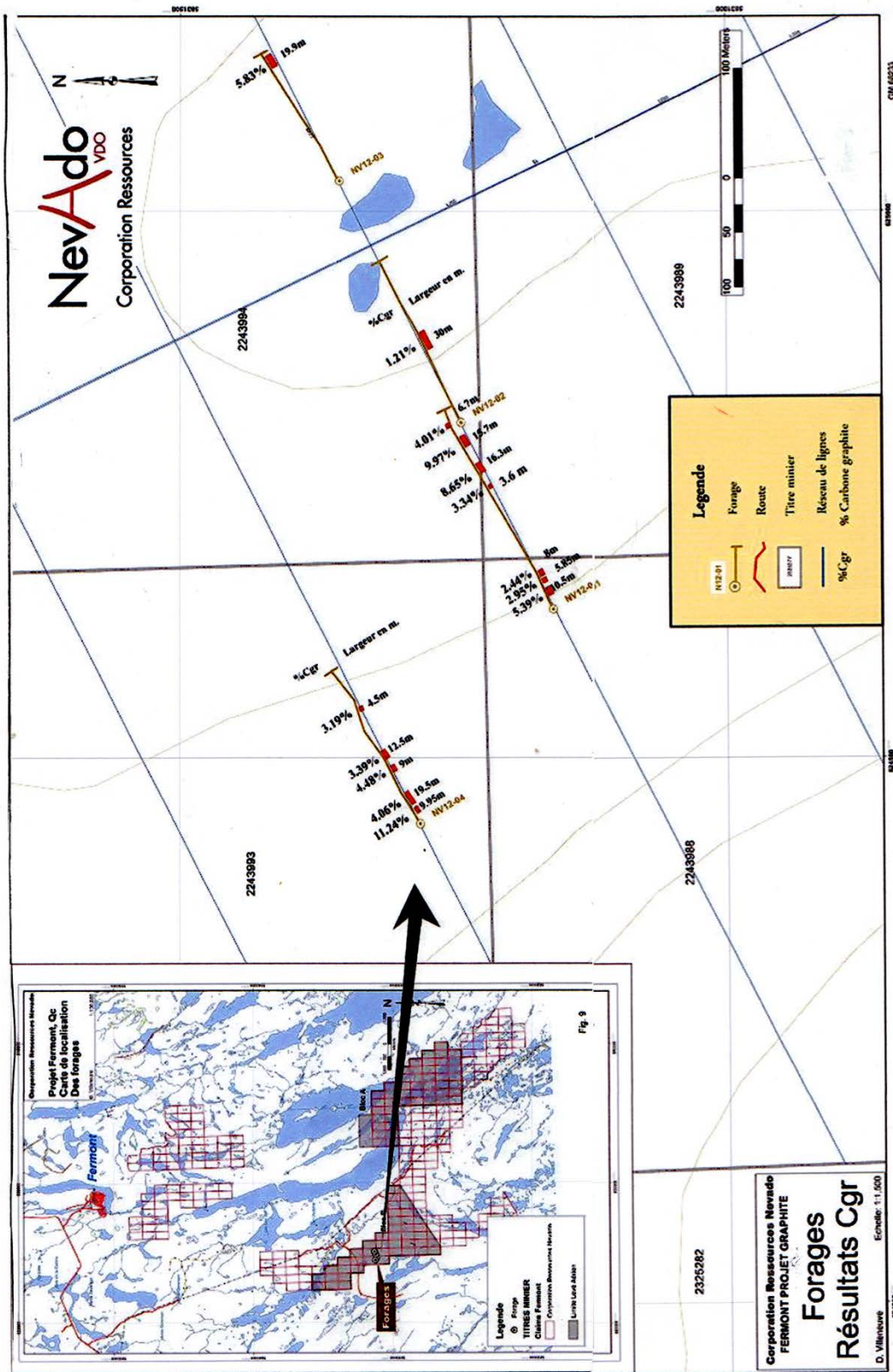
Figure 6

Drill Holes information

Hole #	Easting	Northing	Elevation	Az	Inclination	Length
NV12-01	624636	5831157	684	63	-50	327
NV12-02	624807	5831242	695	63	-50	261
NV12-03	625028	5831354	702	63	-50	225
NV12-04	624439	5831279	671	63	-50	258

Drill Results

Hole #	From (M)	To (M)	Length(M)	Cgr (%)	S (%)
NV12-01	19.5	30	10.5	5.39	4.55
Inc.	25.85	29	3.15	9.85	9.19
	38	43.85	5.85	2.95	4.14
	47.6	55.6	8	2.44	6.57
	213.2	216.8	3.6	3.34	10.18
	231	247.3	16.3	8.64	8.1
	264.8	280.5	15.7	9.97	8.91
Inc.	273	274.5	1.5	19.9	11.6
	301	307.7	6.7	4.01	13.02
NV12-02	114	144	30	1.21	5.54
Incl.	138	141	3	2.76	10.46
NV12-03	194.1	214	19.9	5.83	
Incl.	201	205.5	4.5	13.28	8.05
NV12-04	14.3	20.65	6.35	15.44	9.38
	28.5	48	19.5	4.06	
	84	93	9	4.91	1.97
	106	118.5	12.5	3.39	
	187.5	192	4.5	3.19	



FERMONT GRAPHITE PROSPECTS
 2012 DRILLING RESULTS
 (After Nevada)

Figure 7

6.0 REGIONAL GEOLOGY

Figure 8

The property lies within a Paleo-Proterozoic thrust belt known as the Labrador Trough. The graphite rich schist of the property belong to the Menihek and Iron formations of the Sokoman Gagnon Group of the Paleoproterozoic basin sediments of the Labrador Trough.

The regional area is underlain chiefly by rocks that form the western, miogeosyncline part of the Labrador Trough in the Churchill Province of the Canadian Shield. The Labrador Trough extends for more than 1000 kilometers along the eastern margin of the Superior craton from Ungava Bay to the Manicouagan impact crater, Quebec. The thrust belt is about 100 kilometers wide in its central part and narrows considerably to the north and south.

The Labrador Trough is divided into three geological domains. The Southern Domain defined by the northern limit of the Grenville Orogenic Belt. The Southern Domain encompasses Labrador Through rocks that were metamorphosed during the Grenville Orogeny which involved northward thrusting, northeast-southwest folding, abundant gabbro, anorthosite and pegmatite intrusions, and high grade metamorphism responsible for the recrystallization of primary iron formations. The Central Domain hosts regionally metamorphosed (greenschist facies) iron formation deposits comprising Archaean, mainly sedimentary rocks, including iron formations, volcanic rocks and mafic intrusions. The Northern Domain, north of the leaf Bay area comprises regionally metamorphosed rocks much like those of the Southern Domain.

7.0 PROPERTY GEOLOGY

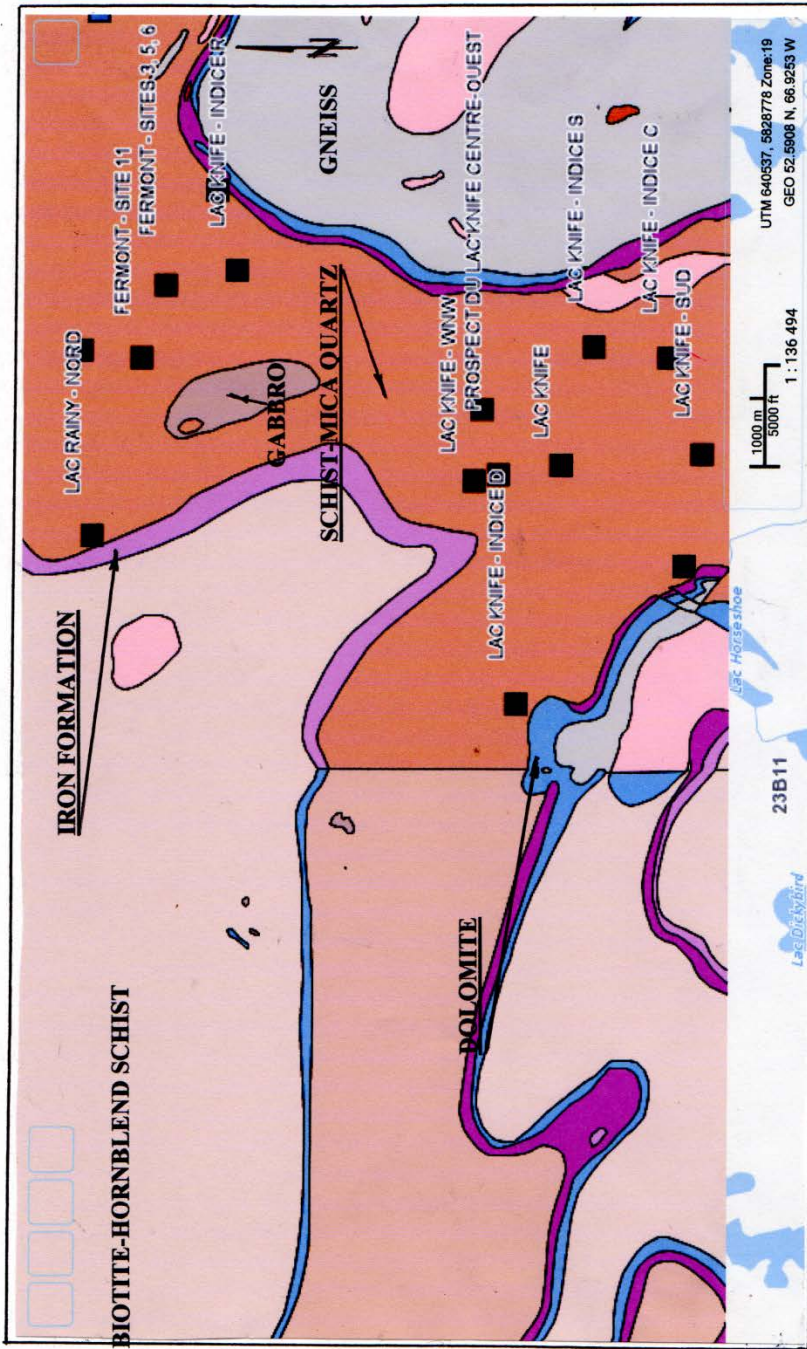
Figure 9

The area of the Fermont property is predominantly underlain by three rock Formations:

- 1- Wabush Formation
- 2- Nault Formation
- 3- Chibougamau Formation

1- Wabush Formation is the iron ore bearing formation and subdivided into Lower, Middle and Upper members and occupies a small portion of the northern part of the property.

2- Nault Formation is the youngest Formation on the property. It consists



FERMONT GRAPHITE PROSPECTS
Basset Township
Northern Quebec
GENERAL GEOLOGY MAP

Figure 8

of a 15-75 meters thick sequence of metamorphosed polytropic sediments. The Formation is commonly fine grained, foliated and variably comprised of quartz-feldspar-mica-graphite schist. Garnets, epidote, chlorite and carbonates are accessory minerals. Graphite is found in rocks where the proportion of mica is relatively high compared with feldspar, quartz and other prismatic minerals such as amphiboles. The rock textures are characterized by a greater proportion of these prismatic minerals, as well as the felsic to mafic minerals segregation.

Rocks of the Nault Formation are well preserved on the vast majority of the property area and extend way beyond the property boundary to the north and south.

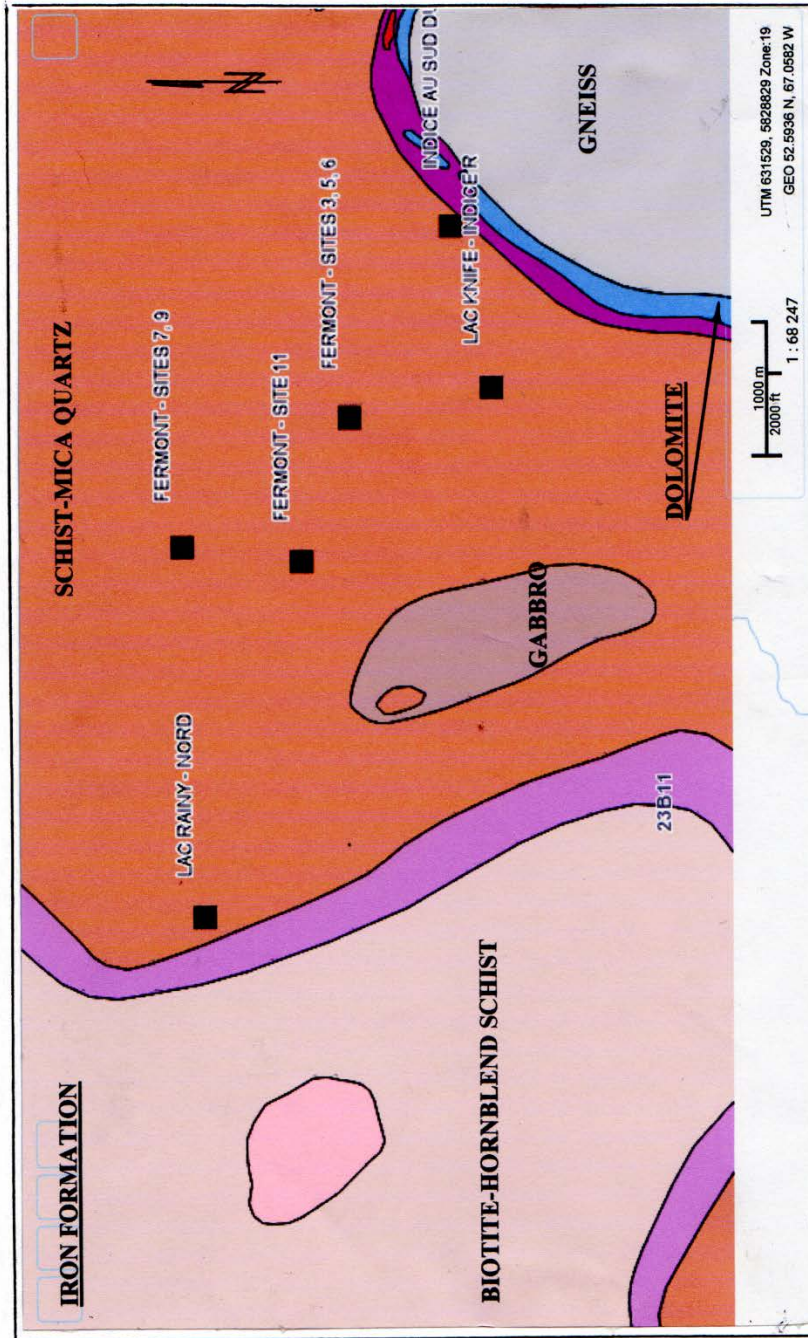
Significantly, several graphite bodies were located within the Nault Formation on the property making it the most important rock Formation and the only host for graphite deposits in the regional area. These rocks are also the host of the Lake knife graphite deposit located 4 kilometers to the southwest.

3- Chibougamau Formation is intrusive rocks comprise the youngest Precambrian rocks in the Wabush Lake area. They consist of the metamorphosed equivalents of massive, medium to coarse grained mafic intrusive, non-magnetic, sill-like bodies with ophitic to sub-ophitic textures.

8.0 MINERALIZATION

Graphite is a polymorph of carbon typically formed through the metamorphism of organic material. It can also appear during the formation of igneous rocks. Metamorphism is the alteration of existing solid rocks due to increasing changes in temperature and pressure, as well as the introduction of chemically active fluids. During metamorphism, the existing rocks become unstable and break down to form new minerals but do so while remaining in a solid state rather than melting. Graphite is produced from the carbon atoms resulting from the metamorphism of minerals such as marble, quartz, calcite, micas, schist, gneiss and tourmaline. Being almost entirely carbon based, graphite shares the same chemical composition as diamonds, but the arrangement of molecules results in a different physical structure.

Graphite on the subject property occurs as part of the metasedimentary rocks of the Menihek Formation. It forms part of local basins in the sediments. There is no indication of secondary hydrothermal alteration or post metamorphic deposition within the local rocks. The distribution and crystallinity of the graphite units are



FERMONT GRAPHITE PROSPECTS
Basset Township
Northern Quebec
PROPERTY GEOLOGY MAP

Figure 9

due to the Grenville metamorphic event, the deposition of carbon-rich sediments, by regional metamorphism, becomes rich paragneiss and paraschist graphite.

Graphite mineralization is widely distributed on the property; several graphite occurrences are located within the metasedimentary rocks in the form of graphite veins. Mineralization is associated with quartz feldspar gneiss, finely grained biotite (2-4 mm). The size of graphite flakes is from 2 to 8 mm. The margins of the graphite bodies are sharp and rapid grade changes with background graphite in the order of <1% Cgr increasing to 5% Cgr to 16.8% Cgr near the contact. The mineralization is generally similar to that found at Lac Knife deposit located 4kilometers southwest of the property.

Graphite mineralization is usually located within large V.L.F. conductive zones. Due to the high conductivity of graphite mineral, electromagnetic survey is considered one of the most effective geophysical tool to explore the property, however since graphite is a non-magnetic element; the Mag survey should be another method to be applied to correlate V.L.F results in order to eliminate anomalies caused by iron formations which are abundant in the Fermont area.

9.0 GEOLOGICAL CHARACTERISTICS OF THE FERMONT GRAPHITE PROSPECTS

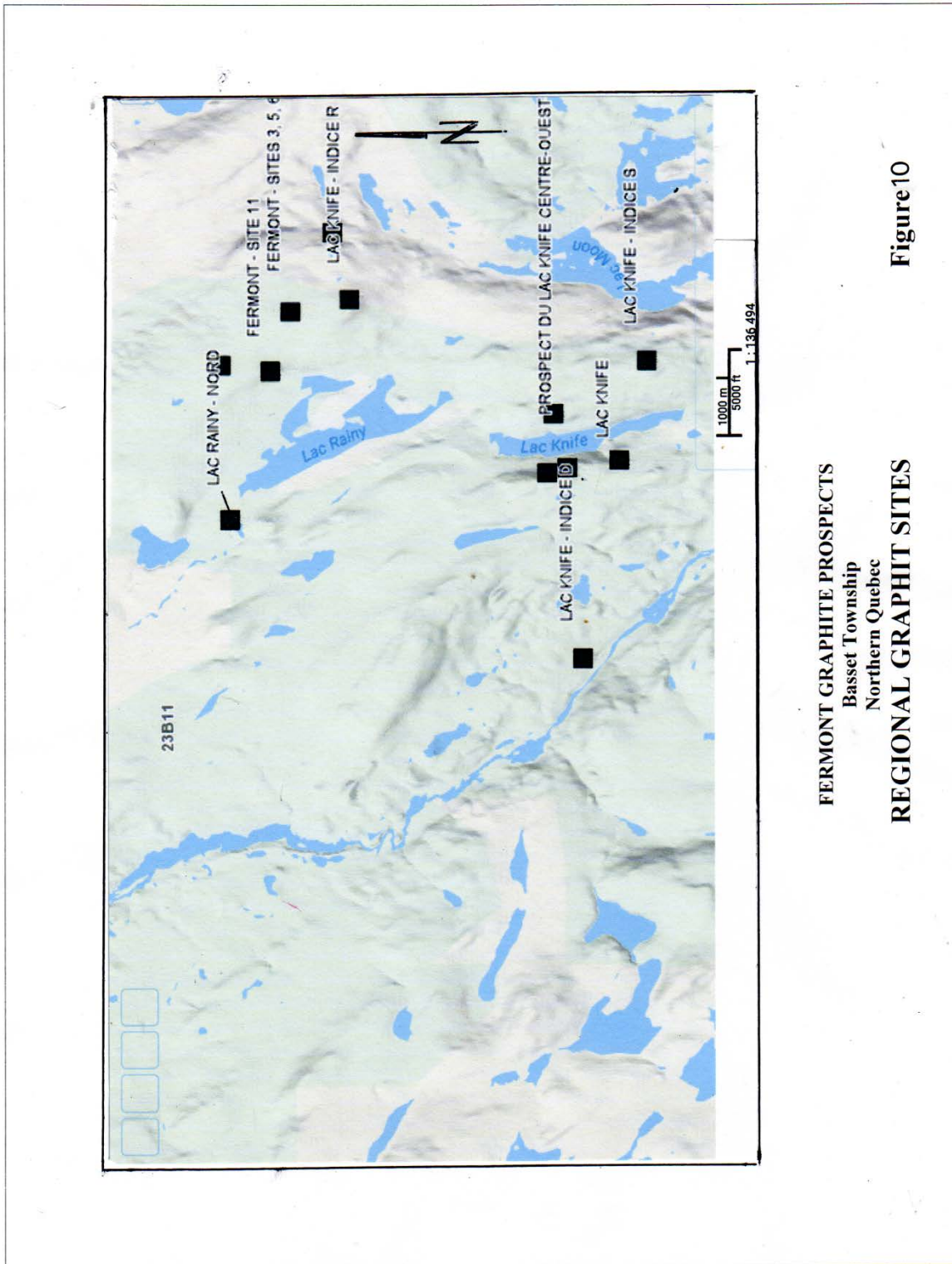
The Fermont graphite property hosts four graphite prospects:

- 1- The Fermont prospect (site 7& 9)
- 2- The Fermont prospect (site 3, 5 & 6)
- 3- The Fermont prospect (site11)
- 4- The Lake Knife prospect-R

The geological and mineralogical characteristics of each prospect are summarized as follow:

9.1 The Fermont prospect (site7&9)

The Fermont prospect (site7&9) is a mineralized gneiss bands with unknown dimensions, sediments by regional metamorphism, becomes rich paragneiss and graphite paraschists. The prospect is located 1.6 km NE of Rainy Lake at GPS 624885East- 5831337 North located in Map sheet 23B/11



FERMONT GRAPHITE PROSPECTS
Basset Township
Northern Quebec
REGIONAL GRAPHIT SITES

Figure 10

Graphite mineralization is associated with quartz feldspar gneiss, biotite with pyrrhotite (1-4%) and trace of pyrite. The size of graphite flakes is from 1 to 8 mm. This type of mineralization is similar to that found at Lac Knife deposit.

Mineralization level is ranging between 15.06% Cg / graphitic carbon over 1.5 m (Site 7) and 11.83% Cg over 1.5 m (Site 9) and 9.96% Cg over 2.0 m (Site 9).

The prospect was discovered in 1992 by MIN. MAZARIN

9.2 The Fermont prospect (site3, 5 &6)

The prospect is tabular mineralized Quartz, feldspar, biotite, graphite gneiss bands of unknown dimensions located 1.3 km from the lake Rainy Arm at GPS 625895 East- 5830087 North in map sheet 23B/11, discovered in 1992 by MIN. MAZARIN.

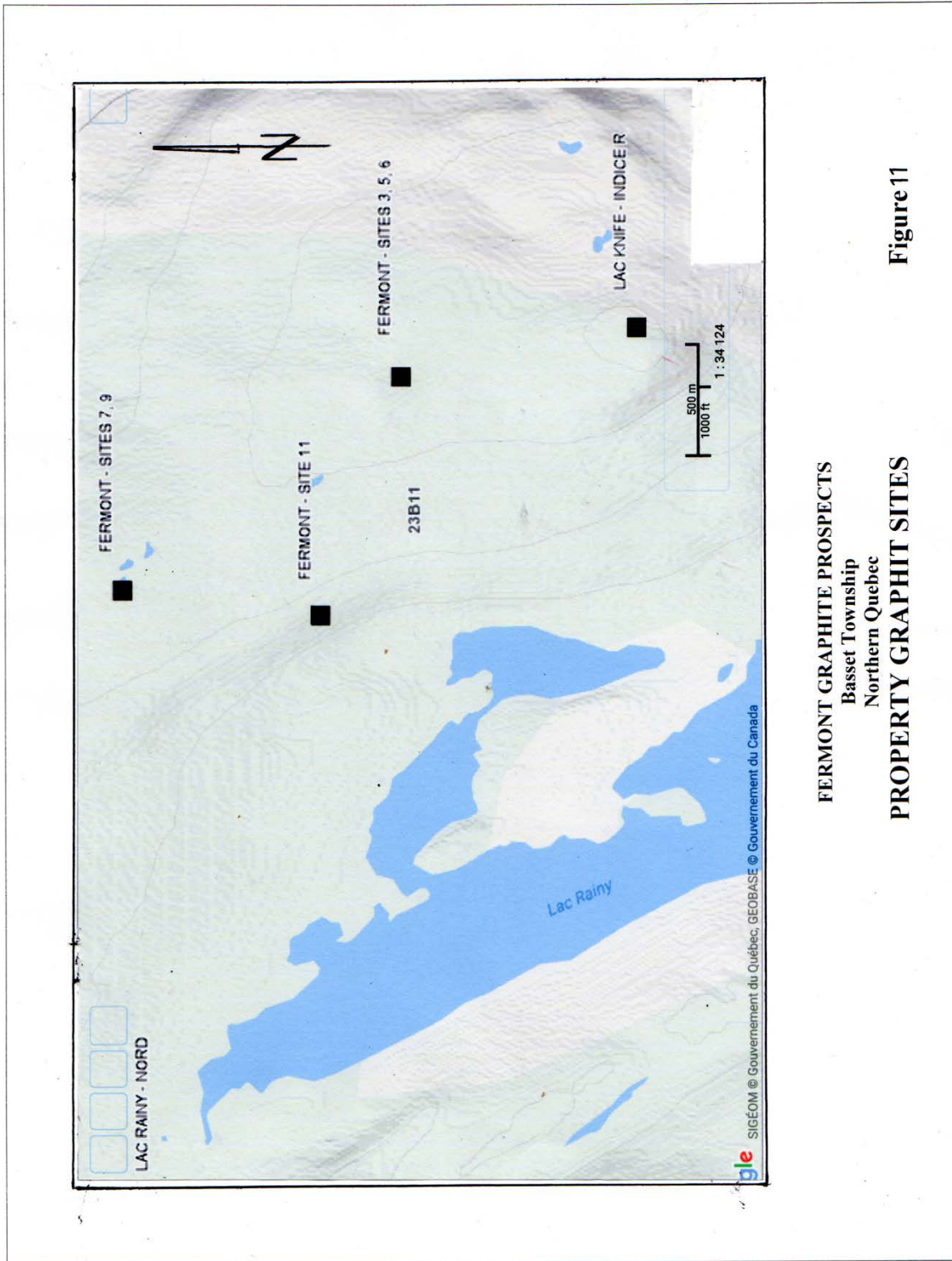
Mineralization is due to the deposition of carbon-rich sediments, by regional metamorphism, becomes paragneiss and paraschists rich in graphite. Graphite mineralization is associated with quartz feldspar gneiss, fine- grained biotite (2-4 mm). The size of graphite flakes is from 2 to 8 mm.

Mineralization level is ranging between 16.87% Cg / graphitic carbon (select sample), 6.78% Cg (select sample) from Site 5; 6.25% Cg (select sample) Site 3; 5.49% Cg over 1.5 m Site 6.

9.3 The Fermont prospect (site11)

The graphite mineralization is associated with quartz-biotite gneiss with pyrrhotite. The size of graphite flakes is from 1 to 5 mm. The type of mineralization is similar to that found in the lake deposit Knife. The prospect is located 1.4 km east of Rainy Lake in map sheet 23B/11 at GPS 624795 E- 5830427 North. The prospect was discovered in 1992 by MIN. MAZARIN.

Mineralization is due to the deposition of carbon-rich sediments, by regional metamorphism, becomes paragneiss and paraschists rich in graphite. Graphite mineralization is associated with quartz-biotite gneiss with trace of pyrrhotite. The size of graphite flakes is from 1 to 5 mm.



FERMONT GRAPHITE PROSPECTS
Basset Township
Northern Quebec
PROPERTY GRAPHIT SITES

Figure 11

Mineralization Level is in the range of 21.58% Cg / graphitic carbon over 1.5 m; 11.39% Cg over 1.5 m; 5.57% Cg over 1.5 m; 13.90% Cg (select sample).

9.4 Lake Knife Prospect – R

The prospect is located 27 km SSW of the town of Fermont and to 425 m of the west shore of Lake Knife and known as the index "R" of the Lake Knife property.

The Lake Knife prospect is hosted by paragneiss rocks, more precisely in an area of amphibolite rich in graphite garnets. The mineralized zone is tabular lenticular body was stripped for 5.5 meters long and 3 meters wide.

Mineralization is due to the deposition of sediments rich in carbon followed by orogenies and regional metamorphic cycles, become paragneiss rich graphite.

Graphite content is in the range of 13.19% Cg / graphitic carbon (select sample) return 9.55% Cg over 2.5 meters. Graphite is very coarse flakes; the alteration in the vicinity of the mineralization is a limonitization.

10.0 ECONOMIC GEOLOGY AND MINERAL POTENTIAL OF THE ADJACENT PROPERTIES

Lake Knife deposit is a deposit with estimated tonnage owned by Focus graphite Inc. It is located 5 kilometers southwest of the Fermont graphite property. The deposit was discovered in 1959, in 1989 a geophysical surveys (VLF-EM) prospecting, stripping, trenching, geological mapping and, sampling and metallurgical testing was carried out by MAZARIN INC. In 1990, a total of 93 diamond drill holes (7732 m), bulk sampling of more than 2500 tons and feasibility study carried out by CAMBIOR MAZARIN INC. The feasibility study was aiming to develop and market the flake graphite as flexible graphite.

In 2013, Focus graphite carried out an exploration diamond drilling program consisted of twenty-three drill holes for a total of 3191.1 meters drilled aiming at the expansion of the deposit to the north and south.

The evaluation of mineral resources in 2014 by Focus Graphite indicated a resource estimate of 9.6 Mt measured and indicated resources at a grade of 14.77% Cgr and 3.1 Mt as inferred resources of 13.25% Cgr (Technical Report 25 June 2014).

Lake Knife deposit is sharing similar geological conditions with the Fermont graphite prospects.

The graphitic zones are hosted in migmatized quartz-biotite gneiss. Gneiss is locally sheared and silicified brecciated and contains on average from 5 to 10% graphite and sulfides with sections of more than 20% of graphite.

The graphite deposit is in the form of strata and irregular veins are oriented NNW-SSE ($\pm 170^\circ$) and dipping 60 to 90 degrees to the west. It consists of a main layer of 200 meters in length and 1 to 5 meters width, bordered by two layers of smaller dimensions. These bands appear to be refolded into a series of synforms and antiforms.

11.0 PROPERTY POTENTIAL

Four graphite prospects were previously located on the property between 1958 and 1992. Very limited exploration work was done on each prospect, the Fermont graphite (site 7 & 9) however was recently tested by Nevado Resources Corporation. Limited diamond drill program consisting of four NQ holes was carried out to test a 200 meters electromagnetic conductor representing the Fermont (site 7 & 9). All four holes intersected graphite mineralization; some of the highlights are presented in table #

Hole #	From (M)	To (M)	Length(M)	CGr (%)
NV12-01	19.5	30	10.5	5.39
Inc.	25.85	29	3.15	9.85
NV12-02	114	144	30	1.21
NV12-03	194.1	214	19.9	5.83
NV12-04	14.3	20.65	6.35	15.44
NV12-04	28.5	48	19.5	4.06

A helicopter TDEM wide loop and high resolution electromagnetic system was carried out on the Fermont property by GPR International Inc. The survey has detected more than 467 electromagnetic anomalies many of which are very strong and persistent for more than a kilometer. These conductors never been tested by drilling. Figure 6 show the interpreted electromagnetic results.

In spite of the fact that several stronger electromagnetic anomalies were recently detected throughout the property, the decision was made to drill the previously known graphite prospect (site 7 & 9). It is the writer's opinion that several other electromagnetic anomalies show strong potential as targets yet to be drilled. The far northern part of the property has better graphite potential than the southern part due to the fact that rock magnetism in the north is less than the southern part. Two strong conductors exceeding two kilometers in length were detected.

Geological similarities exist between Lake Knife graphite deposit and the Fermont property. All graphite prospects were located within the Nault Formation; the graphitic zones are hosted in migmatized quartz-biotite gneiss. These rocks are also the host of the Lake Knife graphite deposit located 4 kilometers to the southwest. The graphite mineralization at Lake Knife is also associated with a series of synforms and antiforms folding structure, similar structural case exist at the drilled conductors of the Fermont (site 7 & 9) which was interpreted as being folded back on itself forming an S shaped fold. The above structural similarity strongly suggests a certain relationship between the graphite mineralization and a type of synclinal-antiform folding structure. Accordingly a new area recently acquired and added to the property at the northeast end covering a regional synclinal structure of 880 meters long running NE-SW located between GPS 624653N-5833357E and 624150N-5832636E. This regional synclinal structure is identical to the one associated with the Lake Knife deposit and should be considered as a new target area that never been tested previously by any geological or geophysical exploration method.

12.0 RECENTLY RECOGNIZED TARGET AREA

As mentioned above, Lake Knife deposit is sharing several geological similarities with the Fermont graphite sites; both are associated with and related to a certain synforms and antiforms geological structure (figure #12). At Lake knife deposit, the graphitic zones are hosted in migmatized quartz-biotite gneiss is in the form of strata or bands refolded into a series of synforms and antiforms structure oriented approximately North-South. At Fermont graphite sites the most interesting results come from drill hole # NV12- 03 where 3 conductors were tested and interpreted as being folded back on itself, forming an S shaped fold. The conductor zone was checked over a distance of nearly 200 meters. Many more conductors of high electromagnetic intensity continue over distances of a few kilometers within the property area that never been tested by drilling.

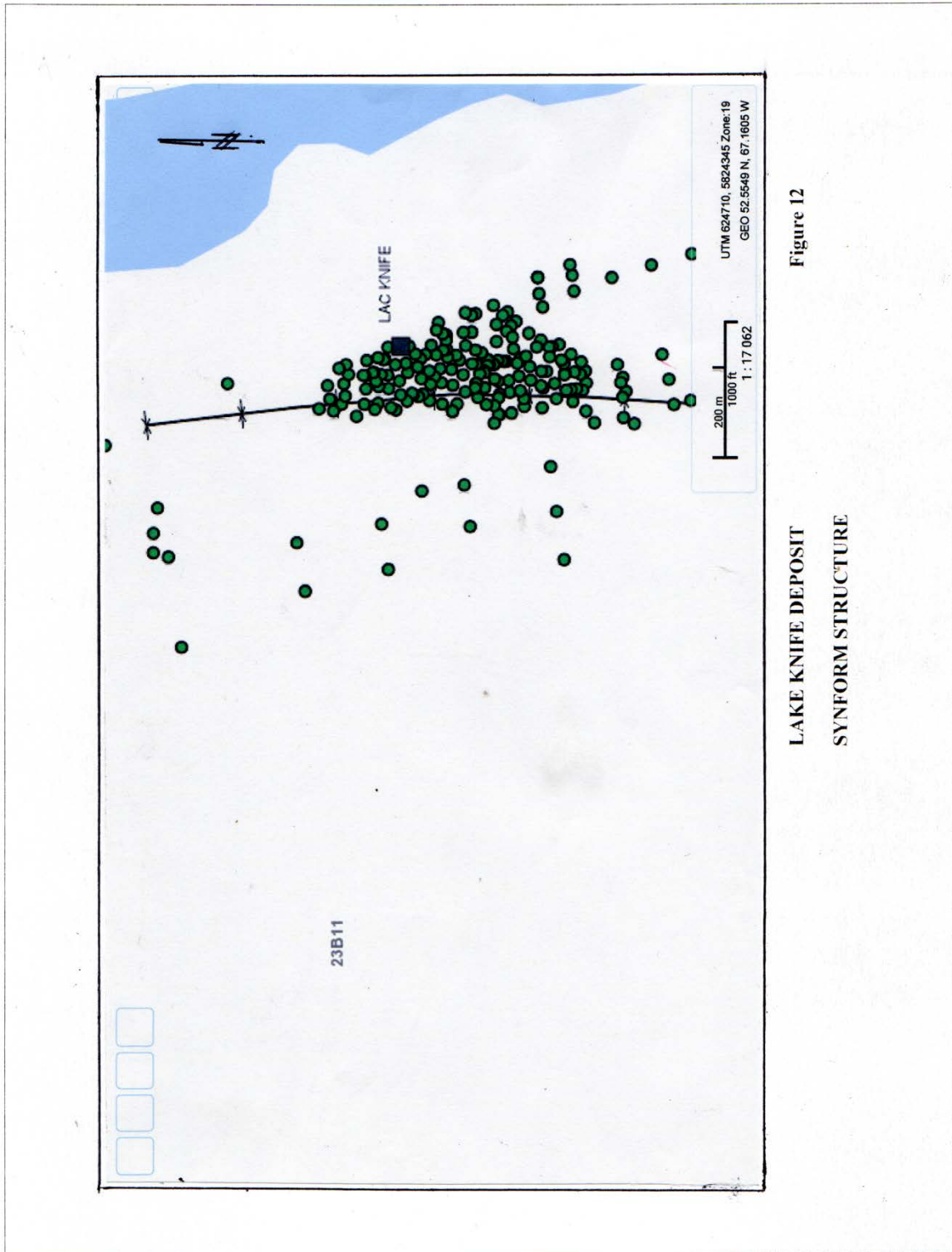


Figure 12

LAKE KNIFE DEPOSIT
SYNFORM STRUCTURE

Similar structure is shown at the northeast corner of the Fermont property (figure 13), the structural map shows a regional fold synclinal structure trending northeast-southwest for approximately 950 meters, more attention should be paid to this area; detailed geological and geophysical examination should be conducted along the fold structure to test for mineralization and electrical conductivity.

13.0 CONCLUSION AND RECOMMENDATION

The Fermont property is situated in an area that is well known for hosting graphite deposits and graphite showings. The Camp has been explored for the last sixty years and several iron ore and graphite deposits have been discovered and developed including Bloom Lake deposit, Lake Moire, Mont Wright, Lake O'keefe, Lake Simone and Lake Knife graphite deposit. The number of deposits and the economic value of each deposit make Fermont Camp one of Quebec's most viable mining camps.

The property is readily accessible and all facilities essential for large scale production are close at hand allowing for a low cost operation. A regional railroad and a port facility connecting Fermont camp with Sept-Isles port of Quebec is only a few kilometers away.

The property lies within a Paleo-Proterozoic thrust belt known as the Labrador Trough, the graphite rich schist of the property belong to the Menihek and Iron formations of the Sokoman Gagnon Group of the Paleoproterozoic basin sediments of the Labrador Trough. This geological setting is a favorable environment for hosting economic graphite mineralization.

The previous work programs on the property have outlined four graphite prospects and several electromagnetic target areas were lately delineated by Nevada Resources and the preliminary diamond drilling resulted in significant graphite mineralization.

Similarities exist between the Fermont property and the Lake Knife graphite property in the geological environment including mineralization, geological and structural settings.

Good potential exists for locating more significant graphite mineralization on the property. For these reasons further exploration work is strongly recommended.

A systematic evaluation of the property for economic graphite mineralization is justified considering the geological setting, the known occurrences and the increasing worldwide demand for graphite.

New graphite deposits could possibly be discovered elsewhere on the property under shallow overburden.

The property is a drill target ready and a minimum of 20 exploratory drill holes (5000 meters) are needed to further test the commercial graphite resources of the property.

REFERENCES

- Raymod Pitre** 1982- Report on the graphite mining property, Esmanville, Saguenay GM39974
- JeanFrancois** 1992-Projet Fermont, Tranchees et Echantilloage sur les permis d' Exploration 861 et 897 for La Societe Miniere Mazarin Inc
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- Girard R.** 2011 Resources confirmation, Drilling campaign, projet Lac Knife, IOS Services Geoscientifiques inc., 71P
- Saucier G.** 2011-Technical Report on the Lac Knife Graphite Projet, Reference 061975,001-200. 76p
- John Langton** 2012-Assessment report on the 2011 diamond drilling (Rellechasse project) GM 67267
- Benoit Lafrance** 2013-Projet Lac Knife- Campgne de Forage, Fermont, Quebec, for Focus Graphite GM 67734
- Alexandre Brosseau** 2014- Rapport des travaux statutaires, Region de Fermont, Quebec GM 68233
- Benoit Lafrance** 2015-Projet Lac Knife- Campgne de Forage 2013, Fermont, Quebec, for Focus Graphite GM 69186

CERTIFICATE OF QUALIFICATIONS

I, FAYZ F. YACOUB, of 6498-128B Street, Surrey, British Columbia, V3W 9P4, do hereby declare that:

- 1) I am a graduate geologist with a bachelor degree from Assuit University, Egypt B.Sc. and a diploma in Mining & Exploration Geology from the International Institute for Aerial Survey and Earth Sciences (I.T.C.), Holland (Diploma 1978).
- 2) I am a fellow in good standing with the Geological Association of Canada (Membership # 5490)
- 3) I am a professional geologist and a member of the Association of the Professional Engineers and Geoscientists of British Columbia (Registration No. 20390).
- 4) I am a professional geologist and a member of 'Ordre des Geologues du Quebec (restricted permit # 1748).
- 5) I have actively pursued my career as a geologist for the past thirty five years.
- 6) The information, opinion, and recommendations in this report (Fermont graphite prospects) are based on previous work conducted on the property between 1959 and 2012 by several mining companies and database of geological, geochemical and geophysical reports gathered on the graphite prospects and from regional work conducted and published by the Minister of Natural Resources of Quebec.
- 7) I am the registered owner and have 100% interest in the property.

Respectfully submitted,



Fayz Yacoub, P. Geo., F.G.A.C.

Dated November 10th, 2017



1647737

APPENDIX A

Geological description of the Fermont (site 3, 5& 6) Prospect
The Ministry of Natural Resources of Quebec

Fermont (site 3,5&6) English

NTS Number: 23B11

Name: FERMONT - SITES 3, 5, 6

Map number: 23B / 11-2013

Mineral Code: Graphite

Township: BASSET

Time: 19

Easting: 625895

Northing: 5830087

location reference: Point located: SITE 5. Source: document MRNQ, GM 51674.

Comment on Location: District: North Shore - New Quebec. Region: Fermont - Mont Wright. The main outcrop is located 1.3 km from the lake Rainy Arm.

Discovery Year: 1992

Comment on Discovery: Background: In 1959-1960, MURPHY, MIN. MINES, QUEBEC - Geological mapping. In 1992, SOC. EXPL. MIN. MAZARIN - Geophysics (MAG-VLF EM) helicopter, prospecting, sampling.

Comment - production reserve: Holder: SOC. EXPL. MIN. MAZARIN INC. (1992).

Comment on lithology: Lithology: A - At GNEISS QUARTZFELDSPATH-BIOTITE. Minerals: QUARTZ, FELDSPAR, BIOTITE, GRAPHITE. gneiss bands to mineralized quartz-feldspar-biotite.

Comment on morphology: gneiss bands tabular mineralized; unknown dimensions.

Comment on typology: Genesis: Deposition of carbon-rich sediments, by regional metamorphism, becomes rich paragneiss and paraschistes graphite.

Comment on mineralization: Levels: 16.87% Cg / graphitic carbon (sample selected RX-5347, page 5); 6.78% C / g (sample selected RX-5349;. Site 5); 6.25% C / g (sample selected RX-5317;. Site 3); 5.49% C / g to 1.5 m (sample RX-5323 groove;. Site 6); see document MRNQ, GM-51674. Found graphite mineralization is associated with quartz feldspar gneiss, biotite finely grained (2-4 mm). The size of graphite flakes is from 2 to 8 mm.

Date Released: 19010101

Document Number: GM 51674

Fermont 3,5&6 French

Numéro feuillet SNRC : 23B11

Nom : FERMONT - SITES 3, 5, 6

Numéro cogîte : 23B/11-2013

Étape : Gîte travaillé

Code minéraux : Graphite

Canton/seigneurie : BASSET

Fuseau : 19

Estant : 625895

Nordant : 5830087

Référence de localisation : Point localisé : SITE 5. Source: document MRNQ, GM 51674.

Commentaire - localisation : District : Côte-Nord - Nouveau-Québec. Région : Fermont - Mont Wright. Gîte avec affleurement localisé à 1,3 km du bras Est du lac Rainy.

Année découverte : 1992

Commentaire - découverte : Historique : En 1959-1960, MURPHY, MIN. DES MINES, QUÉBEC - Cartographie géologique. En 1992, SOC. EXPL. MIN. MAZARIN - Levés géophysiques (MAG, EM-VLF) héliportés, prospection, échantillonnage.

Commentaire - production : Détenteur: SOC. EXPL. MIN. MAZARIN INC. réserve (1992).

Commentaire - lithologie : Lithologie : A - GNEISS À QUARTZFELDSPATH-BIOTITE. Minéraux : QUARTZ, FELDSPATH, BIOTITE, GRAPHITE. Des bandes de gneiss à quartz-feldspath-biotite minéralisées.

Commentaire - morphologie : Bandes de gneiss tabulaires minéralisées; dimensions inconnues.

Commentaire - typologie : Genèse: Dépôt de sédiments riches en carbone qui, par métamorphisme régional, se transforment en paragneiss et paraschistes riches en graphite.

Commentaire - : Teneurs : 16,87 % Cg/carbone graphitique minéralisation (échantillon choisi RX-5347; site 5); 6,78 % C/g (éch. choisi RX-5349; site 5); 6,25 % C/g (éch. choisi RX-5317; site 3); 5,49 % C/g sur 1,5 m (éch. en cannelure RX-5323; site 6); voir document MRNQ, GM-51674. La minéralisation en graphite trouvée est associée à des gneiss à quartz-feldspath-biotite finement grenues (2-4 mm). La grosseur des flocons de graphite varie de 2 à 8 mm.

Date de diffusion : 19010101

Numéro document : [GM 51674](#)

Corps lithologique

Lithologie :

Distribution (morphologie) : Disséminée à massive

Forme (morphologie) : Tabulaire régulier

Corps lithologique - minéraux

Code minéraux	Qualificatif lithologie/minéral
Graphite	Non altéré (minéral primaire)
Biotite	Peu altéré (<10%)
Quartz	Non altéré (minéral primaire)
Feldspath	Peu altéré (<10%)
Minéraux mafiques	Peu altéré (<10%)

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APPENDIX B

Geological description of the Fermont (site 7&9) Prospect
The Ministry of Natural Resources of Quebec

The Fermont Prospect 7&9 (English)

NTS Number: 23B11

Name: FERMONT - SITES 7, 9

Map number: 23B / 11-2015

Stage: worked deposit

Mineral Code: Graphite

Township lordship BASSET

Time: 19

Easting: 624885

Northing: 5831337

location reference: Point located: SITE 7. Source: document MRNQ, GM 51674.

Comment on Location: District: North Shore - New Quebec. Region: Fermont - Mont Wright. The main outcrop is located 1.6 km NE of Rainy Lake.

Discovery Year: 1992

Comment on Discovery: Background: In 1959-1960, MURPHY, MIN. MINES, QUEBEC - Geological mapping. In 1992, SOC. EXPL. MIN. MAZARIN - Geophysics (MAG-VLF EM) helicopter, prospecting, sampling.

Comment on production reserve: Holder: SOC. EXPL. MIN. MAZARIN INC. (1992).

Comment on lithology: Lithology: A - At GNEISS QUARZ-FELDSPAR-BIOTITE GRAPHITIC. Minerals: QUARTZ, FELDSPAR, BIOTITE, GRAPHITE. Schistose gneiss levels of quartz-feldspar-biotite mineralized.

Comment on morphology: mineralized gneiss bands; unknown dimensions.

Comment on typology: Genesis: Deposition of carbon-rich sediments, by regional metamorphism, becomes rich paragneiss and paraschistes graphite.

Comment on mineralization: Levels: 15.06% Cg / graphitic carbon over 1.5 m (sample groove RX-5324, Site 7); 11.83% Cg over 1.5 m (sample spline RX-5328;. Site 9); 9.96% Cg over 2.0 m (sample spline RX-5332;. Site 9); 25.37% 24.69% Cg and Cg (grab samples RX-5351 and RX-5353; website 9); see document MRNQ, GM-51674. Found graphite mineralization is associated with quartz feldspar gneiss, biotite with pyrrhotite (1-4%) and pyrite (trace). The size of graphite flakes is from 1 to 8 mm. Some harvested samples are highly weathered. **This type of mineralization is similar to that found at Lac Knife deposit (FG 023B / 11-016).**

Date Released: 19010101

Document Number: GM 51674

The Fermont Prospect 7&9 (French)

Numéro feuillet SNRC : 23B11

Nom : FERMONT - SITES 7, 9

Numéro cogîte : 23B/11-2015

Étape : Gîte travaillé

Code minéraux : Graphite

Canton/seigneurie : BASSET

Fuseau : 19

Estant : 624885

Nordant : 5831337

Référence de localisation : Point localisé : SITE 7. Source: document MRNQ, GM 51674.

Commentaire - localisation : District : Côte-Nord - Nouveau-Québec. Région : Fermont - Mont Wright. Gîte avec affleurement localisé à 1,6 km au NE du lac Rainy.

Année découverte : 1992

Commentaire - découverte : Historique : En 1959-1960, MURPHY, MIN. DES MINES, QUÉBEC - Cartographie géologique. En 1992, SOC. EXPL. MIN. MAZARIN - Levés géophysiques (MAG, EM-VLF) héliportés, prospection, échantillonnage.

Commentaire - production : Détenteur: SOC. EXPL. MIN. MAZARIN INC. réserve (1992).

Commentaire - lithologie : Lithologie : A - GNEISS À QUARZ-FELDSPATH-BIOTITE GRAPHITIQUE. Minéraux : QUARTZ, FELDSPATH, BIOTITE, GRAPHITE. Niveaux schisteux de gneiss à quartz-feldspath-biotite minéralisés.

Commentaire - morphologie : Bandes de gneiss minéralisées ; dimensions inconnues.

Commentaire - typologie : Genèse: Déposition de sédiments riches en carbone qui, par métamorphisme régional, se transforment

en paragneiss et paraschistes riches en graphite.

Commentaire - : Teneurs : 15,06 % Cg/carbone graphitique sur 1,5 m (échantillon en cannelure RX-5324; site 7); 11,83 % Cg sur 1,5 m (éch. en cannelure RX-5328; site 9); 9,96 % Cg sur 2,0 m (éch. en cannelure RX-5332; site 9); 25,37 % Cg et 24,69 % Cg (échantillons choisis RX-5351 et RX-5353; site 9); voir document MRNQ, GM-51674. La minéralisation en graphite trouvée est associée à des gneiss à quartz-feldspath-biotite avec de la pyrrhotite (1-4 %) et de la pyrite (trace). La grosseur des flocons de graphite varie de 1 à 8 mm. Certains échantillons récoltés sont très altérés. Ce type de minéralisation ressemble à celui trouvé au gisement du lac Knife (FG 023B/11-016).

Date de diffusion : 19010101

Numéro document : [GM 51674](#)

Corps lithologique

Lithologie :

Distribution (morphologie) : Disséminée à massive

Forme (morphologie) : Tabulaire régulier

Corps lithologique - minéraux

Code minéraux	Qualificatif lithologie/minéral
Biotite	Peu altéré (<10%)
Graphite	Non altéré (minéral primaire)
Minéraux mafiques	Peu altéré (<10%)
Quartz	Non altéré (minéral primaire)
Feldspath	Peu altéré (<10%)

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APPENDIX C

Geological description of the Fermont (site 11) Prospect
The Ministry of Natural Resources of Quebec

Fermont (site 11) English

NTS Number: 23B11

Name: FERMONT - SITE 11

Map number: 23B / 11-2014

Stage: worked deposit

Mineral Code: Graphite

Township: BASSET

Time: 19

Easting: 624795

Northing: 5830427

location reference: Point located: SITE 11. Source: document MRNQ, GM 51674.

Comment on Location: District: North Shore - New Quebec. Region: Fermont - Mont Wright. The main outcrop is located 1.4 km east of Rainy Lake.

Discovery Year: 1992

Comment on Discovery: Background: In 1959-1960, MURPHY, MIN. MINES, QUEBEC - Geological mapping. In 1992, SOC. EXPL. MIN. MAZARIN - Geophysics (MAG-VLF EM) helicopter, prospecting, sampling.

Comment - production reserve: Holder: SOC. EXPL. MIN. MAZARIN INC. (1992).

Comment on lithology: Lithologie: A - GNEISS QUARTZ-BIOTITE. Minerals: QUARTZ, BIOTITE, GRAPHITE, pyrrhotite. gneiss bands quartz-biotite with traces of pyrrhotite.

Comment on morphology: mineralized gneiss bands; unknown dimensions.

Comment on typology: Genesis: Deposition of carbon-rich sediments, by regional metamorphism, becomes rich paragneiss and paraschistes graphite.

Comment on mineralization: Levels: 21.58% Cg / graphitic carbon over 1.5 m (sample cannalure RX-5339); 11.39% Cg over 1.5 m (sample RX-5341 in cann.); 5.57% Cg over 1.5 m (sample RX-5338 in cann.); 13.90% Cg (sample selected RX-5352, Site 11); see document MRNQ, GM-51674. Found graphite mineralization is associated with quartz-biotite gneiss with pyrrhotite (trace to 1%). The size of graphite flakes is from 1 to 5 mm.

This type of mineralization is similar to that found in the lake deposit Knife (FG023B / 11-016).

Date Released: 19010101

Document Number: GM 51674

Fermont prospect (site 11) French

Numéro feuillet SNRC : 23B11

Nom : FERMONT - SITE 11

Numéro cogîte : 23B/11-2014

Étape : Gîte travaillé

Code minéraux : Graphite

Canton/seigneurie : BASSET

Fuseau : 19

Estant : 624795

Nordant : 5830427

Référence de localisation : Point localisé : SITE 11. Source: document MRNQ, GM 51674.

Commentaire - localisation : District : Côte-Nord - Nouveau-Québec. Région : Fermont - Mont Wright. Gîte avec affleurement localisé à 1,4 km à l'Est du lac Rainy.

Année découverte : 1992

Commentaire - découverte : Historique : En 1959-1960, MURPHY, MIN. DES MINES, QUÉBEC - Cartographie géologique. En 1992, SOC. EXPL. MIN. MAZARIN - Levés géophysiques (MAG, EM-VLF) héliportés, prospection, échantillonnage.

Commentaire - production : Détenteur: SOC. EXPL. MIN. MAZARIN INC. réserve (1992).

Commentaire - lithologie : Lithologie : A - GNEISS À QUARTZ-BIOTITE. Minéraux : QUARTZ, BIOTITE, GRAPHITE, PYRRHOTITE. Bandes de gneiss à quartz-biotite avec traces de pyrrhotite.

Commentaire - morphologie : Bandes de gneiss minéralisées; dimensions inconnues.

Commentaire - typologie : Genèse: Dépôt de sédiments riches en carbone qui, par métamorphisme régional, se transforment en paragneiss et paraschistes riches en graphite.

Commentaire - : Teneurs : 21,58 % Cg/carbone graphitique sur 1,5 m (échantillon en cannalure RX-5339); 11,39 % Cg sur 1,5 m (éch. en cann. RX-5341); 5,57 % Cg sur 1,5 m (éch. en cann. RX-5338); 13,90 % Cg (échantillon choisi RX-5352; site 11); voir document MRNQ, GM-51674. La minéralisation en graphite trouvée est associée à des gneiss à quartz-biotite avec de la pyrrhotite (trace à 1 %). La grosseur des flocons de graphite varie de 1 à 5 mm. Ce type de minéralisation ressemble à celui trouvé au gisement du lac Knife (FG023B/11-016).

Date de diffusion : 19010101

Numéro document : [GM 51674](#)

Corps lithologique

Lithologie :

Distribution (morphologie) : Disséminée à massive

Forme (morphologie) : Tabulaire régulier

Corps lithologique - minéraux

Code minéraux	Qualificatif lithologie/minéral
Biotite	Peu altéré (<10%)
Quartz	Non altéré (minéral primaire)
Graphite	Non altéré (minéral primaire)
Pyrrhotine/pyrrhotite	Peu altéré (<10%)

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APPENDIX D

Geological description of the Lake knife Prospect-R
The Ministry of Natural Resources of Quebec

Lake Knife prospect-R English

NTS Number: 23B11

Name: LAKE KNIFE - INDEX R

Map number: 23B / 11-2000

Step: Showing, no work

Mineral Code: Graphite

Township: BASSET

Time: 19

Easting: 626150

Northing: 5829012

location reference: localized point: FLUSH MINERALIZED. Source: document MRNQ, GM 49446.

Comment on Location: District: North Shore - New Quebec. Region: Fermont - Mont Wright. The main outcrop is located 27 km SSW of the town of Fermont and to 425 m of the west shore of Lac Knife: the index "R" of the Lac Knife property.

Discovery Year: 1989

Comment on Discovery: Background: In 1959-1960, MURPHY, MIN. MINES, QUEBEC - Geological mapping. In 1989, SOC. EXPL. MIN. MAZARIN - Geophysics (MAG-VLF EM) ground and helicopter, prospecting, stripping, trenching, geological survey, sampling.

Comment - production: Holder: SOC. EXPL. MIN. MAZARIN INC. (1989).

Comment on lithology: lithologies: A - garnet amphibolite GRAPHITIC; B - paragneiss. Minerals: AMPHIBOLE; MICA; GRAPHITE, GARNET. The graphite index R, is located in paragneiss training, more precisely in an area of amphibolite rich in graphite garnets.

Comment on morphology: The mineralized zone, tabular lenticular, was stripped on a strip of 5.5 m long and 3 m wide.

Comment on typology: Genesis: Deposition of sediments rich in carbon, which followed by orogenies and regional metamorphism cycles, become rich paragneiss graphite.

Comment on mineralization: Content: 13.19% Cg / graphitic carbon (sample selected RX4560); 9.55% Cg over 2.5 m (sample No. groove RL-89-09 (RX-4559): see document MRNQ, GM-49446 Graphite is very coarse flakes and varies spread to sub-massif.. the alteration in the vicinity of the mineralization is a limonitisation.

Date Released: 19010101

Document Number: GM 49446

Lake knife Prospect French

Numéro feuillet SNRC : 23B11

Nom : LAC KNIFE - INDICE R

Numéro cogîte : 23B/11-2000

Étape : Indice, aucun travail

Code minéraux : Graphite

Canton/seigneurie : BASSET

Fuseau : 19

Estant : 626150

Nordant : 5829012

Référence de localisation : Point localisé : AFFLEUREMENT MINÉRALISÉ.
Source : document MRNQ, GM 49446.

Commentaire - localisation : District : Côte-Nord - Nouveau-Québec. Région :
Fermont - Mont Wright. Gîte avec affleurement
localisé à 27 km au SSW de la ville de Fermont et à
425 m de la rive Ouest du Lac Knife : l'indice "R"
de la propriété du Lac Knife.

Année découverte : 1989

Commentaire - découverte : Historique : En 1959-1960, MURPHY, MIN. DES
MINES, QUÉBEC - Cartographie géologique. En
1989, SOC. EXPL. MIN. MAZARIN - Levés
géophysiques (MAG, EM-VLF) au sol et
hélicoptés, prospection, décapage, tranchées, levé
géologique, échantillonnage.

Commentaire - production : Détenteur : SOC. EXPL. MIN. MAZARIN INC.
réserve (1989).

Commentaire - lithologie : Lithologies: A - AMPHIBOLITE À GRENAT
GRAPHITIQUE; B - PARAGNEISS. Minéraux :
AMPHIBOLE; MICA; GRAPHITE, GRENAT.
L'indice de graphite R, est situé dans une formation
de paragneiss, plus précisément dans une zone
d'amphibolite à grenats riche en graphite.

Commentaire - morphologie : La zone minéralisée, tabulaire-lenticulaire ?, a été
décapée sur une bande de 5,5 m de longueur par 3
m de largeur.

Commentaire - typologie : Genèse: Dépôt de sédiments riches en carbone, qui suivi par des orogénies et des cycles de métamorphisme régional, se transforment en paragneiss riches en graphite.

Commentaire - : Teneur: 13,19 % Cg/carbone graphitique
minéralisation (échantillon choisi RX4560); 9,55 % Cg sur 2,5 m (échantillon en rainure no RL-89-09 (RX-4559): voir document MRNQ, GM-49446. Le graphite est en paillettes très grossières et varie de disséminé à sub-massif. L'altération au voisinage de la minéralisation consiste en une limonitisation.

Date de diffusion : 19010101

Numéro document : [GM 49446](#)

Corps lithologique

Lithologie :

Distribution (morphologie) : Disséminée à massive

Forme (morphologie) : Tabulaire irrégulier

Corps lithologique - minéraux

Code minéraux	Qualificatif lithologie/minéral
Amphibole	Peu altéré (<10%)
Grenat	Non altéré (minéral primaire)
Graphite	Non altéré (minéral primaire)
Pyrophyllite	Peu altéré (<10%)

Lithologie :

Distribution (morphologie) :

Forme (morphologie) :

Corps lithologique - minéraux

Code minéraux	Qualificatif lithologie/minéral
Minéraux mafiques	Peu altéré (<10%)
Feldspath	Peu altéré (<10%)
Quartz	Non altéré (minéral primaire)

APPENDIX E

Description Report of Lake Knife deposit
(Ministry of Natural Resources of Quebec)

LAKE KNIFE DEPOSIT

NTS Number: 23B11

Name: KNIFE LAKE

Map number: 23B / 11-0016

Stage: deposit with estimated tonnage

Mineral Code: Graphite

Township: ESMANVILLE

Time: 19

Easting: 623320

Northing: 5824002

location reference: Point located: CENTRE MAIN COUNTRY

APPROXIMATE.

Comment on Location: District: North Shore - New Quebec. Region: Fermont - Mont Wright. Cottage with outcrop located 27 km SSW of the town of Fermont and to 425 m of the west shore of Lac Knife.

Discovery Year: 1959

Comment on Discovery: Background: In 1959-1960, MURPHY, MIN. MINES, QUEBEC - Geological mapping and first discovery of graphite on the property.

In 1982 F.N.C, Geophysical survey (MAG-VLF EM) and geological survey.

In 1986, SOC. EXPL. MIN. MAZARIN INC. - Prospecting.

In 1987-1988, SOC. EXPL. MIN. MAZARIN INC. - Geophysical surveys (VLF-EM) prospecting, stripping, trenching, geological mapping large-scale and retail, sampling and metallurgical testing.

In 1989, SOC. EXPL. MIN. MAZARIN INC. - Geophysics (MAG-VLF EM) ground and helicopter, prospecting, stripping, trenching, geological survey, sampling, metallurgical testing, 93 holes (7732 m) and marketing study.

In 1990, SOC. EXPL. MIN. INC./ CAMBIOR MAZARIN INC. - Feasibility study of the start of production.

In 2001, SOC. EXPL. MAZARIN INC. - Sampling bulk of more than 2500 tons (analysis concentrates by GRAFTECH INC Cleveland, Ohio.). feasibility study, with its GRAFTECH partner, which aims to develop and market the flake graphite as flexible graphite (see note in Blocks 10 and 11 below).

Comment on production reserves: Reserves: 8.10 Mt all categories at a grade of 16.7% graphitic carbon (see document MRNQ, DV-91-01, page 150, as noted in Block 20, Part 6 of this plug). Approximately 3.52 mt, proven to 17.4 5 Cg. The evaluation of mineral resources in 2014 by Focus Graphite indicate 9.6 Mt of

measured and indicated resources to 14.77% graphitic carbon and 3.1 Mt of inferred resources of 13.25% graphitic carbon (Technical Report 25 June 2014). Use: Flexible graphite Manufacture ("GRAFCELL" TM GRAFTECH INC Ohio, USA.) Used in the manufacture of gas distribution plates ... an important component of the hydrogen combustion stack developed by, BALLARD POWER SYSTEMS Vancouver, British Columbia, Canada. Holder: SOC. EXPL. MIN.MAZARIN INC. / CAMBIOR INC. (1993)

Comment - lithology: lithologies: A - At GNEISS quartz-BIOTITE; B - SHALE TO MICAS AND GRAPHITE. Minerals: GRAPHITE, pyrrhotite, pyrite, sphalerite, CHALCOPYRITE, QUARTZ, Fuchsite.

The graphitic zones are hosted in a quartz-biotite gneiss migmatized. Gneiss is locally sheared and silicified brecciated and contains on average from 5 to 10% graphite and sulfides. Sections with more than 20% of graphite have the appearance of gaps. Some clusters and silicified fuchsite veins are associated with ore zones, and the zones epidotized and pegmatitic pockets that seem to diopside meet only near rich horizons graphite.

Comment on morphology: The graphite deposit in the form of strata and irregular veins is oriented NNW-SSE ($\pm 170^\circ$) and tilts 60 to 90 degrees to the west. It consists of a main layer of 200 m in length and from 1 to 5 m wide, bordered by two second layers of smaller dimensions. These bands appear to be in fact that the same horizon refolded into a series of synforms and antiforms. The graphitic areas showing significant thickenings would be the product of a succession of very tight folds and a large-scale extrusion effect.

Comment on typology: Genesis: Deposition of carbon-rich sediments, by regional metamorphism, becomes rich paragneiss graphite, higher concentration of graphite in open fractures and in fold hinges. Late sulphide enrichment in a crushed rock sheared and silicified evidence of remobilization in graphitic mass of graphite and sulfides.

Comment on mineralization: Levels: 22.30% Cg / graphitic carbon over 5.3 m, 20.82% Cg over 12 m and 22.60% Cg over 7.5 m (samples 88-3 groove, 88-9 and 88-12; see document MRNQ, GM-49212). The host gneiss mineralization area is locally sheared and silicified and contains an average of 5 to 10% of graphite and sulfides. Sections with more than 20% graphitic carbon have the appearance of gaps and are composed of very fine flakes rich fragments or microcrystalline graphite, with 20 to 25% sulfides. The sections of extremely high concentrations (more than 40% graphite) are formed of a very fine graphitic matrix traversed by coarse flake graphite venules of 1 to 3 mm in diameter. The percentage of sulphides is up to 35%. These come in clusters, centimetric crystals, and veinlets or as disseminated pyrrhotite and consist primarily with pyrite, 2% sphalerite and

minor chalcopyrite. Some clusters and silicified veins with associated fuchsite the ore zones, and the zones epidotized and pegmatitic pockets that seem to diopside meet only near rich horizons graphite.

Date Released: 19900101