

Schefferville Project

RESOURCE ESTIMATE & TECHNICAL REPORT ON THE HOUSTON IRON ORE DEPOSIT WESTERN LABRADOR PROVINCE OF NEWFOUNDLAND AND LABRADOR CANADA

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1. SUMMARY (ITEM 3)

The author of this report is a director and officer of Labrador Iron Mines Holdings Limited ("LIMHL") and of Labrador Iron Mines Limited ("LIM"), a wholly owned subsidiary of LIMHL which holds the mineral claims on which the Houston iron deposit is located. The author is a "qualified person" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators. The author is not independent of either LIMHL or LIM as described in section 1.4 of NI 43-101. This report describes the Houston deposits and makes a new resource estimate compliant with the requirements of National Instrument 43-101.

1.1 Property Description and Location

LIM holds 100% title to 34 Mineral Rights Licenses as of the date of this report issued by the Department of Natural Resources, Province of Newfoundland and Labrador, representing 395 mineral claims located in western Labrador covering approximately 9,875 hectares, including the Houston deposits. All of the LIM properties, including Houston, are located in the western central part of the Labrador Trough Iron Range and are located about 1,140 km northeast of Montreal and within a few kilometres to 70 km from the town of Schefferville (Quebec). The Houston deposit is approximately 20 km from Schefferville and comprises 8 Mineral Rights Licenses representing 66 mineral claims covering approximately 1,650 hectares.

There are no roads connecting the area to southern Labrador or elsewhere in Canada. Access to the area is by rail from Sept-Îles to Schefferville, by air from Montreal and Sept-Îles via Wabush. LIM is preparing the James and Redmond deposits for production start up during the summer of 2010. The Iron Ore Company of Canada ("IOC") had previous mining activities close to these properties.

1.2 HISTORY

The Quebec-Labrador Iron Range has a tradition of mining since the early 1950s and is one of the largest iron producing regions in the world. The former direct shipping iron ore ("DSO") operations at Schefferville operated by IOC produced in excess of 150 million tons of lump and sinter fine ores over the period 1954-1982. The first serious exploration in the Labrador Trough occurred in the late 1930s and early 1940s when Hollinger North Shore Exploration Company Limited ("Hollinger") and Labrador Mining and Exploration Mining Company Limited ("LM&E") acquired large mineral concessions in the Quebec and Labrador portions of the Trough. Mining and shipping from the Hollinger lands began in 1954 under the management of the IOC, a company specifically formed to exploit the Schefferville area iron deposits.

As the technology of the steel industry changed over the ensuing years more emphasis was placed on the concentrating ores of the Wabush area and interest and markets for the direct shipping Schefferville ores declined. Finally, in 1982, IOC closed their operations in the Schefferville area.

Following the closure of the IOC mining operations the mining rights held by IOC in Labrador reverted to the Crown. Between September 2003 and March 2006, Fenton and Graeme Scott, Energold Minerals Inc. ("Energold") and New Millennium Capital Corp. ("NML") began staking claims over the soft iron ores in the Labrador part of the Schefferville camp. Recognizing a need to consolidate the mineral ownership, Energold and subsequently LIM, entered into agreements bringing the southern deposits under one ownership. All of the properties, including Houston, comprising LIM's Schefferville area project were part of the original IOC Schefferville holdings and

formed part of the 250 million tons of reserves and resources identified but not mined by IOC in the area.

1.3 GEOLOGY

At least 45 hematite-goethite ore deposits have been discovered in an area 20 km wide that extends 100 km northwest of Astray Lake, referred to as the Knob Lake Iron Range, which consists of a tightly folded and faulted iron-formation exposed along the height of land that forms the boundary between Quebec and Labrador. The Knob Lake properties are located on the western margin of the Labrador Trough adjacent to Archean basement gneisses. The Central or Knob Lake Range section extends for 550 km south from the Koksoak River to the Grenville Front located 30 km north of Wabush Lake. The principal iron formation unit, the Sokoman Formation, part of the Knob Lake Group, forms a continuous stratigraphic unit that thickens and thins from sub-basin to sub-basin throughout the fold belt.

The sedimentary rocks in the Knob Lake Range strike northwest, and their corrugated surface appearance is due to parallel ridges of quartzite and iron formation which alternate with low valleys of shales and slates. The Hudsonian Orogeny compressed the sediments into a series of synclines and anticlines, which are cut by steep angle reverse faults that dip primarily to the east. The synclines are overturned to the southwest with the east limits commonly truncated by strike faults. Most of the secondary earthy textured iron deposits occur in canoe-shaped synclines, some are tabular bodies extending to a depth of at least 200m, and one or two deposits are relatively flat lying and cut by several faults. Subsequent supergene processes converted some of the iron formations into high-grade ores, preferentially in synclinal depressions and/or down-faulted blocks.

The Labrador Trough contains four main types of iron deposits:

- Soft iron ores formed by supergene leaching and enrichment of the weakly metamorphosed cherty iron formation; they are composed mainly of friable fine-grained secondary iron oxides (hematite, goethite, limonite);
- Taconites, the fine-grained, weakly metamorphosed iron formations with above average magnetite content and which are also commonly called magnetite iron formation;
- More intensely metamorphosed, coarser-grained iron formations, termed metataconites which contain specular hematite and subordinate amounts of magnetite as the dominant iron minerals.
- Minor occurrences of hard high-grade hematite ore occur southeast of Schefferville at Sawyer Lake, Astray Lake and in some of the Houston deposits.

Secondary enrichment included the addition of secondary iron and manganese which appear to have moved in solution and filled pore spaces with limonite-goethite. Secondary manganese minerals, i.e., pyrolusite and manganite, form veinlets and vuggy pockets. The types of iron ores developed in the deposits are directly related to the original mineral facies. The predominant blue granular ore was formed from the oxide facies of the middle iron formation. The yellowish-brown ore, composed of limonite-goethite, formed from the carbonate-silicate facies, and the red painty hematite ore originated from mixed facies in the argillaceous slaty members. Only the direct shipping ore is considered beneficiable to produce lump and sinter feed and forms part of the resources for the LIM project.

1.4 EXPLORATION

Most historic exploration on the properties was carried out by IOC until the closure of their operation in the 1980s. A considerable amount of data used in the evaluation of the current status of the resource and reserve evaluation is provided in the documents, sections and maps produced by IOC or their consultants. Recent exploration has been carried out by LIM during the period 2005 to 2009 and includes tricone reverse circulation and diamond drilling, trenching, bulk sampling and data collation and verification.

The Houston deposit is currently at the most advanced stage next to the James and Redmond deposits which are being prepared for production start up in mid-2010.

Additional RC drilling will be required to enable the classification of all of the potential resources to be compliant with NI 43-101. Additional bulk sampling for metallurgical testing will be necessary to prepare the final process flow sheet for treatment of the iron and manganese-rich resources.

1.5 DRILLING AND SAMPLING

Diamond drilling of the Schefferville area iron deposits has been a problem historically in that the alternating hard and soft mineralized zones tend to preclude good core recovery. Traditionally IOC used a combination of reverse circulation drilling, diamond drilling and trenching to generate data for reserve and resource calculation. A large number of original IOC data have been recovered, reviewed and digitized by LIM.

For the most recent calculations of the resources for the Houston deposit, data from 4,418 metres of drilling in 84 historical reverse circulation drill holes and 1,485 samples has been used. The systematic drilling has been carried out on sections 100 feet (30 metres) apart.

IOC also sampled targets by trenching and test pits in addition to drilling. The test pits and trenches were to determine lithologies, ore body limits and quality of ore on surface. A total of 200 metres in 64 test pits and 6,700 metres in 159 trenches with their 2,086 samples from historical records were considered in this report. Samples were usually collected over 10 feet (3.0 metres) intervals.

In addition to historical data, LIM carried out several exploration programs since 2006 with the purpose of verifying the historical resources. This included 4,181 metres in 63 drill holes, 554 metres in 10 trenches and 1,449 samples. Most of the drilling completed was using tricone reverse circulation.

The geological sections originally prepared by IOC have been updated with the information obtained through LIM's exploration work.

A bulk sample program was started in 2006 (2,400kg from Houston) but the major bulk sampling was carried out in 2008 when 2,000 tonnes of ore were excavated from the Houston 1 deposit.

1.6 Sample Preparation, Security and Data Verification

The precise sampling procedures used by IOC are not known but it is believed that LIM has followed procedures that are similar to those used by IOC in the past. All samples were processed in a preparation laboratory, located in Schefferville that was established by LIM. Sampling as well as the preparation was carried out under supervision of LIM and SGS Geostat personnel in 2008 and

by LIM personnel in 2006 and 2009 by experienced geologists or technicians following well-established sampling and preparation procedures. The samples were reduced to representative, smaller size samples that were sent to SGS Lakefield laboratory or to ACTLABS laboratory for analysis and testing.

1.7 METALLURGICAL TESTING

Four bulk trench samples of 600kg each taken in 2006 from the Houston deposit were tested for compressive strength, crusher index and abrasion index at SGS Lakefield. Composite crushing, dry and wet screen analysis, washing and classification tests were done at "rpc - The Technical Solutions Centre" in Fredericton, New Brunswick.

During the 2008 bulk sample program, a total of 2,000 tonnes of ore was collected from the Houston deposit from which 200 kg representative samples were taken for each of the raw ore types. At Houston, only blue ore was collected and sent to SGS Lakefield laboratories for metallurgical testing. Other tests (angle of repose, bulk density, moisture, direct head assay and particle size analysis determinations) were also carried out. Preliminary scrubber tests were also performed. The potential of beneficiation by gravity was explored by Heavy Liquid Separation and Vacuum filtration testwork was also carried out by Outotec.

1.8 MINERAL RESOURCES AND MINERAL RESERVES

Tables 1 and 2 summarize the resource estimate for the Houston deposit, both iron and manganiferous iron resources, which are NI 43-101 compliant. No mineral reserves are reported in this document.

Table 1
Houston Deposit - NI 43-101 Compliant vs. Historical Iron Resources
(Direct Shipping Resources – DSO)

Ore Type	Classification	43-101				Historical			
		Tonnage	SG	Fe%	SiO2%	Tonnage	Fe%	Si02%	
NB-LNB	Measured	6,700	3.52	61.12	8.58	-	-	-	
	Indicated	5,274	3.51	60.40	9.61	9,114	57.43	7.13	
	Inferred	1,004	3.48	59.17	11.43	-	-	-	
HSiO2	Measured	1,329	3.33	52.64	21.33	-	-	-	
	Indicated	1,382	3.33	52.71	21.08	-	-	-	
	Inferred	494	3.32	52.55	21.19	-	-	-	
Total	Measured	8,029	3.49	59.71	10.69	-	-	-	
	Indicated	6,656	3.47	58.80	12.00	9,114	57.43	7.13	
	Inferred	1,498	3.43	56.99	14.65	-	-	-	

Table 2 Houston Deposit - Total NI 43-101 Compliant Manganiferous Iron Resources

NI 43-101 Compliant	Tonnes (x1,000)	Fe%	SiO ₂ %	Mn%
Measured (LMN+HMN)	480	54.2	8.8	5.8
Indicated (LMN+HMN)	351	54.4	9.5	5.0
Total	831	54.3	9.1	5.5

[NOTE: approximately 4,000 tonnes of measured and indicated manganiferous iron resources lie outside the limits of claims held by LIM]

IOC estimated mineral resources and reserves were published in their Direct-Shipping Ore (DSO) Reserve Book published in 1983. The estimates were based on geological interpretations on cross sections and the calculations were done manually. IOC categorized their estimates as "reserves". The author has adopted the same principle as the 2007 Technical Report on LIM's Western Labrador Iron Deposits prepared by SNC-Lavalin that these should be categorized at "resources" as defined by NI 43-101.

The IOC classification reported all resources (measured, indicated and inferred): the total mineral resource. These historical estimates are not current and do not meet NI 43-101 Definition Standards and are reported here for historical purposes only. The historical estimates should not be relied upon.

LIM's resource estimates for the Houston deposit of 14.68 million tonnes (including $HSiO_2$ not reported previously) at a grade of 59.3% iron in the Measured and Indicated categories represents an increase of 61% over the historical resource of 9.1 million tons. A further 1.5 million tonnes of resources has been classified in the Inferred category. The Houston deposit remains open to the northwest and southeast and to depth.

1.9 BLOCK MODELING

LIM used Gemcom GEMS 6.2.3 software for the resource estimation. The ordinary kriging interpolation method was used to estimate the resources by block modeling with block sizes of 5x5x5 metres and block rotation of 45.6° which corresponds to the general strike of the deposit. LIM used the geological and ore models interpreted in plane and in sections. LIM used different search ellipses derived from 3D semi-variogram analyses for the classification of the resources.

1.10 ANALYSES

Analyses for all of the samples from the 2006, 2008 and 2009 drilling and trenching programs were carried out by SGS-Lakefield Laboratory and/or by Activation Laboratories. The analytical method used was borate fusion whole rock X-Ray Fluorescence.

1.11 DENSITY

A variable specific gravity (density) was used for the modeled ore types. LIM used the following equation: SG (in-situ) = $(2.3388 + \text{Fe} \times 0.0258) \times 0.9$. The regression formula was calculated by LIM based upon 229 specific gravity tests.

1.12 OTHER RELEVANT DATA AND INFORMATION

The Knob Lake Iron Range is well known for its hematite-goethite iron deposits and this region was exploited for approximately 30 years by IOC. LIM proposes to reactivate DSO operations from the same general area, commencing initially with the James, Redmond 2B & 5 deposits and subsequently, adding the Houston and other deposits, located relatively close to Schefferville, before developing deposits further removed from existing infrastructure. LIM plans to systematically bring the historic resources of the various projects into compliance with NI 43-101 on a staged basis as required for future development.

It is believed that the DSO iron ore produced by IOC required little processing and that only crushing and screening was performed and then blending to achieve the required grade and product specifications before being loaded on to trains for transportation to Sept-Îles. LIM has evaluated washing and screening of the ore to improve the quality and grade of products and to ensure a greater degree of consistency in the production of lump ore and sinter fines. It is expected that the proposed washing and screening process will remove low grade iron and silica material and should increase the grades of the final product by about 10-15% of the mined grade.

The railway originally constructed by IOC is still available and in current use for passengers and freight from Schefferville to Emeril Junction (Menehek Division) where it interchanges with the QNS&L railway which has been continually hauling iron ore concentrates from the Labrador City-Wabush area to Sept-Îles since the late 1960's. Some refurbishing of the tracks, rails and culverts on the Menehek Division will be necessary through a recommended multi-year repair and replacement

program. LIM is negotiating an agreement with Tshiuetin Rail Transport ("TSH"), a company owned by three Quebec First Nations and also with Quebec North Shore & Labrador Railway (QNS&L) to reach Sept-Îles.

LIM has been collecting seasonal environmental baseline data since mid-2005. The Houston property has been included in the first phase study which also included the James, Redmond and Knob Lake properties. The James and Redmond properties have recently completed environmental assessment and have been released from any further environmental assessment by the Newfoundland and Labrador Department of Environment and Conservation.

LIM has established an active community relations program since mid-2005 and an ongoing effort is made to work very closely with the relevant First Nations to focus on developing and maintaining productive working relations, ensuring a good understanding of the proposed project. LIM has signed an Impact Benefits Agreement with the Innu of Labrador and Memoranda of Understanding with other two First Nations who may have aboriginal rights in the area. LIM is currently engaged with those First Nations in negotiations for Economic Development Agreements. LIM has also assisted three Quebec based First Nations to identify and undertake the work necessary to allow for a timely expansion/upgrade of the TSH operations to include the shipment of iron ore.

There is a high level of existing infrastructure in the Schefferville area as a result of the former IOC operations and this will be augmented as LIM undertakes the start up of initial development of the James and Redmond deposits.

The Houston deposit is located within reach of existing infrastructure, including road access, electrical power lines and the railway terminal and proposed rail loading yard, although LIM anticipates constructing a new 10 km haulage road to link the Houston deposit to the Redmond mine site, thus keeping its operations completely within the Province of Newfoundland and Labrador.

The market for iron ores and related products has seen some substantial changes in recent years. It is expected that the European market is the most likely destination for products from the LIM Project given the freight advantage of Sept- Îles due to its proximity to Europe. However, there remains a strong demand for iron ore from the Far East and in particular from China.

1.13 CONCLUSIONS

The author has reviewed all of the data in the possession of LIM relating to the Houston and nearby iron and manganese deposits owned by LIM and has personal knowledge of the overall project from initial conception and property acquisition dating back to 2005. All of LIM's exploration work programs carried out in 2006 through 2009 were conducted under the supervision of the author.

Technical reports prepared by LIM's senior geological staff reporting on annual work programs, including drilling, trenching and bulk sampling, and the block modeling and resource estimation of the Houston deposit, were carried out under the direct supervision of the author.

The geological interpretation of the Houston deposit is restricted to the zones considered of economic quality. The historical IOC parameters of the Non-Bessemer and Bessemer ore types were considered together for the geological interpretations and modeling. The High Silica (Hi-SiO $_2$) ore types containing >50% Fe and from 18% up to 30% SiO $_2$ were also considered for the geological interpretation and modeling of the selected mineral deposits.

The geological modeling of the Houston deposit was performed using standard sectional modeling of 30-metre spacing. Geological interpretation and modeling of the mineral deposits on paper sections and plans from IOC were digitized and updated with new information acquired during the recent field work seasons.

LIM used Gemcom GEMS 6.2.3 software for the resource estimation. The ordinary kriging interpolation method was used to estimate the resources by block modeling with block sizes of 5x5x5 metres and block rotation of 45.6° which corresponds to the general strike of the deposit. LIM used a composite length of 3.0 metre, considered suitable in comparison to the dimension of the blocks used for the model. The search ellipses were obtained from 3D semi-variogram analyses for the classification of the resources. The block model estimation used the topography and the overburden contact in the parameters settings.

The results of LIM's work to date on the Houston deposit has shown that there is more than sufficient merit to continue exploration and development to further confirm, expand and reclassify the existing resources, especially to the south, to the north and to provide further detail between the various zones of mineralization.

A considerable amount of infrastructure remains around Schefferville and LIM is currently restoring or adding new facilities including a beneficiation plant and rail car loading facility at the Silver Yard, a 4.4 km rail spur line and a 70-man camp at Bean Lake. Such facilities would be available for any production from the Houston deposit.

1.14 RECOMMENDATIONS

The results of exploration to date have been very positive and have already shown that the IOC data is very reliable and have been confirmed with the recent exploration. Exploration completed on the first phase deposits belonging to LIM in western Labrador including Houston, James, Redmond 2B and Redmond 5 have confirmed and added to the historic resources previously defined by IOC, bringing them into compliance with NI 43-101.

Following a review of all data relative to the Houston deposit and the interpretation and conclusions of this review, there is more than sufficient merit to continue exploration to further expand the resource base of the Houston deposit by step out and infill drilling to the south as well as exploring in more detail between the currently defined zones of mineralization.

2. Introduction (ITEM 4)

The author is a director and senior officer of Labrador Iron Mines Holdings Limited ("LIMHL") and a director and officer of Labrador Iron Mines Limited ("LIM"), a wholly owned subsidiary of LIMHL, which holds the mineral claims on which the Houston iron deposit is located. The author is a "qualified person" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators but is not independent of the Issuer.

Previous resource estimates for the Houston deposit were based on estimates of made by IOC in 1982 and were consequently of an historic nature and were not compliant with NI 43-101. The present report describes the Houston iron deposit located in western Labrador and presents a resource estimate compliant with the requirements of NI 43-101.

The author has a personal knowledge of the Houston deposit and the other nearby iron deposits held by LIM in western Labrador, having been instrumental in the initial acquisition and direction of exploration of the properties dating from 2005. The author was co-author of an internal scoping study of LIM's iron ore project in western Labrador in September 2006.

LIM engaged SNC Lavalin in 2007 to prepare an independent Technical Report (October 2007) on its western Labrador iron properties. In March 2010, LIM engaged the senior author of the SNC Lavalin report (A. Kroon) to co-author, with SGS Canada Inc., a Revised Technical Report on an Iron Ore Project in Western Labrador, Province of Newfoundland and Labrador and an independent Technical Report of an Iron Project in Northern Quebec.

LIM has carried out significant geological exploration programs on the Houston and other Labrador properties held by LIM during the 2006, 2008 and 2009 summer seasons. The author has reviewed the annual technical assessment reports prepared by LIM for submission to the Department of Miners and Energy, Newfoundland and Labrador.

In October 2009, LIM and NML rationalized certain mineral property ownership interests in Labrador, including the Houston property, through an exchange of certain mineral licenses. The agreement represented the exchange by each party of equal quantities of approximately 13 million tons of iron ore. These exchanges were based on historical estimates of gross quantities of iron ore (non NI 43-101 compliant) contained in various DSO deposits. Under the Agreement, NML agreed to transfer to LIM a number of mineral licenses in Labrador and adjacent claim blocks in Quebec, some of which claims adjoin or form part of LIM's Houston property giving LIM ownership of 100% of the known extent of the Houston iron deposit.

The author has visited the site of the Houston project and the general Schefferville area iron deposits on several occasions, including 4-6 May, 2006, 18-19 May, 2006, 17 Jan, 2007, 7 Dec. 2007, 13-14 Mar. 2008, 28-29 Nov. 2008 and 22 Oct. 2009.

3. Reliance on Other Experts (ITEM 5)

This report has been prepared for LIM. The findings, conclusions and recommendations are based on the author's interpretation of information in LIM's possession, comprising reports, sections and plans prepared by IOC during 1954 to 1982; reports prepared for other subsequent owners of some of the Labrador area iron properties, including the Houston property, reports of exploration and sampling activities of LIM during the period 2006-2009 and independent technical reports authored by SNC Lavalin, A. Kroon, SGS Geostat Ltd and MRB & Associates.

The author has verified the ownership of the mineral claims by reference to the website of the Department of Natural Resources of the province of Newfoundland and Labrador as of the date of this report but does not offer an opinion to the legal status of such claims.

The assistance of Erick Chavez, B.Sc., M.Sc., Howard Vatcher, B.Sc., Eldon Roul, B.Sc. and Tara Schrama, B.Sc., of LIM's Exploration Department and Rodel Ortiz, LIM's CAD Manager in the preparation of this report and the underlying in-house technical reports is gratefully acknowledged.

4. Property Description and Location (Item 6)

The Houston property is located in the western central part of the Labrador Trough iron range and about 1,140 km northeast of Montreal and 20 km southeast of the town of Schefferville, Quebec (Figure 1).

There are no roads connecting this area to southern Labrador or elsewhere in Quebec. Access to the area is by rail from Sept-Îles to Schefferville or by air from Montreal and Sept-Îles.

LIM holds title, subject to various agreements described below, to 34 Mineral Rights Licenses as of the date of this report issued by the Department of Natural Resources, Province of Newfoundland and Labrador, representing 395 mineral claims located in northwest Labrador covering approximately 9,875 hectares (Table 3).

Under the terms of an Option and Joint Venture Agreement dated September 15, 2005 between Fonteneau Resources Limited ("Fonteneau") and Energold and as subsequently amended on properties in Labrador, such agreement which was subsequently assigned to LIM, a royalty in the amount 3% of the selling price FOB port per tonne of iron ore produced and shipped from any of the properties shall be payable to Fonteneau. This royalty will be capped at US\$1.50 per tonne on the Houston property.

On October 22, 2009, LIM announced that it has entered into an agreement with NML to exchange certain of their respective mineral licences in Labrador. The exchange eliminates the fragmentation of the ownership of certain mining rights in the Schefferville area and will enable both parties to separately mine and optimise their respective DSO deposits in as efficient a manner as possible.

As part of the Agreement, NML has transferred to LIM 125 hectares in five mineral licenses in Labrador that adjoin or form part of LIM's Houston deposit.

Under the Agreement the parties have agreed to work collaboratively to facilitate their respective extraction, processing and transportation activities by enabling each party to apply for all required surface rights. The parties have also agreed to finalize the layout or detailed technical descriptions of the surface rights that each requires to access the DSO deposits on their respective mineral claims, including any necessary roads, rail lines, processing and storage areas.

Table 3 List of Licenses Comprising the Houston Project (as of March 31, 2010)

License Number	Location	Claims	Area (Has)	Issued
016286M	Gilling River	22	550	12-Apr-04
016391M	Gilling River	1	25	28-Jul-09
016392M	Gilling River	1	25	28-Jul-09
016393M	Gilling River	1	25	28-Jul-09
016516M	Astray Lake	36	900	2-Sep-09
016575M	Houston Lake	1	25	10-Jan-05
016576M	Houston Lake	3	75	10-Jan-05
016577M	Houston Lake	1	25	10-Jan-05
	TOTAL	66	1,650	



Figure 1 Project Location Map

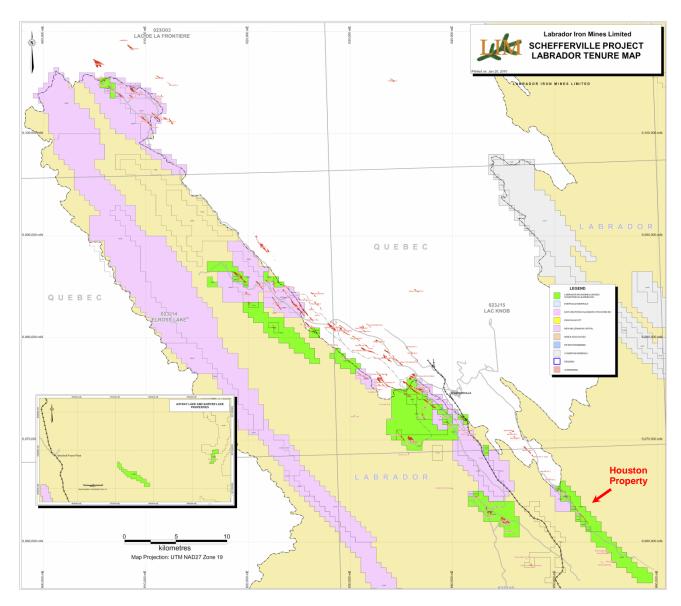


Figure 2 Map of LIM Mining Licenses

5. Accessibility, Climate, Local Resources, Infrastructure, Physiography (Item 7)

5.1 ACCESSIBILITY

The LIM properties are part of the west central part of the Labrador Trough iron range. The mineral properties are located about 1,140 km northeast of Montreal and adjacent to or within 70 km of the town of Schefferville (Quebec). There are no roads connecting the area to southern Labrador or to Quebec. Access to the area is by rail from Sept-Îles to Schefferville or by air from Montreal and Sept-Îles

Some of the properties in western Labrador that LIM initially intends to exploit, the James, Redmond, Gill Mine, Ruth Lake 8, Green Lake, Ryan, and Knob Lake 1 deposits, are accessible by existing gravel roads and are located, in Labrador, approximately 3 to 6 km south-southwest of the town of Schefferville while the Redmond deposits are located a further 10 km to the south-southwest and can be reached by existing gravel roads.

The Houston deposit is located approximately 20 km southeast of Schefferville and can also be reached by existing gravel roads, although LIM will consider the construction of a new 10km allweather access road between Houston and the Redmond mine site.

Access to the James and Knob Lake deposits is possible all year round as they are located close to the road connecting the town of Schefferville to the Menihek hydro electric dam. The other access roads are not currently maintained during the winter months.

5.2 CLIMATE

The Schefferville area and vicinity have a sub-arctic continental taiga climate with very severe winters. Daily average temperatures exceed 0°C for only five months a year. Daily mean temperatures for Schefferville average -24.1°C and -22.6°C in January and February respectively. Mean daily average temperatures in July and August are 12.4°C and 11.2°C, respectively. Snowfall in November, December and January generally exceeds 50 cm per month and the wettest summer month is July with an average rainfall of 106.8 mm.

5.3 LOCAL RESOURCES

It is assumed that the majority of the workforce will come from Labrador or Newfoundland to work on the project. A number of employees will also be recruited from the Quebec communities close to the project site.

5.4 INFRASTRUCTURE

James, Redmond 2B and Redmond 5 are within 12 km of each other and form the first group of properties from which LIM plans to commence mining and are also within 12 km of Schefferville. The Gill, Ruth and Knob Lake deposits are within the same area, while the Houston property is located about 20 km southeast of Schefferville.

The town of Schefferville has a Fire Department with mainly volunteer firemen, a fire station and firefighting equipment. The Sûreté Du Québec Police Force is present in the town of Schefferville and the Matimekush-Lac John reserve. A clinic is present in Schefferville with limited medical care. A municipal garage, small motor repair shops, a local hardware store, a mechanical shop, and a local convenient store, 2 hotels, numerous outfitters accommodations are also present in Schefferville.

A modern airport includes a 2,000 metre paved runway and navigational aids for passenger jet aircraft. Air service is provided three times per week to and from Wabush, Labrador, with less frequent service to Montreal.

A community radio station, recreation centre, parish hall, gymnasium, playground, childcare centre, drop-in centre are also present in Schefferville.

The Menihek power plant is located 35 km southeast of Schefferville. The hydro power plant was built to support iron ore mining and services in Schefferville. Back-up diesel generators are also present.

5.4.1 THE RAILROAD

Schefferville is accessible by train from Sept-Îles by Tshiuetin Rail Transportation Inc. (TSH), a company owned by three Quebec First Nations. The mandate of TSH is to maintain the passenger and light freight traffic between Sept-Îles and Schefferville. Train departures from Sept-Îles and Schefferville occur three times a week.

The QNS&L was established by IOC to haul iron ore from Schefferville area mines to Sept-Îles a distance of some 568 km starting in 1954. After shipping some 150 million tons of iron ore from the area the mining operation was closed in 1982, although, as a common carrier, the railroad maintained a passenger and freight service between Sept-Îles, Labrador City and Schefferville up to 2005. In 2005 the IOC sold the 208 km section of the railway between Emeril Junction and Schefferville to TSH.

Three other railway companies operate in the area, Arnault Railways between Arnault Junction and Pointe Noire to haul iron ore for Wabush Mines ("Wabush"), QNS&L for hauling iron concentrates from Labrador City area to Sept-Iles and CRC hauls iron concentrates from Fermont area to Port-Cartier for Quebec Cartier Mining Company. The latter railway is not connected to Arnault, QNS&L or TSH.

5.5 Physiography

The topography of the Schefferville mining district is bedrock controlled with the average elevation of the properties varying between 500 m and 700m above sea level. The terrain is generally gently rolling to flat, sloping north-westerly, with a total relief of approximately 50 to 100 m. In the main mining district, the topography consists of a series of NW-SE trending ridges while the Astray Lake and Sawyer Lake areas are within the Labrador Lake Plateau. Topographic highs in the area are normally formed by more resistant quartzites, cherts and silicified horizons of the iron formation itself. Lows are commonly underlain by softer siltstones and shales.

Generally, the area slopes gently west to northeast away from the land representing the Quebec – Labrador border and towards the Howells River valley parallel to the dip of the deposits. The finger-shaped area of Labrador that encloses the Howells River drains southwards into the

Hamilton River watershed and from there into the Atlantic Ocean. Streams to the east and west of the height of land in Quebec, flow into the Kaniapiskau watershed, which flows north into Ungava Bay.

The mining district is within a "zone of erosion" in that the last period of glaciation has eroded away any pre-existing soil/overburden cover, with the zone of deposition of these sediments being well away from the area of interest. Glaciation ended in the area as little as 10,000 years ago and there is very little subsequent soil development. Vegetation commonly grows directly on glacial sediments and the landscape consists of bedrock, a thin veneer of till as well as lakes and bogs.

The thin veneer of till in the area is composed of both glacial and glacial fluvial sediments. Tills deposited during the early phases of glaciations were strongly affected by later sub glacial melt waters during glacial retreat. Commonly, the composition of till is sandy gravel with lesser silty clay, mostly preserved in topographic lows. Glacial melt water channels are preserved in the sides of ridges both north and south of Schefferville.

Glacial ice flow in the area has been recorded as an early major NW to SE flow and a later less pronounced SW to NE flow. The early phase was along strike with the major geological features and the final episode was against the topography. The later NE flow becomes more pronounced towards the southern end of the district near Astray Lake or Dyke Lake.

6. HISTORY (ITEM 8)

The Quebec-Labrador Iron Range has a tradition of mining since the early 1950's and is one of the largest iron producing regions in the world. The former direct shipping iron ore operations at Schefferville operated by IOC produced in excess of 150 million tons of lump and sinter fine ores over the period 1954-1982. The properties comprising LIM's Schefferville area project were part of the original IOC Schefferville operations and formed part of the 250 million tons of reserves and resources identified by IOC but were not part of IOC's producing properties¹.

There are currently three major iron ore producers in the Labrador City-Wabush region to the south, IOC, Quebec Cartier Mining Company and Wabush Mines. Three major new iron ore projects in the Quebec-Labrador Peninsula are currently at the feasibility or construction stage.

The Labrador Trough which forms the central part of the Quebec-Labrador Peninsula, is a remote region which remained largely unexplored until the late 1930's and early 1940's when the first serious mineral exploration was initiated by Hollinger and LM&E. These companies were granted large mineral concessions in the Quebec and Labrador portions of the Trough. Initially, the emphasis was on exploring for base and precious metals but, as the magnitude of the iron deposits in the area became apparent, development of these resources became the exclusive priority for a number of years.

Mining and shipping from the area began in 1954 under the management of the IOC, a company specifically formed to exploit the Schefferville area iron deposits. As the technology of the steel industry changed over the ensuing years more emphasis was placed on the concentrating ores of the Wabush area and interest and markets for the direct shipping Schefferville ores declined. Finally, in 1982, the IOC closed their operations in the Schefferville area. From 1954 to 1982, a total of some 150 million tons of ore was produced from the area.

In 1954, IOC started to operate open pit mines in Schefferville containing 56-58% Fe, and exported the direct-shipping product to steel companies in the United States and Western Europe. The properties and iron deposits that currently form LIM's Labrador Project were part of the original IOC Schefferville area operations.

During the 1960's, higher-grade iron deposits were developed in Australia and South America and customers' preferences shifted to products containing +62% Fe or higher. In 1963, IOC developed the Carol Lake deposit near Labrador City and started to produce concentrates and pellets with +64% Fe, so as to satisfy the customers' requirements for higher-grade products. High growth in the demand for steel, which began after the end of World War II, came to an abrupt end in the early 1980's due to the impact of increasing oil prices. The energy crisis affected steel production in the U.S. and Western Europe as consumers switched to energy-efficient products. As a result, the demand for iron ore plummeted, creating a severe overcapacity in the industry. Consequently, IOC decided to close the Schefferville area mines in 1982.

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¹ This is an historic estimate made in compliance with the standards used by IOC.

Hollinger, a subsidiary of Norcen Energy Ltd., was the underlying owner of the Quebec iron ore mining leases in Schefferville area. Following the closure of the IOC mining operations, ownership of the mining rights held by IOC in Labrador reverted to the Crown. In the early 1990's, Hollinger was acquired by La Fosse Platinum Group Inc. ("La Fosse") who conducted feasibility studies on marketing, bulk sampling, metallurgical test work and carried out some stripping of overburden at the James deposit. La Fosse sought and was granted a project release under the Environmental Assessment Act for the James deposit in June 1990 but did not go ahead with project development and the claims subsequently were permitted to lapse.

With the exception of the pre-stripping work carried out on the James deposit and the mining of the Redmond #1 orebody by IOC (adjacent to LIM's current Redmond property), none of the iron deposits within the LIM mineral claims were previously developed for production during the IOC period of ownership.

Between September 2003 and March 2006, Fenton and Graeme Scott, Energold and NML began staking claims over the soft iron ores in the Labrador part of the Schefferville camp. Recognizing a need to consolidate the mineral ownership, Energold entered into agreements with the various parties that have subsequently been assumed by LIM.

7. GEOLOGICAL SETTING (ITEM 9)

7.1 REGIONAL GEOLOGY

The following summarizes the general geological settings of the Houston property and the other properties making up LIM's Western Labrador iron ore project. The regional geological descriptions are based on published reports by Gross (1965), Zajac (1974), Wardel (1979) and Neale (2000) and were first prepared by the author for an internal scoping study report for LIM in 2006.

At least 45 hematite-goethite ore deposits have been discovered in an area 20 km wide that extends 100 km northwest of Astray Lake, referred to as the Knob Lake Iron Range, which consists of tightly folded and faulted iron-formation exposed along the height of land that forms the boundary between Quebec and Labrador. The iron deposits occur in deformed segments of iron-formation, and the ore content of single deposits varies from one million to more than 50 million tonnes.

The Knob Lake properties are located on the western margin of the Labrador Trough adjacent to Archean basement gneisses. The Labrador Trough otherwise known as the Labrador-Quebec Fold Belt extends for more than 1,000 km along the eastern margin of the Superior craton from Ungava Bay to Lake Pletipi, Quebec. The belt is about 100 km wide in its central part and narrows considerably to the north and south.

The western half of the Labrador Trough, consisting of a thick sedimentary sequence, can be divided into three sections based on changes in lithology and metamorphism (North, Central and South). The Trough is comprised of a sequence of Proterozoic sedimentary rocks including iron formation, volcanic rocks and mafic intrusions known as the Kaniapiskau Supergroup (Gross, 1968). The Kaniapiskau Supergroup consists of the Knob Lake Group in the western part of the Trough and the Doublet Group, which is primarily volcanic, in the eastern part.

The Central or Knob Lake Range section extends for 550 km south from the Koksoak River to the Grenville Front located 30 km north of Wabush Lake. The principal iron formation unit, the Sokoman Formation, part of the Knob Lake Group, forms a continuous stratigraphic unit that thickens and thins from sub-basin to sub-basin throughout the fold belt.

The southern part of the Trough is crossed by the Grenville Front. Trough rocks in the Grenville Province to the south are highly metamorphosed and complexly folded. Iron deposits in the Grenville part of the Labrador Trough include Lac Jeannine, Fire Lake, Mounts Wright and Reed and the Luce, Humphrey and Scully deposits in the Wabush area. The high-grade metamorphism of the Grenville Province is responsible for recrystallization of both iron oxides and silica in primary iron formation producing coarse-grained sugary quartz, magnetite, specular hematite schists (metataconites) that are of improved quality for concentrating and processing.

The main part of the Trough north of the Grenville Front is in the Churchill Province and has been subjected to low-grade (green schist facies) metamorphism. In areas west of Ungava Bay, metamorphism increases to lower amphibolite grade. The mines developed in the Schefferville area by IOC exploited residually enriched earthy iron deposits derived from taconite-type protores.

Geological conditions throughout the central division of the Labrador Trough are generally similar to those in the Knob Lake Range.

A general geological map of Labrador is shown in Figure 3.

7.2 LOCAL GEOLOGY

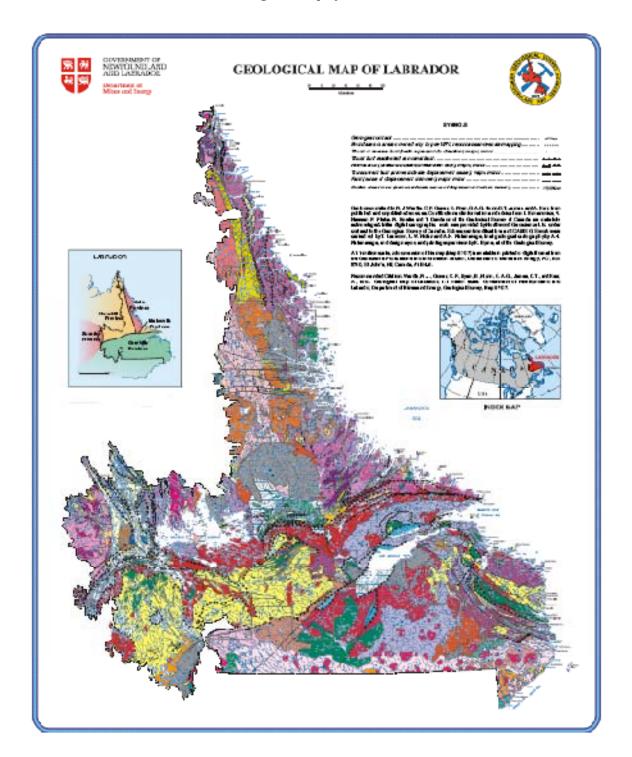
The general stratigraphy of the Knob Lake area is representative of most of the Knob Lake Range, except that the Denault dolomite and Fleming Formation are not uniformly distributed. The Knob Lake Range occupies an area 100 km in length by 8 km in width. The sedimentary rocks, including the cherty iron formation, are weakly metamorphosed to green schist facies. In the structurally complex areas, leaching and secondary enrichment have produced earthy-textured iron deposits. Unaltered, banded, magnetite iron formation, often referred to as taconite, occurs as gently dipping beds west of Schefferville, in the Howells River area.

The sedimentary rocks in the Knob Lake Range strike northwest, and their corrugated surface appearance is due to parallel ridges of quartzite and iron formation which alternate with low valleys of shales and slates. The Hudsonian Orogeny compressed the sediments into a series of synclines and anticlines, which are cut by steep angle reverse faults that dip primarily to the east. The synclines are generally overturned to the southwest with the east limbs commonly truncated by strike faults.

Most of the secondary, earthy textured iron deposits occur in canoe-shaped synclines; some are tabular bodies extending to a depth of at least 200 m, and one or two deposits are relatively flat lying and cut by several faults. In the western part of the Knob Range, the iron formation dips gently eastward over the Archean basement rocks for about 10 km to the east, then forms an imbricate fault structure with bands of iron formation, repeated up to seven times.

Subsequent, supergene processes converted some of the iron formations into high-grade ores, preferentially in synclinal depressions and/or down-faulted blocks. Original sedimentary textures are commonly preserved by selected leaching and replacement of the original deposits. Jumbled breccias of enriched ore and altered iron formations, locally called rubble ores, are also present. Fossil trees and leaves of Cretaceous age have been found in rubble ores in some of the deposits (Neal, 2000).

Figure 3 Geological Map of Labrador



7.3 GEOLOGY OF SCHEFFERVILLE AREA

The stratigraphy of the Schefferville area is as follows:

Attikamagen Formation – is exposed in folded and faulted segments of the stratigraphic succession where it varies in thickness from 30 metres near the western margin of the belt to more than 365 metres near Knob Lake. The lower part of the formation has not been observed. It consists of argillaceous material that is thinly bedded (2-3mm), fine grained (0.02 to 0.05mm), grayish green, dark grey to black, or reddish grey. Calcareous or arenaceous lenses as much as 30 cm in thickness occur locally interbedded with the argillite and slate, and lenses of chert are common. The formation grades upwards into Denault dolomite, or into Wishart quartzite in area where dolomite is absent. Beds are intricately drag-folded, and cleavage is well developed parallel with axial planes, perpendicular to axial lines of folds and parallel with bedding planes.

Denault Formation – is interbedded with the slates of the Attikamagen Formation at its base and grades upwards into the chert breccia or quartzite of the Fleming Formation. The Denault Formation consists primarily of dolomite, which weathers buff-grey to brown. Most of it occurs in fairly massive beds which vary in thickness from a few centimetres to about one metre, some of which are composed of aggregates of dolomite fragments.

Near Knob Lake the formation probably has a maximum thickness of 180 metres but in many other places it forms discontinuous lenses that are, at most, 30 metres thick. Leached and altered beds near the iron deposits are rubbly, brown or cream colored and contain an abundance of chert or quartz fragments in a soft white siliceous matrix.

Fleming Formation – occurs a few kilometres southwest of Knob Lake and only above dolomite beds of the Denault Formation. It has a maximum thickness of about 100 metres and consists of rectangular fragments of chert and quartz within a matrix of fine chert. In the lower part of the formation the matrix is dominantly dolomite grading upwards into chert and siliceous material.

Wishart Formation – Quartzite and arkose of the Wishart Formation form one of the most persistent units in the Kaniapiskau Supergroup. Thick beds of massive quartzite are composed of well-rounded fragments of glassy quartz and 10-30% rounded fragments of pink and grey feldspar, well cemented by quartz and minor amounts of hematite and other iron oxides. Fresh surfaces of the rock are medium grey to pink or red. The thickness of the beds varies from a few centimetres to about one metre but exposures of massive quartzite with no apparent bedding occur most frequently.

Ruth Formation – Overlying the Wishart Formation is a black, grey-green or maroon ferruginous slate, 3 to 36 metres thick. This thinly banded, fissile material contains lenses of black chert and various amounts of iron oxides. It is composed of angular fragments of quartz with K-feldspar sparsely distributed through a very fine mass of chlorite, white mica, iron oxides and abundant finely disseminated carbon and opaque material. Much of the slate contains more than 20% iron.

Sokoman Formation – More than 80% of the ore in the Knob Lake Range occurs within this formation. Lithologically the iron formation varies in detail in different parts of the range and the thickness of individual members is not consistent.

A thinly bedded, slaty facies at the base of the formation consists largely of fine chert with an abundance of iron silicates and disseminated magnetite and siderite. Fresh surfaces are grey to

olive green and weathered surfaces brownish yellow to bright orange where minnesotaite is abundant.

Thin-banded oxide facies of iron formation occurs above the silicate-carbonate facies in nearly all parts of the area. The jasper bands, which are 1.25 cm or less wide and deep red, or in a few places greenish yellow to grey, are interbanded with hard, blue layers of fine-grained hematite and a little magnetite.

The thin jasper beds grade upwards into thick massive beds of grey to pinkish chert and beds that are very rich in blue and black iron oxides. These massive beds are commonly referred to as "cherty metallic" iron formation and make up most of the Sokoman Formation. The iron oxides are usually concentrated in layers a few centimetres thick interbedded with leaner cherty beds. In many places iron-rich layers and lenses contain more than 50% hematite and magnetite.

The upper part of the Sokoman Formation comprises beds of dull green to grey or black massive chert that contains considerable siderite or other ferruginous carbonate. Bedding is discontinuous and the rock as a whole contains much less iron than the lower part of the formation.

Menihek Formation – A thin-banded, fissile, grey to black argillaceous slate conformably overlies the Sokoman Formation in the Knob Lake area. Total thickness is not known, as the slate is only found in faulted blocks in the main ore zone. East or south of Knob Lake, the Menihek Formation is more than 300 metres thick but tight folding and lack of exposure prevent determination of its true thickness.

The Menihek slate is mostly dark grey or jet black. It has a dull sooty appearance but weathers light grey or becomes buff colored where leached. Bedding is less distinct than in the slates of other slate formations but thin laminae or beds are visible in thin sections.

8. Deposit Types (ITEM 10)

8.1 Iron Ore

The Labrador Trough contains four main types of iron deposits:

Soft iron ores formed by supergene leaching and enrichment of the weakly metamorphosed cherty iron formation; they are composed mainly of friable fine-grained secondary iron oxides (hematite, goethite, limonite).

Taconites, the fine-grained, weakly metamorphosed iron formations with above average magnetite content and which are also commonly called magnetite iron formation.

More intensely metamorphosed, coarser-grained iron formations, termed metataconites; which contain specular hematite and subordinate amounts of magnetite as the dominant iron minerals.

Occurrences of hard high-grade hematite ore occur southeast of Schefferville at Sawyer Lake, Astray Lake and in some of the Houston deposits.

The LIM deposits are composed of iron formations of the Lake Superior-type. The Lake Superior-type iron formation consists of banded sedimentary rocks composed principally of bands of iron oxides, magnetite and hematite within quartz (chert)-rich rock, with variable amounts of silicate, carbonate and sulphide lithofacies. Such iron formations have been the principal sources of iron throughout the world.

The Sokoman iron formation was formed as a chemical sediment under varied conditions of oxidation-reduction potential (Eh) and hydrogen ion concentrations (pH) in varied depth of seawater. The resulting irregularly bedded, jasper-bearing, granular, oolite and locally conglomeratic sediments are typical of the predominant oxide facies of the Superior-type iron formations, and the Labrador Trough is the largest example of this type.

The facies changes consist commonly of carbonate, silicate and oxide facies. Typical sulphide facies are poorly developed. The mineralogy of the rocks is related to the change in facies during deposition, which reflects changes from shallow to deep-water environments of sedimentation. In general, the oxide facies are irregularly bedded, and locally conglomeratic, having formed in oxidizing shallow-water conditions. Most carbonate facies show deep-water features, except for the presence of minor amounts of granules. The silicate facies are present in between the oxide and carbonate facies, with some textural features indicating deep-water formation.

Facies contains typical primary minerals, ranging from siderite, minnesotaite, and magnetite-hematite in the carbonate, silicate and oxide facies, respectively. The most common mineral in the Sokoman Formation is chert, which is closely associated with all facies, although it occurs in minor quantities with the silicate facies. Carbonate and silicate lithofacies are present in varying amounts in the oxide members.

The sediments of the Labrador Trough were initially deposited in a stable basin which was subsequently modified by penecontemporaneous tectonic and volcanic activity. Deposition of the iron formation indicates intraformational erosion, redistribution of sediments, and local contamination by volcanic and related clastic material derived from the volcanic centers in the Dyke-Astray area.

8.1.1 Houston

The Houston property is located approximately 20 km southeast of Schefferville and can be reached by existing gravel roads. The Houston project area is composed of what appear to be at least three separate areas of iron enrichment with a continuously mineralized zone of over 3 km in strike length and which remains open to the south. The three areas of enrichment are referred to as the Houston 1, Houston 2S and Houston 3 deposits. Iron ore of direct shipping quality extends northwest-southeast for 3 km with a lateral extent of up to 150 metres in its wider section.

The Houston iron deposits are stratigraphically and structurally controlled, and consist of hard and friable banded, blue and red hematite that locally becomes massive. Airborne magnetometer survey data available from the Geoscience Data Repository of Natural Resources Canada suggests that the iron ore is concentrated along the western flank (gradient) of a modest to strong magnetic feature, which trends approximately 330°. The Houston 1 and Houston 2S deposits are not coincident with the strongest magnetic features, due to the poor magnetic susceptibility of this type of mineralization. This was confirmed in the testing of hand specimens.

IOC drilled and trenched the Houston deposit and prepared reserve and resource calculations which were contained in their Statement of Reserves at December 31, 1982.

LIM carried out drilling during the 2006, 2008 and 2009 programs which indicated that the majority of the potentially economic iron mineralization in the Houston area occurs within the upper iron formation (UIF) and middle iron formation (MIF) with lesser amounts in the SCIF (silicate-carbonate iron formation). The amount of red ore associated with the Ruth Formation appears to be minimal if not absent. Mineralization in several holes is found to terminate in a red chert, which may be the Lower Red Chert member that occurs at the boundary of the MIF and SCIF.

Striking northwest and dipping to the northeast, both Houston 1 and 2 mineralization has been found to extend down dip to the northeast. These down dip extensions had not been previously tested by IOC when mining operations in the area ended.. Drilling by LIM has intersected these extensions and at the present time both the Houston 1 and 2 deposits remain open down dip.

The Houston 3 deposit appears to be more vertical in nature and drill holes testing the eastern margin of the known deposit have not intercepted any eastward extensions. However, this deposit has yet to be tested to its maximum vertical depth.

Menihek Slate was encountered in drill chips in hole RC-HU011 (2008) in the most southerly hole drilled on the Houston 3 property. At this location Menihek Slate has been thrust up and over the Sokoman Iron Formation. Cross sections of the Houston deposit dating from IOC exploration indicate the presence of a reverse fault striking NW through the Houston 1 and 2S deposits.

8.2 MANGANESE DEPOSITS

The manganese deposits in the Schefferville area were formed by residual and second stage (supergene) enrichment that affected the Sokoman (iron) Formation, some members of which contain up to 1% Mn in their unaltered state. The residual enrichment process involved the migration of meteoric fluids circulated through the proto-ore sequence oxidizing the iron formation, recrystallizing iron minerals to hematite, and leaching silica and carbonate. The result is a residually enriched iron formation that may contain up to 10% Mn. The second phase of this process, where it has occurred, is a true enrichment process (rather than a residual enrichment),

whereby iron oxides (goethite, limonite), hematite and manganese are redistributed laterally or stratigraphically downward into the secondary porosity created by the removal of material during the primary enrichment phase.

Deposition along faults, fractures and cleavage surfaces, and in veins and veinlets is also seen, and corroborates the accepted belief that the structural breaks act as channel-ways for migrating hydrothermal fluids causing metasomatic alteration and formation of manganiferous deposits. All the manganese occurrences in the Labrador Trough are considered to have been deposited by the processes described above.

8.2.1 Houston

The manganese mineralization in the Houston deposit is present in relatively low concentrations (6% average) with sporadic concentrations of up to 24% hosted in the Middle Iron Formation apparently structurally controlled by folding and faulting along the western block of the east dipping reverse fault system.

9. MINERALIZATION (ITEM 11)

9.1 IRON ORE

The earthy bedded iron deposits are a residually enriched type within the Sokoman iron formation that formed after two periods of intense folding and faulting, followed by the circulation of meteoric waters in the fractured rocks. The enrichment process was caused largely by leaching and the loss of silica, resulting in a strong increase in porosity. This produced a friable, granular and earthy-textured iron ore. The siderite and silica minerals were altered to hydrated oxides of goethite and limonite. The second stage of enrichment included the addition of secondary iron and manganese which appear to have moved in solution and filled pore spaces with limonite-goethite. Secondary manganese minerals, i.e., pyrolusite and manganite, form veinlets and vuggy pockets. The types of iron ores developed in the deposits are directly related to the original mineral facies. The predominant blue granular ore was formed from the oxide facies of the middle iron formation. The yellowish-brown ore, composed of limonite-goethite, formed from the carbonate-silicate facies, and the red painty hematite ore originated from mixed facies in the argillaceous slaty members. The overall ratio of blue to yellow to red ore in the Schefferville area deposits is approximately 70:15:15 but can vary widely within and between the deposits.

Only the direct shipping ore is considered beneficiable to produce lump and sinter feed which will be part of the resources for LIM's development project. The direct shipping ore was classified by IOC in categories based on chemical, mineralogical and textural compositions. This classification is shown in Table 4.

Table 4
Classification of Iron Ore Types

Schefferville Ore Types (From IOCC):							
TYPE	ORE COLOURS	T_Fe%	T_Mn%	T_Si%	T_Al2O3%		
NB (Non-bessemer)	Blue, Red, Yellow	>=55.0	<3.5	<10.0	<5.0		
LNB (Lean non-bessemer)	Blue, Red, Yellow	>=50.0	<3.5	<18.0	<5.0		
HMN (High Manganiferous)	Blue, Red, Yellow	(Fe+Mn) >=50.0	>6.0	<18.0	<5.0		
LMN (Low Manganiferous)	Blue, Red, Yellow	(Fe+Mn) >=50.0	3.5-6.0	<18.0	<5.0		
HiSiO2 (High Silica)	Blue	>=50.0		18.0-30.0	<5.0		
TRX (Treat Rock)	Blue	40.0-50.0		18.0-30.0	<5.0		
HiAl (High Aluminium)	Blue, Red, Yellow	>=50.0		<18.0	>5.0		
Waste All material that does not fall into any of these categories.							

The blue ores, which are composed mainly of the minerals hematite and martite, are generally coarse grained and friable. They are usually found in the middle section of the iron formation.

The yellow ores, which are made up of the minerals limonite and goethite, are located in the lower section of the iron formation in a unit referred to as the "silicate carbonate iron formation" or SCIF.

The red ore is predominantly a red earthy hematite. It forms the basal layer that underlies the lower section of the iron formation. Red ore is characterized by its clay and slate-like texture.

Direct shipping ores and lean ores mined in the Schefferville area during the period 1954-1982 amounted to some 150 million tons. Based on the original ore definition of IOC (+50% Fe <18% $\rm SiO_2$ dry basis), approximately 250 million tonnes of iron resources remain in the Schefferville area, exclusive of magnetite taconite. LIM has acquired the rights to approximately 50% of this remaining historic iron resource in Labrador².

9.2 MANGANESE ORE

For an economic manganese deposit, there needs to be a minimum primary manganese content at a given market price (generally greater than 5% Mn), but also the manganese oxides must be amenable to concentration (beneficiation) and the resultant concentrates must be low in deleterious elements such as silica, aluminum, phosphorus, sulphur and alkalis. Beneficiation involves segregating the silicate and carbonate lithofacies and other rock types interbedded within the manganese-rich oxides.

The principle manganese deposits found in the Schefferville area can be grouped into three types:

Manganiferous iron deposits that occur within the lower Sokoman Formation. These are associated with in-situ residual enrichment processes related to downward and lateral percolation of meteoric water and ground water along structural discontinuities such as faults and fractures, penetrative cleavage associated with fold hinges, and near surface penetration. These typically contain from 5-10 % Mn.

Ferruginous manganese deposit, generally contain 10-35% Mn. These types of deposits are also associated with structural discontinuities (e.g., fault, well developed cleavage, fracture-zones) and may be hosted by the Sokoman (iron) Formation (e.g., the Ryan, Dannick and Avison deposits), or by the stratigraphically lower silica-rich Fleming and Wishart formations (e.g. the Ruth A, B and C deposits). These are the result of residual and supergene enrichment processes.

So called *manganese-occurrences or manganese-ore deposits* contain at least 35% Mn. These deposits are the result of secondary (supergene) enrichment and are typically hosted in the Wishart and Fleming formations, stratigraphically below the iron formation.

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² These numbers are based on historic estimates made in compliance with the standards used by IOC.

10. EXPLORATION (ITEM 12)

10.1 PAST EXPLORATION

In 1929, a party led by J.E. Gill and W.F. James explored the geology around Schefferville, Quebec and named the area Ferrimango Hills. In the course of their field work, they discovered enriched iron-ore, or "direct-shipping ore" deposits west of Schefferville, which they named Ferrimango Hills 1, 2 and 3. These were later renamed the Ruth Lake 1, 2 and 3 deposits by J.A. Retty.

In 1936, J.S. Wishart, a member of the 1929 mapping expedition, mapped the area around Ruth Lake and Wishart Lake in greater detail, with the objective of outlining new iron ore occurrences.

In 1937, W.C. Howells traversed the area of the Ruth Lake Property as part of a watercourse survey between the Kivivic and Astray lakes – now known as Howells River.

In 1945, a report by LM&E describes the work of A.T. Griffis in the "Wishart – Ruth – Fleming" area. The report includes geological maps and detailed descriptions of the physiography, stratigraphy and geology of the area, and of the Ruth Lake 1, 2 and 3 ore bodies. Griffis recognized that the iron ore unit (Sokoman Formation) was structurally repeated by folding and faulting and remarked that "The potential tonnage of high-grade iron deposits is considered to be great."

In 1946 and 1947, geological mapping of the southeast area of the Wishart Knob Lake area towards Astray Lake carried out by LM&E noted a number of areas with potential economic mineralization that led the discovery of the Houston 1 and 2 deposits in 1950.

Most exploration on the properties was carried out by the IOC from 1954 until the closure of their Schefferville operation in 1982. Most data used in the evaluation of the current status provided in the numerous documents, sections and maps produced by IOC or by consultants working for them.

In 1989 and 1990, La Fosse and Hollinger undertook an extensive exploration program for manganese on 46 known occurrences in the Schefferville area, including those on the Ruth Lake Property, divided at the time into Ruth Lake prospects, Ryan showing and Avison showing.

Work performed during the summer and fall of 1989 consisted of geological mapping, prospecting and sampling, airtrac drilling (26 holes totalling 478 ft = 146 m), and a VLF ground geophysical survey. Also in 1989, the La Fosse Platinum Group carried out exploration on the Ryan manganese showing. Work consisted of stripping and trenching (12 trenches totaling 1970 ft = 601 m), chip sampling and airtrac drilling (25 holes) coupled with sampling of cuttings. In addition, an 1,800 ton bulk sample was obtained and stockpiled for analysis. Representative samples were taken from the bulk sample stockpile and yielded an average of 23.1% Mn and 20.4% Fe.

In 1990, La Fosse returned to the Ryan manganese showing to continue exploration. Their work further defined the two manganese lenses into Zone 1 (560 ft x 30 ft = 171 m x 9 m) containing up to 25% Mn with Mn: Fe ratios around 1.0 and, Zone 2 (600 ft x 30 ft = 183 m x 9 m) containing 16.2% Mn and 10.7% Fe. The two zones are separated by approximately 30 ft (9 m) of barren, fault-gouge material.

Work consisted of stripping and trenching (14 trenches totalling $1600 \, \text{ft} = 488 \, \text{m}$), 3 diamond-drill holes (447 ft = 136 m), and 4 airtrac drill holes (97 ft = 30 m) with simultaneous sampling of cuttings. In addition, another 400 tons of manganese "ore" was mined and added to the 1800 ton stockpile from the previous year. The average grade of the 400 ton addition was 18.8% Mn and 24.2% Fe, whereas the average grade for the 2200 ton bulk sample was 22.3% Mn and 21.1% Fe.

During 1990, Hollinger investigated and named the Avison manganese showing (Geofile 23J/15/0290), located 1.5 miles (2.4 km) southeast of the Ruth deposit and along the same fault zone as the Ruth and Ryan deposits. Work consisted of geological mapping and sampling, stripping and trenching totalling ~ 150 ft (46 m), and airtrac drilling totalling 125 ft (38 m) with concomitant sampling. Selected samples from the zone returned values of up to 42% Mn, whereas channel samples from across the showing ranged from 15% to 25% Mn. It's location along the same fault zone as the Ruth and Ryan deposits were noteworthy to the project geologist.

A large part of Hollinger's efforts in 1990 were devoted to the Ruth Lake deposit(s). Work included detailed geological mapping, trenching, sampling, airtrac drilling (5 holes) with concurrent sampling and diamond drilling (21 holes totalling 2393 ft = 729 m) that outlined two new deposits: Ruth B and Ruth C.

10.2 LIM EXPLORATION FROM 2005 - 2007

10.2.1 2005 PROGRAM

Initial exploration was conducted over LIM's Labrador area properties during the summer of 2005. The work consisted of surveying old workings (trenches, pits and drill holes), prospecting, mapping and collecting rock samples.

10.2.2 2006 PROGRAM

The diamond drill program totalled 605 metres in 11 holes completed between July 21st and August 26th of 2006 on the Houston, James, Knob Lake No.1, and Astray Lake deposits using Cartwright Drilling Inc. of Goose Bay, Labrador. Also, a short program of bulk sampling was carried out in 2006 consisting of 188 metres of trenching for bulk sampling that was completed in two stages; the first at the Houston deposit (75 m) conducted between August 22nd and 24th and the second one at James deposit (113 m).

A summary of the drilling program is given in Section 13. A summary of the bulk sampling and trench sampling of 2006 is shown in Table 5 for the Houston Deposit.

10.2.3 2007 PROGRAM

The exploration program for 2007 operated from September $20^{\rm th}$ until October $5^{\rm th}$ and comprised prospecting and trenching.

Table 5 Trench Sample Results – Houston 1 Deposit

From (m)	To (m)	Len (m)	Fe%	SiO ₂ %	Ore Type
0.00	26.00	26.00	66.14	1.39	NB
26.00	50.00	24.00	60.50	6.82	NBY
50.00	69.00	19.00	59.26	11.57	LNB
69.00	75.00	6.00	44.52	34.07	TRX

10.3 2008 AND 2009 EXPLORATION

LIM continued its exploration program on the properties in the Schefferville area during 2008 and 2009.

10.3.1 2008 PROGRAM

In addition to the drilling program, LIM selected Eagle Mapping Ltd of Port Coquitlam, BC to carry out an aerial topographic survey flown over its properties in the Schefferville Area, including the Houston property. The survey covered an area of 16,230 ha and 233,825 ha at map scales of 1:1,000 and 1:5,000 respectively. Using a differential GPS (with an accuracy within 40 cm), LIM surveyed the 2008 RC drill holes, as well as the trenches and a total of 90 old IOC RC drill hole collars that were still visible and could be located.

A bulk sampling program was carried out with material from the Houston as well as the James, Redmond and Knob Lake deposits. A total of 2,000 tonnes of blue ore was excavated from the Houston deposit as well as 1,400 tonnes of blue ore from the James South deposit, 1,500 tonnes of blue ore from the Redmond 5 deposit and 1,100 tonnes of red ore from the Knob Lake deposit.

The material was excavated with a T330 backhoe and/or a 950G front end loader and loaded into 25 ton dump trucks for transport to their individual stockpiles at the Silver Yard area where the crushing and screening activities were carried out. The samples were crushed and screened to produce two products:

- Lump Ore (-50 mm + 6 mm)
- Sinter Fines (- 6 mm)

Representative samples of 200 kg of each raw ore type were collected and sent to SGS Lakefield laboratories for metallurgical test work and assays. Representative samples of 2 kg of each product were collected and sent to SGS Lakefield laboratories for assays. Other samples were collected for additional screening tests. Five train cars were used for the transport of the samples to Sept-îles, the rest of the sample material remains at the Silver Yard.

10.3.2 2009 Program

In addition to the drilling program, LIM completed the survey the 2009 RC drill holes, trenches as well as any old IOC RC drill holes using a differential GPS.

The 2009 Houston trenching program was focused on the Houston 3 deposit, completing 479 metres in 9 trenches.

The recent exploration programs were intended to confirm and validate the historic resources reported by IOC and to make them NI-43-101 compliant. Appendix I lists drill holes and trenches completed by LIM between 2006 and 2009.

11. DRILLING (ITEM 13)

Diamond drilling of the Schefferville iron deposits has been historically challenging in that the alternating hard and soft ore zones tend to preclude good core recovery. Traditionally IOC used a combination of reverse circulation (RC) drilling, diamond drilling and trenching to generate data for reserve and resource calculation. A large number of original IOC data have been recovered and reviewed by LIM and are included in the data base that is used for the estimation of resources.

LIM carried out exploration drilling programs in 2006, 2008 and 2009.

In 2006, 253 metres in 5 holes BQ size diamond core drilling were drilled in the Houston property using Cartwright Drilling Inc. of Goose Bay, of which only 1 drill hole was successfully completed.

In 2008 and 2009, LIM used Acker RC tricone drill rigs Cabo Drilling using 75mm ($2^{7/8}$ inch) diameter rods. The drill rigs were mounted on Flex Trac Nodwell carriers or skids and outfitted with sample cyclones.

In 2008, 11 RC drill holes were drilled in Houston for a total of 791 metres.

In 2009 46 RC drill holes were completed at Houston for a total of 3,136 metres.

Table 6 summarizes LIM's drilling programs.

Table 6
Houston Drilling Programs

Year	Type	Holes	Length (m)
2006	DD	5	253
2008	RC	11	791
2009	RC	46	3,136

DD – Diamond drill. RC – reverse circulation

12. SAMPLING METHOD AND APPROACH (ITEM 14)

During the time that IOC operated in the area, sampling of the exploration targets were by trenches and test pits as well as by drilling. In the test pits and trenches geological mapping determined the lithologies and the samples were taken over 10 feet (3.0 metres). The results were plotted on vertical cross sections. No further information was provided regarding the sampling procedures followed by IOC but verbal information from consultants, former IOC employees and others suggests that the procedures used by LIM were similar to IOC's during its activities in the Schefferville area.

LIM followed industry sampling standards and protocols for exploration. Sealed boxes and sample bags were handled by authorized personnel and sent to the preparation lab in Schefferville. RC sampling was done on site at the drill site and at the preparation laboratory in Schefferville. Logging was carried out at the preparation laboratory in Schefferville by LIM geologists.

Samples obtained during the 2008 and 2009 programs were prepared in the sample preparation laboratory installed in Schefferville by LIM.

The sampling procedures outlined below were designed and formulated by SGS Geostat.

The entire lengths of the RC drill holes were sampled. The average length of the RC samples was metres. A description of the cuttings was made at every metre drilled. A representative sample was collected and placed in plastic chip trays for every metre drilled. The chip trays were labelled with Hole ID and the interval represented in each compartment. The metres drilled with no recovery were marked with an X inside the chip tray compartment.

12.1 RC SAMPLE SIZE REDUCTION (2008)

In order to reduce the size of the sample at the RC drill site to approximately 7.5 kg, the drill cuttings were split 4 ways after leaving the cyclone, during the 2008 drilling program.

The cuttings from three of the exit ports were discarded and the cuttings from the fourth exit were collected in a 5 gallon buckets. As part of the QA/QC program the cuttings from three of the four exits were routinely sampled.

Samples were taken by truck directly to the preparation lab in Schefferville under supervision of SGS Geostat. Upon arrival at the Preparation Lab, samples came under the care of SGS Geostat personnel.

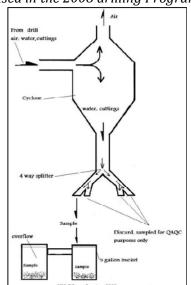


Figure 4 - RC Size Reduction and Sampling Method (used in the 2008 drilling Program)

12.2 ROTARY SPLITTER RC SAMPLE SIZE REDUCTION (2009)

In the 2009 RC drill program, drill cuttings were split with a rotary splitter mounted directly under the cyclone. The Rotary splitter is divided into pie shape spaces and is equipped with a hydraulic motor. The speed of the rotation of the splitter and the closing of the pie shape spaces was set in order to have a 7.5-10 kg sample from the 3 metre rod sample. Cuttings from the remaining material were discarded on site. As part of the QA/QC program the cuttings from the remaining discarded material were routinely sampled.

Upon arrival at the Sample Preparation Lab in Schefferville, samples came under the care of LIM personnel. The use of the rotary splitter sampling system demonstrated efficacy, therefore LIM decided to continue its use in future programs.

12.32006, 2008 AND 2009 TRENCH SAMPLING

In 2006, 2008 and 2009 trenches were dug in several properties for resource estimations and ore body surface definition. The trenches were excavated with a Caterpillar 330 excavator with a 3-yard bucket. The excavator was able to dig a 1metre-wide trench with depths down to 3 metres, which was enough to penetrate the overburden.

Trenches were sampled on 3-metre intervals with the sample considered to be representative of the mineral content over that interval. After cleaning off the exposure, samples were collected from the sides of trenches. Samples were collected with a small rock pick along a line designated by the supervising geologist. In most cases the material sampled was soft and friable.

LIM completed a total of 554 metres of trenching in 10 trenches between 2006 and 2009 at Houston and collected a total of 135 samples.

13. SAMPLE PREPARATION, ANALYSIS AND SECURITY (ITEM 15)

The standardized procedures for the preparation and reduction of samples collected during the 2008 and 2009 RC drilling campaign were prepared by SGS Geostat and adopted by LIM for its sample preparation laboratory in Schefferville.

SGS Geostat were not in possession of the exact sampling procedures carried out historically by IOC but verbal information from former employees and drillers, suggests that the described procedures is similar to that used by IOC during their activities in Schefferville.

The relevant sample results and sample composites used for the resources estimation are described in section 19.

13.1 SAMPLE PREPARATION AND SIZE REDUCTION IN SCHEFFERVILLE

13.1.12008

Sample preparation and reduction was done at LIM's preparation lab in Schefferville which was operated by SGS Geostat personnel. In addition to the preparation lab personnel, SGS Geostat also provided a geologist and two geo-technicians to perform sampling duties on one of the two rigs utilized for the drill program. This procedure was implemented in order to facilitate the shipping and analysis to the SGS-Lakefield laboratory in Ontario.

The majority of samples have a width of 3 metres, equal to the length of the drill rods. As soon as samples were delivered to the Schefferville preparation laboratory, they fell under the responsibility of SGS Geostat. The sampling procedures were designed and formulated by SGS Geostat. These procedures were followed in the preparation laboratory of Schefferville, Quebec. Note that samples obtained from RC drills were wet. All samples were dried and reduced correctly for analyses and then sent to SGS-Lakefield in Ontario.

13.1.22009

The 2008 procedures were adopted in 2009 for sample preparation and sample reduction and were carried out by LIM in its sample preparation laboratory in Schefferville. LIM had a lab supervisor and well trained geo-technicians to perform the sampling duties on the two rigs utilized for the drill program. Some later improvements were made to the procedures but overall they followed guidelines developed by SGS in 2008. All samples were dried and reduced prior to shipment for analyses at Actlabs in Ancaster, Ontario.

13.2 ARRANGEMENT OF SAMPLES AT THE SCHEFFERVILLE PREPARATION LABORATORY

All sample bags that arrived in the preparation laboratory were displayed in a sequential and ordered way in a designated area.

13.2.1 2008 AND 2009 SAMPLE PREPARATION

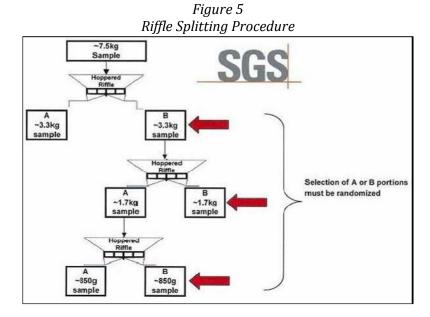
At the end of every shift, the samplers and geologist delivered the samples to the preparation laboratory. Sample bags were placed in sequential order on a draining table and a "Sample Drop Off" form was completed noting the date, time, person, number of samples and sample sequence.

These bags were left over night, so that the fine material could settle to the bottom of the sample bag.

After leaving the samples for 12 hours, excess water was drained out. Sample bags were then emptied into metal pans and samples were spread uniformly. Each sample was weighed wet, and the weight as well as the sample number was recorded on the drying form. The metal pans were placed in ovens in a sequential and orderly way. A drying form was filled out when each sample was placed in the oven. The samples were allowed to dry and cool down before being weighed dry.

13.2.2 Sample Size Reduction

Two sets of riffle splitter were used in regards of samples sizes. They were cleaned and in good condition each time they were used. Each sample bags was put in the splitter and passed through the riffle splitter 4 times before reduction, to ensure a good homogeneity after the splitting, the rejects were put in a sample bag that was kept on site as a witness sample. The analytical split was put in a new labelled sample bag with the same initial number. All witness sample bags were retained in a secure site in Schefferville for future reference and assay, if needed. The analytical split sample bags were sent to SGS-Lakefield or to Actlabs for analysis.



13.3 SAMPLE PREPARATION AT SGS-LAKEFIELD LABORATORY

The following is a table taken from the SGS Geostat report, describing the RC drill hole sample preparation protocols used at the SGS Lakefield laboratory facility in Lakefield, Ontario.

Table 7
SGS-Lakefield Sample Preparation Methodology

Parameter	Methodology
Met Pla	nt/Control quality assays - not suitable for commercial exchange
PRP89	Crush up to 3kg of sample to 75% passing 9 mesh (2mm)
	Pulverize up to 250g of riffle split sample to 200 mesh (75μm)

13.4 SAMPLE ANALYSES AT SGS-LAKEFIELD

All of the 2008 RC drilling and trenching program were sent for analysis to the SGS-Lakefield Laboratory in Lakefield, Ontario, Canada. The analysis used was Borate fusion whole rock XRF (X-Ray Fluorescence). The following is a description of the exploration drill hole analysis protocols used at the SGS-Lakefield laboratory facility in Lakefield, Ontario. This description was given by SGS-Lakefield.

- X-Ray Fluorescence Analysis Code: XRF76Z
- o Parameters measured, units: SiO_2 , Al_2O_3 , Fe_2O_3 , MgO, CaO, Na_2O , K_2O , P_2O_5 , MnO, TiO_2 , Cr_2O_3 , Ni, Co, La_2O_3 , Ce_2O_3 , Nd_2O_3 , Pr_2O_3 , Sm_2O_3 , BaO, SrO, ZrO_2 , HfO_2 , Y_2O_3 , Nb_2O_5 , ThO_2 , U_3O_8 , SnO_2 , WO_3 , Ta_2O_5 , LOI; %
- o Typical sample size: 0.2 to 0.5 g
- o Type of sample applicable (media): Rocks, oxide ores and concentrates.
- Method of analysis used: The disk specimen is analyzed by WDXRF spectrometry.
- Data reduction by: The results are exported via computer, on line, data fed to the Laboratory Information Management System with secure audit trail.
- o Corrections for dilution and summation with the LOI are made prior to reporting.

Table 8
Borate Fusion Whole Rock XRF Reporting Limits

Element	Limit (%)	Element	Limit (%)	Element	Limit (%)	
SiO ₂	0.01	Na ₂ O	0.01	CaO	0.01	
Al ₂ O ₃	0.01	TiO ₂	0.01	MgO	0.01	
Fe _{total} as Fe ₂ O ₃	0.01	Cr ₂ O ₃	0.01	K ₂ O	0.01	
P ₂ O ₅	0.01	V_2O_5	0.01	MnO	0.01	
Also includes Loss on Ignition						

13.5 SAMPLE PREPARATION AT ACTLABS

During the 2009 exploration programme all trench and RC drill samples were shipped to Activation Laboratories (ACTLABS) facility in Ancaster, Ontario. Trench samples were taken to the preparation lab in Schefferville at the end of the day. The trench samples were not prepared in the same way as RC drill samples, being just bagged and shipped to the analytical laboratory.

As a routine practice with rock and core samples, ACTLABS ensured the entire sample was crushed to a nominal minus 10 mesh (1.7 mm), mechanically split (riffled) to obtain a representative sample, and then pulverized to at least 95% minus 150 mesh (105 microns). All of their steel mills are now mild steel, and do not induce Cr or Ni contamination. As a routine practice, ACTLABS automatically used cleaner sand between each sample at no cost to the customer.

Quality of crushing and pulverization is routinely checked as part of their quality assurance program. Randomization of samples in larger orders (>100) provides an excellent means to monitor data for systematic errors. The data is resorted after analysis according to sample number. The following is a table describing the rock, core and drill cuttings sample preparation protocols used at the ACTLABS.

Table 9
Rock. Core and Drill Cuttings Sample Preparation Protocols - ACTLABS

Rock, Core and Drill Cuttings				
code RX1	crush (< 5 kg) up to 75% passing 2 mm, split (250 g), and pulverize (hardened steel) to 95% passing 105 μ			
code RX1	crush (< 5 kg) up to 90% passing 2 mm, split (250 g), and pulverize			
Terminator	(hardened steel) to 95% passing 105 μ			
code RX1+500	500 grams pulverized			
code RX1+800	800 grams pulverized			
code RX1+1.3	1.3 kg pulverized			
code RX2	crush (< 5 kg), split and pulverize with mild steel (100 g) (best for low			
code RX3	oversize charge per kilogram for crushing			
code RX4	pulverization only (mild steel) coarse pulp or crushed rock) (< 800 g)			
code RX5	pulverize ceramic (100 g)			
code RX6	hand pulverize small samples (agate mortar & pestle)			
code RX7	crush and split (< 5 kg)			
code RX8	sample prep only surcharge, no analyses			
code RX9	compositing (per composite) dry weight			
code RX10	dry drill cuttings in plastic bags			
code RX11	checking quality of pulps or rejects			

Following table shows the Pulverization Contaminants that are added by ACTLABS.

Table 10
Pulverization Contaminants that are Added by - ACTLABS

Mill Type	Contaminant Added
Mild Steel (best choice)	Fe (up to 0.2%)
Hardened Steel	Fe (up to 0.2%). Cr (up to 200ppm), trace Ni, Si, Mn, and C
Ceramic	Al (up to 0.2%), Ba, Trace REE
Tungsten Carbide	W (up to 0.1%), Co, C, Ta, Nb, Ti
Agate	Si (up to 0.3%), Al, Na, Fe, K, Ca, Mg, Pb

13.6 SAMPLE ANALYSIS AT ACTLABS

Following is a description of the exploration analysis protocols used at the Actlabs facility in Ancaster, Ontario.

13.6.1 X-RAY FLUORESCENCE ANALYSIS CODE: 4C

To minimize the matrix effects of the samples, the heavy absorber fusion technique of Norrish and Hutton (1969, Geochim. Cosmochim. Acta, volume 33, pp. 431-453) are used for major element oxide) analysis. Prior to fusion, the loss on ignition (LOI), which includes H_2O_+ , CO_2 , S and other volatiles, can be determined from the weight loss after roasting the sample at $1050^{\circ}C$ for 2 hours. The fusion disk is made by mixing a 0.5 g equivalent of the roasted sample with 6.5 g of a combination of lithium metaborate and lithium tetraborate with lithium bromide as a releasing agent. Samples are fused in Pt crucibles using an AFT fluxer and automatically poured into Pt molds for casting. Samples are analyzed on a Panalytical Axios Advanced XRF. The intensities are then measured and the concentrations are calculated against the standard G-16 provided by Dr. K. Norrish of CSIRO, Australia. Matrix corrections were done by using the oxide alpha – influence coefficients provided also by K. Norrish. In general, the limit of detection is about 0.01 wt% for most of the elements.

13.6.2 ELEMENTS ANALYZED

SiO₂ Al2O₃ Fe₂O₃(T) MnO MgO CaO Na₂O K₂O TiO₂ P₂O₅ Cr₂O₃, LOI

13.6.3 CODE 4C OXIDES AND DETECTION LIMITS (%)

The following table shows the Code 4C Oxides and Detection Limits (%)

Table 11 Code 4C Oxides and Detection Limits (%)

Oxide	Detection Limit
SiO ₂	0.01
TiO ₂	0.01
Al_2O_3	0.01
Fe ₂ O ₃	0.01
MnO	0.001
MgO	0.01
Ca0	0.01
Na ₂ O	0.01
K ₂ O	0.01
P_2O_5	0.01
Cr_2O_3	0.01
LOI	0.01

13.7 Sample Security and Control

13.7.1 LIM SAMPLE QUALITY ASSURANCE, QUALITY CONTROL AND SECURITY

LIM initiated a quality assurance and quality control protocol for its 2008 RC, DDH, and trench sampling program, which also was applied for its 2009 program. The procedure included the systematic addition of blanks, field duplicates, preparation lab duplicates to approximately each 25 batch samples sent for analysis at SGS Lakefield.

The sealed sample bags were handled by authorized personnel from LIM and SGS Geostat and sent to the preparation lab in Schefferville. Authorized personnel did the logging and sampling in the secured and guarded preparation lab.

Each sample was transported back to the preparation lab with a truck at the end of each shift by the lab supervisor on a regular basis. The samples were transported to the lab near Schefferville, a warehouse facility rented by LIM. The lab was locked down during the night. Sample batches were sealed and sent by train or by express mail (plane). Traceability was present throughout the shipment to Lakefield.

13.7.1.1 Field Duplicates

The procedure included the systematic addition of field duplicates to approximately each 25 batch samples sent for analysis to the lab. The cuttings from the second and third exits were routinely sampled every 25th batch. The 24th sample was collected at exit 2. The 26th sample was collected at exit 3. These samples went through the same sample preparation, analysis and security procedures and protocols as the regular 3 metre samples collected from the exit 1. This QA/QC procedure enabled SGS any bias in the RC sampling program to be verified.

13.7.1.2 Preparation Lab Duplicates

The procedure included the systematic addition of preparation lab duplicates to approximately each batch of 25 samples sent for analysis at SGS-Lakefield. A second portion of cuttings from the first exit size reduction procedure was routinely sampled every 25 batch similarly as described above.

13.7.1.3 Blanks

Blank samples were created onsite in Schefferville from barren slates located south east of the town. These blanks were used to check for possible contamination in laboratories. Some were sent to SGS-Lakefield and others to Corem and ALS-Chemex for verification of the average tenure in the blanks. Blank samples were introduced every 50 sample batch.

13.7.2 SGS-Lakefield Sample Quality Assurance, Quality Control and Security

The following is a description of the quality assurance and quality control protocols used at the SGS-Lakefield laboratory facility in Lakefield, Ontario. The following description was given by SGS-Lakefield.

13.7.2.1 Quality control

One blank, one duplicate and a matrix-suitable certified or in-house reference material per batch of 20 samples.

The data approval steps are shown in the following table.

Table 12 SGS-Lakefield Laboratory Data Approval Steps

Step	Approval Criteria
1. Sum of oxides	Majors 98 - 101%
2. Batch reagent blank	2 x LOQ
3. Inserted weighed reference material	Statistical Control Limits
4. Weighed Lab Duplicates	Statistical Control Limits by Range

13.7.3 ACTLAB SAMPLE QUALITY ASSURANCE, QUALITY CONTROL AND SECURITY

Following is a description of the quality assurance and quality control protocols used at the ACTLABS facility. This description is based on input from ACTLABS.

A total of 34 standards are used in the calibration of the method and 28 standards are checked weekly to ensure that there are no problems with the calibration.

Certified Standard Reference Materials (CSRM) are used and the standards that are reported to the client vary depending on the concentration range of the samples.

The re-checks are done by checking the sample's oxide total. If the total is less than 98% the samples are reweighed, fused and ran. The data is compared to the original results. Sometimes there are bad fusions or LOI needs to be repeated.

The amount of duplicates done is decided by the Prep Department, their procedure is for every 50 samples only if there is adequate material. If the work order is over 100 samples they will pick duplicates every 30 samples.

General QC procedure for XRF is: The standards are checked by control charting the elements. The repeats and pulp duplicates are checked by using a statistical program which highlights any sample that fail the assigned criteria. These results are analyzed and any failures are investigated using our QCP Non-Conformance (error or omission made that was in contrast with a test method (QOP), Quality Control Method (QCP) or Quality Administrative Method (QAP).

14. DATA VERIFICATION (ITEM 16)

14.1 QAQC PROCEDURES AND PROTOCOLS

The data verification of the iron (Fe), phosphorus (P), manganese (Mn), silica (SiO₂) and alumina (Al₂O₃) values was done with the assay results from the 2008 RC drilling program. SGS Geostat introduced a series of quality control procedures including the addition of preparation lab duplicates, exit 2 duplicates, exit 3 duplicates and blanks as explained in Section 15.7.

SGS Geostat supervised the RC sampling in 2008 when a total of 166 exit duplicates were taken and analyzed. Results show that assay values are precise and dependable. These quality control results permitted SGS Geostat to confirm the presence and content of iron (Fe), phosphorus (P), manganese (Mn), silica (SiO₂) and alumina (Al₂O₃) of all QA/QC samples, as well as the integrity of the sample results used in the resource estimation of James, Redmond 2B and Redmond 5, (and in the future for Houston 1 and Houston 2) mineral deposits. See Figure 6 and 7.

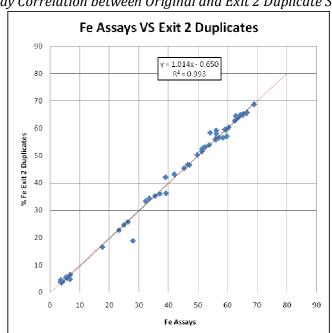


Figure 6
Fe Assay Correlation between Original and Exit 2 Duplicate Samples

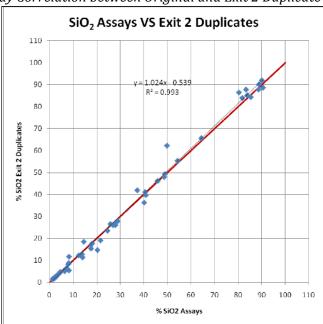


Figure 7
SiO₂ Assay Correlation between Original and Exit 2 Duplicate Samples

14.2 Assay Correlation of Twinned Holes

The data verification was done on the iron (Fe) and silica (SiO_2) assay results from the IOC historical RC drill results and the 2008-2009 RC drilling programs results. LIM twinned some IOC RC holes in order to verify the iron (Fe) content. A total of 4 paired RC holes (8 in total) from Houston were considered. Correlation coefficients showed adequate correlation. Refer to Figures 8 and 9.

Visual analyses of the selected pairs also show satisfactory correlation. A hole showed lower correlation due to low grade ore layers within the orebody and sharp changes because of the structural complexity (Figure 10).

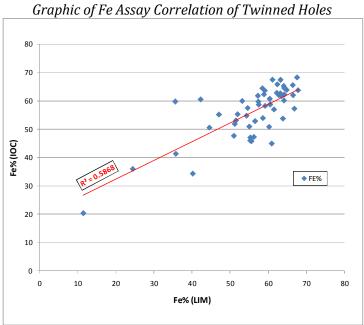
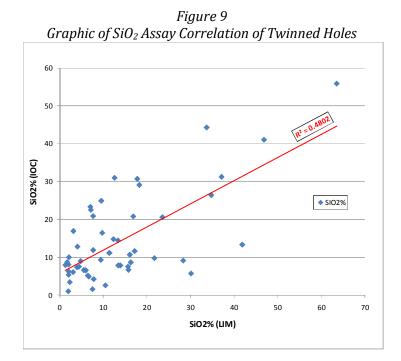


Figure 8



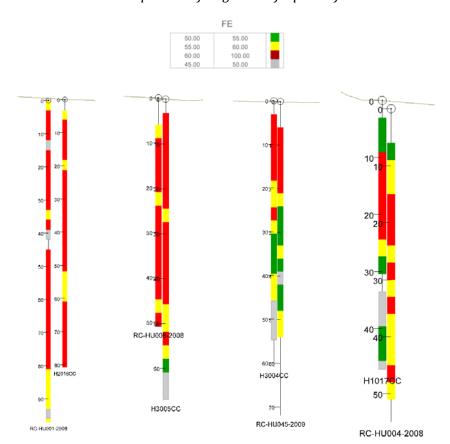


Figure 10
Visual comparison of Fe grades of 4 pairs of holes

14.3 BLANKS

A total of 60 blank samples were used to check for possible contamination in laboratories. SGS Geostat made the blank sample from a known slate outcrop located near Schefferville. SGS Geostat homogenized an average 200 kg of material on site at the preparation lab in Schefferville. LIM and SGS Geostat also sent two separate batches of fifteen (15) blank samples to the Corem and ALS-Chemex independent laboratories of Vancouver and Quebec City, respectively, for analysis.

An average 4.82% Fe and 61.96% SiO₂ was noted for the entire batch of 60 blank samples. For SGS-Lakefield, an average of 5.37% Fe and 61.40% SiO₂ was noted. For ALS-Chemex, an average of 4.22% Fe and 62.60% SiO₂ was noted. For COREM, an average of 4.34% Fe and 62.25% SiO₂ was noted.

15. ADJACENT PROPERTIES (ITEM 17)

Adjacent to the properties owned by LIM in Labrador are other former operations of IOC in Labrador and Quebec that were either mined out or abandoned by IOC in 1982. IOC produced an approximate total of some 150 million tons of direct shipping iron ore from all their properties in Quebec and Labrador during the operating years of 1954 to 1982. IOC is currently operating the Carol Lake iron property some 200 km south of Schefferville near Labrador City in Labrador.

After closure, previously owned IOC operations in Labrador have reverted to the Crown, while the mining leases in Quebec remained with the underlying owner, Hollinger. Currently, LIM and NML hold title to most of the deposits abandoned in Labrador. A wholly own subsidiary of Labrador Iron Mines Holdings Limited has recently entered in to a number of agreements giving it ownership of 214 claims and mining leases in Quebec containing a number of these iron and manganese deposits with a total historic resource of 50 million tons based on the IOC 1983 reserve book.

A feasibility study has been carried out for NML on an iron deposit in the Howells River area of Labrador known as the LabMag Property located some 30 km northwest of Schefferville. The property is owned by the partnership of New Millennium Capital Corp. and the Naskapi LabMag Trust. NML published a Pre-feasibility Study in April 2009 on a DSO Project on some of their claims in Labrador and Quebec and is currently preparing a feasibility study to develop the same project.

The Mont-Wright mining complex (owned by Arcelor Mittal) as well as the Wabush mines are located in the same area near Wabush and Fermont in Quebec. An 8 to 16 Mtpa iron operation at the Bloom Lake deposit, located east of the of Mont-Wright operation, near Labrador City, is currently under construction by Consolidated Thompson Mines.

16. MINERAL PROCESSING AND METALLURGICAL TESTING (ITEM 18)

16.1 LAKEFIELD RESEARCH LABORATORIES

During February 1989 three mineralized samples comprising approximately 12.7 tonnes or 45 drums of James ore were treated at Lakefield Research Laboratories (now SGS-Lakefield), Lakefield, Ontario. This test work program was supervised by W. R. Hatch Engineering Ltd. ("Hatch") of Ontario, and the results were detailed in the report entitled "Wet Spiral Classification of Iron Ores" for La Fosse, dated March 6 1989. Descriptions of the test samples are not available; however, the average head grade of 62.1% Fe and 10.1% silica was about 3.5 units higher in iron and 0.9 units lower in silica than the IOC estimated average in the James deposit.

The samples were crushed to 100% - $1\frac{1}{2}$ inches (in) and screened at $\frac{1}{2}$ in. The Lump Ore product ($-1\frac{1}{2}$ in to $\frac{1}{2}$ in) was weighted and assayed and the - $\frac{1}{2}$ in wash feed was weighed and fed at a controlled rate to a washing circuit. The washing process included a rotary scrubber (mill without grinding media) and a spiral classifier. The spiral classifier fines overflow and sands products were collected and analyzed. The Lakefield test results are summarized in Table 13.

Table 13
Lakefield Washing Test Results

	Wt %	Fe %	Silica %
Sample # 1			
Head	100	67.8	2.2
Lump (-1/1/2" +1/2")	10.3	65.5	6.1
Fines (-1/2")	53.1	68.3	2.3
Tails (-100 mesh = 150 μ m)	36.9	67.3	0.9
Calc. Head	100.3	67.6	2.2
Sample # 2			
Head	100	59.4	13.6
Lump (-1/1/2" +1/2")	13.8	58.9	9.7
Fines (-1/2")	65.0	65.3	5.88
Tails (-100 mesh =150 μ m)	23.7	37.2	35.6
Calc. Head	102.7	57.9	13.3
Sample # 3			
Head	100	59.1	14.6
Lump (-1/1/2" +1/2")	6.7	62.4	9.5
Fines (-1/2")	62.2	65.3	5.9
Tails (-100 mesh = 150 μ m)	31.0	46.0	33.2
Calc. Head	100.0	59.1	14.6

The washing results were used to evaluate the James deposit mineralization as part of the open pit evaluation. The washing results provided an indication of the Lump, Fines and Tailings products quality. Plotting the feed iron and silica grade relationship of the three samples on scatter diagram established from the IOC sample population, all test sample points were above the trend line which indicates a type of mineralization containing high iron and low silica. When comparing the test samples to the block model data, it becomes apparent that it would be desirable to test representative samples containing lower iron grades so that the up-grading potential can be assessed. Hatch concluded that at low silica content (68% iron and 2.3% silica) only minor upgrading occurred. For the relatively high silica samples (57.7% to 59.7% Fe and 15.6% to 14.0% silica), silica concentrated into fines overflow (tailings), resulting in upgrading the sands fraction with respect to iron.

16.2 MIDREX TESTS

Midrex Technologies, Inc. (Midrex) is an international iron and steel making technology company based in Charlotte, North Carolina. In 1989 Midrex sampled and tested lump ore samples # 632 from James, #620 from Sawyer Lake deposit and #625 from Houston 1 deposit for standard raw material evaluation purposes. The sample analyses are presented in Table 14.

Table 14
Midrex Lump Ore Samples Analyses

Sample #	Dry Wt% Yield at +6.7 mm	Fe %	S %	P %
632/ James	82.16	67.95	0.003	0.016
620/ Sawyer	90.50	68.57	0.003	0.011
625/ Houston 1	92.33	68.32	0.007	0.057

All lump ore samples were estimated by Midrex to be suitable for commercial production using its technology.

16.3 CENTRE DE RECHERCHES MINÉRALES (1990)

In 1990, a bulk sample of mineralized material from the James deposit weighing approximately three tonnes was transported to Centre de Recherches Minerales (CdRM), Quebec City, for testing, on behalf of La Fosse Platinum Group Inc. This material was crushed to -1 in, which was finer than the Lakefield tests, and wet screened at $\frac{1}{4}$ in. The results from the screen tests on this bulk sample are summarized in Table 15.

Table 15
James Bulk Sample Screen Analysis (CRM)

Size Fraction	kg	Wt%	Wt%
Sample received	3,121	100	
+2" rejected	227	7.3%	
Total -1"	2,862	91.7%	100
-1" to +½ "	2,340	75.0%	81.8%
-1/4 "	398	12.8%	13.9%
Assumed fines	124	4.0%	4.3%

In addition to the James bulk sample, a sample from Sawyer Lake was submitted for testing. The results of the screening and size fraction assays are presented in Table 16.

Table 16
Sawver Lake Sample Screen and Chemical Analysis (CRM)

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Size Fraction	wt%	Fe %	SiO ₂	$Al_2 O_3$	Mn	P
-1" to + ¹ / ₄ "	21.5	68.2	0.97	0.13	0.56	127
-½ "to 100#	48.9	66.2	3.27	0.17	0.84	146
-100# to 200#	1.3	51.4	28.1			
-200#	28.3	62.6	27.1			
-100#	29.6	62.1	27.1			
Calc. Feed	100.0	65.4	4.85			
Feed Assay	65.0	4.97				

16.42006 BULK SAMPLING BY LIM

Bulk samples from trenches at the James and Houston deposits were collected during the summer of 2006 from two trenches 113 metres and 78 metres long respectively. Three bulk samples of some 400 kg each were collected from the James trench and four bulk samples of some 600 kg each were collected from the Houston deposit trench for testing. The testing for compressive strength, crusher index and abrasion index were done at SGS Lakefield. The composite crushing, dry and wet screen analysis, washing and classification tests were done at "rpc – The Technical Solutions Centre" in Fredericton, New Brunswick. An additional five composite samples from the different ore zones in the trench were collected and tested in the ALS Chemex Lab in Sudbury for chemical testing.

The bulk sampling tests produced data for rock hardness and work indices for crushing and grinding, average density data for the various ore zones as well as chemical data. The specific gravity tests, completed on the bulk samples, have shown that there was a possibility that the average SG is higher than the 3.5 kg/t which was used in the IOC calculations. Additional SG testing was completed during the 2009 exploration program, obtaining a Fe-dependant variable SG (See Section 19.4).

The SG data have been and will continue to be used in the calculation of resource and reserve volumes while the chemical test results will be used to compare them with the historical IOC data from neighboring drill holes. Table 17 shows the summary of the results of the tests on the 2006 bulk samples for the various ore types.

Table 17 Summary of Tests by SGS-Lakefield

Sample Name	CWI (kWh/t)	AI (g)	UCS (Mpa)	Density CWI (g/cm³)	Density UCS (g/cm³)
NB-Houston A	8.2	0.187	106.4	4.26	4.61
NB-Houston B	=	0.213	48.9	¥	4.42
LNB Houston A	7.3	0.108	₹.	3.95	7.E3
LNB Houston B	<u> </u>	0.189	27	8-	(F <u>a</u>)
TRX-Houston A	6.7	0.098	22.3	3.47	3.00
TRX-Houston B	5	0.067	50	=	
NB4-Houston A	5.7	0.086	73.0	3.77	4.36
NB4-Houston B	-	0.080	-	Η.	
JM-TRX A	7.0	0.023	24.8	3.29	3.02
JM-TRX B	_	0.086	33.9	μ	4.31
JM-LNB A	2.6	0.047	16.7	3.15	3.32
JM-LNB B	<u> </u>	0.029	11.9	2	3,35
JM-NB A	4.8	0.143	-	3.48	(2)
JM-NB B	. .	0.144	5	55	ES
Average	6.1	0.107	42.2	3.6	3.8

16.5 SGS LAKEFIELD (2008)

From the 2008 Exploration Drill Program, five iron ore composite samples from the James deposit were submitted to SGS-Lakefield for mineralogical characterization to aid with the metallurgical beneficiation program. The samples were selected based on their lower iron grade. Emphasis was placed on the liberation characteristics of the iron oxides and the silicates minerals.

The overall liberation of the Fe-Oxides is generally good for each sample, except for sample 156037. However, each sample shows slightly different liberation characteristics by size. Samples 156109 and 156090 have relatively constant liberation throughout the size fractions (\sim 70 % to 90% per fraction). Fe-Oxide liberation is \sim 60% in the +1700 μ m, +850 μ m and + 300 μ m fractions, but increases to \sim 80% to 90% in the finer fractions in sample 156032. Liberation is increased significantly with decreasing size in samples 160566 and 156037. Results of the test are summarized in Table 18.

Sample	156109	160566	156090	156032	156037	
Hole	RC-JM001-2008	RC-JM001-2008	RC-JM001-2008	RC-JM001-2008	RC-JM001-2008	Analyzed
From	30	18	42	45	60	Polished Sections
То	33	21	45	48	63	Sections
% Fe	51.13	54.48	51.13	51.69	50.08	
Size-3000+1700μm	30.10	8.00	23.60	24.90	38.30	14
Size-1700+850μm	5.60	5.70	7.00	8.70	12.10	8
Size-850+300μm	12.40	15.40	19.30	13.60	14.70	8
Size-300+150μm	9.50	14.10	7.30	12.20	8.80	4
Size-150+75μm	17.70	13.70	17.30	14.30	7.10	2

Table 18 Results of Mineralogical Characterization Tests (SGS - Lakefield)

Other conclusions from the report include:

24.60

43.00

Size-75+3µm

o Mineral release curves: samples 160566 and 156037 display poor liberation in coarse size fractions. A poor quality coarse concentrate with elevated silicate levels is anticipated for these two samples. For the finer material (-300 $\,\mu$ m) good liberation might be achieved between 100 $\,\mu$ m and 200 $\,\mu$ m (~80% liberation) with the exception of sample 156037;

25.00

26.30

19.00

- o For each sample, silicate liberation might be achieved in the 300 $\,\mu$ m to 400 $\,\mu$ m size range. It should be noted, that this is where most of the silicates accumulate;
- The grade recovery charts for Fe and Si also reveal that sample 156037 is significantly different from any of the other samples and might be more problematic for processing.

16.62008 BULK SAMPLING BY LIM

A Bulk Sample program was undertaken during the summer of 2008. 1,000 to 2,000 tonne samples were excavated with a CAT-330 type excavator from four of LIM's Stage 1 deposits: James South deposit (1,400 tons), Redmond 5 deposit (1,500 ton), Knob Lake deposit (1,100 tond), and Houston deposit (2,000 tons). The excavated material was hauled to the Silver Yard area for crushing and screening. The raw material was screened at approximately 6 mm into two products – a lump product (-50 mm+6 mm) and a sinter fine product (-6 mm). The material excavated from each deposit and the products produced from each deposit were kept separate from the others.

Representative 200 kg samples of each raw ore type was collected and sent to SGS Lakefield Laboratories for metallurgical tests and other (angle of repose, bulk density, moisture, direct head assay and particle size analysis determinations).

Preliminary scrubber tests were performed on all four samples. Only the James South sample was submitted for Crusher Work Index tests. The potential of beneficiation by gravity was explored by Heavy Liquid Separation. Vacuum filtration testwork was also carried out. The results of the bulk sample test are shown in Tables 19 and 20.

Table 19
Calculated Grades from 2008 Bulk Samples (SGS-Lakefield)

Deposit	James South	Knob	Houston	Redmond
Ore Type	Blue Ore	Red Ore	Blue Ore	Blue ore
Fe ¹	63.8	58.5	66.1	57.8
SiO ₂	6.64	7.29	2.22	13.1
P ¹	0.02	0.11	0.07	0.02
Al_2O_3	0.21	1.05	0.30	0.32
LOI	1.88	8.51	1.33	2.63

¹Calculated from WRA oxides

Table 20 2008 Bulk Samples Test Results (SGS-Lakefield)

2008 Bulk Samples Test Results (SGS-Lakefield)									
		Assays %					Distribution		
James South	Fe	SiO ₂	Al_2O_3	P	LOI	Mass			
Lump Ore	50mm- +6.7mm	67.7	1.33	0.12	0.013	1.59	41.1		
Sinter Feed	-6.7mm +150 μ m	64.5	5.69	0.20	0.020	1.95	33.3		
Pellet Feed	-150 μ m +38 μ m	50.1	26.1	0.15	0.016	1.42	13.1		
Slimes	38 μ m	63.3	6.29	0.38	0.030	2.10	12.5		
Calc. Head		63.8	6.64	0.18	0.018	1.75	100.0		
Knob Lake ((Red Ore)								
Lump Ore	50 mm +6.7 mm	58.8	5.02	0.69	0.114	9.95	60.4		
Sinter Feed	-6.7mm +150 μ m	58.3	6.49	1.13	0.111	8.70	26.0		
Pellet Feed	-150 μ m +38 μ m	54.5	11.2	1.58	0.110	7.89	1.87		
Slimes	- 38 μ m	53.2	11.0	2.40	0.108	6.90	11.7		
Calc. Head		57.9	6.22	1.02	0.112	9.23	100.0		
Houston (Bl	ue Ore)								
Lump Ore	50 mm +6.7 mm	68.1	1.08	0.20	0.060	1.00	33.9		
Sinter Feed	-6.7mm +150 μ m	66.2	3.30	0.41	0.078	1.22	35.5		
Pellet Feed	-150 μ m +38 μ m	65.8	3.84	0.38	0.082	1.37	6.43		
Slimes	- 38 μ m	63.7	1.99	0.54	0.089	2.17	24.1		
Calc. Head		66.2	2.27	0.37	0.075	1.38	100.0		
Redmond 5	(Blue Ore)								
Lump Ore	50 mm +6.7 mm	62.4	6.54	0.24	0.020	3.39	26.5		
Sinter Feed	-6.7mm +150 μ m	61.0	8.91	0.59	0.021	3.16	42.0		
Pellet Feed	-150 μ m +38 μ m	45.0	31.8	0.39	0.016	1.80	12.1		
Slimes	- 38 μ m	52.1	21.2	0.74	0.023	2.81	19.5		
Calc. Head		57.7	13.4	0.50	0.021	2.99	100.0		

The material collected from the James South bulk sample was sent to a number of other laboratories for additional test work, including Derrick Corporation for screening tests, Outotec,

and SGA Laboratories for Sinter Tests and Lump Ore characterization. Material from the Redmond deposit was sent to MBE Coal & Minerals Technologies and to Corem in Quebec City.

16.7 MANGANESE PROPERTIES

To date, the only laboratory testing that has been carried out on manganese ore has been on Ruth Lake Ore. In November 1988, Lakefield Research conducted test work to investigate the recovery of coarse manganese. Work included heavy liquid tests at different gravities. Heavy liquid test showed that 80% manganese recovery could be achieved at a specific gravity 3.16 and 31% weight would be rejected. Samples were not identified in the Lakefield report so it is not possible to conclude how well they represent the Ruth Lake deposit.

In December 1989, four samples (approximately 60 lbs) were submitted to Lakefield Research for mineralogical analysis. Several types of tests were carried out in order to identify physical separation processes that may be successful in rejecting iron (goethite) and upgrading the manganese product. Selective crushing/screening, gravity concentration, and high tension/electromagnetic separation indicated upgrading on the –6 mesh material tested. Magnetic separation and wet scrubbing processes showed no significant upgrading.

17. MINERAL RESOURCE ESTIMATION (ITEM 19)

17.1 Introduction

The mineral resources presented herein are reported in accordance with the National Instrument 43-101 and have been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

Prior to the resources reported in this document, the Houston deposits had historical reserves (non-compliant with NI 43-101) of DSO quality totalling 9.1Mt @ 57.4% Fe and 7.1% SiO₂ (IOC Ore Reserves, 1983), which was based on geological interpretations on cross sections and calculations were done manually. It should be noted that the historical estimates are based on economics of 1983 and that although the geological, mineralogical and processing data will be the same today, economics and market conditions have changed.

The classification used in the IOC reports is as follows:

Measured: The ore is measured accurately in three dimensions. All development and engineering evaluations (economics, ore testing) are complete. The deposit is physically accessible and has a complete pit design. The reserve is economic and is marketable under current conditions.

Indicated: Development and engineering evaluations (economics, ore testing) are complete. Deposits in this category do not meet all the criteria of measured ore.

Inferred: Only preliminary development and evaluation are completed. Deposits may not be mineable because of location, engineering considerations, economics and quality.

The above shown terms, definitions and classification are not compliant with NI 43-101 but were used by IOC for their production reports. Current compliant mineral resources are categorized on the basis of the degree of confidence in the estimate of quantity and grade or quality of the deposit, as follows:

- o Inferred mineral resources,
- o Indicated mineral resources and
- Measured mineral resources.

Compliant mineral reserves are that part of a measured mineral resource or indicated mineral resource which can be extracted legally and at a profit under economic conditions that are specified and generally accepted as reasonable by the mining industry and which are demonstrated by a preliminary feasibility study or feasibility study as follows:

- o Probable mineral reserve and
- o Proven mineral reserve

Houston data used for the estimation of current mineral resources was initially compiled and validated using MapInfo Professional software in combination with Encom Discover and Microsoft

Office Access. Data was then exported to Gemcom GEMS Software Version 6.2.3, which was used to perform the final validation of the Houston database, to construct solids, to build composites, to run geostatistical analyses, to build the block model, to run grades interpolation and to estimate mineral resources.

The data used for the resource estimation is based on data obtained as of December 2009 and has been compiled, collected, managed and verified using industry's best practices.

17.2 DATABASE AND VALIDATION

The historical data was entered from IOC's data bank listing print outs of drill holes, trenching and surface analyses. Most collar coordinate locations of drill holes were obtained using a Trimble DGPS with accuracies under 30cms. The locations of the remaining holes and trenches as well as geology were digitized using MapInfo v9.5 on historical maps that were geo-referenced using the DGPS surveyed points. The estimated accuracy of the digitized data is approximately 5 metres. Historical cross sections were also digitized using MapInfo/Discover software then imported into Gemcom GEMS 6.2.3.

The Houston database contains a total of 8,599 metres of drilling in 147 holes (including RC and diamond drilling), a total of 7,454 metres of trenching and a total of 5,020 samples. Table 21 provides a summary of the Houston database.

Table 21 Summary of Houston database

Source	Туре	No.	Metres	Assays
Historical	Drill hole Trench	84	4,418 6,900	3,571
LIM (2005-2009)	Drill hole Trench	63 -	4,181 554	1,449

The final verification and validation of the collar information, down hole survey, lithology, mineralization and analytical data was performed using Gemcom GEMS validation tools that checked for missing and overlapping intervals as well as consistency in lengths. To the best knowledge of the author, all data used in this estimation is accurate.

17.3 GEOLOGICAL INTERPRETATION AND MODELING

The geological and ore model interpretation of the Houston deposit was completed considering a cut-off grade of 45% Fe+Mn; however the resources reported are based on a cut-off grade of 50% Fe for iron ore and 50% Fe+Mn for manganiferous iron ore. The IOC ore type parameters of Non-Bessemer (NB), lean non-Bessemer (LNB), high silica (HiSiO2), high manganiferous (HMN) and low manganiferous (LMN) were considered for the resource estimation. Please refer to Table 4 for details.

The geological modeling of the Houston mineral deposit was done using 90 vertical cross sections with a direction of N043° spaced approximately 30 metres apart. The cross section configuration is the same as the one used by IOC. Fifty two (52) available historical paper cross sections from IOC were digitized and used for the geological interpretation and modeling.

The original geological and ore interpretations were updated with information obtained during recent exploration programs. The solids were created from the sectional wireframes combining geological and mineralization interpretation.

The study area of the Houston deposit included in this report covers an extension of 2,680m long x 450m wide and 160m vertical. Infill drilling will be required to better define mineralization in some areas within the ore body subject of this report. A remaining 2kms strike-length to the south-east of underexplored mineralization will be subject to a separate technical report once enough exploration work is completed.

17.4 Specific Gravity (SG)

The SG testing was carried out on reverse circulation drill chips. The SG was obtained by measuring a quantity of chips in air and then pouring the chips into a graduated cylinder containing a measured amount of water to determine the volume of water displacement. A volume of water equal to the observed displacement is then weighed and the SG of the chips is calculated using the equation listed below.

$$SG = \frac{A}{Ww}$$

SG=Specific Gravity of Sample A=Weight of Sample in air (dry) Ww=Weight of Water displaced

A variable specific gravity, Fe dependant, was used for the resource estimation which was calculated using the formula below.

$$SG_{(in situ)} = [(0.0258 * Fe) + 2.338] * 0.9$$

The formula was calculated from regression analyses in MS Excel using 229 specific gravity tests completed during the 2009 drilling program. The 0.9 factor corresponds to a security factor to take into account porosity of an estimated average of 10% volume. This formula was validated and used by SGS Geostat in prior technical reports.

17.5 STATISTICS

Composite samples were calculated in GEMS at equal lengths of 3 metres starting from the collars using Fe, Mn, SiO_2 , Al_2O_3 and P grades. Composites were extracted into a "Point Area" workspace for statistical analysis and grade interpolation.

Figures 11, 12 and 13 show basic statistics of Fe, SiO2 and Mn in all samples considered in the resource estimation.

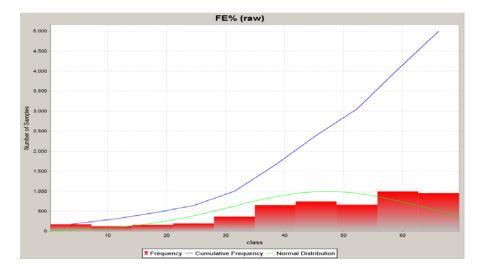


Figure 11 -Frequency, Cumulative Frequency and Normal Distribution chart of Fe

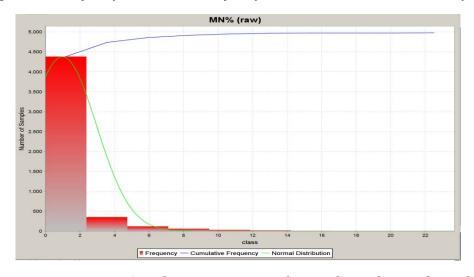


Figure 12 - Frequency, Cumulative Frequency and Normal Distribution chart of Mn

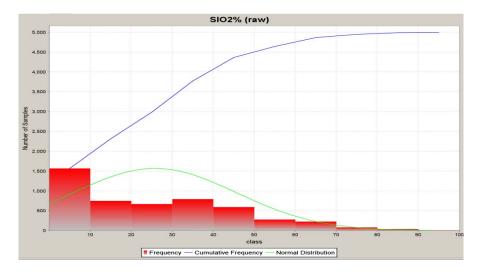


Figure 13 - Frequency, Cumulative Frequency and Normal Distribution chart of SiO₂

17.6 BLOCK MODELING AND GRADE ESTIMATION

17.6.1 VARIOGRAPHY

3D semi-variogram analysis in GEMS using all data available as a single domain (ore body) was done to determine directions of maximum continuity and various ranges of influence. The information obtained from the variograms was used in the parameters for the search ellipses for grade estimations.

Table 22 – Results of the 3D semi-variogram analysis

Principal Azimuth	Principal Dip	Intermediate	Nugget	Model	Sill	Anisotropy		y
Azımum		Azimuth				X	Y	Z
140.675	0	230.675	58.86	Spherical	153.28	71.071	68.090	55.302

17.6.2 Grade Estimation Methodology

The "Ordinary Kriging" interpolation method was used for grade estimate by block modeling with block sizes of 5x5x5 metres and block rotation of 45.6° which corresponds to the general strike of the Houston deposit. The block size considered was to be the smallest estimated size for this type of mineralization to take into account sharp grade changes over short intervals.

Number of Blocks Columns 130 Rows 580 Levels 45 **Origin and Orientation** X 651,84 mE Y 6,063,20 mN Z 630.00 m Orientation 45.6° **Block Size** Column size 5m Row size 5m Level size 5m

Table 23 - Parameters of the block model

Three rock codes were used to assign to the blocks. These were Air, Ore and Waste. Blocks had to be at least 50% inside the ore solid model to be coded as "Ore". Figures 14, 15 and 16 show examples of rock code assigned as ore in sections 344, 325 and 386 respectively.

The ranges (radius of influence) obtained from variogram analysis suggest that the density of data is adequate; however, some areas will need additional drilling to increase confidence in the results obtained.

Block grade estimation was completed in fifteen (15) passes using three search ellipses defined by 3D semi-variogram analysis for five grades (Fe, Mn, SiO_2 , Al_2O_3 and P). The three search ellipses were defined for resource classification (measured, indicated and inferred). Ranges assumed for search ellipses GEOS-1 and GEOS-2 are 20% and 35% respectively of the maximum range obtained from variogram analysis (GEOS-3). Figures 17, 18 and 19 show results of the Fe interpolation on sections 344, 325 and 386. Figure 20 shows stacked long sections throughout the studied area showing results of interpolation for Fe and SiO_2 and well as classification of blocks.

Table 24 - Parameters of search ellipses used in the interpolation of grades and classification

Search Ellipse	Classification	Principal Azimuth	Principal Dip	Anisotropy X	Anisotropy Y	Anisotropy Z
GEOS-1	Measured	140.675°	0°	14.20	13.60	11.06
GEOS-2	Indicated	140.675°	0°	24.85	23.80	19.40
GEOS-3	Inferred	140.675°	0°	71.07	68.09	55.30

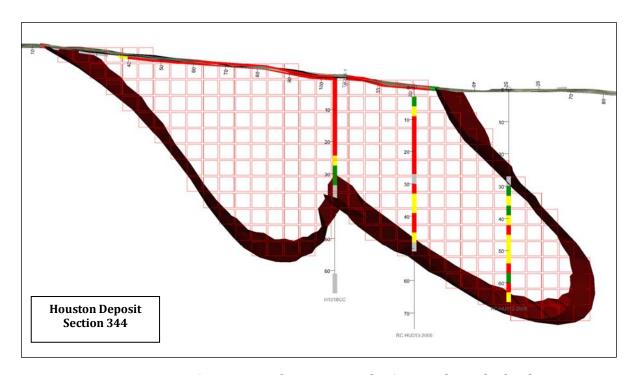


Figure 14 – Section 344 of Houston 1 with 15m corridor on both sides

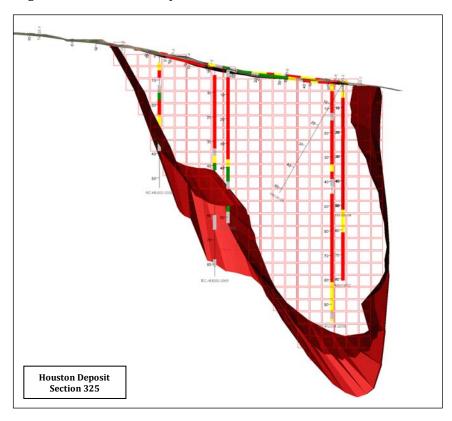


Figure 15 – Section 325 of Houston 2S with 15m corridor on both sides



Figure 16 – Section 386 of Houston 3 with 15m corridor on both sides

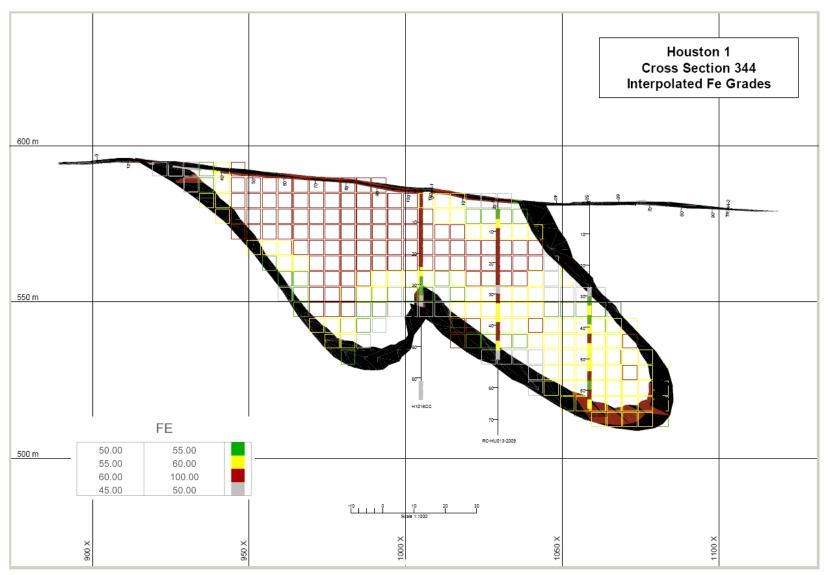


Figure 17

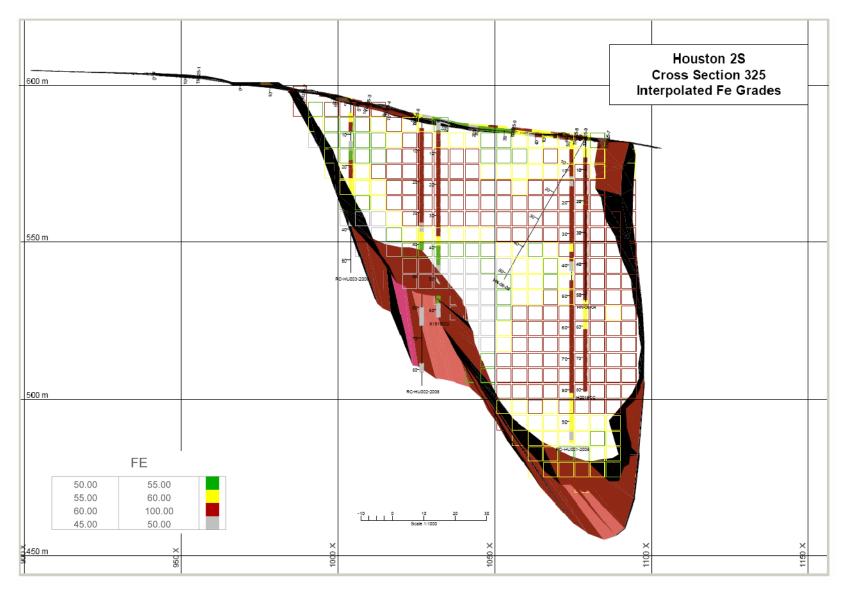


Figure 18

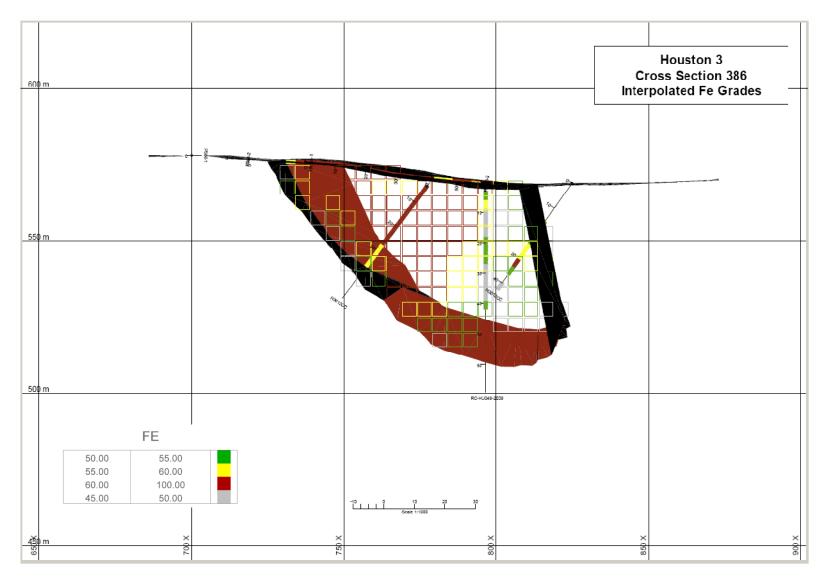
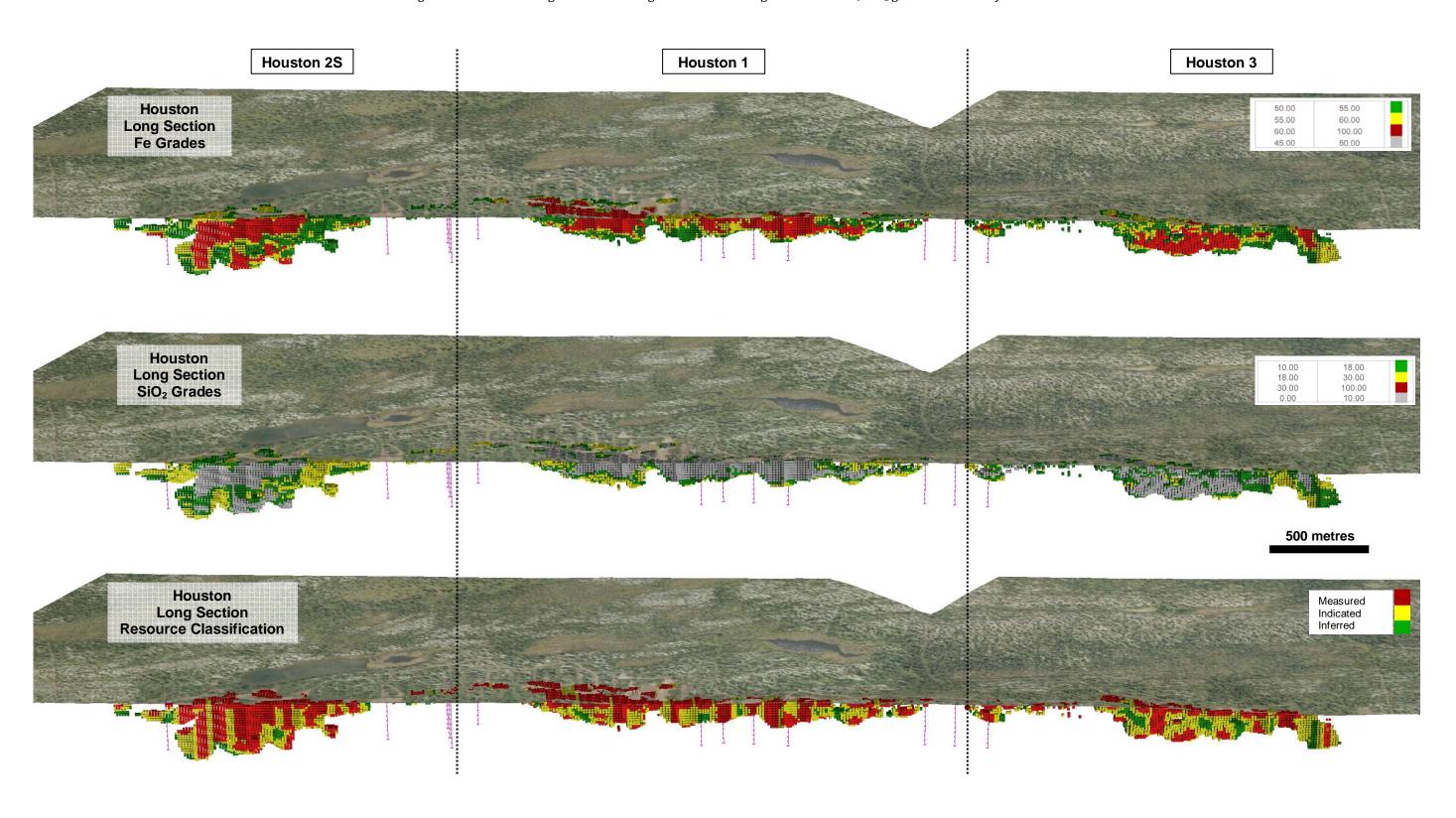


Figure 19

Figure 20 – Stacked long sections looking to the NE showing blocks with Fe, SiO_2 grades and classification



17.7 RESOURCE CLASSIFICATION

The estimated resources were classified in accordance with the specifications of the NI 43-101 Policy, namely in measured, indicated, and inferred resources. The results of the estimates for the Houston deposit are shown Tables 25 and 26.

Mineral resources were classified using the following parameters:

- Portion of block (50%) must be contained within the interpreted ore solid;
- Block had to have a minimum of 2 samples for interpolation;
- Measured Mineral Resources:
 - Blocks estimated in first group pass;
 - \circ Search ellipse GEOS1 (x=14.20, y=13.60, z=11.06)
 - Interpolated grades: Fe, Mn, SiO₂, Al₂O₃, P
- Indicated Mineral Resources:
 - o Blocks estimated in second group pass;
 - o Search ellipse GEOS2 (x=24.85, y=23.80, z=19.40)
 - o Interpolated grades: Fe, Mn, SiO₂, Al₂O₃, P
- Inferred Mineral Resources:
 - o Blocks estimated in third group pass;
 - o Search ellipse GEOS3 (x=71.07, y=68.09, z=55.30)
 - o Interpolated grades: Fe, Mn, SiO₂, Al₂O₃, P

Table 25 - Houston Deposit - NI 43-101 Compliant vs. Historical Iron Resources

Ore Type	Classification		43-1	01	Historical			
		Tonnage	SG	Fe%	SiO ₂ %	Tonnage	Fe%	SiO ₂ %
NB-LNB	Measured	6,700	3.52	61.12	8.58	-	-	-
	Indicated	5,274	3.51	60.40	9.61	9,114	57.43	7.13
	Inferred	1,004	3.48	59.17	11.43	-	-	-
HSiO2	Measured	1,329	3.33	52.64	21.33	-	-	-
	Indicated	1,382	3.33	52.71	21.08	-	-	-
	Inferred	494	3.32	52.55	21.19	-	-	-
Total	Measured	8,029	3.49	59.71	10.69	-	-	-
	Indicated	6,656	3.47	58.80	12.00	9,114	57.43	7.13
	Inferred	1,498	3.43	56.99	14.65	-	-	-

Table 26 - Houston Deposit NI 43-101 Compliant Manganiferous Iron Resources

NI 43-101 Compliant	Tonnes (x1,000)	Fe%	SiO ₂ %	Mn%
Measured (LMN+HMN)	480	54.2	8.8	5.8
Indicated (LMN+HMN)	351	54.4	9.5	5.0
Total	831	54.3	9.1	5.5

17.8 RESOURCES VALIDATION

Visual inspection on sections of interpolated block grades agreed well with the composite grades and it is considered acceptable.

A second validation was done using 20 trace blocks. Interpolated grades assigned to these blocks agreed with the grades of samples in them.

18. OTHER RELEVANT DATA AND INFORMATION (ITEM 20)

18.1 COMMUNITY AND SOCIAL ISSUES

LIM has established an active community relations program since mid-2005 and an ongoing effort is made to work very closely with the First Nations to focus on developing and maintaining productive working relations, ensuring a good understanding of the proposed project and with TSH, to identify and undertake the work necessary to allow for a timely expansion/upgrade of the TSH operations to include the shipment of iron ore.

LIM has signed an Impact Benefits Agreement (IBA) with the Innu Nation of Labrador. In addition, Memoranda of Understanding have been signed with the Innu Nation of Matimekush-Lac John and the Naskapi Nation of Kawawachikamach and extensive community consultation has been conducted with the nearby communities, as well as communities in western and central Labrador (Labrador City, Wabush, Happy Valley-Goose Bay). These consultations and agreements will ensure a close working relationship with the Innu of Labrador with respect to their involvement in the provision of labour, goods, and services.

18.1.1 BENEFITS OF THE PROJECT

The successful start up of LIM's DSO project will likely be the first positive economic stimulus to the northwest Labrador economies in 30 years. It should lead to 20+ years of economic stability.

The project will develop deposits of iron ore and manganiferous ore not previously worked by IOC but which were evaluated and were part of IOC's reserves and resources at the time of closure of its operations in the area in 1982. The deposits considered of high priority for LIM are located within reach of existing infrastructure, including road access, adjacent to electrical power lines and close to the railway terminal and proposed loading yard.

Cost effective and reliable rail transportation is going to be a key component of any direct shipping iron ore operations. The TSH railway company is already owned by a consortium of First Nations and provides an ideal basis upon which to develop other transportation solutions for the project.

For the first phase of operations, which includes the beneficiation site at Silver Yard and mining the James and Redmond deposits, the construction phase will generate up to 40 jobs with that number increasing to about 110 on an ongoing production basis. The economic impact of such employment and contracting business on the surrounding communities could be very positive and lead to the development of other support and service sector jobs and the consistent and planned development and growth of the town of the Labrador area and surrounding communities.

18.2 Markets

The market for iron ores and related products has seen some substantial changes in recent years. These have been driven in the most part by the booming resurgence of the Chinese economy and that country's rapidly increasing demand for raw materials particularly steel and its feed product, iron ore. This demand in the first instance has been met by increases in Australian and, to a lesser extent, Indian and Brazilian supply.

It is expected that the European market is the most likely destination for products from the LIM project given the potential freight advantage over other producers, but there remains a strong demand from the Far East and in particular from China for iron ore.

Iron ore prices, other than for pellets and some minor Direct Reduced Iron (DRI) feeds, are based on sinter fine prices, with a premium for lump.

19. CONCLUSIONS (ITEM 21)

The author's review of LIM's data and his knowledge of the project obtained during the period 2005-2009 have shown that there is more than sufficient merit to continue the exploration and development of the Houston and other Schefferville area direct shipping iron ore deposits.

It has been clearly demonstrated by this report on the Houston deposit resource estimate as well as by earlier reports on the James and Redmond deposit resource estimates that the historical resources calculated by IOC are reliable.

IOC previously worked in the very same areas of Quebec and Labrador between 1954 and 1982 and produced some 150 million tons of "lump and direct shipping" iron ore and carried out exploration to extend the life of these operation to well after 1982. When the economic conditions changed and the market for that ore was no longer attractive, the mines closed. However, the explored deposits remained ready for exploitation when favourable market conditions returned.

LIM has now brought the resources contained in three deposits (Houston, James and Redmond) in compliance with NI 43-101. LIM plans to start initial production of its Phase One operations from the James deposit in July 2010 having invested a significant amount in capital expenditure and upgrading of existing infrastructure. The James and Redmond operations will continue for approximately 4 - 5 years before being supplemented by production from the Houston, Gill, Ruth Lake 8 and other deposits (subject to additional EIS and regulatory approvals).

The other deposits in Labrador, Astray Lake and Sawyer Lake, southeast of Schefferville, as well as Howse and Kivivic, northwest of Schefferville are further from the town of Schefferville and require more infrastructure development and therefore higher capital expenditures. The knowledge of these deposits is less detailed and more exploration will be required to bring these historic inferred resources to NI 43-101 compliance and indicated classification.

20. RECOMMENDATIONS (ITEM 22)

Following the review of all relevant data and the interpretation and conclusions of this review, it is recommended that exploration on the Houston property should continue. The results of past exploration have been very positive and have demonstrated the reliability of the IOC data which has been confirmed with the recent exploration.

Some additional minor drilling is recommended to evaluate possible extensions of the Houston deposit to the south and to infill, in more detail, areas between the main concentrations of iron ore.

A program of RC drilling should continue to explore the possible extension of the Houston deposit to the south, possible depth continuity around the Houston 1 zone and in the areas between the Houston 1 and 2 zones for possible continuity. Drilling will also test the continuity between Houston 3 and Houston 1 and to the north of Houston 2N.

The additional drilling of 18 RC drill holes is proposed:

- A minimum of 4 RC drill holes for a total of 400 metres is proposed for Houston 1 on the newly acquired part of the property, in order to extend and define the possible eastward, down-dip extension of the mineralization.
- In Houston 2, 11 RC holes for a total of 1,100 metres are proposed. Five of the 11 holes are located between Houston 1 and 2 on the newly acquired property. Six of the 11 holes will test the continuity to the north of Houston 2N.
- In Houston 3, 3 holes are planned for a total of 300 metres to test the continuity between Houston 3 and Houston 1 also on the newly acquired property.

The total drilling program will improve the quality of the geological interpretation of the targeted areas.

Estimated budget for the Houston 1, 2 and 3 Deposits:

Drilling 1,800 metres @ \$ 315/metre = \$ 567,000

Subsequent to the exploration programs, outlined in the foregoing section, a number of items would need further development at Houston. The following are areas that need more work:

- Detailed mine plans, including geotechnical and hydrogeological studies, should be prepared for the deposit to optimize mine production, blending of different ore types and scheduling; Optimization of the development schedule;
- Additional metallurgical studies may be required dependent on the mineralogy of the deposit;
- Transport and infrastructure requirements, including haulage alternatives for transporting ore from the site to the beneficiation plant location will need to be designed and engineered.
- Additional environmental studies should be completed for the Houston and other deposits forming the next phase of planned development. Additional community consultation and permit applications will be required on each subsequent phase of project development.

21. REFERENCES (ITEM 23)

The following documents are in LIM's files and have been reviewed by the author:

- "Geology of Iron Deposits in Canada". Volume I. General Geology and Evaluation on Iron Deposits. G.A. Gross. Department of Mines and Technical Surveys Canada. 1965;
- "Reserve and Stripping Estimate". Iron Ore Company of Canada, January 1st, 1983.
- "Overview Report on Hollinger Knob Lake Iron Deposits". Fenton Scott. November 2000.
- "Assessment of an Investment Proposal for the Hollinger Iron Ore Development Project. Final Report". SOQUEM Inc. February 2002;
- "Preliminary Scoping Study for the Labrador Iron Ore Project. Province of Newfoundland & Labrador, Canada. Volume I. Labrador Iron Mines Ltd. September 28, 2006.
- "Technical Report of an Iron Project in Northwest Labrador, Province of Newfoundland and Labrador". D. Dufort, P.Eng and A.S. Kroon, P.Eng SNC-Lavalin, Original Date September 10th, 2007, Amended October 10th, 2007.
- "Report on Summer-Fall 2008 Exploration Program". Labrador Iron Mines Limited. February 2009.
- "A Mineralogical Characterization of Five Composite Samples from James Iron Ore Deposit Located in Labrador Newfoundland". SGS Lakefield Research Ltd., February 2009.
- "An Investigation into Direct Shipping Iron Ore from Labrador Iron Mine prepared for SNC-Lavalin Inc. on behalf Labrador Iron Mines Limited. Project 12010-001 Final Report". SGS Lakefield Research Limited. February 2009.
- "Report on Chemical, physical and metallurgical properties of James South Lump ore". Studien-Gesellschaft für Eisenerz-Aufbereitung. May 2009.
- "Report on Chemical, physical and metallurgical properties of Knob Lake Lump ore". Studien-Gesellschaft für Eisenerz-Aufbereitung. May 2009.
- "Upgrading Iron Ore Using Wet Gravity Separation", Outotec (USA) Inc. May 2009.
- "Magnetic Separation of Iron Ore Using HGMS Magnet", Outotec (USA) Inc. June 2009.
- "Schefferville Area Iron Ore Mine Western Labrador Environmental Impact Assessment". August 2009.
- "Work Assessment Report, The Ruth Lake Property, Western Labrador Province of Newfoundland & Labrador". MRB & Associates, John Langton M.Sc, P.Geo. October 30th, 2009.
- "Report on Batch Stratification Test Work for LIM Labrador Iron Mines Limited". MBE Coal & Minerals Technology GmbH. November 2009.
- "Report on Sintering tests with Labrador Iron Mines sinter fines", Studien-Gesellschaft für Eisenerz-Aufbereitung, November 2009;

- "Technical Report Resource Estimation of the James, Redmond 2B and Redmond 5 Mineral Deposits Located in Labrador, Canada for Labrador Iron Mines Ltd". SGS Geostat Ltd. December 18th, 2009.
- "Labrador Iron Mines Ltd. Ore Beneficiation Potential and Physical Properties Determination Final Report No. T1054", COREM, December 2009.
- "Report on 2009 Exploration Program". Prepared by Labrador Iron Mines Limited.

 December 2009.
- "Technical Report on an Iron Project in Northern Quebec. Province of Quebec". A.S. Kroon. March 10th, 2010.
- "Revised Technical Report on an Iron Ore Project in Western Labrador. Province of Newfoundland and Labrador". A. Kroon, SGS Canada Inc. March 18th, 2010.

22. DATE AND SIGNATURE PAGE (ITEM 24)

This Technical Report is dated May 18, 2010 and reports on all exploration work done up to the December $31^{\rm st}$ of 2009.

Dated at Toronto, ON Date May 18, 2010 TEACHOCEN MONTH 2010

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Terence N. McKillen, P.Geo.

QUALIFICATIONS CERTIFICATE

- I, Terence N. McKillen, Professional Geologist, do hereby certify that:
 - I am a consulting geologist residing at 965 Davecath Road, Mississauga, Ontario, L5J 2R7.
 - I graduated from the University of Dublin, Trinity College in 1968 and hold a Bachelors and a Masters Degree in Natural Sciences (Geology). I obtained a Masters Degree in Mineral Exploration and Mining Geology from the University of Leicester in 1971.
 - I am a member in good standing of the Association of Professional Geoscientists of Ontario (#0216); the Professional Engineers and Geoscientists of Newfoundland and Labrador (#04525) and the Order of Professional Geologists of Québec (#1392) and am designated as a specialist in Geology and Mineral Exploration and Development.
 - I have worked as a geologist and mining executive in the minerals industry for over 40 years since my graduation from university.
 - I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and by reason of my education, membership of professional associations and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
 - I am responsible for this Resource Estimate & Technical Report on the Houston Iron Ore Deposit in Western Labrador in its entirety. I have visited the project site on several occasions, including most recently on 22 Oct. 2009.
 - I was instrumental in the original acquisition of the Houston and nearby iron ore properties held by Labrador Iron Mines Limited, have been involved in the corporate development thereof and have prepared earlier technical and business reports and evaluations pertaining to the Houston and other iron ore properties held by LIMHL in Labrador and Quebec or directly supervised the preparation of such technical reports.
 - I am not independent of either Labrador Mines Limited nor Labrador Iron Mines Holdings Limited as described in section 1.4 of NI 43-101, being a director and officer of both companies.
 - I have read National Instrument 43-101 Standards of Disclosure for Mineral Projects and Form 43-101F1 and Companion Policy 43-101CP and certify that this Resource Estimate and Technical Report has been prepared in compliance with such instrument(s).
 - As of the date of the report and to the best of my knowledge, I am not aware of any material fact or material change with respect to the subject matter of the Resource Estimate and Technical Report that is not reflected in the report, the omission of which disclosure would make the Resource Estimate and Technical Report misleading.
 - I consent to the filing of the Resource Estimate and Technical Report with any stock exchange or other regulatory authority and any publication by them for

regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the report.

DATED

May 18th, 2010

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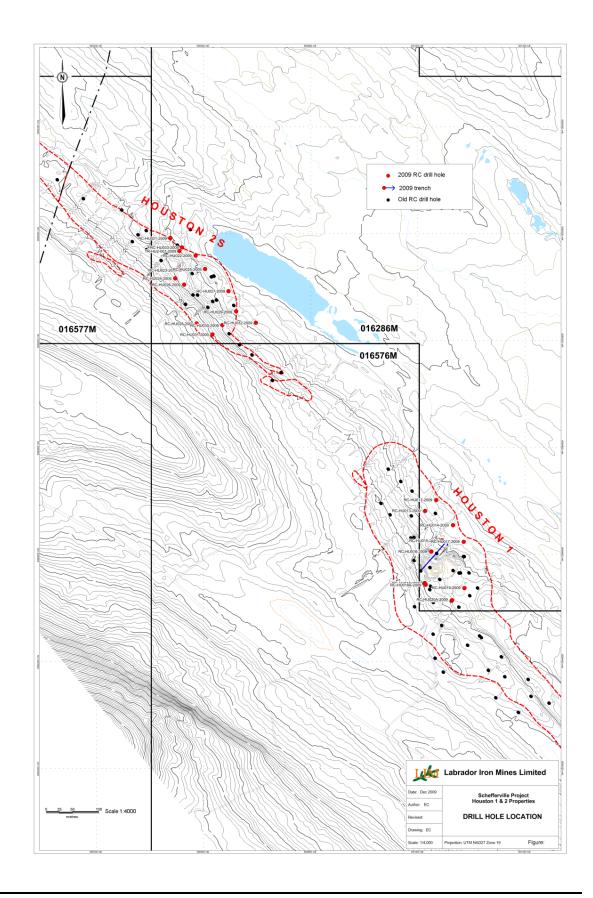
23. ILLUSTRATIONS (ITEM 26)

The following plans are attached as illustrations of the exploration drilling and trench sampling programs carried out LIM to date.

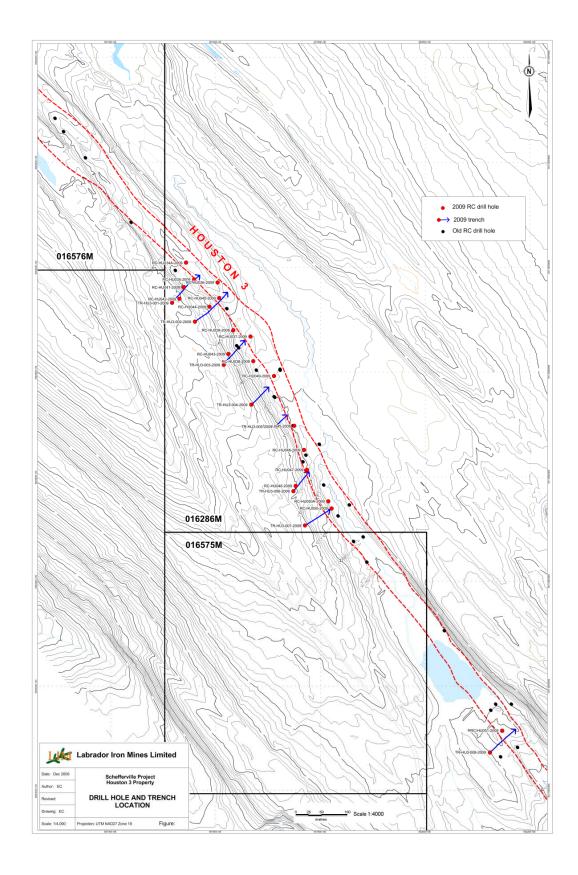
List of Plans and Sections

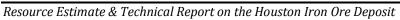
Houston 1 & 2 Drill Holes Houston 3 Drill Holes

Houston 1 & 2S Drill Holes



Houston 3 Drill Holes





APPENDIX I

(List of drill holes and trenches completed by LIM in the Houston property)

Hole ID	Easting	Northing	Elev (m)	Len	Az	Dip	Type	Status	Start	Finish
HN-06-01	650617	6065073	586	32	0	-90.0	DD	Cancelled	3-Aug-06	3-Aug-06
HN-06-02	650620	6065121	583	52	230	-60.0	DD	Cancelled	17-Aug-06	17-Aug-06
HN-06-03	651022	6064534	590	72	0	-90.0	DD	Completed	23-Jul-06	2-Aug-06
HN-06-04	650620	6065121	583	52	0	-90.0	DD	Cancelled	18-Aug-06	19-Aug-06
HN-06-05	651644	6063846	574	45	0	-90.0	DD	Abandoned	20-Aug-06	20-Aug-06
RC-HU001-2008	650615	6065119	583	97	0	-90.0	RC	Completed	28-Aug-08	1-Sep-08
RC-HU002-2008	650581	6065086	589	85	0	-90.0	RC	Completed	2-Sep-08	4-Sep-08
RC-HU003-2008	650567	6065068	594	54	0	-90.0	RC	Completed	4-Sep-08	6-Sep-08
RC-HU004-2008	651087	6064596	584	55	0	-90.0	RC	Completed	4-Sep-08	6-Sep-08
RC-HU005-2008	651077	6064565	585	33	0	-90.0	RC	Abandoned	1-Sep-08	3-Sep-08
RC-HU005A-2008	651080	6064566	585	87	0	-90.0	RC	Completed	1-Sep-08	3-Sep-08
RC-HU006-2008	651029	6064510	590	66	0	-90.0	RC	Completed	30-Aug-08	1-Sep-08
RC-HU007-2008	651723	6063804	570	45	0	-90.0	RC	Completed	7-Sep-08	8-Sep-08
RC-HU008-2008	651712	6063753	571	51	0	-90.0	RC	Completed	8-Sep-08	10-Sep-08
RC-HU009-2008	652125	6063154	565	93	0	-90.0	RC	Completed	9-Oct-08	11-0ct-08
RC-HU010-2008	652176	6063083	561	53	0	-90.0	RC	Completed	12-Oct-08	13-Oct-08
RC-HU011-2008	652144	6063065	565	72	0	-90.0	RC	Completed	13-Oct-08	15-Oct-08
RC-HU012-2009	651035	6064702	582	66	0	-90.0	RC	Completed	14-Aug-09	15-Aug-09
RC-HU013-2009	651014	6064682	583	75	0	-90.0	RC	Completed	15-Aug-09	17-Aug-09
RC-HU014-2009	651066	6064655	582	90	0	-90.0	RC	Completed	20-Aug-09	22-Aug-09
RC-HU015-2009	651045	6064627	584	69	0	-90.0	RC	Completed	22-Aug-09	23-Aug-09
RC-HU016-2009	651025	6064606	586	70	0	-90.0	RC	Completed	23-Aug-09	24-Aug-09
RC-HU017-2009	651086	6064624	581	79	0	-90.0	RC	Completed	24-Aug-09	27-Aug-09
RC-HU018-2009	651013	6064547	589	28	0	-90.0	RC	Completed	17-Aug-09	18-Aug-09
RC-HU018A-2009	651015	6064543	589	9	0	-90.0	RC	Completed	18-Aug-09	18-Aug-09
RC-HU019-2009	651087	6064537	586	69	0	-90.0	RC	Completed	27-Aug-09	28-Aug-09
RC-HU020-2009	651063	6064514	588	15	0	-90.0	RC	Abandoned	18-Aug-09	18-Aug-09
RC-HU020A-2009	651064	6064515	588	73	0	-90.0	RC	Completed	18-Aug-09	20-Aug-09
RC-HU021-2009	650538	6065192	585	30	0	-90.0	RC	Completed	29-Jul-09	29-Jul-09
RC-HU022-2009	650586	6065159	581	111	0	-90.0	RC	Completed	30-Aug-09	1-Sep-09

Hole ID	Easting	Northing	Elev (m)	Len	Az	Dip	Type	Status	Start	Finish
RC-HU023-2009	650557	6065133	589	99	0	-90.0	RC	Completed	2-Aug-09	4-Aug-09
RC-HU024-2009	650547	6065117	590	69	0	-90.0	RC	Completed	31-Jul-09	2-Aug-09
RC-HU025-2009	650603	6065134	583	126	0	-90.0	RC	Completed	28-Aug-09	30-Aug-09
RC-HU026-2009	650564	6065105	589	99	0	-90.0	RC	Completed	29-Jul-09	31-Jul-09
RC-HU027-2009	650647	6065093	581	120	0	-90.0	RC	Completed	4-Aug-09	6-Aug-09
RC-HU028-2009	650588	6065032	596	67	0	-90.0	RC	Completed	10-Aug-09	12-Aug-09
RC-HU029-2009	650661	6065055	583	93	0	-90.0	RC	Completed	6-Aug-09	8-Aug-09
RC-HU030-2009	650636	6065029	589	63	0	-90.0	RC	Completed	12-Aug-09	13-Aug-09
RC-HU031-2009	650617	6065012	594	33	0	-90.0	RC	Completed	13-Aug-09	14-Aug-09
RC-HU032-2009	650698	6065034	583	97	0	-90.0	RC	Completed	8-Aug-09	10-Aug-09
RC-HU033-2009	650560	6065175	584	90	0	-90.0	RC	Completed	1-Sep-09	2-Sep-09
RC-HU034-2009	651543	6064009	579	9	0	-90.0	RC	Completed	3-Sep-09	5-Sep-09
RC-HU034A-2009	651543	6064009	579	117	0	-90.0	RC	Completed	3-Sep-09	5-Sep-09
RC-HU035-2009	651559	6063977	578	82	0	-90.0	RC	Completed	5-Sep-09	6-Sep-09
RC-HU036-2009	651604	6063971	577	78	0	-90.0	RC	Completed	6-Sep-09	7-Sep-09
RC-HU037-2009	651666	6063868	573	81	0	-90.0	RC	Completed	7-Sep-09	8-Sep-09
RC-HU038-2009	651672	6063821	572	102	0	-90.0	RC	Completed	8-Sep-09	9-Sep-09
RC-HU039-2009	651634	6063880	574	96	0	-90.0	RC	Completed	9-Sep-09	11-Sep-09
RC-HU040-2009	651607	6063941	576	78	0	-90.0	RC	Completed	11-Sep-09	12-Sep-09
RC-HU041-2009	651539	6063962	580	72	0	-90.0	RC	Completed	12-Sep-09	14-Sep-09
RC-HU042-2009	651531	6063940	585	39	0	-90.0	RC	Completed	14-Sep-09	15-Sep-09
RC-HU043-2009	651624	6063835	578	42	0	-90.0	RC	Completed	15-Sep-09	16-Sep-09
RC-HU044-2009	651589	6063925	579	90	0	-90.0	RC	Completed	16-Sep-09	17-Sep-09
RC-HU045-2009	651750	6063698	569	72	0	-90.0	RC	Abandoned	17-Sep-09	18-Sep-09
RC-HU046-2009	651753	6063583	574	60	0	-90.0	RC	Completed	18-Sep-09	20-Sep-09
RC-HU047-2009	651774	6063614	570	66	0	-90.0	RC	Completed	20-Sep-09	21-Sep-09
RC-HU048-2009	651769	6063652	569	69	0	-90.0	RC	Completed	21-Sep-09	23-Sep-09
RC-HU049-2009	651711	6063793	571	72	0	-90.0	RC	Completed	23-Sep-09	25-Sep-09
RC-HU050-2009	651822	6063540	567	36	0	-90.0	RC	Abondoned	26-Sep-09	27-Sep-09
RC-HU050A-2009	651815	6063554	567	51	0	-90.0	RC	Abondoned	27-Sep-09	28-Sep-09

Hole ID	Easting	Northing	Elev (m)	Len	Az	Dip	Type	Status	Start	Finish
RC-HU051-2009	652147	6063115	564	9	0	-90.0	RC	Abondoned	29-Sep-09	29-Sep-09
RC-HU051A-2009	652147	6063115	564	6	0	-90.0	RC	Abondoned	29-Sep-09	29-Sep-09
RC-HU051B-2009	652147	6063115	564	69	0	-90.0	RC	Abondoned	29-Sep-09	1-0ct-09
HN-TR-01-06	651006	6064569	587	75	41	-2.0	TR	Completed	22-Aug-06	23-Aug-06
TR-HU2-001-2009	650555	6065168	585	4	30	0.0	TR	Completed	25-Aug-09	25-Aug-09
TR-HU3-001-2009	651517	6063932	584	76	35	-1.2	TR	Completed	30-Aug-09	31-Aug-09
TR-HU3-002-2009	651561	6063896	584	85	52	-8.7	TR	Completed	1-Sep-09	1-Sep-09
TR-HU3-003-2009	651615	6063814	583	63	42	-10.7	TR	Completed	2-Sep-09	2-Sep-09
TR-HU3-004-2009	651668	6063738	579	49	49	-5.1	TR	Completed	2-Sep-09	2-Sep-09
TR-HU3-005-2009	651716	6063697	575	31	35	-20.0	TR	Completed	2-Sep-09	2-Sep-09
TR-HU3-006-2009	651748	6063573	575	48	41	-6.6	TR	Completed	3-Sep-09	3-Sep-09
TR-HU3-007-2009	651771	6063508	575	57	58	-24.2	TR	Completed	3-Sep-09	3-Sep-09
TR-HU3-008-2009	652124	6063073	564	66	49	-4.0	TR	Completed	8-Sep-09	8-Sep-09