Technical Report
Resource Estimation of the James, Redmond 2B and Redmond 5 Mineral Deposits Located in Labrador, Canada for Labrador Iron Mines Limited

Respectfully submitted to:
Labrador Iron Mines Limited

Date: 18th of December, 2009

SGS Geostat Ltd
10 boul. de la Seigneurie Est, Suite 203, Blainville, Quebec Canada
t (450) 433 1050 **f** (450) 433 1048 www.geostat.com www.sgs.com/met

Member of SGS Group (SGS SA)

Table of Contents

List of tables

List of Figures

1- Summary

1. SGS Geostat Ltd. was given a mandate to prepare a **<u>43-101 compliant Resource estimation technical report</u>** on the James, Redmond 2B and Redmond 5 mineral deposits on behalf of the Client in order to assess their resources.

2. SGS Geostat Ltd. was requested to supervise the RC drilling program on the James, Redmond 2B, Redmond 5, Knob Lake, Howse, Astray and Houston mineral deposits on behalf of the Client based on the available information.

3. As of November 09th, 2009, Labrador Iron Mines Limited holds titles to 34 Mineral Rights Licenses issued by the Department of Natural Resources, Province of Newfoundland and Labrador, for a total of 336 mineral claims located in northwest Labrador near the town of Schefferville covering approximately 8,400 hectares.

4. The properties and iron deposits that currently form LIM's Labrador DSO Project were part of the original IOC Schefferville area operations and the reserves and resources identified at the James, Houston, Redmond, Knob Lake No.1, Sawyer, Astray, Howse and Kivivic deposits were developed under the operations of IOC during the time they operated their direct-shipping Schefferville iron operations.

5. 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 (DSO) at Schefferville (Quebec and Labrador) 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 historical reserves and historical resources identified by IOC but were not part of IOC's producing properties.

6. Schefferville, an incorporated municipality in Quebec, is largely intact after the closing of the iron mines of IOC in 1982. Many of the houses and original public buildings, including a recreation centre, hospital, and churches were demolished after IOC left. In the last five years, a number of new buildings and houses have been built including medical clinics and churches. The present population is about 250 permanent residents. An additional 1,300 people, mainly attached to the Matimekosh (Innu) and Kawawachikamak (Naskapi) reserves, live within the vicinity of Schefferville. Kawawachikamak, 20 km north of Schefferville, is a modern community with its own school, medical clinic and recreational complex.

7. In October 1982, IOC decided to close the mining operation in the Schefferville area as the natural iron ore being mined did not interest the prevailing markets.

8. The LIM properties are part of the western central part of the Labrador Trough iron range. The mineral properties are located about 1,000 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.

9. The regional resources in regards to the labour, supplies and equipments are generally sufficient. The area has been mapped and mining activities were present from the 1950's to the early 1980's.

10. The Knob Lake region 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.

11. 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. 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.

12. 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.

13. The James mineral deposit is located 3 km West-Northwest (WNW) of the town of Schefferville, Northern Quebec, close to the Quebec/Labrador border. The deposit is centered on UTM/UPS coordinates 639,430mE and 6,071,615mN (Zone 19, NAD 27 Canada). It is easily accessible with a 4x4 pick-up truck via a wide gravel road from Schefferville and an access road.

14. The Redmond 2B mineral deposit is located 12 km southwest (SE) of the town of Schefferville, Northern Quebec, close to the Quebec/Labrador border. The deposit is centered on UTM/UPS coordinates 643,250mE and 6,063,300mN (Zone 19, NAD 27 Canada). It is easily accessible with a 4x4 pick-up truck via a wide gravel road from Schefferville and an access road.

15. The Redmond 5 mineral deposit project is located 12 km southwest (SW) of the town of Schefferville, Northern Quebec, close to the Quebec/Labrador border. The deposit is centered on UTM/UPS coordinates 642,250mE and 6,064,400N (Zone 19, NAD 27 Canada). It is easily accessible with a 4x4 pick-up truck via a wide gravel road from Schefferville and an access road.

16. During the 2008 drilling campaign, 69 RC drill holes totalizing 4084m were completed with two Skid mounted RC drills from Cabo Drilling of Montreal, Quebec. The RC drilling sequence began at James Property, and went in the following sequence: James, Redmond 2B, Redmond 5, Redmond Treat Rock, Houston, Astray, Knob Lake, and Howse.

17. In 2008, 10 diamond drill holes totalizing 534m were done in the Sawyer Lake property using a BQ-size skid mounted diamond drill from Cabo Drilling of Kirkland Lake, Ontario.

18. In 2008, 12 trenches totalizing 934.34m were completed by a local contractor under the supervision of LIM personnel. The purpose was to better define along section the extent on surface of the James, Redmond 2B and Redmond 5 ore bodies.

19. During the 2009 drilling campaign, 72 RC drill holes totalizing 4752.5 meters were drilled with one track mounted Acker RC drill rig from Cabo Drilling of Kirkland Lake, Ontario. The RC drilling sequence began at James Property, and went in the following sequence: James, Knob Lake, Redmond 2B, Redmond 5, Howse, Houston 2, Houston 3, James

20. During the 2009 trenching campaign, 31 trenches totalling 1525m were dug by LIM's seasonal labour Force in Schefferville and under supervision of LIM geologists. The purpose was to better define along section the extent on surface of the Redmond 2B Redmond 5, Houston 3 and Gill Mine deposits.

21. From July to October 2008, LIM initiated a survey of all the 2008 RC drill holes and trenches using a differential GPS with accuracy <40 cm. LIM also surveyed 90 old IOC drill holes found on the ground.

22. RC Drilling was carried out by two reverse circulation drill rigs from Cabo Drilling of Montreal, Quebec in 2008 and by one track mounted Acker RC drill rig in 2009. The RC rigs used a 75mm (2 3/4inch) rod mounted RC tricone where water was injected from the sides of the bit and water and drill cuttings returned via an inner tube along the centre of the drill rod. Once at the surface, the cuttings entered a cyclone where the water and cuttings exited from the bottom and air through the top of the cyclone.

23. In 2008, in order to reduce the size (to approximately 7.5 kg) of the sample at the RC drill site, the drill cuttings were split 4 ways (exits) after leaving the cyclone. The cuttings from 3 of the exits were discarded and the cuttings from the 4th exit were delivered to a 5 gallon bucket. As part of the QA/QC program the cuttings from three of the four exits were routinely sampled.

24. In 2009, in order to reduce the size (to approximately 7.5 kg) of the sample at the RC drill site, the drill cuttings were split to a ratio of one part sampled to 3 parts discarded by a rotary splitter installed after the cyclone. The cuttings from the remaining sample were discarded. As part of the QA/QC program the cuttings from the remaining sample were routinely sampled.

25. In 2008, the sample preparation and reduction was done at the preparation lab and was operated by SGS Geostat in a secure building in Schefferville. In addition to the prep lab personnel, SGS Geostat provided a geologist and two geological 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 to the SGS Lakefield laboratory in Ontario for analysis. The vast majority of samples have a width of 3m equalling the drill rod length.

26. In 2009 LIM followed the same procedure with its own sampling team and geologists. The procedures followed SGS Geostat's recommendations.

27. All of the 2008 RC drilling and trenching samples 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)

28. The 2009 RC drilling and trenching samples were sent for analysis to the Activation Lab Laboratories Ltd. of Ancaster, Ontario, Canada. The analysis used was Borate fusion whole rock XRF (X-Ray Fluorescence)

29. LIM initiated a QA/QC protocol for its 2008 and 2009 RC, DDH, and trench sampling program. The procedure included the systematic addition of blanks, field duplicates, preparation lab duplicates to approximately each 20 batch samples sent for analysis at SGS-Lakefield.

30. Currently, LIM's properties including the James, Redmond 2B and Redmond 5 are bordered by adjacent properties held by third parties and other LIM properties.

31. There are no reserves reported in this document. The resources reported in this document are compliant with current standards as outlined in the National Instrument 43-101.

32. The data used for the estimation comes from the drill holes database managed by LIM. The owner provided a complete database of all relevant IOC historical RC and diamond drill holes with the latest 2008 RC drilling results updated to the 09^{th} of November 2009

33. The SGS Geostat database consists of a total of 310 collar records (including RC, diamond and trench records), Totalling 15,049 meters, mostly RC and 4567 assay records,

34. The specific gravity regression formula: SG= (0.238*Fe+0.238)*0.9 was used for the James Redmond 2B and Redmond 5 mineral deposits resource estimation described in this document.

35. The geological interpretation of the mineral deposits noted in this document is restricted to the soft friable direct shipping ores. The historical IOC parameters of the Non-Bessemer and Bessemer ore types (see table 17) were considered together for the geological interpretations and modelling of the selected mineral deposits. The Hi Silica ($HiSiO_2$) ore types containing from 18% up to 30% SiO2 were also considered for the geological interpretation and modelling of the selected mineral deposits.

36. The geological modelling of the James, Redmond 2B and Redmond 5 mineral deposits was performed using standard sectional modelling of 30m spacing. Paper sections from IOC were digitized and used for the geological interpretation and modelling of the mineral deposits. SGS Geostat used its own sectional modelling software called SectCad. This software was designed and is wholly owned by SGS Geostat. LIM provided the majority of the sections with the IOC historical geological interpretations.

37. Inverse distance squared is used to estimate the resources by block modelling. SGS Geostat used a block model of 5m by 5m by 5m. SGS Geostat used BlkCad, software designed by SGS Geostat for the resources estimation of the 5 mineral deposits. The block model estimation used the topography and the overburden contact in the parameters settings.

38. SGS Geostat used a composite length of 3.0 metre for the James Redmond 2B and Redmond 5 mineral deposits. The length is considered suitable in comparison to the dimension of the blocks used for the model.

39. Currently, there are no measured resources. Because of the difficulty with the RC drilling, the degree of fines lost, as well as the relative variability of assay results between twinned holes used in this estimation, it did not allow inclusion of any measured resources at this time.

40. The total estimated resources are:

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
total	NB-LNB	Indicated	8 444 000	3.47	58.76	0.043	0.79	10.07	0.72
		Inferred	144 000	3.37	54.48	0.085	1.23	9.93	1.53
	HiSiO2	Indicated	2 587 000	3.33	52.73	0.022	0.50	21.72	0.43
		Inferred	76 000	3.31	51.94	0.015	0.15	23.75	0.42
	Total	**Indicated**	**11 031 000**	**3.43**	**57.35**	**0.038**	**0.72**	**12.80**	**0.66**
		Inferred	**220 000**	**3.35**	**53.60**	**0.061**	**0.86**	**14.71**	**1.15**

41. SGS Geostat recommends:
    I. Continue the RC drilling program of the James, Redmond 2B and Redmond 5 mineral deposits as well as other known prospects for addition of mineral resources.
    II. Accompany the RC drilling campaign with trenching along sections of the principal mineralized areas and to the ends for definition.
    III. Continue the assay correlation of twined holes on every property. An average length 100m of twined hole per property is recommended.
    IV. Continue the application of a quality control and quality assurance protocol including systematic addition of blanks, standards and duplicates, and a regular re-assay of significant mineralized areas.
    V. Verify the option to buy commercial blanks and certified materials according to the industry.
    VI. Continue the Specific gravity determination of all concerned mineral deposits for every relevant ore types.
    VII. Random re-assay about 5% of pulps and/or rejects (1 every 20) on a regular basis including:
        i. Certified materials (5%, 1 every 20)
        ii. Blanks (4%,1 every 25)

Presented here are the proposed drilling, trenching and mapping programs for the next field season on the James, Redmond 2B and Redmond 5 mineral deposits.

42. **James**
SGS Geostat recommends additional drill holes and additional trenches to the NW and to the SE part of the property corresponding to its extensions of the mineral deposit. A minimum of 2 RC drill holes and at least one trench per three sections is proposed in order to define the possible extensions. The total drilling recommended is directly linked to the quality and geological interpretation of the targeted areas.

43. **Redmond 2B**
The Redmond 2B northern extension is defined by sufficient drill hole and trench information. SGS Geostat recommends additional drill holes and additional trenches to the southern extension of the property. A minimum of 2 RC drill holes and at least one trench per three sections is proposed in order to define the possible extension. The drill hole locations may very well be on top of an existing waste/TRX pile. The total drilling recommended is directly linked to the quality and geological interpretation of the targeted areas.

44. **Redmond 5**
SGS Geostat recommends additional drill holes and additional trenches to the southern and northern extensions of the property. A minimum of 2 RC drill holes and at least one trench per three sections is proposed in order to define the possible extension. The total drilling recommended is directly linked to the quality and geological interpretation of the targeted areas.

45. **Proposed 2010 Mapping and Prospecting Program**

I. LIM now has the new 1:1000 and 1:5000 scale topography maps as produced by Eagle Mapping in 2008. Using these maps it is proposed that LIM personnel continue survey of all historical IOC drill holes and survey points that can be found. Old exploration and mining grids should be re-established on the new topography maps where possible.

II. This program would require that surveys be conducted on all LIM claims in the Schefferville area. In addition to locating historical drill holes and survey markers the local geology of each claim should be added to the new maps. The data for this mapping would come from new field mapping as well as from historical maps that LIM has in its procession.

III. All known mineral occurrences would be visited by LIM geologists. The geology and location of each occurrence would be added to the new topography maps. This would allow LIM personnel to determine the priority that each occurrence would have for exploration/development work in the future.

2- Introduction

SGS Geostat Ltd. was retained to prepare a **43-101 compliant Resource estimation technical report** of the James, Redmond 2B and Redmond 5 mineral deposits in the Labrador province, near Schefferville, Quebec on behalf of the Client, Labrador Iron Mines Limited ("LIM"), in order to confirm their resources.

The LIM properties contain different projects and mineral deposits at different stages of development. In this report only the resources estimates of the James, Redmond 2B and Redmond 5 mineral deposits will be discussed. The mineral deposits are located respectively in the James and Redmond Properties.

The Houston 1 and 2 mineral deposits as well as the Sawyer Lake mineral deposit resources estimation will be presented in a future report as some results of the 2009 drilling campaign are still pending at the time of writing of this report.

In addition to resource estimations, SGS Geostat was retained in 2008 to help supervise the drilling program and sample preparation facility during the 2008 field program.

Labrador Iron Mines Limited is the title holder of the James, Redmond, Houston, Kivivic, Knob Lake No.1, Howse, Astray Lake, Sawyer Lake, Ruth Mine/Gill Mine properties.

The properties and iron deposits that currently form LIM's Labrador DSO Project were part of the original IOC Schefferville area operations and the historical reserves and resources identified at the James, Houston, Sawyer, Astray and Howse deposits were obtained during the operations of IOC.

The necessary data for this study was provided by LIM and SNC-Lavalin of Montreal (Quebec) Canada in electronic and paper format. The author first visited the sites from May 26th to May 28th 2008 as part of the site visit and reconnaissance visit of the all the properties of the Schefferville area. SGS Geostat participated in the summer-fall 2008 RC drilling campaign for the supervision of the sampling and preparation before dispatch to the analytical laboratories. Samples were taken for estimation and validation of the different mineral deposits. The author assisted and instructed LIM on RC drilling and sampling procedures for the James, Redmond 2B, Redmond 5and the other mineral deposits as well as other targets during this campaign. SGS Geostat implemented a QA/QC procedure as part of the standard RC drilling and sampling program.

The author's second visit was from August 31st to September 02nd, 2009 as part of the reconnaissance visit of the all the properties of the Schefferville area for the 2009 RC drilling and trenching campaign. SGS Geostat reviewed the different field, laboratory and QA/QC protocols and procedures.

This report was written by SGS Geostat in accordance with the National Instrument 43-101 Policy guidelines. This report was requested by Bill Hooley, President & COO of Labrador Iron Mines Limited for the resources estimation of the James, Redmond 2B, and Redmond 5 mineral deposits. The author met on a regular basis with LIM management and relevant personnel by phone and in the SNC-Lavalin office located in Montréal, Quebec.

In this document, the following terms are used:

IOC: Iron Ore Company of Canada: Former producer of iron ore in the Schefferville area from 1954 to 1982.
LIM: Labrador Iron Mines Limited.
Fonteneau: Fonteneau Resources Ltd., a junior exploration company.
Energold: Energold Minerals Inc., a junior exploration company.
SGS Geostat: SGS Geostat Limited, part of SGS SA, a firm of consultants mandated to complete this study.
SNC-Lavalin: SNC-Lavalin, an international engineering firm.
SGS-Lakefield: SGS Mineral services Laboratory, Accredited independent Laboratory and Member of the SGS group, used for XRF analysis in Lakefield, Ontario, Canada.
Actlabs: Activation Laboratories Ltd. Accredited independent Laboratory used for XRF analysis in Ancaster, Ontario, Canada.
XRF: X Ray Diffraction Spectrometry. The type of analysis used for the assay analysis of 2008.
DATUM NAD 27: North American Datum 1927 coordinates system
Property: In this report, a property is described as an area comprised of one or a series of continuous claims and/or mineral licenses outlining in part or in total a mineral deposit, exploration target or a geological feature.
Mineral deposit: A mineral deposit is a continuous, well-defined mass of material containing a sufficient volume of mineralized material.
DSO: Direct Shipping Ore, Fe content must be greater than 50% on a dry basis; SiO_2 must be less than 18% on a dry basis.

List of abbreviations

The metric units and measurements system is used throughout the report except for historical data mentioned in section 6.

A table showing abbreviations used in this report is provided below.

tonnes or mt	Metric tonnes
tpd	Tonnes per day
tons	Short tons (0.907185 tonnes)
Long Tons	Long tons (1.016047 tonnes)
kg	Kilograms
g	Grams
ppm, ppb	Parts per million, parts per billion
%	Percentage
ha	Hectares
m	Metres
km	Kilometres
m^3	Cubic metres

Table 1: List of abbreviations

3- Reliance on Other Experts

In this report, the author has not relied on any other experts.

4- Property Description and Location

As of November 09th, 2009, Labrador Iron Mines Limited holds title to 34 Mineral Rights Licenses issued by the Department of Natural Resources, Province of Newfoundland and Labrador, for a total of 336 mineral claims located in northwest Labrador covering approximately 8,400 hectares. See table below.

The author did not verify independently all of LIM's mineral licences but to the author's knowledge, all the mineral Rights licenses and related claims in this report are considered active and in good standing. Figures 1 to 8 show details of location of the mineral licenses.

LIM's mineral rights licences are divided into properties. Each property contains different projects and mineral deposits at different stages of development. In this report only the James, Redmond 2B and Redmond 5 mineral deposits are discussed.

Under the terms of an Option and Joint Venture Agreement dated September 15, 2005 between Fonteneau Resources Ltd. and Energold Minerals Inc., an agreement which was subsequently assigned to Labrador Iron Mines Limited, 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 shall be capped at US$1.50 per tonne for the James, Knob Lake, Redmond, and Houston properties; US$1.00 per tonne for the Sawyer and Astray properties and US$0.50 per tonne for the Howse and Kivivic properties.

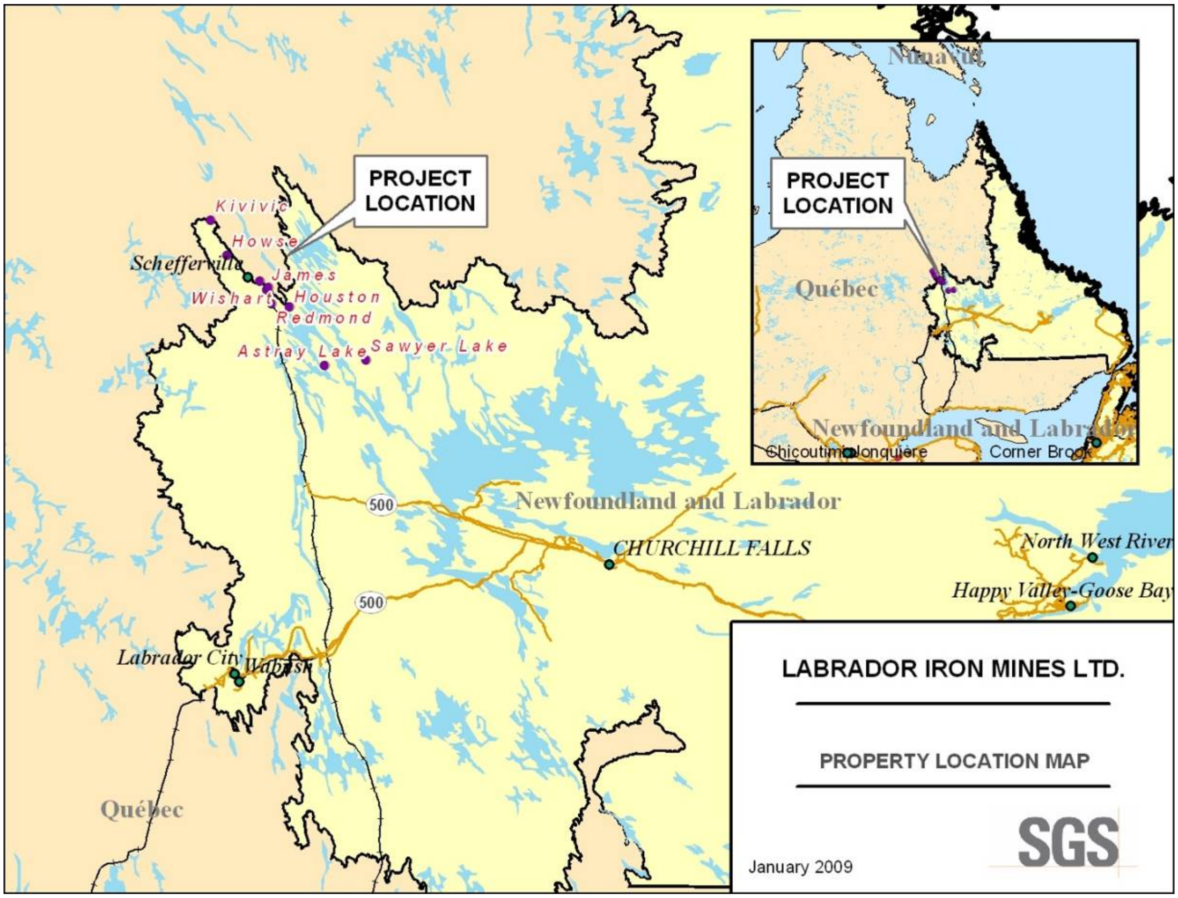

Figure 1: Location of the LIM Properties in Labrador

James Property

The James Property is located in Labrador approximately 3 kilometres south-southwest from the town of Schefferville, Quebec (016288M northwest corner: 634,500mE, 6,071,000mN, NAD27 Zone 19N, NTS: 23J15W). The property comprises of two contiguous licenses (016288M & 016571M) delivered by the Newfoundland & Labrador Natural Resources Department, to Labrador Iron Mines Limited (see table 2 and figure 3).

The James Property covers in part the James mineral deposit, the Wishart mine and TRX Piles, sub economic material and waste piles. It is comprised of 2 mineral rights licences for a total of 28 claims covering a total area of approximately 700 ha. See picture below. The licences and claims are considered active and in good standing at the time of the writing of this report. See Table 2 for more details.

The James mineral deposit is located 3 km West-Northwest (WNW) of the town of Schefferville, Northern Quebec, close to the Quebec/Labrador border. The deposit is centered on UTM/UPS coordinates 639,430mE and 6,071,615mN (Zone 19N, NAD 27 Canada). It is easily accessible with a 4x4 pick-up truck via a wide gravel road from Schefferville and an access road.

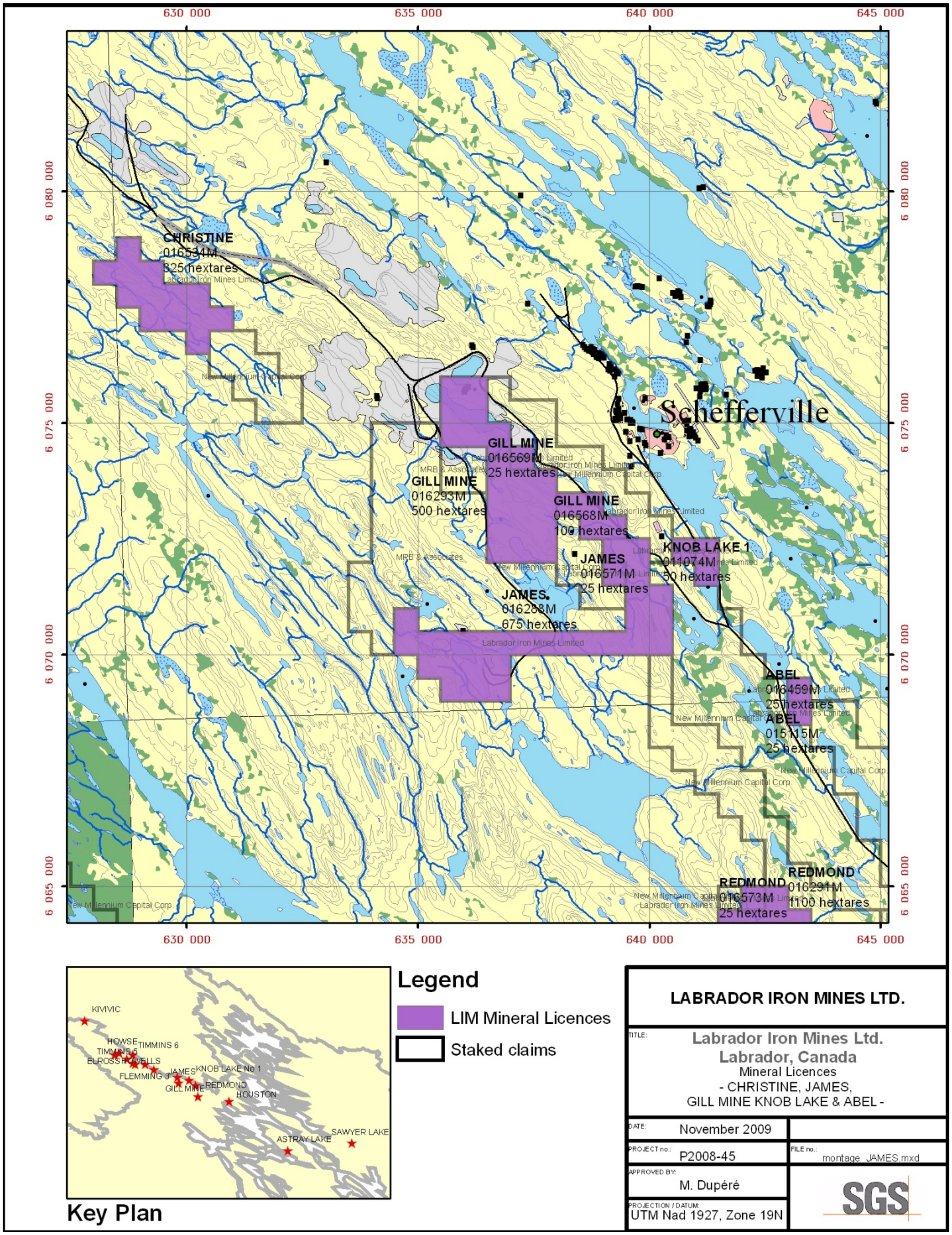

Figure 2: James, Redmond and other LIM Properties

Redmond Property

The Redmond Property is located in Labrador approximately 12 kilometres south-southwest from the town of Schefferville, Quebec (016291M northwest corner: 642,000mE, 6,065,000mN, NAD27 Zone 19N, NTS: 23J10). The property comprises 2 Mineral Rights Licenses (016291M and 016573M) delivered by the Newfoundland & Labrador Natural Resources Department to Labrador Iron Mines Limited (see table 2 and figure 4).

It is comprised of 2 mineral rights licences for a total of 45 claims covering a total area of approximately 1125 ha. The Redmond Property covers completely the Redmond TRX Pile, a sub economic material and waste pile located inside LIM's claim boundary. The Redmond Property covers the completely the Redmond 2B mineral deposit and covers the most part of the Redmond 5 mineral deposit described in this report. Only the resources of the Redmond 2B and Redmond 5 mineral deposits were estimated in this report (see Section 17).

The Redmond 2B mineral deposit is located 12 km southwest (SE) of the town of Schefferville, Northern Quebec, close to the Quebec/Labrador border. The deposit is centered on UTM/UPS coordinates 643,250mE and 6,063,300mN (Zone 19N, NAD 27 Canada). It is easily accessible with a 4x4 pick-up truck via a wide gravel road from Schefferville and an access road.

The Redmond 5 mineral deposit project is located 12 km southwest (SW) of the town of Schefferville, Northern Quebec, close to the Quebec/Labrador border. The l deposit is centered on UTM/UPS coordinates 642,250mE and 6,064,400N (Zone 19N, NAD 27 Canada). It is easily accessible with a 4x4 pick-up truck via a wide gravel road from Schefferville and an access road.

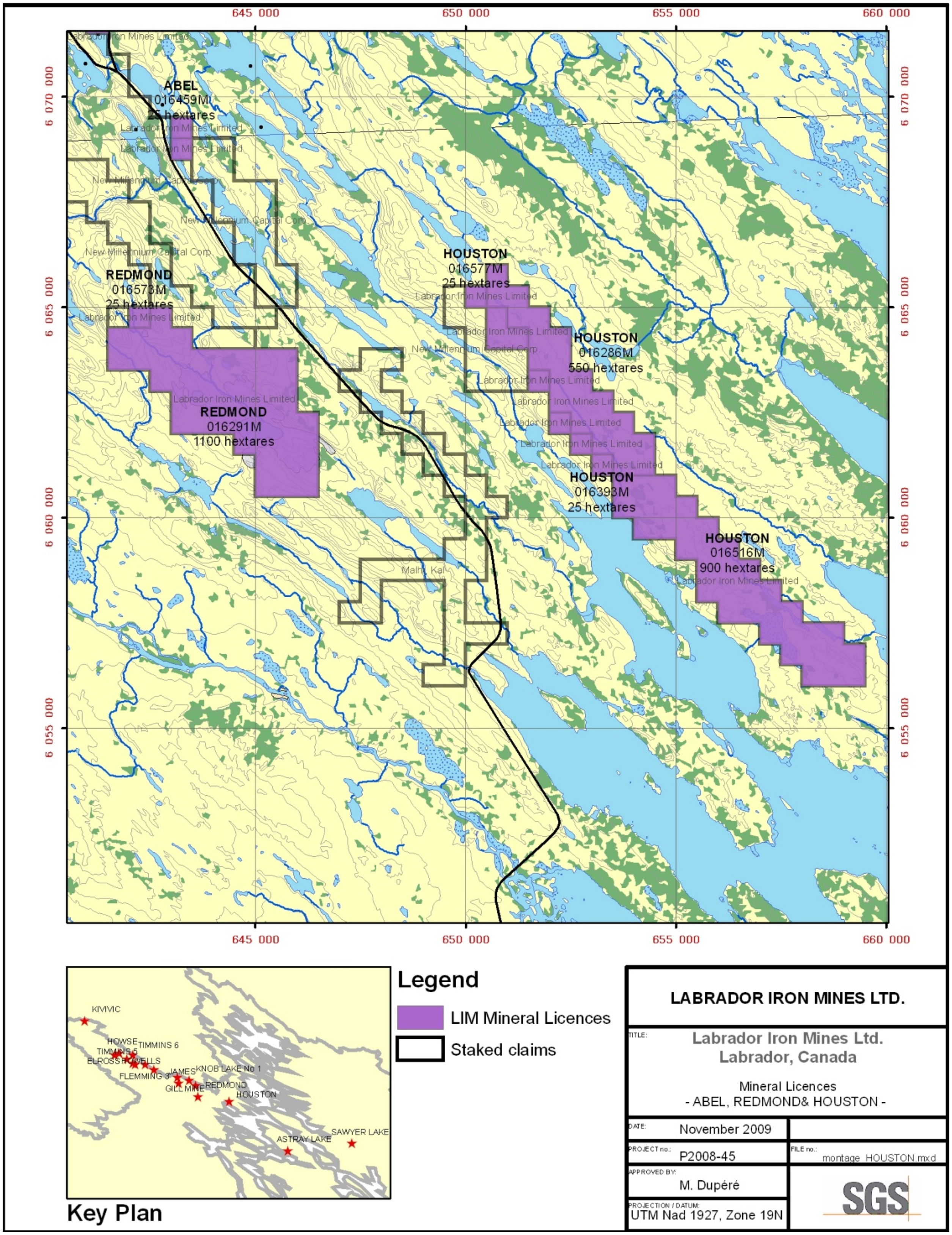

Figure 3: Redmond (Houston) Properties

Other Properties

LIM possess other properties in the Schefferville area. Acquired primarily for iron, they are at different stages of development. Below is a list and general position of LIM's other properties in the Schefferville area.

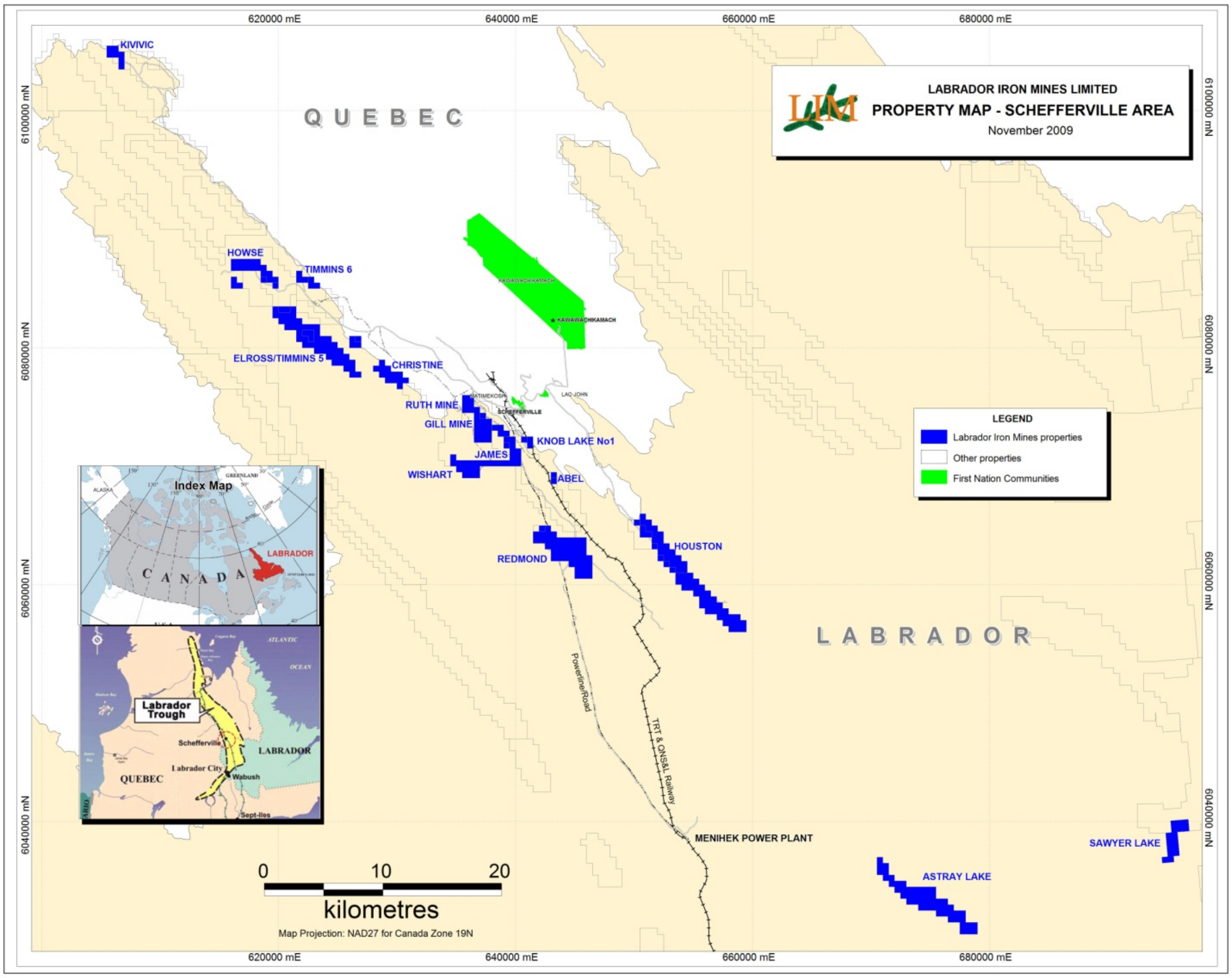

Figure 4: LIM Properties in Labrador

Lincence Nb.	Claims	Hectares	Licence Holder	Status	Property
015115M	1	25	Labrador Iron Mines Limited	Issued	Abel
016459M	1	25	Labrador Iron Mines Limited	Issued	Abel
016285M	50	1250	Labrador Iron Mines Limited	Issued	Astray Lake
016534M	13	325	Labrador Iron Mines Limited	Issued	Christine
011542M	2	50	Labrador Iron Mines Limited	Issued	Elross
016500M	46	1150	Labrador Iron Mines Limited	Issued	Elross - Timmins 5
011541M	3	75	Labrador Iron Mines Limited	Issued	Flemming 3
016502M	1	25	Labrador Iron Mines Limited	Issued	Flemming 3
016293M	20	500	Labrador Iron Mines Limited	Issued	Gill Mine/Ruth Mine
016568M	4	100	Labrador Iron Mines Limited	Issued	Gill Mine/Ruth Mine
016569M	1	25	Labrador Iron Mines Limited	Issued	Gill Mine/Ruth Mine
016286M	22	550	Labrador Iron Mines Limited	Issued	Houston
016391M	1	25	Labrador Iron Mines Limited	Issued	Houston
016392M	1	25	Labrador Iron Mines Limited	Issued	Houston
016393M	1	25	Labrador Iron Mines Limited	Issued	Houston
016516M	36	900	Labrador Iron Mines Limited	Issued	Houston
016575M	1	25	Labrador Iron Mines Limited	Issued	Houston
016576M	3	75	Labrador Iron Mines Limited	Issued	Houston
016577M	1	25	Labrador Iron Mines Limited	Issued	Houston
012894M	3	75	Labrador Iron Mines Limited	Issued	Howells
016287M	15	375	Labrador Iron Mines Limited	Issued	Howse
016582M	1	25	Labrador Iron Mines Limited	Issued	Howse
016583M	1	25	Labrador Iron Mines Limited	Issued	Howse
016288M	27	675	Labrador Iron Mines Limited	Issued	James
016571M	1	25	Labrador Iron Mines Limited	Issued	James
016669M	7	175	Labrador Iron Mines Limited	Issued	Kivivic
011074M	2	50	Labrador Iron Mines Limited	Issued	Knob Lake No.1
016567M	1	25	Labrador Iron Mines Limited	Issued	Knob Lake No.1
016291M	44	1100	Labrador Iron Mines Limited	Issued	Redmond
016573M	1	25	Labrador Iron Mines Limited	Issued	Redmond
016292M	16	400	Labrador Iron Mines Limited	Issued	Sawyer Lake
011543M	3	75	Labrador Iron Mines Limited	Issued	Timmins 5
011544M	3	75	Labrador Iron Mines Limited	Issued	Timmins 6
016531M	3	75	Labrador Iron Mines Limited	Issued	Timmins 6

Table 2: LIM Mineral Licences in the Schefferville area

5- Accessibility, Climate, Local Resources, Infrastructure and Physiography

Accessibility

The LIM properties are part of the western central part of the Labrador Trough iron range. The mineral properties are located about 1,000 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.

The James, Abel and Knob Lake No.1 properties are accessible by existing gravel roads and are located approximately 3 km south-southwest of the town of Schefferville. The Redmond deposit is located approximately 12 km south-southwest of the town of Schefferville and can be reached by existing gravel roads. The Houston property is located approximately 20 km southeast of Schefferville and can also be reached by existing gravel roads. The Timmins 6, Howse, Kivivic deposits are respectively located approximately 20, 25 km and 43 km to the northwest of the town of Schefferville and can be reached by existing gravel roads developed during the former IOC operations. The Astray and Sawyer Lake deposits, approximately 50-65 km southeast of Schefferville, do not currently have road access but can be reached by float plane or by helicopter. The Christine, Elross/Timmins 5 and Timmins 6 properties are located approximately 11, 17 and 19 km northwest of Schefferville and can be reached by existing gravel roads developed during the former IOC operations.

Access to the James and Knob Lake No.1 deposits is possible all year round as they are located close to the road connecting Schefferville to the Menihek Dam. The other access roads are not maintained during winter.

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.

Local Resources

The economy of Schefferville is, since the closure of the mining operations of IOC, based on hunting and fishing, tourism and public service administration. Several fishing and hunting camp operators are based in Schefferville.

While there is a potential local labour force in the Labrador West and Schefferville area, training programs will be required

Schefferville, an incorporated municipality in Quebec, is largely intact after the closing of the iron mines of IOC in 1982. Many of the houses and original public buildings, including a recreation centre, hospital, and churches were demolished after IOC left. In the last five years, a number of new buildings and houses have been built including medical clinics and churches. The present population is about 250 permanent residents. Additional people, mainly attached to the Matimekosh (Innu) and Kawawachikamak (Naskapi) reserves, live within the vicinity of Schefferville. Kawawachikamak, 20 km north of Schefferville, is a modern community with its own school, medical clinic and recreational complex.

Although originally constructed to service the iron-ore mining industry, the economy of Schefferville is currently based on hunting and fishing, tourism and public service administration. More than a dozen fishing and hunting camp operators are based in Schefferville and yearly thousands of hunters and fishermen fly out to various camps distributed about the region, chiefly for trout fishing and hunting for caribou and black bear. The population of the town consists mainly of hunting and fishing outfitters, government agents, motel, store and flying service operators, teachers, retired families and support staff for the town services.

Infrastructure

The properties are located inside a 55 km radius from Schefferville. James, Redmond 2B and Redmond 5 are within 12 km and form the first group of properties from which mining by LIM would commence. Sawyer Lake and Astray Lake properties are some 50 to 65 km southeast from Schefferville and are cut off from the local infrastructure by connected lakes. The Howse and Kivivic are some 25 and 43 km northwest from Schefferville. IOC had excavation activities close to all properties other than Sawyer/Astray.

An approximate number of 200 private dwellings are present in the town of Schefferville

There are no University or College graduates in the community and no trades people in town. When trade work is needed, individuals are hired from Sept-Îles or from the Naskapi Nation of Kawakachikamach and the Innu Nation of Matimekosh.

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 Matimekosh 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.

The waste disposal including landfill site and garbage collection is provided by the Matimekosh band council, at municipal dump in Schefferville.

The Labrador Innu Nation also claim historic territorial rights to the area, as do the members of the Innu Nation of Takuaikan Uashat mak Mani-Utenam.

A modern airport includes a 2,000 metre runway and navigational aids for large jet aircraft. Daily air service is provided to and from Sept-Isles, Quebec 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.

Schefferville possess the necessary services for water treatment and sewage disposal as well as electricity from the Menihek power plant located 35 southeast from Schefferville The hydro power plant was built to support iron ore mining and services in Schefferville. Back-up diesel generators are also present.

Railway

Schefferville is accessible by train from Sept-Iles by TRTI, a company owned by the Naskapi and two Innu Nations. The mandate of TRTI is to maintain the passenger and light freight traffic between Sept-Iles and Schefferville. Train departures from Sept-Iles and Schefferville occur once a week.

Three other railway companies operate in the area, Arnault Railways between Arnault Junction and Pointe Noire to haul iron ore for Wabush Mines, Northern Lands Railway is jointly owned by IOC and Wabush for hauling iron concentrates from Labrador City area to Ross Junction and CRC hauls iron concentrates from Fermont area to Port-Cartier for Quebec Cartier Mines. The latter railway is not connected to Arnault, QNS&L or NLR.

Physiography

The topography of the Schefferville mining district is bedrock controlled with the average elevation of the properties varying between 500 and 700m above sea level. The terrain is generally gently rolling to flat, sloping north-westerly, with a total relief of approximately 50 – 100m. 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.

Figure 5: Left: View of Schefferville and Knob Lake. Right: view of IOC Redmond 1 mine

6- History

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 (DSO) at Schefferville (Quebec and Labrador) 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 historical reserves and historical resources identified by IOC but were not part of IOC's producing properties. In this section all of the resources and reserves mentioned below are considered historical and are not 43-101 compliant.

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 North Shore Exploration Company Limited (Hollinger), and Labrador Mining and Exploration Mining Company Limited. 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.

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 and the historical reserves and historical resources identified at the James, deposit was developed under the operations of IOC during the time they operated their direct-shipping Schefferville iron operations.

in October 1982, IOC decided to close the Schefferville area mines because lesser demand in low concentration natural iron ore.

Hollinger, a subsidiary of Norcen Energy Ltd., was the underlying owner of the iron ore mining leases in Schefferville covering the IOC operations. Following the closure of the IOC mining operations, ownership of the leases reverted to Hollinger. In the early 1990s, Hollinger was acquired by La Fosse Platinum Group Inc. (La Fosse) who conducted feasibility studies on marketing, bulk sampling, and metallurgical test work and carried out some stripping of overburden at the James deposit.

Between September 2003 and March 2006, Fenton and Graeme Scott, New Millennium Capital Corp. and Energold Minerals Inc. 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 in to agreements with the various parties which have subsequently been assumed by LIM.

History of the James Mineral deposit

(Formerly called Ruth Lake Extension)

The James deposit was discovered in 1944. Mapping and tonnage drilling was carried out at that time.

Tonnage drilling was continued in 1950. The deposit was trenched systematically with a power shovel in 1959. Plane table mapping was carried out west of Ruth Lake Extension in 1960. In addition 22 km^2 of iron formation were mapped in the area between Ruth Lake and Redmond No. 1. Thirty-five holes were drilled. In addition, four holes were drilled in the manganese ore body at the north westward end of the deposit. Tonnage drilling was done at the deposit in 1961 and 1962. Test drilling was also done in 1962 to evaluate the ground immediately south of the deposit. Detailed gravimetric and magnetic surveys were also carried out on the deposit that year.
In 1970 trenching was carried out near the deposit in the search for treat rock. In 1971 detailed geological mapping covered an area of approximately 2.6 km2 between Ruth Lake Extension and Ruth Lake No. 8. Trenching and test pitting were done in 1976. In 1979, nine tonnage holes were drilled on James Mine (Ruth Lake Extension) to check grade.

History of the Redmond 2B mineral deposit

In 1955, a strip of territory between Knob Lake and Astray Lake was mapped geologically and appraised. Several enriched zones were observed.
The first available information regarding the history of exploration and development of Redmond No. 2 specifically is from LM&E's annual report on operations for 1960. The same year, 22 km^2 of iron formation were mapped in the area between Ruth Lake and Redmond No. 1. Test pitting was done in the east of Redmond No. 1 and No. 2 in 1961.
Development trenching and test pitting were done at Redmond No. 2 in 1976. Test drilling was also done on Redmond No. 2 deposit that year. Seven holes tested a small ore extension on the west side.
In 1978, trenching and test pitting at Redmond No. 2C confirmed the previously interpreted structure and ore distribution on this small ore occurrence.
In 1979, four tonnage holes were drilled at Redmond No. 2. No major changes in the structure of the ore were shown by this drilling. In addition, seven tonnage holes were drilled at Redmond No. 2B that year. The program outlined the ore present in silicate - carbonate iron formation (SCIF) and Ruth Formation. Interpretation of the results showed a loss of yellow ore. Very little data explicit to the 2B has been found.

History of the Redmond 5 Mineral deposit

Redmond No. 5 was discovered in 1976. Exploration test pitting across a favourable synclinal structure in the Lower and Middle Iron Formation found ore grade material and further test pitting and trenching were done to test the structure. Subsequently this structure was tested by test drilling, the area to the north and northwest was geologically mapped and five lines of geophysics were done over it (Daignault, 1976).

The 200 scale photo mapping of 1976 was done in order to have a better idea of the surrounding geology. Sampling and check mapping were done later. Photo mapping was later transferred by pantograph. The mapping program was helpful in defining the structure in the vicinity of the ore and the ore potential of the northwest. The northwest part of the area was shown to have no economic potential.

Trenching and Test Pitting

Trenching and test pitting in 1976 defined the extent of the ore to the northeast and northwest but deep overburden to the southeast and southwest prevented pits reaching bedrock. Trenching and test pitting were continued on the Redmond No. 5 deposit in 1978.According to Beavan (1978), favourable assays from the trenching program suggested that further development work was warranted on the property. This trenching work further defined the structure and ore distribution (Beavan, 1978).

The same year (1978), a total of nine second order development survey stations were established in the vicinity of the deposit for the location of the 1976 work.

In 1980, an airborne geophysical survey was conducted over parts of the Labrador Trough by Scintrex Ltd. for LM&E. The results of the survey as outlined by Grant (1980) were as follows:
One high U/Th ratio of 2.417 was recorded on flight line 1. The airborne magnetometer survey outlined the iron formation with the magnetic intensity ranging from a background of about 57,000 gammas rising to a high of 62,000 gammas.
Numerous strong E-M conductors occur over the upper slate horizon. A few negative in-phase conductors occur where the iron formation is high in magnetite content.
Grant (1980) concluded that further work would be necessary to filter out the better conductors for follow-up work on the ground.

Eight test holes were drilled in the deposit in 1976 to assess the grade and extent of the ore.
In 1981, forty holes were drilled in Redmond No. 5. The drilling resulted in a significant gain of non-Bessemer grade ore. Changes to the structure of the deposit as interpreted previously were also made and the pit design was revised in December of that year. The new pit design based on direct shipping economics eliminated all manganiferous and treat rock grade material from the ore reserves and reduced the non-Bessemer ore by 82,000 metric tonnes (Orth, 1982).
Removal of overburden was begun on Redmond No. 5 in 1982. The 14,000 m^3 of overburden removed represented 13% of the total overburden within the present pit design limits (Orth, 1982).
Redmond No. 5 is scheduled to be mined in 1983 or 1984 when Redmond No. 2 is finished (Orth, 1982).

7- Geological Setting

Regional Geology

(Based on Gross, 1968 and Neal, 2000)
Approximately 45 hematite-goethite ore deposits were discovered in an area 20km wide that extends 100km northwest of Sawyer Lake, referred to as the Knob Lake Iron Range, which consists of tightly folded and faulted iron-formations exposed generally 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 varied from a 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. 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 550km south from the Koksoak River to the Grenville Front located 30km 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 comprise 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 (meta-taconites) 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 (greenschist 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.

Local geology

Stratigraphy

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 fin thickness from 30 meters near the western margin of the belt to more than 365 meters 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 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 + a metre, some of which are composed of aggregates of dolomite fragments.

Near Knob Lake the formation probably has a maximum thickness of 180 meters but in many other places it forms discontinuous lenses that are, at most, 30 meters thick. Leached and altered beds near the iron deposits are rubbly, brown or cream coloured 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 meters 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 + 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 meters 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 1.25cm or less wide and deep red, or in a few places greenish yellow to grey, are interbedded 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.

Note: Recent authors, i.e., Zajac (1974), and Wardle (1982) consider the Ruth Slate as being the basal part of the Sokoman Formation whereas much of the older literature refers to the Ruth '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 meters 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.

The following table presents the stratigraphy of the western margin of the Labrador Trough typical of the Schefferville area.

REGIONAL STRATIGRAPHIC COLUMN CHURCHILL PART OF WESTERN LABRADOR TROUGH	
PROTEROZOIC - Helikian **Shabogamo Group** *Intrusive Contact*	Gabbro, Diabase
PROTEROZOIC - Aphebian Kania Knob Lake Group	
Menihek Formation	Carbonaceous slate, shale, quartzite, greywacke, mafic volcanic rocks, minor dolomite and chert
Purdy Formation	Dolomite, developed locally
Sokoman Iron Formation	Oxide, silicate and carbonate lithofacies; minor sulphide lithofacies; interbedded mafic volcanic rocks (NimishFormation); ferruginous slate and slaty iron formation, slate and and carbonaceous shale
Wishart Formation	Feldspathic quartz arenite, arkose, minor chert, greywacke, slate and mafic volcanic rocks
Fleming Formation	Chert breccia, thin-bedded chert, limestone, minor lenses of shale and slate
Denault Formation	Dolomite and minor chert
Attikamagen Formation	Green, red, grey and black shale, and argillite intrerbedded with mafic volcanic rocks
Unconformity	
ARCHEAN Ashuanipi Complex	Granitic and granodioritic gneiss and mafic intrusives
	Note: Zajac (1974) redefined the Ruth Formation, located between the Wishart and Sokoman formations as part of the Sokoman Formation

Table 3: Regional Stratigraphic Column, Churchill part of Western Labrador trough

Geology of the Knob Lake Range

All of LIM properties fall into the Knob lake Range geological description.

The general stratigraphy of the Knob Lake area is representative of most of the range, except that the Denault dolomite and Fleming Formation are not uniformly distributed. The Knob Lake Range occupies an area 100km long by 8km wide. The sedimentary rocks including the cherty iron formation of this area are weakly metamorphosed to greenschist 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, and occurs as gently dipping beds west of Schefferville in the Howells River deposits.

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. In the western part of the Knob Range, the iron formation dips gently eastward over the Archean basement rocks for about 10km 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).

8- Deposit Types

The Labrador Trough contains four main types of iron deposits:

1. 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).
2. Taconites, the fine-grained, weakly metamorphosed iron formations with above average magnetite content and which are also commonly called magnetite iron formation.
3. More intensely metamorphosed, coarser-grained iron formations, termed metataconites which contain specular hematite and subordinate amounts of magnetite as the dominant iron minerals.
4. Minor occurrences of hard high-grade hematite ore occur southeast of Schefferville at Swayer Lake, Astray Lake and in some of the Houston deposits.

The Labrador Iron Mountain 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 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. Each 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 centres in the Dyke-Astray area.

The consolidation of the sediments into cherty banded iron formation is due to diagenesis and low grade metamorphism which only reached the greenschist rank. The iron may be a product of erosion. It is unlikely that the Nimish volcanism made a significant contribution.

Following is a generalized stratigraphic breakdown (fig. xx) for the Sokoman Iron Formation in the Schefferville area.

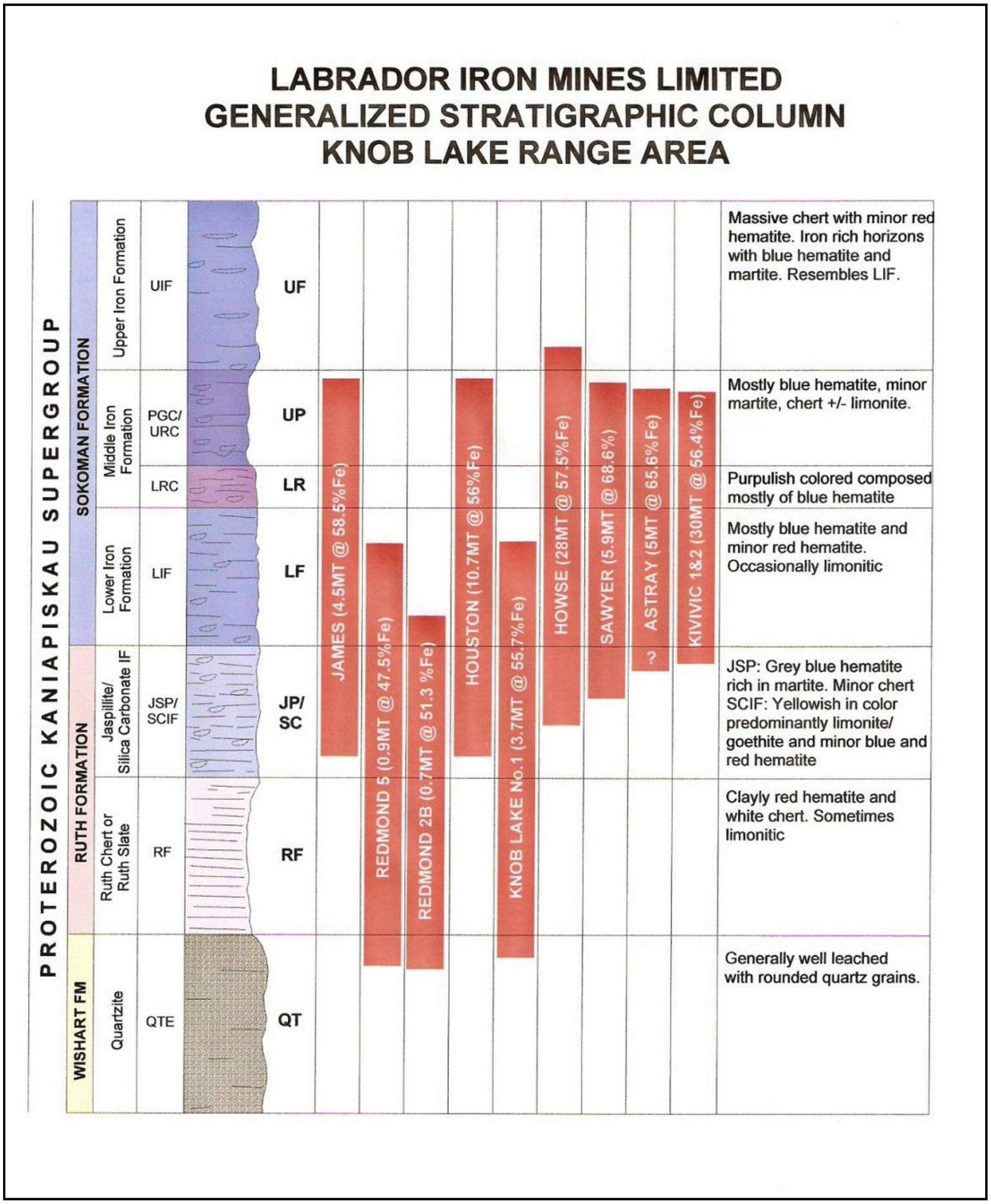

Figure 6: Generalized Stratigraphic Column of the Knob Lake Range area

9- Mineralization

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.

James Mineral deposit

The James mineral deposit is a northeast dipping elongated iron deposit with a direction of N330° in its main axis and it appears to be structurally and stratigraphically controlled. The stratigraphic units recorded in James mine area go from the Denault Formation to the Menihek Formation. The main volume of the ore is developed in the Middle Iron Formation (MIF), and lower portion of the Upper Iron Formation (UIF) both part of the Sokoman Formation.

The iron ore mineralization in the James deposit consist of thin layers (<10cms thick) of fine to medium grained steel blue hematite intercalated with minor cherty silica bands <5cms thick dipping 30° to 45° to the northeast. The James mine ore has been affected by strong alteration, which removed most of the cementing silica making the ore of sandy friable texture.

The James property comprises three deposits: the main deposit, the manganese deposit and a minor and isolated deposit located ~150 meters south of the main deposit. Most of the reserves/resources taken into account come from the main deposit, which is of direct shipping quality. The main deposit has a total length of approximately 880 meters by 80 meters wide and 100 meters deep of direct shipping grade ore. Its shows ore of low grade in its central part defining two separated high-grade zones: the northern and southern ore bodies.

Magnetic susceptibility of the iron ore in James deposit using the KT-9 Kappameter in outcropping mineralization returned an average value of 1.2x10-3 SI units. The relatively low magnetic nature of mineralization found in James can be identified as magnetic lows due to the stronger magnetic nature of the surrounding rock units

Figure 7: James deposit (North End)

Redmond Mineral deposits

The Redmond mineral deposits occur in a northwest trending synclinal feature that runs from the Wishart Lake area in the north to beyond the Redmond 1 pit in the south.

There is a lack of geological data from IOC regarding the 2B deposit. LIM has in its possession an outline of the deposit but no mapping, sampling or drill data. This has necessitated a more intense drill and trenching program in 2008. Exploration and development at Redmond 2B is aided by IOC having stripped the overburden away from their proposed open pit prior to their closing of the mines in 1982.

There is data for the Redmond 5 deposit such as drill logs, collar locations, assays and geological sections. Also a geological model showing geology, assays and ore body outline is in LIM's possession.

Redmond 2B

The Redmond 2B deposit occurs in a northwest trending synclinal feature. A northwest trending reverse fault that runs through the centre of the deposit appears to have thrust older rocks of the Wishart Formation over the younger Sokoman Formation. Smaller faults and folds occur on the limbs of the syncline.

The ore occurs predominantly within the lower half of the Sokoman Iron Formation (including the Ruth Formation). Ore is mainly red with lesser yellow. The red ore occurs in the Ruth Formation. The yellow ore occurs in the SCIF (silicate carbonate iron formation). Some blue ore does occur and is possibly part of the MIF (middle Iron formation) or a blue component of the SCIF.

Redmond 5

The Redmond No. 5 area is separated into three blocks by two major reverse faults striking in a north westerly direction (Daignault, 1976). The deposit occurs in the central block and consists of two second order synclines separated by an anticline (Orth, 1982a). Three northeast dipping normal faults occur along the south western side of the deposit. A normal sequence from Wishart Quartzite, Ruth Formation, SCIF (silicate carbonate iron formation), MIF (Middle Iron Formation) to UIF (Upper Iron Formation) occur in the deposit (Daignault, 1976). Ore occurs predominantly in the lower part of the MIF, the SCIF and some in the Ruth Formation.

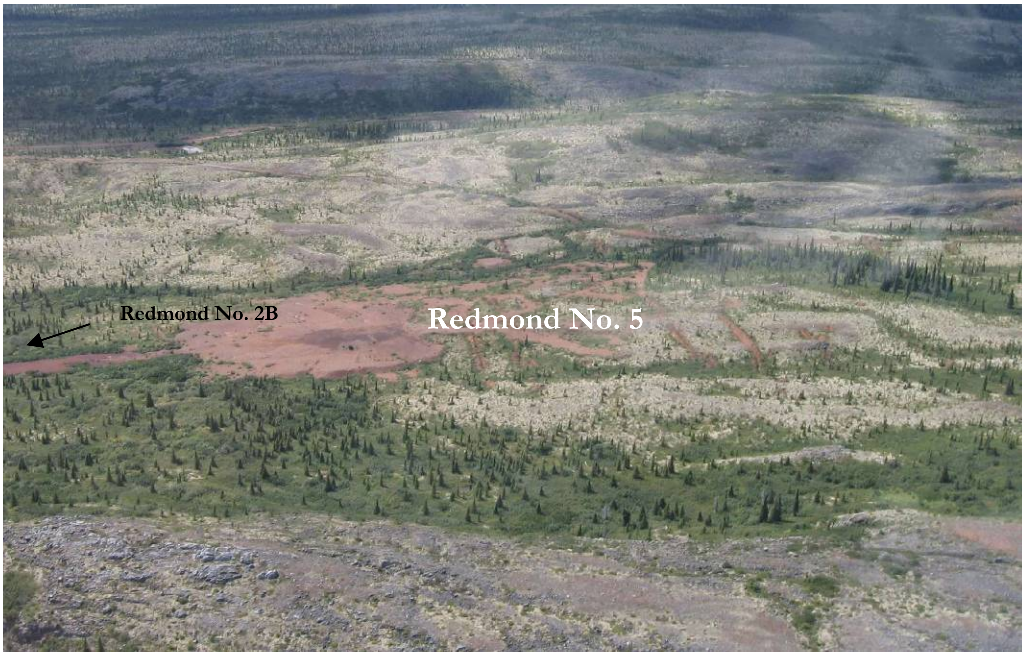

Figure 8: Redmond 5 Mineral deposit aerial view

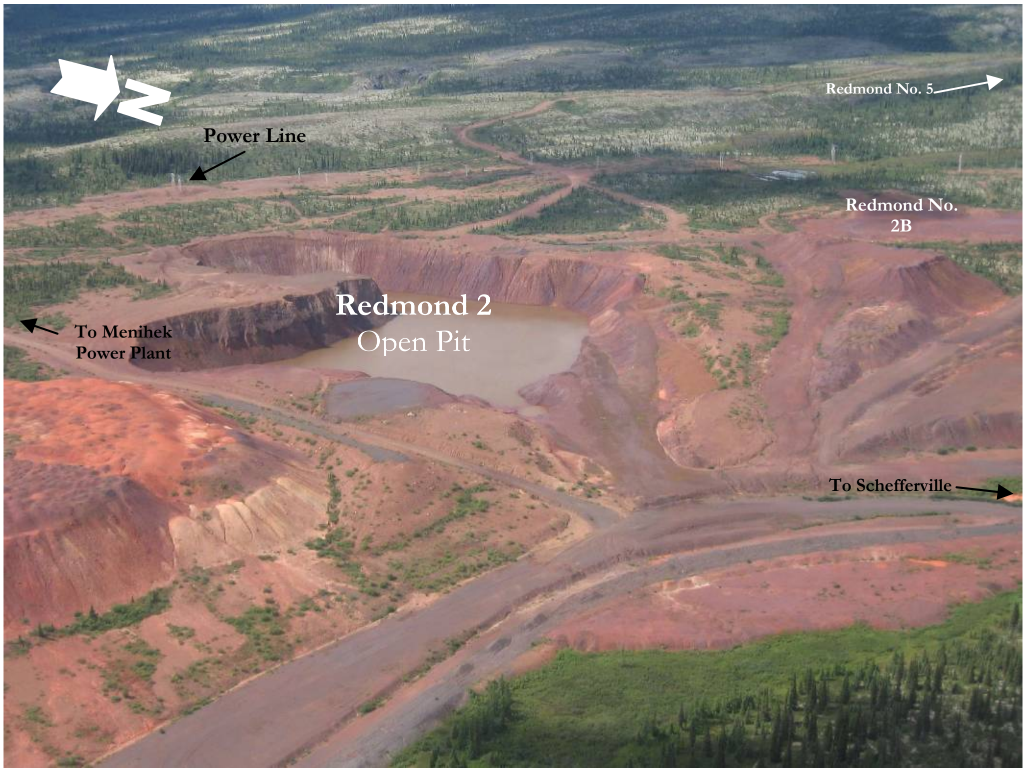

Figure 9: Air View of Redmond 2 Open Pit and Redmond 2B stripped area

10- Exploration

The exploration history of the defined properties is directly linked to the history of the discovery and development of the direct shipping Iron Ore produced by IOC since the early 1950's and discussed in this report.

Survey

Several exploration campaigns have taken place on the properties mentioned in this report since its discovery. In 2008, LIM initiated a GPS survey of historical drill holes using a Trimble differential GPS with accuracies <40cm. All the drill holes completed in 2008 were surveyed with the same DGPS. The Datum used is UTM NAD 27 Eastern Canada, Zone 19N.

Grids used on the property

Originally, three grid systems were used on the James, Redmond 2B, Redmond 5 and Houston properties. The IOC historical local grids were originally in feet with a100 ft spacing, with directions to the NW. The same grids are now converted into meters. All the surveys and other information are now transferred into UTM NAD 27 Eastern Canada, Zone 19N for survey, exploration and reporting purposes. The latest updated drill hole database contains only UTM NAD 27 Eastern Canada, Zone 19N coordinates. The survey values in the UTM grid were checked in this report and the estimation of the resources is relative to this UTM grid. The north of the UTM grid is the same as the geographical north as seen on topographic maps using the projection UTM NAD 27 Eastern Canada, Zone 19N coordinates and the National Topographic System (NTS). Spacing of the grids is now 30m (100 ft) approximately, depending on the georefencing and matching purposes. See sub Section 19: Geological interpretation and modelling

2005 Exploration Program

From May 30th, 2005, Energold Minerals Inc. initiated a limited exploration/reconnaissance and rock sampling program on its Claims in the Schefferville area.

The program included the survey of existing IOC trenches, pits and geological features for the georeferencing of the local grids of the different mineral deposits inside Energold mineral licenses with the emphasis on the James mineral deposit. A hand held GPS was used for the collection of coordinates.

A total of 18 rock samples, 6 composite and 12 from trenches, and 1 from drill cuttings (hole RX-1083) were collected from the James deposit for the sole purpose of grade verification with respect to historical data. Iron (Fe) grades varied from 49.69% Fe (James) to 66.77% Fe (Knob Lake) Surface rock sampling in the James deposit was intended for confirmation purposes. Results obtained were as expected being similar to those reported by the IOC.

2006 Exploration Program

Drilling

In 2006 LIM initiated a limited diamond drilling program on its properties near Schefferville. The blocky nature of the iron formations and/or the "sandy" nature of the softer ore zones resulted in the loss of return water which prevented full core recovery and in most cases, prevented the holes from being drilled to the desired target depths.

Trenching

Two trenches from 75 to 113m long were dug in James and Houston No. 1 mineral deposits, twinning existing trenches completed by IOC. The depth of trench varied from 0.5m to 2.5m.

2008 Exploration Program

From July to October 2008, LIM carried out an exploration program on its Labrador properties including aerial survey, drill hole collar survey, RC and diamond drilling, trench and test pit sampling and bulk sampling.

2008 Survey

From July to October 2008, LIM carried a survey of all the 2008 RC drill holes and trenches using a differential GPS with accuracy within 40 cm. LIM also surveyed all the old IOC RC holes that were still collared and visible that they could find. A total of 90 IOC Drill Holes were surveyed.

2008 Airborne Topographic Survey

LIM retained Eagle Mapping Company to carry out the aerial topographic survey of its properties covering the area of Schefferville for a total of 16,230 ha and 233,825 ha at map scale of 1:1,000 and 1:5,000 respectively.

2008 Drilling

During the 2008 drilling campaign, 69 RC drill holes totalizing 4084m were done with two skid mounted RC drills from Forages Cabo of Montreal, Quebec. The RC drilling sequence began at James Property, and went in the following sequence:

1. James
2. Redmond 2B
3. Redmond 5
4. Redmond Treat Rock
5. Houston
6. Astray
7. Knob Lake
8. Howse

10 diamond drill holes totalizing 534m were done on the Sawyer Lake Property with a BQ skid mounted diamond drill from Cabo Drilling of Kirkland Lakes, Ontario. See tables below.

Property	Type	Holes	Length (m)
James	RC	14	870
Redmond 2B	RC	15	885
Redmond 5	RC	12	551
Redmond TRX	RC	4	151
Houston 1	RC	4	241
Houston 2	RC	3	236
Houston 3	RC	5	314
Astray	RC	1	132
Knob Lake	RC	9	612
Howse	RC	2	103
Sawyer Lake	Diamond	10	552

Table 4: 2008 LIM RC and DDH drilling Summary

LIM 2008 Drilling Program, Schefferville Area				
Hole Name	**Property**	**Length (m)**	**Status**	**Type**
RC-AS-001-08	Astray Lake	132	Incomplete	RC
RC-HU-001-08	Houston	97	Completed	RC
RC-HU-002-08	Houston	85	Completed	RC
RC-HU-003-08	Houston	54	Completed	RC
RC-HU-004-08	Houston	55	Completed	RC
RC-HU-005-08	Houston	33	Abandoned	RC
RC-HU-005A-08	Houston	87	Completed	RC
RC-HU-006-08	Houston	66	Completed	RC
RC-HU-007-08	Houston	45	Completed	RC
RC-HU-008-08	Houston	51	Completed	RC
RC-HU-009-08	Houston	93	Completed	RC
RC-HU-010-08	Houston	53	Completed	RC
RC-HU-011-08	Houston	72	Completed	RC
RC-HW-001-08	Howse	66	Incomplete	RC
RC-HW-002-08	Howse	37	Incomplete	RC
RC-JM-001-08	James	63	Completed	RC
RC-JM-002-08	James	57	Completed	RC
RC-JM-003-08	James	50	Completed	RC
RC-JM-004-08	James	60	Completed	RC
RC-JM-005-08	James	36	Completed	RC
RC-JM-006-08	James	54	Completed	RC
RC-JM-007-08	James	63	Completed	RC
RC-JM-008-08	James	78	Completed	RC
RC-JM-009-08	James	81	Completed	RC
RC-JM-010-08	James	39	Completed	RC
RC-JM-011-08	James	60	Completed	RC
RC-JM-012-08	James	70	Completed	RC
RC-JM-013-08	James	81	Completed	RC
RC-JM-014-08	James	78	Completed	RC
RC-KL-001-08	Knob Lake No.1	72	Completed	RC
RC-KL-003-08	Knob Lake No.1	96	Completed	RC
RC-KL-004-08	Knob Lake No.1	41	Completed	RC
RC-KL-006-08	Knob Lake No.1	96	Completed	RC
RC-KL-008-08	Knob Lake No.1	72	Completed	RC
RC-KL-009-08	Knob Lake No.1	84	Completed	RC
RC-KL-010-08	Knob Lake No.1	33	Completed	RC
RC-KL-014-08	Knob Lake No.1	70	Completed	RC
RC-KL-015-08	Knob Lake No.1	48	Completed	RC
RC-RDTX-001-08	Redmond TRX	58	Completed	RC

Hole Name	Property	Length (m)	Status	Type
RC-RDTX-006-08	Redmond TRX	36	Completed	RC
RC-RDTX-007-08	Redmond TRX	12	Completed	RC
RC-RDTX-008-08	Redmond TRX	45	Completed	RC
RC-RD2B-001-08	Redmond 2B	60	Completed	RC
RC-RD2B-002-08	Redmond 2B	63	Completed	RC
RC-RD2B-003-08	Redmond 2B	66	Completed	RC
RC-RD2B-004-08	Redmond 2B	66	Completed	RC
RC-RD2B-005-08	Redmond 2B	57	Completed	RC
RC-RD2B-006-08	Redmond 2B	75	Completed	RC
RC-RD2B-007-08	Redmond 2B	49	Completed	RC
RC-RD2B-008-08	Redmond 2B	60	Completed	RC
RC-RD2B-009-08	Redmond 2B	66	Completed	RC
RC-RD2B-010-08	Redmond 2B	34	Completed	RC
RC-RD2B-011-08	Redmond 2B	65	Completed	RC
RC-RD2B-012-08	Redmond 2B	65	Completed	RC
RC-RD2B-013-08	Redmond 2B	45	Completed	RC
RC-RD2B-014-08	Redmond 2B	60	Completed	RC
RC-RD2B-015-08	Redmond 2B	54	Completed	RC
RC-RD5-001-08	Redmond 5	45	Completed	RC
RC-RD5-002-08	Redmond 5	42	Completed	RC
RC-RD5-003-08	Redmond 5	31	Completed	RC
RC-RD5-004-08	Redmond 5	60	Completed	RC
RC-RD5-005-08	Redmond 5	63	Completed	RC
RC-RD5-006-08	Redmond 5	60	Completed	RC
RC-RD5-007-08	Redmond 5	60	Completed	RC
RC-RD5-008-08	Redmond 5	48	Completed	RC
RC-RD5-009-08	Redmond 5	40	Completed	RC
RC-RD5-010-08	Redmond 5	30	Completed	RC
RC-RD5-010B-08	Redmond 5	12	Cancelled	RC
RC-RD5-011-08	Redmond 5	60	Completed	RC
DDH-SL01-08	Sawyer Lake	50.5	Completed	Diamond
DDH-SL02-08	Sawyer Lake	67.5	Completed	Diamond
DDH-SL03-08	Sawyer Lake	83	Completed	Diamond
DDH-SL04-08	Sawyer Lake	12	Cancelled	Diamond
DDH-SL04A-08	Sawyer Lake	52	Completed	Diamond
DDH-SL05-08	Sawyer Lake	55.5	Completed	Diamond
DDH-SL06-08	Sawyer Lake	47	Completed	Diamond
DDH-SL07-08	Sawyer Lake	83	Completed	Diamond
DDH-SL08-08	Sawyer Lake	50	Completed	Diamond
DDH-SL09-08	Sawyer Lake	51	Completed	Diamond

Table 5: RC and DDH Holes drilled by LIM in 2008

2008 Trenching

During the 2008 trenching campaign, 12 trenches totalling 934.34m were dug by LIM's seasonal labour Force in Schefferville and under supervision of LIM geologists. The purpose was to better define along section the extent on surface of the James, Redmond 2B and Redmond 5 mineral deposits. See table below.

LIM 2008 Trenching Program Schefferville Area		
Property	**Trench**	**Lengh (m)**
James	TR-JM-071-08	31.34
	TR-JM-073-08	83.56
	TR-JM-076-077-08	99
	TR-JM-084-08	60
	TR-JM-086-08	59.92
Redmond 2B	TR-RD2B-001-2008	153.02
	TR-RD2B-002-2008	39
	TR-RD2B-003-2008	156
Redmond 5	TR-RD5-001-2008	39
	TR-RD5-002-2008	33
	TR-RD5-003-2008	87
	TR-RD5-004-2008	93.5

Table 6: 2008 trenches dug by LIM

2008 Test Pit Sampling (Treat Rock Stock Piles)

A total of 158 test pits were dug by a Caterpillar 330 excavator with a 3-yard bucket. The excavator was able to dig a 1m-wide by 1-2m-deep test pit and a representative portion of the material dug up was collected for assaying. A grid over the top of each pile was laid out based loosely on 25m X 25m grid. These test pits were dug on numerous IOC period sub-economic treat rock piles and waste piles in the Redmond and Wishart properties. All test pit locations were surveyed using the Trimble DGPS. The results from the test pits are not included in this present report and were not considered in the resources estimation.

LIM 2008 Test pit Sampling Program	
Property	**Amount of Test Pits**
Redmond	117
Wishart	41

Table 7: 2008 Test pits dug by LIM

2008 Bulk Sampling

The following is a brief description of the activities for the Labrador Iron Mines' (LIM) Bulk Sampling program that was conducted in 2008.

The contract services were given to RSM Mining Services (RSM) from Labrador City, Nfld, who subcontracted the some of the activities to the Societé de Gestion Innu (SGI) of Schefferville Quebec. The following equipment were used during the excavation activities - CA T330 backhoe excavator, 950G frontend loader, 10-25T dump trucks, dozer, and grader.

Work commenced on June 23, 2008 with the necessary preparation work. The Silver Yard area required some brushing and pad work to create a suitable place to stockpile the sample material and to accommodate the crushing and screening equipment. There was also a need for some road work to improve accesses to the four different sites.

Excavation of bulk sample material started at Redmond 5 on June 30. Approximately 1,500 tonnes of blue ore was excavated from this deposit site. Following this, approximately 1.400 tonnes of blue ore was excavated from James South, 1,100 tonnes of red ore from Knob Lake, and 1,900 tonnes of blue ore from Houston. Excavation activities were completed by July 30. Hauling activities were completed by August 7. Once all the samples were stockpiled (in their individual stockpiles) at the Silver Yard Area, the crushing and screening activities were initiated. These started on August 24 and continued to Sept 19. The samples were crushed and screened to produce two products - a lump ore (-50mm+6mm) and a sinter fine product (-6mm).

Representative 200kg samples of each raw ore type was collected and sent to SGS Laboratories for metallurgical test work and assays. Representative 2kg samples of each product type was collected and sent to SGS Laboratories for assays. Other various product sample sizes have been collected for other test work, including screening test work. 5 train cars of sample were transported to Sept-Iles, the remaining sample material remains at the Silver Yard area in Schefferville.

2009 Exploration Program

From July to October 2009, LIM carried out an exploration program on its Labrador properties including drill hole collar survey, RC drilling, trench and test pit sampling and bulk sampling.

2009 Survey

From July to October 2009, LIM carried a survey of all the 2009 RC drill holes and trenches using a differential GPS with accuracy within 40 cm. LIM also continued the survey of old IOC RC holes that were still collared and visible that they could find.

2009 Drilling

During the 2009 drilling campaign, 72 RC drill holes totalizing 4752.5 meters were drilled with one track mounted Acker RC drill rig from Cabo Drilling of Kirkland Lake, Ontario. The RC drilling sequence began at James Property, and went in the following sequence:

1. James
2. Knob Lake
3. Redmond 2B
4. Redmond 5
5. Howse
6. Houston 2
7. Houston 3
8. James

2009 Drilling program			
Hole Name	**Property**	**Length (m)**	**Status**
RC-HU021-2009	Houston	30	completed
RC-HU026-2009	Houston	99	completed
RC-HU024-2009	Houston	69	Abandonned
RC-HU023-2009	Houston	99	Completed
RC-HU027-2009	Houston	120	Completed
RC-HU029-2009	Houston	93	Completed
RC-HU032-2009	Houston	97	Completed
RC-HU028-2009	Houston	67	Completed
RC-HU030-2009	Houston	63	Completed
RC-HU031-2009	Houston	33	Completed
RC-HU012-2009	Houston	66	Abandonned
RC-HU013-2009	Houston	75	Completed
RC-HU018-2009	Houston	28	Completed
RC-HU018A-2009	Houston	9	Completed
RC-HU020-2009	Houston	15	Abandonned
RC-HU020A-2009	Houston	73	Completed
RC-HU014-2009	Houston	90	Completed
RC-HU015-2009	Houston	69	Completed
RC-HU016-2009	Houston	70	Completed
RC-HU017-2009	Houston	79	Completed
RC-HU019-2009	Houston	69	Completed
RC-HU025-2009	Houston	126	Abandonned
RC-HU022-2009	Houston	111	Abandonned
RC-HU033-2009	Houston	90	Abandonned
RC-HU034-2009	Houston	117	Completed
RC-HU035-2009	Houston	82	Completed
RC-HU036-2009	Houston	78	Completed
RC-HU037-2009	Houston	81	Completed
RC-HU038-2009	Houston	102	Completed
RC-HU039-2009	Houston	96	Completed
RC-HU040-2009	Houston	80	Completed
RC-HU041-2009	Houston	72	Completed
RC-HU042-2009	Houston	39	Completed
RC-HU043-2009	Houston	42	Completed
RC-HU044-2009	Houston	90	Completed
RC-HU045-2009	Houston	72	Abandonned
RC-HU046-2009	Houston	60	Completed
RC-HU047-2009	Houston	66	Completed
RC-HU048-2009	Houston	69	Completed
RC-HU049-2009	Houston	72	Completed
RC-HU050-2009	Houston	36	Abandonned
RC-HU050A-2009	Houston	51	Completed
RC-HU051-2009	Houston	69	Completed
RC-HW003-2009	Howse	21	Abandonned

2009 Drilling program			
Hole Name	**Property**	**Length (m)**	**Status**
RC-HW005-2009	Howse	120	Abandonned
RC-HW006-2009	Howse	105	Abandonned
RC-HW008-2009	Howse	75	Abandonned
RC-HW007-2009	Howse	75	Abandonned
RC-JM015-2009	James	64.5	Completed
RC-JM016-2009	James	55.5	Completed
RC-JM017-2009	James	93	Completed
RC-JM018-2009	James	87	Completed
RC-JM019-2009	James	33	Abandonned
RC-KL002-2009	Knob Lake No.1	92.5	Completed
RC-KL005-2009	Knob Lake No.1	1.5	Completed
RC-KL005A-2009	Knob Lake No.1	58.5	Completed
RC-KL013-2009	Knob Lake No.1	49.5	Completed
RC-KL012-2009	Knob Lake No.1	68.5	Completed
RC-RD2B021-2009	Redmond 2B	45	Completed
RC-RD2B022-2009	Redmond 2B	39	Completed
RC-RD2B016-2009	Redmond 2B	36	Completed
RC-RD2B020-2009	Redmond 2B	42	Completed
RC-RD2B019-2009	Redmond 2B	33	Completed
RC-RD2B023-2009	Redmond 2B	24	Completed
RC-RD5017-2009	Redmond 5	69	Completed
RC-RD5016-2009	Redmond 5	24	Abandonned
RC-RD5016A-2009	Redmond 5	72	Completed
RC-RD5015-2009	Redmond 5	69	Completed
RC-RD5013-2009	Redmond 5	81	Completed
RC-RD5012-2009	Redmond 5	24	Completed
RC-RD5012A-2009	Redmond 5	27	Completed
RC-RD5014-2009	Redmond 5	54	Completed

Table 8: RC Holes drilled by LIM in 2009

2009 Trenching

During the 2009 trenching campaign, 31 trenches totalling 1525m were dug by LIM's seasonal labour Force in Schefferville and under supervision of LIM geologists. The purpose was to better define along section the extent on surface of the Redmond 2B Redmond 5, Houston 3 and Gill Mine mineral deposits. See table below.

LIM 2009 Trenching Program Schefferville Area		
Property	**Trench**	**Lengh (m)**
Redmond 2B	TR-RD2B-004-2009	87
	TR-RD2B-005-2009	96
	TR-RD2B-005B-2009	60
	TR-RD2B-006-2009	21
	TR-RD2B-007-2009	30
Redmond 5	TR-RD5-005-2009	24
	TR-RD5-006-2009	30
	TR-RD5-007-2009	36
	TR-RD5-008-2009	99
Houston 3	TR-HU3-001-2009	76
	TR-HU3-002-2009	72
	TR-HU3-003-2009	57
	TR-HU3-004-2009	39
	TR-HU3-005-2009	24
	TR-HU3-006-2009	48
	TR-HU3-007-2009	57
	TR-HU3-008-2009	66
Gill Mine	TR-GM-001-2009	33
	TR-GM-002-2009	36
	TR-GM-003-2009	30
	TR-GM-004-2009	27
	TR-GM-005-2009	39
	TR-GM-006-2009	29
	TR-GM-007-2009	38
	TR-GM-008-2009	39
	TR-GM-009-2009	39
	TR-GM-010-2009	39
	TR-GM-011-2009	60
	TR-GM-012-2009	63
	TR-GM-013-2009	44
	TR-GM-014-2009	87

Table 9: 2009 trenches dug by LIM

2009 In Situ Specific Gravity Determination

The following is a brief description of the LIM's 2009 In Situ Specific Gravity determination program.

LIM began a study to measure the in situ bulk density of the various types of iron ore in its deposits. The purpose of the study was to determine bulk density values for each of the principal ore types; red, yellow & blue. Low, medium and high grade ore will be tested for each ore type.

IM tested various sample sizes in order to determine the optimum size to be used. The sample method described below has been used for samples between 15kg and 50kg and are taken with pick and shovel. Larger samples (up to one tonne) were taken using a back hoe but overall the methodology is the same.

An area with a known ore type was selected and cleared with any overburden being removed. The ground around the test site was levelled. Using pick and shovel a small pit was excavated with the ore being put into a sample bucket and weighed. At this point the geologist made a description of the ore being excavated. Once full, the bucket was weighed. The weight of the empty bucket was removed giving the weight of the ore excavated. The bucket was tightly sealed with a lid and sent to the LIM Preparation Lab. The laboratory again weighed the contents before and after drying in order to determine the moisture content of ore. The sample undergone the normal sample preparation process described in section 13 of this present report and was then submitted for assay.

Once the ore has been excavated LIM used two methods for the volume determination.

Silica Sand

A weighed quantity of No. 3 Silica Sand was poured into the pit. The bulk density of this sand is known and is 99 lbs per cubic foot. A bucket of sand was weighed and then a quantity of the sand was poured into the pit. The pit was filled to its original surface level with the sand. Once full the sand remaining in the bucket was weighed again in order to determine the weight of sand used filling the pit. Using the known bulk density of the sand and the weight used, the volume of the pit was determined. The volume of the pit and measured weight of the iron ore excavated was then used to determine the bulk density of the Iron ore.

Historical IOCC reports use the term "cubical factor" for density which is reported as ft*3/long ton. These units have been adopted for the tests but conversions to metric can be made.

Water

A variation of this technique is to substitute silica sand for water. The specific gravity of the water was taken to be 1. Once excavated the pit was lined by a soft waterproof material. Thin plastic was currently used. From a bucket of known weight, water was poured into the pit until it is full to the original surface. The water remaining in the bucket was weighed and the total weight of water used was determined. This information was used to calculate the volume of the pit.

After this, the bulk density of the ore was determined in the same way as for the silica sand method. Both the silica sand and water method were used with the results being compared.

Wax Method Core Specific Gravity at LIM's preparation Lab

Core Specific gravity was determined on the 2008 core from the Sawyer 2008 diamond drilling program. The method used was the "wax" method.

A representative piece of whole core within a given sampled interval was selected. The piece was not shorter than 10cms and not longer than 30cms. The sample was weighted dry then sealed with wax and weighted again. The sample was then submerged in water using a graduated Beaker glass or a graduated cylinder (preferably a cylinder since the reading of the volume is more accurate). The water displaced which equals to the volume of the sample + wax was recorded. The measuring container was emptied from sample and water. An equal amount of water equal to the displaced water was added to the measuring container then weighted. The SG of the sample was the weight of the sample divided by the weight of the water displaced.

As an alternative, of a large graduated cylinder, measure the volume of water in the cylinder before adding the sample, and measure the volume after adding the sample, and subtracting the two volumes giving the volume of the sample in ml. Then the SG is simply the weight in grams of the sample divided by its volume. There is no need to add water again and weigh the cylinder unless you do not have a graduated cylinder.

In the event that it is necessary to have highly accurate SG then one would weigh the empty cylinder, fill the cylinder with water, cap it, weigh it, remove the cap, add the sample, re-fill it, cap it, and re-weigh it. This will allow one to calculate the SG to several decimals accuracy, but is more of a nuisance. It requires an easily placed cap that seals without leaving any air bubble and does not require a graduated container as the 3 weighs provide all the required information.

For measuring SG of broken core intervals, representative pieces of a given sampled interval were selected. These pieces were not smaller than 2cm in diameter. The weight and volume measurements were in bulk following the same procedures as for whole core as explained above.

2009 Specific Gravity of RC Drill Samples

During 2009 as part of its specific gravity and bulk density studies LIM developed a procedure of determining the SG of ore using RC drill cuttings. This provided the opportunity to test a large number of samples in a systematic way. Samples being sent into the Schefferville Sample Preparation Facility for reduction were tested on a routine basis. LIM carried out a total of 239 SG tests in 2009 using the method described below.

The dry drill cuttings were weighed (to give value A in the formulae below) and then their volume was determined by adding them to a graduated cylinder filled to with water. The displacement of the water was recorded. The recorded amount of displaced water was then added to a second graduated cylinder and this was weighed (to give the value Ww in the formulae below).

The apparent specific gravity was then calculated by the formulae:

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

SG=Specific Gravity of Sample
A=Weight of Sample
Ww=Weight of Water displaced by cuttings

This value was then subjected to a regression formulae based on Fe content that was established by LIM. This final step could not be completed until the assay values for the sample were returned from ActLabs. For details of the regression formulae please refer to section 17 of this report.

11- Drilling

LIM possess a voluminous drill holes database of the properties in the Schefferville area. Most of these holes were drilled over several years, from the 1950 up to 2009. The description below gives the amount of drill holes (RC, diamond), trenches and test pits on the James, Redmond 2B and Redmond 5 mineral deposits used for the resources estimations mentioned in this report.

Property	Hole Type	Number of Holes	Number of meters	Number of assays
James	Diamond	2	29	0
	RC	122	6806	2278
	Trench	79	3651	939
Redmond 2B	RC	21	1104	364
	Trench	10	663	205
Redmond 5	RC	68	2335	681
	Trench	8	461	100

Table 10: Listing of the Drill holes per property

The majority of the core and RC drill hole witness samples from IOC mining activities is not available. The 2008 and 2009 RC witness samples and diamond drill holes are stored at the Schefferville preparation laboratory. All 2008 and 2009 drill hole collars were surveyed as well as a maximum of historical IOC drill hole collars. Lithological logging, and sample interval logging was done by LIM geologists. Sample interval logging was done by LIM and SGS Geostat qualified staff. LIM keeps written copy of all of its drill holes logs as well as all of the retrieved historical IOC drill holes

SGS Geostat visited all the properties and a good proportion of IOC benchmarks were present to indicate the presence of surface exploration drill holes. SGS Geostat recommends installing permanent benchmark (metal or concrete) with detailed information for each exploration (RC and diamond) drill hole.

James

A total of 203 drill holes, for a total of 10486 meters, 79 trenches were dug for a total of 3651 linear meters and a total of 3217 samples including 322 samples from LIM, were sent for analysis on the James property by IOC during its mining activities and LIM up to October 2009. Mineralized structures containing mainly hematite and Blue Ore Type were encountered. The main purpose was to better define the extent of the mineral deposit and to verify the mineralization indicated by the drilling done by IOC. See appendix 1: List of the mineralized intersections.

Redmond 2B

A total of 31 drill holes and 1767 meters of RC drilling was drilled over the Redmond 2B mineral deposit by LIM up to October 2009. 10 trenches were dug by LIM during the 2009 drilling program for a total of 663 linear meters. A total of 569 samples were sent for analysis. The ore encountered was mainly red and yellow ore with lesser blue ore. The main purpose was to better define the extent of the mineral deposit and to verify the mineralization indicated by the drilling done by IOC. See appendix 1: List of the mineralized intersections.

Redmond 5

A total of 68 drill holes and 2335 meters of RC core was drilled over the Redmond 5 mineral deposit by IOC during its mining activities and LIM up to October 2009. 8 trenches were dug by LIM during the 2009 drilling program for a total of 461 linear meters. A total of 781 samples were sent for analysis. The ore encountered was mainly blue but also quantities of red and yellow were prominent. The main purpose was to better define the extent of the mineral deposit and to verify the mineralization indicated by the drilling done by IOC (see appendix 1: List of the mineralized intersections).

12- Sampling Method and Approach

SGS Geostat was not provided with the IOC sampling procedures. Verbal information from consultants, former IOC employees and drillers, leads SGS Geostat to believe that the procedure used by LIM is similar to IOC's during its activities in Schefferville.

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 lab in Schefferville. Logging was done at the preparation lab in Schefferville by LIM geologists.

2008 RC Sampling

RC Drilling was carried out by two reverse circulation drill rigs from Cabo Drilling of Montreal, Quebec. The RC rigs used a 75mm (2 $^{7/8}$ inch) rod mounted RC tricone where water was injected from the sides of the bit and water and drill cuttings returned via an inner tube along the centre of the drill rod. Once at the surface, the cuttings entered a cyclone where the water and cuttings exited from the bottom and air through the top of the cyclone. See pictures below.

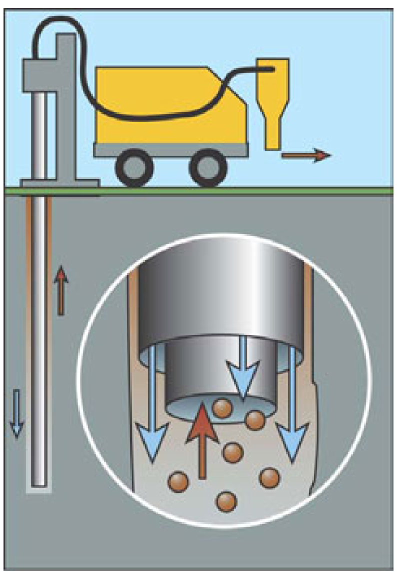

Figure 10: RC Drilling Method

Figure 11: RC Tricone Bit

LIM sampled the entire length of the RC drill holes of the 2008 RC drilling campaign. The average length of the RC samples was 3m. A description of the cuttings was made at every meter drilled. A representative small fraction of the cuttings was placed in a plastic chip tray for every meter drilled. The chip trays were labelled with Hole ID and the interval represented in each compartment. The meters drilled with no recovery were marked with an X inside the chip tray compartment. Descriptions of the cuttings were made by a geologist of LIM after the contents were dried.

Figure 12: RC Chip Trays

2008 RC Sample Size Reduction at the Drill Site

In order to reduce the size (to approximately 7.5 kg) of the sample at the RC drill site, the drill cuttings were split 4 ways after leaving the cyclone. The cuttings from 3 of the exit ports were discarded and the cuttings from the 4th port were collected in a 5 gallon bucket. As part of the QA/QC program the cuttings from three of the four ports were routinely sampled. See Section 14.

Once the bucket was full, a pipe mounted near the rim directed the overflow into a second 5 gallon bucket. The water in the second bucket, being less turbulent than the first bucket, allowed the fines to settle out. Once the second bucket was full, it was permitted to overflow.

When the 3m sample was complete, both buckets were removed and allowed to stand for a few minutes to allow further settling of fines. The contents were then decanted to labelled plastic sample bags. Normally all the water that was collected in the buckets was included in the sample bags that were to be sent to the onsite sample preparation lab. This served as a further guarantee that fines were not being lost in the drilling/sampling process.

At this point the sample would be taken by truck directly to the preparation lab in Schefferville and under supervision of SGS Geostat.

Upon arrival at the Sample Preparation Lab in Schefferville, all samples (core or RC) came under the care of SGS Geostat personnel.

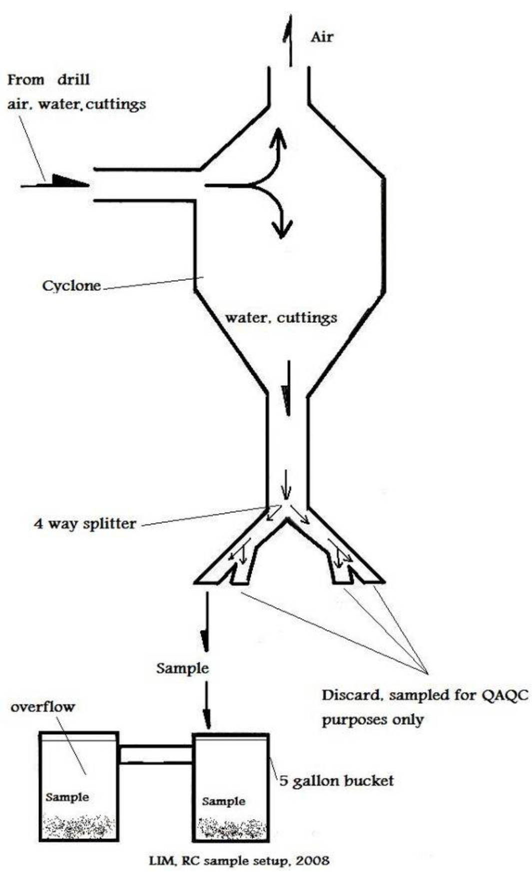

Figure 13: RC Size Reduction and Sampling Method

Figure 14: RC Size Reduction and Sampling Setup

Figure 15: RC Sample bags at the drill site

2009 Rotary Splitter RC Sample Size Reduction at the Drill Site

In order to reduce the size (to approximately 7.5 kg) of the sample at the RC drill site, the drill cuttings were split with a rotary splitter mounted directly under the cyclone. The Rotary splitter is divided into XX pie shape spaces (see pictures below) 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 3m 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. See Section 14.

The same procedure was applied for the size reduction using the bucket system.

Upon arrival at the Sample Preparation Lab in Schefferville, all samples (core or RC) came under the care of LIM personnel.

Figure 16: Rotary Splitter at work

2006, 2008 and 2009 Trench Sampling

In 2006, 2008 and 2009 trenches were dug throughout the properties for resource estimations and ore body surface definition.

The trenches were dug by a Caterpillar 330 excavator with a 3-yard bucket. The excavator was able to dig a 1m-wide trench with depths down to 3m, which was enough to penetrate the overburden.

Trenches were sampled on 3m intervals with the sample being representative of the ore 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 being sampled was soft and friable. In one particular section of the RD2B Trench 2 a short section of durable, highly silicified material was encountered and the interval was skipped.

Figure 17: Trench sampling intervals

Figure 18: Trench sampling

Figure 19: Trench sample layout at James

13- Sample Preparation, Analyses and Security

Sample Preparation

This procedure standardized the preparation and reduction methods of samples obtained during the 2008 and 2009 RC drilling campaign at in the prep lab in Schefferville

SGS Geostat does not possess the IOC sampling procedures but verbal information from former employees and drillers given lets us to believe that this procedure below is similar to IOC's during its activities in Schefferville.

Selected sample results were used for the geological modeling and resources estimation of the different mineral deposits. The relevant sample results and sample composites used for the resources estimation is described in section 17. A summary list is given in appendix 1.

Sample Preparation and Size Reduction in Schefferville

2008

The sample preparation and reduction was done at the preparation lab and was operated by SGS Geostat in a secure building in Schefferville. In addition to the prep lab personnel, SGS Geostat 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 vast majority of samples have a width of 3m equalling the drill rod length.

As soon as samples were delivered to the Schefferville preparation lab, 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.

2009

The same sample preparation and reduction was done at the preparation lab and was operated by LIM in a secure building in Schefferville. LIM had a lab supervisor and well trained geo technicians to perform sampling duties on one of the two rigs utilized for the drill program.

As soon as samples were delivered to the Schefferville preparation lab, they fell under LIM's responsibility. The sampling procedures were designed and formulated by SGS Geostat. Some later improvements were done on the procedures but overall they followed SGS guidelines.

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 Actlabs in Ontario.

Arrangement of samples at the Schefferville preparation Lab

All of the sample bags that arrived in the prep lab were displayed in a sequential and ordered way in a designated area.

2009 Sample water primary removal

Water was removed from its plastic bag to be placed in a dish or pan and placed in an oven, in sequential order, for drying. All ovens were numbered and were equipped with check logs to be filled each time. Information like wet weight, dry weight, sample number, time started and time finished, temperature were noted on this log.

Sample drying procedure

The material was then removed from its plastic bag to be placed in a dish or pan and placed in an oven, in sequential order, for drying. All ovens were numbered and were equipped with check logs to be filled each time. Information like wet weight, dry weight, sample number, time started and time finished, temperature were noted on this log.

Figure 20: Sample Display in the Oven

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 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 left on site in Schefferville for future reference and assays, if needed. The analytical split sample bags were sent to SGS-Lakefield for analysis.

Figure 21: Sample Size Reduction with a Riffle Splitter

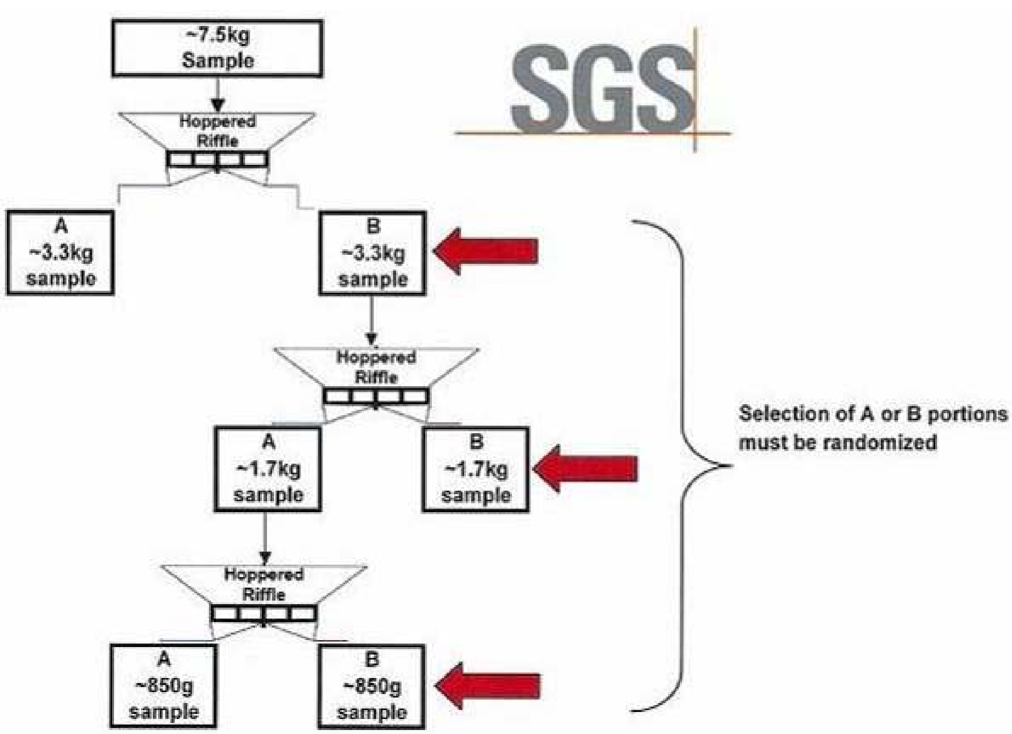

Figure 22: Riffle Splitting Procedure

Witness Sample storage

All witness sample bags were kept on a secure site in Schefferville for future assays if needed.

Figure 23: Witness Sample Storage Bin

Sample Preparation at SGS-Lakefield Lab

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

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

Table 11: SGS-Lakefield Sample Preparation Methodology

Samples analyses

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)

Sample Analysis at SGS-Lakefield

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**

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; %

Typical sample size: 0.2 to 0.5 g
Type of sample applicable (media): Rocks, oxide ores and concentrates

Sample preparation technique used: Samples are crushed and pulverized to -l50 mesh. This method is used to report, in percentage, the whole rock suite (SiO_2, Al_2O_3, Fe_2O_3, MgO, CaO, Na_2O, K_2O, P_2O_5, MnO, TiO_2, Cr_2O_3) and Ni, Co as well as the rare earth oxides (La_2O_3, Ce_2O_3, Nd_2O_3, Pr_2O_3, Sm_2O_3), and other major element oxides (BaO, SrO, ZrO_2, Hf O_2, Y_2O_3, Nb_2O_3, ThO_2, U_2O_8). Sample preparation entails the formation of a homogenous glass disk by the fusion of 0.2 to 0.5 g of rock pulp with 7g of lithium tetraborate/lithium metaborate (50/50). The LOI at 1,000 °C is determined separately gravimetrically. The LOI is included in the matrix-correction calculations, which are performed by the XRF instrument software.

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.
Corrections for dilution and summation with the LOI are made prior to reporting.

Element	Limit (%)	Element	Limit (%)	Element	Limit (%)
SiO_2	0.01	Na_2O	0.01	CaO	0.01
Al_2O_3	0.01	TiO_2	0.01	MgO	0.01
Fe_{total} as Fe_2O_3	0.01	Cr_2O_3	0.01	K_2O	0.01
P_2O_5	0.01	V_2O_5	0.01	MnO	0.01

Table 12: Borate Fusion Whole Rock XRF Reporting Limits

Sample Preparation at Actlabs

The information below was given by Actlabs and is available on its web site at Actlabs.com:

To obtain meaningful analytical results, it is imperative that sample collection and preparation be done properly. ACTLABS can advise on sampling protocol for your field program if requested. Once the samples arrive in the laboratory, ACTLABS will ensure that they are prepared properly. As a routine practice with rock and core, the entire sample is crushed to a nominal minus 10 mesh (1.7 mm), mechanically split (riffle) to obtain a representative sample and then pulverized to at least 95% minus 150 mesh (106 microns).

As a routine practice, we will automatically use cleaner sand between each sample at no cost to the customer. Quality of crushing and pulverization is routinely checked as part of our 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. If you prefer randomization, please request Code Random

Samples submitted in an unorganized fashion will be subject to a sorting surcharge and may substantially slow turnaround time. Providing an accurate detailed sample list by e-mail will also aid in improving turnaround time and for Quality Control purposes. Additional charges may apply for poorly organized batches. Code CP2 - Sample list not provided for orders over 25 samples; Code CP3 - Sorting chaotic shipments

Rock, Core, and Drill Cuttings

RX1	Crush (<5kg> up to 75% passing 2mm, split (250g) and pulverize (hardened steel) to 95% passing 105u
Rx1 - Terminator	Crush (<5kg) up to 90% passing 2mm, split (250g) and pulverize (hardened steel) to 95% passing 105u
RX1+500	500 grams pulverized
RX1+800	800 grams pulverized
RX1+1.3	1.3 kg pulverized
RX2	Crush (<5kg), split and pulverize with mild steel (100g) (best for low contamination)
RX3	Oversize charge per kilogram for crushing
RX4	Pulverization only (mild steel) (coarse pulp or crushed rock) (<800g)
RX5	Pulverize Ceramic (100g)
RX6	Hand Pulverize Small samples (agate mortar & pestle)
RX7	Crush and Split (<5Kg)
RX8	Sample Prep only surcharge, no analyses
RX9	Compositing (per composite) dry weight
RX10	Dry Drill Cuttings in plastic bags
RX11	Checking Quality of pulps or rejects prepared by other labs and issuing reports

Note: Larger sample sizes than listed above can be pulverized at additional costs

Pulverization Contaminants Added

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

Note: amount added depends on hardness of material and particle size required

Sample Analysis at Actlabs

The following is a description of the exploration drill hole analysis protocols used at the Activation laboratories facility in Ancaster, Ontario. This description was given by Actlabs.

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 H2O+, CO2, S and other volatiles, can be determined from the weight loss after roasting the sample at 1050°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.

Elements used:

SiO_2 $Al20_3$ fe_20_3(T) MnO MgO CaO Na_20 K_20 $Ti0_2$ P_20_5 Cr_20_3, LOI

Code 4C Oxides and Detection Limits (%)

Oxide	Detection Limit
SiO_2	0.01
TiO_2	0.01
Al_2O_3	0.01
Fe_2O_3	0.01
MnO	0.001
MgO	0.01
CaO	0.01
Na_2O	0.01
K_2O	0.01
P_2O_5	0.01
Cr_2O_3	0.01
LOI	0.01

Sample security

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. 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 by LIM and SGS Geostat and sent to the preparation lab in Schefferville. Logging and sampling was done in a secured and guarded preparation lab by authorized personnel.

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 the city of Schefferville, a place rented by Labrador Iron Mines. The lab was locked down during the night when there were no personnel. Sample batches were sealed and sent by train or by express mail (plane).Traceability was present throughout the shipment to Lakefield.

Field Duplicates

The procedure included the systematic addition field duplicates to approximately each 25 batch samples sent for analysis to the lab. As explained in section 12, the cuttings from the second and third exits were routinely sampled every 25 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 3m samples collected from the exit 1. This QA/QC procedure enabled SGS Geostat to verify any bias in the 2008 RC sampling program.

Preparation Lab Duplicates

The procedure included the systematic addition preparation lab duplicates to approximately each 25 batch samples sent for analysis at SGS-Lakefield. As explained in section 12, a second portion of cuttings from the first exit size reduction procedure was routinely sampled every 25 batch. The 24th sample was collected at exit 1. The 25th sample was collected at exit 2. The 26th sample was collected at exit 3 and the 27th sample was collected during size reduction of the 24th sample (Exit 1). These samples went through the same sample preparation, analysis and security procedures and protocols as the regular 3m samples collected from the exit 1. This QA/QC procedure enabled SGS Geostat to verify any bias in the 2008 RC sampling program.

Blanks

Blank samples were created onsite in Schefferville from barren slates located south east of the city. 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 used to check for possible contamination in laboratories. Blank samples were introduced every 50 sample batch.

Standards

In 2008, Geostat recommended the addition of standards with the regular re-assay of pulps and rejects. This procedure is useful in order to determine the analytical accuracy and precision of the laboratories.

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. This description was given by SGS-Lakefield.

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

Data approval steps:

Step	Approval Criteria
1. Sum of oxides	Majors 98-101%; Majors + NiO + CoO 98-102%
2. Batch reagent blank	2 x LOQ
3. Inserted weighed reference materials	Statistical Control Limits
4. Weighed Lab Duplicates	Statistical Control Limits by Range

Table 13: SGS-Lakefield Data Approval Steps

Actlab Sample Quality Assurance, Quality Control and Security

The following is a description of the quality assurance and quality control protocols used at the Actlabs facility in Ancaster, Ontario. This description was given by Actlabs.

The amount of standards we used is we have 34 standards used in the calibration of the method and we check 28 standards weekly to ensure there are no problems with the calibration.
ii. We use Certified Standard Reference Materials (CSRM) and the standards we report to the client vary depending on the concentration range of the samples.
iii. The rechecks are done by checking the samples 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.
iv. The amount of duplicates done is decided by the Prep Dept., our 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.
v. 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 samples 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

QAQC Procedures and Protocols

The data verification of the iron (Fe), Phosphorus (P), Manganese (Mn), silica (SiO_2) and alumina (Al_2O_3) values was done with the assay results from the 2008 RC drilling program. As explained in section 13, SGS Geostat introduced a series of quality control procedures including the addition of preparation lab duplicates, exit 2 duplicates, exit 3 duplicates and blanks. SGS Geostat supervised the RC sampling.

In 2008, a total of 166 exit duplicates were done. Results show that assay values are precise and dependable.

All these quality control results permitted SGS Geostat to confirm the presence and content of iron(Fe), Phosphorus (P), Manganese (Mn), silica (SiO_2) and alumina (Al_2O_3) of all QA/QC samples, as well as the integrity of the sample results used in the resource estimation of James Redmond 2B, Redmond 5, Houston 1 and Houston 2 mineral deposits. See graphs below.

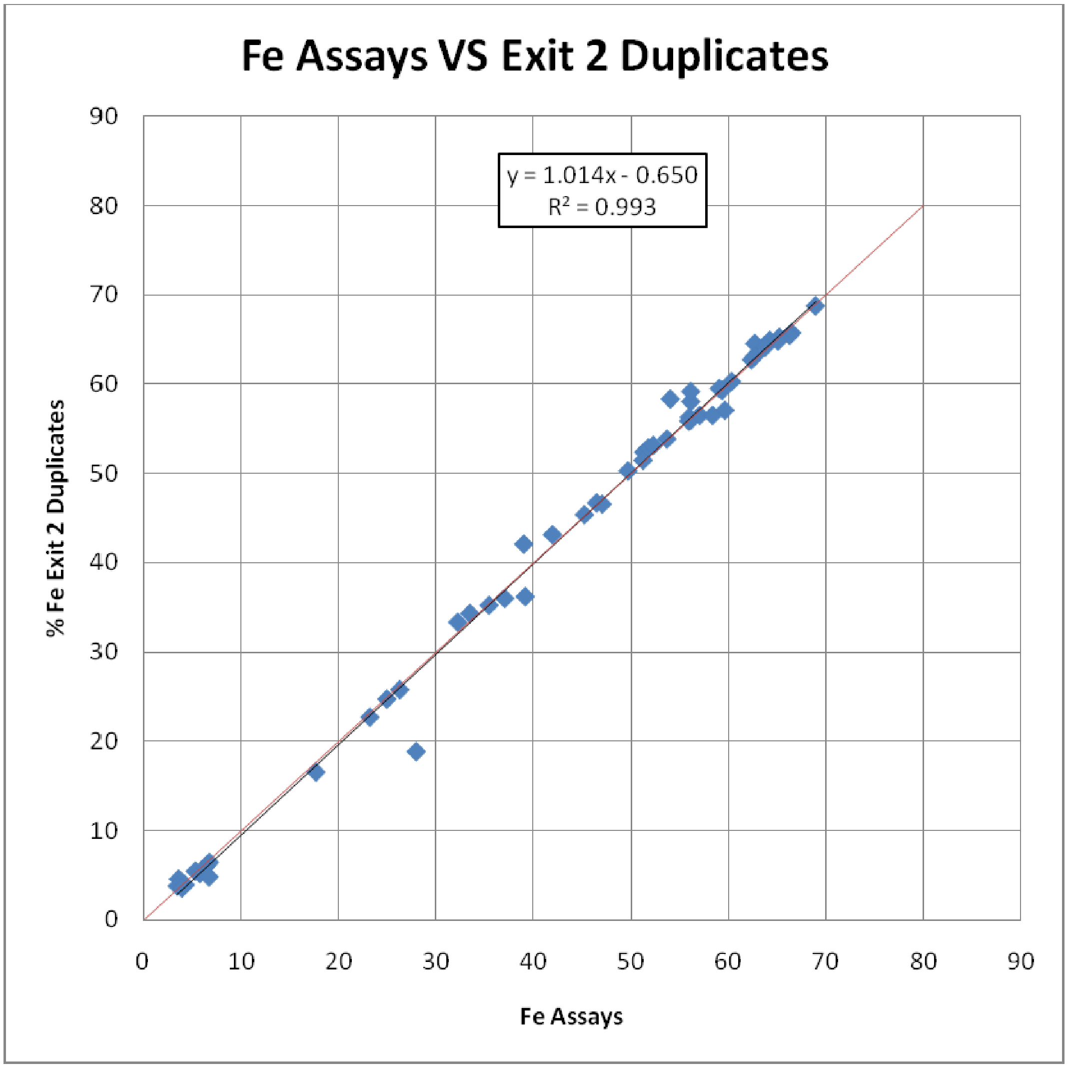

Figure 24: Fe Assay Correlation between original and Exit 2 Duplicate samples

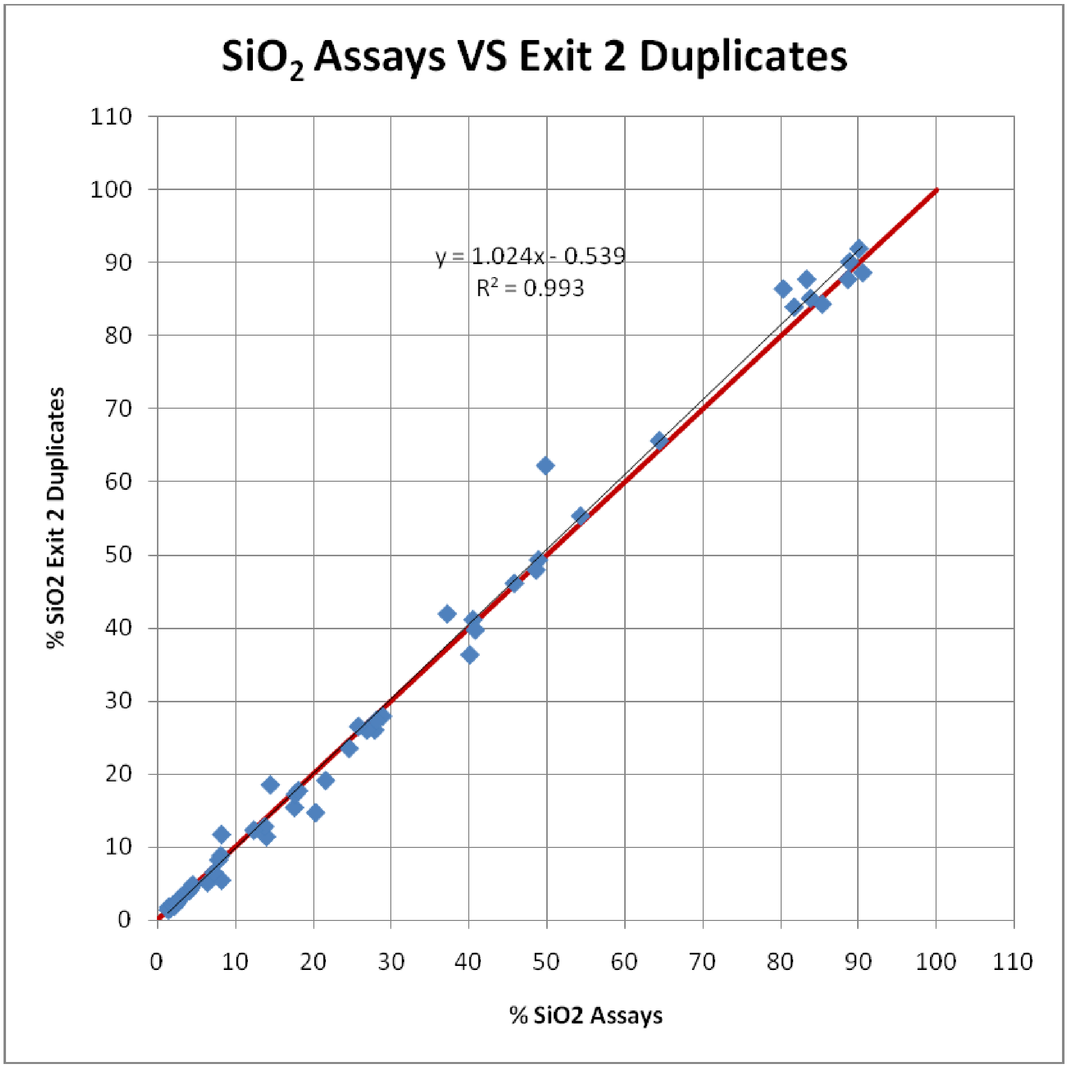

Figure 25: SiO_2 Assay Correlation between original and Exit 2 Duplicate samples

A series of tests was performed: Sign test, Student logarithmic test, Student normal test. Over all, SGS Geostat found the results to be adequate. A series of observations were noted and will be discussed in sections 19 and 20.

Assays Correlation of twined holes

The data verification was done on the iron (Fe) and silica (SiO_2) values with the assay results from the IOC historical RC drill results and the 2008 RC drilling program results. LIM twined some IOC RC holes in order to verify the iron (Fe) content. A total of 7 paired RC holes (14 in Total) were considered for a total of 76 assay results. With these results, SGS Geostat did a series of tests: Sign test, Student logarithmic test, Student normal test.

As illustrated by Figure 41 and 42, the scatter of old and new values in the twinned holes is more important than with duplicates in the new holes. It translates into a rather low coefficient of correlation (R^2 around 0.4) but one should keep in mind that they are not sampled in the same hole and we do not have duplicates in the old RC drill holes to figure out the sampling error attached to the numbers from those holes.

What is more important than good reproduction of individual sample grades when looking at results of twinned holes is the comparison of average old values and average new values. If those averages are significantly different (given the variability of data and number of samples being compared), then we are faced with a bias problem which means that old and new data cannot be used together in the estimation of resources unless data in one of the two sets (generally the old ones) have been corrected to match those in the other set.

In this case, the T-test of paired data shows that the average %Fe in the old samples (53.7%) is not significantly different from the average %Fe in the new samples (53.1%) with a T of 0.84 well below the limit of 1.99

For silica, the conclusions are not as clear as for iron i.e. the mean %SiO_2 of old samples (17.9%) is significantly different from the mean % SiO_2 of new samples (20.2%) with a T of 2.10 just above the limit of 1.99. However, a sign test shows that the proportion of pairs with an old sample value greater than the new samples value (41 out of 76 i.e. 53.9%) is not significantly different from the non-bias target of 50% given the number of pairs available (limit is 61.5%). See recommendations in section 20.

t-Test: Paired Two Sample for Means

	IOC	LIM
	Fe	*Fe*
Mean	53.7376316	53.0638911
Variance	67.5445356	70.428407
Observations	76	76
Pearson Correlation	0.64995494	
Hypothesized Mean Difference	0	
df	75	
t Stat	0.84499173	
P(T<=t) one-tail	0.20040151	
t Critical one-tail	1.66542537	
P(T<=t) two-tail	0.40080302	
t Critical two-tail	1.99210212	

t-Test: Paired Two Sample for Means

	IOC	LIM
	SiO2	*SiO2*
Mean	17.9389474	20.1728947
Variance	102.068002	143.043906
Observations	76	76
Pearson Correlation	0.65947866	
Hypothesized Mean Difference	0	
df	75	
t Stat	-2.103229	
P(T<=t) one-tail	0.0193999	
t Critical one-tail	1.66542537	
P(T<=t) two-tail	0.0387998	
t Critical two-tail	1.99210212	

Table 14: Students' T test stats for Fe and SiO_2

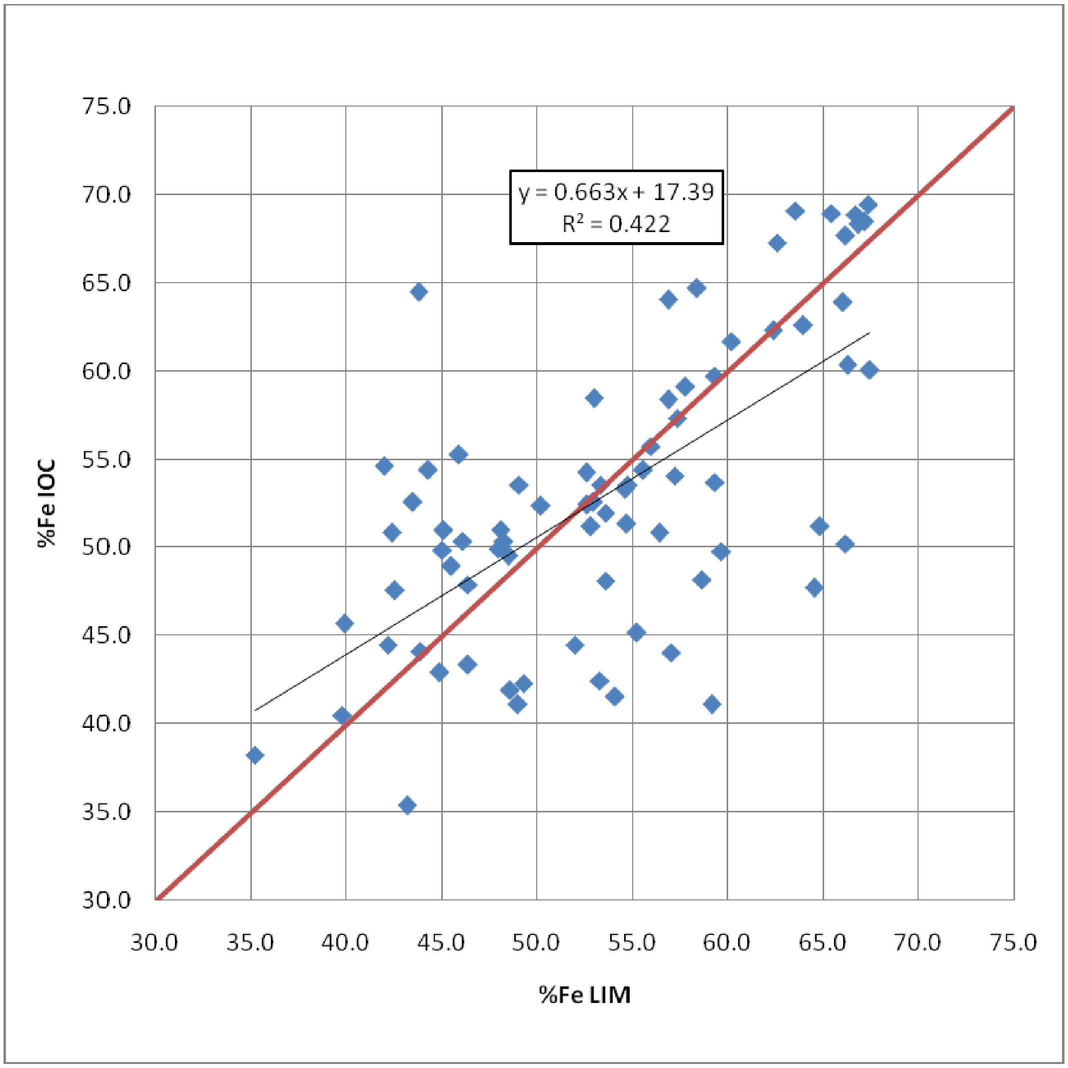

Figure 26: Graphic of Fe Assay Correlation of twined holes IOC VS LIM

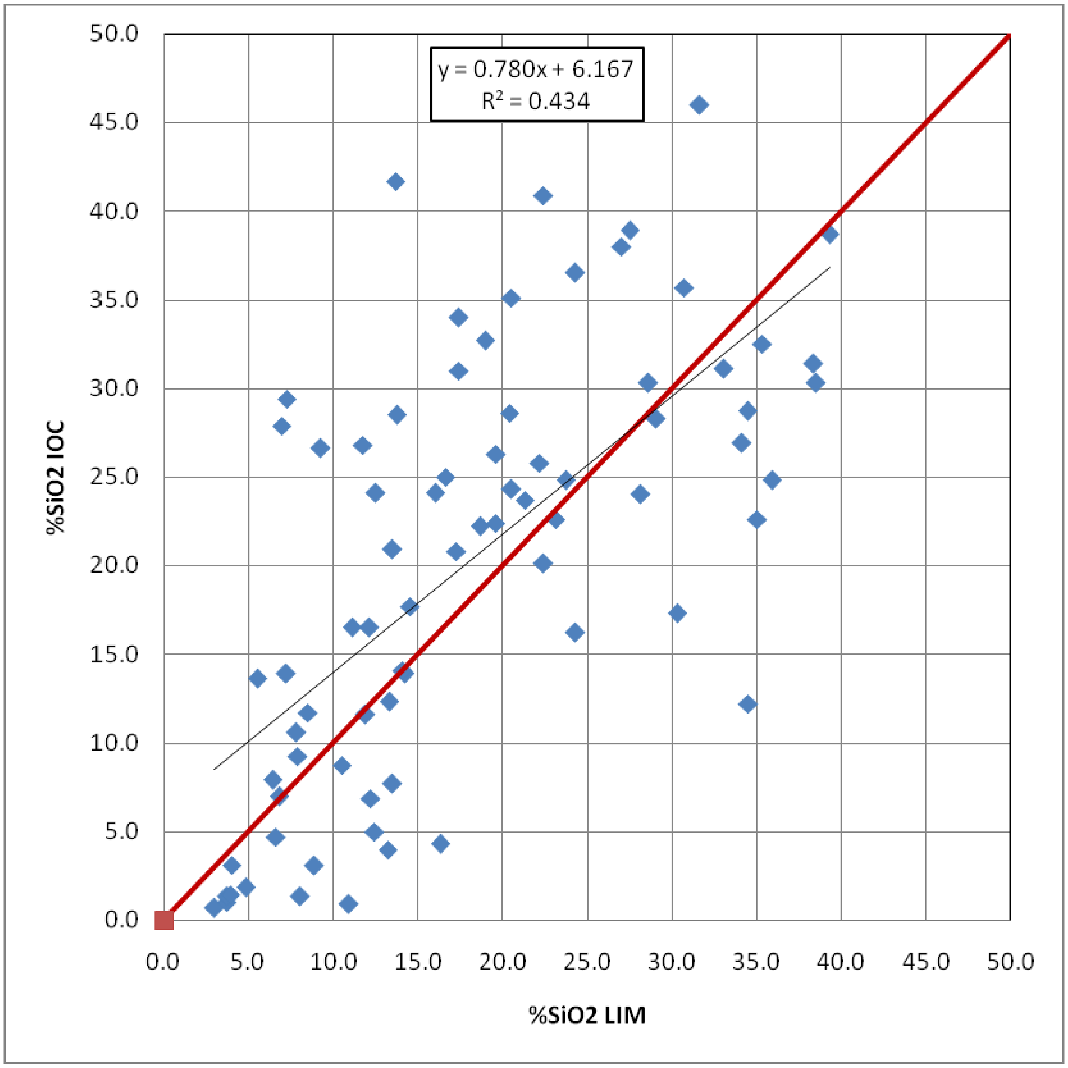

Figure 27: Graphic of SiO_2 Assay Correlation of twined holes IOC VS LIM

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 for analysis two separate batches of fifteen (15) blank samples to the Corem and ALS-Chemex independent laboratories of Vancouver and Quebec City respectively.

An average 4.82% Fe and 61.96% SiO_2 was noted for the entire batch of 60 blank samples. For SGS-Lakefield, an average of 5.37% Fe and 61.40% SiO_2 was noted. For ALS-Chemex, an average of 4.22% Fe and 62.60% SiO_2 was noted. For COREM, an average of 4.34% Fe and 62.25% SiO_2 was noted.

At this stage SGS Geostat cannot determine whether or not any contamination of the 2008 RC samples occurred. This is due to the fact that SGS-Lakefield blanks were sent along with the original batch, homogenization and reduction were not performed in an independent lab and that there are no rocks outcropping near Schefferville with no iron content. See recommendations in section 20.

15- Adjacent Properties

Currently, LIM's properties including the James, Redmond 2B, Redmond 5 mineral deposits are bordered by other claims and licenses owned by active and inactive junior exploration companies. See location map below:

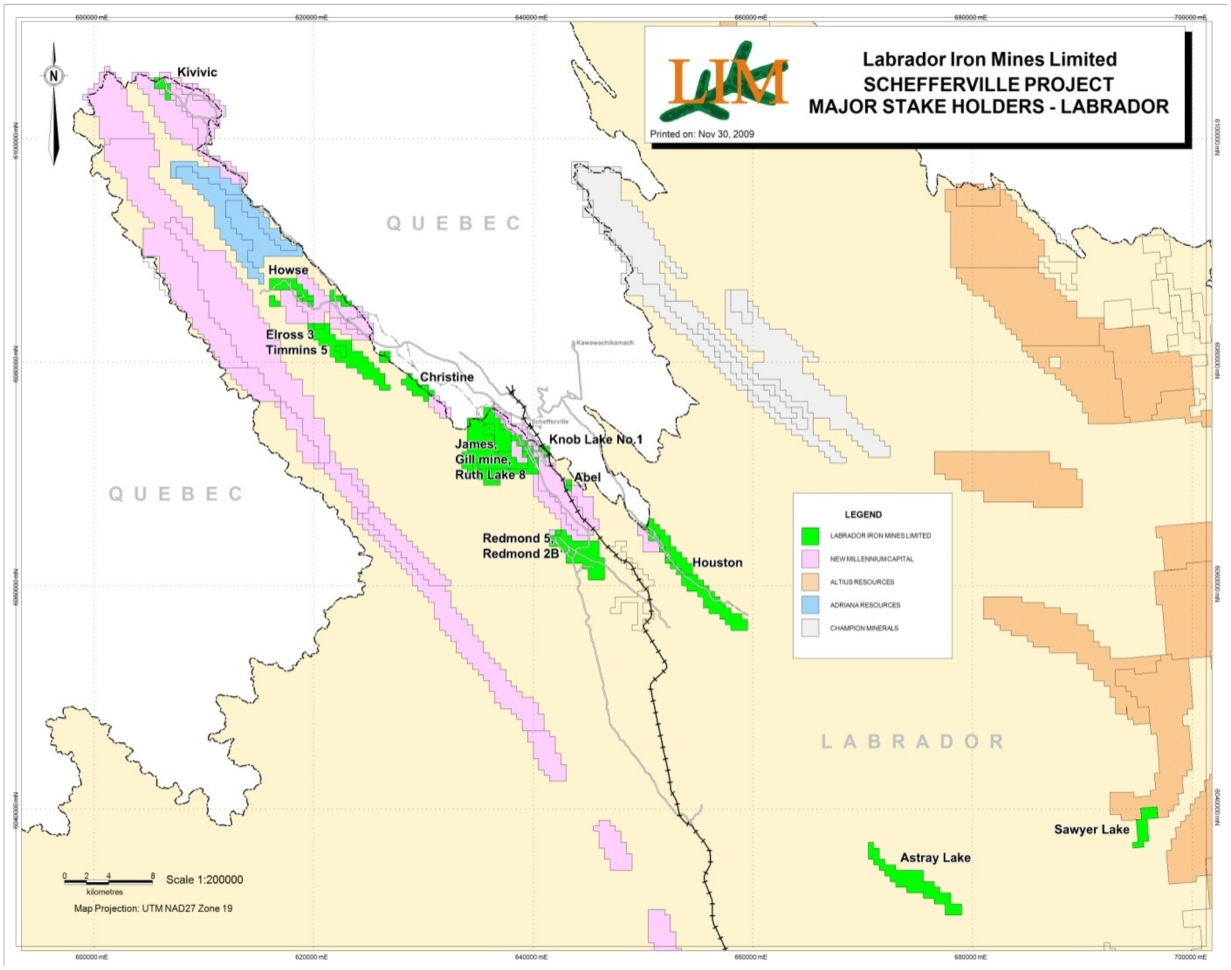

Figure 28: 2009 LIM properties and other adjacent properties in the area of Schefferville

16- Mineral Processing and Metallurgical Testing

Mineral processing and metallurgical tests have been undertaken LIM on several mineral deposits of the Schefferville area properties. However, at the time of the writing of this report, the results were not available.

17- Mineral Resource and Mineral Reserve Estimates

There are no reserves reported in this document. The resources reported in this document are compliant with current standards as outlined in the National Instrument 43-101.

Definitions

The classification of Mineral Resources and Mineral Reserves used in this report relies upon the definitions provided in National Instrument 43-101, which came into effect on February 1, 2001. SGS Geostat followed the "Estimation of Mineral resources and Mineral Reserves – Best Practice Guidelines" adopted by the Council of the Canadian Institute of Mining Metallurgy and Petroleum. The relevant definitions for the CIM Standards/NI 43-101 are as follows:

1- **Mineral Resource**

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase 'reasonable prospects for economic extraction' implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

2- **Inferred Mineral Resource**

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.

3- **Indicated Mineral Resource**

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which

quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

4- Measured Mineral Resource

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

5- Mineral Reserve

Mineral Reserves are sub-divided in order of increasing confidence into Probable Mineral Reserves and Proven Mineral Reserves. A Probable Mineral Reserve has a lower level of confidence than a Proven Mineral Reserve.

A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

Mineral Reserves are those parts of Mineral Resources which, after the application of all mining factors, result in an estimated tonnage and grade which, in the opinion of the Qualified Person(s) making the estimates, is the basis of an economically viable project after taking account of all relevant processing, metallurgical, economic, marketing, legal, environment, socio-economic and government factors. Mineral Reserves are inclusive of diluting material that will be mined in conjunction with the Mineral Reserves and delivered to the treatment plant or equivalent facility. The term 'Mineral Reserve' need not necessarily signify that extraction facilities are in place or operative or that all governmental approvals have been received. It does signify that there are reasonable expectations of such approvals.

Database used

The data used for the estimation comes from the drill holes database managed by LIM. The client provided a complete database of all relevant IOC historical RC and diamond drill holes with the latest 2008 and 2009 RC drilling/trenching results as of November 09th, 2009. SGS Geostat transferred the data into its own database management called GeoBase. The GeoBase drill hole management system is an Access application designed by SGS Geostat for its own purposes and is also available for commercial use. SGS Geostat's GeoBase database contains only the relevant drill holes and trenches information for the resources estimation of the James , Redmond 2B and Redmond 5 mineral deposits. All other data concerning the other properties (Ex: Houston, Howse, Knob Lake, Wishart, etc) was not included in this database.

SGS Geostat database consists of a total of 310 collar records (including RC, diamond and trench records), Totalling 15,049 meters, mostly RC. And 4567 assay records,. Please see table below.

Property	Hole Type	Amount of Holes	Amount of meters	Amount of assay records
James	Diamond	2	29	0
	RC	122	6806	2278
	Trench	79	3651	939
Redmond 2B	RC	21	1104	364
	Trench	10	663	205
Redmond 5	RC	68	2335	681
	Trench	8	461	100

Table 15: SGS Geostat Database Record Information

SGS Geostat did not carry out a detailed verification of all the historical data in comparison with the original logs, but rather did selective checking on the data found with the documents provided by LIM. The site visit, 2008 and 2009 field work and discussions with the personnel gave us the belief that the database (after some minor corrections) is accurate and managed correctly. Drilling was done mostly vertical for the RC drill holes. The diamond drill holes and some exploration RC holes were drilled perpendicular to the directions of the mineral deposits with dips varying from-55° to-70°.

Grids used

All interpretations were done according to the georeferenced historical IOC grid and sections in imperial format. All of the grids used for the resource estimation were georeferenced and validated by LIM and verified by SGS Geostat. All sections were digitized and transferred into metric and georeferenced to UTM NAD 27 Eastern Canada, Zone 19N UTM. Drill hole coordinates and directions are in reference to a local mining grid. See Section 10: Grids used on the Property

Capping of assays

Does not apply to this type of deposit

Specific gravity

A variable specific gravity (density) was used for the modeled ore types. SGS Geostat used the following equation: $SG_{(In\ Situ)} = ((0.0258 * Fe) + 2.338) * 0.9$ The regression formula was calculated by LIM based upon 229 specific gravity tests and validated by SGS Geostat and is considered a safe and conservative measure of density.

Recent specific gravity tests have been done on the James and Houston mineral deposits by RPC for LIM in 2007. RPC gave densities for the Houston ore types ranging from 3.47 to 4.26. Tests were done on rock chips. The rock chips may not have been representative of the whole Houston mineral deposit which consists of hard and friable banded blue and red hematite that locally becomes massive. No recent specific gravity tests have been done on the treat rock ($HiSiO_2$) ores.

SGS-Lakefield produced an investigation report of the Direct Shipping Iron Ore from Labrador Iron Mines Ltd prepared for SNC-Lavalin in February 2009. It stated the average specific gravity as 3.59. This study was done on the James South (Blue), Knob Lake (Red) Houston (Purple) and Redmond (Raw) samples.

LIM gathered SG data on its 2009 RC chip samples. A total of 229 samples were tested. The tests were done on powder from the reduced samples. A SG regression formula based on the Fe content was obtained. $SG_{(In\ Situ)} = ((0.0258 * Fe) + 2.338) * 0.9$. The 0.9 factor corresponds to a security factor to take into account porosity in the deposits.

In 2009, LIM performed several tests of In Situ specific gravity on different ore types of the James, Redmond 2B and Redmond 5 mineral deposits. The full description is given in section 10 under 2009 In Situ Specific Gravity determination.

The results gave an average specific gravity of 2.4 to 3.5 with an average SG of 2.9 for the James and Redmond 2B mineral deposit. A single In Situ SG test was performed on the Redmond 5 mineral deposit ad gave a SG of 3.5. Please see table below.

The two approaches to density determination (chip/core fragments vs bulk) give contradictory results (relatively high density for density from chips and low density from bulk). Some additional work is needed to reconcile the results from the two approaches. At this time however, Geostat will continue using the SG regression formula from chip measurements since we consider this formula as safe and conservative given the added 0.9 safety factor added. It should also be noted that the data from bulk approach does not show variation with Fe grade which looks an obvious fact in this type of deposit.

SGS recommends using non destructive vibration-rotation drilling in order to do additional in situ specific gravity tests and to gather sufficient information on the different ore types. This type of drilling uses a rotating and vibrating coring system and can recover in situ material with lesser compaction or material displacement.

The opinion of the author is to do at least two holes on every ore type deposits of each targeted mineral ore deposits for a complete and comprehensive SG determination.

Test	Test Type	Bulk Density Result	East	North	Comment
James North 1	Back Hoe	2.5	639523	6071696	Beside RC-JM011. This is very low. Possibly disturbed ground or dug to close to old trench site?
James North 2	Back Hoe	3.4	639517	6071756	639517, 6071756. Northern boundary on east edge of ore body.
James	Back Hoe	3.2	639791	6071425	Dug adjacent to LIM James Bulk Sample Pit.
James Density Water 1	Shovel+Water	2.6	639800	6071412	blue 65%, red ore 35%. This ground was graded by dozer, contaminated by overburden
James Density Water 2	Shovel+Water	3.2	639800	6071412	Dark blue high grade ore 90%, hematite + martite. 7% red 3% yellow
James Density Water 3	Shovel+Water	2.9	639800	6071412	Dark blue high grade ore, hematite + martite. 75% Blue, 10% Yellow, 15% red. The Water sample has more red ore than the silica sand sample
James N 1	Shovel+Water	2.5	639520	6071754	North end of James, predominently blue 70% with lesser red10% & yellow 15%.
James N 2	Shovel+Water	2.6	639520	6071754	North end of James, predominently blue 70% with lesser red10% & yellow 15%.
James N 3	Shovel+Water	2.4	639520	6071754	North end of James, predominently blue 70% with lesser red10% & yellow 15%.
James S 1	Shovel+Water	3.1	639843	6071275	South end of james beside RC-JM010-2008. Blue ore
James S 2	Shovel+Water	3.1	639843	6071275	South end of james beside RC-JM010-2008. Blue ore
James S 3	Shovel+Water	3.3	639843	6071275	South end of james beside RC-JM010-2008. Blue ore
James S 4	Shovel+Water	2.9	639843	6071275	South end of james beside RC-JM010-2008. Blue ore
		2.9			**Average of all Lames Bulk Density tests**
RD2B 005	Back Hoe	3.5	643255	6063329	Dug adjacent to RC-RD2B005
RD2B 010	Back Hoe	2.9	643259	6063258	Dug adjacent to RC-RD2B010
RD2B Test3	Back Hoe	2.4	643281	6063274	643281, 6063274. Low? Predominently red and yellow ore
RD5	Back Hoe	3.2	642304	6064354	642304, 6064354. in LIM RD5 bulk sample pit. 60% Blue, 35% Yellow, 5% Red ore.

Table 16: LIM in situ SG test results

Geological Interpretation and Modelling

The geological interpretation of the mineral deposits noted in this document is restricted to the soft friable direct shipping ores. The historical IOC parameters of the Non-Bessemer and Bessemer ore types (see table 17) were considered together for the geological interpretations and modelling of the selected mineral deposits. The 3 Hi silica ($HiSiO_2$) Ore Types containing from 18% up to 30% SiO_2 were also considered for the geological interpretation and modelling of the selected mineral deposits. All the geological interpretations of the mineral deposits in this document follow the following parameters.

Grade Code No.	Type	Cut-offs
30	Non-bessemer (NB)	Fe ≥ 55.0%, Mn < 3.5%, A1203 < 5.0%, Si02 < 10.0%
40	Lean non-bessemer (LNB)	Fe ≥ 50.0%, Mn < 3.5%, A1203 < 5.0%, Si02 < 18.0%
50	Manganiferous(HMN)	(Fe+Mn)≥ 50.0%, Mn ≥ 6.0%, Al203 < 5.0%, Si02 < 18.0%
60	Low Manganiferous(LMN)	(Fe+Hn) ≥50.0%, 6.0% >Mn ≥ 3.5%, A1203 < 5.0%, Si02 < 18.0%
71	Hi Silica Rock (1) (HiSiO2)	100% Blue ≥ 18%, < 23% Si02
72	Hi Silica (2)	100% Blue ≥ 23%, <26% Si02
73	Hi Silica (3)	100% Blue ≥ 26%, <30% Si02
80	Waste	All material which does not fall into any of the above categories.

Table 17: Historical IOC parameters for the geological interpretation and modelling

James Mineral deposit

The geological modelling of the James mineral deposit was done using standard sectional modelling of 30m spacing. Paper sections from IOC were digitized and used for the geological interpretation and modelling of the James mineral deposit. SGS Geostat used its own sectional modelling software called SectCad. This reliable software was designed and is wholly owned by SGS Geostat. A total of 69 sections were used. LIM provided the majority of the sections with the IOC historical geological interpretations. SGS Geostat took into account the geological model on sections of the IOC geologists for its geological interpretation and modelling and incorporated it into SectCad.

The historical IOC parameters of the Non-Bessemer and Bessemer ore types (Table 17) were considered together for the geological interpretations and modelling of the James mineral deposit. The 3 Hi Silica ($HiSiO_2$) Ore Types containing from 18% up to 30% silica (SiO_2) (Table 17) were also considered for the geological interpretations and modelling of the James mineral deposit.

The Sections for the James mineral deposit are named using sequential numbering starting from 56 to 124. This numbering is derived from the historical IOC sections in feet (100ft spacing)

The James mineral deposit sections are oriented NE (looking NW at 313.5°) (True North) with a half thickness of 15 meters. The Anchor point of the section 56 is at 640266.43mE, 6071046.82mN (NAD 27). These sections were made to follow the general direction of the deposit.

As described in the document "Estimation of Mineral resources and Mineral Reserves – Best Practice Guidelines" adopted by the CIM Council in 2003, the geological model interpretation is sliced again in another direction in order to verify the spatial continuity of the geological model. A slicing of the geological model was done on a set of horizontal plan views every 5 meters. A total of 25 plan views were created for the James mineral deposit centered on elevations from 425 meters to 545metres above sea level.

The geological model of the James mineral deposit covers an area of 995 meters long by 150 meters wide by 125 meters vertical.

The James mineral deposit was defined in several mineralized envelopes. Each envelope was defined according to the IOC historical sections. SGS Geostat named the different envelopes for better refinement only. Each mineralized envelope was given a number. Lean Bessemer (30) and Lean Non Bessemer (40) Ore Types were modeled together. The next mineralized envelopes were considered as Non-Bessemer and Lean-Non-Bessemer Ore Type envelopes (NB-LNB): 01, 05, 09, 11, 12, 14, 16, 20, 21, 27, 29, 33, 35, 37, 38, 40 The next mineralized envelopes were considered as Hi Silica or $HiSiO_2$ (71) Ore Type envelopes: 02, 03, 04, 06, 08, 10, 13, 15, 17, 18, 19, 22, 23, 25, 26, 28, 30, 31, 32, 39. The next envelopes do not exist: 07, 24, 34, 36.

The mineralized intersections covering the James mineral deposit mineralized envelopes are in appendix 1.

Below, is the 3D geological interpretation of the sections of the James mineral deposit taken from SectCad sectional modelling software. Please see Figure 6 for the stratigraphic legend. Colors of the assay results are based on the IOC Historical parameters described above. See table 21. The envelope colors are solely for identification purposes.

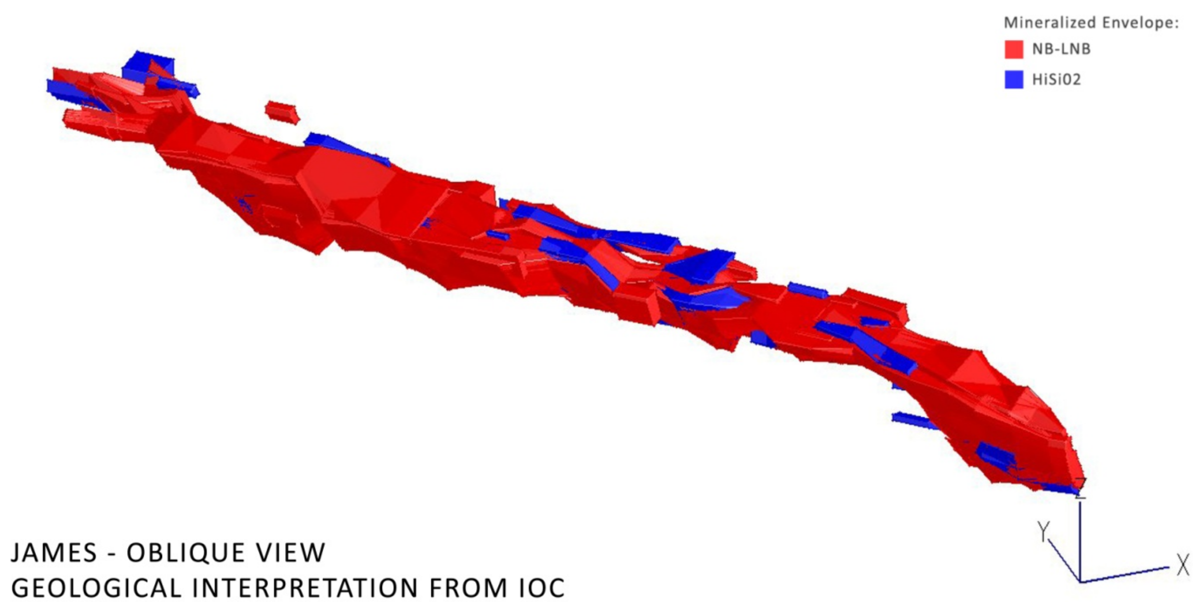

Figure 29: Oblique View of James mineral deposit Geological Model

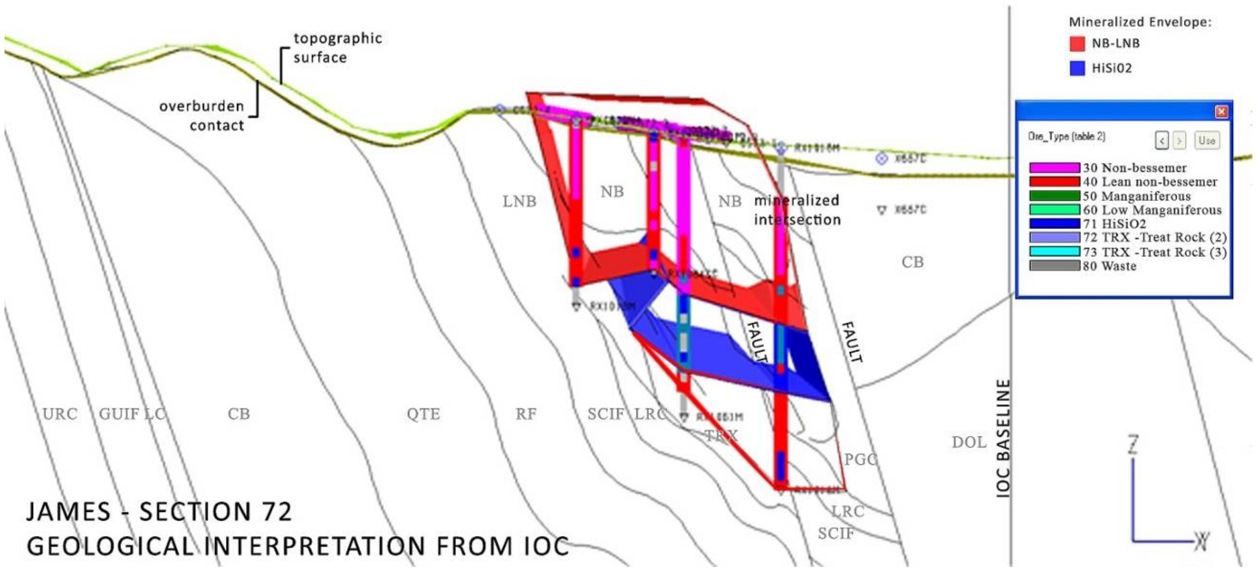

Figure 30: Section 72, James deposit, Mineralized Envelopes: NB-LNB and $HiSiO_2$

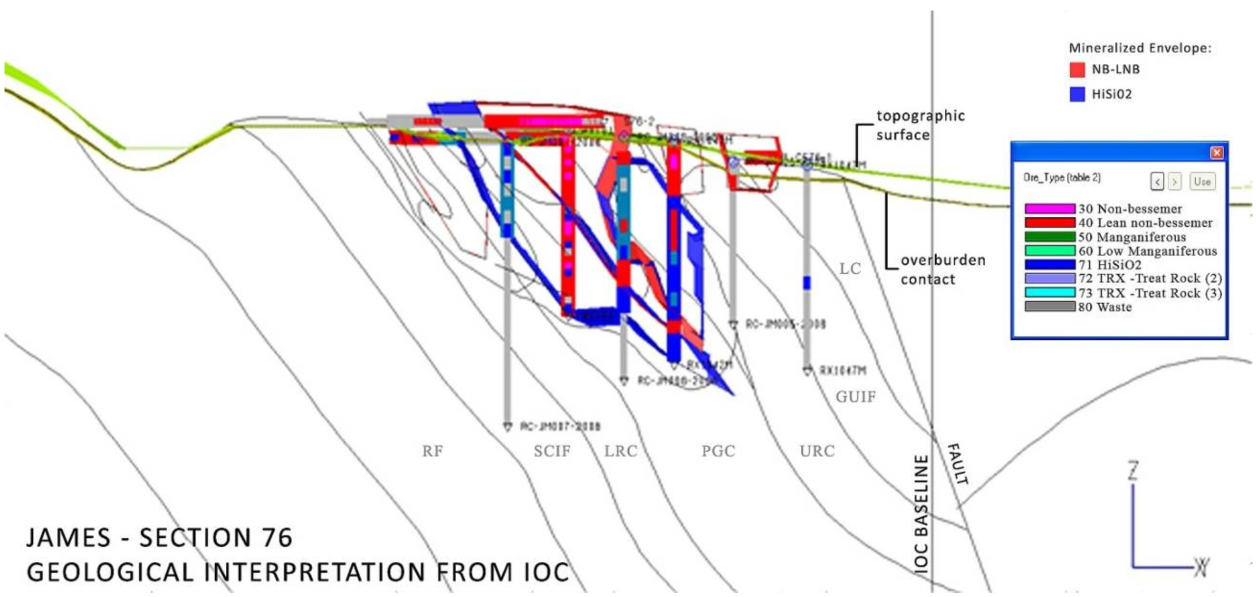

Figure 31: Section 76, James deposit, Min. Envelopes: NB-LNB and $HiSiO_2$

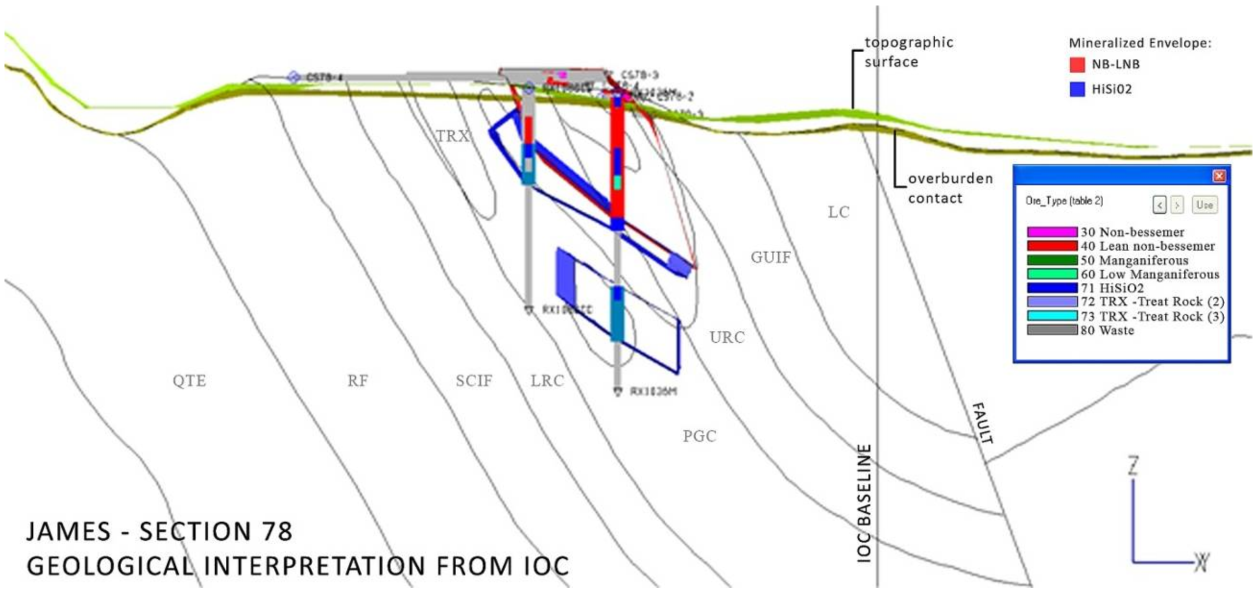

Figure 32: Section 78, James deposit Mineralized Envelope: NB-LNB and Hi SiO_2

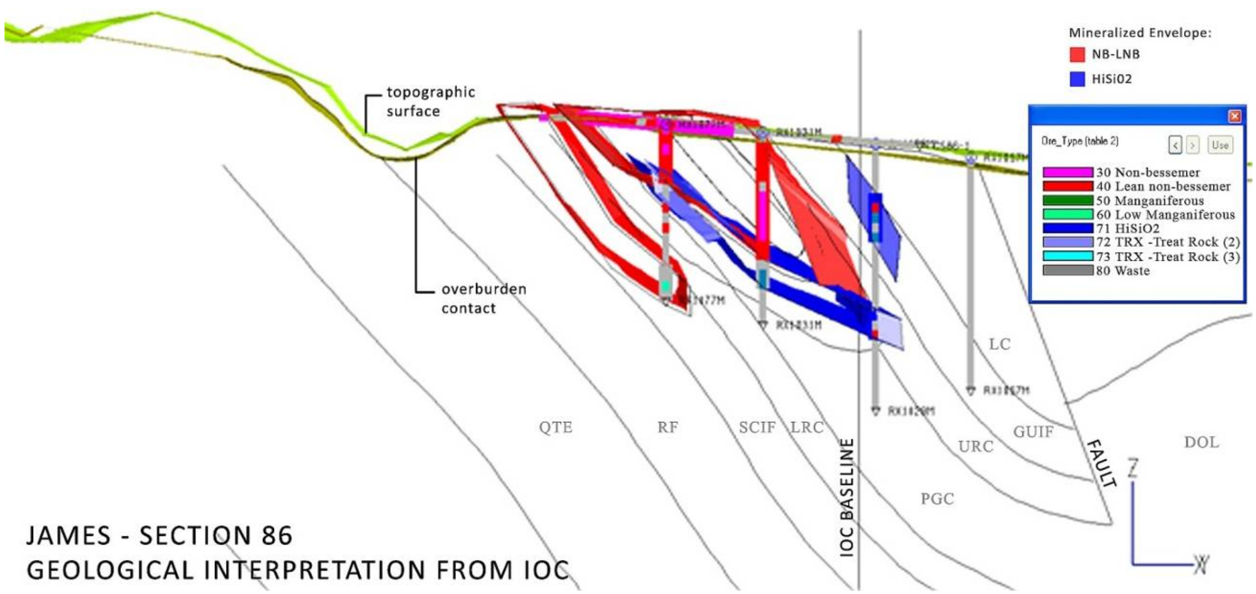

Figure 33: Section 86, James deposit, Mineralized Envelopes: NB-LNB and Hi SiO_2

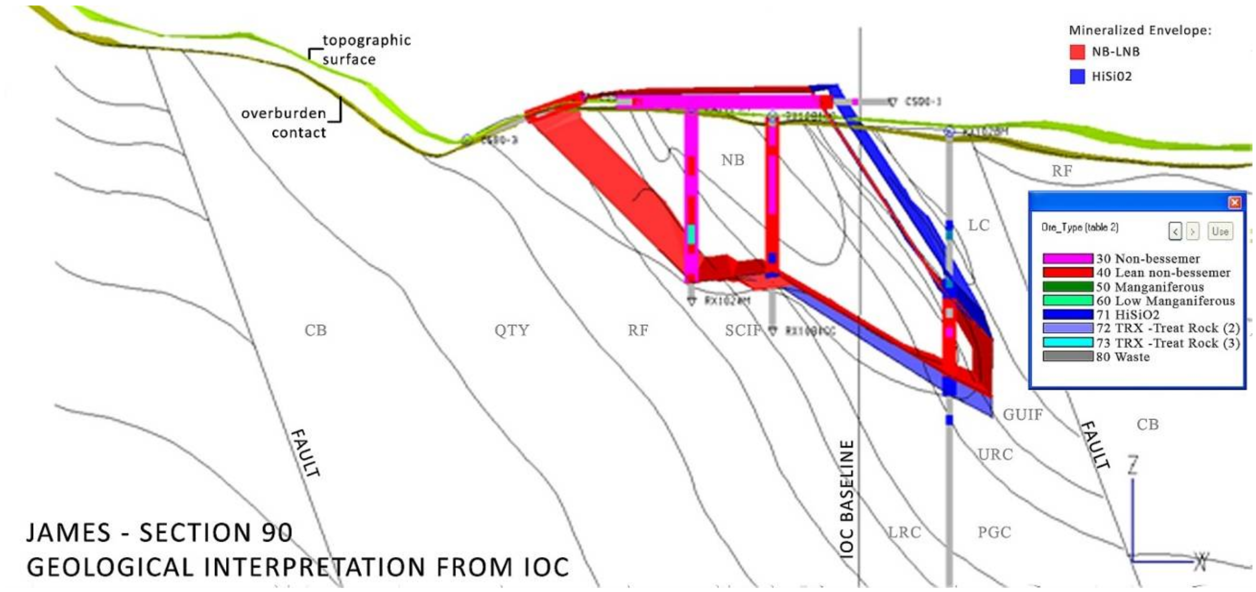

Figure 34: Section 90, James deposit, Mineralized Envelope: NB-LNB and Hi SiO_2

Redmond 2B Mineral deposit

The geological modelling of the Redmond 2B mineral deposit was done using standard sectional modelling of 25m spacing. SGS Geostat used its own sectional modelling software called SectCad. This reliable software was designed and is wholly owned by SGS Geostat. A total of 12 sections were used. LIM provided the geological model in 3D digital format. SGS Geostat took into account LIM's geological model for its geological interpretation and modelling and incorporated it into SectCad.

The historical IOC parameters of the Non-Bessemer and Bessemer ore types (Table 17) were considered together for the geological interpretations and modelling of the Redmond 2B mineral deposit. The 3 treat rock (Hi SiO_2) Ore Types containing from 18% up to 30% silica (SiO_2) (Table 17) were also considered for the geological interpretations and modelling of the Redmond 2B mineral deposit.

Sections for the Redmond 2B mineral deposit are labelled using sequential numbering starting from 000 to 060. Some inner-Sections of 12.5m spacing were created (as well as sections along trenches) in order to better define the model.

The Redmond 2B sections are orientated NE looking NW at 313° (True North) with a half thickness of 12.5 meters. The Anchor point of Section 010 is: 643293.20mE, 6063232.06mN centered on the RC Hole: RC-RC2B-012-08. These sections were made to follow the general direction of the mineral deposit and its associated mineralized structures.

As described in the document "Estimation of Mineral resources and Mineral Reserves – Best Practice Guidelines" adopted by the CIM Council in 2003, the geological model interpretation is sliced again in another direction in order to verify the spatial continuity of the geological model. A slicing of the geological model was done on a set of horizontal plan views every 5 meters. A total of 12 plan views were created for the Redmond 2B mineral deposit centered on elevations from 570 meters to 470 meters above sea level.

The geological model of the Redmond 2B mineral deposit covers an area of 300 meters E-W by 200 meters N-S by 55 meters vertical.

The Redmond 2B mineral deposit was defined in several mineralized envelopes. Each envelope was defined according to LIM's geological model in 3D digital format. Note that there are no historical IOC geological interpretations available for this deposit. SGS Geostat named the different envelopes for better refinement only. Each mineralized envelope was given a number. Lean Bessemer (30) and Lean Non Bessemer (40) Ore Types were modeled together. The next mineralized envelopes were considered as Non-Bessemer and Lean-Non-Bessemer Ore Type envelopes (NB-LNB): N01, S01, S02, S03. In this mineral deposit, no mineralized envelopes were modelled as Hi Silica or Hi SiO_2 (71) Ore Type envelopes.

The mineralized intersects covering the Redmond 2B mineral deposit mineralized envelopes in appendix 1.

Below is the 3D geological interpretation of the sections of the Redmond 2B mineral deposit taken from SectCad sectional modelling software. The envelope colors are for identification purposes only.

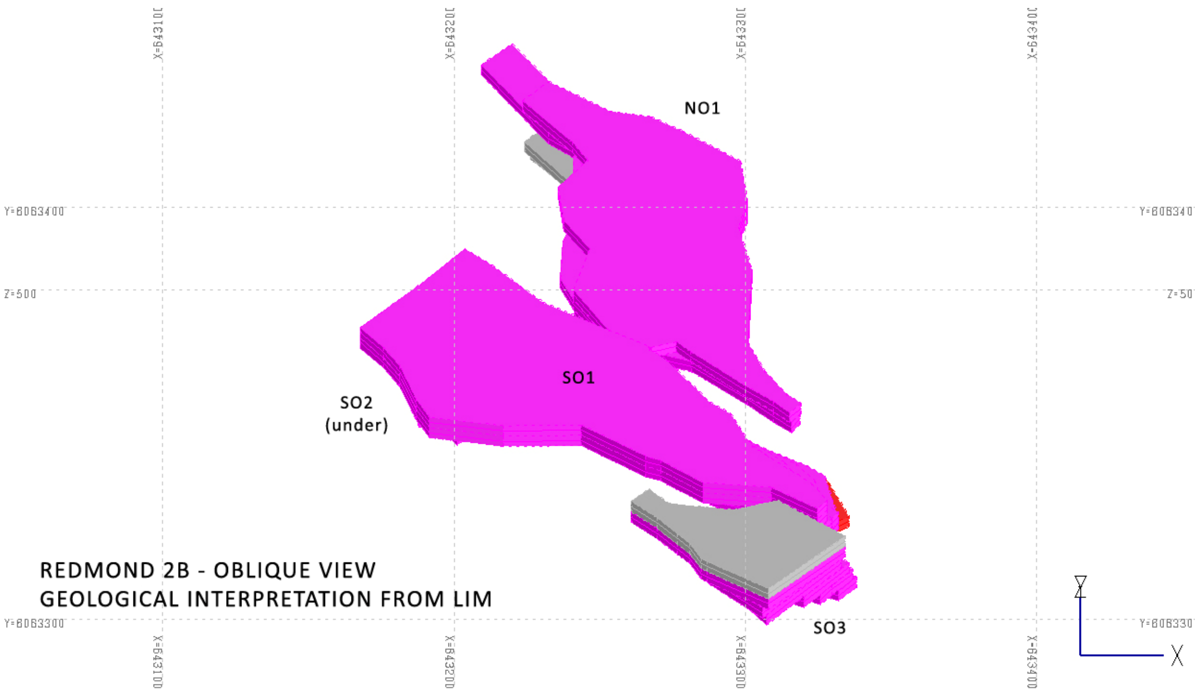

Figure 35: Oblique View (Looking down NE) of Redmond 2B Geological Model

Below is the geological interpretation on sections of the Redmond 2B mineral deposit taken from SectCad sectional modelling software. Colors of the assay results are based on the IOC Historical parameters described above. See table 21. The envelope colors are solely for identification purposes.

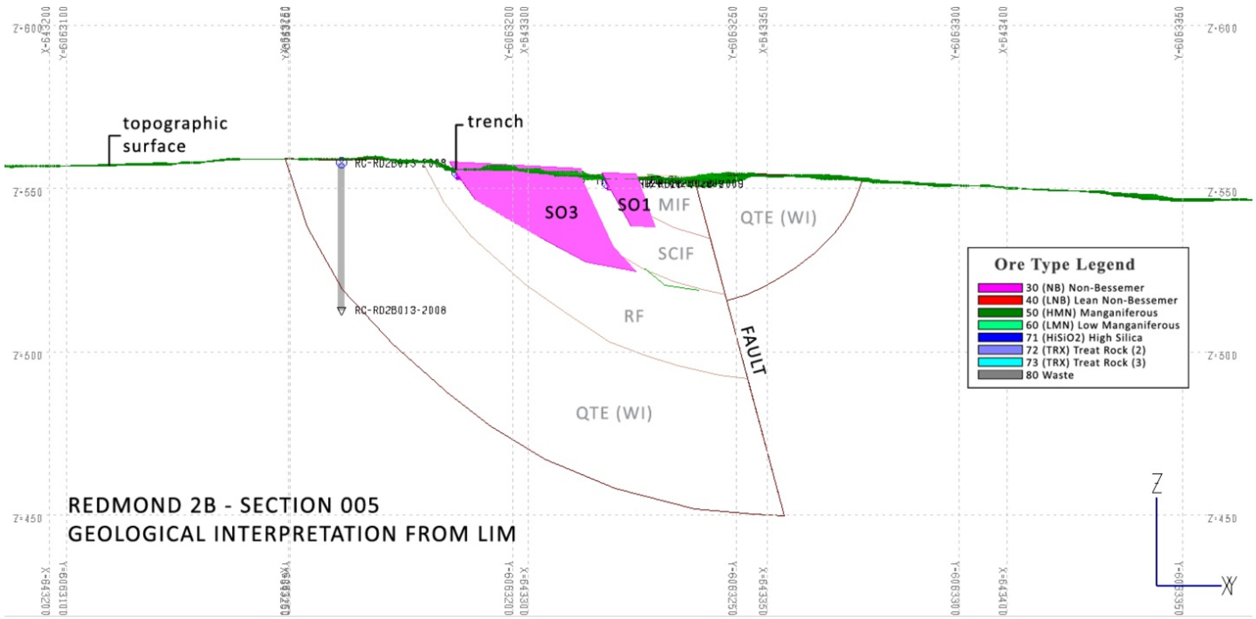

Figure 36: Section 005 Redmond 2B deposit, Mineralized Envelope: SO3

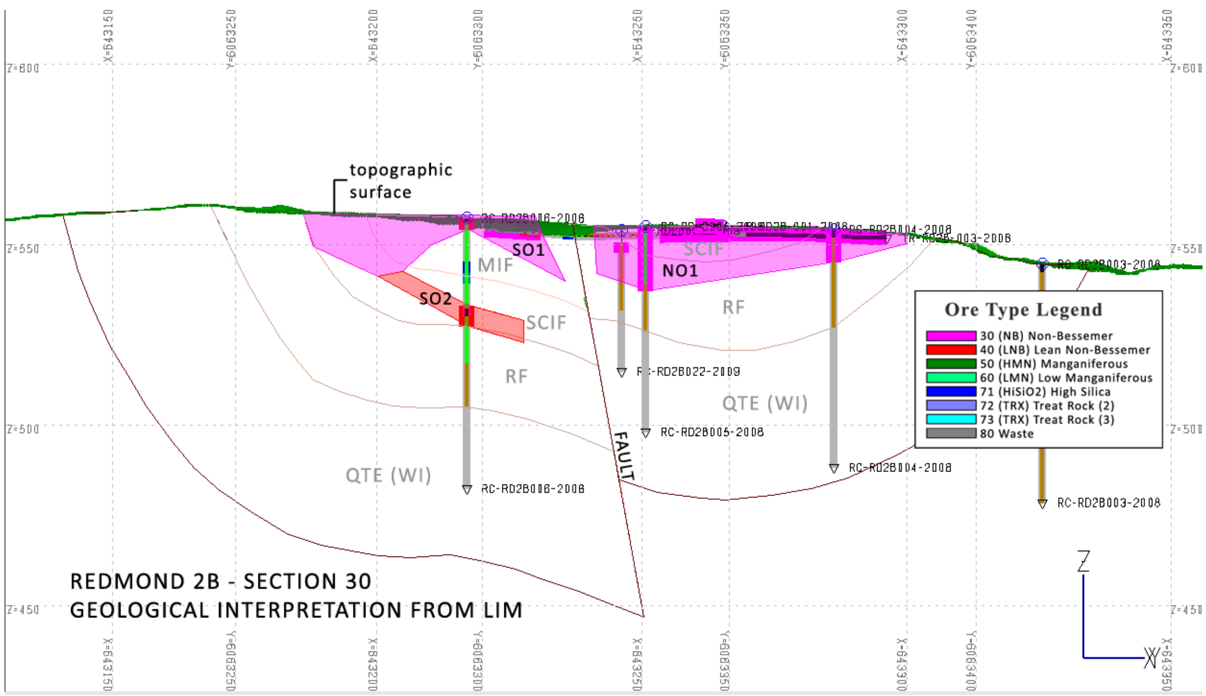

Figure 37: Section 030 Redmond 2B deposit, Mineralized Envelope: S01, S02, N01

Redmond 5 Mineral deposit

The geological modelling of the Redmond 5 mineral deposit was done using standard sectional modelling of 30m spacing. SGS Geostat used its own sectional modelling software called SectCad. This reliable software was designed by and is wholly owned by SGS Geostat. A total of 11 sections were used. LIM provided the majority of the sections with the IOC historical geological interpretations. SGS Geostat took into account the geological model on sections of the IOC geologists for its geological interpretation and modelling and incorporated it into SectCad.

The historical IOC parameters of the Non-Bessemer and Bessemer ore types (Table 17) were considered together for the geological interpretations and modelling of the Redmond 5 mineral deposit. The 3 Hi silica (Hi SiO_2) Ore Types containing from 18% up to 30% silica (SiO_2) (Table 17) were also considered for the geological interpretations and modelling of the Redmond 5 mineral deposit.

The sections for the Redmond 5 mineral deposit are named using sequential numbering starting from 137 to 147. Some inner-Sections of 15m spacing were created (as well as sections along trenches) in the SectCad software for the better refinement of the model.

The Redmond 5 sections are orientated NE looking NW at 313° (True North) with a half thickness of 15 meters. The Anchor point of Section 140 is: 642251.26mE, 6064450.83mN centered on the historical section according to historical IOC RC holes. These sections were made to follow the general direction of the mineral deposit and its associated mineralized structures.

As described in the document "Estimation of Mineral resources and Mineral Reserves – Best Practice Guidelines" adopted by the CIM Council in 2003, the geological model interpretation is sliced again in another direction in order to verify the spatial continuity of the geological model. A slicing of the geological model was done on a set of horizontal plan views every 5 meters. A total of 21 plan views were created for the Redmond 5 mineral deposit centered on elevations from 610m to 510m above sea level.

The geological model of the Redmond 5 mineral deposit is 275 meters long by 220 meters wide by 100 meters vertical.

The Redmond 5 mineral deposit was defined in several mineralized envelopes. Each envelope was defined according to the IOC historical sections. SGS Geostat named the different envelopes for better refinement only. Each mineralized envelope was given a number. Lean Bessemer (30) and Lean Non Bessemer (40) Ore Types were modeled together. The next mineralized envelopes were considered as Non-Bessemer and Lean-Non-Bessemer (NB-LNB) Ore Type: 01, 03, 04, 05, and 07. The next mineralized envelopes were considered as Hi Silica or Hi SiO_2 (71) Ore Type: 02, 06.

The mineralized intersects covering the Redmond 5 mineral deposit mineralized envelopes are in appendix 1.

Below is the 3D geological interpretation of the sections of the Redmond 5 mineral deposit taken from SectCad sectional modelling software. The envelope colors are for identification purposes only.

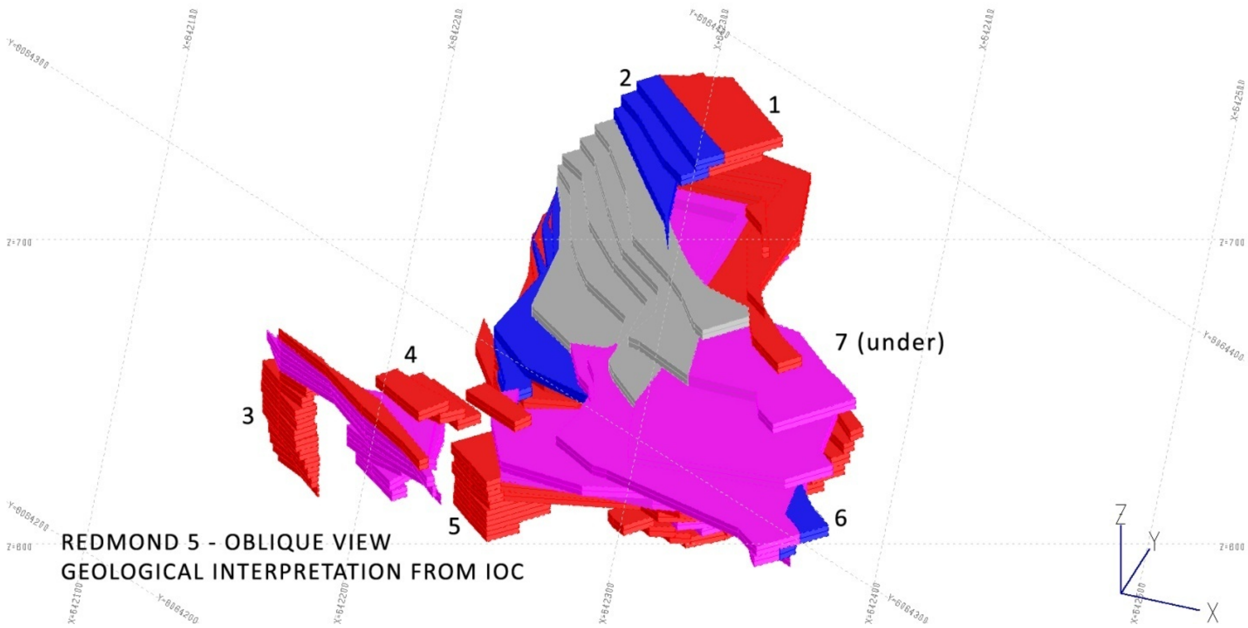

Figure 38: Oblique View Redmond 5 Geological Model

Below is the geological interpretation on sections of the Redmond 5 mineral deposit taken from SectCad sectional modelling software. Colors of the assay results are based on the IOC Historical parameters described above. See table 19. The envelope colors are solely for identification purposes.

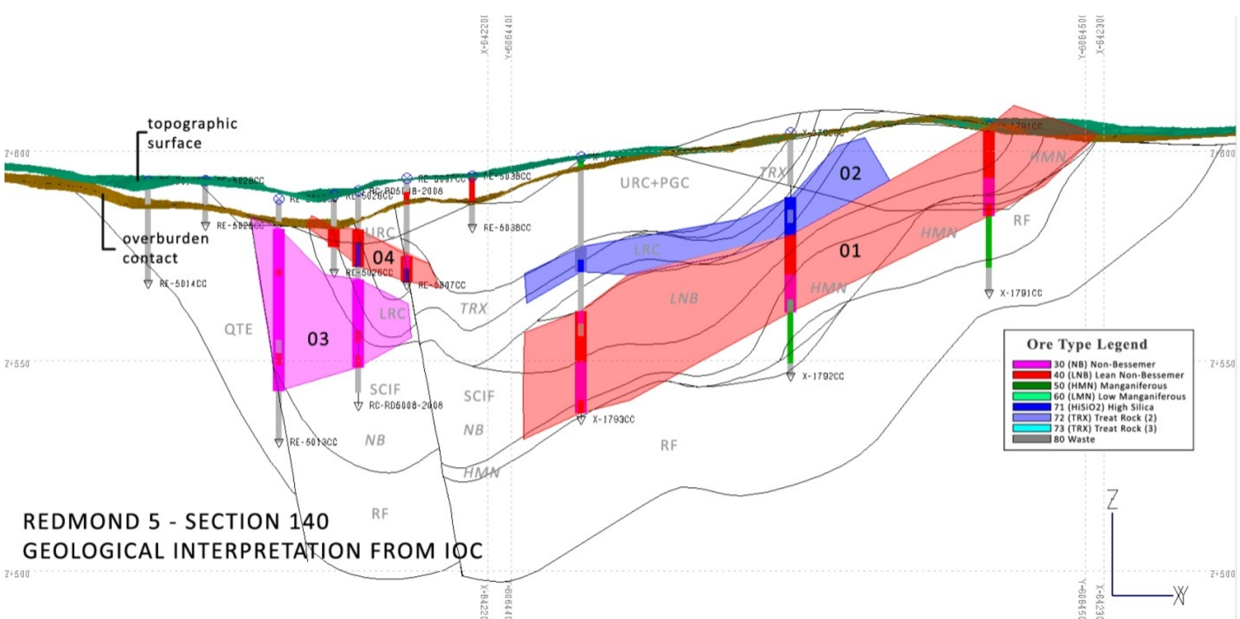

Figure 39: Section 140 Redmond 5 deposit, Mineralized Envelopes: 01, 02, 03, 04

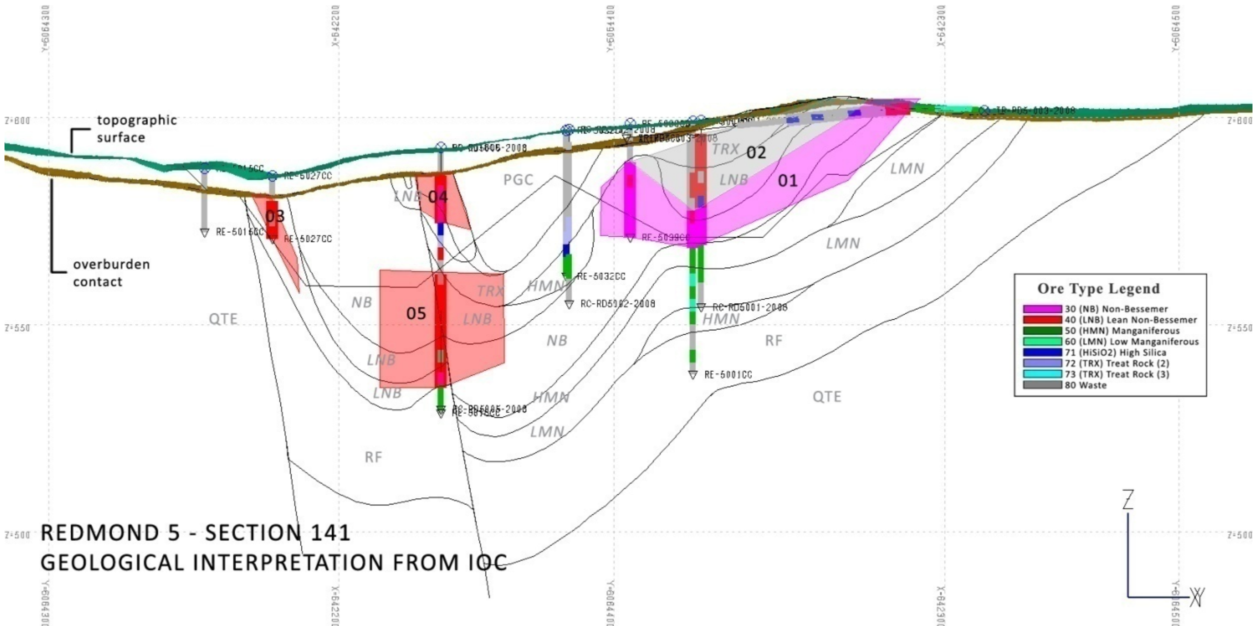

Figure 40: Section 141 Redmond 5 deposit, Mineralized Envelopes: 01, 02, 03, 04, 05

Composites

The method used to estimate the resources is by the inverse distance squared on regular blocks inside the mineralized envelope. This method requires the use of samples of regular length. Composites are then created starting from the original samples. We used a 3 m composite length for the James, Redmond 2B and Redmond 5 mineral deposits. The length is considered suitable in comparison to the dimension of the blocks used for the model. The selected length of the composites directly influences the amount of dilution of the model. The longer composites are, more they will be diluted. The length of the composites is in direct relation to the length of the original RC sample results used in the modeling. 3 m is corresponding to the length of a 3 m sample used by LIM corresponding to a 3m length drilling rod used by Cabo Drilling. Historically, IOC used an average 10 foot length sample corresponding to the total length of an RC drilling rod during its mining and exploration activities.

Resource Estimation Settings

James Resources Settings

The estimation was done using the Block Modelling method of estimation.

Block Modelling

Inverse distance squared was used to estimate the resources by block modelling. SGS-Geostat used a block model of 5m by 5m by 5m. The orientation of the blocks is 313.5˚. SGS Geostat used BlkCad, software designed by SGS Geostat for the resources estimation of the James mineral deposit. The block model estimation used the topography and the overburden contact in the parameters settings. The parameters of the James block model are the following:

Coordinates	X	Y	Z
Block Model Origin	639 800	6 071 100	600
Block size	5	5	-5

Table 18: Geometric parameters of the James mineral deposit block model

Search window parameters

SGS Geostat used the orientations (azimuth and dip) of the geological interpretations and the ore limits interpreted in plane and in section to define a search window. SGS Geostat used different search window according to the shape and distribution of the mineralized envelopes in each specified mineral deposit for each of LIM's properties as part of this study. Below is the different search window parameters used for the estimation of the James mineral deposit:

Search Ellipsoid	Radius			Orientation		
	Major Axis	Medium Axis	Minor Axis	Azimuth	Dip	Spin
NB-LNB	200	100	80	313.5	0	50
HiSiO2	100	50	40	313.5	0	50

Table 19: Parameters for the different search windows for the James Mineral deposit

The estimation of the James block model was done on the selected mineralized envelopes according to the following table.

Search Ellipsoid	Envelopes	Composites	Max Nb ofsamples used	Min Nb of samples used	Max nb of samples used per hole
NB-LNB	01, 05, 09, 11, 12, 14, 16, 20, 21, 27, 29, 33, 35, 37, 38, 40	NB-LNB	8	2	N/A
HiSiO2	02,03, 04, 06, 08, 10, 13, 15, 17, 18, 19, 22, 23, 25, 26, 28, 30, 31, 32, 39	HiSiO2	8	2	N/A

Table 20: Parameters of estimations of the James mineralized envelopes

The figures below represents the block model of the James mineral deposit estimated according to estimation settings described above.

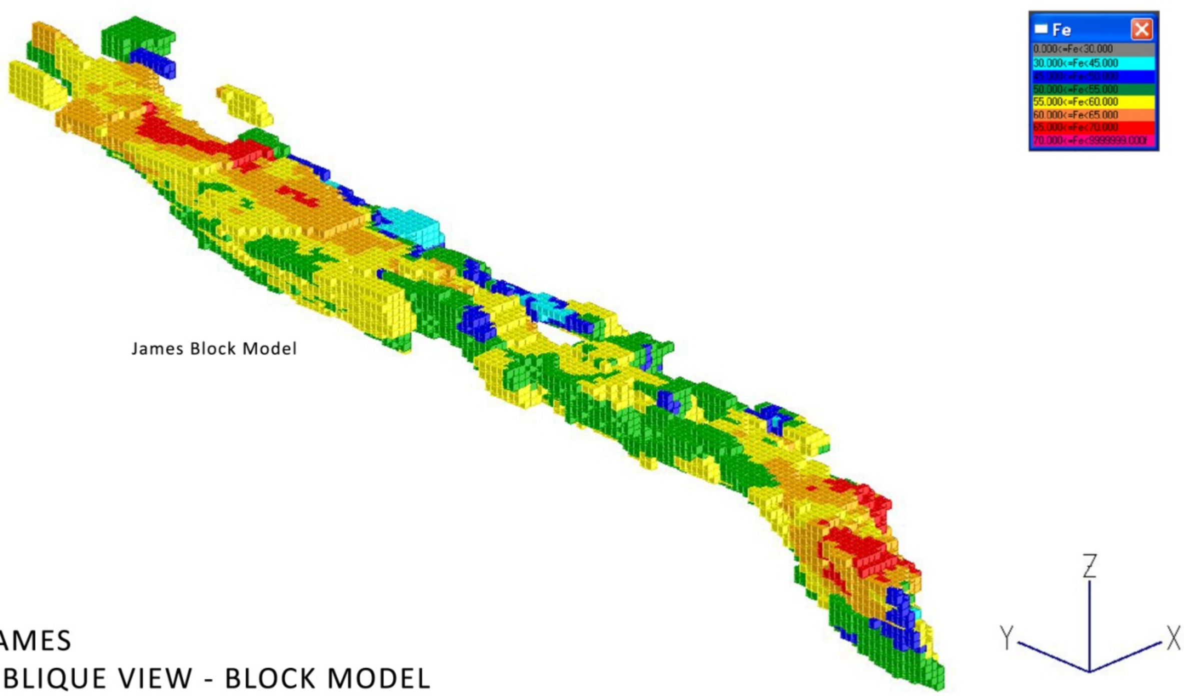

Figure 41: James Block model

Redmond 2B Resources Settings

The estimation was done using the Block Modelling method of estimation.

Block Modelling

Inverse distance squared is used to estimate the resources by block modelling. SGS-Geosat used a block model of 5m by 5m by 5m. The orientation of the blocks is 310°. SGS Geostat used BlkCad, software designed by SGS Geostat for the resources estimation of the Redmond 2B mineral deposit. The block model estimation only used the topography in the parameters settings. There is no overburden at the Redmond 2B mineral deposit. IOC stripped the area during its mining activities. The parameters of the Redmond 2B block model are as followed:

Coordinates	X	Y	Z
Block Model Origin	643 300	6 063 100	575
Block size	5	5	-5

Table 21: Geometric parameters of the Redmond 2B mineral deposit block model

Search window parameters

SGS Geostat used the orientations (azimuth and dip) of the geological interpretations and the ore limits interpreted in plane and in section to define a search window. SGS Geostat used different search windows according to the shape and distribution of the mineralized envelopes in each specified mineral deposit for each of LIM's properties as part of this study. Below is the different search window parameters used for the estimation of the Redmond 2B mineral deposit:

Search Ellipsoid	Radius			Orientation		
	Major Axis	Medium Axis	Minor Axis	Azimuth	Dip	Spin
N01-RO	100	50	25	312	0	0
S01-RO	100	50	25	310	0	20

Table 22: Parameters for the different search windows for the Redmond 2B mineral deposit

The estimation of the Redmond 2B block model was done on the selected mineralized envelopes according to the following table:

Estimation Method:		Inverse Power Distance Square (IPD2)			
Block Discretization:		X: 2 Y: 2 Z: 2			
Search Ellipsoid	Envelopes	Composites	Max Nb ofsamples used	Min Nb of samples used	Max nb of samples used per hole
N01-RO	N	N	8	2	2
S01-RO	S(S01, S02, S03)	S (S01, S02, S03)	8	2	2

Table 23: Parameters of estimations of the Redmond 2B mineralized envelopes

The figures below represents the block model of the Redmond 2B mineral deposit estimated according to estimation settings described above.

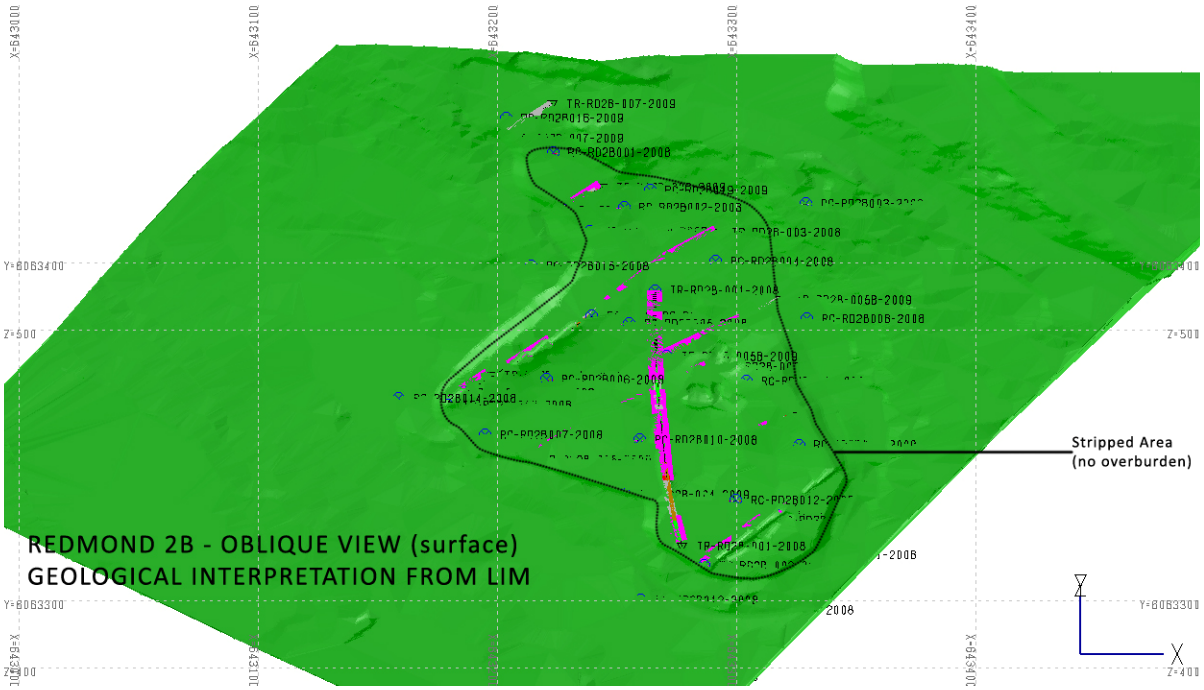

Figure 42: Redmond 2B Stripped area

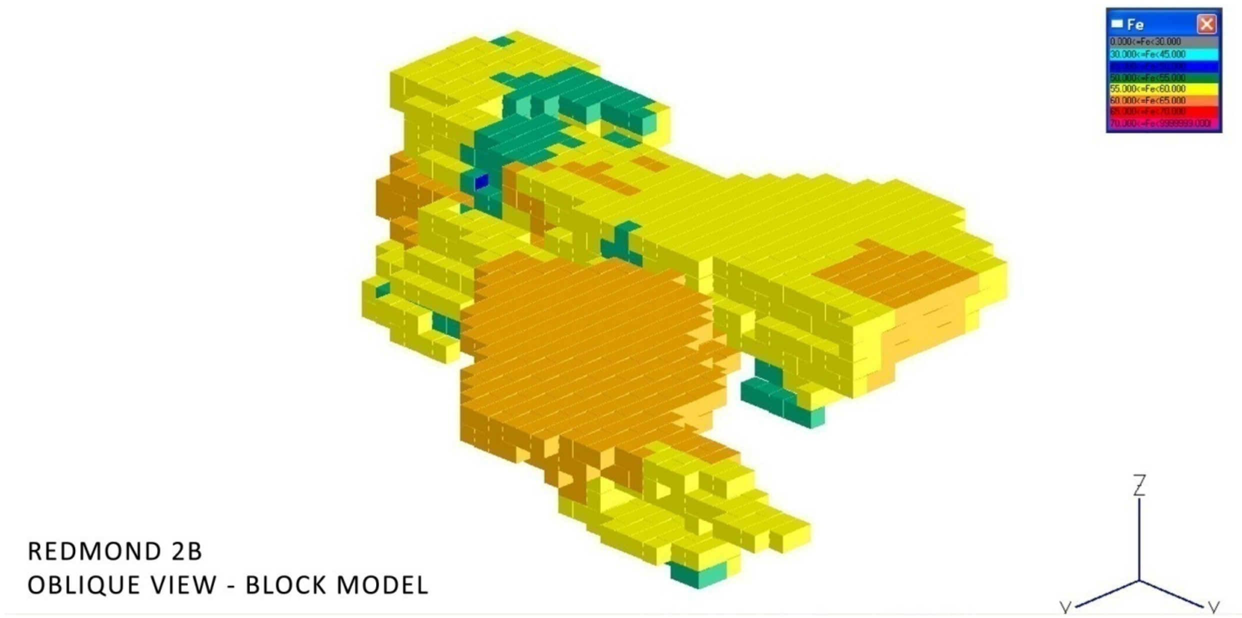

Figure 43: Redmond 2B Block model

Redmond 5 Resources Settings

The estimation was done using the Block Modelling method of estimation.

Block Modelling

Inverse distance squared was used to estimate the resources by block modelling. SGS-Geostat used a block model of 5m by 5m by 5m. The orientation of the blocks is 313˚. SGS Geostat used BlkCad, software designed by SGS Geostat for the resources estimation of the Redmond 5 mineral deposit. The block model estimation used the topography and the overburden contact in the parameters settings. The parameters of the Redmond 5 block model are the following:

Coordinates	X	Y	Z
Block Model Origin	642 300	6 064 100	620
Block size	5	5	-5

Table 24: Geometric parameters of the Redmond 5 mineral deposit block model

Search window parameters

SGS Geostat used the orientations (azimuth and dip) of the geological interpretations and the ore limits interpreted in plane and in section to define a search window. SGS Geostat used different search windows according to the shape and distribution of the mineralized envelopes in each specified mineral deposit for each of LIM's properties as part of this study. Below is the different search window parameters used for the estimation of the Redmond 5 mineral deposit:

Search Ellipsoid	Radius			Orientation		
	Major Axis	Medium Axis	Minor Axis	Azimuth	Dip	Spin
01-RO	100	50	25	310	0	-43
03-RO	50	25	10	320	0	75
Default	100	100	100	0	0	0

Table 25: Parameters for the different search windows for the Redmond 5 Mineral deposit

The estimation of the Redmond 5 block model was done on the selected mineralized envelopes according to the following table.

Estimation Method:		Inverse Power Distance Square (IPD2)			
Block Discretization:		X: 2 Y: 2 Z: 2			
Search Ellipsoid	Envelopes	Composites	Max Nb ofsamples used	Min Nb of samples used	Max nb of samples used per hole
01-RO	01, 02, 06, 07	01, 02, 06, 07	8	1	2
03-RO	03, 04	03, 04	8	1	2
Default	05	05	8	1	2

Table 26: Parameters of estimations of the Redmond 5 mineralized envelopes

The figures below represents the block model of the Redmond 5 mineral deposit estimated according to estimation settings described above.

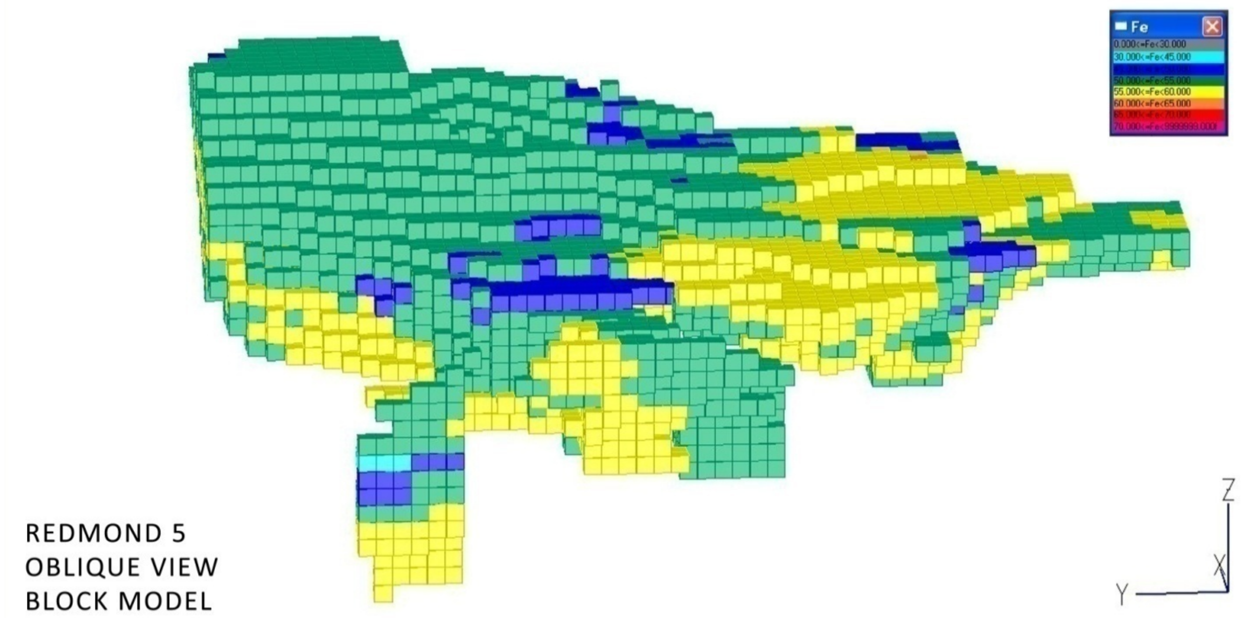

Figure 44: Redmond 5 Block model

Resource Classification Settings

The estimated resources were classified in accordance with the specifications of the 43-101 Policy, namely in measured, indicated, and inferred resources. Currently, there are no measured resources. Because of the difficulty with the RC drilling, the degree of fines lost and the relative variability of assays between twinned holes, it did not allow inclusion of any measured resources at this time.

James Classification Settings

The density of the drilling and the outline of the James mineral deposit outline permitted SGS Geostat to consider most of the James resources as indicated. Currently, there are no measured resources. SGS Geostat also took into account the difficulty of the RC drilling, the amount of fines lost and the relative variability of assays between twinned holes.

Portions of the James mineral deposit were classified as inferred resources. This is based on the following criteria:

1. The modelled zones are intersected by only one drill hole.
2. There is insufficient drill hole (trench) information within a radius of 15 to 20 meters of the modelled zone.
3. The level of confidence of the historical assay results is considered low.

All parameters described above were use in the parameter settings of BlkCAD. Indicated resource are in Blue, inferred resources are in yellow.

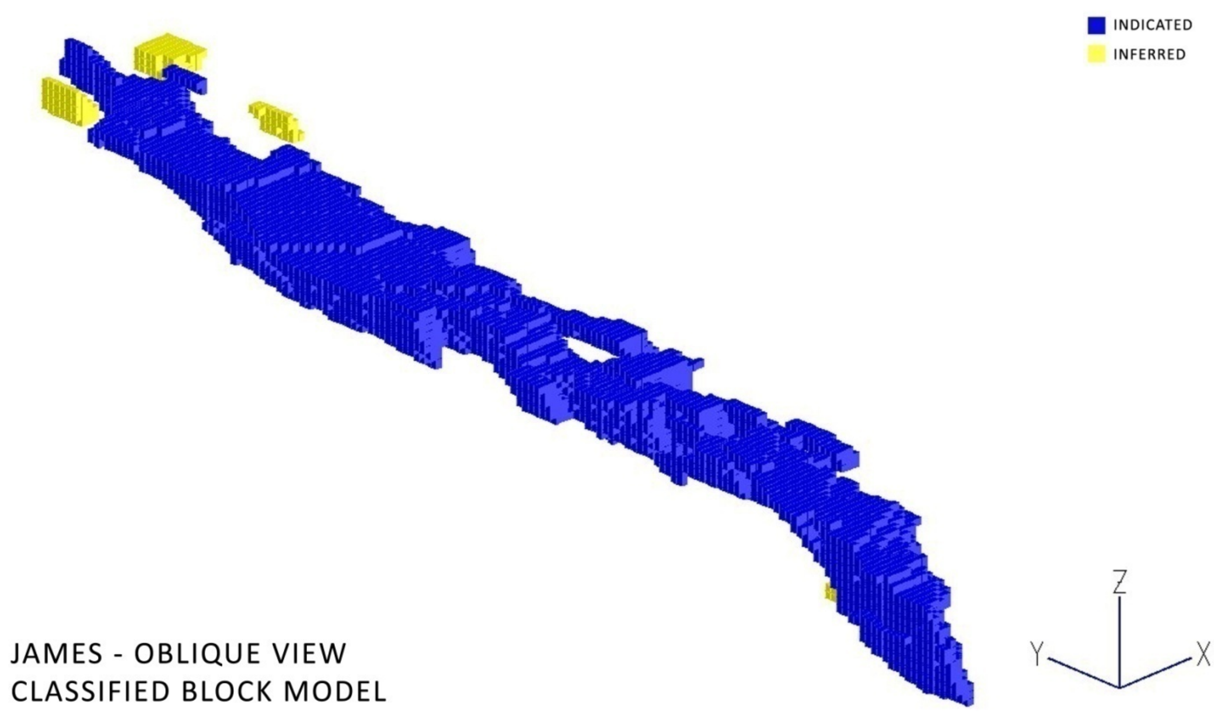

Figure 45: James Classified Block model

Redmond 2B Classification Settings

The density of the drilling on 50mX50m spacing and the confined and constant attitude of the mineral deposit outline permitted SGS Geostat to consider most of the Redmond 2B resources as indicated. Currently, there are no measured resources. SGS Geostat also took into account the difficulty of the RC drilling, the amount of fines lost and the relative variability of assays between twined holes.

Only a small portion was classified as inferred resources for the Redmond 2B mineral deposit. This is based on the following criteria:

1. The modelled zones are intersected by only one drill hole.
2. There is insufficient drill hole (trench) information within a radius of 15 to 20 meters of the modelled zone.
3. The level of confidence of the historical assay results is considered low.

All parameters described above were used in the parameter settings of BlkCAD. Indicated resource are in Blue, inferred resources are in yellow.

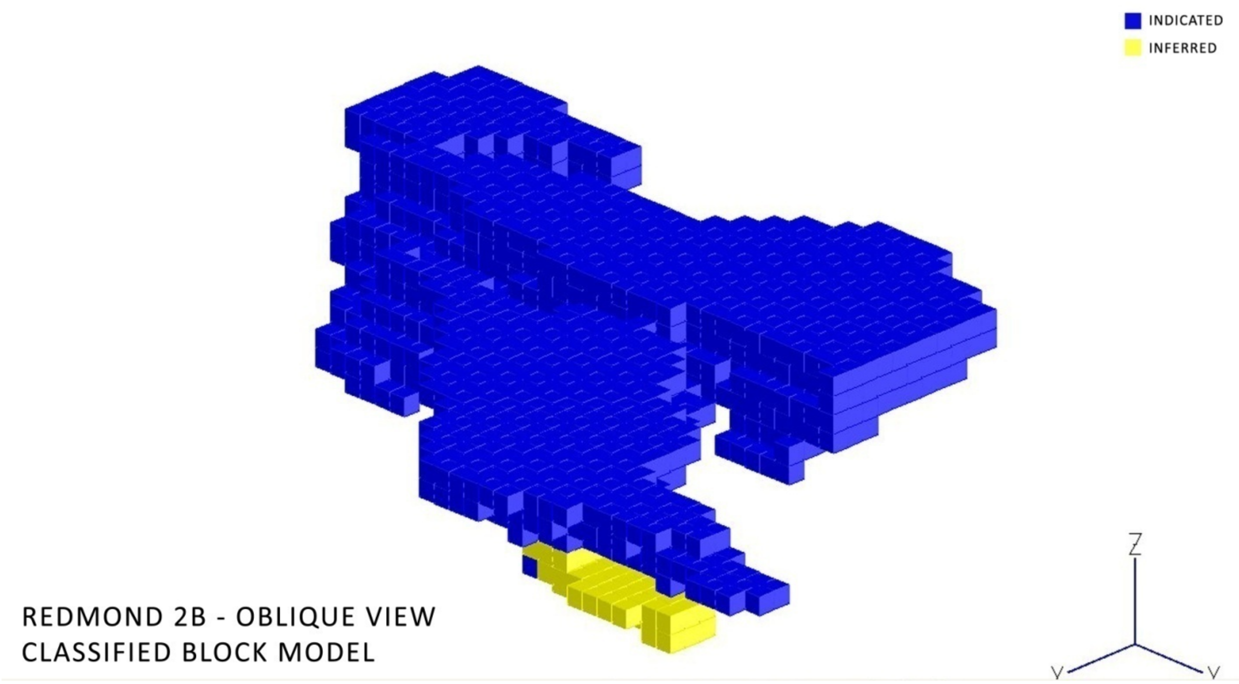

Figure 46: Redmond 2B Classified Block model

Redmond 5 Classification Settings

The density of the drilling and the outline of the mineral deposit outline permitted SGS Geostat to consider most of the Redmond 5 resources as indicated. Currently, there are no measured resources. SGS Geostat also took into account the difficulty of the RC drilling, the amount of fines lost and the relative variability of assays between twined holes.

Only two small portions were classified as inferred resources for the Redmond 5 mineral deposit. This statement is based on the following criteria:

1. The modelled zones are intersected by only one drill hole.
2. There is insufficient drill hole (trench) information within a radius of 15 to 20 meters of the modelled zone.
3. The level of confidence of the historical assay results is considered low.

All parameters described above were use in the parameter settings of BlkCAD. Indicated resource are in Blue, inferred resources are in yellow.

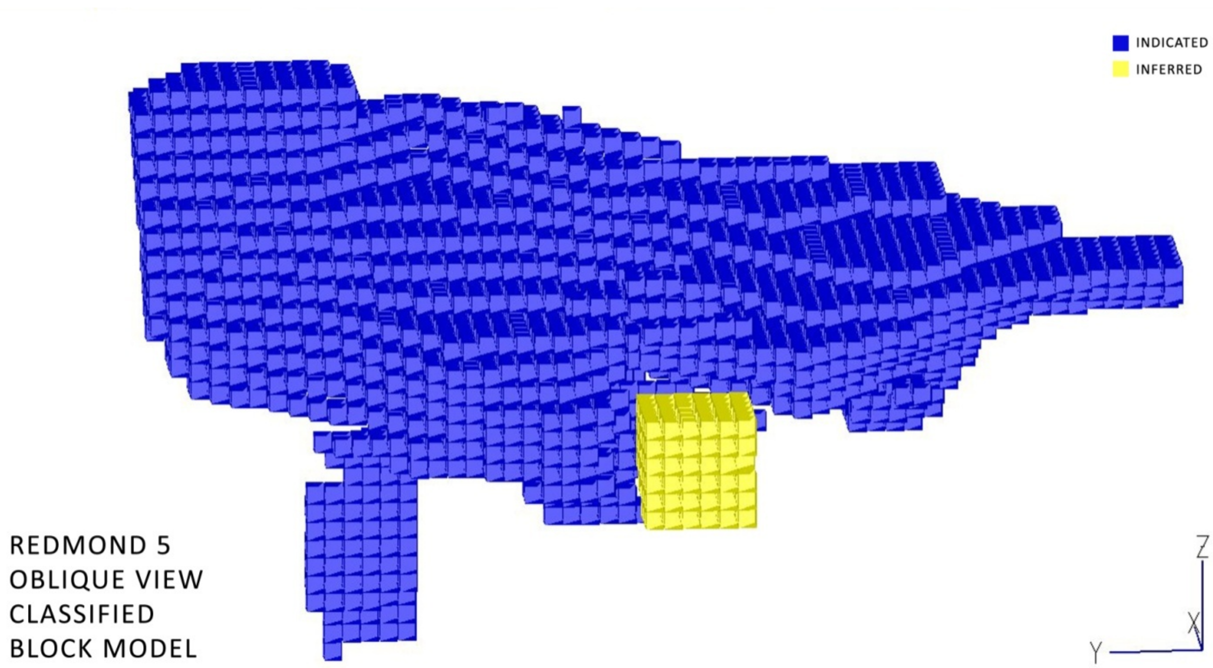

Figure 47: Redmond 5 Classified Block model

Classified Resources Estimates

All of the classified mineral resources in this report are cut by the topography, the overburden contact..

Classified Total Resources Estimates

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
total	NB-LNB	Indicated	8 444 000	3.47	58.76	0.043	0.79	10.07	0.72
		Inferred	144 000	3.37	54.48	0.085	1.23	9.93	1.53
	HiSiO2	Indicated	2 587 000	3.33	52.73	0.022	0.50	21.72	0.43
		Inferred	76 000	3.31	51.94	0.015	0.15	23.75	0.42
	Total	**Indicated**	**11 031 000**	**3.43**	**57.35**	**0.038**	**0.72**	**12.80**	**0.66**
		Inferred	**220 000**	**3.35**	**53.60**	**0.061**	**0.86**	**14.71**	**1.15**

Table 27: Classified Total Resources Estimates

James Classified Resources Estimates

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
James	NB-LNB	Indicated	5 802 000	3.49	59.60	0.029	0.69	11.05	0.48
		Inferred	35 000	3.43	57.22	0.080	0.14	11.50	0.59
	HiSiO2	Indicated	2 296 000	3.33	52.92	0.021	0.53	21.75	0.43
		Inferred	76 000	3.31	51.87	0.015	0.15	23.72	0.42
	Total	**Indicated**	**8 098 000**	**3.44**	**57.71**	**0.027**	**0.65**	**14.08**	**0.47**
		Inferred	**111 000**	**3.35**	**53.56**	**0.036**	**0.14**	**19.88**	**0.47**

Table 28: James Classified Resources Estimates

Redmond 2B Classified Resources Estimates

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
Redmond 2B	NB-LNB	Indicated	849 000	3.71	59.86	0.120	0.37	5.05	2.09
		Inferred	30 000	3.76	57.27	0.133	0.64	5.87	4.09

Table 29: Redmond 2B Classified Resources Estimates

Redmond 5 Classified Resources Estimates

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
Redmond 5	NB-LNB	Indicated	1 793 000	3.40	55.55	0.051	1.32	9.26	0.87
		Inferred	78 000	3.30	52.34	0.068	1.95	10.84	0.96
	HiSiO2	Indicated	291 000	3.30	51.23	0.029	0.24	21.54	0.41
		Inferred	0	0.00	0.00	0.000	0.00	0.00	0.00
	Total	**Indicated**	**2 084 000**	**3.40**	**54.95**	**0.048**	**1.17**	**10.97**	**0.81**
		Inferred	**78 000**	**3.30**	**52.34**	**0.068**	**1.95**	**10.84**	**0.96**

Table 30: Redmond 5 Classified Resources Estimates

18- Other Relevant Data and Information

There is no other relevant data and information for this report

19- Interpretation and Conclusions

There are no reserves reported in this document. The resources reported in this document are compliant with current standards as outlined in the National Instrument 43-101.

SGS Geostat can confirm that most of Iron (Fe), Phosphorus (P), Manganese(Mn), Silica (SiO_2), Alumina (Al_2O_3) content of the database for the 2008 RC drilling results are mostly corroborated by check analyses and QA/QC procedures and that no significant bias was observed (See Data Verification for details).

In order to calculate the Iron (Fe), Phosphorus (P) and Manganese (Mn) contents, SGS Geostat used these formulas: $Fe = 0.69942*Fe_2O_3$, $P= 0.043642*P_2O_5$, $Mn= 0.77446*MnO$

The classified Resource estimates given in this report are cut with the topography, the overburden contact and are limited to the mineralized envelopes of the James Redmond 2B and Redmond 5 mineral deposits.

All of the classified Resource estimates given in this report are within LIM's mineral licences boundaries for each corresponding property

The resources estimated by block modelling can be established as followed:

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
James	NB-LNB	Indicated	5 802 000	3.49	59.60	0.029	0.69	11.05	0.48
		Inferred	35 000	3.43	57.22	0.080	0.14	11.50	0.59
	HiSiO2	Indicated	2 296 000	3.33	52.92	0.021	0.53	21.75	0.43
		Inferred	76 000	3.31	51.87	0.015	0.15	23.72	0.42
	Total	**Indicated**	**8 098 000**	**3.44**	**57.71**	**0.027**	**0.65**	**14.08**	**0.47**
		Inferred	**111 000**	**3.35**	**53.56**	**0.036**	**0.14**	**19.88**	**0.47**

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
Redmond 2B	NB-LNB	Indicated	849 000	3.71	59.86	0.120	0.37	5.05	2.09
		Inferred	30 000	3.76	57.27	0.133	0.64	5.87	4.09

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
Redmond 5	NB-LNB	Indicated	1 793 000	3.40	55.55	0.051	1.32	9.26	0.87
		Inferred	78 000	3.30	52.34	0.068	1.95	10.84	0.96
	HiSiO2	Indicated	291 000	3.30	51.23	0.029	0.24	21.54	0.41
		Inferred	0	0.00	0.00	0.000	0.00	0.00	0.00
	Total	**Indicated**	**2 084 000**	**3.40**	**54.95**	**0.048**	**1.17**	**10.97**	**0.81**
		Inferred	**78 000**	**3.30**	**52.34**	**0.068**	**1.95**	**10.84**	**0.96**

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
total	NB-LNB	Indicated	8 444 000	3.47	58.76	0.043	0.79	10.07	0.72
		Inferred	144 000	3.37	54.48	0.085	1.23	9.93	1.53
	HiSiO2	Indicated	2 587 000	3.33	52.73	0.022	0.50	21.72	0.43
		Inferred	76 000	3.31	51.94	0.015	0.15	23.75	0.42
	Total	**Indicated**	**11 031 000**	**3.43**	**57.35**	**0.038**	**0.72**	**12.80**	**0.66**
		Inferred	**220 000**	**3.35**	**53.60**	**0.061**	**0.86**	**14.71**	**1.15**

The total estimated measured and indicated resource tonnage of the LIM properties is 11,031,000 tonnes at 57.35% Fe and 12.80% SiO_2 for a minimum cut-off of 50% Fe and a maximum cut-off of 30% SiO_2.

The estimated measured and indicated resource tonnage of the James mineral deposit is 8,098,000 tonnes at 57.71% Fe and 14.08% SiO2 for a minimum cut-off of 50% Fe and a maximum cut-off of 30% SiO_2.

The estimated measured and indicated resource tonnage of the Redmond 2B mineral deposit is 849,000 tonnes at 59.86% Fe and 5.05% SiO2 for a minimum cut-off of 50% Fe and a maximum cut-off of 30% SiO_2.

The estimated measured and indicated resource tonnage of the Redmond 5 mineral deposit is 2,084,000 tonnes at 54.95% Fe and 10.97% SiO2 for a minimum cut-off of 50% Fe and a maximum cut-off of 30% SiO_2.

The James and Redmond 5 mineral deposits are the most significant for additional work to be done. Geostat recommends continuing the definition of the extensions to the north and south and to take all the steps to advance the properties to the next phase that should confirm the results of a Preliminary Economic Assessment study.

The data verification was done on the iron (Fe) and silica (SiO_2) values with the assay results from the IOC historical RC drill results and the 2008 RC drilling program results. LIM twined some IOC RC holes in order to verify the iron (Fe) content. A total of 7 paired RC holes (14 in Total) were considered for as total of 77 assay results. With these results, SGS Geostat did a series of tests: Sign test, Student logarithmic test, Student normal test. Over all, SGS Geostat found the results to be adequate for iron. As for Silica (SiO_2) the results were considered inconclusive.

SGS Geostat cannot say whether there is any contamination of the 2008 RC samples. This is due to the fact that SGS-Lakefield blanks were sent along with the original batch, homogenization and reduction were not performed in an independent lab and that there are no rocks outcropping near Schefferville with no iron content. See recommendations in section 20.

20- Recommendations

SGS Geostat recommends:

1. SGS recommend using non destructive vibration-rotation drilling in order to do additional in situ specific gravity tests and to gather sufficient information on the different ore types. This type of drilling uses a rotating and vibrating coring system and can recover in situ material with lesser compaction or material displacement. The opinion of the author is to do at least two holes on every ore type deposits of each targeted mineral ore deposits for a complete and comprehensive SG determination.

2. Leaving a permanent benchmark with detailed information for each surface exploration drill hole, trench and test pit.

3. Continue the RC drilling program of the James, Redmond 2B and Redmond 5 mineral deposits as well as other known prospects for addition of mineral resources.

4. Accompany the RC drilling campaign with trenching along sections of the principal mineralized areas and to the ends for definition.

5. Continue the assay correlation of twined holes on every property. An average length 100m of twined hole per property is recommended.

6. Continue the application of a quality control and quality assurance protocol including systematic addition of blanks, standards and duplicates, and a regular re-assay of significant mineralized areas.

7. SGS Geostat recommends retrieval of all pulps from the laboratories, to store them safely in a properly secured area.

8. Verify the option to buy industry standard commercial blanks and certified materials. Or, continue using the blanks and to gather all assay data in order to determine the average Iron content and the possible contamination of assay laboratories.
9.

10. Continue the in situ specific gravity determination of all available ore types in the mineral deposits discussed in this report. SGS Geostat recommends using non destructive vibration-rotation drilling consisting of a rotary and vibrating drilling system capable of gathering sufficient information and lithological information with an almost constant volume of material on all of its targeted mineral deposits.

11. Random re-assay about 5% of pulps and/or rejects (1 every 20) on a regular basis including:
    a. Certified materials (5%, 1 every 20)
    b. Blanks (4%,1 every 25)

Proposed 2010 Drilling and Trenching Program

Presented here are the proposed drilling, trenching and mapping programs for the 2010 field season.

James

SGS recommends additional drill holes and additional trenches to the NW and to the SE part of the property corresponding to its extensions of the mineral deposit. A minimum of 2 RC drill holes and at least one trench per three sections is proposed in order to extend of define the possible extensions. The total drilling recommended is directly linked to the quality and geological interpretation of the targeted areas.

Redmond 2B

The Redmond 2B northern extension is defined by sufficient drill hole and trench information. SGS Geostat recommends additional drill holes and additional trenches on the southern extension of the property. A minimum of 2 RC drill holes and at least one trench per three sections is proposed in order to properly define the possible extension. The drill hole locations may very well be on top of an existing waste/TRX pile. The total drilling recommended is directly linked to the quality and geological interpretation of the targeted areas.

Redmond 5

Geostat recommends additional drill holes and additional trenches to the southern and northern extensions of the property. A minimum of 2 RC drill holes and at least one trench per three sections is proposed in order to properly define the possible extension. The total drilling recommended is directly linked to the quality and geological interpretation of the targeted areas.

Other Mineral deposits

Lim possesses other mineral deposits in the Schefferville area. In 2008 and 2009 several mineral deposits were targeted for a drill program and the results are promising. Geostat recommends continuing the RC drilling program of LIM's other well developed mineral deposits. The Schefferville area remains open for additional work and SGS Geostat recommends having an exploration program set up on the most promising properties.

21- References

Lee, N., Raabe, H., McKenzie, S., February 24th, 2009: SGS-Lakefield Research Ltd. An Investigation into Direct Iron Ore From Labrador Iron Mine. Ont. Project 12010-001-Final Report.

Beavan, A., 1978: Block No. 101, Trenching and Test Pitting; Labrador Mining and Exploration Co. Ltd. Report. Nfld. MDD File – 23J (186)

Geology of Canadian mineral deposit types, Geology of North-America, Volume P-1,
Mineral Occurrence Database System Report, Newfoundland & Labrador, Natural Resources, Canada, Website: http://www.gov.nl.ca/nr

Daignault, J., 1976: Redmond No. 5 Deposit, Labrador Mining and Exploration Co. Ltd., Mining License Block 101; Labrador Mining and Exploration Co. Ltd. Report. Nfld. MDD File – 23J (115).

Dufresne, C., 1950: Geological report on the Sawyer-Snelgrove map-area, Labrador. Labrador Mining and Exploration Company Limited Unpublished report [GSB# 023I/0003]

Eakins, P.R., 1949: Irony Mountain Area (Labrador - New Quebec); Labrador Mining and Exploration Co. Ltd. Report. NFLD MDD File - 23J (1).

Gilman, 1950: Internal IOC report

Grant, J.M., 1980: Report on Airborne Geophysical Survey, Block No. 101: Labrador Mining and Exploration Co. Ltd. Report. NFLD MDD File – 23J (240).

Gross, G.A., 1968: Geology of Iron Deposits in Canada, Vol. 3, Iron Ranges of the Labrador Geosyncline; Geol. Surv. Can., Econ. Geol. Report No. 22, 179 p. NFLD MDD File - Lab. (94).

Neal H.R., 2000: Exploration and Mining Geology; April 2000; v. 9; no. 2; p. 113-121; DOI: 10.2113/0090113

Orth, J., 1982a: Block 101, Drilling of Redmond 5 Deposit; Labrador Mining and Exploration Co. Ltd. Report. Nfld. MDD File – Lab. (600)

Price, J.B., 1979: Block No. 19 Concor Test Drilling; Labrador Mining and Exploration Co. Ltd. Report. NFLD MDD File - 23J/14 (209).

Price, J., 1981: Report of Impost Related Work on Licence Block 19 During 1980; Iron Ore Company of Canada Report. NFLD MDD File - 23J/14 (225).

Stocken, C.G., 1949: Ruth Lake – Astray Lake Area; Labrador mining and Exploration Company Ltd. Report. NFLD MDD File – 23J (3).

Stubbins, J.B., Blais, R.A. and Zajac, I.S., 1961: Origin of the Soft Iron Ores of the Knob Lake Range; Can. Inst. Mining and Met. Trans., Vol. 64, pp. 37-52. NFLD MDD File - 23J (32).

Stubbins,JB., 1978: Report on geological reconnaissance and sample collection on block 18 in the Sawyer Lake area, Labrador. Iron Ore Company of Canada and Labrador Mining and Exploration Company Limited Unpublished report [GSB# 023J/0184]

Usher, J.L., 1953: The geology of Astray Lake area, Labrador. Iron Ore Company of Canada Unpublished report [GSB# 023J/0019]

Wathier, 1949: Internal IOC report.

Wardle, R J and Gibbons, R.V., 1979: Geology of the eastern margin of the Labrador Trough. Mineral Development Division, Department of Mines and Energy, Government of Newfoundland and Labrador Report 78-09, 26 pages. [GSB# LAB/0415]

Wardle, R.J., 1982: Map 1, geology of the south-central Labrador Trough. Government of Newfoundland and Labrador, Department of Mines and Energy, Mineral Development Division, Map 82-005.

Wardle, R.J., 1982: Map 2, geology of the south-central Labrador Trough. Government of Newfoundland and Labrador, Department of Mines and Energy, Mineral Development Division, Map 82-006.

Zajac, I.S., 1974: The Stratigraphy and Mineralogy of the Sokoman Formation in the Knob Lake Area, Quebec and Newfoundland; Geol. Surv. Can. Bull. 220, 159 p. NFLD MDD File - 23J (92).

22- Date and Signature Page

This report titled: :**"Technical Report Resource Estimation of the James, Redmond 2B and Redmond 5 Mineral Deposits Located in Labrador, Canada for Labrador Iron Mines Limited dated December 18th,2009"** was prepared and signed by the author.

Signed

____

Maxime Dupéré, geo.
Geologist
SGS Geostat Ltd.

Blainville, Quebec Canada
December 18th, 2009

23- Certificate of qualification

Certificate of Maxime Dupéré, geo.

To accompany the Report entitled:" **Technical Report Resource Estimation of the James, Redmond 2B and Redmond 5 Mineral Deposits Located in Labrador, Canada for Labrador Iron Mines Limited dated December 18th, 2009"**

1. I, Maxime Dupéré, reside at 9660, Rue de la Chouette, Mirabel, Quebec, Canada, J7N 0C9.

2. I am a graduate from the Université de Montréal, Quebec in 1999 with a B.Sc. in geology and I have practiced my profession continuously since 2001.

3. I am a registered member of the Ordre des Géologues du Québec (#501), and I am currently employed by SGS Geostat Ltd since May 2006.

4. I am responsible for the preparation of all sections of the report entitled:" "Preliminary Feasibility Report, Labrador Iron Mines Project for Labrador Iron Mines Ltd dated January 2009", done by SNC-Lavalin of Montreal, (Quebec).

5. I visited the sites from May 26th to May 28th, 2008 and from August 31st to September 2nd, 2009 and I helped to supervise the sampling and QAQC procedures during the 2008 RC Drilling Program.

6. I certify that there is no circumstance that could interfere with my judgment regarding the preparation of this technical report.

7. Neither I, nor any affiliated entity of mine, is at present, under an agreement, arrangement or understanding or expects to become, an insider, associate, affiliated entity or employee of Labrador Iron Mines Limited, or any associated or affiliated entities.

   Neither I, nor any affiliated entity of mine, own directly or indirectly, nor expect to receive, any interest in the properties or securities of Labrador Iron Mines Limited, or any associated or affiliated companies.

8. I have read NI 43-101 and Form 43-101F1 and have prepared parts of the report entitled: **Technical Report Resource Estimation of the James, Redmond 2B and Redmond 5 Mineral deposits Located in Labrador, Canada for Labrador Iron Mines Limited dated December 18th, 2009"** in compliance with NI 43-101 and Form 43-101F1.

9. To the best of my knowledge, information and belief, and, as of the date of this certificate, the parts I wrote in this technical report contains all scientific and technical information that is required to be disclosed to make this section of the technical not misleading.

Signed at Blainville, Quebec this December 18th, 2009

Signed

Maxime Dupéré, geo.

24-Appendix 1

Mineralized intersections of the James mineral deposit

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
CS70-1	0	25.39	30	67.43	-1	-1	-1	-1
CS70-2	6.1	9.14	40	54.4	-1	-1	-1	-1
CS72-1	0	24.38	30	66.26	-1	-1	-1	-1
CS72-3	0	18.29	30	63.67	-1	-1	-1	-1
CS72-4	10.97	25.96	30	62.91	-1	-1	7.5	-1
CS73-1	0	9.14	40	58.3	-1	-1	-1	-1
CS73-1	9.14	50.29	30	64.51	-1	-1	-1	-1
CS74-1	0	33.53	30	59.64	-1	-1	-1	-1
CS74-2	15.24	39.62	80	51.56	-1	-1	-1	-1
CS74-2	39.62	70.1	30	60.19	-1	-1	-1	-1
CS74-3	16.76	33.53	80	52.93	-1	-1	-1	-1
CS75-1	0	4.57	30	67	-1	-1	-1	-1
CS75-1	12.19	27.12	40	58.43	-1	-1	-1	-1
CS75-2	24.38	41.15	80	51.95	-1	-1	-1	-1
CS75-2	41.15	52.82	40	57.46	-1	-1	-1	-1
CS76-1	0	12.19	40	56.04	-1	-1	-1	-1
CS76-2	28.96	41.15	80	51	-1	-1	-1	-1
CS76-2	41.15	50.6	80	52.17	-1	-1	-1	-1
CS76-2	50.6	77.11	40	57.71	-1	-1	-1	-1
CS76-3	0	6.1	30	60.25	-1	-1	-1	-1
CS76-4	0	5.8	30	61.6	-1	-1	-1	-1
CS77-1	0	12.19	80	51.23	-1	-1	-1	-1
CS77-1	59.44	67.06	40	56.76	-1	-1	-1	-1
CS77-2	76.2	79.25	80	44.6	0.01	0.02	34.5	0.3
CS78-2	0	6.1	71	55.5	0.01	0.31	18.95	0.25
CS78-3	33.53	53.19	71	53.92	0.02	1.4	19.41	0.63
CS78-4	47.24	65.53	80	52.06	-1	-1	-1	-1
CS79-3	3.05	12.19	40	58.57	-1	-1	-1	-1
CS79-3	12.19	30.48	40	57.7	-1	-1	-1	-1
CS80-1	3.05	9.14	40	53.35	0.04	0.09	16.61	4
CS80-2	0	15.24	72	51.06	0.02	0.11	25.8	0.46
CS80-3	0	18.29	40	54.65	0.12	1.53	13.43	0.72
CS80-3	30.48	39.62	71	52.04	0.03	0.72	22.66	0.4
CS80-3	60.96	85.34	71	55.04	0.02	0.81	19.39	0.37
CS82-1	0	12.19	30	61.5	-1	-1	-1	-1
CS82-2	0	18.29	80	50.87	-1	-1	-1	-1
CS82-3	0	3.66	30	61.3	-1	-1	-1	-1
CS82-4	0	3.96	40	55.73	-1	-1	-1	-1
CS82-5	0	8.53	40	57.54	-1	-1	-1	-1
CS82-6	1.52	4.57	80	44.2	-1	-1	-1	-1
CS83-1	0	13.72	72	50.41	0.02	1.1	24.54	0.36
CS83-1	15.24	35.05	40	57.5	0.03	1.14	13.99	0.32
CS83-1	35.05	41.15	80	37.43	0.01	0.2	44.21	0.37
CS83-1	44.2	56.39	80	43.68	0.02	0.44	29.6	0.74
CS83-3	0	9.14	80	43.2	-1	-1	-1	-1
CS83-3	9.14	12.19	30	61.6	-1	-1	-1	-1
CS84-1	3.05	22.86	80	52.59	-1	-1	-1	-1
CS84-1	22.86	41.15	40	57.53	-1	-1	-1	-1

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
CS84-1	41.15	59.44	80	42.73	-1	-1	-1	-1
CS85-1	0	3.05	80	43.8	0.03	0.24	32.9	0.5
CS85-2	7.62	25.91	30	60.2	-1	-1	-1	-1
CS85-2	25.91	36.58	40	58.96	-1	-1	-1	-1
CS85-3	0	21.34	30	55.74	0.14	1.84	7.96	0.99
CS85-3	21.34	39.62	71	51.17	0.02	1.39	22.55	0.52
CS85-3	48.77	70.1	40	58.52	0.03	1.36	11.5	0.59
CS85-3	70.1	73.15	71	51.7	0.03	0.28	20.9	0.5
CS86-1	0	18.29	30	62.9	-1	-1	-1	-1
CS86-1	27.43	76.2	30	59.37	-1	-1	-1	-1
CS86-2	0	15.24	40	55.99	-1	-1	-1	-1
CS87-1	0	33.53	80	44.92	-1	-1	-1	-1
CS87-2	0	12.19	40	58.43	-1	-1	-1	-1
CS87-3E	50.29	62.48	30	61.6	-1	-1	-1	-1
CS87-3N	0	7.62	30	61.3	-1	-1	-1	-1
CS88-2	0	36.58	30	62.21	-1	-1	-1	-1
CS88-3	0	7.62	30	61.66	-1	-1	-1	-1
CS88-4	21.34	64.01	40	56.38	-1	-1	-1	-1
CS89-1	0	85.34	30	61.43	0.07	0.76	7.21	2.36
CS89-2	0	32	30	63.44	-1	-1	-1	-1
CS90-1	0	76.81	30	60.96	-1	-1	-1	-1
CS90-1	76.81	80.77	40	54.6	-1	-1	-1	-1
CS90-2	0	6.1	80	39.45	-1	-1	-1	-1
CS90-3	19.81	39.62	40	55.02	-1	-1	-1	-1
CS91-1	12.19	67.06	30	62.79	-1	-1	-1	-1
CS91-1	67.06	82.3	40	56.58	-1	-1	-1	-1
CS92-1	0	3.05	30	63	-1	-1	-1	-1
CS92-2	6.1	54.9	30	63.59	0.02	0.22	7.41	0.34
CS93-2	27.43	36.58	30	59.87	-1	-1	-1	-1
CS93-3	0	45.72	30	63.2	-1	-1	4.94	-1
CS93-4	32	74.68	30	64.74	-1	-1	-1	-1
CS93-4	80.77	91.44	30	60.6	-1	-1	-1	-1
CS94-1	0	24.38	40	57.32	-1	-1	-1	-1
CS94-2	0	51.82	30	62.31	-1	-1	-1	-1
CS95-1	9.14	72.24	30	60.84	-1	-1	-1	-1
JM-TR-06-01	12.5	21.8	80	34.05	0.03	0.03	45.21	2.44
JM-TR-06-01	36.3	88.3	71	54.59	0.02	0.09	18.35	0.14
JM-TR-06-01	88.3	113.3	40	54.56	0.03	0.53	16.81	0.42
KLTR-02-2005	0	55	30	62.73	0.04	0.8	4.91	0.22
RC-JM001-2008	3	27	30	63.25	0.03	1.03	6.22	0.18
RC-JM001-2008	27	33	71	52.17	0.03	0.14	22.5	0.75
RC-JM002-2008	0	18	40	57.51	0.03	0.14	14.79	0.33
RC-JM002-2008	18	39	71	53.63	0.02	0.81	20.44	0.32
RC-JM002-2008	45	57	40	56.04	0.08	1.48	12.18	0.54
RC-JM003-2008	0	27	71	52.48	0.03	1.43	20.14	0.72
RC-JM003-2008	33	47	40	55.45	0.1	0.85	11.64	0.67
RC-JM004-2008	3	39	30	61.44	0.03	1.62	8.34	0.28
RC-JM004-2008	39	48	72	51.48	0.02	0.28	24.43	0.16
RC-JM005-2008	0	6	80	38.74	0.04	0.1	34.3	5.81
RC-JM006-2008	3	6	40	59.1	0.01	0.02	15.4	0.15
RC-JM006-2008	6	27	72	52.06	0.03	0.19	23.46	0.21
RC-JM006-2008	27	33	40	60.47	0.03	0.1	12.45	0.32
RC-JM006-2008	33	39	71	54.66	0.03	0.05	20.15	0.23

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
RC-JM007-2008	0	21	72	50.75	0.04	0.16	24.39	0.48
RC-JM008-2008	0	57	40	57.05	0.02	0.06	16.75	0.36
RC-JM008-2008	66	72	71	54.69	0.04	0.07	20.65	0.12
RC-JM009-2008	3	45	30	65.31	0.02	0.07	5.59	0.14
RC-JM009-2008	45	66	72	50.54	0.03	0.05	25.46	0.11
RC-JM010-2008	2	3	30	63.72	0.01	0.13	6.65	0.86
RC-JM011-2008	3	60	40	59.99	0.05	0.57	10.13	0.48
RC-JM012-2008	3	48	30	61.46	0.03	0.59	8.82	0.17
RC-JM013-2008	0	51	40	61.01	0.01	0.04	12.13	0.32
RC-JM013-2008	51	66	72	51.95	0.01	0.05	23.24	0.72
RC-JM014-2008	0	18	80	49.41	0.01	0.01	29.33	0.33
RC-JM014-2008	48	75	71	53.93	0.01	0.17	22.23	0.27
RC-JM015-2009	3	27	71	52.35	0.01	0.42	22.32	0.26
RC-JM016A-2009	24	33	72	50.72	0.01	0.02	25.43	0.2
RX101	0	16.76	40	56.35	0.03	0.18	16.05	0.45
RX101	16.76	41.15	40	55.76	0.04	0.16	17.21	0.49
RX1016M	0	51.82	40	58.04	0.04	0.2	13.14	0.55
RX1017M	39.62	57.91	72	51.74	0.01	0.16	23.64	0.85
RX1017M	57.91	82.3	40	56.18	0.02	0.6	15.71	0.36
RX1018M	15.24	54.86	40	61.63	0.02	0.13	10.18	0.29
RX1018M	54.86	76.2	71	53.51	0.02	0.37	21.46	0.69
RX1018M	76.2	106.68	40	56.18	0.02	0.29	16.44	0.59
RX1019M	76.2	82.3	40	57.82	-1	0.61	14.72	-1
RX101B	0	22.86	40	59.31	0.04	0.17	10.58	1.52
RX101B	22.86	24.38	71	52.2	0.05	0.21	22.93	1
RX102	0	24.38	30	55.47	0.16	1.22	7.96	1.3
RX1020M	27.43	64.01	40	57.82	0.02	0.7	15.35	0.35
RX1020M	64.01	79.25	71	52.19	0.01	0.69	22.58	0.4
RX1021M	0	15.24	80	49.85	0.02	0.1	20.24	0.57
RX1021M	15.24	57.91	30	62.48	0.01	0.63	9.89	0.48
RX1022M	0	12.19	71	52.51	0.01	0.11	22.98	0.5
RX1022M	12.19	54.25	40	56.95	0.03	1.4	12.95	0.59
RX1023M	0.91	33.53	40	56.9	0.02	0.81	12.67	0.47
RX1023M	33.53	39.62	71	52.89	0.02	0.28	21.6	0.4
RX1023M	57.91	70.1	40	52	0.02	2.38	14.42	0.53
RX1024M	0	54.86	30	58.74	0.06	1.33	9.4	0.41
RX1025M	6.1	30.48	40	58.03	0.02	0.1	13.06	0.36
RX1025M	30.48	33.53	71	55.53	0.02	0.16	18.42	0.3
RX1026M	45.72	51.82	71	53.09	0.01	0.27	22.97	0.4
RX1026M	51.82	76.2	40	59.58	0.01	0.77	13.55	0.46
RX1026M	76.2	82.3	71	52.84	0.02	1	20.89	0.4
RX1028M	3.05	51.82	30	61.16	0.02	0.66	9.87	0.25
RX1029M	15.24	30.48	71	51.64	0.02	0.1	22.28	0.5
RX1029M	51.82	60.96	71	51.63	0.03	0.3	22.17	0.23
RX102BD	6.1	12.19	40	59.75	0.01	0.13	13.01	-1
RX102BD	21.34	65.53	40	57.38	0.02	0.25	16.55	0.39
RX102BD	65.53	73.15	40	55.2	0.03	0.49	16.39	0.44
RX103	0	45.72	40	60.75	0.04	0.28	10.64	0.55
RX1030M	3.05	15.24	71	53	0.02	0.14	22.94	0.5
RX1030M	36.58	45.72	80	49.1	0.02	1.92	23.63	0.26
RX1030M	45.72	60.96	40	58.35	0.03	2.41	11.34	0.4
RX1030M	60.96	70.1	71	52.95	0.02	1.43	20.36	0.4
RX1031M	3.05	39.62	40	58.75	0.02	0.49	11.38	0.39

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
RX1031M	39.62	48.77	80	35.58	0.02	0.17	22.12	0.4
RX1032M	0	33.53	30	60.05	0.03	1.26	9.41	0.21
RX1032M	33.53	45.72	71	52.85	0.03	0.89	21.55	0.23
RX1033M	3.05	12.19	71	53.37	0.01	0.11	22.23	0.27
RX1033M	12.19	42.67	40	57.41	0.01	0.96	13.5	0.51
RX1033M	42.67	45.72	71	54.03	0.02	0.47	20.25	0.3
RX1034M	0	6.1	80	34.5	0.04	0.48	43.66	-1
RX1034M	30.48	57.91	40	57.57	0.02	1.67	13.25	0.2
RX1034M	57.91	69.19	71	55.48	0.02	1.11	20.32	0.4
RX1035M	0.91	27.43	40	55.47	0.01	1.32	17.77	0.28
RX1035M	27.43	30.48	71	53.25	0.01	1.32	18.7	0.5
RX1035M	42.67	54.86	73	50.85	0.03	0.26	26.45	0.7
RX1036M	0.61	18.29	71	52.78	0.02	0.12	22.6	0.4
RX1036M	33.53	45.72	40	55.84	0.01	0.72	16.19	0.3
RX1036M	45.72	54.86	71	54.34	0.01	0.33	19.87	0.2
RX1037M	0	3.05	40	58	0.02	1.7	13.7	0.4
RX1037M	3.05	12.19	71	52.3	0.02	1.1	21.56	0.6
RX1038M	0	18.29	71	54.31	0.01	0.23	20.45	0.67
RX1038M	48.77	73.15	71	55.3	0.01	0.48	19.8	0.65
RX1039M	9.14	18.29	71	54.87	0.03	0.86	18.2	0.2
RX1039M	24.38	33.53	71	52.02	0.02	0.67	22.51	0.6
RX104	6.1	16.76	40	57.01	0.02	0.11	16.22	0.21
RX104	16.76	21.34	72	52.57	0.01	0.11	23.82	0.17
RX104	24.38	32	72	51.72	0.02	0.17	23.38	0.2
RX1040M	0	3.05	72	50.83	0.03	0.2	24.08	0.5
RX1040M	3.05	27.43	40	56.33	0.04	1.9	14.84	0.56
RX1041M	3.05	30.48	40	57.62	0.02	0.63	15.24	0.11
RX1042M	0	12.19	40	53.31	0.03	0.16	16.41	0.4
RX1042M	12.19	39.62	71	54.43	0.03	0.19	18.66	0.51
RX1042M	39.62	42.67	40	56.07	0.02	0.2	17.89	0.6
RX1042M	42.67	48.77	71	53.53	0.03	0.13	20.23	0.6
RX1043M	0	15.24	40	58.46	0.02	0.1	11.06	0.42
RX1043M	15.24	27.43	71	54.27	0.03	0.1	20.68	0.5
RX1044M	0	12.19	40	57.58	0.02	0.91	14.86	0.4
RX1044M	12.19	27.43	72	52.03	0.02	0.5	23.9	0.46
RX1045M	0	15.24	40	59.85	0.02	0.26	10.86	0.52
RX1045M	15.24	21.34	71	56.01	0.02	0.34	20.86	0.35
RX1046E	0	6.1	80	38.13	0.01	0.35	42.76	-1
RX1046E	6.1	24.38	30	64.4	0.01	0.38	7.38	0.17
RX1046E	24.38	45.72	71	50.82	0.02	2.52	19.03	0.39
RX1048M	24.38	36.58	40	57.21	0.03	0.11	16.23	0.7
RX1048M	36.58	51.82	73	50.26	0.01	0.08	26.33	0.9
RX1049M	0	21.34	40	59.98	0.03	0.23	10.48	0.6
RX1049M	36.58	45.72	71	52.07	0.03	0.1	22.29	0.6
RX104B	0	25.6	30	65.2	0.03	0.13	5.47	0.17
RX105	0	27.43	40	57.41	0.02	0.79	13.62	0.67
RX105	27.43	30.48	40	56.39	0.02	0.74	16.78	0.6
RX1050M	54.86	60.96	72	50.59	0.01	0.08	25.92	0.75
RX1050M	85.34	91.44	72	51.8	0.04	0.19	23.29	0.25
RX1051M	85.34	91.44	73	51.09	0.01	0.09	26.07	0.5
RX1052M	0	57.91	40	61.01	0.01	0.13	11.16	0.48
RX1054M	0	39.62	30	56.41	0.06	1.44	9	0.49
RX1055M	0	24.38	40	57.69	0.03	0.26	13.27	0.63

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
RX1055M	24.38	30.48	40	55.75	0.03	1.16	16.52	0.35
RX1056M	76.2	82.3	71	53.91	0.03	0.64	18.73	0.35
RX1058M	1.22	15.24	40	61.77	0.03	0.17	10.36	0.2
RX1058M	15.24	24.38	71	50.63	0.02	0.1	21.81	0.4
RX1059M	12.19	27.43	72	52.22	0.01	0.13	23.38	0.36
RX1059M	48.77	60.96	72	51.68	0.02	1.58	23.38	0.37
RX105BD	10.67	19.81	30	64.09	0.02	0.1	6.66	0.6
RX105BD	39.62	48.77	72	52.46	0.02	0.1	25.51	0.4
RX105BD	48.77	71.63	40	57.64	0.02	0.1	16.36	0.33
RX105BD	71.63	86.26	72	54.15	0.03	0.18	25.05	0.46
RX106	0	24.38	71	52.8	0.02	0.12	19.75	1.45
RX106	24.38	38.1	71	53.49	0.02	0.15	19.84	0.51
RX106	38.1	73.15	40	58.98	0.03	1.72	11.18	0.37
RX1060M	3.05	21.34	40	56.64	0.1	0.13	10.89	0.7
RX1061M	0	48.77	30	62.64	0.02	0.18	8.62	0.24
RX1061M	48.77	73.15	80	48.4	0.02	0.53	26.78	0.24
RX1061M	73.15	79.25	40	54.45	0.01	0.2	15.5	1.1
RX1062M	6.1	42.67	40	60.18	0.02	0.89	10.56	1.21
RX1062M	42.67	57.91	71	55.3	0.03	0.43	18.88	0.38
RX1063M	12.19	33.53	40	59.44	0.03	0.21	13.19	0.2
RX1063M	33.53	36.58	71	55.88	0.09	0.17	18.42	0.2
RX1072M	30.48	42.67	80	48.94	0.02	0.88	24.86	1.1
RX1072M	42.67	51.82	40	58.8	0.03	0.4	11.37	0.3
RX1073M	3.05	6.1	40	59.7	0.01	0.2	12.5	0.4
RX1074M	0	9.14	30	59.6	0.02	1.4	9.1	0.4
RX1074M	9.14	27.43	71	51.25	0.01	2.08	19.6	0.92
RX1074M	27.43	42.67	30	55.1	0.08	1.14	7.78	0.68
RX1075M	0	36.58	40	56.86	0.01	0.63	15.81	0.42
RX1075M	36.58	39.62	71	52.5	0.02	0.3	22.2	0.3
RX1077M	0	18.29	40	59.88	0.03	0.33	11.57	0.27
RX1077M	43.59	54.86	80	49.18	0.02	2.85	20.95	1.22
RX1078M	85.34	106.68	40	54.52	0.01	1.31	14.26	0.43
RX1079M	67.06	73.15	71	54.8	0.01	1.25	19.15	1.1
RX1080M	24.38	33.53	72	50.47	0.01	0.4	25.3	0.23
RX1081M	3.05	9.14	40	55.85	0.01	0.35	16.75	0.35
RX1082CC	4.57	18.29	40	54.39	0.01	0.07	15.8	0.21
RX1082CC	33.53	60.96	71	53.32	0.01	1.82	22.14	0.14
RX1083CC	6.1	27.43	71	54.02	0.02	0.11	20.04	0.11
RX1083CC	27.43	39.62	40	56.9	0.02	0.13	14.7	0.1
RX1083CC	39.62	45.72	71	55.15	0.01	0.05	18.25	0.1
RX1084CC	0	42.67	40	57.96	0.02	0.08	13.72	0.16
RX1085CC	0	9.14	71	53.46	0.01	0.29	20.41	0.77
RX1085CC	9.14	42.67	72	53.17	0.01	0.02	23.51	0.12
RX1086CC	0	12.19	80	45.89	0.02	0.6	29.32	0.55
RX1086CC	12.19	21.34	72	52.7	0.02	0.77	24.8	0.37
RX1087CC	0	15.24	72	51.43	0.01	0.8	24.02	0.15
RX1088CC	15.24	39.62	40	59.66	0.02	0.88	11.15	0.19
RX1088CC	39.62	51.82	71	53.65	0.03	0.79	21.63	0.33
RX1089CC	21.34	27.43	71	53.55	0.02	0.08	21.2	0.15
RX1089CC	27.43	48.77	40	54.7	0.02	0.9	14.99	0.16
RX1090CC	0	48.77	40	59.67	0.03	0.3	11.1	0.19
RX1090CC	48.77	51.82	71	51.5	0.02	1.49	22.9	0.4
RX1091CC	0	36.58	40	60.46	0.02	0.97	11.98	0.24

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
RX1092CC	15.24	36.58	30	63.87	0.01	0.33	7.73	0.13
RX1092CC	36.58	51.82	80	49.24	0.02	0.08	23.9	0.26
RX1093CC	0	27.43	40	58.56	0.01	0.05	10.95	0.32
RX1093CC	27.43	36.58	80	49.27	0.02	0.04	26.8	0.47
TR-JM-071-2008	12	30	30	65.67	0.01	0.07	5.61	0.29
TR-JM-073-2008	9	27	71	55.75	0.03	0.06	18.25	0.39
TR-JM-073-2008	27	81	40	59.68	0.02	0.06	13.68	0.25
TR-JM-076-077-2008	18	30	40	54.13	0.03	1.48	17.23	1.2
TR-JM-076-077-2008	30	36	72	50.15	0.03	0.41	25.25	0.46
TR-JM-076-077-2008	36	45	80	49.45	0.03	0.08	26.4	0.4
TR-JM-076-077-2008	45	75	40	58.41	0.03	0.41	13.24	0.29
TR-JM-076-077-2008	75	81	71	52.7	0.03	0.06	21.7	0.34
TR-JM-076-077-2008	96	99	80	34.06	0.01	0.05	49.1	1.14
TR-JM-084-2008	0	18	71	54.13	0.03	1.05	19.08	0.61
TR-JM-084-2008	18	36	30	62.46	0.03	1.22	6.87	0.21
TR-JM-084-2008	36	45	40	59.85	0.03	1.66	10.58	0.31
TR-JM-084-2008	45	54	80	44.69	0.01	0.12	34.23	0.27
TR-JM-086-2008	6	12	72	50.08	0.03	0.99	23.3	0.58
TR-JM-086-2008	12	54	80	48.9	0.03	0.67	26.05	0.44
X676C	0	25.39	80	23.18	0.05	0.35	59.05	-1

Mineralized intersections of the Redmond 2B mineral deposit

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
RC-RD2B001-2008	0	6	30	56.52	0.14	1.4	9.55	1.9
RC-RD2B002-2008	0	9	30	59.68	0.13	0.1	4.68	3.17
RC-RD2B002-2008	15	27	80	55.23	0.14	0.9	6.58	5.05
RC-RD2B004-2008	0	9	30	64.83	0.09	0.07	3.17	1.67
RC-RD2B005-2008	0	18	30	63.51	0.09	0.08	2.65	1.2
RC-RD2B006-2008	0	3	40	56.72	0.03	0.04	17.4	0.93
RC-RD2B006-2008	24	30	40	54.23	0.14	0.08	10.24	1.96
RC-RD2B007-2008	0	9	40	54.55	0.15	3.44	5.05	2.38
RC-RD2B010-2008	0	15	30	55.09	0.16	0.19	7.39	4.51
RC-RD2B011-2008	24	36	40	55.13	0.15	0.22	15.14	2.29
RC-RD2B012-2008	0	12	40	51.86	0.07	0.3	9.26	2.22
RC-RD2B012-2008	24	30	30	59.98	0.12	0.07	6.59	3.62
RC-RD2B022-2009	3	6	30	55.57	0.31	0.05	4.92	3.83
TR-RD2B-001-2008	0	54	30	62.13	0.08	0.08	1.99	1.12
TR-RD2B-001-2008	60	114	30	57.38	0.16	0.15	5.18	2.99
TR-RD2B-001-2008	135	150	30	58.15	0.1	0.61	7.38	2.43
TR-RD2B-002-2008	0	39	30	63.2	0.12	0.08	2.29	1.02
TR-RD2B-002B-2009	0	6	30	63.41	0.08	0.69	2.05	0.88
TR-RD2B-003-2008	3	12	30	59.5	0.15	2.2	5.05	2.26
TR-RD2B-003-2008	36	60	30	59.88	0.1	0.09	6.2	2.05
TR-RD2B-003-2008	93	156	30	62.73	0.09	0.08	2.55	1.63
TR-RD2B-003B-2009	0	15	30	60.34	0.16	0.96	3.06	1.46
TR-RD2B-004-2009	15	51	30	60.39	0.1	0.55	6.52	1.63
TR-RD2B-004-2009	69	75	30	55.7	0.12	2.1	8.34	2.01
TR-RD2B-005-2009	6	69	30	58.48	0.17	0.14	3.55	1.79
TR-RD2B-005-2009	81	96	30	59.79	0.14	0.54	3.19	2.3
TR-RD2B-005B-2009	0	39	30	60.97	0.12	0.15	2.23	1.62
TR-RD2B-006-2009	6	21	30	59.03	0.16	0.35	4.57	3.48

Mineralized intersections of the Redmond 5 mineral deposit

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
RC-RD5001-2008	3	21	40	51.7	0.034	0.741	17.87	0.578
RC-RD5001-2008	21	30	30	57.77	0.08	0.718	6.93	0.993
RC-RD5004-2008	3	36	30	59.29	0.048	1.18	7.51	0.642
RC-RD5004-2008	42	51	30	55.44	0.09	1.887	7.07	2.62
RC-RD5006-2008	0	21	60	48.67	0.061	5.893	10.59	2.14
RC-RD5006-2008	24	30	80	33.89	0.059	2.211	30.9	8.44
RC-RD5007-2008	3	12	30	60.59	0.026	0.545	7.17	0.547
RC-RD5008-2008	9	18	40	55.3	0.023	0.377	17.03	0.423
RC-RD5008-2008	21	42	30	60.8	0.029	0.259	6.84	0.537
RC-RD5009-2008	3	15	30	55.52	0.057	2.908	7.54	0.72
RC-RD5010-2008	3	12	71	52.74	0.026	0.145	21.27	0.35
RC-RD5010-2008	24	27	30	60.85	0.044	0.349	7.04	0.79
RC-RD5010B-2008	6	12	72	50.36	0.026	0.182	24.35	0.375
RC-RD5011-2008	6	30	30	58.76	0.067	2.54	3.55	1.293
RC-RD5012-2009	18	24	72	50.98	0.017	0.062	24.57	0.185
RC-RD5012A-2009	18	27	80	49.38	0.015	0.111	27.65	0.273
RC-RD5013-2009	21	30	71	54.05	0.013	0.385	18.6	0.23
RC-RD5013-2009	30	60	40	54.08	0.055	0.356	12.06	0.769
RC-RD5014-2009	0	3	71	50.46	0.039	0.072	20.71	0.37
RC-RD5014-2009	3	18	30	55.01	0.045	1.099	9.8	0.61
RC-RD5015-2009	0	24	30	58.55	0.022	0.305	6.79	0.532
RC-RD5016-2009	6	24	40	55.08	0.031	2.554	10.59	0.632
RC-RD5016A-2009	6	27	30	57.43	0.037	1.611	7.98	0.843
RC-RD5017-2009	3	36	30	58.36	0.061	1.065	4.26	0.778
RC-RD5017-2009	42	48	40	54.84	0.074	3.396	6.51	2.82
RE-5001CC	4.57	21.34	80	47.67	0.092	0.748	21.24	0.282
RE-5001CC	21.34	30.48	30	55.6	0.058	0.35	8.9	0.7
RE-5002CC	15.24	28.96	40	51.83	0.055	0.279	14.89	0.733
RE-5003CC	0	12.19	80	42.2	0.039	1.166	22.45	2.175
RE-5003CC	21.34	30.48	60	54.55	0.19	3.76	3.65	1.45
RE-5006CC	3.05	15.24	50	50.13	0.127	7.572	5.65	1.825
RE-5007CC	18.29	24.38	40	55.6	0.025	0.225	14.6	0.45
RE-5013CC	7.01	45.72	30	56.2	0.09	0.398	7.53	0.752
RE-5017CC	9.14	27.43	30	56.42	0.063	0.38	6.36	0.98
RE-5018CC	6.71	18.29	40	53.85	0.047	1.056	13.83	1.695
RE-5018CC	30.48	57.91	40	52.34	0.067	1.925	11.09	0.938
RE-5019CC	30.48	39.62	40	54.67	0.034	0.093	17.27	0.5
RE-5019CC	39.62	54.86	80	47	0.025	0.1	25.26	0.4
RE-5019CC	54.86	74.68	30	55.54	0.086	0.642	8.96	0.762
RE-5021CC	6.1	12.19	40	51.2	0.053	0.48	13.5	1.75

Hole Name	From	To	Ore Type	Fe	P	Mn	SiO2	Al2O3
RE-5022CC	54.86	57.91	30	55	0.052	0.47	9.7	0.7
RE-5025CC	12.19	15.24	40	50	0.103	0.11	14.9	1.2
RE-5026CC	7.62	12.19	40	53.73	0.021	0.54	17.83	0.5
RE-5027CC	6.1	15.24	40	51	0.145	0.203	12.37	3.833
RE-5030CC	4.57	12.19	30	55.64	0.086	1.828	3.68	1.22
RE-5031CC	6.1	15.24	40	55.83	0.023	0.173	14.33	0.467
RE-5039CC	9.14	27.43	30	56.48	0.045	1.585	5.73	0.6
TR-RD5-001-2008	6	18	71	52.88	0.017	0.168	21.98	0.68
TR-RD5-001-2008	18	39	30	57.34	0.047	1.614	8.7	1.024
TR-RD5-002-2008	0	33	60	55.74	0.119	4.592	4.59	2.047
TR-RD5-003-2008	18	24	40	53.79	0.033	1.305	11.65	0.47
TR-RD5-003-2008	24	48	80	49.41	0.043	0.163	22.3	0.507
TR-RD5-005-2009	0	12	30	57.81	0.045	0.183	7.68	0.677
TR-RD5-006-2009	0	30	30	56.59	0.022	3.424	7.2	0.579
TR-RD5-007-2009	15	36	60	52.44	0.052	4.722	10.09	1.124
TR-RD5-008-2009	39	48	80	25	0.08	0.974	50.88	4.273
TR-RD5-008-2009	48	66	60	50.63	0.041	5.376	9.4	0.963
X-1790CC	15.24	24.38	71	52.83	0.029	0.143	18.37	0.467
X-1790CC	24.38	51.82	40	55.19	0.03	0.226	12.03	0.656
X-1791CC	0	12.19	40	53.3	0.043	0.642	13.6	0.55
X-1791CC	12.19	21.34	30	56.43	0.102	0.597	7.1	0.6
X-1792CC	15.24	24.38	71	50.83	0.024	0.207	21.5	0.5
X-1792CC	24.38	33.53	40	53.8	0.032	0.35	13.9	0.567
X-1792CC	33.53	42.67	30	56.37	0.053	1.863	5.93	0.8
X-1793CC	21.34	27.43	80	49.85	0.017	0.145	24.1	0.4
X-1793CC	36.58	48.77	40	53.58	0.043	0.215	14.4	0.8
X-1793CC	48.77	60.96	30	56.27	0.05	0.218	7.72	0.775
X-1794CC	6.1	33.53	30	57.6	0.033	1.132	8.01	0.6
X-1794CC	42.67	49.99	60	50.98	0.063	5.031	8.88	1.883
X-1797CC	3.05	21.34	30	58.15	0.068	0.223	4.22	1
X-1797CC	27.43	33.53	30	55.55	0.084	2.57	6.4	1.7