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N.T.S: 22D/06

GEOLOGICAL EVALUATION REPORT ON THE MOQUIN TITANIUM PROPERTY Lake Saint Jean Saguenay-Quebec

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!

SUMMARY

A global increase in the demand and the price of titanium concentrates particularly in China and emerging South Asian markets has stimulated the exploration for this metal in the Province of Quebec. Over the last decade, the Lower North Shore of Quebec as well as several other parts of Quebec has witnessed a surge in mining exploration owing to its numerous Fe-Ti prospects and deposits associated with anorthosite complexes.

The distribution of subject claims was strategically oriented and picked to surround or partially cover active zones of exploration. The Moqin titanium-phosphate property is located in the south-central part of Quebec about 200 kilometers North-Northeast of Quebec City, 20 kilometers East of Lake-Saint-Jean. The Ilmenite-Iron-phosphate-Vanadium prospects are located only 200 meters from Highway 170 in Kenogami Township, NTS map sheet 22D/06. The property is predominantly underlain by rocks of pre-Cambrian age of the Proterozoic Grenville geological province consisting mainly of anorthosite suite of Lake Saint Jean that covers an area of approximately 20,000 square kilometer and is considered the largest anorthositic belt in the world.

The claims are100% owned by Mr. Fayz Yacoub geologist and president of On Track Exploration Ltd in Vancouver, British Columbia, the author of this report.

The property is the host of five titanium/iron/phosphate prospects, Moquin, Moquin north, Moquin east, Lake Goyer and Canada Iron Furnace Mine. Moquin is titanium-iron working deposit discovered in 1960 by Saguenay Exploration and Mining Inc and considered the main target area on the subject property. The titanium-phosphate, iron prospects of the subject property are all located within an area of 2 x 2.5 kilometers.

The study of this report has concluded that the Moquin property has the potential to host significant titanium, phosphate, vanadium, iron deposits; the report is recommending that all five titanium prospects should be diligently explored laterally and at depth.

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1.0 INTRODUCTION

Between July 25th and August 15th of 2017, On Track Exploration Ltd has prepared this report to postulate the potential of the Moquin Titanium-Vanadium property based on the geological criteria and all available previous exploration work completed on the property between 1960 and 2002.

The report describes the regional geology and the past exploration activities and outlines proposed exploration program for the next exploration phase.

All technical information were gathered from previous data completed on the property, geological, geochemical, geophysical reports by different exploration companies and by reviewing of government assessment reports. Regional geology and claim data gathered from the Ministry of Natural Resources of Quebec.

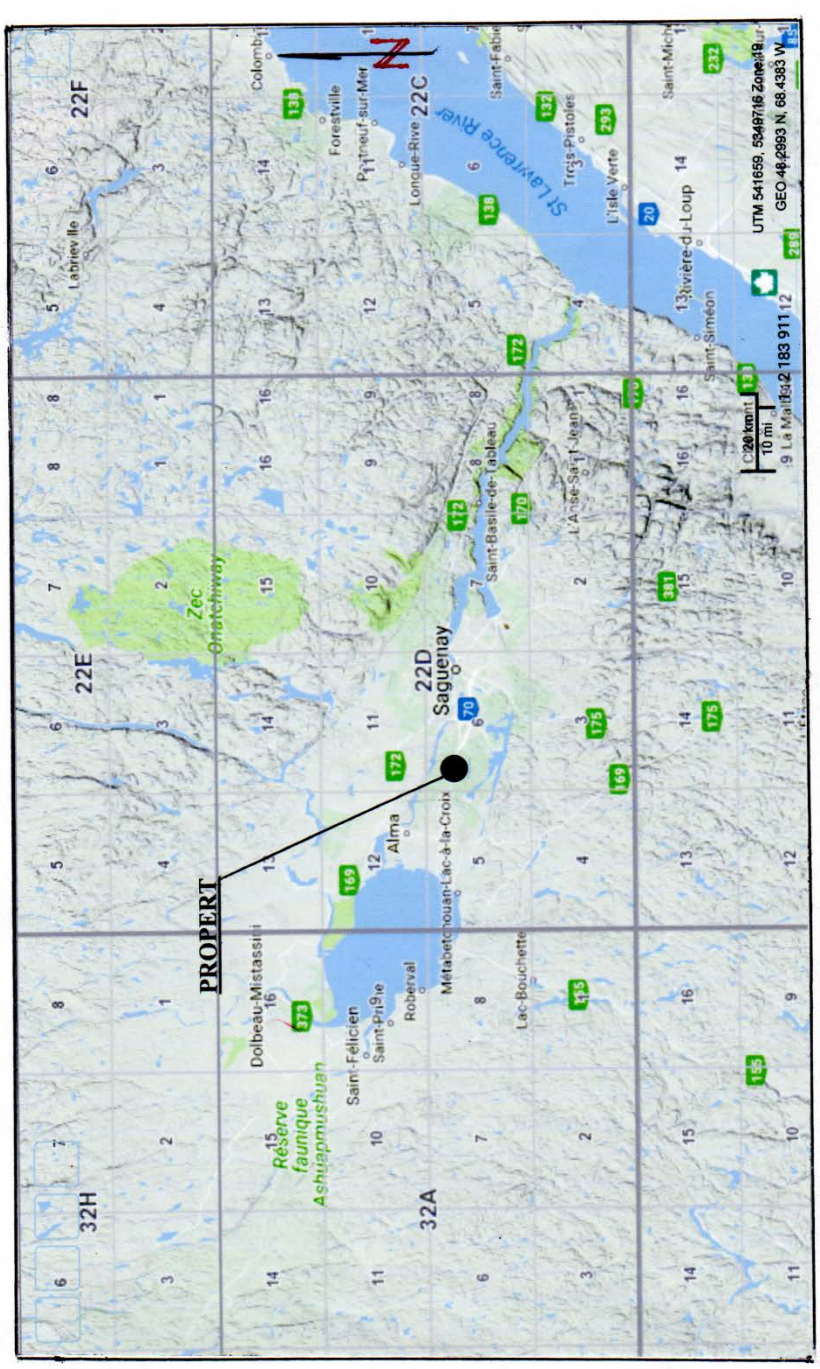
The Author of this report Mr. Fayz Yacoub is the owner and the title holder of 100% of the property.

2.0 LOCATION & ACCESS (Figure 1 & 2)

The Moquin property is located in the south-central part of Quebec about 200 kilometers North-Northeast of Quebec City, approximately 30 kilometers east of Lake-Saint-Jean. The Ilmenite-Iron-Vanadium prospects are located only 200 meters from Highway 170 in Kenogami Township, NTS map sheet 22D/06.

Electric power, railway, airport and highways are either only a few kilometers away from the property or running through the property area. The proximity of the property to power supply, deep water port and infra structures is great value as these are prime factors for minimizing the mining operation and transportation cost.

Access to the property is by highway 175 from Quebec City directly north for approximately 200 kilometers then follow Highway # 170 going west for another 30 kilometers to the center of the property.



THE MOQUIN TITANIUM PROPERTY
Lake Saint Jean
Saguenay-Quebec
GENERAL LOCATION MAP

Figure # 1

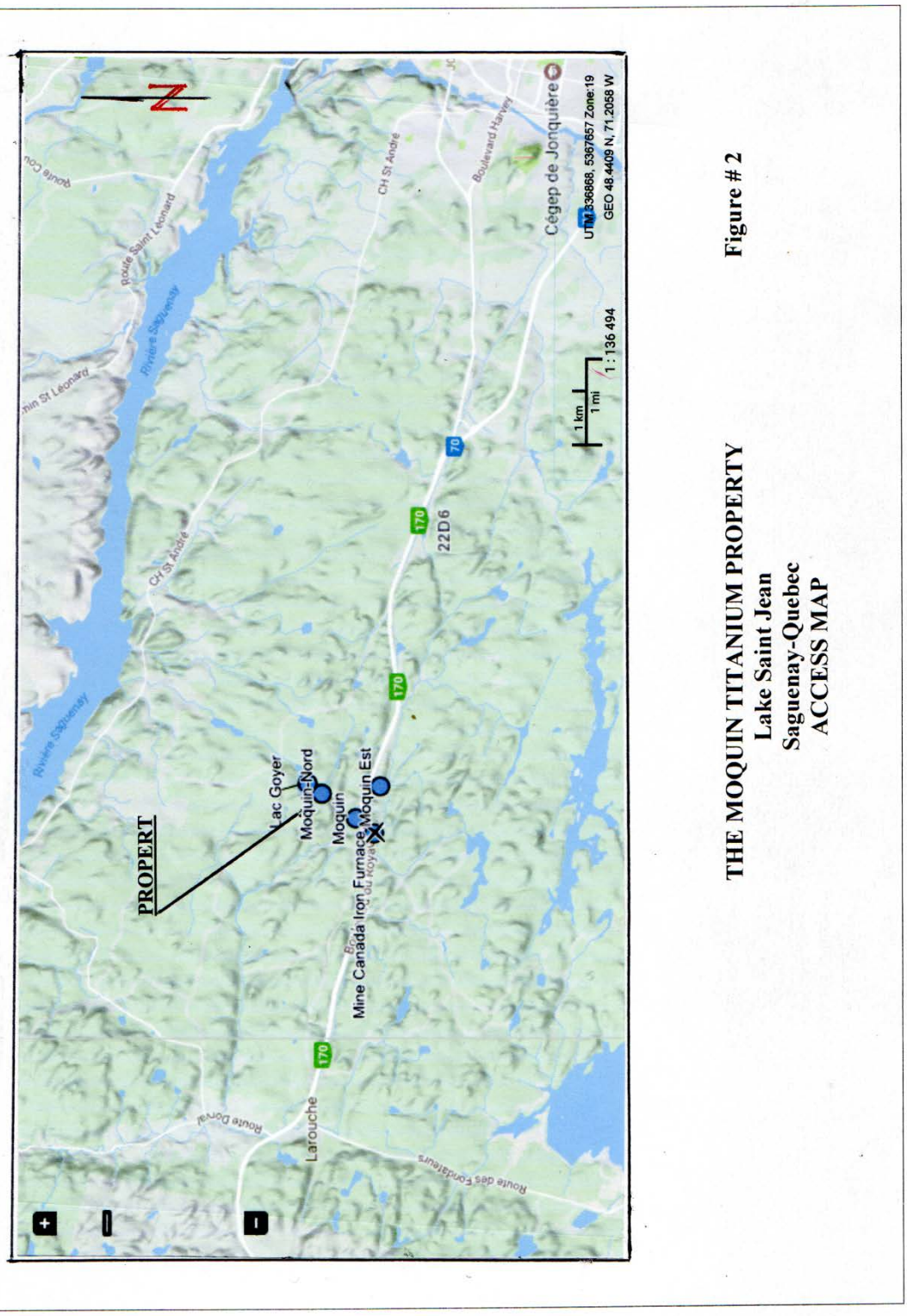


Figure # 2

THE MOQUIN TITANIUM PROPERTY
Lake Saint Jean
Saguenay-Quebec
ACCESS MAP

Numerous secondary roads are accessible by truck through the property area making any portion of the property readily accessible. The topography of the property for the most part is moderate to rolling hills except the central part of the property which lies directly above the Highway is hilly, cliffy and rocky.

All mineralized areas of interest are accessible, located comfortably close to Highway 170. Any heavy equipment could easily be driven from the main Highway to any of the mineralized target areas.

Highway 170 crosses the central part of the property running west to Lake Saint Jean which is located 30 kilometers west of the property.

Vegetation is now typically second growth, regenerating taiga forest mainly birch, fir, poplar, black spruce and pines.

The climate around the property area is characterized by winter weather and snow accumulation extending from late October until late March or early April.

3.0 PROPERTY STATUS (Figure 3)

The Moquin property consists of 9 contiguous mineral claims (polygons) covering approximately 5.1 square kilometers, 514.2 hectares, 597.66 acres. The property is centered at GPS 319345E and 5368073N on Highway 170.

Pertinent claim data is as follows:

TITLE #	ROW	COLUMN	AREA	EXPIRY
CDC 2492318	23	7	57.15	2019/05/15
CDC 2492319	23	8	57.13	2019/05/15
CDC 2492320	24	8	57.13	2019/05/15
CDC2492321	24	9	57.13	2019/05/15
CDC2492563	23	9	57.13	2019/05/22
CDC2496967	24	10	57.13	2019/06/19
CDC2496968	25	10	57.12	2019/06/19
CDC2496969	26	10	57.11	2019/06/19
CDC2500090	22	8	57.17	2019/08/13

According to Quebec government records, no part of the land covered by the property area is restricted for mineral exploration activities.

The Moquin property is 100% owned by Mr. Fayz Yacoub, professional geologist of British Columbia-Canada, the president of On Track Exploration Ltd.

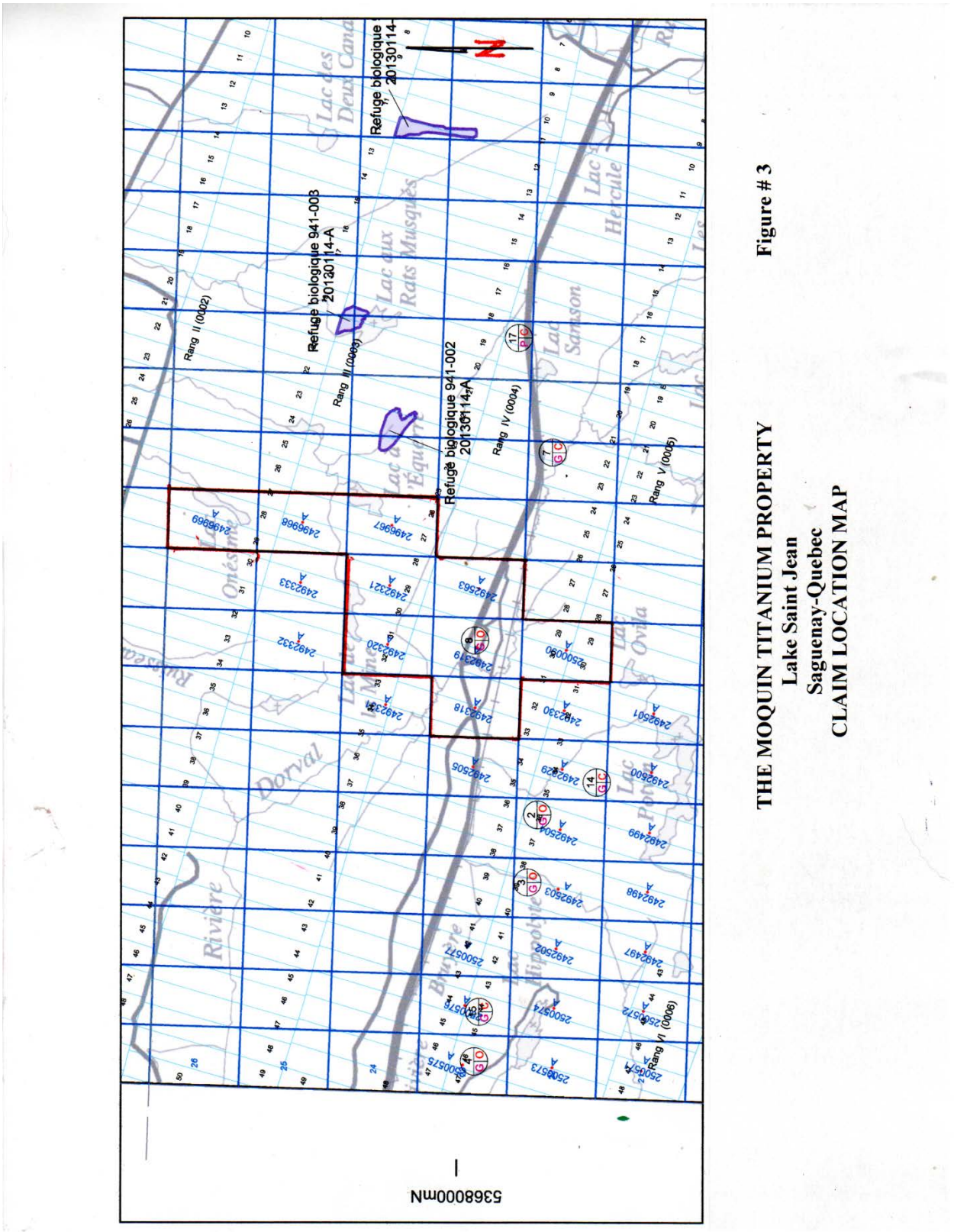


Figure # 3

THE MOQUIN TITANIUM PROPERTY
Lake Saint Jean
Saguenay-Quebec
CLAIM LOCATION MAP

4.0 WHAT IS TITANIUM

Titanium Facts

- The chemical element Titanium has the symbol Ti and atomic number 22.
- Pure titanium is a transition metal with a lustrous silver-white color.
- Titanium will always be found bonded with another element and does not naturally occur on its own in a pure form.
- British pastor William Gregor discovered titanium in 1791. It was later named by German chemist Martin Heinrich Klaproth who called it titanium after the Titans of Greek mythology. It was not until 1910 that titanium was produced to 99.9% purity by New Zealander Matthew A. Hunter, the method became known as the Hunter Process.
- Titanium has two very useful properties, it is resistant to corrosion (including in sea water and chlorine) and has the highest strength-to-weight ratio of any metal.
- Titanium is as strong as a lot of steels, yet it is 45% lighter. The metal is also 60% denser than aluminum but is over two times as strong.
- Titanium has a melting point of 3,034 °F (1,668 °C) and a boiling point of 5,949 °F (3,287 °C).
- Titanium is non-magnetic and is not very good at conducting heat or electricity.
- Even in large doses titanium remains non-toxic and does not have any natural role inside the human body, usually passing through without being absorbed.
- Titanium is present in most igneous rocks and their sediments; it is the 9th most abundant element in the Earth's crust and the 7th most abundant metal.
- Many elements such as iron, aluminum, nickel and vanadium are alloyed with titanium to produce strong lightweight alloys. These titanium alloys are used in the manufacturing of naval ships, spacecraft, missiles and aircraft, with around two thirds of all titanium metal produced is used in aircraft engines and frames.
- Titanium metal is also used in the production of high-end racing cars and motorcycles where reducing weight but maintaining strength is important.

- Titanium's strength-to-weight superiority has seen the metal used as a component in many other products in recent times including, laptops, firearms, tennis rackets, golf clubs, lacrosse sticks, football helmet grills, bicycles frames, camping cookware and utensils.
- Around 95% of all titanium is used to produce the compound titanium dioxide, which is a very bright and refractive white pigment that is used in paints, plastics, toothpaste, sunscreens, sports equipment and paper.
- The fact that titanium is strong, light, non-toxic and does not react without bodies make it a valuable medical resource. It's used to make surgical implements and implants, such as hip joint replacements that can stay in place for up to 20 years.
- Titanium is now popular in designer rings and other jewelry due to its durability, its resistance to seawater and chlorine in swimming pools and as it is non-toxic.

Titanium Industries

At Titanium Industries, many manufacturers, engineers and designers that use titanium in a wide variety of products and projects. Titanium is extremely tough yet lightweight, boasting the highest strength to weight ratio of any structural metal. It takes far less titanium to produce a structure that matches the same strength of other metals. If individual plates of the same weight were made from titanium, copper and stainless steel, the titanium plate would be double the size of the copper, and 75% larger than the stainless steel. Conversely you could buy half as much titanium to do the same job as copper, slightly more than half as much to do the same job as stainless steel.

The equipment and capability of the metal gives the flexibility to meet a wide variety of the market needs – and so huge range of applications can be accomplish from simple weight reduction to advanced body implants.

1- Titanium in the Aerospace market

The SR-71 "Blackbird" war plane was the first aircraft to use titanium extensively in its structure and skin. The aerodynamic friction that resulted from the intense speeds of which the aircraft was capable created so much

aerodynamic friction that if any other metal was used, it would simply melt out of the sky. In fact, it was so fast, that if anyone fired a surface to air missile at it – the standard evasive procedure was to simply accelerate and outrun it! Holding the record of the fastest aircraft in the world for over 30 years, the Blackbird reached speeds of 3500km an hour, or three times the speed of sound. Today, about two thirds of all titanium metal produced is used in aircraft engines and frames. As an example, the A380 Aero bus uses approximately 70 tons of titanium for the aircraft structure and fittings.

2- Titanium in medical devices.

Titanium is one of the most biocompatible metals – the human body can handle it in large doses with no impact. In fact, it is estimated that we ingest around 0.8mg of titanium a day – most passes through us without being absorbed. Also, its density is very similar to human bone, which will readily adhere to it. These qualities make Titanium perfect for use in surgical implants, such as hip balls, sockets (joint replacements), heart stents and dental implants. Lasting in excess of 20 years with no effects, Titanium is a clear choice in the medical field. Its high strength to weight ratio also makes it the perfect choice for surgical instruments and other medical devices. Wheelchairs made from titanium provide the lightest weight, yet are very strong and children's wheelchairs can be made to grow as the child becomes older.

3- Titanium in everyday products

Surprisingly, of all the mined and synthetic titanium minerals, approximately only 5% is used to produce titanium metal. The remaining 95% is used to manufacture pure titanium dioxides – a pigment that enhances brightness and opacity in paints and inks, paper, and plastics, and even in food products and cosmetics. It's also the metal used in the body of Apple's PowerBook line – helping achieve a lightweight frame.

4- Titanium Art/Architecture

Titanium spontaneously forms a hard protective oxide film upon contact with any oxygen. It's this film that gives the metal its trademark shine and shimmer, with variations in the film's thickness affecting the color that the metal projects. It also has remarkable elasticity, making it the metal of choice for artistic and architectural structures. For instance, the 40 m (131 foot) memorial to Yuri Gagarin (the first man to travel in space) in Moscow, is made of titanium for the metal's attractive color and association with rocketry. The Guggenheim Museum, Bilbao is sheathed in titanium panels. It can also be used to help structural repair of historic buildings. Titanium was used as a part of the 2008 structural repair and stabilization for the Leaning tower of Pisa in Italy. The artist who chose Titanium for the Olympic Torch chose the metal for two reasons – its modern image of superior technology and its beautiful colors.

5- Titanium in Sporting Products

The high strength to weight ratio of Titanium makes it ideal for use in a wide range of sporting equipment. Titanium is a core material in the components of the world's lightest bicycle, which weighs only 6 lbs.! Considering an average adult bike weighs 30 lbs. and racing bikes weigh around 15 lbs., this bike is extremely lightweight thanks to its titanium structure. The number 1 consumer of titanium for sporting goods is in manufacture of golf club heads. Most manufacturers such as Taylor Made, Cobra, Ping and Integra have a titanium line.

Titanium is also naturally resistant to corrosion and erosion – making it a great choice for safety equipment. When the 6000 bolts that secured the daring climbing track in Ton Sai first started to erode, they were replaced with stainless steel. However the stainless steel replacements only lasted 9 months, after which they had a corrosion problem that would break the bolt on a simple body weight charge. Metallurgists discovered that the only metal the climbers could trust with their lives was titanium.

5.0 REGIONAL GEOLOGY (Figure 4)

The regional area where the property is located predominantly underlain by rocks of pre-Cambrian age of the Proterozoic Grenville geological province consisting mainly of anorthosite suite of Lake Saint Jean that covers an area of approximately 20,000 square kilometer and is considered the largest anorthositic massive belt of the world. The intrusion of the anorthosite was followed by several mafic and felsic magmatic events. The last of which was the emplacement of granites of Lake Saint Jean.

The anorthosite suite was emplaced along a regional NE-SW thrust and strike slip shear zones developing in association with several NNE-SSW strike slip faults. These are the most prominent structural features in the regional area and are responsible for all deformation, mineralization and metamorphism in the regional area.

The anorthosite is the most important rock type as regards to the economic interest. Rocks are generally medium to coarse-grained, light grey in color composed mainly of plagioclase with lesser amount of ferromagnesian minerals.

The titaniferous magnetite ores occurs as lenticular bodies within a large mass of anorthosite and gabbroic anorthosite. Jooste and Allen describe the contact between anorthosite and magnetite ore as intrusive and where contact is exposed; it is sharp with no obvious alteration.

The phosphatic titaniferous magnetite ores show considerable variation in mineral content typically made of aggregates of magnetite and apatite.
Two main types of ore are differentiated: high phosphorus ore with 5-30% apatite and low phosphorus ore with less than 5% apatite. The high phosphorus titaniferous magnetite ores mainly occur in the northern part of the regional area, whereas phosphorus-poor type occurrences are concentrated in the southern part.

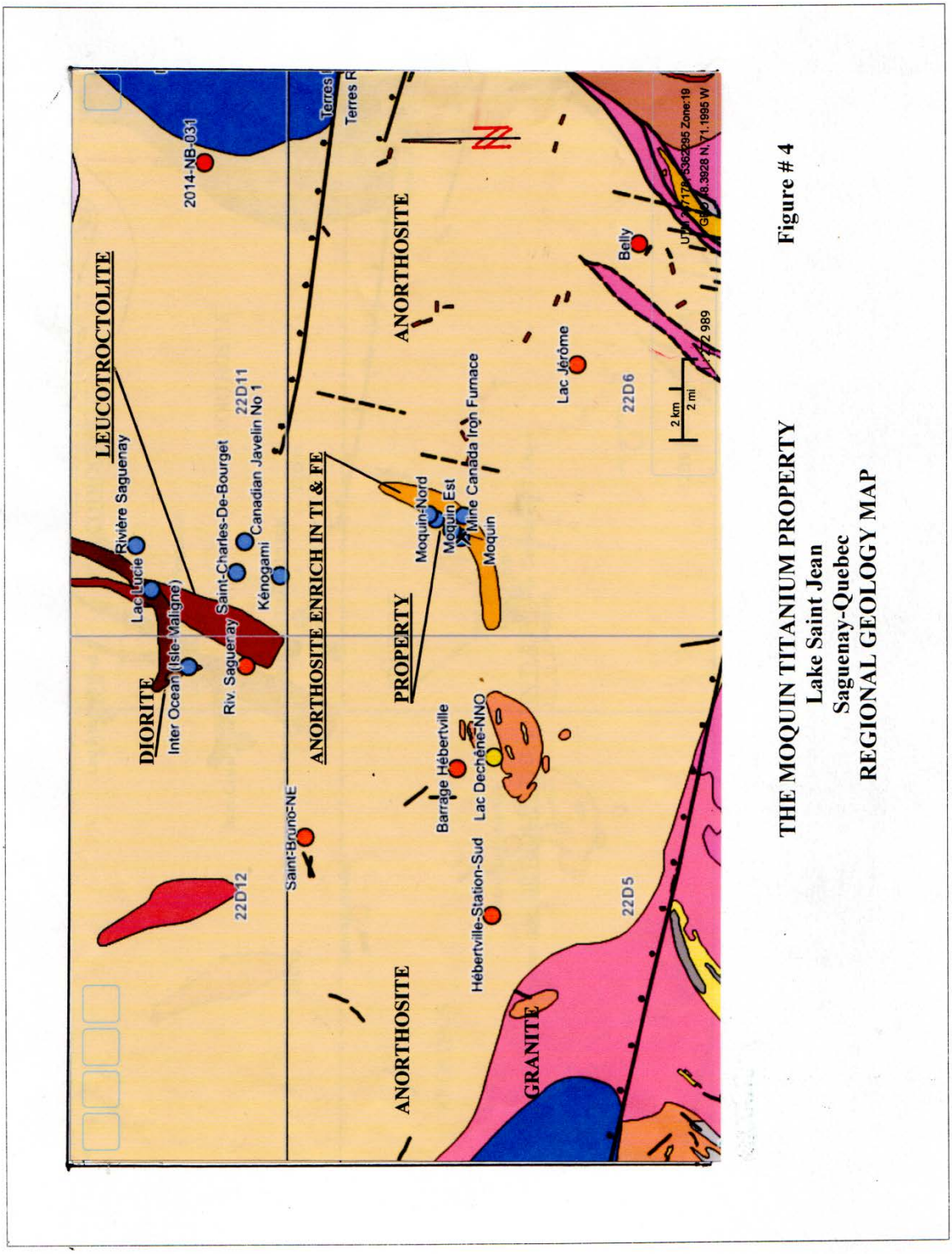


Figure # 4

THE MOQUIN TITANIUM PROPERTY
Lake Saint Jean
Saguenay-Quebec
REGIONAL GEOLOGY MAP

6.0 PROPERTY GEOLOGY (Figure 5)

The subject property is located within the Precambrian anorthosite complex of Lake Saint Jean. The oldest rocks are anorthosite facies. They are intruded by younger diorite dykes and a subsequent ophitic tractolite NNE-SSW dyke (Cote, 1986). Finally, quartz syenite and syenite monzonite stocks intruded by microcline granite and quartz microcline syenitic rocks.

The anorthosite complex is dominated by anorthosite (Sl). The abundance of cafemic mineral such as augite, hypersthene or olivine is sufficient for the anorthosite to be classified as a gabbroic anorthosite, gabbro norite, or tractolite.

Previous mapping describes the rocks as anorthosite containing a number of titaniferous magnetite occurrences consisting of coarse-grained mixture of magnetite and ilmenite. The titaniferous magnetite occurrences have been known for many years and described as medium-grained gabbro and anorthosite containing titaniferous magnetite either coarsely disseminated or massive bands up to 35 feet wide. Previous rock samples of the titaniferous magnetite returned the following Iron/Titanium results:

% Iron	% Titanium oxide
48.14	19.29
49.37	19.82
49.14	19.04

Two parallel regional fault systems were recognized 500 meters and 3 kilometers east of the property boundary. The ilmenite/magnetite mineralization trend of Lake Goyer, Moquin, Moquin north, Moquin east, and Canada Iron Furnace prospects located on the property are parallel to The NNE-SSW direction of the regional fault systems and possibly related to it. An intense fracturing accompanied by hydrothermal alteration characterizes all ilmenite showings on the property area, the NNE/SSW fault systems may have a major effect on the ilmenite mineralization of all prospects located on the property.

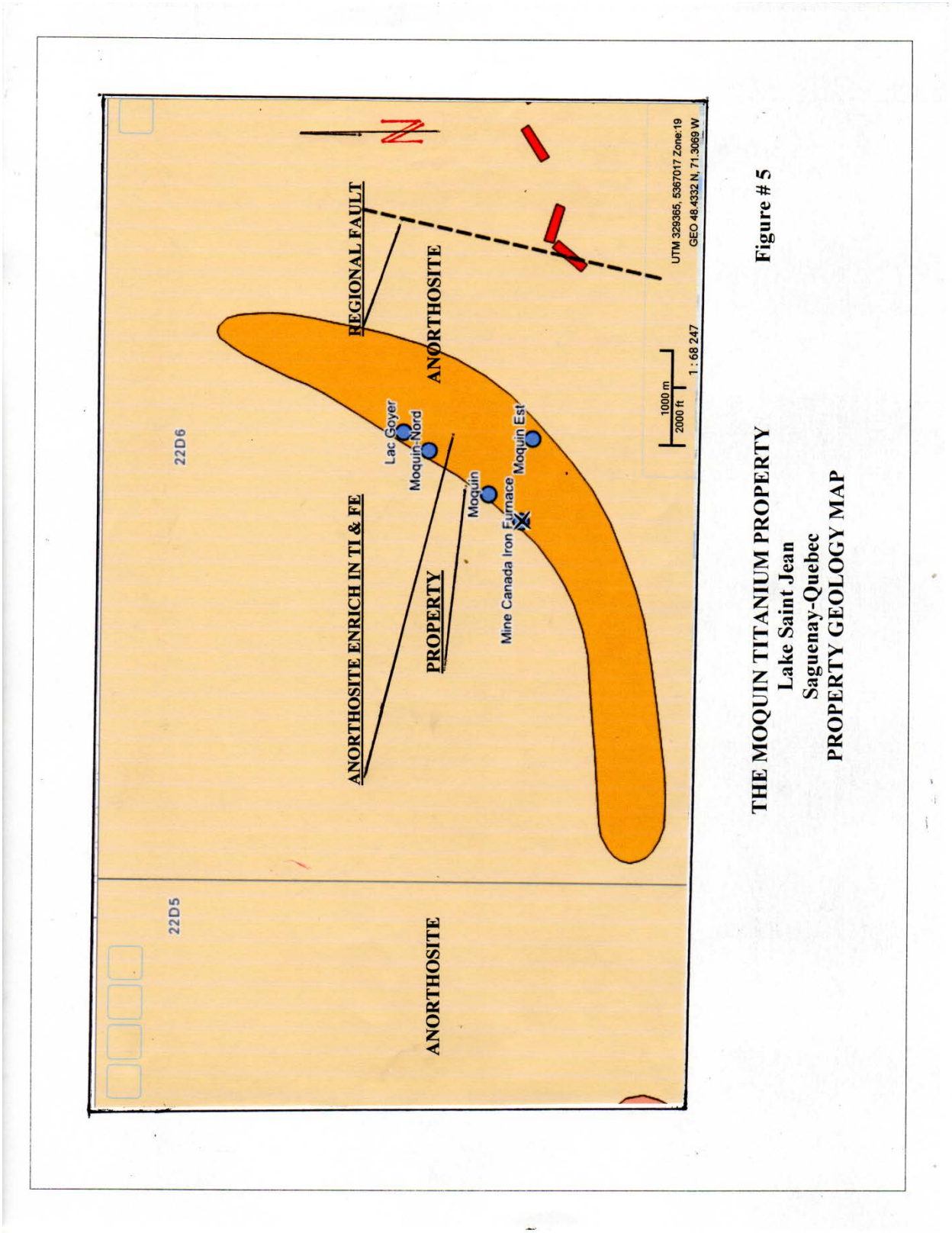


Figure # 5

THE MOQUIN TITANIUM PROPERTY
Lake Saint Jean
Saguenay-Quebec
PROPERTY GEOLOGY MAP

7.0 GEOPHYSICAL SIGNATURE

Most of all major ilmenite deposits have been discovered by systematic exploration and ground prospecting; aeromagnetic survey is the main exploration method used in finding the hidden extensions due to the high magnetite content. It must be borne in mind that most valuable deposits contain ilmenite that is intergrown with hematite, magnetite usually present in way less percentage than normal. Therefore, within an area of magmatic ilmenite occurrences, all magnetic anomalies should be checked regardless of the magnetic intensity.

Previous geophysical work on and around the property area includes magnetic survey was applied to test the property potential for hosting ilmenite magnetite type of mineralization within the anorthosite complex of Lake Sainte Jean. Magnetic anomalies were encountered over all of the magnetic showings already discovered on the property particularly south of Lake Goyer. The fact that some of the known showings do not corresponds to magnetic anomalies may be due to a high proportion of nonmagnetic ilmenite. Most of strongest anomalies are interpreted as being probably due to concentrations of magnetite or titaniferous magnetite; it is considered likely that this applies to all results in excess of 10,000 gammas and also to several in the 5000 to 10,000 gammas ranges.

The magnetic pattern over the area of the prospects generally leaves room for some of the anomalies to be of fairly large size, but the final estimate of possible tonnage must be determined by applying the proper geophysical method, mainly gravity survey to determine the lower limit of intensity for significant titanium/ iron mineralization within the anorthosite complex of Lake Saint Jean followed by diamond drilling.

8.0 HISTORY AND PREVIOUS WORK (Figure 6)

In 1901 Canada Iron Furnace mine was discovered and produced 272 tons by artisanal mining, however, the difficulties of metallurgical treatment of the ore back then probably diminished its interest.

In 1960, the Moquin, Moquin north, Moquin east, Goyer titanium/iron prospects were discovered in 1960 by prospections.

In 1960, Saguenay Exploration and Mining Inc conducted a program of geological investigation right after the discovery of all titanium/iron. The company has investigated several mineralized outcrops of titaniferous magnetite exposed on surface, they are between 50 to 150 meters in length, outcrops are open in all directions as they disappear under overburden. Several rock samples were collected from outcrops representing the above prospects.

Rock sampling results were as follow:

% Iron	% TiO2
48.14	1929
49.37	19.82
49.14	19.04
44.12	18.48
33.64	14.26
36.24	12.29
31.43	11.19
33.00	7.51
32.70	9.18
46.80	19.78

The number and the widespread distribution and the size of the mineralized occurrences already exposed on the discovery area were quite impressive considering the small amount of work done back then. It was evidence that large bodies of titaniferous magnetite exist on the property. Provided that titanium can be easily separated from the iron, and the location close to Saguenay River is extremely advantageous as regards to transportation, availability of electric power, etc. (GM 10393-Leo Brassard P. Eng).

The main interest back of all previous work programs was looking for iron ore potential not titanium, in fact it is a bad news when titanium shows in the results as part of the chemical composition of the mineralized rocks due to the separation problems, for this reason the interest for titanium exploration was almost nonexistent.

In 2002, a geological investigation program known as Project Titane was initiated by Ariana Resources to investigate the titanium potential of the most interesting 22 properties

located within Grenville geological province of Quebec, (Moquin, Moquin north, Lake Goyer titanium prospects were included in this investigation program).

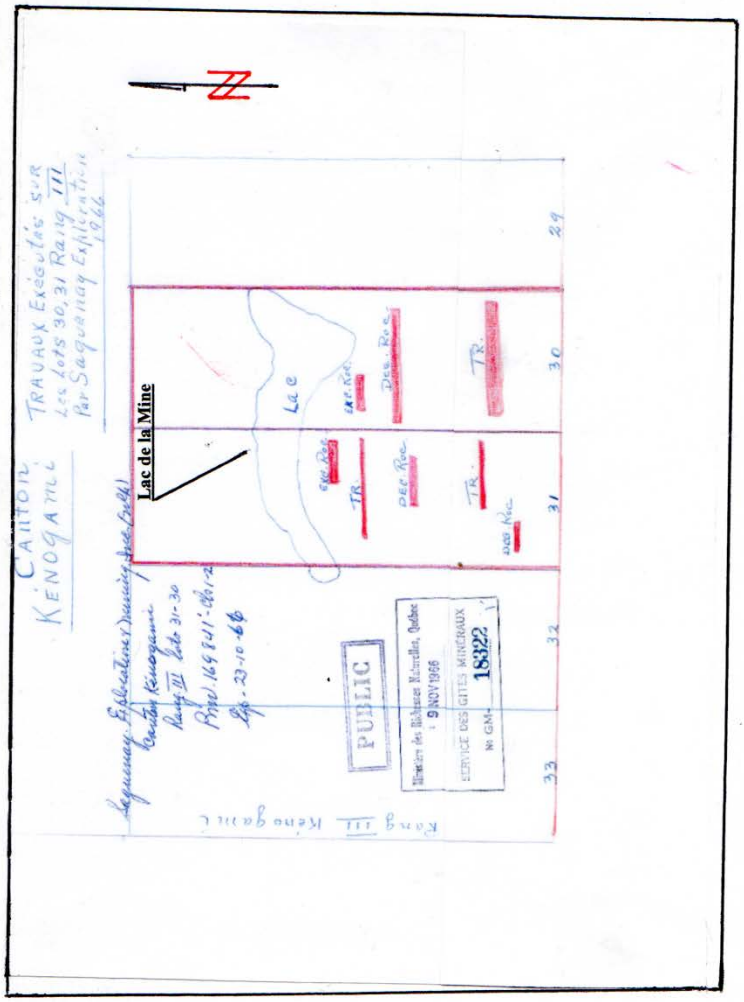


Figure # 6

THE MOQUIN TITANIUM PROPERTY
Lake Saint Jean
Saguenay-Quebec
EXCAVATED AREAS & TRENCHING
LOCATION MAP

FROM GM 18322

9.0 MINERALIZATION (Figure 7)

The Moquin property host four titanium/iron prospects and one past producing titanium mine:

1- The Moquin Titanium/Iron prospect
2- The Moquin North Titanium/Iron prospect
3- The Moquin East Titanium/Iron prospect
4- The Goyer Lake Titanium/Iron prospect
5- Canada Iron Furnace Mine

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

9.1 The Moquin Prospect

The Moquin titanium/iron prospect is a mineralized outcrop located approximately 150 meters west of the village of Moquin at GPS: 319345E-5368073N.

An anorthosite rocks belonging to the anorthosite complex of Lake -St-Jean, contains titaniferous magnetite. The Moquin prospect is of undetermined form and the mineralized zone is between 23 and 24 meters in width, its longitudinal extension is undetermined. The center of the prospect located approximately 150 meters west of the village of Moquin (GM 10477).

The mineralization is massive consisting of ilmenite, pyrite and titaniferous and vanadiferous magnetite. Magnetite grains are 2 to 3 mm in diameter and are xenomorphic. The ilmenite grains are 1 mm and are xenomorphic. Ilmenite is intergranular with magnetite or in exsolution lamellae with it. GM 60442: Ilmenite is granular and clear. The MgO and Cr2O3 contents are low, interesting P2O5 contents have been observed. This type of ore produces a high quality apatite and ilmenite concentrate with values of 43.50 % and 43.40 % Fe, 15.90 % and 18.01 % TiO2, 0.23 % and 0.24 % V, (GM 10477). Values of 13,1 % TiO2, 52,2 % Fe2O3, 0,18 % V (GM 60442) and 19,6 % TiO2, 52,9 % Fe2O3, 0,13 % V from semi massive mineralized sample and 11,6 % TiO2, 49,8% Fe2O3, 0,15 % V and 13 % TiO2, 52,1 % Fe2O3, 0,18 % V from (60% massive mineralized sample). The Moquin prospect is an iron and titanium deposit of magmatic origin associated with anorthosite.

Genesis of the prospect: Bed of iron, titanium and vanadium formed by magmatic segregation associated with mafic masses.
The prospect was discovered in 1960 by mineral prospecting.

-20-

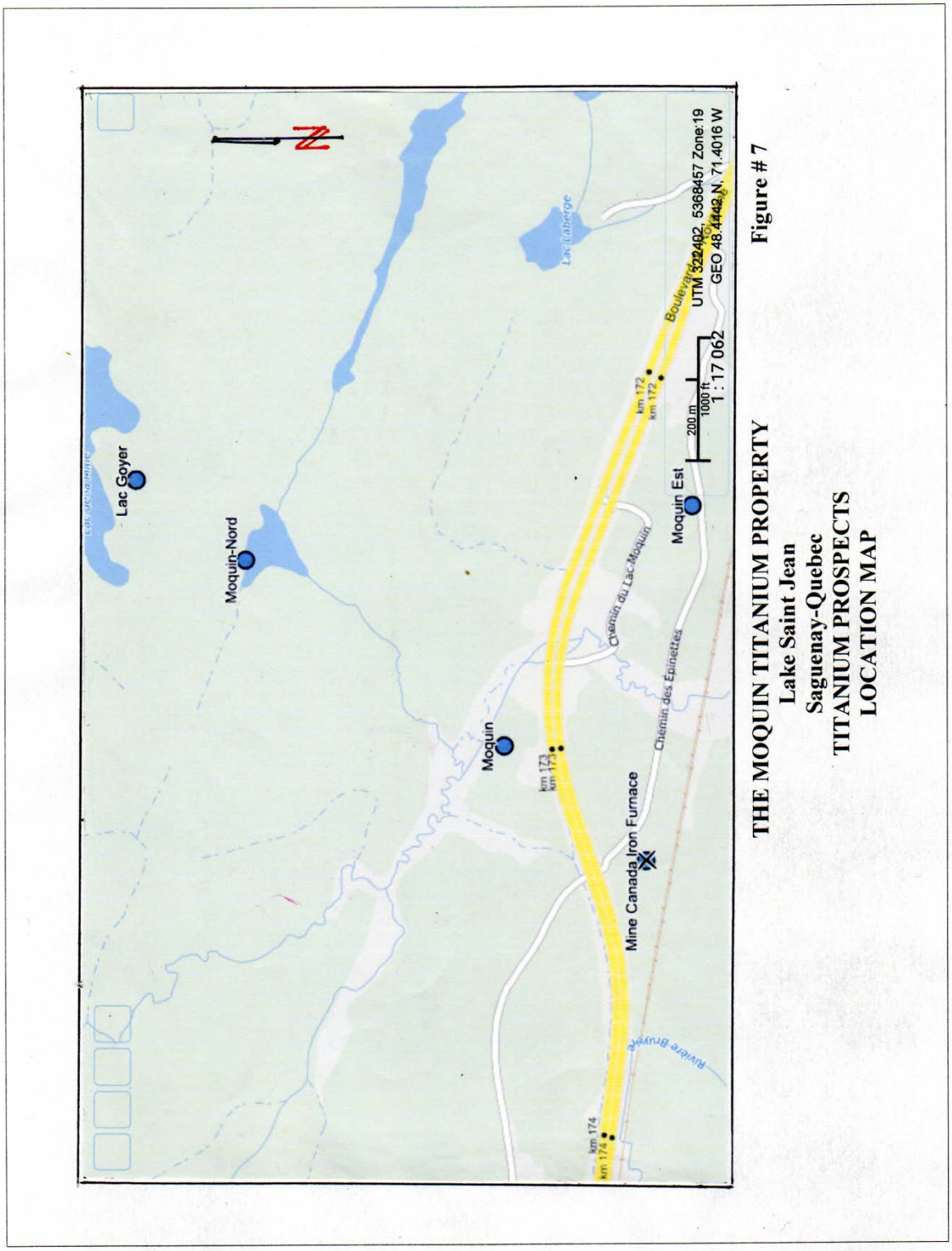


Figure # 7

THE MOQUIN TITANIUM PROPERTY
Lake Saint Jean
Saguenay-Quebec
TITANIUM PROSPECTS
LOCATION MAP

9.2 **The Moquin North Prospect**

The Moquin North prospect is located approximately 1.3 kilometers north of the village of Moquin at GPS:319345E-5368073N in map 22D/06; the prospect is in the form of clusters, measuring between 12 and 15 meters wide and 9 meters deep; The attitude of the mineralized bodies is unknown, the prospect was discovered in 1960.

Mineralization is massive, consists of ilmenite, pyrite and titaniferous and vanadiferous magnetite. Magnetite grains are 2 to 3 mm in diameter and are xenomorphic. The ilmenite grains are 1 mm and are xenomorphic. Ilmenite is intergranular with magnetite or in exsolution lamellae with it. GM 60442: Ilmenite is granular and clear. The MgO and Cr2O3 contents are low, interesting P2O5 contents have been observed. This type of mineralization produces a high quality apatite and ilmenite concentrate.

Sampling the mineralized zone returned the following results: 31.70% Fe, 10.30% TiO2 and 0.10% V (568 g, GM 10477). GM 60442: 02-MOQ-025 (solid oxides): 15% TiO2, 60.1% Fe2O3.

The iron and titanium mineralization is of magmatic origin, associated with anorthosite.

Genesis of the prospect: Bed of iron, titanium and vanadium formed by magmatic segregation associated with mafic masses.

9.3 **The Moquin East Prospect**

The Moquin East prospect is located approximately 800 meters east of the Canada Iron Furnace mine and 700 meters southeast of the Moquin deposit (GM 60442). at GPS: 319940E-5367581N in map 22D/06. Massive ilmenite/ magnetite mineralization in anorthosite of Lake saint Jean. The prospect was discovered in 2002 by Arianne Resources through surface prospecting.

Ilmenite is granular and limpid. The MgO and Cr2O3 contents are low however interesting P2O5 contents have been observed. This type of mineralization produces a high quality apatite and ilmenite concentrate.

Sampling the Moquin east prospect returns 15.2% TiO2, 60.7% Fe2O3 (GM 60442).

9.4 Goyer Lake Prospect

The Goyer Lake titanium/iron prospect is a mineralized outcrop located approximately 1.7 km north of the village of Moquin near the south shore of Goyer Lake (GM 10477) at GPS 320045E-5368983N. The outcrop is 99 meters long, 53 meters wide and 30 meters deep. The attitude of the prospect is still unknown due to the limited investigation work however an EM survey is suggesting a north 030 degrees orientation.

An anorthosite rocks belonging to the anorthosite complex of Lake-St-Jean, contains titaniferous magnetite. The prospect is described as a hill with steep sides, about 30 meters high, 53 meters wide and 99 meters long. The walls of this hill are not necessarily the limits of this prospect. The material of the walls and the top of the hill consists almost entirely of a combination of magnetite and ilmenite.

The mineralization is massive, and consists of titaniferous ilmenite, pyrite and vanadiferous magnetite. Magnetite grains are 2 to 3 mm in diameter and are xenomorphic. The ilmenite grains are 1 mm and are xenomorphic. Ilmenite is intergranular with magnetite or in exsolution lamellae with it. GM 60442: Ilmenite is granular and clear. The MgO and Cr2O3 contents are low, interesting P2O5 contents have been observed which usually produces high quality apatite and ilmenite concentrate with values of 43.50 % and 43.40 % Fe, 15.90 % and 18.01 % TiO2, 0.23 % and 0.24 % V, (GM 10477). Values of 13,1 % TiO2, 52,2 % Fe2O3, 0,18 % V (GM 60442) and 19,6 % TiO2, 52,9 % Fe2O3, 0,13 % V from semi massive mineralized sample and 11,6 % TiO2, 49,8% Fe2O3, 0,15 % V and 13 % TiO2, 52,1 % Fe2O3, 0,18 % V from (60% massive mineralized sample). It is iron and titanium deposit of magmatic origin associated with anorthosite.
Genesis of the prospect: Bed of iron, titanium and vanadium formed by magmatic segregation associated with mafic masses. The prospect was discovered in 1960 by mineral prospecting.

9.5 Canada Iron Furnice Mine

The center of the former Canada Iron Furnace quarry is located approximately 6.7 km east of the village of Larouche and 30 meters south of Highway 170 at GPS: 5367723E-5367723N within map sheet 22D/06.

The magnetic zone is an outcrop, belonging to the anorthositic mass of Lake-St-Jean, contains titaniferous magnetite. It is 305 meters long by 11 meters wide and is oriented N045 °. Anorthosite outcrops along Route 170 over a length of more than 91.5 m east of the quarry. The mineralized outcrop discovered in 1901 by mineral prospecting.

Mineralized anorthosite rocks, belonging to the anorthositic mass of Lac-St-Jean contain titaniferous magnetite. The mineralization is titaniferous magnetite, apatite, garnet and rutile in massive and disseminated forms. To the east of the quarry along Highway 170

(Jonquière-Larouche) over a width of 15 meters at the northern end of the outcrop, the anorthosite contains numerous grains and in places narrows parallel strips of magnetite. Also along Route 170, it appears that magnetite is located along fracture zones with garnet, rutile and apatite. Clusters of apatite grains up to 5 cm long are present with magnetite in the anorthosite. The iron content appears to be 10%. GM 60442: Ilmenite is granular and clear. The MgO and Cr2O3 contents are low, interesting P2O5 contents have been observed that usually produces high quality apatite and ilmenite concentrate.

Ten mineral wagons from the quarry were shipped to Radnor in 1901. Almost all came from a quarry where the massive ore is visible over a width of 11 meters. A sample was cut into pieces over the entire width returned 39.99% iron and 18.38% TiO2.

The iron and titanium mineralization formed by magmatic segregation associated with mafic masses of magmatic origin. Or it may be thought that this deposit is possibly related to that of St-Charles located approximately 10 kilometers to the north.

Canada Iron Furnace mine produced 272 t back in1901 by artisanal mining. However, the difficulties of metallurgical treatment of the ore back then probably diminished its interest.

10.0 ECONOMIC GEOLOGY AND MINERAL POTENTIAL OF THE ADJACENT PROPERTIES

Saint-Charles Deposit

The Saint Charles is a titaniferous-magnetite deposit in anorthosite located on the northern shore of the Saguenay River, 42 kilometers west of the city of Saguenay, 5.2 kilometers northwest of St Charles, approximately 8 kilometers north-northwest of the subject property. It is a deposit with estimated tonnage of 41.9 MT of 32.02% Fe and 6.58% Ti.

The first discovery of titaniferous magnetite in this area dates back to 1884. The main six mineralized zones were intersected during the 2011-2012 drilling program. The mineralized zones are typically massive and form a more or less tabular horizon , the mineralization consists of nelsonite bodies, composed mainly of titanomagnetite, enclosed in a finely to moderately grained anorthosite. Typical mineralization consists of magnetite, ilmenite, apatite, spinel, olivine, serpentine, pyroxene and more rarely amphibole, biotite and plagioclase.

Titanomagnetite represents between 50% and 70% of the rocks, apatite up to 30% and other minerals between 15% and 20% (locally up to 30%). Ilmenite accounts for up to 20-40% of titanomagnetite.

Mineralization was formed by magmatic segregation associated with mafic masses. Jooste (1958) concludes that the titaniferous deposits of Saint-Charles result from the injection of a residual magma remaining liquid,

The best grades returned by the 2011 drill holes are: 49.74% Fe2O3 over 25.10 m, 13.34% TiO2 and 9.05% P2O5 over 27.67 m, 47.70% Fe2O3 m, 12.15% TiO2 and 9.41% P2O5 (GM 67674).

Micrex Development Corporation is evaluating the deposit for the production of magnetite, ilmenite, apatite and rare earth elements.

11.0 PROPERTY POTENTIAL

The author believes that the subject property has potential for hosting Titanium-Iron Ore deposit for the following reasons:

- The Moquin property is located in a geological environment that is well known to host Titanium-Iron Ore deposits. Several deposits and prospects have been found since 1901. Electric power, railway, airport and highways are either only a few kilometers away from the property or running through the property area. The proximity of the property to power supply, deep water port and infra structures is great value as these are prime factors for minimizing the mining operation and transportation cost.

- Previous mineral exploration on the property has outlined favorable geological and geophysical environments for Titanium-Iron Ore deposits and several target areas have already been established such as the Moquin titanium/iron prospect, the Moquin north titanium/iron prospect and the Canadian iron furnace mine.A mineralized massive anorthosite rocks consist of ilmenite, pyrite and titaniferous and vanadiferous magnetite with values of 43.50 % and 43.40 % Fe, 15.90 % and 18.01 % TiO_2 and interesting P_2O_5 contents have been observed.

- Previous ground magnetic survey completed by Saguenay exploration and Mining Inc. on the property has encountered areas of magnetic susceptibility significantly lower than would be expected for coarse-grained magnetite. The reason for the lower magnetism is that magnetic properties of iron-titanium minerals vary greatly with their composition, texture, temperature, and pressure. One of the important magnetic properties of these minerals is their ability to produce magnetic anomalies. Another key attribute is their varying capacity to retain a hard component of remnant magnetism; and a third related property is their inherent mechanism of reversing their magnetic fields.These target areas of the negative magnetic anomalies could reflect a hidden mineralized Titanium-Iron Ore bodies that could add significant tonnage if favorable surface and subsurface chemical results are obtained through future investigation.

- Except for the five titanium prospects, the property was tested through the exposed mineralized areas only, no detailed ground geology; ground geophysics or drilling seems to be conducted on the property.

- Electric power, railway, airport and highways are either only a few kilometers away from the property or running through the property area. The proximity of the property to power supply, deep water port and infra structures is great value as these are prime factors for minimizing the mining operation and transportation cost. The property is readily accessible and all facilities essential for large scale production are close at hand allowing for a low cost operation.

Good potential exists for locating more significant mineralization on the property, however the assumption of a deposit of any size of indicated reserves (open pit mining) located on the subject property still needs to be confirmed by all methods of exploration including drill testing and bulk sampling.

It is concluded that the geological and the geophysical character of the property is of sufficient merit to justify intensive exploration programs.

12.0 RECOMMENDATIONS

An initial phase of continued exploration and development is recommended for the property as follows:

- Compilation and evaluation of the previous database. The property data consists of geological, geochemical, and geophysical surveys. The database represents the exploration work conducted on the property area between 1901 and 2002. At a time titanium was not the main focus.

- A detailed geological study should be undertaken to determine more precisely the extent and the grade of Ti-Fe mineralization within all previously discovered titanium prospects and target areas.

- A program of airborne survey followed by detailed gravity over all target area to determine best drill locations to continue investigating the prospects by diamond drilling.

- Drilling and bulk sampling the main target areas and all previously discovered targets should continue in order to confirm previous results and to outline the full extent of the Ti-Fe mineralization.

- Exploration pits should be designed for a bulk sampling program.

- Detailed drilling and reserve estimates should be recast using geological information such as drill intersections and grade, drill spacing, the depth of mineralization, method of sampling, drilling method and consistency of mineralization.

- Metallurgical test work to establish the best process for concentrating the ilmenite and the iron ore.

- When all of this is done, a preliminary assessment of feasibility can be made with emphasis on the economics of the project. The project is expected to take about two to three years to complete at an estimated cost of $3,000,000 (Canadian dollars).

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, and a diploma in Mining Exploration Geology from the International Institute for Aerial Survey and Earth Sciences (I.T.C.), Holland (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 (the Moquin property) are based on previous work conducted on the property between 1901 and 2002 by several mining companies and database of several geological, geochemical and geophysical reports gathered on the property and from regional work conducted and published by Ministere des Ressources Naturelles, Quebec.

7) I am the registered owner of the property and have 100% interest.

Respectfully submitted

Fayz Yacoub, P. Geo., F.G.A.C. Dated August 30th, 2017

REÇU
08 JAN. 2018
DIRECTION GÉNÉRALE DE LA GESTION DU MILIEU MINIER

Fayz Yacoub, P.Geo

1649447 - -

August, 2017

APPENDIX A

Goyer Lake Prospect

Geological Description

Goyer Lake Prospect

NTS Sheet Number: 22D06
Name metal deposit: Goyer Lake
Name: Goyer Lake
Cog: 22D / 06-0002
Stage: Working deposit
Township: Kénogami
Number rank: III
Lot number: 30
Timezone: 19
Easting: 320045
Northing: 5368983
Year discovered: 1960
Location reference: The outcrop center of prospect 5 locates the lodge, approximately 1.7 km north of the village of Moquin near the south shore of Lake Goyer (GM 10477).
Comment on morphology: Lodging in the form of irregular cluster. The outcrop is 99 m long, 53 m wide and 30 m deep. The attitude of the lodging is unknown. The anomaly EM is oriented N030.
Comment on discovery: The main outcrop discovered in 1960 by prospecting.
Comment on lithology: An anorthosite, belonging to the anorthositic massif of Lac-St-Jean, contains titaniferous magnetite. SAGUENAY EXPLORATION (1960) has partially updated seven deposits of titaniferous magnetite. Particular attention has been paid to prospect 2 (22D06-004, Moquin), prospect 5 (22D06-002, Lac Goyer) and prospect 6 (22D06-001, Moquin-Nord). Given that their location is relatively close, prospects 1, 3, 4 and 7 have not been listed. Apart from prospect 7, which has a fairly limited level of development, the other three (1, 3 and 4) are small. Prospect 5 (here) is described as a hill with steep sides, about 30 m high, 53 m wide and 99 m long. The walls of this hill are not necessarily the limits of this lodging. The material of the walls and top of the hill consists almost entirely of a combination of magnetite and ilmenite. There are also some anorthosite inclusions (up to 45 cm in diameter). The development of the property has been abandoned due to the difficulty of processing this type of ore. It was only in 1976 that the deposit 5 became an object of interest when ALCAN proposed to use the ore as a source of heavy aggregates. It was not possible to know whether the project was carried out.
Comment on mineralization: The mineralization is massive, and consists of ilmenite, pyrite and titaniferous and vanadiferous magnetite. Magnetite grains are 2 to 3 mm in diameter and are xenomorphic. The ilmenite grains are 1 mm and are xenomorphic. Ilmenite is intergranular with magnetite or in exsolution lamellae with it. GM 60442: Ilmenite is granular and clear. The MgO and Cr2O3 contents are low, interesting P2O5 contents have been observed. This type of ore produces a high quality apatite and ilmenite concentrate.
Comments on Substance: 43.50% and 43,40% Fe, 15,90% and 18,01% TiO2, 0,23% and 0,24% V (Analysis of two samples of 28,4 g and 966 g, GM 10477). GM 60442: 02-MOQ-020 (60% solid oxides): 13.1% TiO2, 52.2% Fe2O3, 0.18% V. 02-MOQ-022 (red semi-solid oxides): 19.6% TiO2, 52.9% Fe2O3, 0.13% V. 02-MOQ-023 (red semi-solid oxides): 11.6% TiO2, 49.8% Fe2O3, 0.15% V. MOQ-PG (60% solid oxides): 13.2% TiO2, 51.2% Fe2O3, 0.17% V. MOQ-GM (60% solid oxides): 13% TiO2, 52.1% Fe2O3, 0.18% V.
Comment on structural control: Insufficient information.

Comment on alteration: No information.
Typology: Deposit Of iron and titanium in anorthosites
Commentary on typology: Typology: Iron and titanium deposit of magmatic origin associated with anorthosites. Genesis: Bed of iron, titanium and vanadium formed by magmatic segregation associated with mafic masses.
Comment on production:
Tonnage reserves:
Reserves category:
Reserve calculation date:
Reference document reservation:
Comment - reservations:
Document number: GM 10393, GM 10477, GM 11046, GM 18322, GM 32302, GM 60442, RG 078, RG 161, RG 97-08, RP 381, RP 472, SI-22D06-C3G-98J
Date Released: 20111015

Lac Goyer

Numéro feuillet SNRC	:	22D06
Nom gisement métallique	:	Lac Goyer
Nom	:	Lac Goyer
Numéro cogîte	:	22D/06-0002
Étape	:	Gîte travaillé
Canton/seigneurie	:	Kénogami
Numéro rang	:	III
Numéro lot	:	30
Fuseau	:	19
Estant	:	320045
Nordant	:	5368983
Année découverte	:	1960
Référence de localisation	:	Le centre de l'affleurement du gîte 5 localise le gîte, à environ 1,7 km au nord du village de Moquin près de la rive Sud du lac Goyer (GM 10477).
Commentaire - morphologie	:	Gîte en forme d'amas irrégulier. L'affleurement mesure 99 m de long, 53 m de large et 30 m de profondeur. L'attitude du gîte est inconnue. L'anomalie EM est orientée N030.
Commentaire - découverte	:	Gîte avec affleurement découvert en 1960 par prospection.
Commentaire - lithologie	:	Une anorthosite, appartenant au massif anorthositique du Lac-St-Jean, contient de la magnétite titanifère. SAGUENAY EXPLORATION (1960) a partiellement mis à jour 7 gîtes de magnétite titanifère. Une attention particulière a été portée au gîte 2 (22D06-004 ; Moquin), au gîte 5 (22D06-002 ; Lac Goyer) et au gîte 6 (22D06-001; Moquin-Nord)). Leur situation étant assez rapprochée, les gîtes 1, 3, 4 et 7 n'ont pas été fichés. À part le gîte 7, dont le niveau de développement est assez restreint, les trois autres (1, 3 et 4) sont peu étendus. Le gîte 5 (ici) est décrit comme une colline à flancs abrupts, d'environ 30 m de hauteur, 53 m de largeur et 99 m de longueur. Les parois de cette colline ne sont pas nécessairement les limites de ce gîte. Le matériel des parois et du sommet de la colline est constitué presque essentiellement d'une association de magnétite et d'ilménite. Il y a également quelques inclusions d'anorthosite (jusqu'à 45 cm de diamètre). La mise en valeur de la propriété a été abandonnée suite à la difficulté de traitement de ce type de minerai. C'est seulement en 1976 que le gîte 5 redevient un

		objet d'intérêt, lorsque ALCAN propose d'en utiliser le minerai comme source d'agrégats lourds. Il n'a pas été possible de savoir si le projet a été réalisé.
Commentaire - minéralisation	:	La minéralisation est massive, et constituée d'ilménite, de pyrite et magnétite titanifère et vanadifère. Les grains de magnétite mesurent de 2 à 3 mm et ils sont xénomorphes. Les grains d'ilménite mesurent 1 mm et sont xénomorphes. L'ilménite est intergranulaire avec la magnétite ou en lamelles d'exsolution avec celle-ci. GM 60442 : L'ilménite est granulaire et limpide. Les teneurs en MgO et Cr2O3 sont basses, des teneurs intéressantes en P2O5 ont été observées. Ce type de minerai produit un concentré d'apatite et d'ilménite de bonne qualité.
Commentaire - substance	:	Teneurs: 43,50 % et 43,40 % Fe, 15,90 % et 18,01 % TiO2, 0,23 % et 0,24 % V (Analyses respectives de deux échantillons de 28,4 g et 966 g, GM 10477). GM 60442 : Éch. 02-MOQ-020 (60% oxydes massifs) : 13,1 % TiO2, 52,2 % Fe2O3, 0,18 % V. Éch. 02-MOQ-022 (oxydes semi-massifs rouges) : 19,6 % TiO2, 52,9 % Fe2O3, 0,13 % V. Éch. 02-MOQ-023 (oxydes semi-massifs rouges) : 11,6 % TiO2, 49,8% Fe2O3, 0,15 % V. Éch. MOQ-PG (60% oxydes massifs) : 13,2 % TiO2, 51,2 % Fe2O3, 0,17 % V. Éch. MOQ-GM (60% oxydes massifs) : 13 % TiO2, 52,1 % Fe2O3, 0,18 % V.
Commentaire - contrôle structural	:	Information insuffisante.
Commentaire - altération	:	Aucune information.
Typologie	:	Gis. de fer et titane dans des anorthosites
Commentaire - typologie	:	Typologie : Gisement de fer et titane d'origine magmatique associé à des anorthosites. Genèse : Gîte de fer, titane et vanadium formé par ségrégation magmatique associée à des masses mafiques.
Commentaire - production	:	
Tonnage réserves	:	
Catégorie réserves	:	
Date calcul réserves	:	
Référence document réserve	:	
Commentaire - réserves	:	
Numéro document	:	GM 10393, GM 10477, GM 11046, GM 18322, GM 32302, GM 60442, RG 078, RG 161, RG 97-08, RP 381, RP 472, SI-22D06-C3G-98J, tous

Date de diffusion : 20111015

Substance principale ou secondaire

Statut de la substance : Principal
Élément chimique : Fe

Statut de la substance : Principal
Élément chimique : Ti

Statut de la substance : Principal
Élément chimique : V

Substance et teneur

Élément chimique	Teneur	Unité teneur	Type échantillon (minéralisation)	Longueur
Fe	435000	ppm	Échantillon choisi	0
Fe	434000	ppm	Échantillon choisi	0
Ti	107900	ppm	Échantillon choisi	0
V	2400	ppm	Échantillon choisi	0
V	2300	ppm	Échantillon choisi	0

Corps lithologique

Identifiant lithologie : A
Lithologie : I4Z - Roches ultramafiques à >90% de minéraux oxydés

Identifiant lithologie : B
Lithologie : I3G - Anorthosite

APPENDIX B

Moquin Prospect

Geological Description

Moquin Titanium Prospect

NTS sheet number: 22D06
Name metallic deposit: Moquin
Name: Moquin
Map. Number: 22D / 06-0010
Stage: Working deposit
Township: Kénogami
Number rank: IV
Lot number: 31 (32?)
Timezone: 19
Easting: 319345
Northing: 5368073
Year discovered: 1960
Comment on morphology: Prospect of undetermined form. The mineralized zone is between 23 and 24 m in width and its longitudinal extension is undeterminate.
Location reference: The center of the outcrop of the prospect 2 locates the prospect, located approximately 150 m west of the village of Moquin (GM 10477). SAGUENAY EXPLORATION (1960) has partially updated seven deposits of titaniferous magnetite.
Comment on lithology: The mineralization is located in an anorthosite belonging to the anorthositic massif of Lac Saint-Jean. SAGUENAY EXPLORATION (1960) has partially updated seven deposits of titaniferous magnetite. Particular attention has been paid to prospect 2 (22D06-004, Moquin), prospect 5 (22D06-002, Lac Goyer) and prospect 6 (22D06-001, Moquin-Nord). Given that their location is relatively close, prospects 1, 3, 4 and 7 have not been listed. Apart from prospect 7, which has a fairly limited level of development, the other three (1, 3 and 4) are small. Deposit 2 (here) is described as a low outcrop. The development of the property has been abandoned due to the difficulty of processing this type of ore.
Comment on discovery: Mineralized outcrop discovered in 1960 by prospecting.
Comment on mineralization: The mineralization of vanadium magnetite and ilmenite is massive and disseminated. The titaniferous magnetite is fine to medium. One third of the grains of magnetite contain ilmenite in the form of exsolution lamellae. GM 60442: Ilmenite is granular and clear. The MgO and Cr2O3 contents are low, interesting P2O5 contents have been observed. This type of ore produces a high quality apatite and ilmenite concentrate.
Comment on substance: Content: 42.02% Fe, 17.80% TiO2 and 0.19% V (369 g, GM 10477). (Solid oxides): 16.1% TiO2, 48.5% Fe2O3, 0.16% V. Ech 02-MOQ-026 (solid oxides): 16.1% TiO2, 51 % Fe2O3, 0.12% V.
Comment on structural control: Insufficient information.
Comment on alteration: No information.
Typology: Deposit Of iron and titanium in anorthosites
Comment on typology: Typology: Deposit of Iron/ titanium and vanadium formed by magmatic segregation associated with mafic masses.
Genesis: Deposit of magmatic origin.
Comment on production:
Tonnage reserves:
Reserves category:
Reserve calculation date:

Reference document reservation:
Comment on reservations:
Date Released: 20111015
Document Number: GM 10393, GM 10477, GM 18322, GM 60442, RG 078, RG 161, RG 97-08, RP 381, RP 472, SI-22D06-C3G-98J

Moquin

Numéro feuillet SNRC	:	22D06
Nom gisement métallique	:	Moquin
Nom	:	Moquin
Numéro cogîte	:	22D/06-0010
Étape	:	Gîte travaillé
Canton/seigneurie	:	Kénogami
Numéro rang	:	IV
Numéro lot	:	31(32?)
Fuseau	:	19
Estant	:	319345
Nordant	:	5368073
Année découverte	:	1960
Référence de localisation	:	Le centre de l'affleurement du gîte 2 localise le gîte, situé à environ 150 m à l'ouest du village de Moquin (GM 10477). SAGUENAY EXPLORATION (1960) a partiellement mis à jour 7 gîtes de magnétite titanifère.
Commentaire - morphologie	:	Gîte de forme indéterminée. La zone minéralisée mesure entre 23 et 24 m de largeur et son extension longitudinale est indéterminée.
Commentaire - découverte	:	Gîte avec affleurement découvert en 1960 par prospection.
Commentaire - lithologie	:	La minéralisation est disposée dans une anorthosite appartenant au massif anorthositique du lac Saint-Jean. SAGUENAY EXPLORATION (1960) a partiellement mis à jour 7 gîtes de magnétite titanifère. Une attention particulière a été portée au gîte 2 (22D06-004 ; Moquin), au gîte 5 (22D06-002; Lac Goyer) et au gîte 6 (22D06-001; Moquin-Nord). Leur situation étant assez rapprochée, les gîtes 1, 3, 4 et 7 n'ont pas été fichés. À part le gîte 7, dont le niveau de développement est assez restreint, les trois autres (1, 3 et 4) sont peu étendus. Le gîte 2 (ici) est décrit comme un affleurement bas. La mise en valeur de la propriété a été abandonnée suite à la difficulté de traitement de ce type de minerai.
Commentaire - minéralisation	:	La minéralisation en magnétite vanadifère et en ilménite est massive et disséminée. La magnétite titanifère est à grain fin à moyen. Le tiers des grains de magnétite renferme de l'ilménite sous forme de lamelles d'exsolution. GM 60442 : L'ilménite est granulaire et limpide. Les teneurs en MgO et Cr2O3 sont basses, des teneurs intéressantes en P2O5 ont

		été observées. Ce type de minerai produit un concentré d'apatite et d'ilménite de bonne qualité.
Commentaire - substance	:	Teneurs : 42,02 % Fe, 17,80 % TiO2 et 0,19 % V (Éch. de 369 g, GM 10477). GM 60442 : Éch 02-MOQ-017 (oxydes massifs) : 15,4 % TiO2, 48,5 % Fe2O3, 0,16 % V. Éch 02-MOQ-026 (oxydes massifs) : 16,1 % TiO2, 51 % Fe2O3, 0,12 % V.
Commentaire - contrôle structural	:	Information insuffisante.
Commentaire - altération	:	Aucune information.
Typologie	:	Gis. de fer et titane dans des anorthosites
Commentaire - typologie	:	Typologie : Gîte de fer, titane et vanadium formé par ségrégation magmatique associée à des masses mafiques. Genèse : Gîte d'origine magmatique.
Commentaire - production	:	
Tonnage réserves	:	
Catégorie réserves	:	
Date calcul réserves	:	
Référence document réserve	:	
Commentaire - réserves	:	
Numéro document	:	GM 10393, GM 10477, GM 18322, GM 60442, RG 078, RG 161, RG 97-08, RP 381, RP 472, SI-22D06-C3G-98J, tous
Date de diffusion	:	20111015

Substance principale ou secondaire

Statut de la substance : Principal
Élément chimique : Fe

Statut de la substance : Principal
Élément chimique : Ti

Statut de la substance : Secondaire
Élément chimique : V

Substance et teneur

Élément chimique	Teneur	Unité teneur	Type échantillon (minéralisation)	Longueur
V	1900	ppm	Échantillon choisi	0
Fe	420200	ppm	Échantillon choisi	0

Ti	106700	ppm	Échantillon choisi	0

Corps lithologique

Identifiant lithologie : A

Lithologie : I4Z - Roches ultramafiques à >90% de minéraux oxydés

Corps lithologique-minéralisation

Code minéraux	Qualificatif lithologie/minéral
Ilménite	Non altéré (minéral primaire)
Magnétite	Non altéré (minéral primaire)

Identifiant lithologie : B

Lithologie : I3G - Anorthosite

Corps lithologique-minéralisation

Code minéraux	Qualificatif lithologie/minéral
Plagioclase	Non altéré (minéral primaire)

APPENDIX C

Moquin North Prospect

Geological Description

Moquin North Prospect

NTS sheet number: 22D06
Name metal deposit: Moquin-Nord
Name: Moquin-Nord
Map number: 22D / 06-0001
Stage: Working deposit
Township: Kénogami
Number rank: III
Lot number: 31
Timezone: 19
Easting: 319835
Northing: 5368713
Year discovered: 1960
Comment on morphology: Lodging in the form of clusters, measuring between 12 and 15 m wide and 9 m deep; its attitude is unknown.
Location reference: The center of the outcrop of the prospect 6 locates the prospect, about 1.3 km north of the village of Moquin (GM 10477).
Comment on lithology: Titaniferous magnetite mineralization is located in an anorthosite belonging to the Lac Saint-Jean anorthositic massif. SAGUENAY EXPLORATION (1960) has partially updated seven deposits of titaniferous magnetite. Particular attention has been paid to prospect 2 (22D06-004, Moquin), prospect 5 (22D06-002, Lac Goyer) and prospect 6 (22D06-001, Moquin-Nord). Given that their location is relatively close, prospects 1, 3, 4 and 7 have not been listed. Apart from prospect 7, which has a fairly limited level of development, the other three (1, 3 and 4) are small. prospect 6 (the prospect herein) is described as a gently sloping hill with a height of about 9 m and whose width of mineralized outcrop varies from 12 to 15 m. Its lateral and longitudinal extensions are indeterminate. There is association of magnetite and ilmenite with anorthosite inclusions. The development of the property has been abandoned due to the difficulty of processing this type of ore.
Comment on discovery: Mineralized outcrop discovered in 1960 by prospecting.
Comment on mineralization: The mineralization in titaniferous and ilmenite magnetite is massive and disseminated. The titaniferous magnetite is in coarse and irregular grains. One third of the grains of magnetite contain ilmenite in the form of exsolution lamellae. GM 60442: Ilmenite is granular and clear. The MgO and Cr_2O_3 contents are low, interesting P_2O_5 contents have been observed. This type of ore produces a high quality apatite and ilmenite concentrate.
Comment on substance: Content: 31.70% Fe, 10.30% TiO_2 and 0.10% V (568 g, GM 10477). GM 60442: 02-MOQ-025 (solid oxides): 15% TiO_2, 60.1% Fe_2O_3.
Comment - structural control: Insufficient information.
Comment - alteration: No information.
Typology: Deposit of iron and titanium in anorthosites
Comments on typology: Typology: Deposit of iron/ titanium and vanadium in anorthosites.
Genesis: Bed formed by magmatic segregation.
Comment - production:
Tonnage reserves:
Reserves category:
Reserve calculation date:

Reference document reservation:
Comment - reservations:
Date Released: 20111015
GM 10393, GM 10477, GM 11046, GM 18322, GM 60442, RG 078, RG 161, RG 97-08, RP 381, RP 472, SI-22D06-C3G-98J,

Moquin Nord

Numéro feuillet SNRC	:	22D06
Nom gisement métallique	:	Moquin-Nord
Nom	:	Moquin-Nord
Numéro cogîte	:	22D/06-0001
Étape	:	Gîte travaillé
Canton/seigneurie	:	Kénogami
Numéro rang	:	III
Numéro lot	:	31
Fuseau	:	19
Estant	:	319835
Nordant	:	5368713
Année découverte	:	1960
Référence de localisation	:	Le centre de l'affleurement du gîte 6 localise le gîte, à environ 1,3 km au nord du village de Moquin (GM 10477).
Commentaire - morphologie	:	Gîte en forme d'amas, mesurant entre 12 et 15 m de large et 9 m de profondeur; son attitude est inconnue.
Commentaire - découverte	:	Gîte avec affleurement découvert en 1960 par prospection.
Commentaire - lithologie	:	La minéralisation en magnétite titanifère est disposée dans une anorthosite appartenant au massif anorthositique du Lac Saint-Jean. SAGUENAY EXPLORATION (1960) a partiellement mis à jour 7 gîtes de magnétite titanifère. Une attention particulière a été portée au gîte 2 (22D06-004; Moquin), au gîte 5 (22D06-002; Lac Goyer) et au gîte 6 (22D06-001; Moquin-Nord). Leur situation étant assez rapprochée, les gîtes 1, 3 , 4 et 7 n'ont pas été fichés. À part le gîte 7, dont le niveau de développement est assez restreint, les trois autres (1, 3 et 4) sont peu étendus. Le gîte 6 (le gîte ici présent) est décrit comme une colline à pente douce d'une hauteur de 9 m environ et dont la largeur de l'affleurement minéralisé varie de 12 à 15 m. Ses extensions latérale et longitudinale sont indéterminées. Il y a association de magnétite et d'ilménite avec des inclusions d'anorthosite. La mise en valeur de la propriété a été abandonnée suite à la difficulté de traitement de ce type de minerai.
Commentaire - minéralisation	:	La minéralisation en magnétite titanifère et ilménite est massive et disséminée. La magnétite titanifère est en grains grossiers et irréguliers. Le tiers des grains de magnétite

		renferme de l'ilménite sous forme de lamelles d'exsolution. GM 60442 : L'ilménite est granulaire et limpide. Les teneurs en MgO et Cr2O3 sont basses, des teneurs intéressantes en P2O5 ont été observées. Ce type de minerai produit un concentré d'apatite et d'ilménite de bonne qualité.
Commentaire - substance	:	Teneurs : 31,70 % Fe, 10,30 % TiO2 et 0,10 % V (Éch. de 568 g, GM 10477). GM 60442 : Éch. 02-MOQ-025 (oxydes massifs) : 15 % TiO2, 60,1 % Fe2O3.
Commentaire - contrôle structural	:	Information insuffisante.
Commentaire - altération	:	Aucune information.
Typologie	:	Gis. de fer et titane dans des anorthosites
Commentaire - typologie	:	Typologie : Gîte de fer, titane et vanadium dans des anorthosites. Genèse : Gîte formé par ségrégation magmatique.
Commentaire - production	:	
Tonnage réserves	:	
Catégorie réserves	:	
Date calcul réserves	:	
Référence document réserve	:	
Commentaire - réserves	:	
Numéro document	:	GM 10393, GM 10477, GM 11046, GM 18322, GM 60442, RG 078, RG 161, RG 97-08, RP 381, RP 472, SI-22D06-C3G-98J, tous
Date de diffusion	:	20111015

Substance principale ou secondaire

Statut de la substance : Principal
Élément chimique : Fe

Statut de la substance : Secondaire
Élément chimique : V

Statut de la substance : Secondaire
Élément chimique : Ti

Substance et teneur

Élément chimique	Teneur	Unité teneur	Type échantillon (minéralisation)	Longueur
Fe	317000	ppm	Échantillon choisi	0

Ti	61700	ppm	Échantillon choisi	0
V	1000	ppm	Échantillon choisi	0

Corps lithologique

Identifiant lithologie : A

Lithologie : I4Z - Roches ultramafiques à >90% de minéraux oxydés

Corps lithologique-minéralisation

Code minéraux	Qualificatif lithologie/minéral
Ilménite	Non altéré (minéral primaire)
Magnétite	Non altéré (minéral primaire)

Identifiant lithologie : B

Lithologie : I3G - Anorthosite

Corps lithologique-minéralisation

Code minéraux	Qualificatif lithologie/minéral
Plagioclase	Non altéré (minéral primaire)

APPENDIX D

Moquin East Prospect

Geological Description

Moquin East Prospect

NTS Sheet Number: 22D06
Name metallic deposit: Moquin East
Name: Moquin East
Stage: showing, no work
Township: Catalonia
Number rank:
Lot number:
Timezone: 19
Easting: 319940
Northing: 5367581
Year discovered: 2002
Location Reference: Sample 02-MOQ-016A located the deposit 800 m east of the Canada Iron Furnace mine and 700 m southeast of the Moquin deposit (GM 60442).
Comment on morphology: The mineralization is massive (GM 60442).
Comment on discovery: Prospet discovered in 2002 by Arianne Resources by surface prospecting.
Comment on lithology: Massive mineralization of ilmenite and magnetite in an anorthosite (GM 60442).
Comment on mineralization: GM 60442: Ilmenite is granular and limpid. The MgO and Cr2O3 contents are low, interesting P2O5 contents have been observed. This type of ore produces a high quality apatite and ilmenite concentrate.
Substance: Content: Sample 02-MOQ-016A, 15.2% TiO2, 60.7% Fe2O3 (GM 60442).
Comment on structural control: Insufficient information.
Comment - alteration: No information.
Typology: Deposit of iron and titanium in anorthosites
Comments on typology: Typology: Iron and titanium in anorthosites.
Genesis: Insufficient information.
Comment - production:
Tonnage reserves:
Reserves category:
Reserve calculation date:
Reference document reservation:
Comment - reservations:
Document Number: GM 60442

Moquin East

Numéro feuillet SNRC	:	22D06
Nom gisement métallique	:	Moquin Est
Nom	:	Moquin Est
Numéro cogîte	:	
Étape	:	Indice, aucun travail
Canton/seigneurie	:	Catalogne
Numéro rang	:	
Numéro lot	:	
Fuseau	:	19
Estant	:	319940
Nordant	:	5367581
Année découverte	:	2002
Référence de localisation	:	L'échantillon 02-MOQ-016A localise le gîte à 800 m à l'est de la mine Canada Iron Furnace et 700 m au sud-est du gîte Moquin (GM 60442).
Commentaire - morphologie	:	La minéralisation est massive (GM 60442).
Commentaire - découverte	:	Gîte découvert en 2002 par Ressources d'Arianne par prospection de surface.
Commentaire - lithologie	:	Minéralisation massive d'ilménite et magnétite dans une anorthosite (GM 60442).
Commentaire - minéralisation	:	GM 60442 : L'ilménite est granulaire et limpide. Les teneurs en MgO et Cr2O3 sont basses, des teneurs intéressantes en P2O5 ont été observées. Ce type de minerai produit un concentré d'apatite et d'ilménite de bonne qualité.
Commentaire - substance	:	Teneurs : Échantillon 02-MOQ-016A, 15,2 % TiO2, 60,7 % Fe2O3 (GM 60442).
Commentaire - contrôle structural	:	Information insuffisante.
Commentaire - altération	:	Aucune information.
Typologie	:	Gis. de fer et titane dans des anorthosites
Commentaire - typologie	:	Typologie : Gîte de fer et titane dans des anorthosites. Genèse : Information insuffisante.
Commentaire - production	:	
Tonnage réserves	:	
Catégorie réserves	:	

Date calcul réserves :	
Référence document réserve :	
Commentaire - réserves :	
Numéro document :	GM 60442
Date de diffusion :	20111015

Substance principale ou secondaire

Statut de la substance : Principal
Élément chimique : Fe

Statut de la substance : Secondaire
Élément chimique : Ti

Substance et teneur

Élément chimique	Teneur	Unité teneur	Type échantillon (minéralisation)	Longueur
Fe	425000	ppm	Échantillon choisi	0
Ti	91000	ppm	Échantillon choisi	0

Corps lithologique

Identifiant lithologie : A
Lithologie : I4Z - Roches ultramafiques à >90% de minéraux oxydés

Corps lithologique-minéralisation

Code minéraux	Qualificatif lithologie/minéral
Ilménite	Non altéré (minéral primaire)
Magnétite	Non altéré (minéral primaire)

Identifiant lithologie : B
Lithologie : I3G - Anorthosite

Corps lithologique-minéralisation

Code minéraux	Qualificatif lithologie/minéral
Plagioclase	Non altéré (minéral primaire)

APPENDIX E

Canada Iron Furnace Mine

Geological Description

Canada Iron Furnace Mine

NTS Sheet Number: 22D06
Name metal deposit: Canada Iron Furnace mine
Mine Name: Canada Iron Furnace Mine
Map: 22D / 06-0009
Stage: Closed Mine
Township: Kénogami
Number rank: IV
Lot number: 32-33
Timezone: 19
Easting: 319045
Northing: 5367723
Year discovered: 1901
Location reference: The center of the former Canada Iron Furnace quarry is located approximately 6.7 km east of the village of Larouche and 30 m south of Highway 16.
Comment on morphology: Lenticular prospect. The magnetic zone is 305 m long by 11 m wide and is oriented N045 °. The anorthosite outcrops along Route 170 (Jonquière-Larouche) over a length of more than 91.5 m east of the quarry.
Comment on discovery: Mineralized outcrop discovered in 1901 by prospecting.
Comment on lithology: An anorthosite, belonging to the anorthositic mass of Lac-St-Jean, and a gabbro contain titaniferous magnetite.
Comment on mineralization: The mineralization in titaniferous magnetite, apatite, garnet and rutile is massive and disseminated, to the east of the quarry along Highway 170 (Jonquière-Larouche) over a width of 15 m at the northern end of the outcrop. The anorthosite contains numerous grains and in places narrows parallel strips of magnetite. Sometimes (along Route 170), it appears that magnetite is located along fracture zones with garnet, rutile and apatite. Clusters of apatite grains up to 5 cm long are present with magnetite in the anorthosite. The iron content appears to be 10%. GM 60442: Ilmenite is granular and clear. The MgO and Cr2O3 contents are low, interesting P2O5 contents have been observed. This type of ore produces a high quality apatite and ilmenite concentrate.
Comment on substance: Content: 39.99% Fe and 18.38% TiO2 (7.2 kg shard fragment, GM 02077). Ten mineral wagons from these lands were shipped to Radnor in 1901. Almost all came from a quarry where the massive ore is visible over a width of 11 m. A sample was cut into pieces over the entire width. At analysis, it gave 39.99% iron and 18.38% TiO2. An open gallery at 23 m to the north of the quarry shows a massive 2.4 m wide mineral strip, accompanied on each side by scattered titaniferous magnetite. Three splint samples were taken in this area over a width of 10 m. At the analysis, they gave: 9.81% iron and 4.41% TiO2 over a 4.6 m width, 24.60% iron and 11.90% TiO2 over the 2.4 m massive ore and , Finally 11.10% iron and 5.30% TiO2 over the last 3 m. GM 60442: 02-MOQ-010 (solid oxides): 14.6% TiO2, 54.9% Fe2O3. Exch. 02-MOQ-011 (solid oxides): 13% TiO2, 46.2% Fe2O3. Exch. 02-MOQ-013 (semi-solid oxides): 17.8% TiO2, 63.7% Fe2O3. Exch. 02-MOQ-014A (solid oxides and sulphides): 18.5% TiO2, 72.6% Fe2O3. Exch. 02-MOQ-014C (anorthosite with 35% of solid oxides): 14.2% TiO2, 48.9% Fe2O3.
Comment - structural control: Insufficient information.

Comment - alteration: No information.
Typology: Deposit of iron and titanium in anorthosites
Commentary on typology: Typology: Iron and titanium hut formed by magmatic segregation associated with mafic masses.
Genesis: Deposit of magmatic origin. Other: It may be thought that this deposit is possibly related to that of St-Charles (22D / 01-008). The difficulties of metallurgical treatment of the ore probably diminished its interest.
Commentary on production: Production at the beginning and end of 1901: 272 t. Ten mineral wagons from these lands were shipped to Radnor in 1901. Artisanal production
Tonnage reserves:
Reserves category:
Reserve calculation date:
Reference document reservation:
Comment - reservations:
Document number: ES 012, GM 02077, GM 10477, GM 60442, RG 078, RG 161, RG 97-08, RP 330, RP 381, RP 409, SI-22D06-C3G-98J

Canada Iron Furnace Mine

Numéro feuillet SNRC	:	22D06
Nom gisement métallique	:	Mine Canada Iron Furnace
Nom	:	Mine Canada Iron Furnace
Numéro cogîte	:	22D/06-0009
Étape	:	Mine fermée
Canton/seigneurie	:	Kénogami
Numéro rang	:	IV
Numéro lot	:	32-33
Fuseau	:	19
Estant	:	319045
Nordant	:	5367723
Année découverte	:	1901
Référence de localisation	:	Le centre de l'ancienne carrière de Canada Iron Furnace situe le gîte, à environ 6,7 km à l'est du village de Larouche et 30 m au sud de la route 16.
Commentaire - morphologie	:	Gîte de forme lenticulaire. La zone magnétique mesure 305 m de long par 11 m de large et est orientée N045°. L'anorthosite affleure le long de la route 170 (Jonquière-Larouche) sur une longueur de plus de 91,5 m à l'est de la carrière.
Commentaire - découverte	:	Gîte avec affleurement découvert en 1901 par prospection.
Commentaire - lithologie	:	Une anorthosite, appartenant au massif anorthositique du Lac-St-Jean, et un gabbro contiennent de la magnétite titanifère.
Commentaire - minéralisation	:	La minéralisation en magnétite titanifère, apatite, grenat et rutile est massive et disséminée. À l'est de la carrière, le long de la route 170 (Jonquière-Larouche) sur une largeur de 15 m à l'extrémité Nord de l'affleurement, l'anorthosite renferme de nombreux grains et par endroits d'étroites bandes parallèles de magnétite. Quelquefois (le long de la route 170), il semble que la magnétite soit située le long de zones de fractures avec du grenat, du rutile et de l'apatite. Des grappes de grains d'apatite mesurant jusqu'à 5 cm sont présents avec la magnétite dans l'anorthosite. La teneur en fer semble être de 10%. GM 60442 : L'ilménite est granulaire et limpide. Les teneurs en MgO et Cr2O3 sont basses, des teneurs intéressantes en P2O5 ont été observées. Ce type de minerai produit un concentré d'apatite et

		d'ilménite de bonne qualité.
Commentaire - substance	:	Teneurs : 39,99 % Fe et 18,38 % TiO2 (Éch. en éclats de 7,2 kg; GM 02077). Dix wagons de minerai provenant de ces terrains furent expédiés à Radnor en 1901. La presque totalité provenait d'une carrière où le minerai massif est visible sur une largeur de 11 m. Un échantillon fut prélevé en éclats sur toute cette largeur. À l'analyse, il a donné 39,99 % de fer et 18,38 % de TiO2. Une galerie à ciel ouvert située à 23 m au nord de la carrière laisse voir une bande de minéral massif large de 2,4 m, accompagnée de chaque côté de magnétite titanifère éparse. Trois échantillons en éclats ont été prélevés dans cette zone sur une largeur de 10 m. À l'analyse, ils ont donné : 9,81 % fer et 4,41 % TiO2 sur une largeur de 4,6 m, 24,60 % fer et 11,90 % TiO2 sur les 2,4 m de minerai massif et, finalement, 11,10 % fer et 5,30 % TiO2 sur les derniers 3 m. GM 60442 : Éch. 02-MOQ-010 (oxydes massifs) : 14,6 % TiO2, 54,9 % Fe2O3. Éch. 02-MOQ-011 (oxydes massifs) : 13 % TiO2, 46,2 % Fe2O3. Éch. 02-MOQ-013 (oxydes semi-massifs) : 17,8 % TiO2, 63,7 % Fe2O3. Éch. 02-MOQ-014A (oxydes massifs et sulfures) : 18,5 % TiO2, 72,6 % Fe2O3. Éch. 02-MOQ-014C (anorthosite avec 35 % d'oxydes massifs) : 14,2% TiO2, 48,9 % Fe2O3.
Commentaire - contrôle structural	:	Information insuffisante.
Commentaire - altération	:	Aucune information.
Typologie	:	Gis. de fer et titane dans des anorthosites
Commentaire - typologie	:	Typologie : Gîte de fer et titane formé par ségrégation magmatique associée à des masses mafiques. Genèse : Gîte d'origine magmatique. Autres : On peut penser que ce gisement est possiblement en relation avec celui de St-Charles (22D/01-008). Les difficultés de traitement métallurgique du minerai en ont probablement diminué l'intérêt.
Commentaire - production	:	Production au début et à la fin de 1901 : 272 t. Dix wagons de minerai provenant de ces terrains furent expédiés à Radnor en 1901. Production artisanale.
Tonnage réserves	:	
Catégorie réserves	:	
Date calcul réserves	:	
Référence document réserve	:	
Commentaire - réserves	:	

Numéro document : ES 012, GM 02077, GM 10477, GM 60442, RG 078, RG 161, RG 97-08, RP 330, RP 381, RP 409, SI-22D06-C3G-