Technical Report: Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada For Labrador Iron Mines Holdings Limited

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Respectfully submitted to:
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1. SUMMARY

This Technical Report addresses the ongoing exploration and development of the iron ore projects on various deposits owned and operated by Labrador Iron Mines Holdings Limited ("LIMHL")in western Labrador and north eastern Quebec. The Report has been produced as a result of additional metallurgical test work and process design and following the completion of the construction of the Silver Yards processing plant facility and other associated infrastructure and the commencement of initial mining at the James deposit.

The Report makes recommendations regarding further exploration on the various deposits and regarding other associated work required to advance the deposits towards production. The Report discusses a preliminary production schedule for these current resources.

The authors are "qualified persons" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators.

The authors of this report are independent within the meaning of NI 43-101 of Labrador Iron Mines Holdings Limited ("LIMHL"), Schefferville Mines Incorporated ("SMI") and of Labrador Iron Mines Limited ("LIM"), wholly owned subsidiaries of LIMHL which holds the mineral claims on which the iron deposits are located.

The current compliant resource estimates for the James, Redmond and Knob Lake deposits are summarised in Table 1-1.

Table 1-1: NI 43-101 Compliant Resources, James, Redmond & Knob Lake

Area	Classification	Tonnes (x1000)	Fe%	P%	Mn%	SiO_2%	Al_2O_3%
James	Indicated	6,670	57.40	0.02	0.70	14.60	0.40
	Inferred	103	53.40	0.04	0.10	19.70	0.50
Redmond 2B	Indicated	849	59.90	0.12	0.40	5.10	2.10
	Inferred	30	57.30	0.13	0.60	5.90	4.10
Redmond 5	Indicated	2,084	55.00	0.05	1.20	11.00	0.80
	Inferred	78	52.30	0.07	2.00	10.80	1.00
Knob Lake 1 Total (Fe Ore + Mn Ore)	Measured	3,221	54.48	0.07	1.54	10.02	0.50
	Indicated	2,494	53.87	0.06	1.42	11.10	0.49
	Inferred	870	52.04	0.08	1.84	12.87	0.44
TOTAL	**Measured**	**3,221**	**54.48**	**0.07**	**1.54**	**10.02**	**0.50**
	Indicated	**12,097**	**56.43**	**0.04**	**0.91**	**12.59**	**0.61**
	Inferred	**1,081**	**52.33**	**0.08**	**1.65**	**13.18**	**0.59**

1.1 PROPERTY DESCRIPTION AND LOCATION

As of March 31st, 2012 LIM holds title to 55 Mineral Rights Licenses issued by the Department of Natural Resources, Province of Newfoundland and Labrador, representing 659 mineral claims located in western Labrador covering approximately 16,475 hectares. SMI holds interests in 298 Mining Rights issued by the Ministry of Natural Resources, Province of Quebec, covering approximately 12,097 hectares. SMI also holds an exclusive operating license in a mining lease covering 23 parcels totalling about 2,036 hectares. The LIM and SMI properties are located in the western central part of the Labrador Trough iron range and are located approximately 1,000 km northeast of Montreal and adjacent to or within 70 km from 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 Labrador properties are located inside a 70 km radius from Schefferville. The James, Houston, Knob Lake 1, Gill, Ruth Lake 8, Denault, and Redmond deposits are within 20 km from Schefferville and form the first group of properties from which mining would commence. The Sawyer Lake and Astray Lake properties are some 50 to 65 km southeast from Schefferville and cut off from the local infrastructure by connected lakes. The Howse and Kivivic deposits are some 25 and 45 km northwest from Schefferville.

The SMI properties in Quebec are all within a 70 km radius from Schefferville with the exceptions of Eclipse and Murdoch Lake which are about 85 km distant. The properties close to Schefferville are mostly accessible by gravel roads while the properties far away from the town are only accessible by helicopter.

1.2 History

The Quebec-Labrador iron range has a tradition of mining since the early 1950s and is one of the largest iron producing regions in the world. The former direct shipping iron ore ("DSO") operations at Schefferville (Quebec and Labrador) operated by Iron Ore company of Canada ("IOC") produced in excess of 150 million tons of lump and sinter fine ores over the period 1954-1982.

The first serious exploration in the Labrador Trough occurred in the late 1930s and early 1940s when Hollinger North Shore Exploration Company Limited ("Hollinger") and Labrador Mining and Exploration Mining Company Limited ("LM&E") acquired large mineral concessions in the Quebec and Labrador portions of the Labrador Trough. Mining and shipping from the Hollinger lands began in 1954 under the management of the IOC, a company specifically formed to exploit the Schefferville area iron deposits.

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

Following the closure of the IOC mining operations the mining rights held by IOC in Labrador reverted to the Crown. Between September 2003 and March 2006, Fenton and Graeme Scott, Energold Minerals Inc. ("Energold") and New Millennium Capital Corp. ("NML") began staking claims over the soft iron ores in the Labrador part of the Schefferville camp. Recognizing a need to consolidate the mineral ownership, Energold and subsequently LIMHL, entered into agreements together. LIMHL subsequently acquired additional properties in Labrador by staking. In 2009, SMI acquired the properties in Quebec held by Hollinger. All of the properties comprising LIMHL's Schefferville area projects were part of the original IOC Schefferville holdings and formed part of the 250 million tons of reserves and resources identified but not mined by IOC in the area.

The IOC historical iron ore resources contained within LIMHL's properties in Labrador, not including James, Redmond 2B, Redmond 5 and Houston deposits, total 60.8 million tonnes with grades greater than 50% Fe (Table 1-7) and are not yet compliant with the standards prescribed by

NI 43-101. They are predominantly based on estimates made by IOC in 1982 and published in their Direct Shipping Ore Reserve Book published in 1983. The IOC historical iron ore resources contained within SMI's Quebec holdings, not including Denault, total 60.5 million tonnes with grades greater than 50% Fe (Table 1-7)

1.3 GEOLOGY

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

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

The Labrador Trough contains four main types of iron deposits:

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

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.

Only the direct shipping ore is considered beneficial to produce lump and sinter feed and will be part of the resources for the LIMHL project.

1.4 EXPLORATION

Most historic exploration on the properties was carried out by IOC until the closure of their operation in 1982. A considerable amount of data used in the evaluation of the current status of the resource and reserve evaluation is provided in the documents, sections and maps produced by IOC or by consultants working for them. Recent exploration was carried out by LIMHL since 2005. On some of the properties trench sampling as well as bulk sampling, was carried out. The exploration data used for the NI 43-101 compliant resource estimates has been developed for the James, Redmond 2B, Redmond 5, Knob Lake 1 and Denault deposits. Additional exploration drilling and trenching will be required for the other deposits to confirm the historical resource estimates and to be able to produce NI 43-101 compliant resource estimations.

Additional bulk sampling for metallurgical testing will also be necessary to prepare the final process flow sheet for treatment of the iron and manganiferous ore resources from these deposits.

1.5 DRILLING AND SAMPLING

Diamond drilling of the Schefferville iron deposits has been a problem historically in that the alternating hard and soft ore zones tend to preclude good core recovery. Traditionally IOC used a combination of reverse circulation (RC) drilling, diamond drilling and trenching to generate data for reserve and resource calculation. A significant portion of the original IOC data has been recovered and reviewed by LIMHL. Systematic drilling has been carried out on sections 30 metres apart.

During the time that IOC owned the properties, sampling of the exploration targets were by trenches and test pits as well as drilling. In the test pits and trenches geological mapping determined the lithologies and the samples were taken over 10 feet (3.0 metres). The results were plotted on vertical cross sections. All drilling and sampling of the iron deposits covered in this Report has been carried out by LIMHL during 2006, 2008 to 2011, predominantly with RC drilling. The geological sections originally prepared by IOC have been updated with the information obtained through LIMHL's exploration.

Including Labrador and Quebec (excluding the Houston Property drill holes) A total of 14,407 metres of RC drilling in 268 holes were drilled to the date of this effective of this report. A total of 54 trenches totalling 3,438 metres of trenching has been carried out on the James, Knob Lake No.1, Redmond 2B, Redmond 5, Gill and Ruth Lake 8 deposits.

A bulk sample program was started in 2006 (3,600 kgs from James and Houston) with the major bulk sampling conducted in 2008. During that year, a total of 5,900 tonnes was excavated from the James South, Knob Lake 1, Redmond 5 and the Houston deposits. No bulk samples have been taken from any of the other deposits.

1.6 SAMPLE PREPARATION, SECURITY AND DATA VERIFICATION

The IOC sampling procedures have not been located but it is believed that LIMHL has followed similar procedures to those used by IOC in the past. All samples were prepared in the preparation laboratory, located in Schefferville, that was established by LIMHL. Sampling as well as the preparation was carried out under supervision of LIMHL or SGS Geostat personnel by experienced geologists or technicians following well-established sampling and preparation procedures. The samples were reduced to representative smaller size samples that were sent to SGS Lakefield laboratory or ACTLABS for further analysis and testing.

1.7 METALLURGICAL TESTING

During February 1989, three mineralized samples comprising approximately 12.7 tonnes or 45 drums of James ore were treated at Lakefield Research Laboratories (now SGS-Lakefield), Lakefield, Ontario. In 1990, a bulk sample of mineralized material from James deposit weighing approximately three tonnes was transported to Centre de Recherches Minerales ("CDRM"), Quebec City, for testing.

Trench samples taken by LIMHL in 2006 from the James and Houston deposits were tested for compressive strength, crusher work index and abrasion index at SGS Lakefield. Composite crushing, dry and wet screen analysis, washing and classification tests were done at “rpc”, The Technical Solutions Centre in Fredericton, New Brunswick.

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

The 2008 bulk sample program, during which a total of some 5,900 tonnes was collected, provided 200 kg samples from each of the raw ore types, (James: blue ore, Knob Lake 1: red ore, Houston: blue ore and Redmond 5: blue ore) that were sent to SGS Lakefield laboratories for metallurgical testing. Other tests (angle of repose, bulk density, moisture, and direct head assay and particle size analysis determinations) were also carried out. Preliminary scrubber tests were performed on all four samples. Only the James South sample was submitted for Crusher Work Index tests. The potential of beneficiation by gravity was explored by Heavy Liquid Separation and Vacuum filtration test work was also carried out by Outotec.

The material collected from the James South bulk sample was sent to a number of other laboratories for additional test work, including Derrick Corporation for screening tests, Outotec in Jacksonville, Florida, and SGA Laboratories in Germany for Sinter Tests and Lump Ore characterization. Material from the Redmond deposit was sent to MBE Coal & Minerals Technologies in Germany and to Corem in Quebec City.

Based on the samples provided to it which were solely sourced from the James blue ore, SGA concluded: “In summary, it can be stated that the tested sample showed excellent sintering behaviour, clearly improving sintering productivity and metallurgical properties of the sinters. The high iron content and low gangue as well as the low portion of fines determines the high quality of this ore grade. Such fines will be well accepted in the market.” SGA also concluded: “High reducibility evaluated for James South being superior to other ore grades on the European market. In summary, it can be stated that James South ore represents a high quality lump ore grade which will be well accepted on the European market.”

The samples sent to Derrick Corporation for screening test work determined optimum screen capacity and design for sinter fines production. From the material sent to Derrick Corporation, a sample of -300 microns was sent to Outotec (USA) Inc., for Wet Gravity Separation and Magnetic Separation using HGMS Magnet test work. The results of this study indicate that it is possible to produce an iron product containing +65% Fe and less than 5% silica using wet gravity separation, followed by spiral concentration. Recovery of 83% Fe was achieved. Testing using a magnetic separator to recover Fe from the Floatex overflow combined with the gravity tail produced a product containing 65.1% Fe.

Lump and fine samples were sent to MBE for BATAC jig tests. The test work indicated that a concentrate grade of +65% Fe for the fines +65 % Fe for lump ore is possible.

Ten samples from the James deposit were sent to SGS Lakefield in 2010 for mineralogical characterization to aid with the metallurgical beneficiation program.

FL Smidth Minerals carried out tests on the Density Separator product for James deposit samples to confirm feasibility of using Pan Filters to decrease the moisture content of the concentrate. The filtration results clearly indicate that filter cake with moisture in the range of 8% is achievable.

No metallurgical testing has been carried out on any deposits other than James, Redmond 5, Houston and Knob Lake 1.

1.8 Mineral Resources

As of the date of this Report, the current resource estimates for the James Redmond2B, Redmond 5 and Knob Lake No.1 deposits are summarised in Table 1-4, Table 1-5 and Table 1-6.

Table 1-2: Estimated Mineral Resources James Deposit (NI 43-101 Compliant)

Area	Ore Type	Classification	Tonnage	SG	Fe(%)	P(%)	MN(%)	SiO2(%)	Al2O3 (%)
James	Fe Ore	Measured (M)	-	-	-		-	-	-
		Indicated(I)	6,670,000	3.43	57.42	0.021	0.65	14.59	0.42
		TotalM+I	**6,670,000**	3.43	57.42	0.021	0.65	14.59	0.42
		Inferred	103,000	3.34	53.42	0.035	0.14	19.77	0.48

Dated March 31st, 2012.

Table 1-3: Estimated Mineral Resources Redmond 2B and 5 Deposits (NI 43-101 Compliant)

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
Redmond 2B	**NB-LNB**	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	849,000	3.71	59.86	0.120	0.37	5.05	2.09
		Total (M+I)	**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
	HiSiO2	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Total (M+I)	**-**	**0.00**	**0.00**	**0.000**	**0.00**	**0.00**	**0.00**
		Inferred	-	0.00	0.00	0.000	0.00	0.00	0.00
	HMN-LMN	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Total (M+I)							
		Inferred	-	0.00	0.00	0.000	0.00	0.00	0.00
	Fe Ore (NB-LNB and HiSiO2)	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	849,000	3.71	59.86	0.120	0.37	5.05	2.09
		Total (M+I)	**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

Restated March 31st, 2012

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
Redmond 5	**NB-LNB**	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	1,793,000	3.40	55.55	0.051	1.32	9.26	0.87
		Total (M+I)	**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	Measured (M)							
		Indicated(I)	291,000	3.30	51.23	0.029	0.24	21.54	0.41
		Total (M+I)	**291,000**	**3.30**	**51.23**	**0.029**	**0.24**	**21.54**	**0.41**
		Inferred	-	0.00	0.00	0.000	0.00	0.00	0.00
	HMN-LMN	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Total (M+I)							
		Inferred	-	0.00	0.00	0.000	0.00	0.00	0.00
	Fe Ore (NB-LNB and HiSiO2)	Measured (M)							
		Indicated(I)	2,084,000	3.40	54.95	0.048	1.17	10.97	0.81
		Total (M+I)	**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

Restated March 31st, 2012

Table 1-4: Estimated Mineral Resources for Knob Lake 1 (NI 43-101 Compliant)

Area	Ore Type	Classificatio	Tonnage	SG	Fe(%)	P(%)	MN(%)	SiO2(%)	Al2O3(%)
Knob Lake No.1	Fe Ore	Measured	2,838,000	3.38	55.02	0.07	1.00	10.22	0.48
		Indicated(I)	2,264,000	3.36	54.33	0.06	1.08	11.19	0.46
		TotalM+I	5,102,000	3.37	54.71	0.07	1.03	10.65	0.47
		Inferred	724,000	3.32	52.32	0.09	1.25	13.40	0.45
Knob Lake No.1	Mn Ore	Measured	383,000	3.28	50.52	0.09	5.57	8.53	0.68
		Indicated(I)	230,000	3.25	49.37	0.08	4.78	10.21	0.79
		TotalM+I	613,000	3.27	50.09	0.08	5.34	9.16	0.72
		Inferred	146,000	3.28	50.63	0.05	4.79	10.27	0.40
Knob Lake No.1	Total	Measured	3,221,000	3.37	54.48	0.07	1.54	10.02	0.50
		Indicated(I)	2,494,000	3.35	53.87	0.06	1.42	11.10	0.49
		TotalM+I	5,715,000	3.36	54.21	0.07	1.50	10.49	0.50
		Inferred	870,000	3.31	52.04	0.08	1.84	12.87	0.44

All other resource estimates quoted in this Report are based on prior data and reports prepared by IOC prior to 1983 and were not prepared in accordance with NI 43-101. These historical estimates are not current and do not meet NI 43-101 Definition Standards. A qualified person has not done sufficient work to classify the historical estimate as current mineral reserves. These historical results provide an indication of the potential of the properties and are relevant to ongoing exploration. The historical estimates should not be relied upon

The IOC estimated mineral resources and reserves were published in their DSO Reserve Book published in 1983. The estimate was based on geological interpretations on cross sections and the calculations were done manually. Tables 1-7 and 1-8 show the summary of the estimate of the (non-compliant with NI 43-101) historical mineral resources of the LIM owned deposits in Labrador and the SMI deposits in Quebec. IOC categorized their estimates as “reserves”. The authors have adopted the same principle used in the 2007 Technical Report prepared by SNC-Lavalin that these should be categorized as “resources” as defined by NI 43-101.

The IOC classification reported all resources (measured, indicated and inferred) in the total mineral resource.

Table 1-5: Summary of Historical IOC Mineral Resource Estimates in Labrador (Non-compliant with NI 43-101)

Property	Historical Iron Resources			Historical Manganese Resources			
	Tonnes (x 1000)	Fe%	SiO_2%	Tonnes (x 1000)	Fe%	SiO_2%	Mn%
Astray Lake	7,818	65.6	3.9				
Howse	28,228	58	5				
Sawyer Lake	12,000	61.8	11.4				
Gill Mine	4,595	50.5	10.6	298	44	9.2	9.2
Green Lake	366	51.4	7.8				
Kivivic 1	6,583	54	8.5				
Ruth Lake 8	410	53.3	9.6				
Wishart Mine	207	53.7	12.2				
Wishart 2	554	52	12.9				
Total	**60,761**	**58.6**	**7.1**	**298**	**44.0**	**9.2**	**9.2**

Table 1-6: Summary of Historical IOC Mineral Resource Estimates in Quebec (Non-compliant with NI 43-101)

Property	Iron Resources			Manganese Resources			
	Tonnes (x 1000)	Fe%	SiO_2%	Tonnes (x 1000)	Fe%	SiO_2%	Mn%
Barney 1	6,281	53.9	7.7	62	49.1	3.5	5
Eclipse	37,159	56.3	5.2	2,068	49.9	4.5	4.1
Fleming 6	802	48.3	8.8	23	42.1	7	7.3
Fleming 7S	1,946	56	7.6				
Fleming 9	417	54.1	8.9				
Lance Ridge	1,370	53.9	8.5	281	41.5	5.7	10.3
Malcolm 1	2,879	56.2	6.1	422	51.4	4.9	5.8
Partington 2	3,377	55.2	9.2				
-Wollett 1	2,303	54.9	5.8				
Star Creek 1	1,492	51	7.3	1,972	45.9	6.2	6.5
Star Creek 3	63	55.2	8.4				
Sunny 3	460	57.8	6.7				
Trough 1	1,969	48.8	8.5	230	43.8	6.5	5.8
Total:	**60,518**	**55.4**	**6.1**	**5,058**	**47.7**	**5.4**	**5.6**

These historical estimates are not current and do not meet NI 43-101 Definition Standards. A qualified person has not done sufficient work to classify the historical estimate as current mineral reserves. These historical results provide an indication of the potential of the properties and are relevant to ongoing exploration. The historical estimates should not be relied upon.

1.9 INTERPRETATIONS AND CONCLUSIONS

The updated mineral resources for the Schefferville Direct Shipping Iron Ore Projects involving the James, Redmond 2B, Redmond 5 and Knob Lake No.1 deposits are reported in Table 1-9.

Table 1-7: Updated Mineral Resources for James, Redmond 2B, Redmond 5 and Knob Lake No.1 Deposits

Area	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
SCHEFFERVILLE DIRECT SHIPPING IRON ORE PROJECTS (James, Redmond 2B, Redmond 5, Knob Lake No.1)	NB-LNB	Measured (M)	2,644,000	3.39	55.31	0.071	0.07	1.03	9.52
		Indicated(I)	9,310,000	3.46	57.67	0.046	0.65	8.16	2.82
		TotalM+I	**11,954,000**	**3.44**	**57.15**	**0.052**	**0.53**	**6.58**	**4.30**
		Inferred	712,000	3.35	53.04	0.091	0.32	3.09	9.82
	HiSiO2	Measured (M)	194,000	3.29	51.07	0.047	0.05	0.54	19.82
		Indicated(I)	2,552,000	3.32	52.55	0.020	0.46	19.94	2.06
		TotalM+I	2,746,000	**3.32**	**52.45**	**0.022**	**0.43**	**18.57**	**3.32**
		Inferred	223,000	3.29	51.20	0.039	0.08	7.89	13.28
	HMN-LMN	Measured (M)	377,000	3.28	50.55	0.085	0.09	5.60	8.41
		Indicated(I)	214,000	3.25	49.54	0.075	0.08	4.86	9.58
		TotalM+I	**591,000**	**3.27**	**50.18**	**0.082**	**0.08**	**5.34**	**8.84**
		Inferred	139,000	3.28	50.79	0.047	0.05	4.82	9.84
	Fe Ore (NB-LNB and HiSiO2)	Measured (M)	2,838,000	3.38	55.02	0.070	1.00	10.22	0.48
		Indicated(I)	11,647,000	3.44	56.67	0.040	0.81	12.49	0.62
		Total (M+I)	**14,485,000**	**3.43**	**56.35**	**0.046**	**0.85**	**12.05**	**0.59**
		Inferred	2,475,000	3.37	54.27	0.061	1.06	11.47	0.52
	Mn Ore (HMN-LMN)	Measured (M)	377,000	3.28	50.55	0.085	5.60	8.41	0.68
		Indicated(I)	214,000	3.25	49.54	0.075	4.86	9.58	0.79
		Total (M+I)	**591,000**	**3.27**	**50.18**	**0.082**	**5.34**	**8.84**	**0.72**
		Inferred	139,000	3.28	50.79	0.047	4.82	9.84	0.40

Resources are rounded to the nearest 10,000 tonnes.
James Deposit Resources updated to March 31st, 2012
Knob Lake No.1 Deposit Resources updated to March 31st, 2012
Redmond 2B Deposit Resources restated to March 31st, 2012
Redmond 5 Deposit Resources restated to March 31st, 2012
CIM Definitions were followed for mineral resources
Mineral resources which are not mineral reserves do not have demonstrated economic viability

There are no known factors or issues related to environment, permitting, legal, mineral title, taxation, marketing, socio-economic or political settings that could materially affect the mineral resource estimate.

Of the total 2011 RC drilling campaign, (141 RC field duplicates), the reproducibility of 82% of the assays was within ±10% and 79% of the assays returning values between 40% and 50% Fe grade was within ±10%. The sign test and student-T tests highlighted a bias. Only 21% of all the 2011 original samples returned values higher than field duplicates.

Out of 47 samples ranging between 40 and 50% Fe, only 9% of these samples returned values higher than their respective field duplicates.

Of the 141 RC field duplicates, the reproducibility of 77% of the assays was within ±10% and 48% of the assays returning values between 30% and 40% SiO2 grade was within ±10%. The sign test and student-T tests highlighted a bias.

Out of 29 samples ranging between 30 and 40% SiO2, 88% of these samples returned values higher than their respective field duplicates.

The bias identified in this statistical analysis of the 2011 samples indicates that the Fe grades may have lower analytical results for Fe. Furthermore 82% of the Fe % sample data is less than ±10% different and 63% of the data is less than 5% different. There is not a significant difference but there is a bias trend towards the field duplicates.

LIMHL considers the difference to be acceptable. SGS Geostat considers the difference as acceptable as well and suitable for resource estimation but strongly suggests identifying the bias and addressing this matter in a proper timeframe.

The results from the check sampling done on the 2011 RC cuttings by SGS-Geostat indicate that the bias may relate to sampling errors and that they might have been inserted as early as the start of the sampling sequence. SGS-Geostat does not have sufficient data to pin point the selected errors of sampling and strongly encourage LIMHL to run extensive QAQC tests at the start of the sampling program. The rotary splitting could also be a source of error if not set correctly.

However, the errors are located for values over 40-45% Fe corresponding to approximately 15% of the check samples collected. The reverse situation is observed for SiO_2 low assay values. The 40% Fe and higher portion is the targeted range of potentially economic grades.

Additionally, the errors could also be from the analysis from the different labs. SGS did not investigate this matter and suggest LIMHL to investigate this matter. The following are possible errors related to the observed bias.

On the field and at the prep lab:

- The RC method using water is a source of errors and the use of sonic drilling to a certain depth, or the use of diamond drilling could resolve these possible errors. We suggest also looking at drilling RC with a powerful air compressor to get rid of the water table. However, excess pressure could get rid of the sampling material you want to sample.
- A sampling bias directly at the rotary splitter due to improper setting.
- Sampling procedures used by the samplers could be inconsistent from sampler to sampler
- Sample mix up on the field, at the prep lab and/or before shipping.

At the analytical lab:

- Selection of a representative sample at the weighing for XRF may be different from one lab to another
- Calibration of high values could be involved

Finally, SGS suggest inserting real blanks and certified materials as well as regular field, prep coarse rejects pulp duplicates and the use of a second laboratory for checks. SGS is not inclined to right off any resources or lower the classification but suggest investigating this matter using a third lab for third party check. In the author's opinion, the information in the section appears to be consistent and not misleading.

1.10 Recommendations

Following the review of all relevant data and the interpretation and conclusions of this review, it is recommended that exploration on the Redmond 2B, Redmond 5, Denault, Gill, Star Creek, and Ruth Lake 8 properties should continue. The results of past exploration have been positive and have demonstrated the reliability of the IOC data, which has been confirmed with the recent exploration.

SGS Geostat recommends adding information in the James mineral deposit sector based on the RC drilling information. The added information, after verification and validation, will likely augment the level of confidence in the dataset and would affect positively the resources categories in that deposit. Additional infill drilling is recommended to finalize the evaluation of James deposit.

Additional drilling is recommended for the Gill, James, Redmond 2B and 5, and Denault occurrences in order to continue the ongoing program to confirm historical resource (not NI 43-101 compliant). The additional drilling of about 35 drill holes is recommended:

- A minimum of 5 drill holes for a total of 500 metres is proposed for the James Deposit in order to extend and define new mineralization to the south-east which could lead to Compliant Resource upgrading.
- A total of 17 drill holes for a total of 1,700 metres are proposed for the Gill occurrence. All holes are located to define historical resources.
- A total of 6 drill holes for a total of 600 metres are proposed for Redmond 2B and 5 to define further extensions.
- A total of 7 drill holes for a total of 700 metres are proposed for Denault occurrence to define further extensions.

Estimated budget for the additional exploration are in Table 1-10.

Table 1-8: Budgetary Recommendations

Description	Number	Units	$/Number	Total
Assays (RC)	1,250	Unit	40	50,000
RC Infill Drilling	1,800	m.	350	63,000
Vibration-Rotation Drilling	1,000	m.	350	35,000
Reporting, Mineral Resource Updates	1		65,000	65,000
Sub-Total				213,000
Contingency & Miscellaneous (25%)				53,250
			Total	266,250

Exploration programs are recommended to be carried out for all those remaining deposits to convert the historic resources to current compliant resources. This work will need to be scheduled to ensure that current resource estimates for each of these occurrences are produced in sufficient time to enable planning, environmental assessment and permitting to be completed in sufficient time to allow construction and development to be achieved to match the overall project production schedule.

At the same time as the recommended exploration programs outlined above, a number of specific items will be required to progress the development of the Redmond 2B, Redmond 5, Gill, Ruth Lake 8, Denault and Star Creek targets:

- Ongoing additional environmental studies, traditional environmental knowledge programs, and community consultation;
- Completion of the environmental assessment and permitting process.
- Additional metallurgical studies dependent on the mineralogy of the deposit;
- Hydrology investigations should be completed to determine groundwater movement and to determine the amount of pit dewatering that will be required on all properties.

SGS Geostat strongly encourages LIMHL to run extensive QA/QC tests at the start of the sampling program. The rotary splitting could also be a source of error if not set correctly. SGS Geostat suggest inserting real blanks and certified materials as well as regular field, prep coarse rejects pulp duplicates and the use of a second laboratory for checks.

SGS recommends introducing non-destructive vibration-rotation drilling within all the occurrences. It is consisting of a rotary and vibrating drilling system capable of gathering sufficient material and lithological information with an almost constant volume in order to better define the in situ Specific Gravity and to gather material at depth for metallurgical tests and possibly geotechnical tests. The tests would include the same as previous ones done on the property such as: General Mineralogy, QEMSCAN, Grindability and Bond Work Index, Scrubbing tests, Size analysis and assays from before and after scrubbing, Density separation, Jigging tests, WHIMS tests, Settling tests without using flocculants, Vacuum filtration (assuming vacuum disc filter).

2 INTRODUCTION

This Report reviews the ongoing exploration and development in LIMHL's *direct shipping ore (DSO)* properties in Newfoundland and Labrador and Quebec. It reviews current progress and provides a conceptual schedule of projected production.

The construction phase of the LIM's direct shipping iron ore projects at Silver Yards is scheduled to be complete by the end of March 2011. This Technical Report has been produced in order to provide an update on drilling and metallurgical test work and design carried out to address the ongoing exploration and development of the various deposits during 2010 and focused on the mining and beneficiation of ores scheduled to comprise the phase 1 operation centered on Silver Yards.

The authors are "qualified persons" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators. The authors are independent as described in section 1.4 of NI 43-101.

The authors of this report are independent, within the meaning of NI 43-101 of LIMHL, SMI and of LIM, wholly owned subsidiaries of LIMHL which holds the mineral claims on which the iron deposits are located.

LIMHL engaged SNC Lavalin in 2007 to prepare an independent Technical Report (October 2007) on its western Labrador iron properties.

In March 2010, LIMHL engaged the other author of the SNC Lavalin report (A. Kroon) to co-author, with SGS Canada Inc., a Revised Technical Report on an Iron Ore Project in Western Labrador, Province of Newfoundland and Labrador (March 2010) (filed on SEDAR March 11, 2010 with a revised version filed on SEDAR March 19, 2010) and an independent Technical Report of an adjacent Iron Project in Northern Quebec (March 2010) (filed on SEDAR March 11, 2010).

The author visited the site from August 1st to August 5th, 2011 as part of the reconnaissance visit of the all the properties of the Schefferville area for the 2011 RC drilling and trenching campaign. SGS – Geostat reviewed the different field, laboratory and QA/QC protocols and procedures.

The terms "iron ore" and "ore" in this Report are used in a descriptive sense and should not be construed as representing current economic viability.

2.1 COMPANY INFORMATION

The Direct Shipping Iron Ore Projects located in the Province of Newfoundland and Labrador, near the town of Schefferville of Quebec (the Project) is being undertaken by Labrador Iron Mines Limited and Schefferville Mines Inc.

The parent company (Labrador Iron Mines Holdings Limited) is an Ontario registered company trading on the TSX Exchange under the symbol of "LIM".

3 Reliance on Other Experts

This report has been prepared for LIMHL. The findings, conclusions and recommendations are based on the authors' interpretation of information in LIMHL's possession, comprising reports, sections and plans prepared by IOC between 1954 to 1982; reports prepared for other subsequent owners of some of the Schefferville area iron properties, reports of exploration and sampling activities of LIMHL during the period 2006-2010 and independent technical reports authored by SNC Lavalin, A. Kroon, SGS Geostat Ltd. and MRB & Associates.

A number of metallurgical testing laboratories have carried out work on these Properties at the request of LIMHL. These include "rpc – The Technical Solutions", SGS Lakefield, Corem, SGA, FL Schmidt, MBB and Outokumpu.

Detailed engineering design on the Silver Yards plant was carried out by DRA Americas and this has been extended to initial conceptual design for the potential Redmond plant.

The authors have verified the ownership of the mineral claims by reference to the websites of the Department of Natural Resources of the Province of Newfoundland and Labrador and the Ministry of Natural Resources, Province of Quebec, as of the date of this report, but do not offer an opinion to the legal status of such claims.

The assistance of LIMHL personnel in the preparation of this report and the underlying in-house technical reports is gratefully acknowledged.

4 PROPERTY DESCRIPTION AND LOCATION

The properties are located in the western central part of the Labrador Trough iron range and are located about 1,000 km northeast of Montreal and adjacent to or within 80 km from the town of Schefferville, Quebec (Figure 4.1).

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 (Figure 4.1).

As of March 31st 2012, LIM holds title, subject to various agreements described below, to 55 Mineral Rights Licenses in good standing, issued by the Department of Natural Resources, Province of Newfoundland and Labrador, representing 659 mineral claim units located in northwest Labrador covering approximately 16,475 hectares (Table 4-1). In addition to the Mineral Rights Licenses, LIM holds title to three Mining Leases and eight Surface Leases issued by the Department of Natural Resources, Province of Newfoundland and Labrador covering an area of 483 hectares (Table 4-2).

Under the terms of an Option and Joint Venture Agreement dated September 15, 2005 between Fonteneau Resources Limited ("Fonteneau") and Energold as subsequently amended on properties in Labrador, and which agreement which was subsequently assigned to LIM, a royalty in the amount 3% of the selling price FOB port per tonne of iron ore produced and shipped from any of the properties in Labrador is payable to Fonteneau. This royalty shall be capped at US$1.50 per tonne on the Central Zone properties, (James, Knob Lake 1, Redmond, Gill and Houston); US$1.00 per tonne on the South Zone properties (Sawyer and Astray); and US $0.50 per tonne on the North Central Zone (Howse property) and the North Zone (Kivivic property).

In October 2009, LIM entered into an agreement with New Millennium Capital Corp ("NML") to exchange certain of their respective mineral licences in Labrador. The exchange eliminated the fragmentation of the ownership of certain mining rights in the Schefferville area and will enable both parties to separately mine and optimise their respective DSO deposits in as efficient a manner as possible.

Under the Agreement, NML transferred to LIMHL 375 hectares in ten mineral licenses in Labrador that adjoin or form part of LIMHL's Phase One James, Houston, Redmond, Gill and Knob Lake 1 deposits, and a small portion of LIMHL's Phase Three Howse deposit. LIMHL transferred to NML two mineral licenses in Labrador comprising part of LIMHL's Phase Four Kivivic 2 and Kivivic 1 deposits.

SMI holds interests in 298 Mining Rights in the Schefferville area issued by the Ministry of Natural Resources, Province of Quebec, covering approximately 12,097 hectares, (Table 4-3). SMI also holds an exclusive operating license in a mining lease covering 23 parcels totalling about 2,036 hectares, which are part of the original mining lease issued to Hollinger in 1953 under a Special Act of the Quebec Parliament enacted in 1946, (Table 4-4). The 1953 mining lease remains valid under its current term to 2013 and is renewable for a further twenty years to 2033. SMI has the option to take a sublease of the properties subject to the approval of the Government of Quebec. These mining rights and the operating license in Quebec are held subject to a royalty of $2.00 per tonne of iron ore produced from the properties.

Table 4-1: List of Licenses in Newfoundland and Labrador held by LIMHL

(as of March 30, 2012)

Lic No.	Map Sheet	Property	Location	# of Claims	Area (Has)	Staked	Issued
011074M	23J15	Knob Lake No.1	Ruth Lake	2	50	1-Jun-05	1-Jun-05
011541M	23J14	Fleming 3	Pinette Lake	3	75	5-Dec-05	4-Jan-06
011542M	23J14	Elross No.3	Howells River	2	50	5-Dec-05	4-Jan-06
011543M	23J14	Timmins 5	Howells River	3	75	5-Dec-05	4-Jan-06
011544M	23J14	Timmins 6	Howells River	3	75	5-Dec-05	4-Jan-06
012894M	23J14	Howells River	Howells River	3	75	14-Nov-06	14-Dec-06
015115M	23J10	Abel Lake No.1 (Mn)	Gilling Lake	1	25	23-May-08	23-Jun-08
016285M	23J08	Astray Lake	Astray Lake	50	1250		17-Dec-04
016286M	23J10	Houston	Gilling River	22	550		12-Apr-04
016287M	23J14	Howse	Howells River	15	375		2-May-05
016292M	23I05	Sawyer Lake	Sawyer Lake	16	400		18-Sep-03
016293M	23J15	Ruth Lake	Ruth Lake	20	500		14-Dec-06
016391M	23J10	Houston	Gilling River	1	25	28-Jul-09	27-Aug-09
016392M	23J10	Houston	Gilling River	1	25	28-Jul-09	27-Aug-09
016393M	23J10	Houston	Gilling River	1	25	28-Jul-09	27-Aug-09
016459M	23J10 23J15	Abel Lake No.1 (Mn)	Gilling Lake	1	25	17-Aug-09	16-Sep-09
016474M	23J15	Ruth Lake (Mn)	Ruth Lake	4	100	18-Aug-09	17-Sep-09
016478M	23J15	Ruth Lake (Mn)	Ruth Lake	55	1375	18-Aug-09	17-Sep-09
016500M	23J14	Elross 3/Timmins 5	Howells River	46	1150	20-Aug-09	21-Sep-09
016502M	23J14	Fleming 3	Pinette Lake	1	25	20-Aug-09	21-Sep-09
016516M	23J10	Houston	Astray Lake	36	900	2-Sep-09	2-Oct-09
016531M	23J14	Timmins 6	Howells River	3	75	15-Sep-09	15-Oct-09
016534M	23J15 23J14	Christine	Stakit Lake	13	325	15-Sep-09	15-Oct-09
016567M	23J15	Knob Lake No.1	Knob Lake	1	25	15-Nov-04	16-Dec-04
016568M	23J15	Gill Mine	Knob Lake	4	100	15-Nov-04	16-Dec-04
016569M	23J15	Gill Mine	Knob Lake	1	25	15-Nov-04	16-Dec-04
016575M	23J10	Houston	Huston Lake	1	25	10-Jan-05	10-Feb-05
016576M	23J10	Houston	Huston Lake	3	75	10-Jan-05	10-Feb-05
016577M	23J10	Houston	Huston Lake	1	25	10-Jan-05	10-Feb-05
016582M	23J14	Howse	Howells River	1	25		16-Dec-04
016583M	23J14	Howse	Howells River	1	25		16-Dec-04
016669M	23O03	Kivivic No.1	Kivivic Lake	7	175		2-May-05
017359M	23J15	James/Wishart	Knob lake	28	700		12-Apr-04
017360M	23J10	Redmond	Gilling Lake	45	1125		25-Aug-05
017720M	23J10	Houston-Redmond	Gilling Lake	9	225	4-May-10	3-Jun-10

Lic No.	Map Sheet	Property	Location	# of Claims	Area (Has)	Staked	Issued
017721M	23J10	Houston-Redmond	Houston Lake	6	150	4-May-10	3-Jun-10
017722M	23J10	Houston-Redmond	Gilling Lake	27	675	4-May-10	3-Jun-10
018226M	23J14	Howse	Kivivic Lake	22	550	11-Nov-10	13-Dec-10
018230M	23J14 23J15	Timmins	Pinette Lake	27	675	12-Nov-10	13-Dec-10
018235M	23J14	Elross/Timmins	Howells River	2	50	15-Nov-10	15-Dec-10
018256M	23J10	Redmond	Gilling Lake	8	200	17-Nov-10	17-Dec-10
018276M	23J10 23J15	Wishart Lake	Wishart Lake	10	250	23-Nov-10	23-Dec-10
018277M	23J15	Ruth Lake	Ruth Lake	26	650	23-Nov-10	23-Dec-10
018283M	23J14	Timmins 6	Howells River	3	75	24-Nov-10	24-Dec-10
018284M	23J10	Houston	Gilling River	1	25	24-Nov-10	24-Dec-10
018285M	23J08	Astray Lake	Astray Lake	16	400	24-Nov-10	24-Dec-10
018286M	23I05	Sawyer Lake	Sawyer Lake	6	150	24-Nov-10	24-Dec-10
018405M	23J10	Gilling Lake	Gilling Lake	15	375	23-Dec-10	24-Jan-11
018466M	23J10 23J15	Abel Lake - Knob Lake	Gilling Lake	17	425	5-Jan-11	4-Feb-11
018470M	23J10	Houston-Malcolm	Gilling Lake	6	150	5-Jan-11	4-Feb-11
018521M	23J10	Houston	Petitsikapau Lake Area	5	125	14-Jan-11	14-Feb-11
018522M	23J10	Houston	Petitsikapau Lake Area	34	850	14-Jan-11	14-Feb-11
018638M	23J14	Timmins 6	Howells River	3	75	14-Feb-11	16-Mar-11
018702M	23J08	Astray Lake	Fawley Lake	4	100	3-Mar-11	4-Apr-11
019461M	23J10 23J15	Malcolm	Gilling Lake	17	425	21-Sep-11	21-Oct-11
			Total	**659**	**16,475**		

Table 4-2: Mining and Surface Leases in Labrador

Type	Name	No.	Area (Has.)
Mining Lease	James	200	95.7
Mining Lease	Redmond 5	201	27.7
Mining Lease	Redmond 2B	202	35.1
Surface lease	Spur Line	109	78.8
Surface lease	Silver Yards	110	81.5
Surface lease	Bean Lake Camp	111, 115	3.4
Surface lease	Ruth Pit	112	76.6
Surface lease	Pipe Line	113	3.3
Surface lease	Redmond Haul Road	114	11.0
Surface lease	James Discharge	119	35.0
Surface lease	James Creek Culvert Area	120	35.3
Surface lease	Gill		
		TOTAL	**483.3**

Table 4-3: Mining Titles in Schefferville Area – Quebec (As of March 30th, 2012)

Title No.	Sheet	Issued	Area (ha.)
CDC-2016779	23J15	20/06/2006	49
CDC-2016780	23J15	20/06/2006	49
CDC-2016781	23J15	20/06/2006	49
CDC-2016789	23J15	20/06/2006	46
CDC-2016790	23J15	20/06/2006	44
CDC-2016791	23J15	20/06/2006	24
CDC-2016797	23O03	20/06/2006	49
CDC-2016800	23O03	20/06/2006	49
CDC-2016805	23O03	20/06/2006	48
CDC-2016807	23O03	20/06/2006	45
CDC-2016808	23O03	20/06/2006	35
CDC-2016927	23O03	20/06/2006	49
CDC-2172892	23J14	14/10/2008	40
CDC-58039	23J10	24/02/2005	20
CDC-58040	23J10	24/02/2005	4

Title No.	Sheet	Issued	Area (ha.)
CDC-58048	23J10	24/02/2005	47
CDC-2183131	23J15	07/05/2009	49
CDC-2183132	23J15	07/05/2009	49
CDC-2183133	23J15	07/05/2009	49
CDC-2183173	23J15	08/05/2009	49
CDC-2183175	23J15	08/05/2009	49
CDC-2183176	23J15	08/05/2009	39
CDC-2198040	23O10	18/12/2009	48
CDC-2198041	23O10	18/12/2009	48
CDC-2198043	23O10	18/12/2009	48
CDC-2198045	23O10	18/12/2009	48
CDC-2198046	23O10	18/12/2009	48
CDC-2198047	23O10	18/12/2009	48
CDC-2198048	23O10	18/12/2009	48
CDC-2198049	23O10	18/12/2009	48
CDC-2188494	23O07	16/09/2009	39
CDC-2188495	23O07	16/09/2009	49
CDC-2188496	23O07	16/09/2009	49
CDC-2188497	23O07	16/09/2009	49
CDC-2188498	23O07	16/09/2009	15
CDC-2188500	23O07	16/09/2009	49
CDC-2188501	23O07	16/09/2009	49
CDC-2188502	23O07	16/09/2009	49
CDC-2188503	23O07	16/09/2009	49
CDC-2188504	23O07	16/09/2009	38
CDC-2188505	23O07	16/09/2009	49
CDC-2188506	23O07	16/09/2009	49

Title No.	Sheet	Issued	Area (ha.)
CDC-2188507	23O07	16/09/2009	49
CDC-2188508	23O07	16/09/2009	33
CDC-2188510	23O07	16/09/2009	49
CDC-2188512	23O07	16/09/2009	22
CDC-2188513	23O07	16/09/2009	25
CDC-2188514	23O07	16/09/2009	46
CDC-2188515	23O07	16/09/2009	49
CDC-2188516	23O07	16/09/2009	49
CDC-2188517	23O07	16/09/2009	11
CDC-2188520	23O07	16/09/2009	49
CDC-2188521	23O07	16/09/2009	49
CDC-2188523	23O07	16/09/2009	49
CDC-2188524	23O07	16/09/2009	49
CDC-2188525	23O07	16/09/2009	49
CDC-2188526	23O07	16/09/2009	49
CDC-2188528	23O10	16/09/2009	48
CDC-2188529	23O10	16/09/2009	48
CDC-2188530	23O10	16/09/2009	48
CDC-2188531	23O10	16/09/2009	48
CDC-2188532	23O10	16/09/2009	48
CDC-2188533	23O10	16/09/2009	48
CDC-2188534	23O10	16/09/2009	48
CDC-2188535	23O10	16/09/2009	48
CDC-2188538	23O10	16/09/2009	48
CDC-2188539	23O10	16/09/2009	48
CDC-2188540	23O10	16/09/2009	48
CDC-2188542	23O10	16/09/2009	48

Title No.	Sheet	Issued	Area (ha.)
CDC-2188543	23O10	16/09/2009	48
CDC-2188544	23O10	16/09/2009	48
CDC-2188546	23O10	16/09/2009	48
CDC-2188547	23O10	16/09/2009	48
CDC-2188548	23O10	16/09/2009	48
CDC-2188549	23O10	16/09/2009	48
CDC-2188826	23J10	17/09/2009	49
CDC-2189056	23J15	17/09/2009	47
CDC-2189057	23J15	17/09/2009	49
CDC-2189058	23J15	17/09/2009	49
CDC-2189059	23J15	17/09/2009	49
CDC-2189060	23J15	17/09/2009	49
CDC-2198889	23O03	13/01/2010	49
CDC-2198890	23O03	13/01/2010	49
CDC-2198892	23O03	13/01/2010	49
CDC-2198893	23O03	13/01/2010	49
CDC-2198894	23O03	13/01/2010	49
CDC-2198897	23O03	13/01/2010	49
CDC-2198899	23O03	13/01/2010	49
CDC-2198900	23O03	13/01/2010	49
CDC-2198902	23O03	13/01/2010	49
CDC-2198903	23O03	13/01/2010	49
CDC-2198904	23O03	13/01/2010	49
CDC-2198905	23O03	13/01/2010	49
CDC-2198906	23O03	13/01/2010	49
CDC-2198911	23O03	13/01/2010	49
CDC-2198912	23O03	13/01/2010	49

Title No.	Sheet	Issued	Area (ha.)
CDC-2198913	23O03	13/01/2010	49
CDC-2198915	23O03	13/01/2010	49
CDC-2198916	23O03	13/01/2010	49
CDC-2198917	23O03	13/01/2010	49
CDC-2198919	23O03	13/01/2010	49
CDC-2214980	23O07	16/04/2010	49
CDC-2214981	23O07	16/04/2010	49
CDC-2214983	23O07	16/04/2010	49
CDC-2214984	23O07	16/04/2010	49
CDC-2214985	23O07	16/04/2010	49
CDC-2214986	23O07	16/04/2010	49
CDC-2214987	23O07	16/04/2010	49
CDC-2214989	23O07	16/04/2010	49
CDC-2214990	23O07	16/04/2010	49
CDC-2214991	23O07	16/04/2010	49
CDC-2214992	23O07	16/04/2010	48
CDC-2214993	23O07	16/04/2010	48
CDC-2214994	23O07	16/04/2010	48
CDC-2214995	23O07	16/04/2010	48
CDC-2214996	23O07	16/04/2010	48
CDC-2214998	23O07	16/04/2010	48
CDC-2214999	23O07	16/04/2010	48
CDC-2215001	23O07	16/04/2010	48
CDC-2215002	23O07	16/04/2010	48
CDC-2233266	23J10	11/05/2010	10
CDC-2233267	23J10	11/05/2010	48
CDC-2233268	23J10	11/05/2010	49

Title No.	Sheet	Issued	Area (ha.)
CDC-2233269	23J10	11/05/2010	37
CDC-2233270	23J10	11/05/2010	49
CDC-2259638	23J10	09/11/2010	49
CDC-2223062	23J15	28/04/2010	49
CDC-2223063	23J15	28/04/2010	37
CDC-2223065	23J15	28/04/2010	46
CDC-2223066	23J15	28/04/2010	49
CDC-2223067	23J15	28/04/2010	49
CDC-2168457	23J14	30/07/2008	3
CDC-2168458	23J14	30/07/2008	23
CDC-2168460	23J14	30/07/2008	26
CDC-2168461	23J14	30/07/2008	46
CDC-2168462	23J14	30/07/2008	1
CDC-2168463	23J14	30/07/2008	48
CDC-2168464	23J14	30/07/2008	49
CDC-2168465	23J14	30/07/2008	49
CDC-2168466	23J15	30/07/2008	9
CDC-2168467	23J15	30/07/2008	14
CDC-2168468	23J15	30/07/2008	3
CDC-2168469	23J15	30/07/2008	0
CDC-2168470	23J15	30/07/2008	19
CDC-2168471	23J15	30/07/2008	8
CDC-2168472	23J15	30/07/2008	14
CDC-2168473	23J15	30/07/2008	5
CDC-2168474	23J15	30/07/2008	24
CDC-2168476	23J15	30/07/2008	20
CDC-2168477	23J15	30/07/2008	22

Title No.	Sheet	Issued	Area (ha.)
CDC-2168478	23J15	30/07/2008	3
CDC-2168479	23J15	30/07/2008	25
CDC-2168480	23J15	30/07/2008	49
CDC-2168482	23J15	30/07/2008	49
CDC-2168483	23J15	30/07/2008	1
CDC-2168484	23J15	30/07/2008	26
CDC-2168485	23J15	30/07/2008	34
CDC-2168487	23J15	30/07/2008	0
CDC-2168488	23J15	30/07/2008	2
CDC-2168489	23J15	30/07/2008	1
CDC-2168490	23J15	30/07/2008	46
CDC-2168491	23J15	30/07/2008	43
CDC-2168493	23J15	30/07/2008	46
CDC-2168494	23J15	30/07/2008	5
CDC-2168496	23J15	30/07/2008	38
CDC-2168498	23J15	30/07/2008	49
CDC-2168499	23J15	30/07/2008	46
CDC-2168500	23J15	30/07/2008	14
CDC-2168501	23J15	30/07/2008	6
CDC-2168502	23J15	30/07/2008	49
CDC-2168503	23J15	30/07/2008	49
CDC-2168504	23J15	30/07/2008	49
CDC-2168505	23J15	30/07/2008	49
CDC-2168506	23J15	30/07/2008	49
CDC-2168507	23J15	30/07/2008	49
CDC-2168508	23J15	30/07/2008	49
CDC-2168509	23J15	30/07/2008	49

Title No.	Sheet	Issued	Area (ha.)
CDC-2168510	23J15	30/07/2008	49
CDC-2168511	23J15	30/07/2008	49
CDC-2168513	23J15	30/07/2008	49
CDC-2168514	23J15	30/07/2008	49
CDC-2168515	23J15	30/07/2008	49
CDC-2168516	23J15	30/07/2008	49
CDC-2168517	23J15	30/07/2008	49
CDC-2168519	23J15	30/07/2008	49
CDC-2168524	23J15	30/07/2008	49
CDC-2168525	23J15	30/07/2008	49
CDC-2168526	23J15	30/07/2008	49
CDC-2168529	23J15	30/07/2008	49
CDC-2168530	23J15	30/07/2008	49
CDC-2168531	23O03	30/07/2008	20
CDC-2168532	23O03	30/07/2008	17
CDC-2168533	23O03	30/07/2008	27
CDC-2168534	23J14	30/07/2008	3
CDC-2168535	23J15	30/07/2008	0
CDC-2168538	23J15	30/07/2008	29
CDC-2168539	23J15	30/07/2008	21
CDC-2168540	23J15	30/07/2008	36
CDC-2168541	23J15	30/07/2008	48
CDC-2317779	23J10	13/10/2011	49
CDC-2317781	23J10	13/10/2011	49
CDC-2317783	23J10	13/10/2011	4
CDC-2317785	23J10	13/10/2011	21
CDC-2317786	23J15	13/10/2011	3

Title No.	Sheet	Issued	Area (ha.)
CDC-2298702	23J10	22/06/2011	17
CDC-2298703	23J10	22/06/2011	40
CDC-2298704	23J10	22/06/2011	10
CDC-2298705	23J10	22/06/2011	1
CDC-2298706	23J10	22/06/2011	36
CDC-2298707	23J15	22/06/2011	11
CDC-2298708	23J15	22/06/2011	37
CDC-2298709	23J15	22/06/2011	49
CDC-2016803	23O03	20/06/2006	49
CDC-2016806	23O03	20/06/2006	47
CDC-2168486	23J15	30/07/2008	1
CDC-2168495	23J15	30/07/2008	14
CDC-2168512	23J15	30/07/2008	49
CDC-2168520	23J15	30/07/2008	49
CDC-2168521	23J15	30/07/2008	49
CDC-2168527	23J15	30/07/2008	49
CDC-2168537	23J15	30/07/2008	34
CDC-58045	23J15	24/02/2005	49
CDC-2183174	23J15	08/05/2009	49
CDC-2189054	23J14	17/09/2009	0
CDC-2189055	23J15	17/09/2009	45
CDC-2198891	23O03	13/01/2010	49
CDC-2198898	23O03	13/01/2010	49
CDC-2198901	23O03	13/01/2010	49
CDC-2198908	23O03	13/01/2010	49
CDC-2233265	23J10	11/05/2010	11
CDC-2214988	23O07	16/04/2010	49

Title No.	Sheet	Issued	Area (ha.)
CDC-2214997	23O07	16/04/2010	48
CDC-2223064	23J15	28/04/2010	49
CDC-2198039	23O10	18/12/2009	48
CDC-2198042	23O10	18/12/2009	48
CDC-2188509	23O07	16/09/2009	49
CDC-2188511	23O07	16/09/2009	20
CDC-2188519	23O07	16/09/2009	49
CDC-2188522	23O07	16/09/2009	48
CDC-2188527	23O10	16/09/2009	48
CDC-2188537	23O10	16/09/2009	48
CDC-2188545	23O10	16/09/2009	48
CDC-2317780	23J10	13/10/2011	32
CDC-2317782	23J10	13/10/2011	28
CDC-2317787	23J15	13/10/2011	0
CDC-2016787	23J15	20/06/2006	49
CDC-2016925	23O03	20/06/2006	49
CDC-2016926	23O03	20/06/2006	49
CDC-2168459	23J14	30/07/2008	0
CDC-2168475	23J15	30/07/2008	34
CDC-2168481	23J15	30/07/2008	49
CDC-2168492	23J15	30/07/2008	49
CDC-2168497	23J15	30/07/2008	49
CDC-2168518	23J15	30/07/2008	49
CDC-2168522	23J15	30/07/2008	49
CDC-2168523	23J15	30/07/2008	49
CDC-2168528	23J15	30/07/2008	49
CDC-2168536	23J15	30/07/2008	13

Title No.	Sheet	Issued	Area (ha.)
CDC-2168612	23J15	31/07/2008	3
CDC-2279509	23J15	25/03/2011	48
CDC-2198895	23O03	13/01/2010	49
CDC-2198896	23O03	13/01/2010	49
CDC-2198907	23O03	13/01/2010	49
CDC-2198909	23O03	13/01/2010	49
CDC-2198910	23O03	13/01/2010	49
CDC-2198914	23O03	13/01/2010	49
CDC-2198918	23O03	13/01/2010	49
CDC-2214982	23O07	16/04/2010	49
CDC-2215000	23O07	16/04/2010	48
CDC-2198044	23O10	18/12/2009	48
CDC-2198050	23O10	18/12/2009	48
CDC-2298710	23J15	22/06/2011	49
CDC-2188499	23O07	16/09/2009	48
CDC-2188518	23O07	16/09/2009	44
CDC-2188536	23O10	16/09/2009	48
CDC-2188541	23O10	16/09/2009	48
CDC-2317784	23J10	13/10/2011	39

Table 4-4: Mining Lease Held by Hollinger North Shore Inc. in the Schefferville Area - Quebec

Title	Map Sheet	Issued	Expiry	Area (Has)
1	23J15	03-Feb-90	02-Feb-13	65
2	23J10	03-Feb-90	02-Feb-13	12
4	23O03	03-Feb-90	02-Feb-13	780
5	23O02	03-Feb-90	02-Feb-13	96
6	23J15	03-Feb-90	02-Feb-13	56
7	23O06	03-Feb-90	02-Feb-13	129
39	23O05	03-Feb-90	02-Feb-13	118
3A	23J15	03-Feb-91	02-Feb-13	35
3B	23J15	03-Feb-91	02-Feb-13	338
3C	23J15	03-Feb-91	02-Feb-13	119
3D	23J15	03-Feb-91	02-Feb-13	32
3E	23J15	03-Feb-91	02-Feb-13	12
3F	23J15	03-Feb-91	02-Feb-13	45
3G	23J15	03-Feb-91	02-Feb-13	37
3H	23J15	03-Feb-91	02-Feb-13	22
3J	23J15	03-Feb-91	02-Feb-13	47
3K	23J14	03-Feb-91	02-Feb-13	18
3L	23J14	03-Feb-91	02-Feb-13	5
3M	23J14	03-Feb-91	02-Feb-13	15
3N	23J14	03-Feb-91	02-Feb-13	11
3P	23J14	03-Feb-91	02-Feb-13	29
3Q	23J14	03-Feb-91	02-Feb-13	15
		TOTAL	**22**	**2,036**

Figure 4.1: Project Location Map

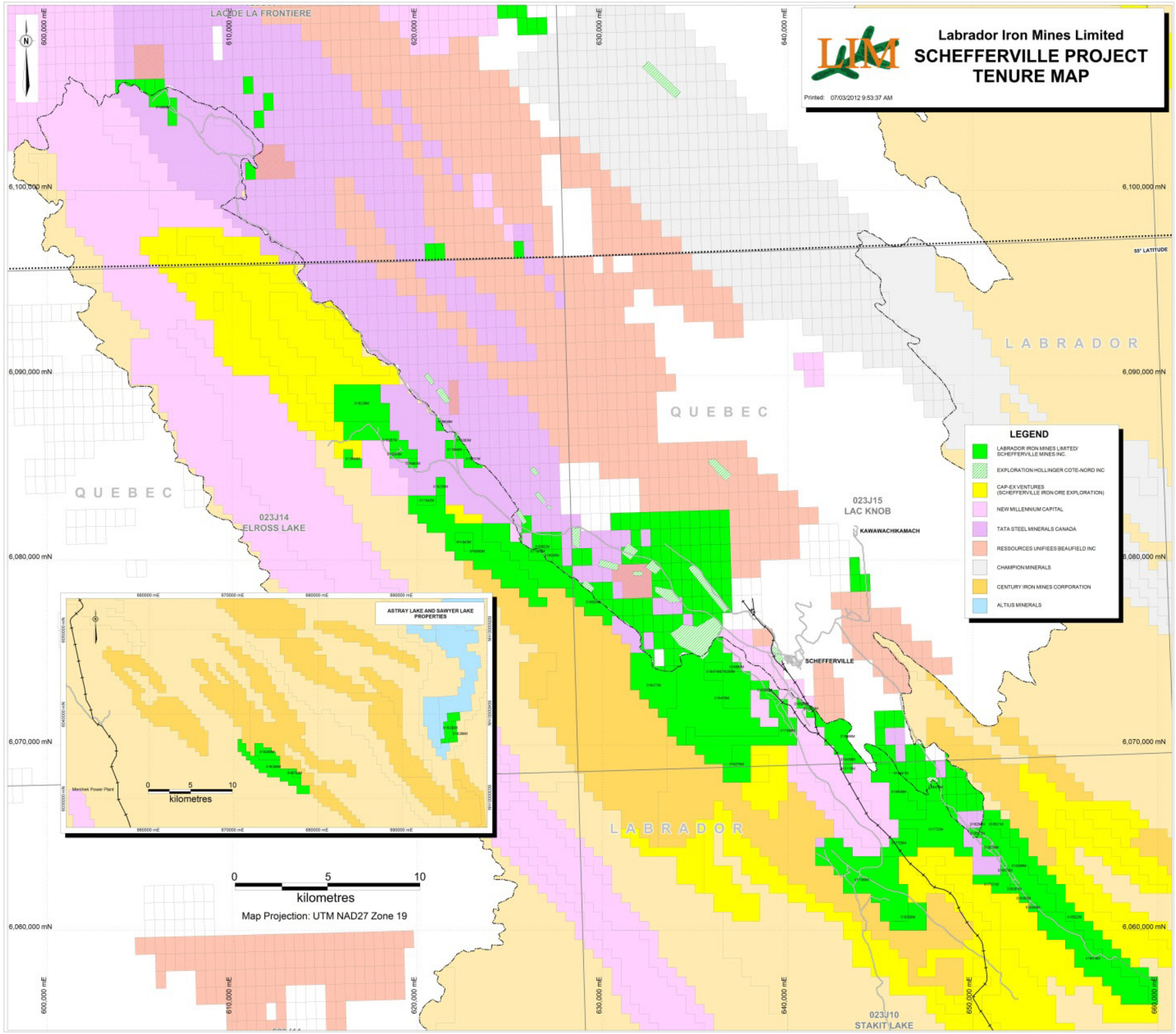


Figure 4.2: Map of LIMHL Mining Licenses and Titles

The properties considered in LIM's first phase are:

4.1 JAMES DEPOSIT

The James deposit is located in the NE portion of the license 017359M; which covers an area of 7 km^2. The license is held by Labrador Iron Mines Limited (Table 4-5) and entirely covers the James deposit. The status of this license is in good standing.

Table 4-5: James deposit Mineral License

License No.	Holder	Issued	Claims	Extension (km^2)	Comments
017359M	Labrador Iron Mines Limited	Apr 12, 2004	28	7.00	This license replaces 016288M and 016571M as of Feb. 3, 2010

4.2 REDMOND DEPOSITS

The Redmond property is located between 8 and 10km south of the James deposit and is covered by the mineral license 017360M which covers an area of 11.25 km^2. It is held by Labrador Iron Mines Limited (Table 4-6). The deposits considered by LIM for exploitation are Redmond 2B and Redmond 5 and both are covered by the license 017360M. The status of this license is in good standing.

Table 4-6: Redmond deposits Mineral License

License No.	Holder	Issued	Claims	Extension (km^2)	Comments
017360M	Labrador Iron Mines Limited	Aug 25, 2005	45	11.25	This license replaces 016291M and 016573M as of Feb. 3, 2010

4.3 GILL DEPOSIT

The Gill deposit is located 2kms north of James deposit and 1.5kms north of Silver Yards processing plant. It is covered by 3 mineral rights licenses comprising 6.25 km^2 held by Labrador Iron Mines Limited (Table 4-7). The status of these licenses is in good standing.

Table 4-7: Gill deposit Mineral Licenses

License No.	Holder	Issued	Claims	Extension (km^2)	Comments
016293M	Labrador Iron Mines Limited	14-Dec-06	20	5.00	This license replaces 012889M,014496M,014511M
016568M	Labrador Iron Mines Limited	16-Dec-04	4	1.00	This license replaces 010479M. Transferred from NML
016569M	Labrador Iron Mines Limited	16-Dec-04	1	0.25	This license replaces 010479M. Transferred from NML
		TOTAL	**25**	**6.25**	

4.4 RUTH LAKE 8 DEPOSIT

The Ruth Lake 8 property is located 2.5km west of James deposit and 2km west of Silver Yards processing plant. It is entirely covered by the license 016293M (Table 4-8). This mineral license also partially covers the Gill deposit. The status of this license is in good standing.

Table 4-8: Ruth Lake 8 Property Mineral License

License No.	Holder	Issued	Claims	Extension (km^2)	Comments
016293M	Labrador Iron Mines Limited	14-Dec-06	20	5.00	This license replaces 012889M,014496M,014511M

4.5 KNOB LAKE 1 DEPOSIT

The Knob Lake 1 deposit is located 1.5km east of James deposit and 2.3km south of Silver Yards processing plant. It is covered by two mineral licenses with a total area of 0.75km held by Labrador Iron Mines Limited (Table 4-9). The ore body is entirely covered by mineral licenses 011074 and 016567M which are in good standing.

Table 4-9: Knob Lake 1 deposit Mineral Licenses

License No.	Holder	Issued	Claims	Extension (km^2)	Comments
011074M	Labrador Iron Mines Limited	1-Jun-05	2	0.50	
016567M	Labrador Iron Mines Limited	16-Dec-04	1	0.25	This license replaces 010479M. Transferred from NML
		TOTAL	**3**	**0.75**	

4.6 DENAULT 1 DEPOSIT

The Denault deposit occurs along a low hill immediately to the east of Denault Lake and is located 6 km northwest of Schefferville, Quebec. A year round gravel road from Schefferville crosses the property. The Denault property is covered by mining lease 3C held by Hollinger and by title claims 2016790, 2168483, 2168485, 2168494 and 2168496 held by SMI.

Table 4-10: Denault 1 deposit Mining Lease

Mine Lease No.	Holder	Issued	Claims	Area (Has)	Comments
13C	Hollinger North Shore Exploration	03-Feb-91	1	119	Held under operating license and mining claims

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, PHYSIOGRAPHY

5.1 ACCESSIBILITY

The LIMHL 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 100km 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 Stage One properties, subject of this technical report, are located in Labrador and Quebec within 30km from the town of Schefferville, Quebec. These properties are accessible by existing seasonal gravel road network from Schefferville.

The beneficiation plant is located in Silver Yards, close to the Gill and James deposits and all the roads and crossings have been upgraded to be suitable for large plant and equipment and are kept in condition by the LIMHL fleet of contract road maintenance equipment.

The Redmond deposits are located in Labrador approximately 12 km south-southwest of the town of Schefferville and can be reached by existing high quality built ballast and topped roads.

The Ruth Lake 8 deposit is accessible via an original IOC rail connection that can be now driven as the rail tracks have been removed. A direct road of approximately 4km is to be built by the heavy plant and road building equipment that is at site and currently involved in active mining operations.

The northerly properties include Howse, Timmins 6 and Elross 3. These deposits are located approximately 15 to 25 km northwest of the town of Schefferville and can be reached by existing gravel roads developed during the former IOC operations.

Denault, Star Creek No.1, and Lance Ridge, are located in Quebec approximately 5 to 8 km north-northwest of the town of Schefferville and are accessible by existing gravel roads. Other properties include Christine, Fleming 7, Ferriman 3 and 5 and Timmins 5, are accessible by existing gravel road, and are located 11 km northwest from the town of Schefferville. The Christine deposit is partly in Labrador and partly in Quebec.

Malcolm 1 is located in Quebec approximately 10 km southeast of Schefferville can be reached by existing gravel roads.

The North Central properties in Quebec include Fleming 9 and Barney, and these deposits are located approximately 15 to 25 km northwest of the town of Schefferville and can be reached by existing gravel roads developed during the former IOC operations. The Sawyer and Astray properties are located about 50-60 km south east of Schefferville and do not have road access but are accessible by helicopter.

The Woollett 1 property is located approximately 11 km north-northwest of the town of Schefferville and is accessible by existing gravel roads. The Trough 1 property is approximately 21 km north-northwest of Schefferville and is currently not accessible by road but can be reached by helicopter.

The Sunny 2 & 3 deposits are located approximately 43 km to the northwest of the town of Schefferville and can be reached by existing gravel roads developed during the former IOC operations. Partington and Hoylet Lake, located approximately 55 km and 40 km, respectively, northwest of Schefferville, can also be reached by existing gravel roads developed during the former IOC operations. The Sawyer and Astray Properties are located about 50 – 60 km south east of Schefferville and do not have road access but are accessible by helicopter.

The Eclipse, Schmoo Lake, Murdoch Lake North and Murdoch Lake South properties, (North Zone) located respectively approximately 85 km northwest, 81 km northwest, 95 km north, and 60 km north of the town of Schefferville, do not have road access but are accessible by helicopter.

5.2 CLIMATE

The Schefferville area and vicinity have a sub-arctic continental taiga climate and can have 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. Certain parts of LIMHL's proposed operation involving washing the ore are restricted during the months of November through April. Mining of ore including the stripping of waste rock operates on a 12 month basis with equipment stoppage limited to a small number of extremely cold days.

5.3 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.

Schefferville, an incorporated municipality in Quebec, remains 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 few years, a number of new buildings and houses have been built including medical clinics and churches. The present population is about 1,250 permanent residents including the Matimekush (Innu) and Kawawachikamak (Naskapi) reserves. Kawawachikamak, 20 km north of Schefferville, is a modern community with its own school, medical clinic and recreational complex.

The majority of the workforce that are currently engaged in the mining operation in Labrador are from Labrador or Newfoundland. The operation of the mine and beneficiation plant is contracted to a Labrador company Innu Municipal Inc. A number of employees from the Quebec communities close to the project site are also trained and engaged in many support roles.

5.4 INFRASTRUCTURE

James, Redmond 2B, and Redmond 5 are within 12 km of each other and form the first group of properties from which mining by LIMHL will commence and are also within 12 km of Schefferville. The Gill, Ruth Lake 8 and Knob Lake 1 deposits are within the same area, while Houston is 7km east of Redmond and 15km southeast of James and Denault is about 5 km north west of James.

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 large local convenient store (Hudson Bay), 2 hotels, numerous outfitters accommodations are also present in Schefferville.

A modern airport includes a 2,000 m runway and navigational aids for large jet aircraft. A daily air service by a twin engine 9-seat Kingair is provided to and from Sept-Îles via Wabush and a larger Dash 8 service three times per week to Montreal via Quebec City.

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

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

5.4.1 RAILROAD

The Quebec North Shore & Labrador Railway ("QNS&L") was established by IOC to haul iron ore from Schefferville area mines to Sept-Îles a distance of some 568 km starting in 1954. After shipping some 150 million tons of iron ore from the area the mining operation was closed in 1982, and QNS&L maintained a passenger and freight service between Sept-Îles and Schefferville up to 2005. In 2005, IOC sold the 208 km section of the railway between Emeril Yard at Emeril Junction and Schefferville (the Menihek Division) to Tshiuetin Rail Transportation Inc. (TSH), a company owned by three Quebec First Nations. TSH operates a passenger and light freight traffic between Sept-Îles and Schefferville three times a week.

Five railway companies operate in the area; TSH which runs passengers and freight from Schefferville to Emeril Junction; QNS&L hauling iron concentrates and pellets from Labrador City/Wabush area via Ross Bay Junction to Sept-Îles; Bloom Lake Railway hauling ore from the Cliffs Bloom Lake Minemine to Wabush; and Arnault Railways hauling iron ore for Wabush Mines ("Wabush") and the Bloom Lake Mine between Arnault Junction and Pointe Noire. CRC hauls iron concentrates from Fermont area to Port-Cartier forArcelor Mittal. The latter railway is not connected to TSH, QNS&L, Bloom Lake or Arnault.

5.5 PHYSIOGRAPHY

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

Generally, the area slopes gently west to northeast away from the land representing the Quebec – Labrador border and towards the Howells River valley parallel to the dip of the deposits. The finger-shaped area of Labrador that encloses the Howells River drains southwards into the Hamilton River watershed and from there into the Atlantic Ocean. Streams to the east and west of the height of land in Quebec, flow into the Kaniapiskau watershed, which flows north into Ungava Bay.

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

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

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

6 HISTORY

The Quebec-Labrador iron range has a tradition of mining since the early 1950s and is one of the largest iron producing regions in the world. The former direct shipping iron ore operations 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 (IOC Ore Reserves, January 1983). The properties comprising LIMHL's Schefferville area project were part of the original IOC Schefferville operations and formed part of the 250 million tons of Historical reserves and resources identified by IOC but were not part of IOC's producing properties. The historical resources referred to in this document are based on work completed and estimates prepared by the Iron Ore Company of Canada ("IOC") prior to 1983 and were not prepared in accordance with NI 43-101. These historical estimates are not current and do not meet NI 43 101 Definition Standards. A qualified person has not done sufficient work to classify the historical estimate as current mineral reserves. These historical results provide an indication of the potential of the properties and are relevant to ongoing exploration. The historical estimates should not be relied upon.

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

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 LIMHL's Projects were part of the original IOC Schefferville area operations and the reserves and resources identified at the James, Houston, Sawyer, Astray and Howse deposits were reviewed and in some instances under development by IOC.

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

With the exception of the Gill deposit and pre-stripping work carried out on the James, Redmond 2B and Ruth Lake 8 deposits, the iron deposits within the LIMHL mineral licenses were not previously developed for production during the IOC period of ownership.

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

Fosse sought and was granted a project release under the Environmental Assessment Act for the James deposit in June 1990 but did not go ahead with project development and the claims subsequently were permitted to lapse. The IOC historical iron ore resources not including James, Redmond 2B, Redmond 5, Houston, Knob Lake and Denault 1 deposits contained within the properties totals 60.8 million tonnes with grades greater than 50% Fe(Table 6-2) and are not compliant with the standards prescribed by NI 43-101. They are predominantly based on estimates made by IOC in 1982 and published in their DSO Reserve Book published in 1983. IOC categorized their estimates as “reserves”. The authors have adopted the principle (as in the 2007 SNC-Lavalin Technical Report) that these should be categorized at “resources” as defined by NI 43 -101.

These estimates were also part of a review carried out by Kilborn Inc. (at that time an independent engineering company with the head office in Toronto) in 1995 for Hollinger. SOQUEM Inc. (a mining company owned by the government of Quebec) with experts of Metchem (an independent engineering company from Montreal), evaluated the same properties again in 2002. All estimates were based on geological interpretations on cross sections and the calculations were done manually.

Between September 2003 and March 2006, Fonteneau Resources and Energold began staking claims over the soft iron ores in the Labrador part of the Schefferville area. Recognizing a need to consolidate the mineral ownership, Energold entered into agreements with the various parties that have subsequently been assumed by LIMHL. LIMHL subsequently acquired additional properties in Labrador by staking. All of the properties comprising LIMHL’s Schefferville area project were part of the original IOC Schefferville holdings and formed part of the 250 million tons of reserves and resources identified but not mined by IOC in the area.

The historic IOC ore reserves classifications used in the reports are not compliant with reserves classifications compliant with NI 43-101. The historic reserves were for DSO which was ore that was sold directly to the customer in its raw state. The only processing done was the crushing to 4-inch size in the mine screening plant and, in case of wet ore, reduction of moisture content in the drying plant in Sept Îles. It should be noted that the following classifications are based on economics of 1983 and that although the geological, mineralogical and processing data will be the same today, economics and market conditions will have changed. The classification used in the IOC reports is as follows:

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

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

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

The above shown terms, definitions and classification are not compliant with NI 43-101 but were used by IOC for their production reports**.**

There is no reason to conclude that IOC utilized other than best industry practices. The historic resources from the James Property, Redmond, Houston and Denault properties have been further explored and have been estimated according to NI 43-101 accepted methods. It is reasonable, therefore, to conclude that other historic resources can be brought to compliance with NI 43 101 requirements with programs of verification as recommended in this report.

A summary of the historical resource estimates reported by IOC in their January 1983 statement is shown in Table 6-1 and Table 6-2. The resources are all in tonnes. It should be noted that in the IOC statements all "reserves" were included.

The historical resources contained in the manganese deposits were reported in the MRB & Associates report dated October 30th, 2009 and were based on the IOC estimates of 1979. Because some of the properties were still producing at that time, this report shows some differences due LIMHL's reference date of IOC January 1983 statement.

Table 6-1: Summary of Historical IOC Mineral Resource Estimates in Labrador

	Historical Iron Resources			Historical Manganese Resources			
Property	**Tonnes (x 1000)**	**Fe%**	**SiO_2%**	**Tonnes (x 1000)**	**Fe%**	**SiO_2%**	**Mn%**
Astray Lake	7,818	65.6	3.9				
Howse	28,228	58	5				
Sawyer Lake	12,000	61.8	11.4				
Gill Mine	4,595	50.5	10.6	298	44	9.2	9.2
Green Lake	366	51.4	7.8				
Kivivic 1	6,583	54	8.5				
Ruth Lake 8	410	53.3	9.6				
Wishart Mine	207	53.7	12.2				
Wishart 2	554	52	12.9				
Total	**60,761**	**58.6**	**7.1**	**298**	**44.0**	**9.2**	**9.2**

**Non-compliant with NI 43-101*

Table 6-2: Summary of Historical IOC Mineral Resource Estimates in Quebec

	Iron Resources			Manganese Resources			
Property	Tonnes (x 1000)	Fe%	SiO_2%	Tonnes (x 1000)	Fe%	SiO_2%	Mn%
Barney 1	6,281	53.9	7.7	62	49.1	3.5	5
Eclipse	37,159	56.3	5.2	2,068	49.9	4.5	4.1
Fleming 6	802	48.3	8.8	23	42.1	7	7.3
Fleming 7S	1,946	56	7.6				
Fleming 9	417	54.1	8.9				
Lance Ridge	1,370	53.9	8.5	281	41.5	5.7	10.3
Malcolm 1	2,879	56.2	6.1	422	51.4	4.9	5.8
Partington 2	3,377	55.2	9.2				
-Wollett 1	2,303	54.9	5.8				
Star Creek 1	1,492	51	7.3	1,972	45.9	6.2	6.5
Star Creek 3	63	55.2	8.4				
Sunny 3	460	57.8	6.7				
Trough 1	1,969	48.8	8.5	230	43.8	6.5	5.8
Total:	**60,518**	**55.4**	**6.1**	**5,058**	**47.7**	**5.4**	**5.6**

**Non-compliant with NI 43-101*

The historical resource estimates quoted in this report are based on prior data and reports prepared by IOC, the previous operator. These historical estimates are not current and do not meet NI 43-101 Definition Standards. A qualified person has not done sufficient work to classify the historical estimate as current mineral reserves. These historical results provide an indication of the potential of the properties and are relevant to ongoing exploration. The historical estimates should not be relied upon.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

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

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

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

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

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

The southern part of the Trough is crossed by the Grenville Front. Trough rocks in the Grenville Province to the south are highly metamorphosed and complexly folded. Iron deposits in the Grenville part of the Labrador Trough include Lac Jeannine, Fire Lake, Mounts Wright and Reed and the Luce, Humphrey and Scully deposits in the Wabush area. The high-grade metamorphism of the Grenville Province is responsible for recrystallization of both iron oxides and silica in primary iron formation producing coarse-grained sugary quartz, magnetite, specular hematite schists (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. A general geological map of Labrador is shown in Figure 7.1.

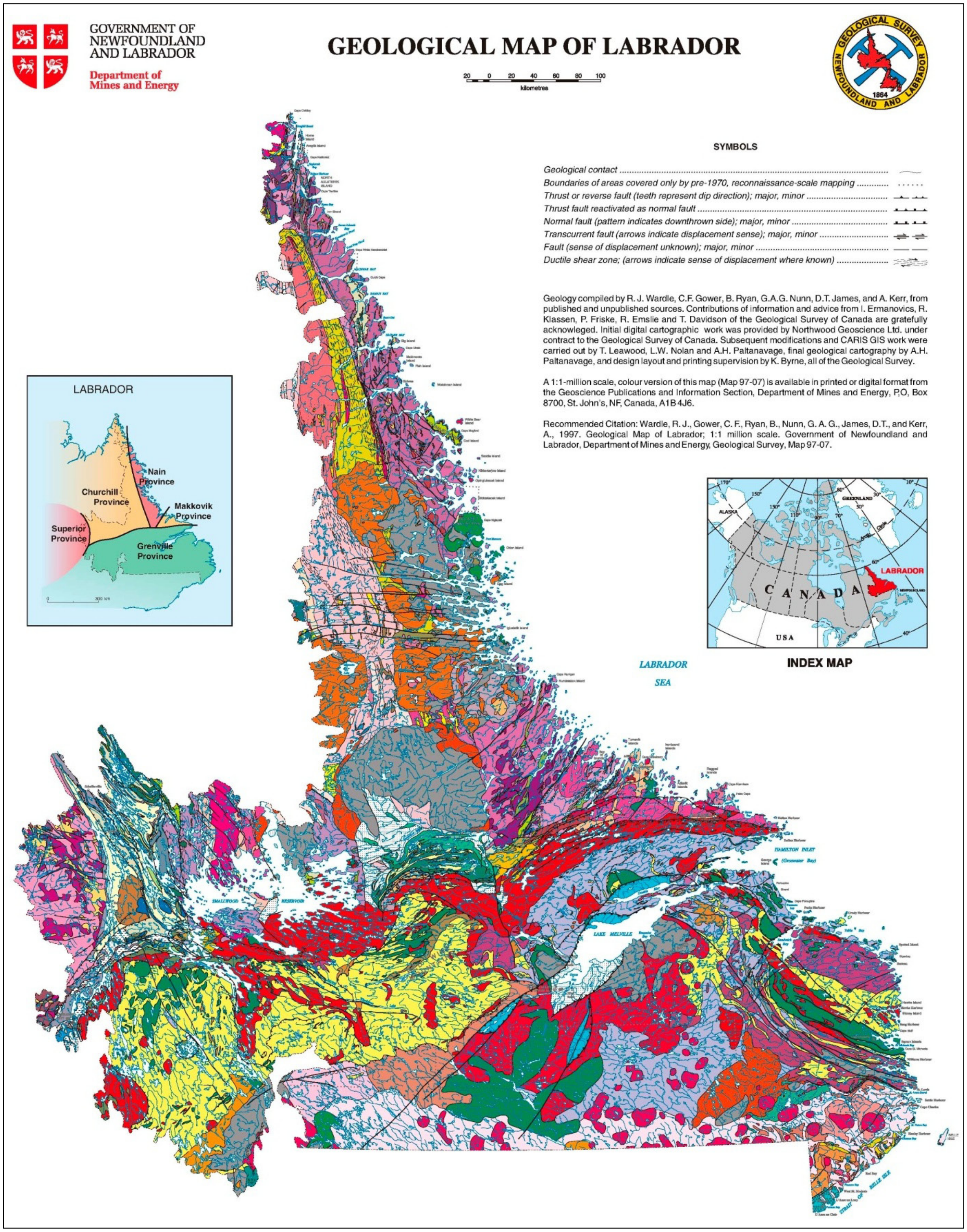


Figure 7.1: Geological Map of Labrador

7.2 Local Geology

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

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

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

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

7.2.1 Geology of Schefferville Area

The stratigraphy of the Schefferville area is as follows:

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

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

Near Knob Lake the formation probably has a maximum thickness of 180 metres but in many other places it forms discontinuous lenses that are, at most, 30 metres thick. Leached and altered beds near the iron deposits are rubbly, brown or cream 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 metres and consists of rectangular fragments of chert and quartz within a matrix of fine chert. In the lower part of the formation the matrix is dominantly dolomite grading upwards into chert and siliceous material.

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

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

Sokoman Formation – More than 80% of the ore in the Knob Lake Range occurs within this formation. Lithologically the iron formation varies in detail in different parts of the range and the thickness of individual members is not consistent. A thinly bedded, slaty facies at the base of the formation consists largely of fine chert with an abundance of iron silicates and disseminated magnetite and siderite. Fresh surfaces are grey to olive green and weathered surfaces brownish yellow to bright orange where minnesotaite is abundant.

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

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

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

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

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

7.2.2 *Iron Ore*

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

Only the direct shipping ore is considered amenable to beneficiation to produce lump and sinter feed which will be part of the resources for LIMHL's development projects. The direct shipping ore was classified by IOC in categories based on chemical, mineralogical and textural compositions. This classification is shown in Table 7-1.

Table 7-1: Classification of Ore Type

Schefferville Ore Types (From IOC)					
TYPE	**ORE COLOURS**	**T_Fe%**	**T_Mn%**	**SiO2%**	**Al2O3%**
NB (Non-bessemer)	Blue, Red, Yellow	>=55.0	<3.5	<10.0	<5.0
LNB (Lean non-bessemer)	Blue, Red, Yellow	>=50.0	<3.5	<18.0	<5.0
HMN (High Manganiferous)	Blue, Red, Yellow	(Fe+Mn) >=50.0	>=6.0	<18.0	<5.0
LMN (Low Manganiferous)	Blue, Red, Yellow	(Fe+Mn) >=50.0	3.5-6.0	<18.0	<5.0
HiSiO2 (High Silica)	Blue	>=50.0		18.0-30.0	<5.0
TRX (Treat Rock)	Blue	40.0-50.0		18.0-30.0	<5.0
HiAl (High Aluminum)	Blue, Red, Yellow	>=50.0		<18.0	>5.0
Waste	All material that does not fall into any of these categories.				

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

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

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

Direct shipping ores and lean ores mined in the Schefferville area during the period 1954-1982 amounted to some 150 million tons. Based on the original ore definition of IOC (+50% Fe <18% SiO_2dry basis), approximately 250 million tonnes of iron resources remain in the Schefferville area, exclusive of magnetite taconite. LIM has acquired the rights to approximately 50% of this remaining historic iron resource in Labrador. These numbers are based on historic estimates made in compliance with the standards used by IOC. The information in this paragraph was provided by LIMHL.

7.2.3 MANGANESE

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

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

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

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

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

8 DEPOSIT TYPES

8.1 IRON ORE

The Labrador Trough contains four main types of iron deposits:

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

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

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

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

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 centers in the Dyke-Astray area.

The iron ore deposits that form part of the LIMHL projects are further subdivided into:

- The deposits in the Central Zone;
- The deposits in the South Central Zone;
- The deposits in the North Central Zone,
- The deposits in the South Zone; and
- The deposits in the North Zone.

8.1.1 CENTRAL ZONE

8.1.1.1 *James Deposit*

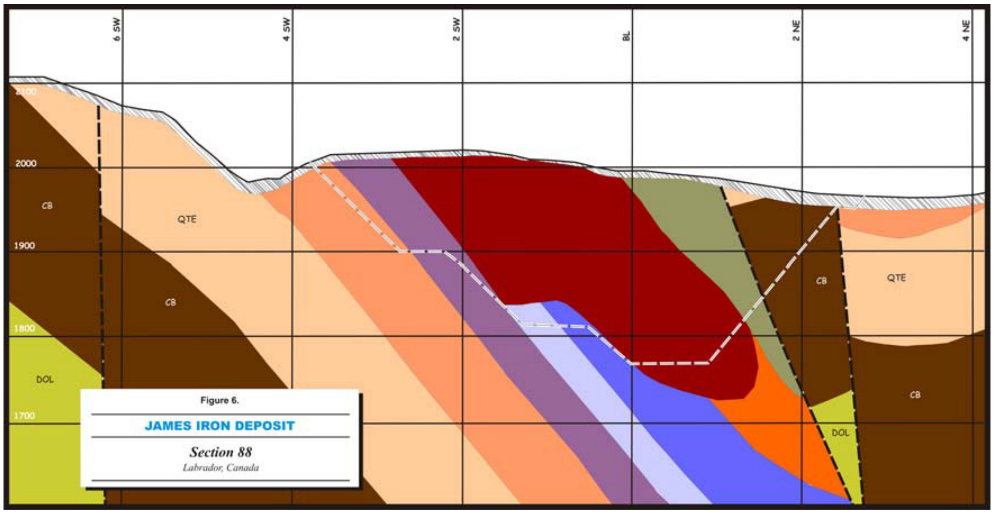
The James deposit is accessible by existing gravel roads and is located in Labrador approximately 3 km southwest of the town of Schefferville. The James deposit is a northeast dipping elongated iron enrichment deposit striking 330° along its main axis which appears to be structurally and stratigraphically controlled. The stratigraphic units recorded in the 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 mineralization consists of thin layers (<10 cms thick) of fine to medium grained steel blue hematite intercalated with minor cherty silica bands <5 cms thick dipping 30° to 45° to the northeast. The James mineralization has been affected by strong alteration, which removed most of the cementing silica making the mineralization with a sandy friable texture.

The James property comprises three areas of mineral enrichment: the main deposit, a manganese occurrence and a minor and isolated Fe occurrence located ~150 meters south of the main deposit. Most of the resources come from the main deposit, which are of direct shipping quality. The main deposit has a total length of approximately 880 metres by 80 metres wide and 100 metres deep of direct shipping grade. It shows low grade in its central part defining two separated high-grade zones: the northern and southern zones.

Magnetic susceptibility of the iron in the James deposit measuring by 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 the James deposit can be identified as magnetic lows due to the stronger magnetic nature of the surrounding rock.

Figure 8.1: Generalized Cross Section – James Deposits



Source: Labrador Iron Mines Limited

8.1.1.2 *Fleming 9*

The Fleming 9 deposit is located approximately 15 northwest of the town of Schefferville and can be reached by existing gravel roads. The centre part of the deposit is 2 km to the north of Iron Lake. The deposit was discovered in 1949 by IOC. The deposit is composed of iron bearing hematite ore, which represents the Sokoman Iron Formation. The mineralization is comformable with the stratigraphy.

8.1.1.3 *Gill Mine*

The Gill Mine is accessible by existing gravel roads and is located in Labrador approximately 3 km south-southwest of the town of Schefferville. The Gill Mine (also known as Ruth Lake 1) has approximately 1.6 km of strike. The mineralization is located along a steep dip slope along the west side of the Silver Yards Valley. It is described as a NW-SE trending homocline with concordant bands of Bessemer and non-Bessemer mineralization. The mineralization is concentrated in the upper portion of the MIF (Middle Iron Formation). Several cross faults have been mapped along the deposit. Pods of manganiferous material have been noted near the northwest end of the deposit.

Despite being a former iron ore producer (1954-1957), LIM has currently very little mining data with which to verify the resources in this location.

8.1.1.4 *Ruth Lake 8*

The Ruth Lake 8 deposit is accessible by existing gravel roads and is located in Labrador approximately 6 km south-southwest of the town of Schefferville. Discovered in 1948, Ruth Lake 8 is 1.5 km SW of the Silver Yards/James Mine area. Ruth Lake No. 8 deposit is located on flat ground having an average elevation of 682 m (2270 ft.). The structure of Ruth Lake No. 8 is a faulted syncline the axis of which trends NW. Drilling in 1976 showed that in part of the deposit mineralization extends to a depth of up to 122 m (400 ft.). The deposit consists of more than 75%

blue ore (Stubbins et al., 1961). A manganiferous resource was delineated by IOC during their work in the area.

Prior to the closure of the IOC mining operation in Schefferville the Ruth Lake 8 deposit was partially stripped of overburden in preparation for mining and three dewatering wells were installed.

8.1.1.5 *Wishart 1 and 2*

The Wishart 1 and Wishart 2 areas are accessible by existing gravel roads and lie 4 km to the southwest of the James Mine/Silver Yards area. The Wishart 1 and 2 deposits were mined by IOC early in their Schefferville mining program. In the process large tonnages of lean ore and treat rock were stockpiled for future consideration. LIM has commenced a program of documenting the grade and tonnage of treat rock that still remains in the area, focusing on two large piles that are located immediately to the southwest of the Wishart 1 pit.

In addition to the treat rock there are resources still remaining in the dormant open pits. Wishart 1 has a resource listed in historical records as 207 K tonnes grading 53.69% Fe and 12.17% SiO_2. Wishart 2 resources are given as 554 K tonnes grading 52.02% Fe and 12.93% SiO_2. The Wishart 2 property contains a Mn resource of 9 K tonnes grading 46.37% Fe, 4.93% SiO_2 and 4.35% Mn. The historical resources referred to in this document are based on work completed and estimates prepared by the Iron Ore Company of Canada ("IOC") prior to 1983 and were not prepared in accordance with NI 43-101. These historical estimates are not current and do not meet NI 43-101 Definition Standards. A qualified person has not done sufficient work to classify the historical estimate as current mineral reserves. These historical results provide an indication of the potential of the properties and are relevant to ongoing exploration. The historical estimates should not be relied upon

Wishart 1 was located in a broad symmetrical syncline that plunges gently to the southeast. The deposit was known to have an overall length of nearly 762 m (2500 ft.), was hook-shaped in plan, and had a maximum width in the central part of 244 m (800 ft.). Ore extended 244 m (800 ft.) farther southeast in the east limb of the syncline than in the west limb and this extension was about 76 m (250 ft.) wide. More than 90% of the ore is of the blue variety with a high metallic lustre and a fairly granular texture.

8.1.1.6 *Knob Lake 1*

The Knob Lake 1 deposit is accessible by existing gravel roads and is located in Labrador approximately 3 km south of the town of Schefferville. The deposit is a northeast dipping ellipsoidal iron deposit with a direction of N330° in its main axis and it appears to be structurally and stratigraphically controlled. Despite the proximity of the deposit to James deposit, the mineralization in Knob Lake 1 is different. The deposit at Knob Lake 1 is capped by a medium grade very hard siliceous hematite mineralization dipping 35° - 45° to the northeast. The high grade iron mineralization is concentrated at the end of a hill restricted between Knob Lake and Lejuene Lakes which consists of thin banded hematite intercalated with layers of cherty silica <10 cms thick. The overall texture of the underlying mineralization is softer and moderately unconsolidated, similar to that in the Houston deposit (see Section 8.1.2.2).

8.1.1.7 *Denault*

The Denault property is accessible by existing gravel roads and is located in Quebec approximately 5 to 8 km north-northwest of the town of Schefferville. The property consists of three separate areas of Fe enrichment which are from north to south Denault 1, 2 and 3. The structure that crosses a low hillside is a rolling homocline. The ore type is predominantly yellow and is located primarily in the Ruth and silicate SCIF (carbonate iron formation) members of the LIF (lower iron formation). Overburden in the area is less than 5 m thick.

8.1.1.8 *Star Creek 1*

The Star Creek 1 deposit is accessible by existing gravel roads and is located in Quebec approximately 5 to 8 km north-northwest of the town of Schefferville. The deposit is located 2 km to the west of the Denault showing. The mineralization occurs in fault blocks within the LIF and Ruth Formation and is a mix of the red-yellow and blue types. The Star Creek 1 Deposit was partially mined out by IOC however there is still an iron and manganese resource in place. Recent work by a previous claim holder suggests that stockpiles immediately to the east of the open pit may contain further manganese resources.

8.1.1.9 *Lance Ridge*

The Lance Ridge deposit is accessible by existing gravel roads and is located in Quebec approximately 5 to 8 km north-northwest of the town of Schefferville. This property lies 1.5 km northwest from the Star Creek property. It is a combined iron/manganese resource. Lance Ridge 1 is an enriched iron deposit that contains several zones of manganese mineralization. IOC trenched, sampled and drilled the deposit in 1970. The area of enrichment is generally covered by 3 m to 7 m of glacial till and does not outcrop. IOC outlined an area of high manganese by trench sampling. Their analyses ranged from 30% to 31% Mn.

8.1.1.10 *Woollett 1*

The Woollett 1 property, located within the province of Quebec and approximately 11 km north-northwest of the town of Schefferville is accessible by existing gravel roads. This resource was delineated by IOC. The mineralization lies along the south east shore of Lake Vacher on gently sloping ground; overburden in the area is generally 2 m to 5 m thick. The structure is a northeast dipping homocline. The mineralization is a mix of the red, yellow and blue ore types.

8.1.2 South Central Zone

8.1.2.1 *Redmond*

The Redmond deposits are located in Labrador approximately 12 km south-southwest of the town of Schefferville and can be reached by existing gravel roads. The Redmond iron deposits occur in a northwest trending synclinal feature that extends from the Wishart Lake area in the north to beyond the Redmond 1 pit in the south.

A lack of geological data from IOC regarding the Redmond 2B property required an intense drill and trenching program in 2008 and 2009. Exploration and development at Redmond 2B is aided by the fact that IOC stripped the overburden from their proposed open pit prior to their closing of the mines in 1982. There is historic IOC data available for the Redmond 5 area 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.

8.1.2.2 *Redmond 2B*

The Redmond 2B enrichment 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.

8.1.2.3 *Redmond 5*

The Redmond 5 deposit 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.

8.1.2.4 *Houston*

The Houston property is located approximately 20 km southeast of Schefferville and can be reached by existing gravel roads. The Houston project area is composed of what appear to be at least three separate areas of iron enrichment with a continuously mineralized zone of over 3 km in strike length and which remains open to the south. These three areas of enrichment are referred to as the Houston 1, Houston 2 and Houston 3 deposits. Houston 3 is currently less well explored and there appears to be significant additional DSO potential to the south of Houston 3 which requires additional drilling.

The Houston DSO iron deposits are stratigraphically and structurally controlled, and consist of hard and friable banded, blue and red hematite that locally becomes massive. Airborne magnetometer survey data available from the Geoscience Data Repository of Natural Resources Canada suggests that the iron ore is concentrated along the western flank (gradient) of a modest to strong magnetic feature, which trends approximately 330°. The Houston 1 and Houston 2S deposits are not coincident with the strongest magnetic features, due to the poor magnetic susceptibility of this type of mineralization. IOC drilled and trenched the Houston deposit and prepared reserve and resource calculations which were contained in their Statement of Reserves at December 31, 1982.

LIM carried out drilling during the 2006, 2008, 2009, 2010 and 2011 programs in Houston which indicated that the majority of the potentially economic iron mineralization occurs within the lower iron formation (LIF) and middle iron formation (MIF). The majority of the economic mineralization in the Houston area is hosted within the Ruth Chert Formation.

Striking northwest and dipping to the northeast, both Houston 1 and 2 mineralization has been found to extend down dip to the northeast. These down dip extensions had not been previously tested by IOC when mining operations in the area ended. At the present time there remains potential for additional resources to be developed at deeper levels in both the Houston 1 and 2 deposits (down dip).

The Houston 3 deposit appears to be more vertical in nature and drill holes testing the eastern margin of the known deposit have not intercepted any eastward extensions. However, this deposit has yet to be tested to its maximum vertical depth or for at least an additional 2 km of strike to the south.

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

8.1.2.5 *Malcolm 1*

The Malcolm 1 is located approximately 10 km southeast of Schefferville and can be reached by existing gravel roads. IOC discovered the deposit in 1950. The deposit contains iron in the form of hematite and the mineralization is located within the Sokoman Iron Formation along with slaty iron formation of the Ruth Formation. The deposit is oriented southwest and has an inclination of 60 degrees.

8.1.3 North Central Zone

8.1.3.1 *Howse*

The Howse iron deposit is located approximately 25 km northwest of the town of Schefferville and can be reached by existing gravel roads developed during the former IOC operations. This iron occurrence was discovered in 1979 and was explored during the final days of IOC operations in the area when IOC geologists put the possibility of a deposit existing under the thick overburden forward in the 1960's. This deposit lies under 10 m to 40 m of overburden. In 1978 a gravimetric survey detected anomalies that were subsequently drilled to make the discovery. Trenching in the area between 1979 and 1982 failed to reach bedrock.

The Howse deposit was drilled by IOC who reported about 110 reverse circulation (RC) drill holes. Details of analytical results and geology of Howse deposit is the subject of ongoing compilation as of the date of this report. As of December 2009, 25 of the IOC drill hole logs with assays have been reviewed. In addition to the IOC drill results, LIM carried out two short RC drilling programs on the Howse property in 2008 and 2009 for a total of 7 holes for a total of 409 metres.

8.1.3.2 *Barney 1*

The Barney 1 property is located approximately 25 km northwest of the town of Schefferville and can be reached by existing gravel roads developed during the former IOC operations. The Barney 1 deposit is located 3.5 km to the NE from Howse on the Quebec side of the provincial boundary. Geologically described as a complex syncline it is exposed in a low hillside. Overburden thickness varies between 2 m and 5 m. The ore type in the Barney area is greater than 75% blue ore.

8.1.4 South Zone

8.1.4.1 *Astray Lake*

The Astray Lake deposit is approximately 50 km southeast of Schefferville and has currently no road access but can be reached by float plane or by helicopter. The Astray Lake occurrence is a northeast dipping undefined iron deposit located approximately 500m northeast from the eastern shore of Astray Lake and on the west side of a steeply sided NW-SE trending ridge. The occurrence occurs in iron formation in the south corner of the Petisikapau Synclinorium, a major structural feature of this part of the Labrador Trough.

The mineralization is localized in the Lower Sokoman Formation in the trough of a major north-plunging syncline. The surface outline of the occurrence has a northwest-southeast alignment consistent with the distribution of the iron formation generally located along the ridges. Some of the hematite jasper iron formation is brecciated and ore is developed where hard blue hematite cements this breccia or replaces silica in the banded iron formation. Ore is developed up to the top of this member along the contact with the overlying basalt flows.

The jasper iron formation is not highly metamorphosed and contains more than 40% Fe in the form of hard dense blue to dark grey-black hematite distributed in fine granular textured layers inter-banded with deep red jasper. The iron formation has been highly leached and secondarily enriched in martite, goethite and hematite (Wardle, 1979).

Due to the hard nature of the mineralized iron formation and its differential erosion with respect to other rock units, iron ore mineralization tends to be on or about the hilltops. Consequently it is believed that the Astray Lake mineralization will favor a significant amount of lump ore compared to the other “soft ore” deposits. The local stratigraphic units are dipping approximately between 30° and 40° to the northeast. Taking into consideration the previous characteristics, the most prospective areas for iron mineralization are the eastern hillsides along the Astray Lake Mountain, which was confirmed by the mineral occurrences identified so far.

8.1.4.2 *Sawyer Lake*

The Sawyer Lake deposit, located approximately 65 km southeast of Schefferville, has currently no road access but can be reached by float plane or by helicopter. The Sawyer Lake mineralization is a medium-sized iron ore occurrence located approximately 1.6 km northwest of Sawyer Lake. The mineralization occurs in iron formation in the south corner of the Petisikapau Synclinorium.

Cross-sections outlining the mineralization show that it has an inverted “V” shape or saddle reef-like structure, suggesting that hematite enrichment followed bedding over the crest of the small anticline. Some of the hematite jasper iron formation is brecciated

The general geological sequence of this occurrence is high grade massive blue hematite on top of medium grade banded iron formation, which is over top of low grade banded iron formation where yellow ore begins to show up. Specular martite grains show up within the massive blue hematite zones.

The Sawyer Lake iron deposit does not fit the two most common models for iron formation in the Labrador Trough. It differs from the Knob Lake 1 deposits in that the ore is very hard dense blue hematite with practically no goethite present. Silica is replaced in many places with very little porosity or friability developed in the iron formation and the effects of oxidation are not conspicuous in either the iron formation or adjacent rocks.

The deposit lacks sulphur and magnetite, indicating that there was little mineralogical disturbance after deposition.

8.1.5 North Zone

8.1.5.1 *Kivivic 1*

Kivivic 1 is located some 43 km northwest of Schefferville and can be reached by gravel roads. It is located in a wide valley having an average elevation of 802 m (2630 ft.). The structure of Kivivic 1 is a faulted syncline. The average depth of the deposit was said to be 43 m (140 ft.) and the maximum depth greater than 61 m (200 ft.). The deposit consists of more than 75% blue ore that occurs predominantly in the MIF of the Sokoman Iron Formation (Stubbins et al., 1961).

8.1.5.2 *Trough 1*

The Trough 1 property, also located within Quebec, is approximately 21 km north-northwest of Schefferville and is currently not accessible by road but can only be reached by helicopter. This property is located on a gently sloping hillside with very little overburden. Mineralization is within a syncline and is reported to be predominantly yellow ore within the SCIF.

8.1.5.3 *Partington*

The Partington deposit is located approximately 55 km northwest of Schefferville and can be reached by existing gravel roads developed during the former IOC operations. This property occupies gently sloping ground to the southeast of Partington Lake. Overburden ranges from 2 m to 5 m thick. The structure is described as a distorted syncline. The mineralization is reported to be predominantly blue type occurring in the MIF.

8.1.5.4 *Eclipse*

The Eclipse deposit is located approximately 85 km northwest of Schefferville and has no road access but is only accessible by helicopter. Eclipse is the second largest occurrence of iron ore in the Schefferville mining district. It is exceeded in size by only the Goodwood occurrence. The mineralization occurs in a northeast dipping faulted homocline and is composed of a mix of the red, yellow and blue types. Lying under a steep hillside on the east side of Sunspot Lake the overburden varies from 2 m to 5 m thick.

8.1.6 Other Deposits

This section describes LIM properties that are predominantly composed of iron ore but do not fall into the above four categories of Central, South Central South and North Central Zones.

8.1.6.1 *Fleming*

The Fleming 3 property was mined by IOC and SMI is interested in the manganese resources contained in stockpiles adjacent to the old open pits.

The Fleming 7 deposit is accessible by existing gravel road and is located approximately 10 km to 15 km from northwest of the town of Schefferville. Fleming 7 is located at the height of land that marks the Labrador-Quebec provincial border. This claim covers the southern extension of the Fleming 7 property from Labrador into Quebec

8.1.6.2 *Snow Lake*

The Snow Lake deposit is located 11 km northwest of the town of Schefferville, 2 km to the east of the Timmins area. This property is shown on IOC maps as an iron resource. At the moment, LIMHL does not possess any description of the occurrence or historic resource volumes.

8.2 MANGANESE DEPOSITS

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

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

The manganese ore deposits have been subdivided in the same format that form part of the LIMHL project are further subdivided into the same zones as the iron deposits.

8.2.1 CENTRAL ZONE

8.2.1.1 *Ruth Lake (Manganese)*

The Ruth Lake (Manganese) deposit is accessible by existing gravel roads and is located in Labrador approximately 6 km south-southwest of the town of Schefferville. Located immediately to the west of the Gill Mine and Silver Yards area the Ruth Lake (Manganese) property covers an area 2.5 km long by 200 m wide that trends NW/SE. Up to 2009 seven manganese showings have been documented by previous claim holders. From northwest to southeast these are the Ruth Lake A, B & C showings, Dry Lake, Ryan, Dannick and in the south the Avison Showing.

8.2.1.2 *Ruth A, B & C*

The Ruth A, B and C occurrences are NE-plunging lenses of massive manganese mineralization hosted in a fault gouge consisting of altered quartzites and chert breccias of the Wishart and Fleming formation respectively. The Ruth B and C deposits are northwest extensions to the Ruth A deposit. The Ruth A occurrence is interpreted as a pinch-and-swell structure, 450 ft (=137 m) along strike, with a maximum thickness of 20 ft (=6 m). The Ruth B occurrence is 300 ft (=91 m) northwest of Ruth A and is completely hosted within Fleming Formation chert breccia. The Ruth C deposit is 220 ft (= 67 m) north of Ruth B and is recognized over a length of 600 ft (= 183 m), after which it is covered by the Ruth iron mine waste pile. The mineralized zone, which has a maximum reported thickness is 110 ft (=34 m), is hosted entirely by altered, Fleming Formation chert breccia.

8.2.1.3 *Dry Lake*

Located 500 metres southeast of the Ruth A occurrence of manganese enrichment in the Dry Lake deposit is reported to occur in Wishart Formation quartzites and Fleming Formation cherts. The Wishart Formation quartzite in this area is highly leached by ground water and appears as friable and unconsolidated sand and muddy soils with lenses of the remaining original rock.

8.2.1.4 *Ryan*

The Ryan manganese showing comprises two manganese lenses hosted by the Sokoman Formation (iron formation) and Wishart Formation (quartzite). Manganese mineralization occurs as 0.5 to 25 cm thick veins, cavity fillings and fine grained disseminations. The occurrence covers approximately 15,000 m2 in the centre of the Property. According to La Fosse, Lens 1 (560 ft x 30 ft = 171 m x 9 m) contains up to 25% Mn, with Mn:Fe ratios around 1.0, whereas Lens 2 (600 ft x 30 ft = 183 m x 9 m) contains 16.2% Mn and 10.7% Fe. The two zones are separated by approximately 30 ft (9 m) of barren, fault-gouge material.

8.2.1.5 *Dannick*

A recent discovery (MRB, 2008) this newly exposed zone of manganese mineralization occurs some 200-300 metres northwest of the Avison occurrence along the trace of the central thrust fault that transects the Property, and in close proximity to the Sokoman-Ruth Formation contact. This property is now in an early phase of exploration.

8.2.1.6 *Avison*

The Avison occurrence covers an area of 2000 m2 near the south end of the known zone of manganese enrichment. It is hosted by the silicate-carbonate iron formation of the Sokoman Formation, just above Ruth Formation slates. It is interpreted to have formed by an in situ enrichment of a manganese-rich iron formation. Previous work returned values of up to 42% Mn from grab samples, whereas channel samples from across the showing ranged from 15% to 25% Mn. The location of these showings along the same fault zone as the Ruth and Ryan manganese occurrences is noteworthy.

8.2.1.7 *Wishart 2*

The Wishart 1 and Wishart 2 area lies 4 km to the southwest of the James Mine/Silver Yards area. The Wishart 1 and 2 deposits were mined by IOC early in their Schefferville mining program. As described in Section 8.1.1.4 the Wishart 2 property contains a manganese resource of 9,000 tonnes grading 46.37% Fe, 4.93% SiO_2 and 4.35% Mn.

8.2.1.8 *Christine*

The Christine deposit is accessible by existing gravel road, and are located 11 km from northwest of the town of Schefferville. This property is located 10 km northwest of the James Mine area along the Labrador-Quebec border. This property is an exploration project centered on the Christine 1B and 1C manganese showings. These showings are noted on IOC resource maps of the Schefferville area and LIM is in the early phases of an exploration program to access resources in the area.

8.2.1.9 *Timmins Area*

The Timmins area is accessible by existing gravel road, and it is located 11km northwest of the town of Schefferville. LIM is exploring a group of claims in the Howse/Timmins area. These 4 claim groups cover the Elross 3, Timmins 5, Timmins 6 and Irony Mountain properties.

Elross 3 and Timmins 5 properties were explored by IOC and iron and manganese occurrences were noted. This historical work did not progress beyond an early exploration phase and no resources are listed in the 1982 IOC Resource Inventory. There is very little data available describing the deposits of these properties.

The Timmins 6 property was mined by IOC and LIM is interested in the Mn resources contained in stockpiles adjacent to the old open pits. During 2009 field prospecting work began on Timmins 5 and Elross 3. Although Timmins 6 and Elross 3 are located within the North Central Zone they are grouped into this category because they are part of the same property.

8.2.1.10 *Ferriman 3 and Ferriman 5*

These claims are located approximately 10-15 km northwest of Schefferville. These claims cover the area of the mined out Gagnon A and Gagnon B open pits. Exploration on these claims will focus on manganese resources in stockpiles around the open pits.

8.2.1.11 *French Mine*

The French Mine is located 11 km northwest of the town of Schefferville, 5 km north of the James Mine area. This manganese showing is adjacent to the former producing French Mine. Manganese mineralization is exposed in an area 6 m by 16 m. The mineralization is hosted by the Ruth Shale, and saddles a northwest trending fault zone. The fault appears to occupy the contact between the Ruth Shale and the Wishart quartzite.

8.2.1.12 *Christine*

The Christine manganese occurrence occupies this area that is the Quebec side of the Christine 1B and 1C properties in Labrador. It occurs in a small, southeast striking valley at the base of a steep northeast slope. Iron formation outcrops at the head (NW end) of the valley over an area of 30 m x 100 m. Veins and pods of manganese occur in a 1 m to 5 m wide band across the center of the outcrop area.

8.2.2 South-Central Zone

8.2.2.1 *Abel Lake 1*

Abel is currently accessible by ATV and is located in Labrador approximately 7 km south-southeast of the town of Schefferville. The Abel area was first prospected by LM&E and its location is noted on IOC maps. Little to no information dating from this time is available. In 1989 La Fosse carried out field work on the Abel occurrence as part of their manganese exploration program. More recently in 2008 the previous property owner Gravhaven Ltd. ("Gravhaven") carried out a sampling program on this prospect.

The occurrence lies on the east shore of Abel Lake and is underlain by bedrock of the Wishart Formation and Sokoman Iron Formation (the Ruth Formation is considered to be the basal unit of the Sokoman Iron Formation). The strike of the bedrock in the area is consistent with the north-westerly strike of the region. Dip varies from 20 degrees to 70 degrees to the east. A dextral cross fault occurs in the northern area of the prospect.

The Wishart formation occurs on the west side of the prospect and consists of massive fine grained quartz sandstone. This unit is overlain by the Sokoman Formation and it is in this unit that the manganese enrichment occurs.

The manganese enrichment occurs in two zones. In the western area it occurs between the Ruth Formation and the overlying Iron formation. In this zone manganese occurs as lenses varying from a few cm to 1.0 m in width. Manganese veinlets are noted to crosscut bedding. This zone varies from 3 to 30 metres width and is mapped over a strike of 200 m. Channel samples taken by La Fosse in 1989 ranged from 5% Mn to 38% Mn.

The eastern zone of manganese enrichment averages 15 m width and is exposed over a strike length of 240 m. manganese occurs in lenses ranging from 2 cm to 1.5 m. Channel samples taken by La Fosse returned grades of 45 to 23% Mn. Again veinlets of manganese are noted to crosscut bedding.

8.2.3 *Other Manganese Deposits*

This group covers a number of properties acquired in 2009. All the properties are in Quebec, located to the north of Schefferville, and focus primarily on manganese resources. While some have been explored or developed in the past, SMI is only starting to carry out work here. .

8.2.3.1 *Sunny 2 and Sunny 3*

These two deposits are located 43 km from the town of Schefferville. Located in the Kivivic area these claims target potential manganese resources around known iron deposits as delineated by IOC. No work has been carried out by SMI in these areas as of the time of writing this report.

8.2.3.2 *Hoylet Lake*

These claims are located 40 km northwest of Schefferville and 18 km east of Kivivic. These claims have recently been acquired by SMI as manganese targets and no work has been carried out to this date.

8.2.3.3 *Murdock Lake North and Murdock Lake South*

These claims are located 90 and 60 km northeast of Schefferville respectively, and have also recently been acquired by SMI as manganese exploration targets. No evaluation has been carried out to date.

8.2.3.4 *Schmoo Lake*

This prospect is located approximately 81 km northwest of Schefferville. The prospect is a high grade +50% manganese occurrence. IOC carried out sampling and pitting on the prospect in the mid-1950s. The mineralization occurs within a silicate carbonate iron formation. Cherty iron formation occurs adjacent to the surface mineralization. The mineralization outcrops for a strike length of 45 m and is 10 m thick at its widest part.

9 EXPLORATION

9.1 PAST EXPLORATION

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

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

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

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

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

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

Work performed during the summer and fall of 1989 consisted of geological mapping, prospecting and sampling, airtrac drilling (26 holes totalling 478 ft = 146 m), and a VLF ground geophysical survey. Also in 1989, the La Fosse Platinum Group carried out exploration on the Ryan manganese showing. Work consisted of stripping and trenching (12 trenches totalling 1970 ft = 601 m), chip sampling and airtrac drilling (25 holes) coupled with sampling of cuttings. In addition, an 1,800 ton bulk sample was obtained and stockpiled for analysis. Nineteen representative samples were taken from the bulk sample stockpile and yielded an average of 23.1% Mn and 20.4% Fe (see Geofile 23J/15/0277).

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

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

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

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

During the summer and autumn of 2008, an exploration program of prospecting, trenching and diamond-drilling was completed by Gravhaven on their mineral concessions in the Schefferville Iron District (SID) of Labrador and Quebec. The program and results have been reported in the Work Assessment Report by MRB & Associates ("MRB") (October 30th, 2009).

A total of 42 trenches totalling 1,672 metres were excavated, and 1,042 grab and 35 core samples from 8 drill holes were obtained and assayed from 10 of Gravhaven's mineral concessions. Trenches were excavated on a large number of their properties. A local contractor was hired to excavate the trenches, which ranged from 0.5 to 2.5m in depth, and all trenches were mapped. The diamond drill program was comprised 8 holes (345.5 metres) drilled on the Ruth Property in October 2008. The intent of this sampling program was to quantify the manganese content of different mineralized areas underlying Gravhaven's property holdings throughout the Schefferville area. The goals of Gravhaven's exploration campaign were two-fold:

- to re-evaluate the previous trenching and mapping campaign completed by La Fosse during the late 1980's and early 1990's and to authenticate their results, and
- to locate new manganese-rich mineralized zones underlying their mineral claims in the SID.

9.2 LIM Exploration from 2005 - 2007

2005 - Three geologists travelled to Schefferville to start the exploration and reconnaissance program over the properties held by Energold and those held by Fenton Scott and Graeme Scott, among them the Sawyer Lake claims. The crew flew in to the Sawyer Lake property and spent 9 days in the properties surveying the old workings (trenches, pits and drill holes), prospecting, mapping, and collecting rock samples. A total of 18 rock samples, 6 composite and 12 from trenches, and 1 from drill cuttings (hole RX-1083) were also collected from the James deposit for the sole purpose of grade verification with respect to historical data. Iron grades varied from 49.69% Fe (James) to 66.77% Fe (Knob Lake 1). Surface rock sampling in the James deposit was intended for confirmation purposes. Results obtained were as expected being similar to those reported by IOC.

2006 - The diamond drill program totalled 605 metres in 11 holes completed between July 21st and August 26th of 2006 on the James, Knob Lake No.1, Houston and Astray Lake deposits using Cartwright Drilling Inc. of Goose Bay, Labrador. Also, a short program of bulk sampling was carried out in 2006 consisting of 188 metres of trenching for bulk sampling that was completed in two stages; the first at Houston deposit (75 m) conducted between August 22nd and 24th and the second one at James deposit (113 m) conducted between September 29th and October 2nd of 2006.

2007 – The exploration program for 2007 ran from September 20th until October 5th. The crew spent 5 days in Sawyer Lake between September 25th and September 30th and 4 days in Astray Lake between September 30th and October 3rd of 2007 prospecting and trenching. The company contracted the services of local labour through the Public Works division of the Naskapi Band in Kawawachikamach. The results of the exploration program of bulk sampling trenching and the drilling program carried out by LIM in 2006 were reported in the Technical Report dated October 10th, 2007.

A summary of the drilling program has been shown in Section 10.

A summary of the bulk sampling and trench sampling of 2006 is shown in Table 9-1 for the James Deposit.

Table 9-1: Trench Sample Results – James Deposit

From (m)	To (m)	Len (m)	Fe%	SiO_2%	Ore Type
0.00	12.50	12.50	15.67	72.30	HIS
12.50	21.80	9.30	34.05	45.21	NBY
36.30	52.30	16.00	35.84	45.15	LNB
52.30	88.30	36.00	62.93	6.44	NB
88.30	113.30	25.00	54.56	16.81	TRX

9.3 2008, 2009, 2010 AND 2011 EXPLORATION

LIMHL continued its exploration program on the properties in the Schefferville area during 2008, 2009, 2010 and 2011.

9.3.1 2008 PROGRAM

In addition to the drilling program (See Section 10) LIMHL selected Eagle Mapping Ltd of Port Coquitlam, BC to carry out an aerial topographic survey flown over their properties in the Schefferville Area covering a total of some 16,230 ha and 233,825 ha at a map scale of 1:1000 and 1:5000 respectively. Using a differential GPS (with an accuracy within 40 cm) LIMHL surveyed their 2008 RC drill holes, as well as the trenches and a total of 90 old IOC RC drill holes that were still visible and could be located.

Because the proposed mining of the properties was to start with the James and Redmond deposits a trenching program was initiated on these properties to better define the extent of the mineral zones. In addition to the 113 metres long trench excavated in 2006, LIMHL developed 5 trenches (for a total of 333.82 metres) on the James property, 3 trenches (for a total of 348.02 metres) on Redmond 2B property and 4 trenches (for a total of 252 metres) on the Redmond 5 property.

During the IOC exploitation of the Redmond and Wishart properties the then sub-economic "Treat Rock" and waste was stockpiled. LIMHL carried out a sampling program with test pits that were excavated (and RC drilled see Section 11.0) and sampled. A total of 117 test pits were excavated on the Redmond property and 41 on the Wishart property. The results of these tests were not used in the resource estimates.

A bulk sampling program was carried out with material from the James, Redmond, Knob Lake 1 and Houston deposits. A total of 1,400 tonnes of blue ore was excavated from the James South deposit, 1,500 tonnes of blue ore from the Redmond 5 deposit, 1,100 tonnes of red ore from the Knob Lake 1 deposit and 1,900 tonnes of blue ore from the Houston deposit.

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

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

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

9.3.2 2009 Program

In addition to the drilling program (See Section 11.0) LIMHL used a differential GPS (with an accuracy within 40 cm) to survey their 2009 RC drill holes, trenches as well as any old IOC RC drill holes or survey markers that were still visible and could be located.

The 2009 trenching program focused on the Redmond 2B, Redmond 5 and Houston 3 properties. Between May 25th and November 1st of 2009 a total of 1,525 metres of trenching were excavated. LIM developed 8 trenches (for a total of 439 metres) on the Houston 3 property, 5 trenches (for a total of 294 metres) on Redmond 2B property, 4 trenches (for a total of 189 metres) on the Redmond 5 deposit and 14 trenches (for a total of 603 metres) on the Gill Mine property.

The information obtained from this and the 2008 exploration program was intended for the confirmation and validation of the resources reported by IOC, making them NI-43-101 compliant. For this purpose, LIM retained SGS Geostat for the preparation of the mineral resource evaluation of the James, Redmond 2B and Redmond 5 deposits. The results of this evaluation are shown in Section 13.0.

LIM has expended approximately $17.5 million on exploration and development of the properties between 2005 and 2009.

9.3.3 2010 Program

The work carried out during the 2010 exploration program included reverse circulation drilling in the Houston area totalled 1804 metres in 26 drill holes. A trenching program on the Ruth Lake 8 deposit totalled 1452 metres in 15 trenches. In addition, 68 test pits were dug and sampled over a low grade stockpile in the Redmond 2 area.

Drilling on the Houston claims focused on three areas. The first was the ground between Houston 1 and Houston 2. The goal of this work was to link these two deposits together. Insufficient work had been done in the past to accomplish this. The second area was the north end of Houston 2. In this area confirmation drilling was carried out in order to test the size and location of the iron ore deposit as modelled by IOC and more recent LIM drilling. The third area covered was along the eastern margin of the Houston 1 deposit. Work here was intended to test the down dip extensions of the ore body.

The 2010 trenching program was focused on the Ruth Lake 8 deposit. This area had been stripped of overburden in preparation for mining during the final days of IOC operations in Schefferville. A total of 15 trenches (1,452m) were excavated and 458 samples were collected. The purpose of this work was to outline the surface expression of the ore body. This data is to be used for planning the 2011 drill program in the area.

The LIM stockpile testing program began in 2008 and was continued during 2010. Recently acquired historic maps of the Redmond area indicated a stockpile of low grade iron ore near the Redmond 2 pit. A test pitting program was carried out using a small back hoe and 68 samples were collected. The results of this work will be used to plan 4 to 5 RC drill holes on the stockpile in 2011.

9.3.3.1 *Airborne Geophysical Survey*

During the 2010 exploration season an airborne gravity and magnetic survey was flown over four claim blocks of LIM's Schefferville area properties. The company contracted to conduct the survey was Fugro Airborne Surveys Pty Ltd, Australia.

Four claim blocks were selected by LIM for the survey being centered on the Howse, Houston/Redmond, Astray and Sawyer Lake areas. A total of 473.6 line kms were surveyed over the Howse area, 851.8kms over Houston/Redmond areas, 354.6 kms over Astray and 215.7 line kms over the Sawyer Lake area. In all 1895.7 line kms were flown for the gravity and magnetic surveys.

An interim interpretation and evaluation of the processed and plotted airborne gravity gradiometer and magnetic data acquired by Fugro on behalf of LIM over four blocks in the Schefferville area has confirmed the projected utility of the survey in detecting and outlining Fe deposits, although only some of the recessive hematitic DSO deposits were detected. Several targets will be tested in 2011 using RC and/or Diamond Drilling.

On the Houston Block, predicted by other surveys and computer modeling, the vertical gravity gradient (Gzz), computed from the measured tensor component Tij, successfully detected and delineated narrow taconite Fe formations, aided by their expression as ridges and hence proximity to the airborne gradiometer.

The Howse Block, near the northern limit of LIM's current exploration and development efforts, contains numerous defined and/or exploited high-grade hematitic Fe deposits in at least five separate belts, as well the potential for extensions and/or new deposits.

9.3.4 2011 Program

For the 2011 Exploration season, the program consisted of 96 drill holes and 23 test pits. LIM contracted Cabo Drilling to conduct all RC drilling activities.

Exploration activities were planned for verification and validation of estimations compared with historical IOC findings. Work at Redmond 2B, Denault and Knob Lake properties also provided updates and possible expansions on resource estimations and locations.

On July 14th and 15th a two person crew carried out a test pitting program along the western margin of the Knob Lake 1 showing. The purpose of this program was to check the geology of the area for iron formation and what the iron content was of any iron formation encountered.

A small back hoe excavated a 2m to 3m deep pit. The rock type was noted and a 3 to 4 kg sample was collected from material excavated. The location of each pit was determined using a Trimble DGPS.

9.3.4.1 *2011 Geophysics Program*

During the 2011 season, two airborne geophysical surveys were carried out in the Schefferville area. The first was a helicopter mounted gravity survey. This survey was carried out as a test in order to determine the advantages of flying with helicopter over fixed wing aircraft. The second survey was a regional gravity and magnetics survey. The company contracted to conduct the survey was:

Fugro Airborne Surveys Pty Ltd
U3/435 Scarborough Beach Road
Osborne Park, WA, 6017
Australia
In addition, the consulting services of Mr. Jerry Roth were used in planning and interpreting the survey.

Jerry Roth
Senior Geophysics
Stratagex Geophysics
(416) 449-2226 work
(416) 995-2205 mobile
jroth@startagex.com

9.3.4.1.1 Airborne (Helicopter) Geophysical Survey

During the 2011 exploration season an airborne (helicopter) gravity survey was flown over two small claim blocks of LIM's Schefferville area properties.

This work was a test survey, since a fixed wing gravity survey carried out during 2010 failed to detect two known deposits. In particular the Howse and James deposits were not detected. It was felt that a helicopter would have greater ability to follow the contour of the local topography than the fixed wing mounted unit resulting in better overall resolution. The helicopter was limited to carrying out a gravity survey, no magnetic survey was conducted due to space/weight restrictions.
The results of the test survey showed that there was a marginally greater resolution with the helicopter unit over the fixed wing survey but not enough to justify the extra cost of using helicopter. In addition any helicopter survey would not be able to complete a magnetic survey at the same time.

The results of this test survey were studied only enough to determine whether LIM would carry out a fixed wing or helicopter borne regional survey and no formal report was prepared by the contractor. In the case of Howse it was decided that neither the fixed wing nor helicopter mounted survey produced satisfactory results. Based on the test survey it has been decided to carry out a ground gravity survey in the Howse area during the 2012 season.

9.3.4.1.2 Airborne (Fixed Wing) Geophysical Survey

Subsequent to the Helicopter Gravity Test Survey, a Fixed Wing Gravity and Magnetics Survey was carried out over a 1346 sq km block of LIM claims in the Schefferville area.

Flight lines were orientated at 218 degrees and spaced at 200m. Tie lines were flown at 308 degrees and the total area covered was 1346 sq km.

10 DRILLING

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

LIMHL carried out exploration drilling programs in 2006, 2008, 2009, 2010 and 2011. The first year (2006) a total of 352 metres were completed in 6 diamond drill holes on the various properties.

In 2008, LIMHL used a RC drill rigs from Forages Cabo of Montreal. Cabo's RC rigs provide LIM with accurate geological information without fluid or cutting loss. Cabo's RC drills include the Acker long stroke drills which, when mounted on one of the Flex TracNodwell carriers or Fly skids, provides LIMHL with highly mobile and stable drilling platforms with very small environmental footprints. LIMHL's drill rigs from Cabo are outfitted with a sample cyclone, housed within the drill enclosure, the drills allow the driller and the geologist to coordinate the production and collection of samples efficiently and cost effectively.

Up to two helicopters (Heli Boreal of Sept Isles, QC) were used to support the drill program on the Sawyer Lake and Astray Properties. The helicopter also supported a regional survey dedicated to laying markers for the air photo survey.

In 2008, 10 diamond drill holes were drilled for a total of 552 metres. The majority of the drilling program was carried out with RC drilling namely 67 RC holes for a total of 3,856 metres. In 2009 only RC drilling was carried out in 29 drill holes for a total of 1,639 metres.

The work carried out during the 2010 exploration program included reverse circulation drilling in the Denault area totalled 2,726 metres in 50 drill holes.

The 2011 drilling program began in the James area on June 9th with one Nodwell mounted RC rig. A second skid mounted RC drill rig began drilling on July 17th. A third Nodwell mounted RC drill rig arrived in the Schefferville area on August 28th and worked on Quebec Claims, including Denault and Star Creek, until Oct 9th. On October 9th that rig began drilling on the Ruth Lake 8 property. The 2011 drill program ended on November 27th in the Gill area. A total of 6,669m of RC drilling was carried out in 129 drill holes excluding the Houston property drilling.

Table 10-1 to Table 10-5 show the various drilling programs the results of which were included in the LIM/SMI database for the resource estimations.

Table 10-1: 2006 - Drilling Program - (Diamond Drilling)

Property	Type	Holes	Length (m)
James	DD	2	29
Astray Lake	DD	3	279
Knob Lake 1	DD	1	44
Total		**6**	**352**

Table 10-2: 2008 – Drilling Program – (RC and Diamond Drilling)

Property	Type	Holes	Length (m)
James	RC	14	870
Redmond (2B, 5, TRX*)	RC	31	1,587
Astray Lake	RC	1	132
Knob Lake 1	RC	9	612
Howse	RC	2	103
Sawyer Lake	DD	10	552
Total		**67**	**3,856**

** TRX - re drill holes to sample "Treat Rock" stock pile (4 holes)*

Table 10-3: 2009 - Drilling Program - (RC Drilling)

Property	Type	Holes	Length (m)
James	RC	5	333
Redmond (2B, 5)	RC	14	639
Knob Lake 1	RC	5	271
Howse	RC	5	396
Total		**29**	**1,639**

Table 10-4: 2010 - Drilling Program (RC Drilling NL & QC)

Property	Type	Holes	Length (m)
Denault	RC	50	2,726

Table 10-5: 2011 – Drill Program (RC Drilling NL & QC)

Property	Type	Holes	Length m
Gill Mine	RC	33	1375
James Mine	RC	5	447
Knob Lake 1	RC	5	321
Redmond 2B	RC	4	261
Ruth Lake 8	RC	49	2850
Star Creek	RC	7	350
Denault	RC	26	1065
	Total	**129**	**6,669**

This total does not include the Houston property drilling program

11 SAMPLING PREPARATION, ANALYSIS AND SECURITY

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

LIMHL 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 at the drill site. Logging was carried out at the drill sites by LIMHL geologists.

Samples obtained during the 2008 to 2011 programs were prepared in the sample preparation laboratory setup in Schefferville by LIMHL.

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

The entire lengths of the RC drill holes were sampled. The average length of the RC samples was 3 metres. A description of the cuttings was made at every metre drilled. A representative sample was collected and placed in plastic chip trays for every metre drilled. The chip trays were labelled with Hole ID and the interval represented in each compartment. The metres drilled with no recovery were marked with an X inside the chip tray compartment.

11.1 RC SAMPLE SIZE REDUCTION

11.1.1 2008 RC SAMPLE SIZE REDUCTION

In order to reduce the size of the sample at the RC drill site to approximately 7.5 kg, the drill cuttings were split 4 ways after leaving the cyclone, during the 2008 drilling program (figure 11-1).

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

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

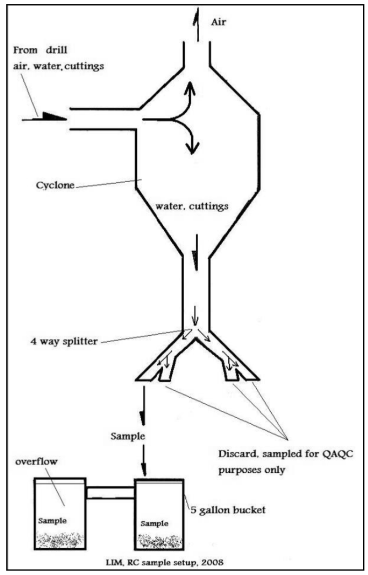


Figure 11.1: RC Size Reduction and Sampling (Method used in the 2008 drilling Program)

11.1.2 Rotary Splitter RC Sample Size Reduction (2009-2011)

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

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

Starting 2010, LIMHL followed the same on-site sample reduction as described above; however the samples were collected in the pails lined with Sentry II Micro Pore bags which allowed water to slowly drain thru while capturing very fine sample material (Figure 11.2).

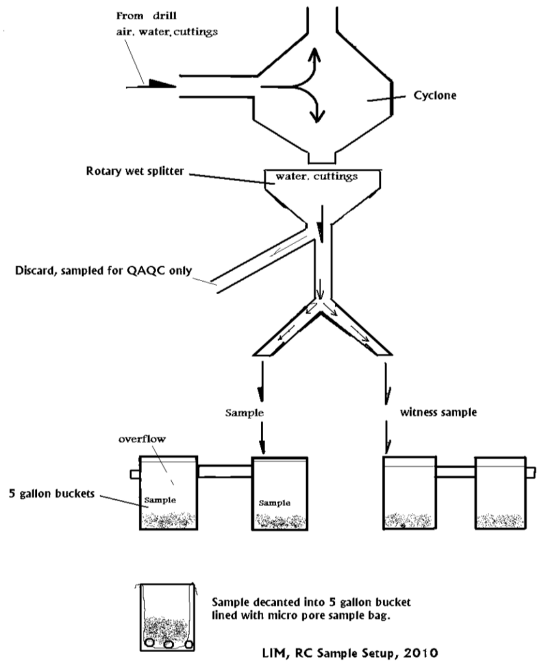


Figure 11.2: 2010 & 2011 Reverse Circulation Sampling Setup Diagram

11.2 2006-2011 Trench Sampling

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

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

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

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

The relevant sample results and sample composites used for the resources estimation are described in Section 13.2.

11.3 Sample Preparation and Size Reduction in Schefferville

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

11.3.1 2008

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

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

11.3.2 2009

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

11.3.3 2010 - 2011

The 2010 and 2011 sample preparations consisted of cataloguing and drying samples before shipping.

11.4 Sample Preparation at SGS-Lakefield Laboratory

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

Table 11-1: SGS-Lakefield Sample Preparation Methodology

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

11.5 SAMPLE ANALYSES AND SECURITY AT SGS-LAKEFIELD

All of the 2008 RC drilling and trenching program 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). 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.
- 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.

Table 11-2: Table Borate Fusion Whole Rock XRF Reporting Limits

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
Also includes Loss on Ignition					

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

11.5.1 *QUALITY CONTROL*

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

The data approval steps are shown in the following table:

Table 11-3: SGS-Lakefield Laboratory 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 material	Statistical Control Limits
4. Weighed Lab Duplicates	Statistical Control Limits by Range

11.6 SAMPLE PREPARATION AT ACTLABS

During the 2009 to 2011exploration programs, all trench and RC drill samples were shipped to Activation Laboratories (ACTLABS) facility in Ancaster, Ontario. Trench samples were taken to the preparation lab in Schefferville at the end of the day. The trench samples were not prepared in the same way as RC drill samples, being just bagged and shipped to the analytical laboratory.

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

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

Table 11-4: Rock, Core and Drill Cuttings Sample Preparation Protocols - ACTLABS

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

The following table shows the Pulverization Contaminants that are added by ACTLABS.

Table 11-5: Pulverization Contaminants that are added by – ACTLABS

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

11.7 SAMPLE ANALYSIS AND SECURITY AT ACTLABS

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

11.7.1 X-RAY FLUORESCENCE ANALYSIS CODE: 4C

To minimize the matrix effects of the samples, the heavy absorber fusion technique of Norrish and Hutton (1969, Geochim. Cosmochim. Acta, volume 33, pp. 431-453) are used for major element oxide) analysis. Prior to fusion, the loss on ignition (LOI), which includes H_2O+, CO_2, S and other volatiles, can be determined from the weight loss after roasting the sample at 1050°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 Ptmolds 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 Analyzed:

SiO_2 $Al20_3$ Fe_2O_3(T) MnO MgO CaO Na_2O K_2O TiO_2 P_2O_5 Cr_2O_3, LOI

Code 4C Oxides and Detection Limits (%)

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

Table 11-6: 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

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

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

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

The re-checks are done by checking the sample's oxide total. If the total is less than 98% the samples are reweighed, fused and ran.

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

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

11.8 SAMPLE SECURITY AND CONTROL

11.8.1 LIMHL SAMPLE QUALITY ASSURANCE, QUALITY CONTROL AND SECURITY

From the beginning of the 2008 RC drilling & trenching campaign, LIMHL initiated a quality assurance and quality control protocol. The procedure included the systematic addition of in-house blanks, in-house reference standards, field duplicates, and preparation lab duplicates (not included in 2010 sequence) to approximately each 25 batch samples sent for analysis at SGS Lakefield.

The sealed sample bags were handled by authorized personnel from LIMHL and SGS – Geostat (2008 RC drilling campaign) and sent to the preparation lab in Schefferville. Authorized personnel did the logging and sampling in the secured and guarded preparation lab.

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

11.8.2 FIELD DUPLICATES

The procedure included the systematic addition of field duplicates to approximately each 25 batch samples sent for analysis to the lab. In 2008, the cuttings from the second and third exits were routinely sampled every 25th batch. The 24thsample was collected at exit 2. The 26th sample was collected at exit 3. These samples went through the same sample preparation, analysis and security procedures and protocols as the regular 3 metre samples collected from the exit 1. In 2009 and 2010, the sample was split by a cyclone rotary splitter. One half of the material was discarded outside the drill, and the second half was sent into sampling buckets underneath the splitter. The field duplicate was taken for the material discarded outside the rig at every 25th sample. The 26th sample was the duplicate of the 25th sample. This QA/QC procedure enabled SGS and LIMHL any bias in the RC sampling program to be verified.

11.8.3 PREPARATION LAB DUPLICATES

The procedure included the systematic addition of preparation lab duplicates to approximately each batch of 25 samples sent for analysis at SGS-Lakefield. In 2008, a second portion of cuttings from the first exit size reduction procedure was routinely sampled every 25 batch similarly as described above. In 2009, the every 25th sample was taken the same way as a regular sample describe above. Its duplicate sample was tied empty to it. Once at the lab, the sample was dried, and riffle split 4 times. From the material riffle split, a lab duplicate was composed. In 2010, there was no lab duplicates because the sample bags were not riffle split.

LIMHL started a quality assurance and quality control protocol for its 2008 RC, DDH, and trench sampling program. The procedure included the systematic addition of field duplicates, preparation lab duplicates to approximately each 25 samples sent for analysis at SGS-Lakefield along with a blank at every 50 sample. This protocol was adopted and used during the 2009 and 2010 exploration programs with modifications mentioned above.

11.8.4 Blanks

Blank samples were created onsite in Schefferville from barren slates located south east of the town. These blanks were used to check for possible contamination in laboratories. Some were sent to SGS-Lakefield and others to Corem and ALS-Chemex for verification of the average tenure in the blanks. Blank samples were inserted every 50 samples. SGS – Geostat homogenized an average 200 kg of material on site at the preparation lab in Schefferville. LIMHL and SGS – Geostat also sent two separate batches of fifteen (15) blank samples to the Corem and ALS-Chemex independent laboratories of Vancouver and Quebec City, respectively, for analysis.

An average 4.82% Fe and 61.96% 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.

11.8.5 Standard Material

LIMHL introduced in-house standards with high grade James ore collected from a bulk sample taken in 2008. In 2009, LIMHL sent 20 samples to Actlabs and 10 sent to both SGS Lakefield and ALS Chemex starting the process of characterizing the standard material. In 2010, there were additional 30 samples of the high grade James standard material sent to Actlabs and 40 samples sent to both SGS and ALS Chemex. There was a second standard picked which was composed of medium grade Knob Lake ore material with 50 samples sent to SGS, Actlabs and ALS Chemex. The James Standard material was the only standards inserted into the sample sequence until 2010. In 2011 LIMHL introduced its in-house Knob lake standard into the sample sequence. The table below shows the results of the statistical analysis for each reference material.

Table 11-7: Summary of Statistical Analysis of LIMHL Reference Material

Ref Material	Count	Period		Expected Fe%		Observed Fe%				Expected SiO2%		Observed SiO2%				Mislabeled
		From	To	Average	Std. Dev.	Average	Std. Dev.	Min	Max	Average	Std. Dev.	Average	Std. Dev.	Min	Max	
BLK-SH	195	29-Aug-08	23-Dec-11	4.29	0.24	4.81	0.63	1.18	8.40	62.40	0.37	61.90	0.93	58.76	68.11	1
JM-STD	119	19-Aug-09	23-Dec-11	61.33	0.96	61.30	1.24	57.35	66.42	9.51	1.09	9.54	1.70	2.42	13.09	1
KL-STD	36	29-Aug-11	23-Dec-11	56.47	0.60	55.69	2.94	43.50	57.10	8.30	0.54	9.76	3.83	7.57	28.74	0

11.8.6 2008 Exploration Program

The data verification of the iron (Fe), Phosphorus (P), Manganese (Mn), silica (SiO2) and alumina (Al2O3) values was done with the assay results from the 2008 RC drilling program. SGS – Geostat introduced a series of quality control procedures including the addition of preparation lab duplicates, exit 2 duplicates, exit 3 duplicates and blanks. SGS – Geostat supervised the RC sampling.

In 2008, a total of 166 duplicates were taken and analyzed. SGS – Geostat followed the QAQC and considered the data to be precise and reliable.

During the 2009 program, a total of 46 blanks were inserted. The analytical results showing that the results remained within +/-1%, which is relatively good and unbiased.

11.8.7 2009 Exploration Program

LIMHL followed the same method of taking duplicates as in 2008. However, the field duplicate did not come from 3 exits but from two. The field duplicate came from a single discharge tube that flowed outside of the rig into a bucket. The lab duplicate sample bag was left empty and stapled to the sample bag that contained the sample that would at as the lab duplicate. The duplicates were treated as a normal sample, and were prepared, riffle split and sent to Actlabs for analysis.

The analysis of data indicated that the repeatability of results is acceptable and the process of taking duplicates is good and reliable. There is very little variation in the data except for two (2) outliers, which could be a result of contamination while processing or taking the sample.

11.8.8 2010 Exploration Program

During 2010, the field duplicate came from a single discharge tube that flowed outside of the rig into a bucket. There were no lab duplicates taken because no riffle splitting was necessary. Samples and duplicates were collected and sealed using Sentry II Micropore Polywoven bags. These bags allowed the excess water to flow through catching the fines. The samples were dried in ovens for 3-4hrs prior shipping or storing. There were a total of 54 duplicates taken over the course of the 2010 program. The analysis of Fe data indicated that the repeatability of results is acceptable and the process of taking duplicates is good and reliable.

During the 2010 program, a total of 62 samples of blank material were systematically inserted in the sample batches sent for analyses. The results remained within the zone between the average value and the 2σ. This states that the sampling procedures within the lab are very good, and there is very little to no bias. Blank sample 329707 that went outside the (+/-)3σ zones is possibly related to contaminated blank since the standards and duplicates included in the same batch showed not apparent problems.

11.8.9 2011 Exploration Program

During the 2011 RC drilling and exploration program, LIMHL followed its quality assurance and quality control protocol. The procedure included the systematic addition of in-house blanks, in-house reference standards, field duplicates, and preparation lab duplicates to approximately each 25 batch samples sent for analysis at ACTLABS.

11.8.9.1 *2011 Blanks*

A total of 75 blank samples were used to check for possible contamination in the analytical laboratories during the 2011 campaign including 22 on the RC drilling at Houston. During 2008, SGS – Geostat prepared the blank sample from a known slate outcrop located near Schefferville.

Please see 11.8.4.

The Figure 11.3 shows that 16 out of the 75 blanks were outside the ±3σ line. However, all of the blanks are under 5% iron grade and the majority is over 60% SiO_2. Given this information contamination issues appear to be low. However, SGS –Geostat suggests that LIMHL to buy pure blanks (commercial silica sand or decorative pebbles) that do not contain any iron. SGS –Geostat suggests also that LIMHL introduce more descriptive tolerance levels for Fe and SiO_2. LIMHL is currently verifying anomalous results from the 2011 QAQC and is currently implementing appropriate measures for the data validation.

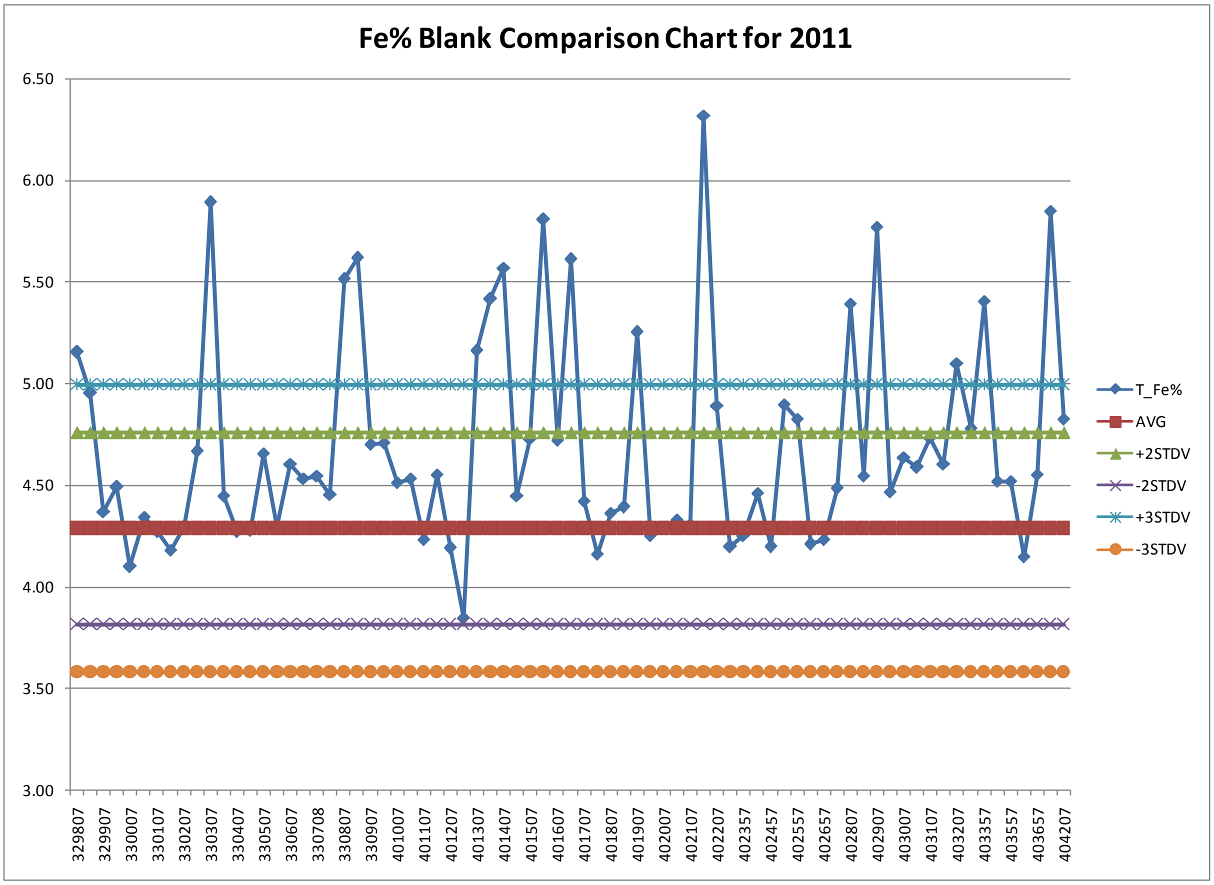


Figure 11.3: 2011 Fe% Blanks Comparison

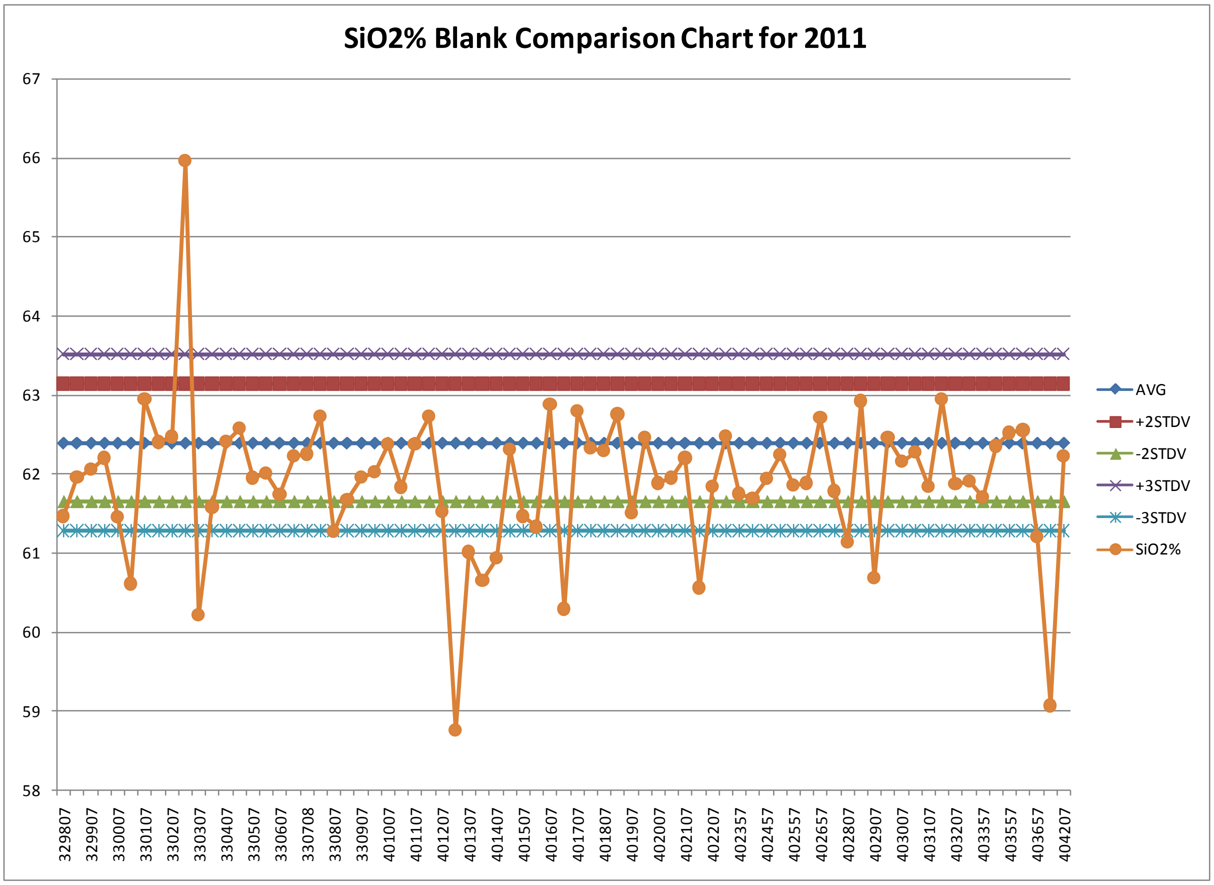


Figure 11.4: 2011 SiO_2% Blanks Comparison

11.8.9.2 *In-House 2011 Reference Materials (Standards)*

In 2011, LIMHL inserted 76 in-house standards (including 22 for Houston). Figure 11.5, Figure 11.6, Figure 11.7, and Figure 11.8 show the results plotted for the JM-STD and KL-STD standards. Two (2) samples (JM STD) were under the -3σ limit. Also two other standards were close to the -2σ limits. Two (2) samples (JM- STD) were over the +2σ limit and none over the +3σ.

Four (4) sample standards were under the -3σ limit. Only two (2) sample standards were close to the -2σ limit. This information indicates that there were some issues with the assays in that period, perhaps equipment calibration or sample mix-up. LIMHL is conducting verification as of the date of this report. Please see Table 11-7 reference material summary stats.

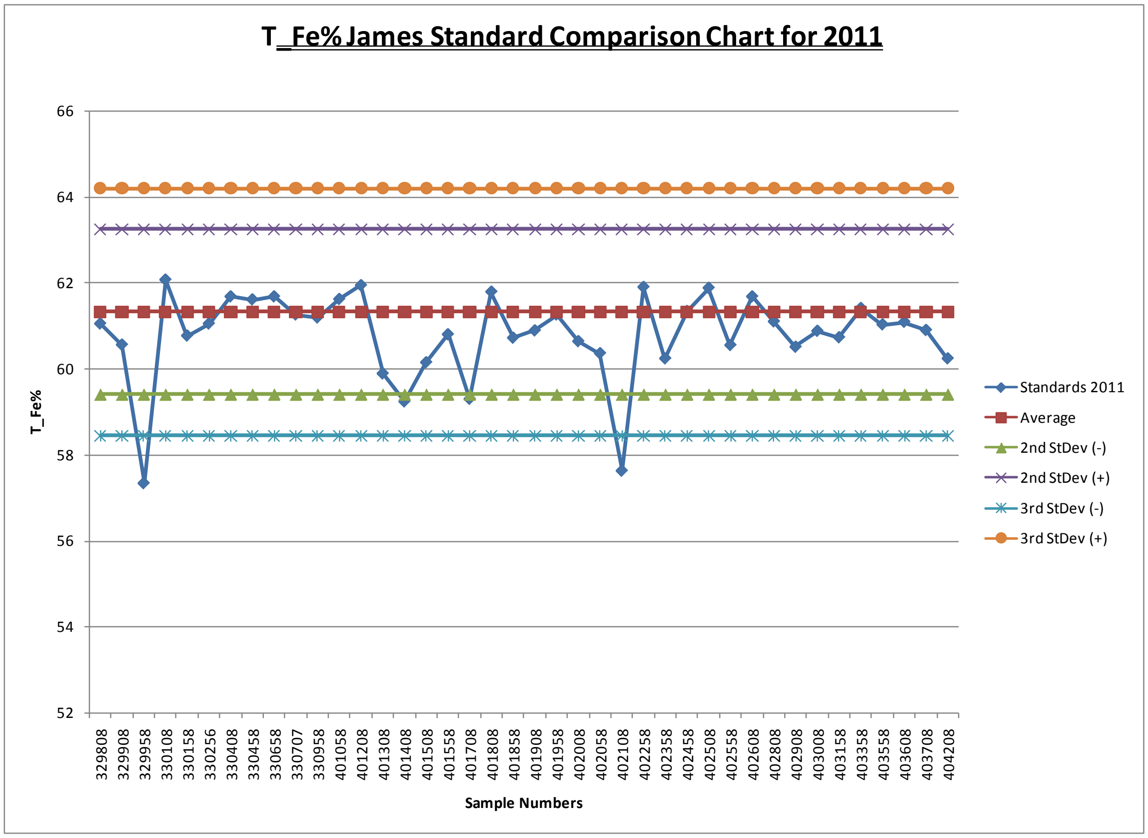


Figure 11.5: Fe High Grade JM-STD Standards in 2011

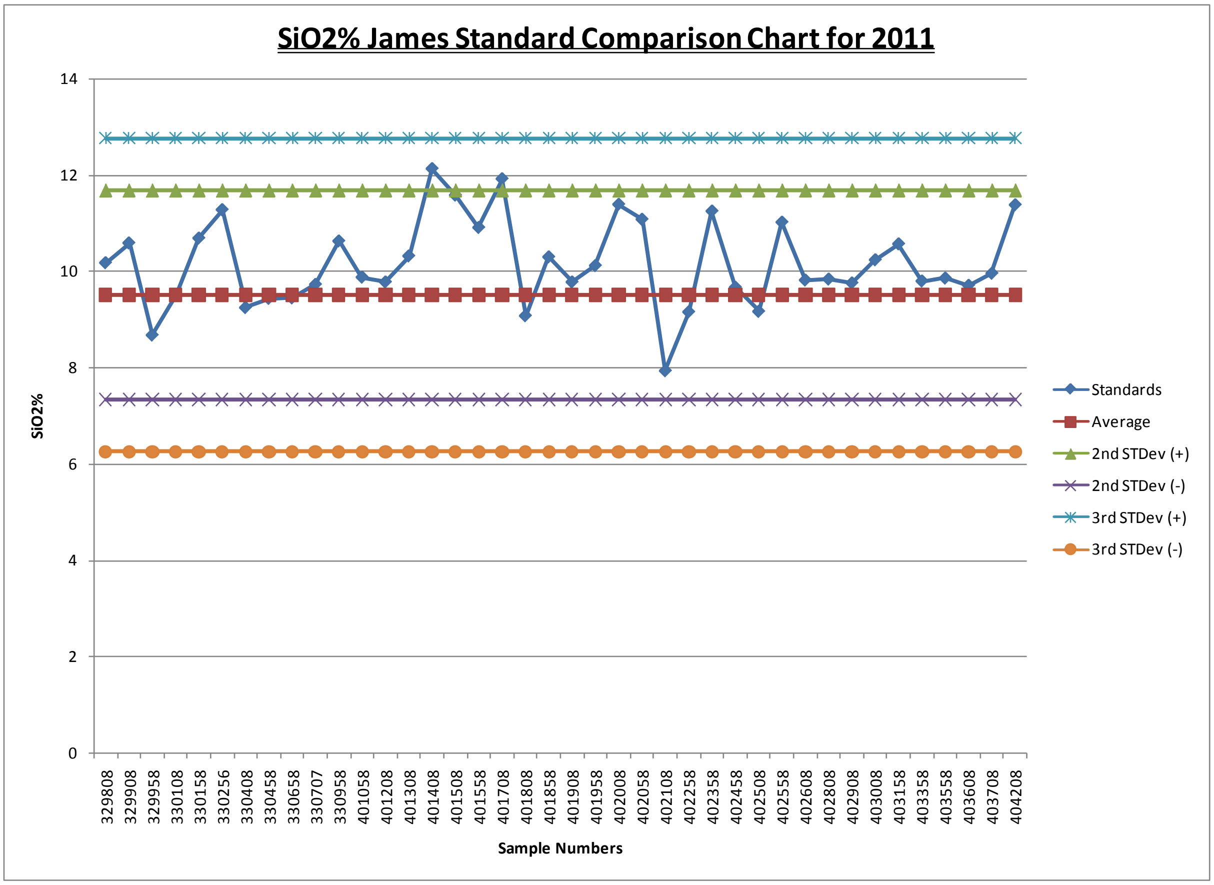


Figure 11.6: SiO2 Grades JM-STD Standards in 2011

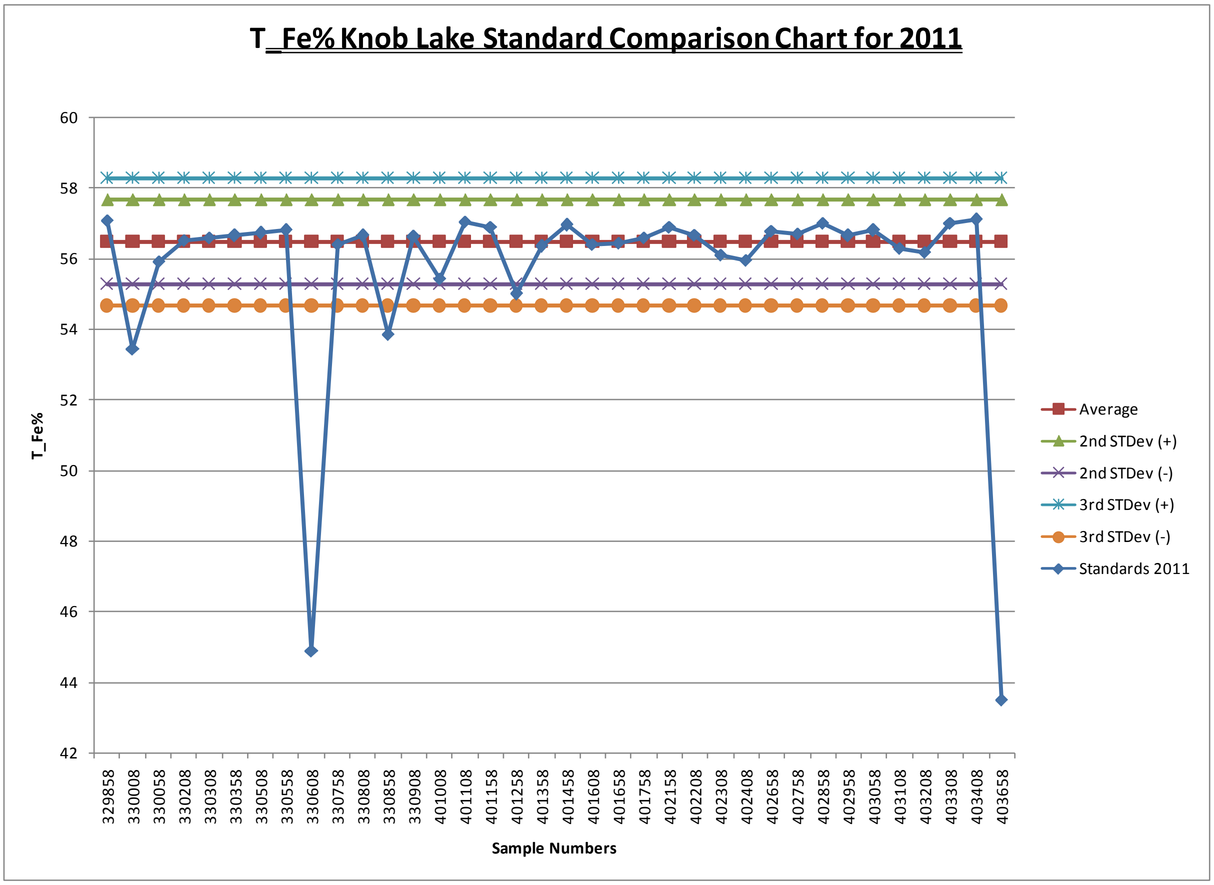


Figure 11.7: Fe Medium Grade KL-STD Standards in 2011

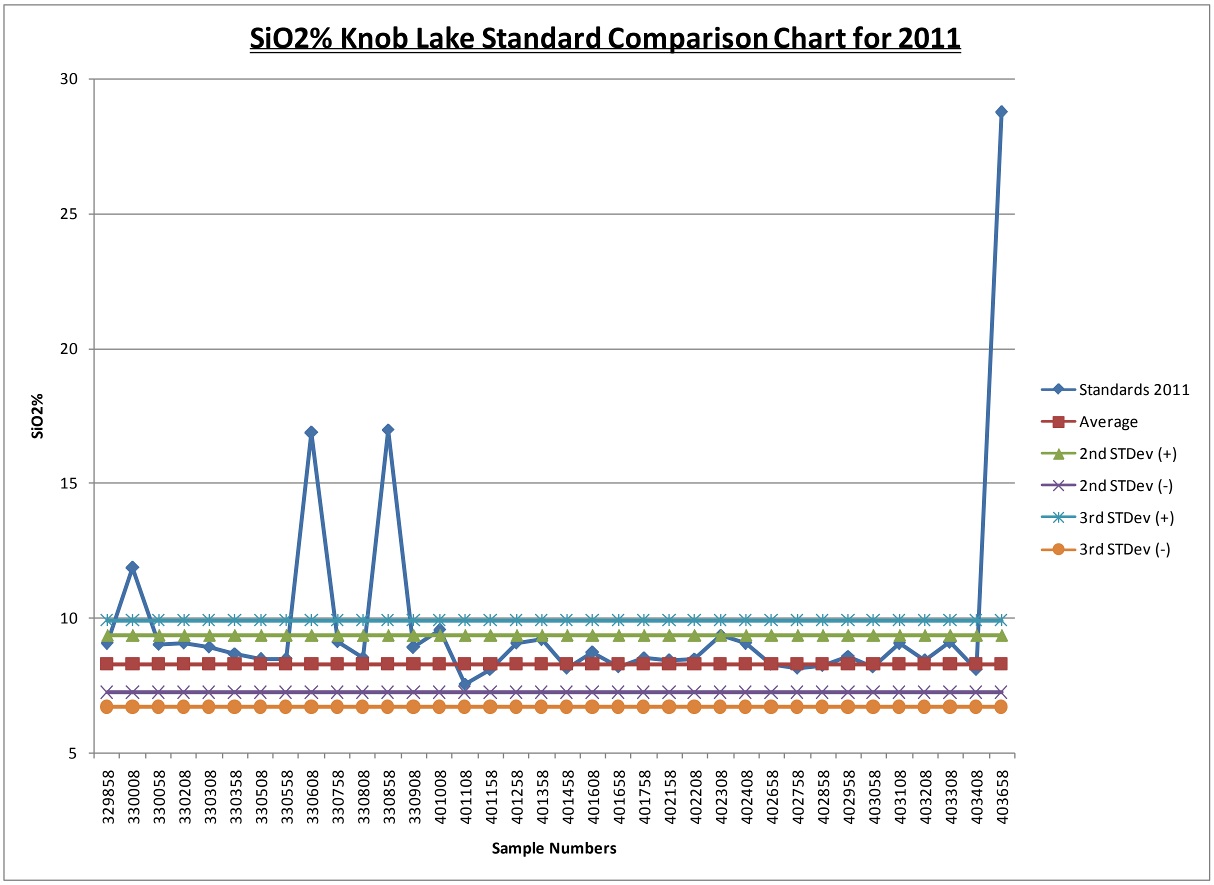


Figure 11.8: SiO2 Medium Grade KL-STD Standards in 2011

11.8.9.3 *2011 Field and Preparation Lab Duplicates*

In 2011 LIMHL sent 141 field duplicates, including 40 for Houston (effective date of the data is March 6th, 2012.). No preparation lab duplicates were analysed in 2011. The next figures and Tables show the comparison chart for the Fe(%) Table 11-8 and Figure 11.9 and SiO_2 (%)Table 11-9 and Figure 11.10 between original and field duplicate samples. The correlation is good between original and field duplicate results however, a bias was found.

The statistical analysis of the field duplicates was done only on RC drill holes done by LIMHL. Assay results from re-analysed older and historical RC from previous owners were not included in this statistical analysis. Table 11-10 and Table 11-11 summarise the results of the statistical analysis of Fe% and SiO2%.

Of the 141 RC field duplicates, the reproducibility of 82% of the assays was within ±10% and 79% of the assays returning values between 40% and 50% Fe grade was within ±10%. The sign test and student-T tests highlighted a bias. Only 21% of all the 2011 original samples returned values higher than field duplicates.

Out of 47 samples ranging between 40 and 50% Fe, only 9% of these samples returned values higher than their respective field duplicates.

Of the 141 RC field duplicates, the reproducibility of 77% of the assays was within ±10% and 48% of the assays returning values between 30% and 40% SiO2 grade was within ±10%. The sign test and student-T tests highlighted a bias.

Out of 29 samples ranging between 30 and 40% SiO2, 88% of these samples returned values higher than their respective field duplicates.

The bias identified in this statistical analysis of the 2011 samples indicates that the Fe grades may have lower analytical results for Fe. Furthermore 82% of the Fe % sample data is less than ±10% different and 63% of the data is less than 5% different. There is not a significant difference but there is a bias trend towards the field duplicates.

LIMHL considers the difference to be acceptable. SGS Geostat considers the difference as acceptable as well and suitable for resource estimation but strongly suggests identifying the bias and addressing this matter in a proper timeframe.

Table 11-8: Summary of 2011 Field Duplicate Analytical Fe Results

Criteria	Count	Original ≥Duplicate	Original < Duplicate	Criteria	Count	Samples within % relative Difference			
						±5%	±10%	±25%	±50%
All samples	141	29	112	All samples	141	89	116	135	140
		21%	79%			63%	82%	96%	99%
<=40%Fe	56	15	41	<=40%Fe	56	33	41	50	55
		27%	73%			59%	73%	89%	98%
>40%Fe<50%	47	4	43	>40%Fe<50%	47	22	37	47	47
		9%	91%			47%	79%	100%	100%
>=50%Fe<60%	26	6	20	>=50%Fe<60%	26	22	26	26	26
		23%	77%			85%	100%	100%	100%
>60%Fe	12	4	8	>60%Fe	12	12	12	12	12
		33%	67%			100%	100%	100%	100%

Table 11-9: Summary of 2011 Field Duplicate Analytical SiO2 Results

Criteria	Count	Original ≥Duplicate	Original < Duplicate	criteria	Count	Samples within % relative Difference			
						±5%	±10%	±25%	±50%
All samples	141	110	31	**All samples**	141	51	77	124	138
		78%	22%			36%	55%	88%	98%
<15%SiO2	27	19	8	**<15%SiO2**	27	5	9	22	26
		70%	30%			19%	33%	81%	96%
>15%Fe<30%	38	33	5	**>15%Fe<30%**	38	9	16	34	38
		87%	13%			24%	42%	89%	100%
>=30%Fe<40%	33	29	4	**>=30%Fe<40%**	33	9	16	28	32
		88%	12%			27%	48%	85%	97%
>40%SiO2	43	29	14	**>40%SiO2**	43	28	36	40	42
		67%	33%			65%	84%	93%	98%

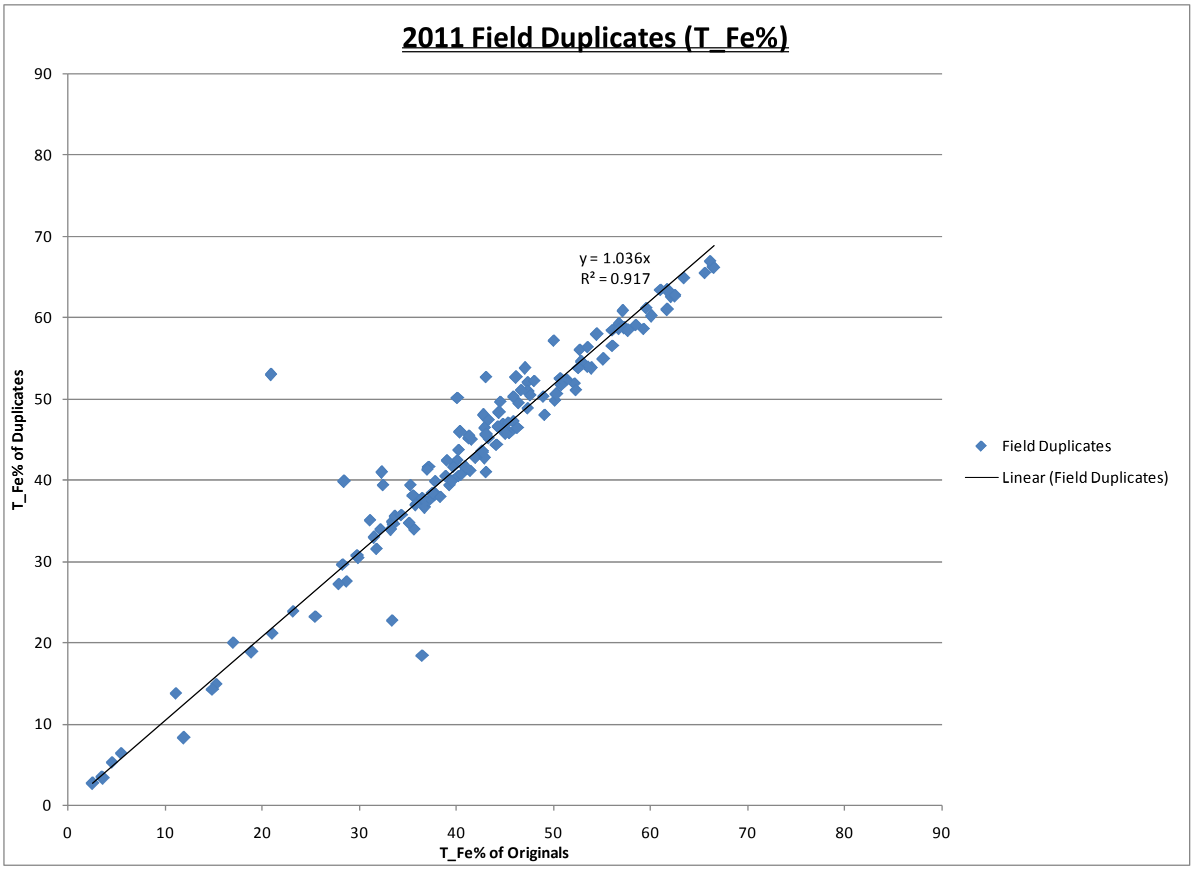


Figure 11.9: 2011 Fe% Comparison Chart for Field Duplicates

Table 11-10: Statistical Summary of Fe% in 2011 Field Duplicates

Statistic Summary Statistics Fe (%) 2011		
Statistics	**Original**	**Duplicate**
Number of data	141	141
Maximum	66.51	67
Minimum	2.55	2.65
Mean	41.65475	43.35816
Median	42.72	45.2
Skewness	-0.71241	-0.90108
Standard	13.65466	14.10592

deviation			

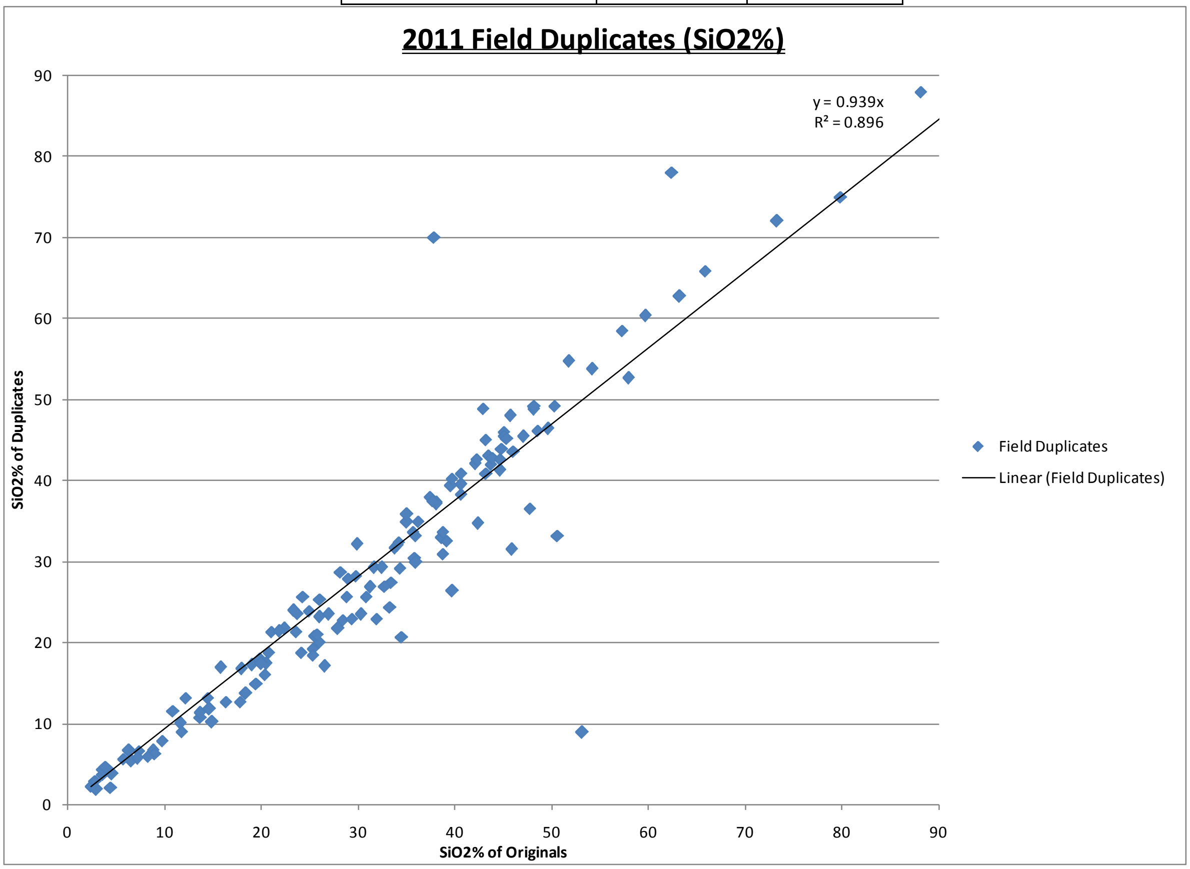


Figure 11.10: 2011 SiO2% Comparison Chart for Field Duplicates

Table 11-11: Statistical Summary of SiO2% in 2011 Field Duplicates

Summary Statistics SiO2 (%) 2011		
Statistic	**Original**	**Duplicate**
Number of data	141	141
Maximum	92.71	92.61
Minimum	2.31	1.84
Mean	32.36	29.88
Median	32.39	27.33
Skewness	0.73	0.95

Standard deviation	17.94	18.73

11.9 ASSAY CORRELATION OF TWINNED HOLES

The data verification was done on the iron (Fe) and silica (SiO_2) assay results from the IOC historical RC drill results and the 2008-2010 RC drilling programs results. LIMHL twinned some IOC RC holes in order to verify the iron (Fe) content. A total of 6 paired RC holes from Houston were considered. Correlation coefficients showed adequate correlation. Refer to Figure 11.11 and Figure 11.12.

Visual analyses of the selected pairs also show satisfactory correlation. A hole showed lower correlation due to low grade ore layers within the deposit and sharp changes because of the structural complexity (see Figure 11-13).

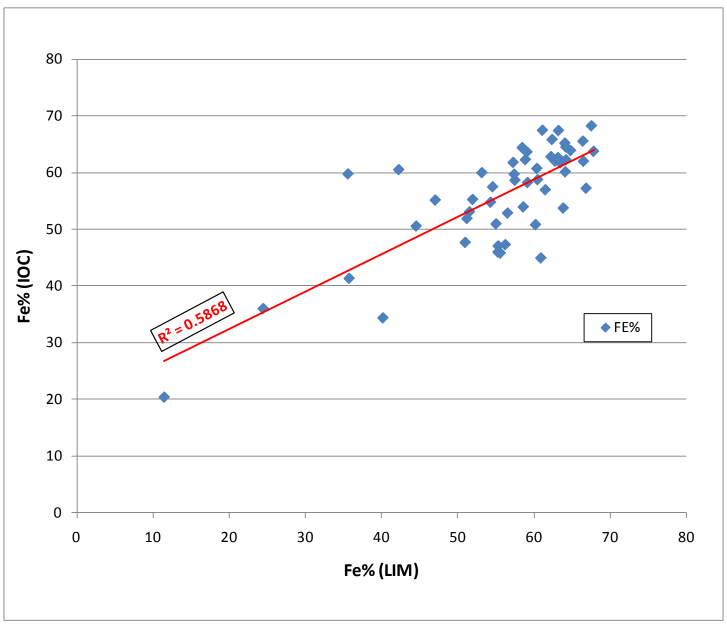


Figure 11.11: Graphic of Fe Assay Correlation of Twinned Holes

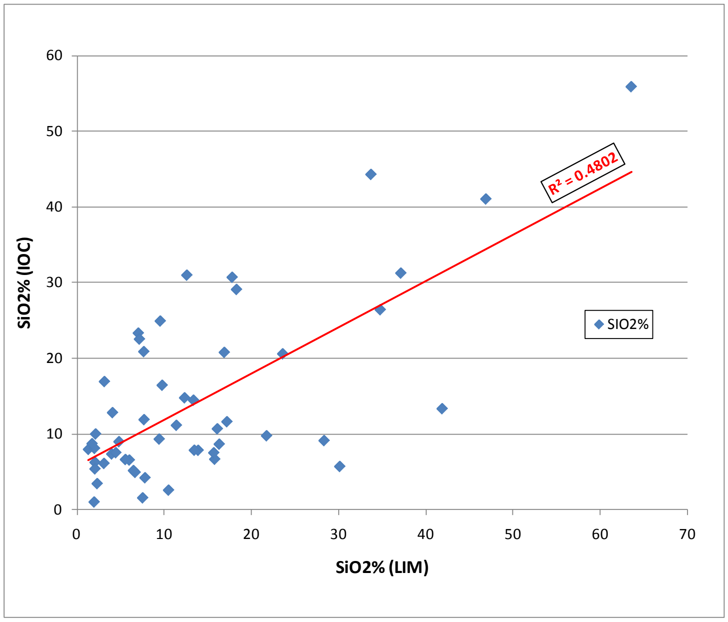


Figure 11.12: Graphic of SiO2 Assay of Twined Holes

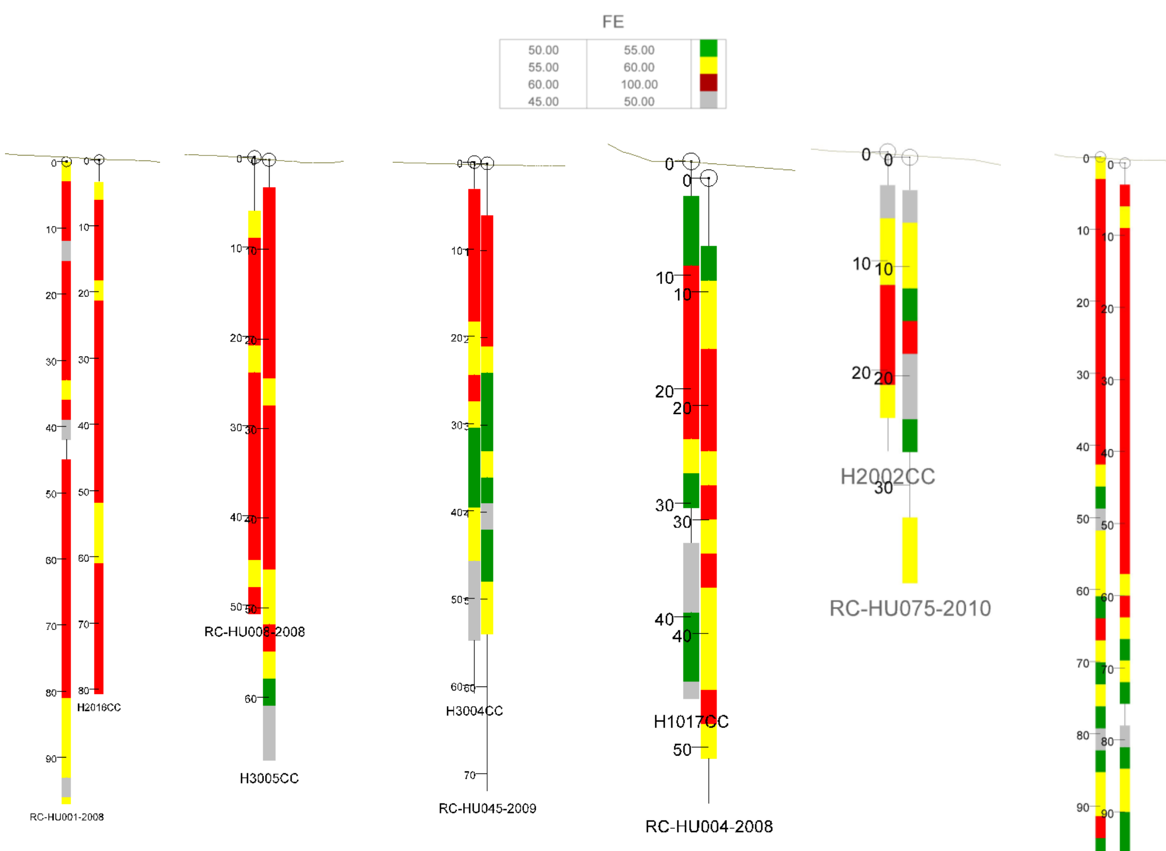


Figure 11.13: Visual Comparison of Fe Grades of 6 pairs of Holes

12 MINERAL PROCESSING AND METALLURGICAL TESTING

12.1 LAKEFIELD RESEARCH LABORATORIES

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

The samples were crushed to 100% -1½ inches (in) and screened at ½ in. The Lump Ore product (-1½ in to ½ in) was weighted and assayed and the -½ in wash feed was weighed and fed at a controlled rate to a washing circuit. The washing process included a rotary scrubber (mill without grinding media) and a spiral classifier. The spiral classifier fines overflow and sands products were collected and analyzed. The Lakefield test results are summarized in Table 12-1.

Table 12-1: Lakefield Washing Test Results

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

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

12.2 MIDREX TESTS

Midrex Technologies, Inc. (Midrex) is an international iron and steel making technology company based in Charlotte, North Carolina. In 1989 Midrex sampled and tested lump ore samples # 632 from James, #620 from Sawyer Lake deposit and #625 from Houston 1 deposit for standard raw material evaluation purposes. The sample analyses are presented in Table 12-2.

Table 12-2: Midrex Lump Ore Samples Analyses

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

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

12.3 CENTRE DE RECHERCHES MINÉRALES (1990)

In 1990, a bulk sample of mineralized material from the James deposit weighing approximately three tonnes was transported to Centre de Recherches Minerales (CdRM), Quebec City, for testing, on behalf of La Fosse Platinum Group Inc. This material was crushed to -1 in, which was finer than the Lakefield tests, and wet screened at ¼ in. The results from the screen tests on this bulk sample are summarized in Table 12-3.

Table 12-3: James Bulk Sample Screen Analysis (CRM)

Size Fraction	kg	Wt%	Wt%
Sample received	3,121	100%	
+2" rejected	227	7.3%	
Total -1"	2,862	91.7%	100%
-1" to +¼ "	2,340	75.0%	81.8%
-¼ "	398	12.8%	13.9%
Assumed fines	124	4.0%	4.3%

In addition to the James bulk sample, a sample from Sawyer Lake was submitted for testing. The results of the screening and size fraction assays are presented in *Table 12-4*.

Table 12-4: Sawyer Lake Sample Screen and Chemical Analysis (CRM)

Size Fraction	wt%	Fe %	SiO_2	$Al_2 O_3$	Mn	P
-1" to +¼ "	21.5	68.2	0.97	0.13	0.56	127
-¼ "to 100#	48.9	66.2	3.27	0.17	0.84	146
-100# to 200#	1.3	51.4	28.1			
-200#	28.3	62.6	27.1			
-100#	29.6	62.1	27.1			
Calc. Feed	100.0	65.4	4.85			
Feed Assay	65.0	4.97				

12.4 2006 BULK SAMPLING BY LIM

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

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

The SG data has been used in the calculations of the resource and reserve volumes while the chemical test results has been used to compare them with the historical IOC data from neighbouring drill holes. Table 12-5 show the summary of the results of the tests on the 2006 bulk samples for the various ore types.

Table 12-5: Summary of Tests by SGS-Lakefield

Sample Name	CW (kWh/t)	AI (g)	UCS (Mpa)	Density CW (g/cm^3)	Density UCS (g/cm^3)
NB-Houston A	8.2	0.187	106.4	4.26	4.61
NB-Houston B	-	0.213	48.9	-	4.42
LNB Houston A	7.3	0.108	-	3.95	-
LNB Houston B	-	0.189	-	-	-
TRX-Houston A	6.7	0.098	22.3	3.47	3.00
TRX-Houston B	-	0.067	-	-	-
NB4-Houston A	5.7	0.086	73.0	3.77	4.36
NB4-Houston B	-	0.080	-	-	-
JM-TRX A	7.0	0.023	24.8	3.29	3.02
JM-TRX B	-	0.086	33.9	-	4.31
JM-LNB A	2.6	0.047	16.7	3.15	3.32
JM-LNB B	-	0.029	11.9	-	3.35
JM-NB A	4.8	0.143	-	3.48	-
JM-NB B	-	0.144	-	-	-
Average	**6.1**	**0.107**	**42.2**	**3.6**	**3.8**

12.5 SGS LAKEFIELD (2008)

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

The overall liberation of the Fe-Oxides is generally good for each sample, except for sample 156037. However, each sample shows slightly different liberation characteristics by size. Samples 156109 and 156090 have relatively constant liberation throughout the size fractions (~70 % to 90% per fraction). Fe-Oxide liberation is ~60% in the +1700 µm, +850 µm and + 300 µm fractions, but increases to ~80% to 90% in the finer fractions in sample 156032. Liberation is increased significantly with decreasing size in samples 160566 and 156037. Results of the test are summarized in *Table 12-6*.

Table 12-6: Results of Mineralogical Characterization Tests (SGS – Lakefield)

Sample	156109	160566	156090	156032	156037	Analyzed
Hole	RC-JM001-2008	RC-JM001-2008	RC-JM001-2008	RC-JM001-2008	RC-JM001-2008	Sections
From	30	18	42	45	60	
To	33	21	45	48	63	
% Fe	51.13	54.48	51.13	51.69	50.08	
Size-3000+1700µm	30.10	8.00	23.60	24.90	38.30	14
Size-1700+850µm	5.60	5.70	7.00	8.70	12.10	8
Size-850+300µm	12.40	15.40	19.30	13.60	14.70	8
Size-300+150µm	9.50	14.10	7.30	12.20	8.80	4
Size-150+75µm	17.70	13.70	17.30	14.30	7.10	2
Size-75+3µm	24.60	43.00	25.00	26.30	19.00	2

Other conclusions from the report include:

- Mineral release curves: samples 160566 and 156037 display poor liberation in coarse size fractions. A poor quality coarse concentrate with elevated silicate levels is anticipated for these two samples. For the finer material (-300 µm) good liberation might be achieved between 100 µm and 200 µm (~80% liberation) with the exception of sample 156037;
- For each sample, silicate liberation might be achieved in the 300 µm to 400 µm size range. It should be noted, that this is where most of the silicates accumulate;
- The grade recovery charts for Fe and Si also reveal that sample 156037 is significantly different from any of the other samples and might be more problematic for processing.

12.6 2008 Bulk Sampling By LIM

A Bulk Sample program was undertaken during the summer of 2008. 1,000 to 2,000 tonne samples were excavated with a CAT-330 type excavator from four of LIM's Stage 1 deposits: James South deposit (1,400 T), Redmond 5 deposit (1,500 T), Knob Lake 1 deposit (1,100 T), and Houston deposit (1,900 T). The excavated material was hauled to the Silver Yards area for crushing and screening. The raw material was screened at approximately 6 mm into two products – a lump product (-50 mm+6 mm) and a sinter fine product (-6 mm). The material excavated from each deposit and the products produced from each deposit were kept separate from the others.

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

Preliminary scrubber tests were performed on all four samples. Only the James South sample was submitted for Crusher Work Index tests. The potential of beneficiation by gravity was explored by Heavy Liquid Separation. Vacuum filtration test work was also carried out. The results of the bulk sample test are shown in *Table 12-7* and Table 12-8.

Table 12-7: Calculated Grades from 2008 Bulk Samples (SGS-Lakefield)

Deposit	**James South**	**Knob Lake 1**	**Houston**	**Redmond 5**
Ore Type	**Blue Ore**	**Red Ore**	**Blue Ore**	**Blue ore**
Fe[1]	63.8%	58.5%	66.1%	57.8%
SiO_2	6.64%	7.29%	2.22%	13.1%
P[1]	0.02%	0.11%	0.07%	0.02%
Al_2O_3	0.21%	1.05%	0.30%	0.32%
LOI	1.88%	8.51%	1.33%	2.63%

[1] Calculated from WRA oxides

Table 12-8: 2008 Bulk Samples Test Results (SGS-Lakefield)

		Assays %					Distribution
James South (Blue Ore)		**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**% Mass**
Lump Ore	50mm- +6.7mm	67.7	1.33	0.12	0.013	1.59	41.1
Sinter Feed	-6.7mm +150µm	64.5	5.69	0.20	0.020	1.95	33.3
Pellet Feed	-150µm +38µm	50.1	26.1	0.15	0.016	1.42	13.1
Slimes	38µm	63.3	6.29	0.38	0.030	2.10	12.5
Calc. Head		63.8	6.64	0.18	0.018	1.75	100.0
Knob Lake 1 (Red Ore)		**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**% Mass**
Lump Ore	50 mm +6.7 mm	58.8	5.02	0.69	0.114	9.95	60.4
Sinter Feed	-6.7mm +150µm	58.3	6.49	1.13	0.111	8.70	26.0
Pellet Feed	-150µm +38µm	54.5	11.2	1.58	0.110	7.89	1.87
Slimes	- 38µm	53.2	11.0	2.40	0.108	6.90	11.7
Calc. Head		57.9	6.22	1.02	0.112	9.23	100.0
Houston (Blue Ore)		**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**% Mass**
Lump Ore	50 mm +6.7 mm	68.1	1.08	0.20	0.060	1.00	33.9
Sinter Feed	-6.7mm +150µm	66.2	3.30	0.41	0.078	1.22	35.5
Pellet Feed	-150µm +38µm	65.8	3.84	0.38	0.082	1.37	6.43
Slimes	- 38µm	63.7	1.99	0.54	0.089	2.17	24.1
Calc. Head		66.2	2.27	0.37	0.075	1.38	100.0
Redmond 5 (Blue Ore)		**Fe**	**SiO_2**	**Al_2O_3**	**P**	**LOI**	**% Mass**
Lump Ore	50 mm +6.7 mm	62.4	6.54	0.24	0.020	3.39	26.5
Sinter Feed	-6.7mm +150µm	61.0	8.91	0.59	0.021	3.16	42.0
Pellet Feed	-150µm +38µm	45.0	31.8	0.39	0.016	1.80	12.1
Slimes	- 38µm	52.1	21.2	0.74	0.023	2.81	19.5
Calc. Head		57.7	13.4	0.50	0.021	2.99	100.0

The material collected from the James South bulk sample was sent to a number of other laboratories for additional test work, including Derrick Corporation for screening tests, Outotec, and SGA Laboratories for Sinter Tests and Lump Ore characterization. Material from the Redmond deposit was sent to MBE Coal & Minerals Technologies and to Corem in Quebec City.

12.7 Derrick Corporation (2008)

From the James Fines product, 8 - 45-gallon drums of the sample were sent to Derrick Corporation in Buffalo, NY for screening test work. The purpose of the test work was to determine optimum screen capacity and design for sinter fines production.

Different screen openings were used to investigate the dependence of the recovery from the size of the product.

The test results proved that both 300 µm and 600 µm openings give very promising recoveries:

Table 12-9: 2008Screen Results

Screen	Feed	Oversize	Undersize	Efficiency
Openings	Fe_{tot}, %	Fe_{tot}, %	Fe_{tot}, %	%
300 µm	61.23	68.26	58.91	99.2
600 µm	61.23	66.62	59.28	99.6

12.8 Outotec (2009)

From the material sent to Derrick Corporation, a sample of -300 microns was sent to Outotec (USA) Inc., in Jacksonville, Florida for Wet Gravity Separation and Magnetic Separation using HGMS Magnet (SLon magnetic separator) test work.

Based on the results of this study, it is possible to produce an iron product containing +65% Fe and less than 5% silica using wet gravity separation by the means of Floatex Density Separator, followed by spiral concentration. Recovery of 83% Fe in the Floatex underflow was achieved (17% of the head feed weight).

Wet gravity treatment on the rougher spiral tail with a wet table indicates additional material can be recovered at acceptable grade.

Testing using a SLon magnetic separator to recover Fe from the Floatex overflow combined with the gravity tail did produce a product containing 65.1% Fe.

12.9 SGA Laboratories (2009)

A 1.3 tonne sample from the James South fines product, obtained during the 2008 Bulk Sample Program, was sent to StudiengesellschaftfürEisenerzaufbereitung (SGA) in Germany, to conduct pot grate sintering tests to evaluate the sintering behaviour. Three series of tests were performed to evaluate the sintering behaviour of the fines measuring above 0.3 mm. The iron content of the hematitic sample was analyzed at 67.23% with favourably low acidic gangue contents of silicon dioxide and aluminum oxide in addition to very low levels of manganese, titanium and vanadium. The portion of fines smaller than 0.3 mm was only 1.7% which is expected to have a positive effect on sinter productivity. SGA concluded that "In summary, it can be stated that the tested sample showed excellent sintering behaviour, clearly improving sintering productivity and metallurgical properties of the sinters. The high iron content and low gangue as well as the low portion of fines determine the high quality of this ore grade. Such fines will be well accepted in the market."

A 100 kg sample of James South and of Knob Lake 1 lump ores were also tested at SGA for their physical, chemical, and metallurgical properties. The results of the James South lump ore sample indicate that the iron content is high at 66.98%, while the content of non-ferrous metals, manganese, phosphorus, sulphur, alkaline materials, titanium and vanadium are favourably low. The high reducibility was evaluated as being superior to the typical ore grades available on the

European market. In addition, the physical testing of the lump ore resulted in a favourable size distribution with a low amount of fines. The tumbler test revealed well acceptable strength and abrasion for lump ores. SGA concluded that "High reducibility was evaluated for James South being superior to other ore grades on the European market. In summary, it can be stated that James South ore represents a high quality lump ore grade which will be well accepted on the European market."

For the Knob Lake 1 sample (red ore), the iron content was analysed at 58.08 %. Accordingly high gangue contents of 6.89% SiO_2 and 0.84% Al_2O_3 were analysed as well as an LOI of 8.66 %. The contents of Mn, S, TiO2, V and non-ferrous metals are favourably low, whereas alkaline and P-contents are comparatively high. The physical testing of Knob Lake 1 lump ore resulted in a favourable size distribution with a low amount of fines. Also the tumbler test revealed good results with high strength and low abrasion for lump ores. Regarding metallurgical properties, reducibility of Knob Lake 1 ore was found to be very high being superior to other ore grades. Also disintegration testing resulted in excellent results.

The results of the SGA tests are shown in Table 12-10.

Table 12-10: SGA Test Results

	Total Fe%	SiO_2 %	$Al_2 0_3$ %	P%	Mn %
James Deposit					
Lump	66.98	1.81	0.17	0.02	0.09
Sinter (+0.3 mm)	67.23	1.49	0.17	0.02	0.09
Knob Lake 1 Deposit					
Lump	58.03	6.89	0.84	0.104	0.118

12.10 MBE (2009)

Approximately 1,600 kg of the James fine sample and 1,300 kg of the James lump sample were sent to MBE Coal & Minerals Technology GmbH, in Cologne, Germany, in November 2009. A representative part of each material was processed in two separate batch trials using a BATAC jig.

The test work on the fine ore sample produced a total of seven layers, whilst the Lump sample was split into five layer fractions.

Previous to the jigging trial on the fine sample, the material was screened at 1mm (wet screening) with an estimated cut point at 0.75 mm. The mass balance is given below:

>1mm	171.5 kg	162.4 kg dry
<1mm	133l at 1613g/l	214.5 kg dry
		376.9 kg dry total

To ensure highest accuracy, all elements were analysed by wet chemical analysis. All layer masses and their distribution specified in this report have been determined by weighing.

Table 12-11: Screen Analysis of the Lump Ore Sample as Received

Grain sizing [mm]	weight [%]	residue [%]	Fe [%]	SiO_2 [%]	Al_2O_3 [%]	density [g/cm³]	LOI
>22.4	14.8	14.8	60.29	13.34	0.24	4.42	2.88
22.4-16.0	27.1	41.9	61.21	12.72	0.34	4.47	2.66
16.0-11.2	29.9	71.8	63.08	9.54	0.32	4.56	2.49
11.2-8.0	16.2	88.0	62.33	9.92	0.49	4.55	2.84
8.0-5.6	3.0	91.0	61.90	12.60	0.38	4.50	2.39
5.6-0	9.0	100.0	55.53	18.10	0.82	4.21	2.88
$Feed_{anal}$	100.0		60.29	13.34	0.24	4.45	3.04

Table 12-12: Chemical Analysis of Jigging Products – Course Ore

Layer #	weight [kg]	weight %	Fe %	SiO_2 %	Al_2O_3 %	P %	density [g/cm³]	LOI
Layer 1	11.91	9.60	52.17	22.90	1.17	<0.05	4.00	4.33
Layer 2	16.89	13.61	57.05	13.30	0.46	<0.05	4.27	3.96
Layer 3	19.16	15.44	60.94	11.08	0.43	<0.05	4.42	3.65
Layer 4	22.78	18.36	62.11	10.59	0.37	<0.05	4.50	3.21
Layer 5	53.32	42.99	65.25	6.92	0.32	<0.05	4.76	1.89
$Feed_{calc.}$	124.06	100.00	61.64	10.69	0.45	<0.05	4.52	2.92
$Feed_{anal.}$	-	-	60.96	11.53	0.43	<0.05	4.47	2.98
Layer 4-5	76.10	61.35	64.31	8.02	0.33	<0.05	4.68	2.29
Layer 3-5	95.26	76.79	63.63	8.63	0.35	<0.05	4.63	2.56
Layer 2-5	112.15	90.40	62.64	9.34	0.37	<0.05	4.58	2.77

Table 12-13: Screen Analysis of the Fine Sample as Received

Grain sizing [mm]	weight %	residue %	Fe%	SiO_2%	Al_2O_3%	P %	Density [g/cm³]	LOI
>8.0	3.7	3.7	63.46	8.40	0.22	<0.05	4.65	2.66
8.0-5.6	9.4	13.1	63.55	8.58	0.31	<0.05	4.59	3.17
5.6-2.8	14.7	27.8	63.46	8.24	0.39	<0.05	4.58	3.15
2.8-1.0	13.8	41.6	62.82	8.74	0.52	<0.05	4.55	3.22
1.0-0.50	6.0	47.6	62.64	9.23	0.49	<0.05	4.55	2.87
0.50-0.315	9.9	57.5	64.49	9.00	0.47	<0.05	4.60	2.47
0.315-0.125	12.4	69.9	58.80	16.15	0.43	<0.05	4.38	2.11
0.125-0	30.1	100.0	49.61	32.77	0.42	<0.05	3.96	1.81
$Feed_{anal}$			58.46	15.84	0.48	<0.05	4.34	2.63
Fraction <1mm	214.5	-	54.80	0.57	24.20	<0.05	4.21	2.13

Table 12-14: Chemical Analysis of Jigging Products – Fine Ore

Layer #	weight [kg]	weight %	Fe %	SiO_2 %	Al_2O_3 %	P %	density [g/cm^3]	LOI
Layer 1	7.60	6.35	59.89	12.36	1.16	< 0.05	4.30	4.16
Layer 2	9.91	8.28	60.85	10.59	0.83	< 0.05	4.40	3.99
Layer 3	11.64	9.72	61.25	10.39	0.83	< 0.05	4.42	3.80
Layer 4	18.42	15.38	61.48	9.56	0.70	< 0.05	4.46	3.75
Layer 5	17.52	14.63	63.24	8.76	0.55	< 0.05	4.53	3.62
Layer 6	16.11	13.45	64.02	7.42	0.39	< 0.05	4.61	3.13
Layer 7	38.55	32.19	66.41	5.35	0.34	< 0.05	4.83	2.11
$Feed_{calc.}$	119.75	100.00	64.47	8.14	0.57	< 0.05	4.59	3.17
$Feed_{anal.}$	-	-	63.22	8.29	0.52	< 0.05	4.56	3.19
Layer 6-7	54.66	45.64	65.71	5.96	0.35	< 0.05	4.77	2.41
Layer 5-7	72.18	60.27	65.11	6.64	0.40	< 0.05	4.71	2.70
Layer 4-7	90.60	75.38	64.37	7.23	0.46	< 0.05	4.66	2.92
Layer 3-7	102.24	85.37	64.01	7.59	0.50	< 0.05	4.63	3.02
Layer 2-7	112.15	95.65	63.73	7.86	0.53	< 0.05	4.61	3.10

Regarding the fine ore trials, the test work indicated that it was possible to achieve a concentrate grade of +65% Fe at a mass yield of +60%. It was recommended that consideration should be given to grinding the remaining 40 % (reject) in order to feed to an additional separation process step such as the WHIMS magnetic separation.

The lump ore could be upgraded successfully to a +65 % Fe at +43 % weight recovery or +64 % Fe at a weight recovery of +61%.

It was further recommended that consideration be given to feeding the lump ore material into a three product lump ore jig to produce final reject, a middlings fraction, which could be fed after further crushing to the fines jig, and a final high grade concentrate.

12.11 2009 Bulk Sample by LIMHL/COREM

In an effort to seek ways to evaluate both feasibility and quality of eventual lump and sinter production, LIMHL contracted COREM to perform a series of characterization tests and to validate a proposed process flow sheet. The characterization tests (head assay, particle size distribution, specific gravity, bulk density, angle of repose, compressive strength, crushing work index, abrasion index and liberation characteristics) and the flow sheet were proposed by LIMHL and implemented at COREM's facilities.

The "Yellow Ore" samples from James South mainly consisted of iron hydroxide and hematite with silica, phosphorous and manganese as main contaminants. The NBY sample, when passed through a simple commination flow sheet (scrubbing, wet screening and stack sizing screen) can produce lump ore and sinter fines of commercial quality. Hence, no further work on this ore is needed.

Finally, the reject fines product still contained 56.27% Fe_{tot} that could possibly be recovered by traditional gravity technologies. An ideal recovery curve test using a Mozley table would be useful to evaluate the amount of valuable iron that could be recovered from the reject fines material.

Several characterization tests were performed on each sample to determine if a commercial product could be obtained after applying the simple beneficiation process proposed by LIMHL.

The mineralogical study showed that the valuable iron in the two head samples corresponded to iron hydroxide and hematite with silica, phosphorous and manganese as contaminants. The proportion of free iron particles in the – 300 µm fraction of the sample was as low as 69% and worse in the coarser fractions (under 50%).

A summary of the results is as follows:

Table 12-15: Corem Yellow Ore Test Results

Product	% Weight ROM	Fe_{tot}	SiO_2	Mn	P	Al_2O_3	LOI	SG
Head	100	59.07%	4.97%	0.23%	0.21%	0.78%	10.40	4.1
Lump	30.20	60.11%	3.16%	0.23%	0.20%	0.61%	10.00	
Sinter Feed	33.13	59.62%	3.96%	0.31%	0.23%	0.73%	10.10	
Reject Fines	36.67	56.27%	10.10%	0.31%	0.20%	1.06%	8.53	

These products could meet for some of the future LIMHL clients market specifications with dilution of Phosphorous by blending low Phosphorous Blue Ore to obtain following products:

- Lump: 64% Fe_{tot}, 4% SiO_2, 0.5% Mn, 0.1% P
- Sinter Feed: 62% Fe_{tot}, 4% SiO_2, 0.5% Mn, 0.1% P

Given this possibility, no further work on this ore is needed. All the material finer than 150 microns is considered as rejects. This product contained 56.27% Fe_{tot}.

12.12 SGS Lakefield (2010)

Ten Fe-ore composite samples from the James deposit were submitted for mineralogical characterization to aid with the metallurgical beneficiation program. Emphasis was placed on the locking/liberation characteristics of the Fe-oxides and the silicates minerals, particularly of the coarse sizes including the +3350 µm and +1180 µm size fractions. This mineralogical program also provided data in order to determine the optimum size of an achievable concentrate within each of the samples. A summary of the mineralogical characteristics are listed below:

- The 10 submitted samples were received as "as-is" iron ore drill cuttings, which have been split from 3 meter intervals of exploration drill holes.

- Each sample was screened into five size fractions +3350µm (+6 mesh), -3350/+1180µm (-6/+14 mesh), -1180/+300µm (-14/+48 mesh), -300/+106µm (-48/150 mesh), and -106µm (-150 mesh). Each fraction was submitted for chemical analysis (Whole Rock) and QEMSCAN™ analysis.
- The chemical analyses showed that these samples are composed mainly of Fe and Si with low levels of Al and Mn in some of the samples. Other elements occur in trace amounts.
- The calculated heads showed that the samples are composed primarily of Fe-oxides and moderate amounts of quartz. "Textural condition" is significant in one sample accounting for approximately 20% of the sample.
- The QEMSCAN™ analysis showed that quartz and other silicates accumulate with decreasing size, generally in the +106 µm and -300/+106 µm size fractions.
- The mineral release curves show display that, for the finer material (-300 µm), a good liberation is achieved between 100 µm and 200 µm (~80% liberation) with the exception of one sample, which has more middling particles than the others.

12.13 FLSmidth Minerals (2010)

In 2010 LIMHL contracted FLSmidth Minerals to perform tests on the Density Separator product for James deposit samples to confirm feasibility of using filters to decrease the moisture content of the concentrate. The objective of the test work was to evaluate FLSmidth (FLS) Pan Filter technology. Testing was conducted at the FLSmidth Technology Center in Salt Lake City, Utah. The testing examined operating conditions for future operation on the pan filters.

Sample Characterization and Pan Filter testing was conducted separately on two (2) streams during the months of July and November of 2010.

Testing was first performed on a finer sample with a particle size range of approximately (+75 µm, -1 mm) obtained by de-sliming the sampled received which specified 78% below 100 microns. Tests made in November 2010 were performed on a coarser material with a particle size range of approximately (+100 µm, -6 mm).The sample was first submitted to screening to remove the very coarse particles (+6mm, -20 mm) and then de-slimed and classified to simulate different cuts from a fluid bed Density Separator to obtain the above mentioned sample (+100 µm, -6 mm).

For the tests conducted in July 2010 particle size analysis showed approximately 78% of the sample under 100 µm. After de-sliming and classification the fraction (-100 µm) was only 60% and respectively 1.4% (-45 µm). To remove this undesired fraction the sample was manually classified (de-slimed) by repeatedly suspending the fine particles in the overflow then decanting to remove the fines from the sample. Figure 12.1 below shows the particle size distribution (psd) of both the original sample and the sample after classification.

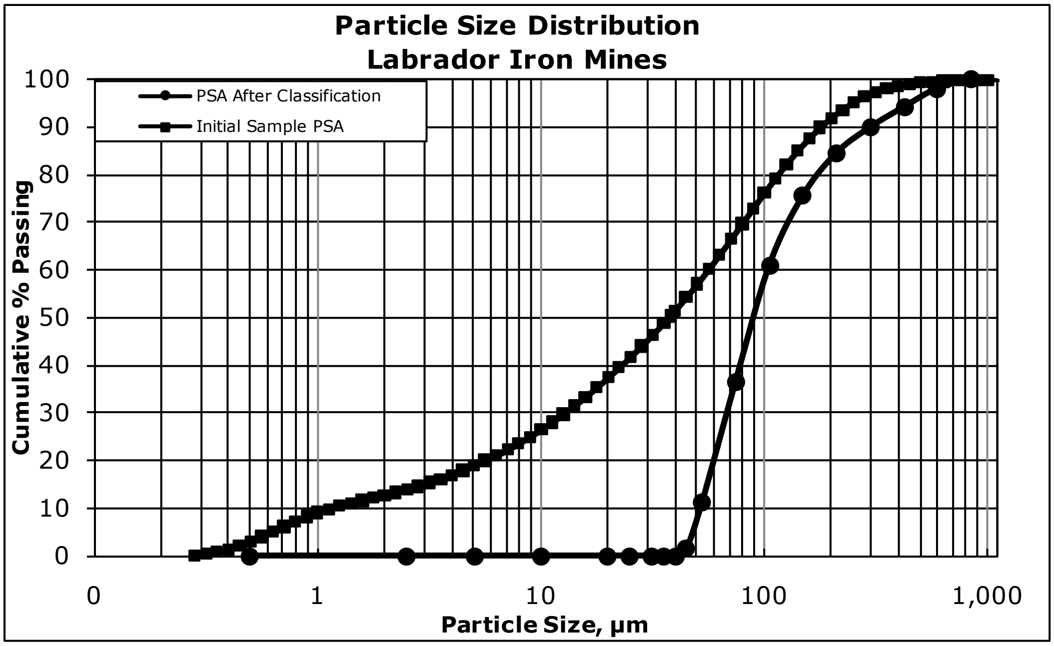


Figure 12.1: Particle Size Distribution for Labrador Iron Sample (July 2010)

The sample tested in November 2010 was much coarser with a fraction exceeding even 6-20mm. The coarse fraction above 6.0 mm was screened out of the sample and the remaining sample was manually classified to obtain a fraction between (+100 µm, -6 mm). Figure 12.2, below, shows the particle size distribution for two of the samples tested and also the psd that is expected for a hydrosizer underflow.

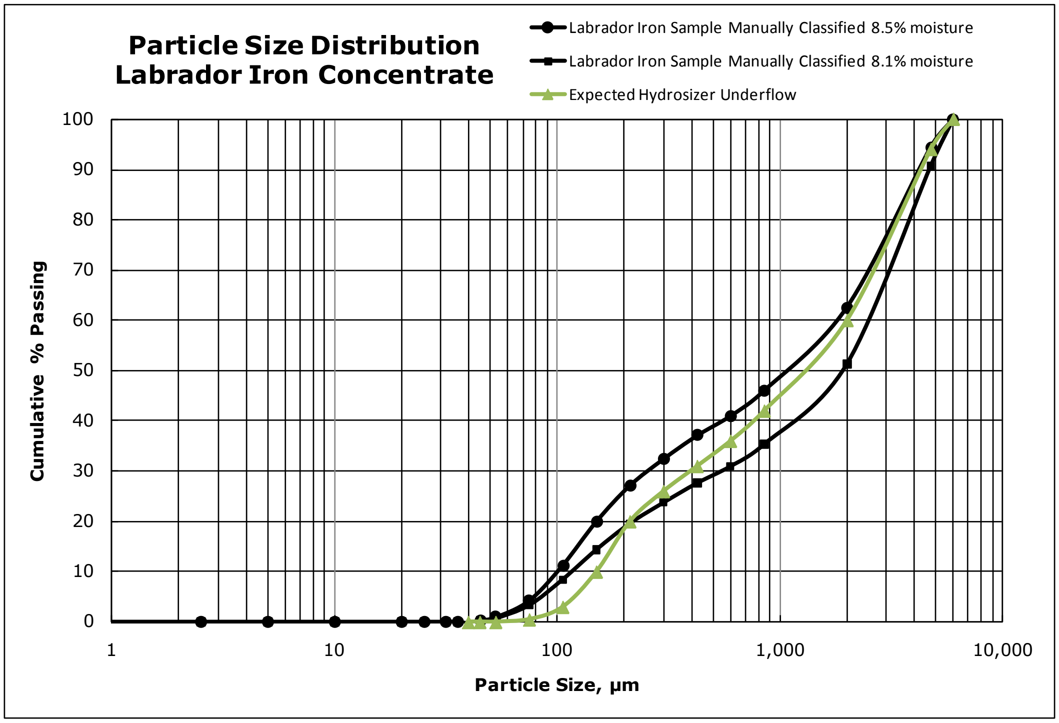


Figure 12.2: PSD for Labrador Iron Sample Tested November 2010

After the samples had been classified Vacuum Filtration simulating Pan Filter operation was performed on the samples without the use of steam or surfactant. The following table gives the results of the vacuum test sizing of both samples.

Table 12-16: Vacuum Filtration Sizing results

Sample	**50-1000 µm sample (July 2010)**	**100-6000 µm sample (November 2010)**
Cake Thickness, mm	65	80
Feed Solids, wt%	71	71
Rotational Speed, rpm	1	1
Cake Moisture, wt%	9,0%	<8.50%
Cycle Time, s	60	60
Filtration Rate, Kg/hr-m2	6250	8000

The filtration results clearly indicate the effect that particle size has on both filtration rate and residual moisture. Filter cake with finer particles have a higher resistance resulting in slower cake dewatering and lower filtration rates, with a moisture in the range of 9% is achievable for the finer particles and less than 8.5% expected for the coarser ones.

13 MINERAL RESOURCE ESTIMATION

This section reports the results of mineral resources of the James property. The property holds classified resources from its James(JM), Redmond 2B(RD2B), Redmond 5(R5) mineral deposits as well as the new resources estimate form the Knob lake No.1 (KL1) mineral deposit described in this report.

The resource estimates technical information for the James, and Redmond (2B and 5) are fully detailed in the Technical report dated December 18, 2009 and available on SEDAR. The James and Redmond technical information is also summarised in the silver yards technical report dated date April 15, 2011.

This report supports the 2011 year end update of the James mineral deposit taking into account the mineralised blocks extracted during the 2011 period. The mineral resources of the James deposit were not re-estimated but were restated using the updated James topographic surface as of March 31st, 2012. The mineral resource estimates technical information for the James, and Redmond (2B and 5) are fully detailed in the Technical report dated December 18, 2009 and available on SEDAR. The James and Redmond technical information is also summarised in the Silver Yards technical report dated date April 15, 2011.

The resources of the Redmond 2B and Redmond 5 deposits remain current and do not differ from the Technical report dated December 18, 2009. The fully detailed technical information of Redmond 2B and Redmond 5 was previously disclosed in the technical report dated December 18, 2009 and also summarised in the silver yards technical report dated April 15, 2011. The Redmond 2B and Redmond 5 summary is followed in this report. The mineral resource estimates technical information for the James, and Redmond (2B and 5) are fully detailed in the Technical report dated December 18, 2009 and available on SEDAR.

The James, Redmond 2B, Redmond 5 and Knob Lake No.1 mineral resources have been estimated by Maxime Dupéré P.Geo., Geologist for SGS Geostat. Mr. Dupéré is a professional geologist registered with the Ordre des Géologues du Québec and has worked in exploration for gold and diamonds, silver, base metals and iron ore. The author has been involved in mineral resource estimation work over different deposits on a continuous basis since he joined SGS Canada Inc. in 2006, which includes the participation in mineral resource estimate for the James and Redmond deposits in 2009 as well as the resource update of the Houston Property in June 2012. Mr. Dupéré is an independent Qualified Person as per section 1.4 of the NI 43-101 Standards of Disclosure for Mineral Projects with respect to the owner of the mineral titles included in the Property.

13.1 COMMENTS ABOUT THE MINERAL RESOURCE ESTIMATES

There are no known factors or issues related to environment, permitting, legal, mineral title, taxation, marketing, socio-economic or political settings that could materially affect the mineral resource estimate.

Important note: During the mineral resource estimation process different assumptions were made. The assumptions were used in order to calculate modelling cut-off grades and resources cut-off grades following the "reasonable prospect for economic extraction" stated by the NI 43-101 regulation. Mineral resources that are not mineral reserves have have demonstrated economic viability.

13.1.1 RESOURCES ESTIMATES DESCRIPTION AND INTERPRETATION

The Resources Estimation and classification section of this report on the James property mineral resource estimate was prepared by Maxime Dupéré P.Geo. Mr. Dupéré is responsible for this section. He is a qualified person by virtue of education, experience and membership in a professional organization. The author of this section was validated by SGS Geostat senior geostatistician.

The current classified resources of the Knob Lake No.1 , James, Redmond 5 and Redmond 2b Deposits reported below are compliant with standards as outlined in the National Instrument 43-101.

The James, Redmond, 2b, Redmond 5 and Knob Lake No.1 DSO resources are estimated through the construction of a resource block model with small blocks on a regular grid filling an interpreted mineralized envelope and with grades interpolated from measured grades of composites drill hole or trench samples around the blocks and within the same envelope. Blocks are then categorized according to average proximity to samples.

These resources were reported using the IOC Classification of Ore described in the next table.

Table 13-1: Classification of Ore Types

Schefferville Ore Types (From IOC)					
TYPE	**ORE COLOURS**	**T_Fe%**	**T_Mn%**	**SiO2%**	**Al2O3%**
NB (Non-bessemer)	Blue, Red, Yellow	>=55.0	<3.5	<10.0	<5.0
LNB (Lean non-bessemer)	Blue, Red, Yellow	>=50.0	<3.5	<18.0	<5.0
HMN (High Manganiferous)	Blue, Red, Yellow	(Fe+Mn) >=50.0	>=6.0	<18.0	<5.0
LMN (Low Manganiferous)	Blue, Red, Yellow	(Fe+Mn) >=50.0	3.5-6.0	<18.0	<5.0
HiSiO2 (High Silica)	Blue	>=50.0		18.0-30.0	<5.0
TRX (Treat Rock)	Blue	40.0-50.0		18.0-30.0	<5.0
HiAl (High Aluminum)	Blue, Red, Yellow	>=50.0		<18.0	>5.0

13.1.2 Specific Gravity (SG)

The following information was applied to all of LIM's mineral deposits described in this report.

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

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

SG=Specific Gravity of Sample

A=Weight of Sample in air (dry)

Ww=Weight of Water displaced

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

SG (in situ) = [(0.0258 * Fe) + 2.338] * 0.9

The formula was calculated from regression analyses in MS Excel using 229 specific gravity tests completed during the 2009 drilling program on the KL1 And other similar iron deposits of the nearby area.. The 0.9 factor corresponds to a security factor to take into account porosity of an estimated average of 10% volume. This formula was validated and used by SGS in prior technical reports.

13.1.3 Database and Validation

No significant inconsistencies were observed. LIM entered the historical data was entered from IOC's data bank listing print outs of drill holes, trenching and surface analyses. All of the data entering was done by LIM. SGS used separate databases for each mineral deposit.

Most collar coordinate locations of drill holes were obtained using a Trimble DGPS with accuracies under 30cms. The locations of the remaining holes and trenches as well as geology were digitized using MapInfo v9.5 on historical maps that were geo-referenced using the DGPS surveyed points. The estimated accuracy of the digitized data is approximately 5 metres. Historical cross sections were also digitized using MapInfo/Discover software then imported into Gemcom Gems software.

Table 13-2 is a summary table of the Database record information for each deposit being estimated in this report.

Table 13-2: James Property Drill Hole Database Summary

Deposit	Hole type	# holes	metres	Assays
James	Diamond	2	29	0
	RC	125	7094	2366
	Trench	79	3651	939
Redmond 2B	RC	25	1365	444
	Trench	10	663	205
Redmond 5	RC	68	2335	681
	Trench	8	461	100
	Diamond	1	44.2	17
Knob Lake No.1	RC	47	2597	991
	Trench	28	877	196

13.1.4 Grids Used

Originally, each deposit had its own grid system. 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 geo-refencing and matching purposes. See 13.2.2.

13.2 Knob Lake No.1 Mineral Resource Estimation

13.2.1 Introduction

This section reports the results of the mineral resource estimate for the Knob Lake No.1 (KL1) mineral deposit based on analytical data sampled from the drilling completed since the 2011 RC drilling program, effective May 24 2012.

SGS Geostat conducted the current mineral resource estimate for the Knob Lake No.1 iron deposit using historical RC drill holes and trenches and recent RC drill holes and trench data compiled from the 2008 to 2011 exploration programs conducted on Knob Lake No.1. The Knob Lake No.1 database used contains a total of 2,095 metres of RC drilling in 47 RC drill holes and 1 diamond drill hole for a total of 1008 assays. Also, 877.1 metres of trenching and a total of 196 assays are included in the database. The database cut-off date is February 6th, 2012. Table 13-2 in the Data verification section provides a summary of the Knob Lake No.1 database.

The mineral resources presented herein are reported in accordance with the National Instrument 43-101 and have been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve. These resources were reported using the IOC Classification of Ore described in the Table 13-1.

The current resource estimates for the Knob Lake No.1 deposit are of 5.7 million tonnes including LNB, NB, HiSiO2, LMN and HMN ore types as described in Table 13-1 in the Measured and Indicated categories at a grade of 54.2% Fe and 870,000 tonnes in the inferred category at a grade of 52% Fe and supports the LIM's May 31st, 2012 press release. The resources presented in this section are all inside the property boundary. The block model was cut by the topography. The block percentage had to be at least 50% inside the mineralised solid in order to be considered in the resource estimation. The Knob Lake No.1 resources are dated as of March 31st 2012.

The Knob Lake No.1 data used for the estimation of current mineral resources was initially compiled and validated by LIM using MapInfo Professional software in combination with Encom Discover and Microsoft Office Access. Data was then imported into Gemcom GEMS Software Version 6.2.4.1., which was used to perform the final validation of the Knob Lake No.1 database, to construct solids, to build composites, to run geostatistical analyses, to build the block model, to run grades interpolation and to estimate mineral resources.

No significant inconsistencies were observed. LIM entered the historical data was entered from IOC's data bank listing print outs of drill holes, trenching and surface analyses. All of the data entering was done by LIM. SGS did a limited validation of the data as described Section 13.1.3.

13.2.2 Geological Interpretation and Modeling

This information was provided by LIM. The geological interpretation of the Knob Lake No.1 deposit was entirely constructed by LIM according to available data of the area.

The geological and ore model interpretation of the Knob Lake No.1 deposit was completed considering a cut-off grade of 45% Fe; however the resources reported are based on a cut-off grade of 50%Fe for iron ore and 50% Fe+Mn for manganiferous iron ore. The IOCC ore type parameters of Non-Bessemer (NB), lean non-Bessemer (LNB), high silica (HiSiO2), high manganiferous (HMN) and low manganiferous (LMN) were considered for the resource estimation. See Table 13-2.

The geological modeling of the Knob Lake No.1 mineral deposit was done using 25 vertical cross sections with a direction of 44.5° spaced approximately 30 metres apart (100 feet). The cross section configuration is the same as the one used by IOCC. Eight (8) available historical paper cross sections and one geological map from IOCC were digitized and used for the geological interpretation and modeling. The original geological and mineralization interpretations were updated with information obtained during recent exploration programs. The solids were created from the sectional wireframes combining geological and mineralization interpretation.

The study area of the Knob Lake No.1 deposit included in this report covers an extension of 500km long by a maximum of 240m wide and a maximum of 120m vertical. Further infill drilling will be required to better define mineralization in some areas within the deposit subject of this report. Please see Figure 13.1.

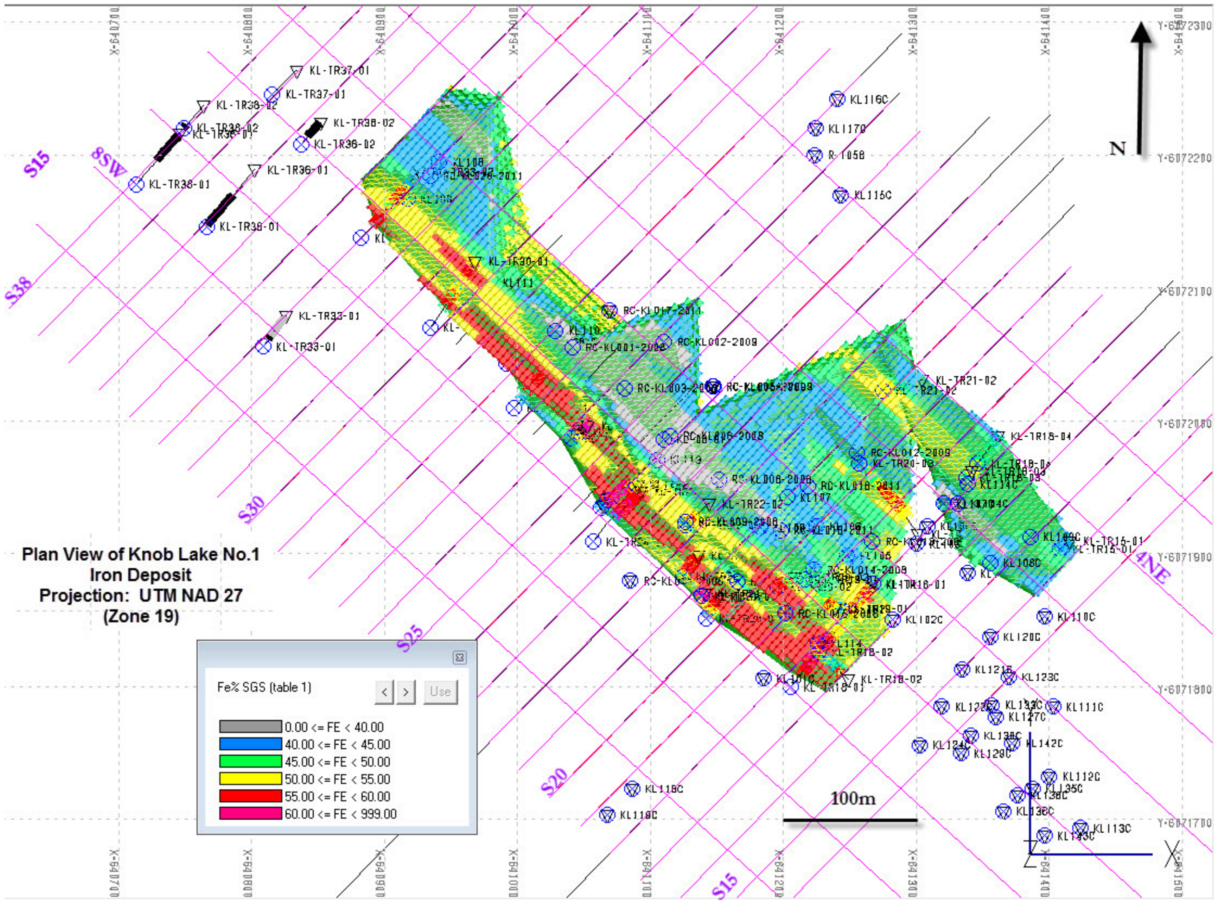


Figure 13.1: Knob Lake 1 Plan View

13.2.3 Specific Gravity (SG) on KL1

A variable specific gravity, Fe dependant, was used for the resource estimation which was calculated using the formula below. Please see Section 13.1.2.

SG (in situ) = [(0.0258 * Fe) + 2.338] * 0.9

13.2.4 Blocks Model Information

Blocks are 5x5x5m on a grid within a rotated local coordinate system with a long axis along the N312. Maximum number of columns (along the N42°) is 201 and maximum number of rows (along the N312°) is 141. Vertically, the maximum number of 5m benches is 36. The total of blocks is 29,793. The block centers are within the DSO envelope interpreted by LIM geologists. The parameters of the Block Model were done using the following parameters.

Table 13-3: Parameters of Block Model

Number of Blocks	
Columns	201
Rows	141
Levels	36
Origin and Orientation	
x	641,200
y	6,071,600
z	575
Orientation* (counterclockwise)	
Block Size	
Columns Size	5
Rows Size	5
Levels Size	5

* Orientation Origin based on Block Centroid

13.2.5 Composites Used for Estimation

Block model grade interpolation is conducted on composited assay data. A composite length of 3 m has been selected to reflect the 3 m RC sampling intervals used on the Knob Lake No.1 deposit Compositing was done on the entire RC drill holes and trenches. A minimum length of 1.5 m was set. No capping was necessary.

At total of 671 composites were generated. The modeled 3D wireframe of the mineralized envelope was used to constrain the composites Table 13-3 summarises the statistics of the composite data. Figure 13.2 shows the histogram of the composites.

The Composites were built from assay intervals along sub-horizontal trenches and vertical RC holes. Spacing between holes and trenches varies along the 600 m strike length but at the best, we have trenches and RC holes on cross-sections at 30m distance along the N314.5° strike and the spacing between holes on the section is the same 30m. In practice most sections just have a single hole (owing to the narrow width of the mineralized zone) plus a trench at the top. Only composites with a center within the same mineralized envelope as blocks are kept (some trench composites are outside blocks because of the yes/no block elimination around the topo surface) and they need have a minimum 1.5m documented length. All together we have 4227 composites with at least a %Fe and a %SiO2 grade within the DSO envelope.

13.2.6 Distribution of Composite Grades

Data to be populated in blocks around composites are the %Fe, %SiO2, %Al2O3, %Mn and %P grades. Statistics of composite grades for those elements are on Table 13-2. Histograms are on Figure 13.2. Some correlation plots appear on Figure 13.3.

As expected the distribution of the %Fe of composites is negatively skewed (tail of low values) while the distribution of the %SiO2 is almost its mirror image (positively skewed with a tail of high values). This can be explained by the high negative correlation of %Fe and %SiO2 (Figure 13.3). Distribution of alumina and manganese and phosphorous are heavily skewed with a long tail of high values. All other correlations between variables are weak (best with R around 0.25 are between %Mn and %P (negative), %Fe and %Mn (negative).

Table 13-4 Statistics of Composite Data Used in the Interpolation of KL1 Resource Blocks

Statistics	***FE***	***P***	***MN***	***SIO2***	***AL2O3***
Mean	50.56	0.07	1.41	17.23	0.52
Standard Error	0.32	0.01	0.13	0.55	0.03
Median	52.00	0.04	0.15	11.87	0.43
Standard Deviation	8.21	0.28	3.23	14.17	0.56
Sample Variance	67.45	0.08	10.44	200.78	0.32
Kurtosis	-0.25	314.40	17.97	-0.84	17.68
Skewness	-0.62	17.13	3.83	0.66	2.79
Range	49.69	5.76	26.50	66.96	5.58
Minimum	12.81	0.00	0.00	0.50	0.00
Maximum	62.50	5.76	26.50	67.46	5.58
Count	670	669	667	670	382

13.2.7 Variograms of Composite Grades

The spatial continuity of the grades of composites is assessed through experimental correlograms computed along specific directions. A correlogram looks at the decrease of the correlation between samples as the distance between samples is increasing. It is presented like a variogram with a sill of 1 by graphing the function 1- correlogram (Figure 13.4).

Correlograms have been computed along the following directions:

- vertical holes and horizontal trenches at the same time i.e.an average of all directions with a short 3m lag to get the nugget effect and average range (in black on Figure 13.4)
- vertical holes only with the same short 3m lag (in light green on Figure 13.4)
- horizontal trenches only with the same 3m lag (in blue on Figure 13.4)
- average N134.4 horizontal strike with a lag of 35m corresponding to the spacing between sections (in red on Figure 13.4)

The correlograms of %Fe show (1) a moderate nugget effect of 20% (2) ranges between 30 and 250m (3) the same long range of about 250m in strike (4) a very similar continuity for vertical drill hole samples and horizontal trench samples.

As it could be expected from the strong negative correlation between %Fe and %SiO2 in composites, the correlograms of %SiO2 are basically the same as those of %Fe (Figure 13.4).

The correlograms of all three minor elements (%Al2O3, %Mn and %P) show a similar relative nugget effect of 0.20%. For %Al2O3, the anisotropy pattern looks the same as with %Fe and %SiO2 (best in strike) but ranges are shorter (60m for short and long axis). For %Mn and %P, the range along strike is longer (65m) than the range along dip (15m). All experimental variograms are modelled with the sum of a nugget effect and a spherical function.

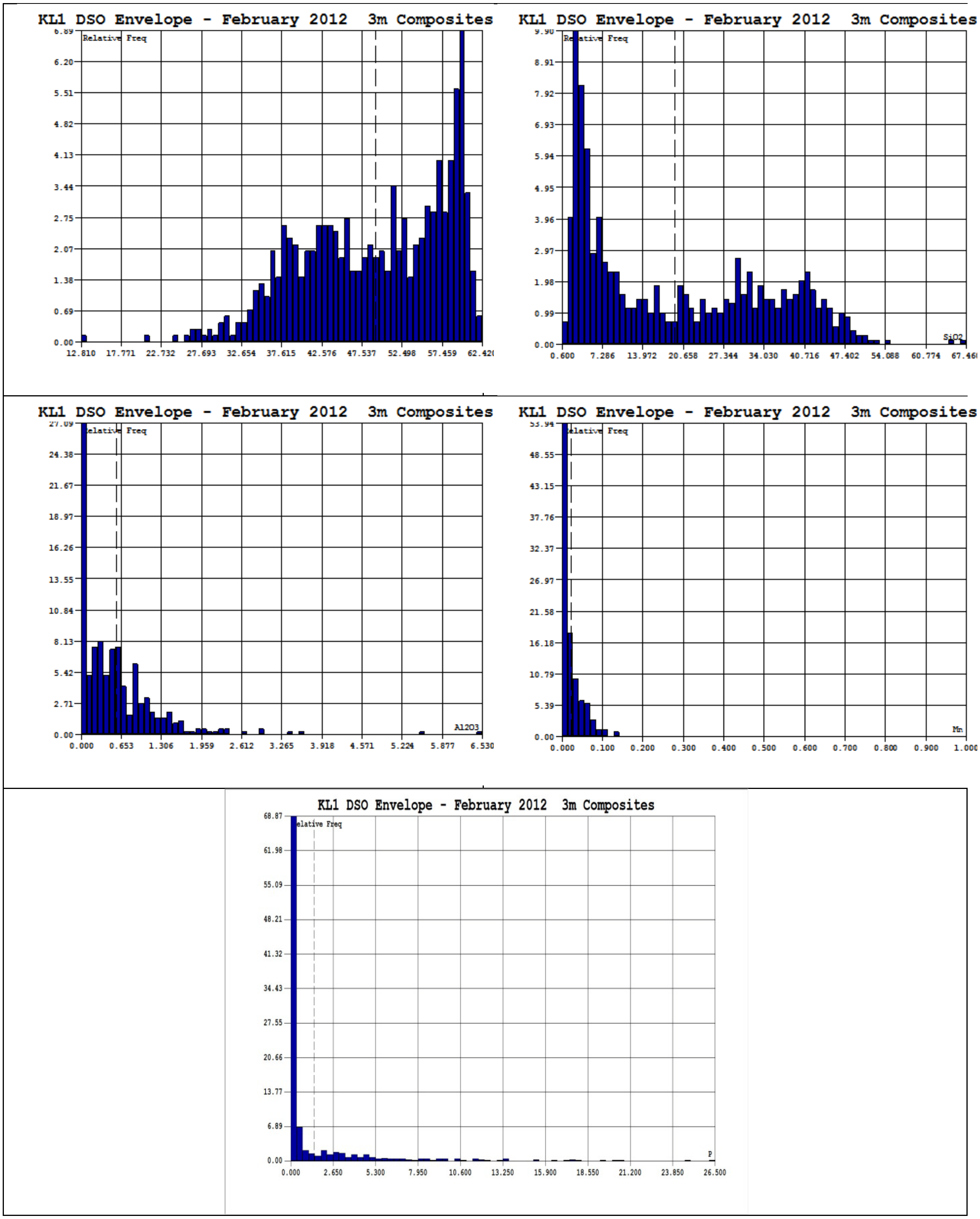


Figure 13.2: Histograms of KL1 Composite Data

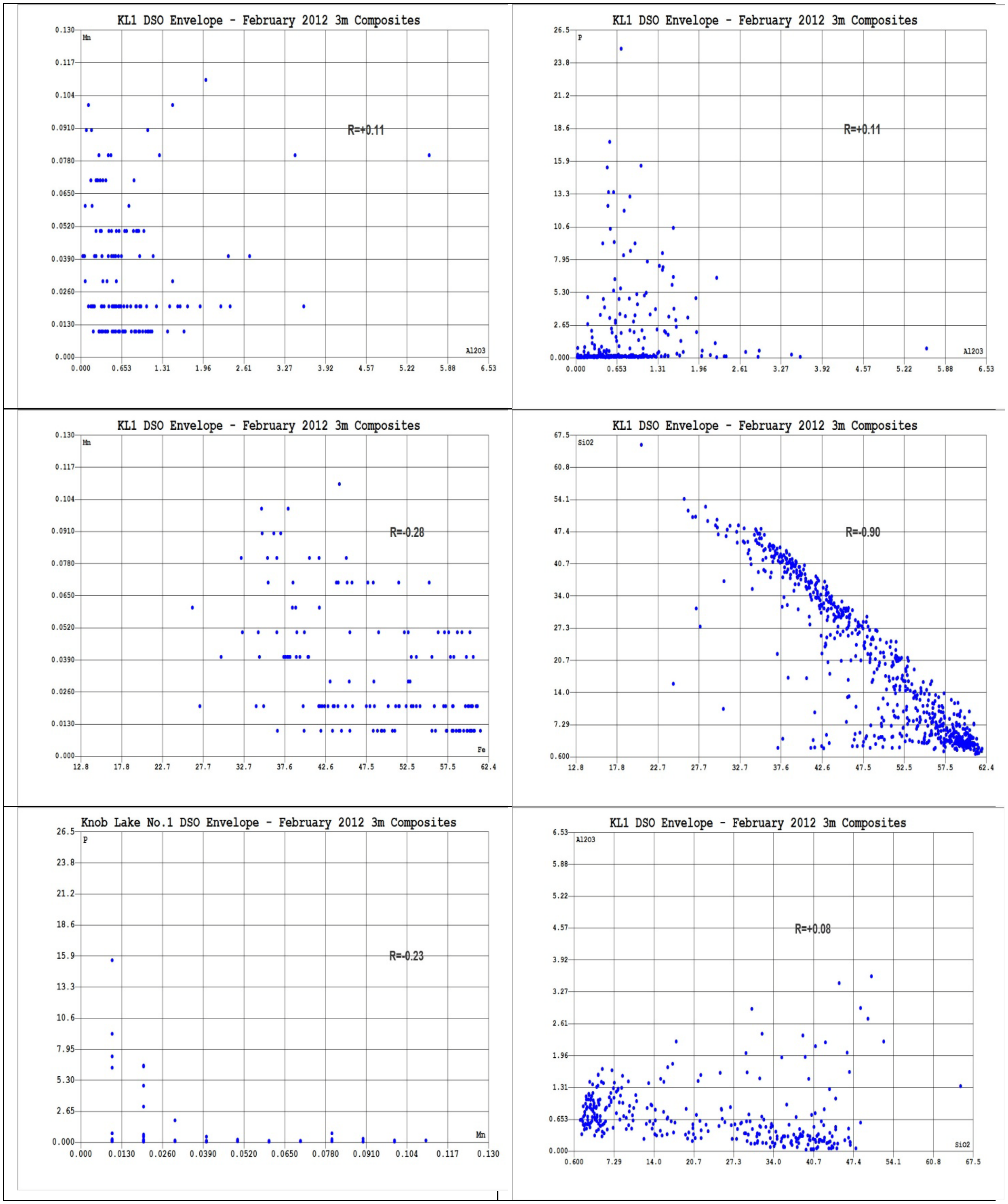


Figure 13.3: Some Correlation Plots of DSO Composite Grade Data (2012)

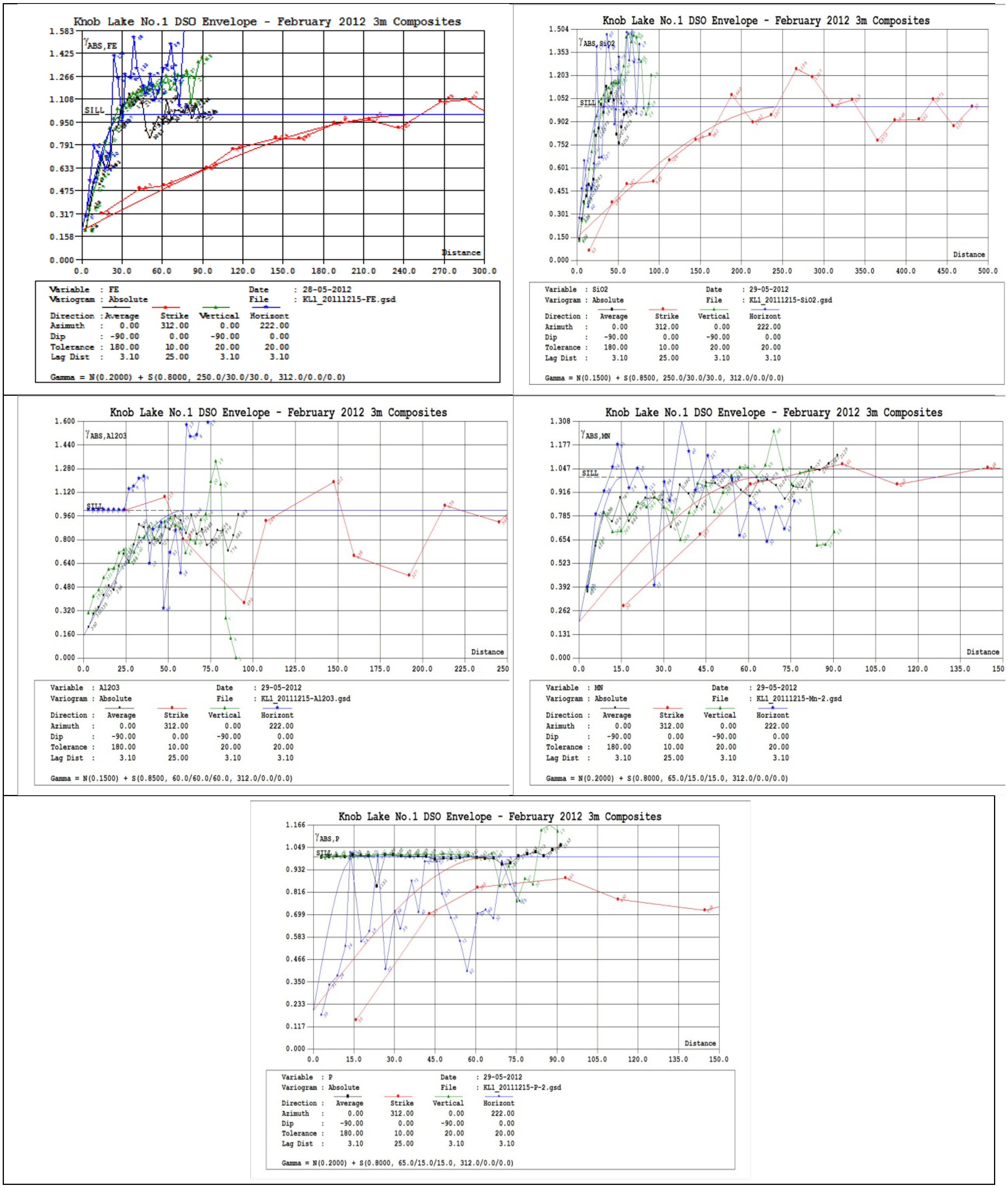


Figure 13.4: Variograms of DSO Composite Grade Data

13.2.8 BLOCK GRADES INTERPOLATION

The %Fe, %SiO2, %Al2O3, %Mn and %P grades of each of the 29,793 blocks 5x5x5m within the DSO envelope are interpolated from the grades of nearby composites through the ordinary kriging method which fully uses the characteristics of variograms of each variable.

As usual, the interpolation is done in successive runs with minimum search conditions relaxed from one run to the next until all blocks are interpolated.

The basic search ellipsoid (to collect the nearby composites around a block to interpolate) is oriented according to the anisotropy of variogram i.e. its long radius is along the horizontal N144 strike, its intermediate radius is along the average dip of 60^o to the N54 and its short radius is along the perpendicular to the average strike+dip i.e. a dip of 30^o to the N234. For all variables the long radius is set to either 40m (%Al2O3) or 50m (all others) in order to catch samples on at least two adjacent sections. In the case of %Fe and %SiO2, the intermediate radius is the same 50m and the short radius is 25m. In the case of %Al2O3, the intermediate radius is 40m and the short radius is 20m. In the case of %Mn, the intermediate radius is 35m and the short radius is 25m. In the case of %P, the intermediate radius is 30m and the short radius is 20m. Those dimensions are simply doubled in the second interpolation run.

The maximum number of composites kept in the search ellipsoid is 30 with a maximum of 3 composites from the same hole or trench. The minimum number of composites required in order to the interpolation to proceed is 7 (i.e. in a minimum of 3 different holes or trenches). That minimum is simply lifted in the third run in order to interpolate the very few un-interpolated blocks at that stage. Those conditions are set to insure that a block grade is truly interpolated from samples in several holes and trenches (on different sides of the block) and not extrapolated from a few samples in the same drill hole or trench.

Statistics of block grade estimates from the different runs are on Table 13-3. As a general rule, the variability of estimates (difference max.-min., %CV) decreases from first run to second run. A large majority of blocks is interpolated in the first run while just a few blocks are interpolated in the third and last run.

Figures 13.5 and Figure 13.6 represent typical sections of the KL1 deposit showing the geological interpretations and resource block models:

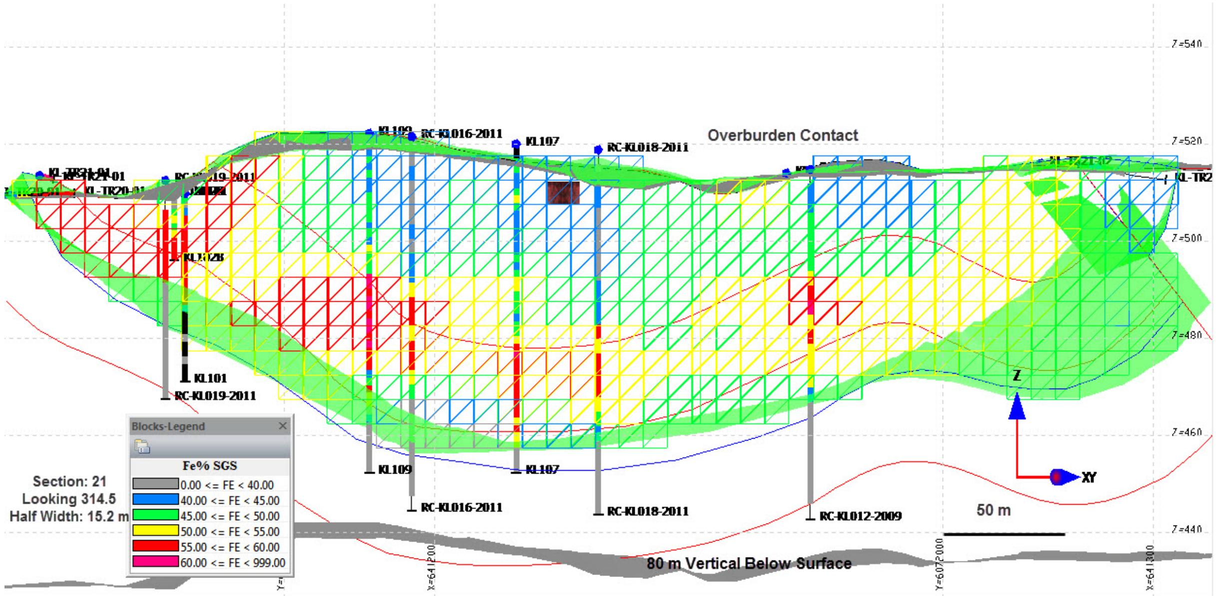


Figure 13.5: Knob Lake 1 Section 21 – Geological Interpretation

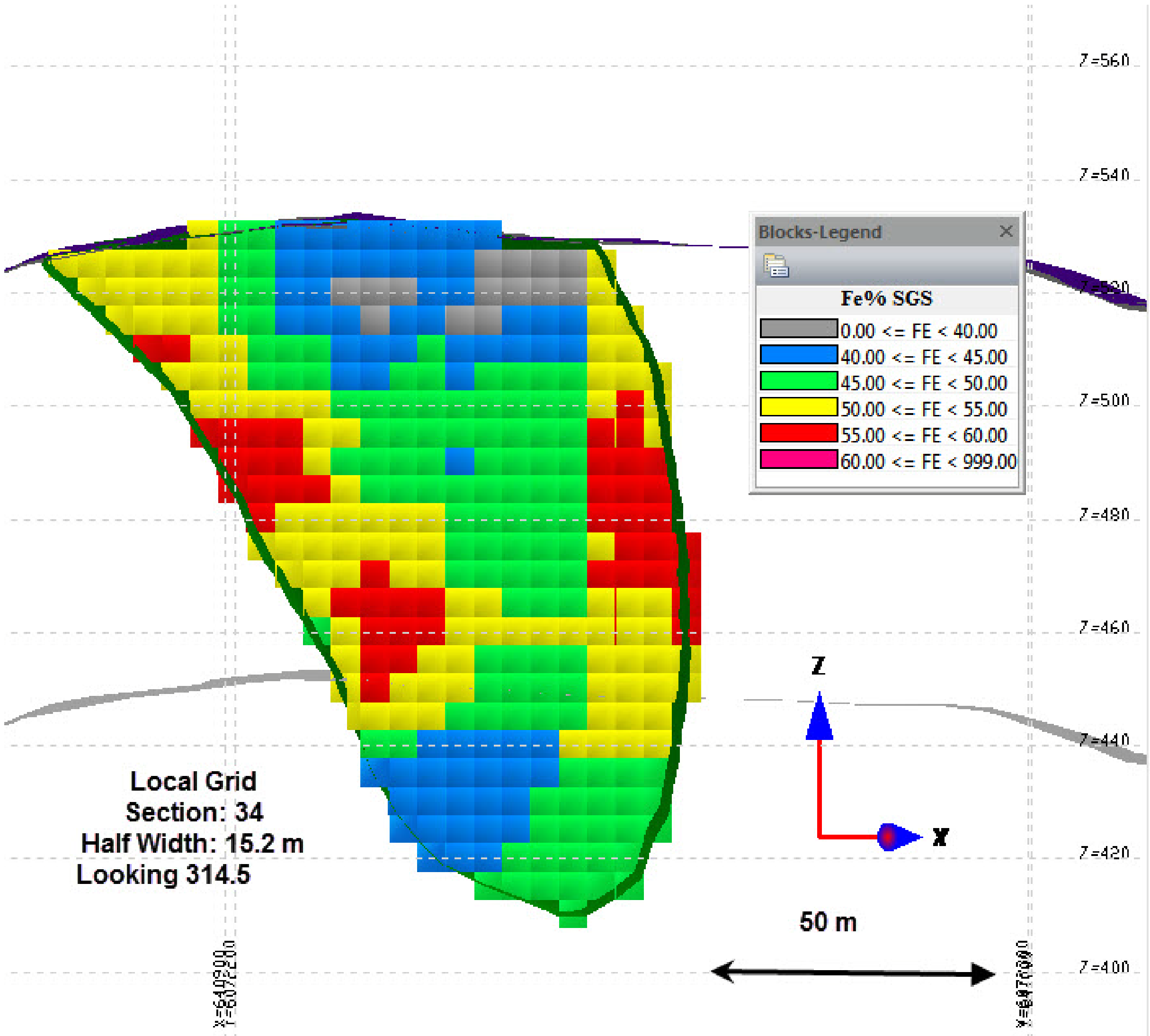


Figure 13.6: Knob Lake 1 Section 34 – Geological Interpretation

13.2.9 BLOCK GRADE VALIDATION

Block grade validation was done revolving around the idea that grade estimates of blocks close to samples should reflect the grades of those samples (which is not necessarily the case when variograms show a high nugget effect). The sections and benches were checked with blocks and composites, using the same color scale for grade and making sure that they visually match. SGS considers the validation as adequate and current.

13.2.10 RESOURCES CLASSIFICATION

The estimated resources were classified in accordance with the specifications of the NI 43-101 Policy, namely in measured, indicated, and inferred resources.

SGS used the kriging variance (standard krigging error) as a factor of classification. The kriging variance is a statistical method of describing the quality of the estimation on each block and ranged from 0 to 1.1.This could also be considered as semi qualitative. The kriging variance on the Fe grade was retained. Kriging variance of each block was shown bench by bench and a manual selection by contouring was done in order to construct two solids of Measured and Indicated category.

Blocks having a kriging variance from 0 to 0.8 were taken into account for the measured category solid construction. Blocks having a kriging variance from 0.8 to 1.0 were taken into account for the indicated category solid construction. Blocks having a kriging variance from 1.0 and up were taken into account for the indicated category selection. The drilling grid of 30m and the presence of trenches on most of some cross sections helped acknowledge the kriging variance and classification boundary as a preferred tool for classification. A second step was done on the classification contour to apply a smoothing in order to avoid the spotted dog effect.

13.2.11 MINERAL RESOURCES ESTIMATION CONCLUSION

The current resource estimates for the Knob Lake No.1 deposit are of 5.7 million tonnes including the LNB, NB, HiSiO2, LMN and HMN Ore types (Table 13-1) in the Measured and Indicated categories at a grade of 54.2% Fe and 870,000 tonnes in the inferred category at a grade of 52% Fe. The resources presented in this section are all inside the Property boundary. The block model was cut by the topography. The block percentage had to be at least 50% inside the mineralised solid in order to be considered in the resource estimation. The Knob Lake No.1 resources are dated as of March 31st 2012.

The block model was cut by the topography and to a maximum depth of 80 metres. The block percentage had to be at least 50%inside the mineralised solid in order to be considered in the resource estimation.

The Knob Lake No.1 deposit remains open to the northwest and southeast. The results of the resource estimates for the Knob Lake No.1 deposit are shown in Table 13-5. The Mineral resources were classified using the following parameters:

There are no known factors or issues related to environment, permitting, legal, mineral title, taxation, marketing, socio-economic or political settings that could materially affect the mineral resource estimate.

Table 13-5: Knob Lake 1 – Resource Estimates

Area	Ore Type	Classificatio	Tonnage	SG	Fe(%)	P(%)	MN(%)	SiO2(%)	Al2O3(%)
Knob Lake No.1	Fe Ore	Measured	2,838,000	3.38	55.02	0.07	1.00	10.22	0.48
		Indicated(I)	2,264,000	3.36	54.33	0.06	1.08	11.19	0.46
		TotalM+I	5,102,000	3.37	54.71	0.07	1.03	10.65	0.47
		Inferred	724,000	3.32	52.32	0.09	1.25	13.40	0.45
Knob Lake No.1	Mn Ore	Measured	383,000	3.28	50.52	0.09	5.57	8.53	0.68
		Indicated(I)	230,000	3.25	49.37	0.08	4.78	10.21	0.79
		TotalM+I	613,000	3.27	50.09	0.08	5.34	9.16	0.72
		Inferred	146,000	3.28	50.63	0.05	4.79	10.27	0.40
Knob Lake No.1	Total	Measured	3,221,000	3.37	54.48	0.07	1.54	10.02	0.50
		Indicated(I)	2,494,000	3.35	53.87	0.06	1.42	11.10	0.49
		TotalM+I	5,715,000	3.36	54.21	0.07	1.50	10.49	0.50
		Inferred	870,000	3.31	52.04	0.08	1.84	12.87	0.44

13.3 JAMES DEPOSIT MINERAL RESOURCE UPDATE

This report supports the fiscal 2011 year-end update of the James mineral deposit taking into account the mineralised blocks extracted during the 2011 period. The mineral resources of the James deposit were not re-estimated but were restated using the updated James topographic surface as of March 31st, 2011.

The previous mineral resource estimate of the James Property was completed by Maxime Dupéré P.Geo., Geologist for SGS Geostat and was disclosed in the Technical report dated December 18, 2009. The technical information is also summarised in the silver yards technical report dated date April 15, 2011.

SGS Geostat updated the mineral resource estimate for the James iron deposit using the new and updated March31st, 2012 topographic surface provided by LIM. The James database used contains a total of 6,835 metres of RC drilling in 122 RC drill holes and 2 diamond drill hole for a total of 2,278 assays. Also, 79 trenches for a total of 3,651 metres of trenching and a total of 939 assays were included in the database. The database cut-off date is November 9th, 2009. The presence of 3 additional 2011 RC drill holes to the southeast of the James deposit were checked and validated and the opinion of SGS is that they do not affect materially the current mineral resources of the James deposit. 2 additional RC drill holes were drilled in the James mineral deposit for QA/QC and grade control by the mining staff of the James Mine. It is the author's opinion that this additional information does not affect materially the current James mineral resources at this stage. Suggestions are made in the Recommendations section regarding this additional RC drill information.

The mineral resources presented herein are reported in accordance with the National Instrument 43-101 and have been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve. These resources were reported using the IOC Classification of Ore described in the Table 13-1.

The current resource estimates for the James deposit after 2011 mining depletion are of 6.7 million tonnes including LNB, NB and HiSiO2 ore types as described in Table 13-1 in the Measured and Indicated categories at a grade of 57.42% Fe and 103,000 tonnes in the inferred category at a grade of 53.42% Fe. The resources presented in this section are all inside the property boundary. The block model was cut by the March 2012 topography. SGS assigned a percentage to each block that was curt by the updated topography. This percentage was taken into account for the resource estimates. The James updated resources are dated as of March 31st 2012.

The James deposit remains open to the northwest and southeast. The results of the resource update for the deposit are shown in Table 13-6.

Table 13-6: Updated mineral resources of the James Deposit

Area	Ore Type	Classification	Tonnage	SG	Fe(%)	P(%)	MN(%)	SiO_2(%)	Al_2O_3 (%)
James	Fe Ore	Measured (M)	-	-	-		-	-	-
		Indicated(I)	6,670,000	3.43	57.42	0.021	0.65	14.59	0.42
		TotalM+I	**6,670,000**	3.43	57.42	0.021	0.65	14.59	0.42
		Inferred	103,000	3.34	53.42	0.035	0.14	19.77	0.48
James	Mn Ore	Measured (M)	-	-	-		-	-	
		Indicated(I)	-	-	-		-	-	
		TotalM+I	**-**	**-**	**-**		**-**	**-**	
		Inferred	-	-	-		-	-	

Dated March 31st 2012

There are no known factors or issues related to environment, permitting, legal, mineral title, taxation, marketing, socio-economic or political settings that could materially affect the mineral resource estimate. LIM is currently extracting mineralized material from its James open pit mine and , although not validated by the author, all legal, mineral title, socio economic and community impact issues and settings are being addressed in a proper manner.

The presence of 3 additional 2011 RC drill holes to the southeast of the James deposit were checked and validated and the opinion of SGS is that this additional information does not affect materially the current James mineral resources at this stage. Suggestions are made in the Recommendations section regarding this additional RC drill information.

13.4 REDMOND DEPOSITS MINERAL RESOURCE UPDATE

The mineral resource estimate of the Redmond deposits (Redmond 2B and Redmond 5) were completed by Maxime Dupéré P.Geo., Geologist for SGS Geostat stated in the Technical report dated December 18, 2009. The technical information and resources statement are also summarised in the silver yards technical report dated date April 15, 2011. The mineral resources stated below remain current as of the date of this report. No relevant additional exploration or drilling has a material effect to the Redmond 2B deposit.

The Redmond 2B database used contains a total of 1,365 metres of RC drilling in 125 RC drill holes for a total of 444 assays. Also, 10 trenches for a total of 663 metres of trenching and a total of 205 assays were included in the database. The Redmond 5 database used contains a total of 2,335 metres of RC drilling in 68 RC drill holes for a total of 681 assays. Also, 8 trenches for a total of 461 metres of trenching and a total of 100 assays were included in the database. The database cut-off date is November 9th, 2009.

The mineral resources presented herein are reported in accordance with the National Instrument 43-101 and have been estimated in conformity with generally accepted CIM "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve. These resources were reported using the IOC Classification of Ore described in the Table 13-1.

The current resource estimate for the Redmond 2B deposit is of 849,000 tonnes including LNB, NB and HiSiO2 ore types as described in Table 13-1 in the Measured and Indicated categories at a grade of 59.86% Fe and 30,000 tonnes in the inferred category at a grade of 57.21% Fe. The resources presented in this section are all inside the property boundary. The block model was cut by the topography. The block percentage had to be at least 50% inside the mineralised solid in order to be considered in the resource estimation. The Redmond resources are dated as of March 31st 2012. The results of the resource update for the deposit are shown in Table 13-7.

The current resource estimate for the Redmond 5 deposit is of 2.1 million tonnes including LNB, NB and HiSiO2 ore types as described in Table 13-1 in the Measured and Indicated categories at a grade of 54.95% Fe and 78,000 tonnes in the inferred category at a grade of 52.34% Fe. The resources presented in this section are all inside the property boundary. The block model was cut by the topography. The block percentage had to be at least 50% inside the mineralised solid in order to be considered in the resource estimation. The Redmond resources are dated as of March 31st 2012. The results of the resource update for the deposit are shown in Table 13-7.

Table 13-7: Updated mineral resources of the Redmond Deposits

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
Redmond 2B	NB-LNB	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	849,000	3.71	59.86	0.120	0.37	5.05	2.09
		Total (M+I)	**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
	HiSiO2	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Total (M+I)	**-**	**0.00**	**0.00**	**0.000**	**0.00**	**0.00**	**0.00**
		Inferred	-	0.00	0.00	0.000	0.00	0.00	0.00
	HMN-LMN	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Total (M+I)							
		Inferred	-	0.00	0.00	0.000	0.00	0.00	0.00
	Fe Ore (NB-LNB and HiSiO2)	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	849,000	3.71	59.86	0.120	0.37	5.05	2.09
		Total (M+I)	**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

Restated March 31st, 2012

Deposit	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
Redmond 5	NB-LNB	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	1,793,000	3.40	55.55	0.051	1.32	9.26	0.87
		Total (M+I)	**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	Measured (M)							
		Indicated(I)	291,000	3.30	51.23	0.029	0.24	21.54	0.41
		Total (M+I)	**291,000**	**3.30**	**51.23**	**0.029**	**0.24**	**21.54**	**0.41**
		Inferred	-	0.00	0.00	0.000	0.00	0.00	0.00
	HMN-LMN	Measured (M)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Indicated(I)	-	0.00	0.00	0.000	0.00	0.00	0.00
		Total (M+I)							
		Inferred	-	0.00	0.00	0.000	0.00	0.00	0.00
	Fe Ore (NB-LNB and HiSiO2)	Measured (M)							
		Indicated(I)	2,084,000	3.40	54.95	0.048	1.17	10.97	0.81
		Total (M+I)	**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

Restated March 31st, 2012

There are no known factors or issues related to environment, permitting, legal, mineral title, taxation, marketing, socio-economic or political settings that could materially affect the mineral resource estimate.

The presence of 4 additional 2011 RC drill holes to the outside perimeter of the Redmond 2b deposits were checked and validated and the opinion of SGS is that this additional information does not affect materially the current James mineral resources at this stage.

13.5 Total Mineral Resources Estimate for the Schefferville Direct Shipping Iron Ore Projects

The updated mineral resources for the Schefferville Direct Shipping Iron Ore Projects involving the James, Redmond 2B, Redmond 5 and Knob Lake No.1 deposits are reported in Table 13-8.

Table 13-8: Updated Mineral Resources for James, Redmond 2B, Redmond 5 and Knob Lake No.1 Deposits

Area	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
SCHEFFERVILLE DIRECT SHIPPING IRON ORE PROJECTS (James, Redmond 2B, Redmond 5, Knob Lake No.1)	**NB-LNB**	Measured (M)	2,644,000	3.39	55.31	0.071	0.07	1.03	9.52
		Indicated(I)	9,310,000	3.46	57.67	0.046	0.65	8.16	2.82
		TotalM+I	**11,954,000**	**3.44**	**57.15**	**0.052**	**0.53**	**6.58**	**4.30**
		Inferred	712,000	3.35	53.04	0.091	0.32	3.09	9.82
	HiSiO2	Measured (M)	194,000	3.29	51.07	0.047	0.05	0.54	19.82
		Indicated(I)	2,552,000	3.32	52.55	0.020	0.46	19.94	2.06
		TotalM+I	2,746,000	**3.32**	**52.45**	**0.022**	**0.43**	**18.57**	**3.32**
		Inferred	223,000	3.29	51.20	0.039	0.08	7.89	13.28
	HMN-LMN	Measured (M)	377,000	3.28	50.55	0.085	0.09	5.60	8.41
		Indicated(I)	214,000	3.25	49.54	0.075	0.08	4.86	9.58
		TotalM+I	**591,000**	**3.27**	**50.18**	**0.082**	**0.08**	**5.34**	**8.84**
		Inferred	139,000	3.28	50.79	0.047	0.05	4.82	9.84
	Fe Ore (NB-LNB and HiSiO2)	Measured (M)	2,838,000	3.38	55.02	0.070	1.00	10.22	0.48
		Indicated(I)	11,647,000	3.44	56.67	0.040	0.81	12.49	0.62
		Total (M+I)	**14,485,000**	**3.43**	**56.35**	**0.046**	**0.85**	**12.05**	**0.59**
		Inferred	2,475,000	3.37	54.27	0.061	1.06	11.47	0.52
	Mn Ore (HMN-LMN)	Measured (M)	377,000	3.28	50.55	0.085	5.60	8.41	0.68
		Indicated(I)	214,000	3.25	49.54	0.075	4.86	9.58	0.79
		Total (M+I)	**591,000**	**3.27**	**50.18**	**0.082**	**5.34**	**8.84**	**0.72**
		Inferred	139,000	3.28	50.79	0.047	4.82	9.84	0.40

Resources are rounded to the nearest 10,000 tonnes
James Deposit Resources updated to March 31st, 2012
Knob Lake No.1 Deposit Resources updated to March 31st, 2012
Redmond 2B Deposit Resources restated to March 31st, 2012
Redmond 5 Deposit Resources restated to March 31st, 2012
CIM Definitions were followed for mineral resources
Mineral resources which are not mineral reserves do not have demonstrated economic viability

There are no known factors or issues related to environment, permitting, legal, mineral title, taxation, marketing, socio-economic or political settings that could materially affect the mineral resource estimate.

14 ADJACENT PROPERTIES

A Joint Venture between Tata Steel Global Minerals Holdings, (80%) (a member of the Tata Group, the world's sixth largest steel producer) and New Millennium Capital Corp. (NML) (20%) is developing an adjacent DSO project on some of their claims in Labrador and Quebec about 30 km north of Schefferville.

NML published a Pre-Feasibility Study in April 2009 and on April 12, 2010 published a Feasibility Study on the development of the same project.

A Feasibility Study has also been carried out for a joint venture between NML and Tata Global Steel Minerals Holdings on a taconite iron deposit known as the LabMag Property in the Howells River area of Labrador located some 30 km northwest of Schefferville. The property is owned by the partnership of New Millennium Capital Corp., Tata Steel Global Minerals Holdings and the Naskapi LabMag Trust and a Pre-Feasibility study has been carried out on the adjacent Ke Mag taconite Property in Quebec.

In the Labrador City-Fermont area, 200 km to the south of Schefferville, iron ore mining and upgrade operations are being carried out by IOC at Carol Lake, by Cliffs Natural Resources at Wabush and at Bloom Lake (formerly Consolidated Thompson) and by Arcelor-Mittal at Mont-Wright.

15 OTHER RELAVENT INFORMATION

Table 15.1 below outlines the company's forward looking view of operating costs, capital costs, and revenues from operating the James and Redmond Mines and the Silver Yards Plant. The operating assumptions for the Silver Yards plant follows from the design of the plant completed by DRA Americas and are reasonably expected to be achieved based on this design. These assumptions primarily include throughput, recovery, running days per year and availability while running.

Capital costs included in this report are dominated by the costs to complete the Phase III expansion of the Silver Yards Plant in 2012. These costs are as budgeted by DRA Americas for the project; DRA Americas is acting as the EPCM consultant for the project. As the project is at an advanced stage, there is a high level of confidence in these costs. Other capital costs are low and based on company budget for each small project individually.

Operating costs of approximately $64/tonne delivered to the port reflect costs included in the company's board approved budget, are consistent with other current company disclosure and generally match the company's experience and disclosure from last operating season.

These economics are based on the company's disclosed NI 43-101 Resources only and do not include mining and/or processing any other planned resources or other historical resources. Economics can be updated at the time when resources are brought into compliance and development plans are completed based on these future resources.

The QP (Qualified Person), Mr. Justin Taylor with review was done in conjunction with LIM personnel. The numbers and assumption leading to these numbers were reviewed at a high level and represent a reasonable view going forward. Revenues are based on current market conditions and are subject to variations in foreign currency exchange and prices realized based on market conditions prevalent at the time of sales."

Property:	James Mine				
Province:	NL				
		Ore	DRO	PF	Waste
Mineral Resources (tonnes)James:		6,670,000	1,734,200	4,935,800	8,004,000
Mineral Resources (tonnes)Redmond 2B:		849,000	545,085	303,915	426,207
Mineral Resources (tonnes)Redmond 5:		2,084,000	229,534	1,854,466	2,742,177
		9,603,000	**2,508,819**	**7,094,181**	**11,172,384**

					Production period _ Calendar Year				
	DESCRIPTION			**TOTAL**	**2012**	**2013**	**2014**	**2015**	**2016**
C#	**OPERATIONAL INPUTS**								
12	**ROM**	DMT	12,000	9,603,000	3,140,099	2,880,000	2,880,000	702,901	0
10	**Waste**	Tonnes	1.16	11,172,384	3,447,904	3,862,240	3,044,466	817,774	0
17	DRO PRODUCED	Tonnes	26%	2,508,819	816,426	748,800	748,800	194,793	0
	PLANT FEED	Tonnes	74%	7,094,181	2,323,673	2,131,200	2,131,200	508,108	0
	ROM PLANT PRODUCTS	Tonnes		5,320,636	1,742,755	1,598,400	1,598,400	381,081	0
13	Lump	Tonnes	15%	1,064,127	348,551	319,680	319,680	76,216	0
14	Sinter	Tonnes	40%	2,837,672	929,469	852,480	852,480	203,243	0
15	Concentrate	Tonnes	20%	1,418,836	464,735	426,240	426,240	101,622	0
	DRO PRODUCTS	Tonnes		2,508,819	816,426	748,800	748,800	194,793	0
17	Bulk DRO	Tonnes	30%	752,646	244,928	224,640	224,640	58,438	0
18	Lump	Tonnes	15%	376,323	122,464	112,320	112,320	29,219	0
19	Sinter	Tonnes	55%	1,379,850	449,034	411,840	411,840	107,136	0
20	Concentrate	Tonnes	0%	0	0	0	0	0	0
	TOTAL PRODUCTS			7,829,455	2,559,181	2,347,200	2,347,200	575,874	0
	REVENUES (NET)	**(C$/US$)**	**1.00**	**$766,278,740**	**$247,596,806**	**$227,088,000**	**$227,088,000**	**$64,505,934**	**$0**
	PRODUCTS	C$		$766,278,740	$247,596,806	$227,088,000	$227,088,000	$64,505,934	$0
	Bulk DRO	% bonus	0%	$72,377,911	$23,268,133.59	$21,340,800	$21,340,800	$6,428,178	$0
	Lump	% bonus	10%	$152,266,705	$49,221,052	$45,144,000	$45,144,000	$12,757,653	$0
	Sinter	% bonus	0%	$405,320,362	$130,957,829	$120,110,400	$120,110,400	$34,141,733	$0
	Concentrate	% bonus	0%	$136,313,762	$44,149,792	$40,492,800	$40,492,800	$11,178,370	$0
	CAPITAL COSTS (+0%)	**QTY**	**0%**	**$43,052,420**	**$39,196,183**	**$2,440,412**	**$707,912**	**$707,912**	**$0**
	DIRECT COSTS			**$41,218,789**	**$39,196,183**	**$674,202**	**$674,202**	**$674,202**	**$0**
	Infrastructure			$26,451,804	$26,451,804	$0	$0	$0	$0
	Energy and power			$7,322,866	$7,322,866	$0	$0	$0	$0
	Transportation			$4,601,580	$4,601,580	$0	$0	$0	$0
	Closure/remediation (refer to separate file for details)			$0	$819,933	$674,202	$674,202	$674,202	$0
	INDIRECT COSTS			**$1,833,630**	**$0**	**$1,766,210**	**$33,710**	**$33,710**	**$0**
	Owner's Costs / Technical Programs			$1,650,000	$0	$1,650,000	$0	$0	$0
	OPERATION COSTS (+0%)		**0%**	**$505,846,978**	**$162,108,812**	**$154,662,710**	**$148,161,407**	**$40,914,049**	**$0**
	SITE	C$		$237,399,483	$75,901,816	$75,179,208	$68,677,905	$17,640,555	$0
	TRANSPORTATION	C$		$249,040,525	$79,892,257	$73,691,822	$73,691,822	$21,764,623	$0
	ROYALTIES	C$		$19,406,970	$6,314,739	$5,791,680	$5,791,680	$1,508,870	$0
	NET OPERATING PROFIT (CASH FLOW)	**C$**			**$46,291,811**	**$69,984,877**	**$78,218,681**	**$22,883,973**	**$0**
	CUMULATIVE CASH FLOW	**C$**		**$220,221,881**	**$46,291,811**	**$116,276,689**	**$194,495,369**	**$217,379,342**	**$217,379,342**
	PRE-TAX DISCOUNTED CASH FLOW (8%)	**C$**		**$124,543,710**					

Figure 15.1 – James-Redmond Projected Economics

16 INTERPRETATIONS AND CONCLUSIONS

The updated mineral resources for the Schefferville Direct Shipping Iron Ore Projects involving the James, Redmond 2B, Redmond 5 and Knob Lake No.1 deposits are reported in Table 16-1.

Table 15-1: Updated Mineral Resources for James, Redmond 2B, Redmond 5 and Knob Lake No.1 Deposits

Area	Ore Type	Classification	Tonnage	SG	% Fe	% P	% Mn	% SiO2	% Al2O3
SCHEFFERVILLE DIRECT SHIPPING IRON ORE PROJECTS (James, Redmond 2B, Redmond 5, Knob Lake No.1)	NB-LNB	Measured (M)	2,644,000	3.39	55.31	0.071	0.07	1.03	9.52
		Indicated(I)	9,310,000	3.46	57.67	0.046	0.65	8.16	2.82
		TotalM+I	**11,954,000**	**3.44**	**57.15**	**0.052**	**0.53**	**6.58**	**4.30**
		Inferred	712,000	3.35	53.04	0.091	0.32	3.09	9.82
	HiSiO2	Measured (M)	194,000	3.29	51.07	0.047	0.05	0.54	19.82
		Indicated(I)	2,552,000	3.32	52.55	0.020	0.46	19.94	2.06
		TotalM+I	2,746,000	**3.32**	**52.45**	**0.022**	**0.43**	**18.57**	**3.32**
		Inferred	223,000	3.29	51.20	0.039	0.08	7.89	13.28
	HMN-LMN	Measured (M)	377,000	3.28	50.55	0.085	0.09	5.60	8.41
		Indicated(I)	214,000	3.25	49.54	0.075	0.08	4.86	9.58
		TotalM+I	**591,000**	**3.27**	**50.18**	**0.082**	**0.08**	**5.34**	**8.84**
		Inferred	139,000	3.28	50.79	0.047	0.05	4.82	9.84
	Fe Ore (NB-LNB and HiSiO2)	Measured (M)	2,838,000	3.38	55.02	0.070	1.00	10.22	0.48
		Indicated(I)	11,647,000	3.44	56.67	0.040	0.81	12.49	0.62
		Total (M+I)	**14,485,000**	**3.43**	**56.35**	**0.046**	**0.85**	**12.05**	**0.59**
		Inferred	2,475,000	3.37	54.27	0.061	1.06	11.47	0.52
	Mn Ore (HMN-LMN)	Measured (M)	377,000	3.28	50.55	0.085	5.60	8.41	0.68
		Indicated(I)	214,000	3.25	49.54	0.075	4.86	9.58	0.79
		Total (M+I)	**591,000**	**3.27**	**50.18**	**0.082**	**5.34**	**8.84**	**0.72**
		Inferred	139,000	3.28	50.79	0.047	4.82	9.84	0.40

Resources are rounded to the nearest 10,000 tonnes
James Deposit Resources updated to March 31st, 2012
Knob Lake No.1 Deposit Resources updated to March 31st, 2012
Redmond 2B Deposit Resources restated to March 31st, 2012
Redmond 5 Deposit Resources restated to March 31st, 2012
CIM Definitions were followed for mineral resources
Mineral resources which are not mineral reserves do not have demonstrated economic viability

There are no known factors or issues related to environment, permitting, legal, mineral title, taxation, marketing, socio-economic or political settings that could materially affect the mineral resource estimate.

Of the total 2011 RC drilling campaign, (141 RC field duplicates), the reproducibility of 82% of the assays was within ±10% and 79% of the assays returning values between 40% and 50% Fe grade was within ±10%. The sign test and student-T tests highlighted a bias. Only 21% of all the 2011 original samples returned values higher than field duplicates.

Out of 47 samples ranging between 40 and 50% Fe, only 9% of these samples returned values higher than their respective field duplicates.

Of the 141 RC field duplicates, the reproducibility of 77% of the assays was within ±10% and 48% of the assays returning values between 30% and 40% SiO2 grade was within ±10%. The sign test and student-T tests highlighted a bias.

Out of 29 samples ranging between 30 and 40% SiO2, 88% of these samples returned values higher than their respective field duplicates.

The bias identified in this statistical analysis of the 2011 samples indicates that the Fe grades may have lower analytical results for Fe. Furthermore 82% of the Fe % sample data is less than ±10% different and 63% of the data is less than 5% different. There is not a significant difference but there is a bias trend towards the field duplicates.

LIMHL considers the difference to be acceptable. SGS Geostat considers the difference as acceptable as well and suitable for resource estimation but strongly suggests identifying the bias and addressing this matter in a proper timeframe.

The results from the check sampling done on the 2011 RC cuttings by SGS-Geostat indicate that the bias my related to sampling errors and that they might have been inserted as early as the start of the sampling sequence. SGS-Geostat does not have sufficient data to pin point the selected errors of sampling and strongly encourage LIMHL to run extensive QAQC tests at the start of the sampling program. The rotary splitting could also be a source of error if not set correctly.

However, the errors are located for values over 40-45% Fe corresponding to approximately 15% of the check samples collected. The reverse situation is observed for SiO_2 low assay values. The 40% Fe and higher portion is the targeted range of potentially economic grades.

Additionally, the errors could also be from the analysis from the different labs. SGS did not investigate this matter and suggest LIMHL to investigate this matter. The following are possible errors related to the observed bias.

On the field and at the prep lab:

- The RC method using water is a source of errors and the use of sonic drilling to a certain depth, or the use of diamond drilling could resolve these possible errors. We suggest also looking at drilling RC with a powerful air compressor to get rid of the water table. However, excess pressure could get rid of the sampling material you want to sample.
- A sampling bias directly at the rotary splitter due to improper setting.
- Sampling procedures used by the samplers could be inconsistent from sampler to sampler
- Sample mix up on the field, at the prep lab and/or before shipping.

At the analytical lab:

- Selection of a representative sample at the weighing for XRF may be different from one lab to another
- Calibration of high values could be involved

Finally, SGS suggest inserting real blanks and certified materials as well as regular field, prep coarse rejects pulp duplicates and the use of a second laboratory for checks. SGS is not inclined to right off any resources or lower the classification but suggest investigating this matter using a third lab for third party check. In the author's opinion, the information in the section appears to be consistent and not misleading.

17 RECOMMENDATIONS

Following the review of all relevant data and the interpretation and conclusions of this review, it is recommended that exploration on the Redmond 2B, Redmond 5, Denault, Gill, Star Creek, and Ruth Lake 8 properties should continue. The results of past exploration have been positive and have demonstrated the reliability of the IOC data, which has been confirmed with the recent exploration.

SGS Geostat recommends adding information in the James mineral deposit sector based on the RC drilling information. The added information, after verification and validation, will likely augment the level of confidence in the dataset and would affect positively the resources categories in that deposit. Additional infill drilling is recommended to finalize the evaluation of James deposit.

Additional drilling is recommended for Gill and Ruth Lake 8 occurrence in order to continue the ongoing program to confirm historical resource (not NI 43-101 compliant). The additional drilling of about 35 drill holes is recommended:

- A minimum of 5 drill holes for a total of 500 metres is proposed for the James Deposit in order to extend and define new mineralization to the south-east which could lead to Compliant Resource upgrading.
- A total of 17 drill holes for a total of 1,700 metres are proposed for the Gill occurrence. All holes are located to define historical resources.
- A total of 6 drill holes for a total of 600 metres are proposed for Redmond 2B and 5 to define further extensions.
- A total of 7 drill holes for a total of 700 metres are proposed for Denault occurrence to define further extensions.

Estimated budget for the additional exploration:

Table 16-1: Budgetary Recommendations

Description	Number	Units	$/Number	Total
Assays (RC)	1,250	Unit	40	50,000
RC Infill Drilling	1,800	m.	350	63,000
Vibration-Rotation Drilling	1,000	m.	350	35,000
Reporting, Mineral Resource Updates	1		65,000	65,000
Sub-Total				213,000
Contingency & Miscellaneous (25%)				53,250
			Total	266,250

Exploration programs are recommended to be carried out for all those remaining deposits to convert the historic resources to current compliant resources. This work will need to be scheduled to ensure that current resource estimates for each of these occurrences are produced in sufficient time to enable planning, environmental assessment and permitting to be completed in sufficient time to allow construction and development to be achieved to match the overall project production schedule.

At the same time as the recommended exploration programs outlined above, a number of specific items will be required to progress the development of the Redmond 2B, Redmond 5, Gill, Ruth Lake 8, Denault and Star Creek targets:

- Ongoing additional environmental studies, traditional environmental knowledge programs, and community consultation;
- Completion of the environmental assessment and permitting process.
- Detailed mine plans, including geotechnical and hydrogeological studies and optimization of the development schedule;
- Additional metallurgical studies dependent on the mineralogy of the deposit;
- Hydrology investigations should be completed to determine groundwater movement and to determine the amount of pit dewatering that will be required on all properties.

SGS Geostat strongly encourages LIMHL to run extensive QA/QC tests at the start of the sampling program. The rotary splitting could also be a source of error if not set correctly.

SGS Geostat suggest inserting real blanks and certified materials as well as regular field, prep coarse rejects pulp duplicates and the use of a second laboratory for checks.

SGS recommends introducing non-destructive vibration-rotation drilling within all the occurrences. It is consisting of a rotary and vibrating drilling system capable of gathering sufficient material and lithological information with an almost constant volume in order to better define the in situ Specific Gravity and to gather material at depth for metallurgical tests and possibly geotechnical tests. The tests would include the same as previous ones done on the property such as: general mineralogy, QEMSCAN, grindability and Bond Work Index, scrubbing tests, size analysis and assays from before and after scrubbing, density separation, jigging tests, WHIMS tests, settling tests without using flocculants, vacuum filtration (assuming vacuum disc filter).

18 REFERENCES

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"Technical Report of an Iron Project in Northwest Labrador, Province of Newfoundland and Labrador". Dufort, D. P.Eng and Kroon, A.S. P.Eng SNC-Lavalin, Original Date September 10th, 2007, Amended October 10th, 2007;

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"Work Assessment Report, The Ruth Lake Property, Western Labrador Province of Newfoundland & Labrador". MRB & Associates., October 30th, 2009;

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"Technical Report Resource Estimation of the James, Redmond 2B and Redmond 5 Mineral Deposits Located in Labrador, Canada for Labrador Iron Mines Ltd". SGS Geostat Ltd. December, 2009;

"Labrador Iron Mines Ltd. Ore Beneficiation Potential and Physical Properties Determination Final Report No. T1054", COREM. December 2009;

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NMI FILE NUMBER 23J/14/Fe028, Newfoundland and Labrador Department of Natural Resources;

"Technical Report Mineral Resource Estimation of the Houston Property minerals deposit for Labrador Iron Mines Limited" SGS Canada Inc. Dated March 25, 2011;

"Technical Report, Direct Shipping Iron Ore Projects in Western Labrador and North Eastern Quebec, Canada." Dated April 15th, 2011.

19 DATE AND SIGNATURE PAGE

This report "**Technical Report: Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited**" dated March 31, 2012 was prepared and signed by the authors.

Signed in Blainville, Québec, Canada on June 20th, 2012

SIGNED & SEALED

Maxime Dupéré P.Geo.

Geologist

SGS Canada Inc.

Signed in Toronto, Ontario, Canada on June 20th, 2012

SIGNED & SEALED

Justin Taylor, P. Eng.

Project Manager

DRA Americas

Qualifications Certificate

Certificate of Maxime Dupéré, P.Geo.

To accompany the Report entitled**: "Technical Report: Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited" dated March 31, 2012**

I, Maxime Dupéré, P. Geo, do hereby certify that:

1. I reside 9660, Rue de la Chouette, Mirabel, Québec, 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 as a geologist by SGS – Geostat since May 2006.
4. I have 11 years of experience in mining exploration in diamonds, gold, silver, base metals, and Iron Ore. I worked on several resources estimation technical reports and I have prepared and made several mineral resource calculations for different exploration projects at different stages of exploration. I am aware of the different methods of calculation and the geostatistics applied to metallic and non-metallic projects as well as industrial mineral projects.
5. I am responsible for the preparation of this report , excluding part 15, entitled**"Technical Report: Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited" dated March 31, 2012.**
6. I visited the site from August 1st, to August 5th, 2011, and on several occasions since 2008. I helped to supervise the sampling and QA/QC procedures during the 2008 RC Drilling Program.
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. I am an independent qualified person as described in section 1.5 of NI-43-101.
8. 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.
9. I have read NI 43-101 and Form 43-101F1 and have prepared this report, excluding part 15 entitled**"Technical Report: Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited" dated March 31, 2012** in compliance with NI 43-101 and Form 43-101F1.
10. To the best of my knowledge, information and belief, and, as of the date of this certificate, 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 in Blainville, Québec, Canada on June 20th, 2012.

SIGNED & SEALED

Maxime Dupéré, P.Geo.

Qualifications Certificate

To accompany the Report entitled: **"Technical Report: Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited" dated March 31, 2012.** I, Justin Taylor P. Eng., do hereby certify that:

1. I am a mechanical engineer residing at 84 Furrow Lane, Etobicke, ON, M8Z 0A3, Canada.
2. I am a co-author of the report entitled "Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited" dated April 15, 2011.
3. I graduated from the University of Pretoria South Africa with Bachelor of Engineering degree in Mechanical Engineering 1999; Maintenance Engineering (Hons)2002; Diploma Business Management 2003.
4. I am a registered member in good standing of the Professional Engineers of Ontario, Professional Engineers and Geoscientists Newfoundland and Labrador, Canada.
5. I am a registered member in good standing of the Engineering Council of South Africa.
6. I have worked as a mechanical engineer involved with minerals processing, materials handling in the mining and minerals industry for 13 years since my graduation from university.
7. I have read the definition of ''qualified person'' set out in National Instrument 43 101 (NI 43 101) and by reason of my education, membership of professional associations and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43 101.
8. I am responsible with the other authors singularly for part 15 of this Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited, Canada ("Technical Report"). I have visited the project site on many occasions most recently from May 15 to May 24, 2012 to evaluate the progress of the construction activities and to confirm the status of the construction completion within the program as described in this document.
9. I am independent of either Labrador Mines Limited or Labrador Iron Mines Holdings Limited or Schefferville Mines Inc.
10. I am the past project manager employed by DRA Americas Inc. responsible for the past and present design of the Beneficiation Plant in Silver Yard.
11. I have read National Instrument 43-101 – Standards of Disclosure for Mineral Projects and Form 43-101F1 and Companion Policy 43-101CP and certify that this Technical Report has been prepared in compliance with such instrument(s).
12. As of the date of the report and to the best of my knowledge, I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the report, the omission of which disclosure would make the Technical Report misleading.

I consent to the filing of the Technical Report with any stock exchange or other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Report.

Signed in Toronto, Ontario, Canada on June 20th, 2012.

SIGNED & SEALED

Justin Taylor, P. Eng.

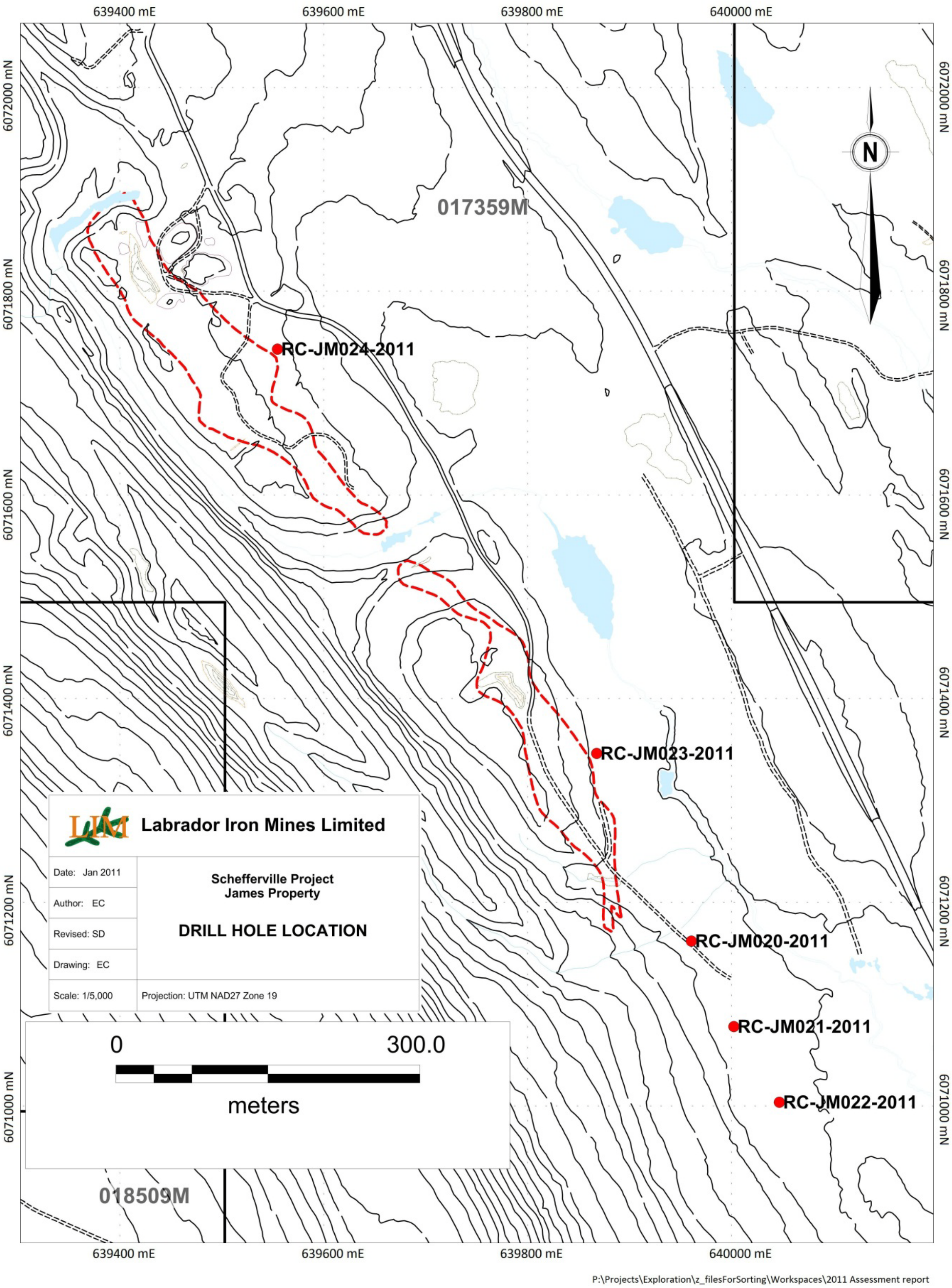
20 ILLUSTRATIONS

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

List of Plans

1. James 2011 Drilling Locations
2. Knob Lake 2011 Drilling Locations
3. Knob Lake 2011 Test Pit Locations
4. Redmond 2B 2011 Drilling Locations
5. Gill 2011 Drilling Locations
6. Ruth Lake 8 2011 Drilling Locations
7. Star Creek 2011 Drilling Locations
8. Denault 2011 Drilling Locations

James 2011 Drilling Locations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017359M
018509M
N
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RC-JM023-2011
RC-JM020-2011
RC-JM021-2011
RC-JM022-2011
Labrador Iron Mines Limited
Date: Jan 2011
Author: EC
Revised: SD
Drawing: EC
Scale: 1/5,000
Schefferville Project
James Property
DRILL HOLE LOCATION
Projection: UTM NAD27 Zone 19
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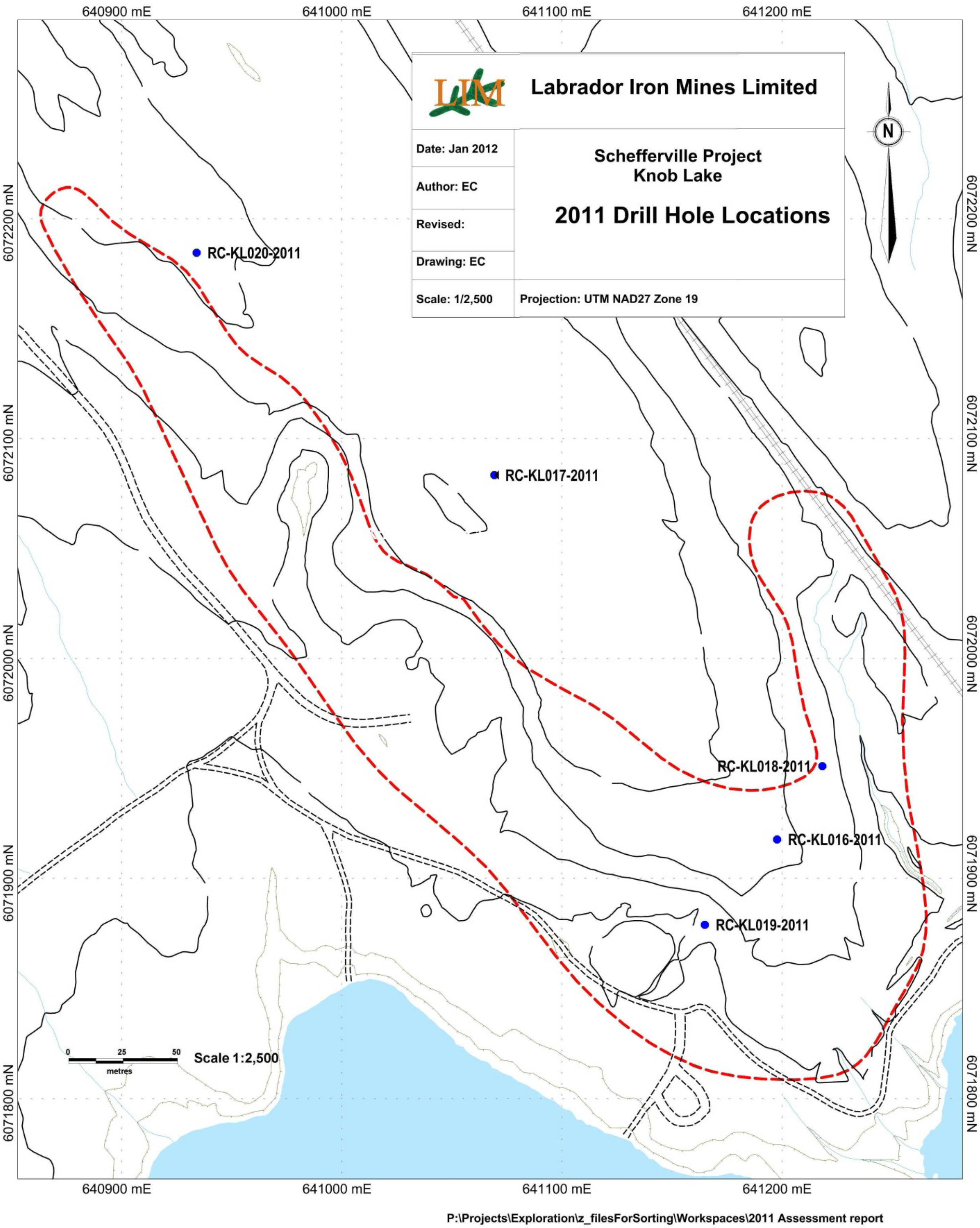
meters
P:\Projects\Exploration\z_filesForSorting\Workspaces\2011 Assessment report

Knob Lake 2011 Drilling Locations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Date: Jan 2012
Author: EC
Revised:
Drawing: EC
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Knob Lake
2011 Drill Hole Locations
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RC-KL018-2011
RC-KL016-2011
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metres
Scale 1:2,500
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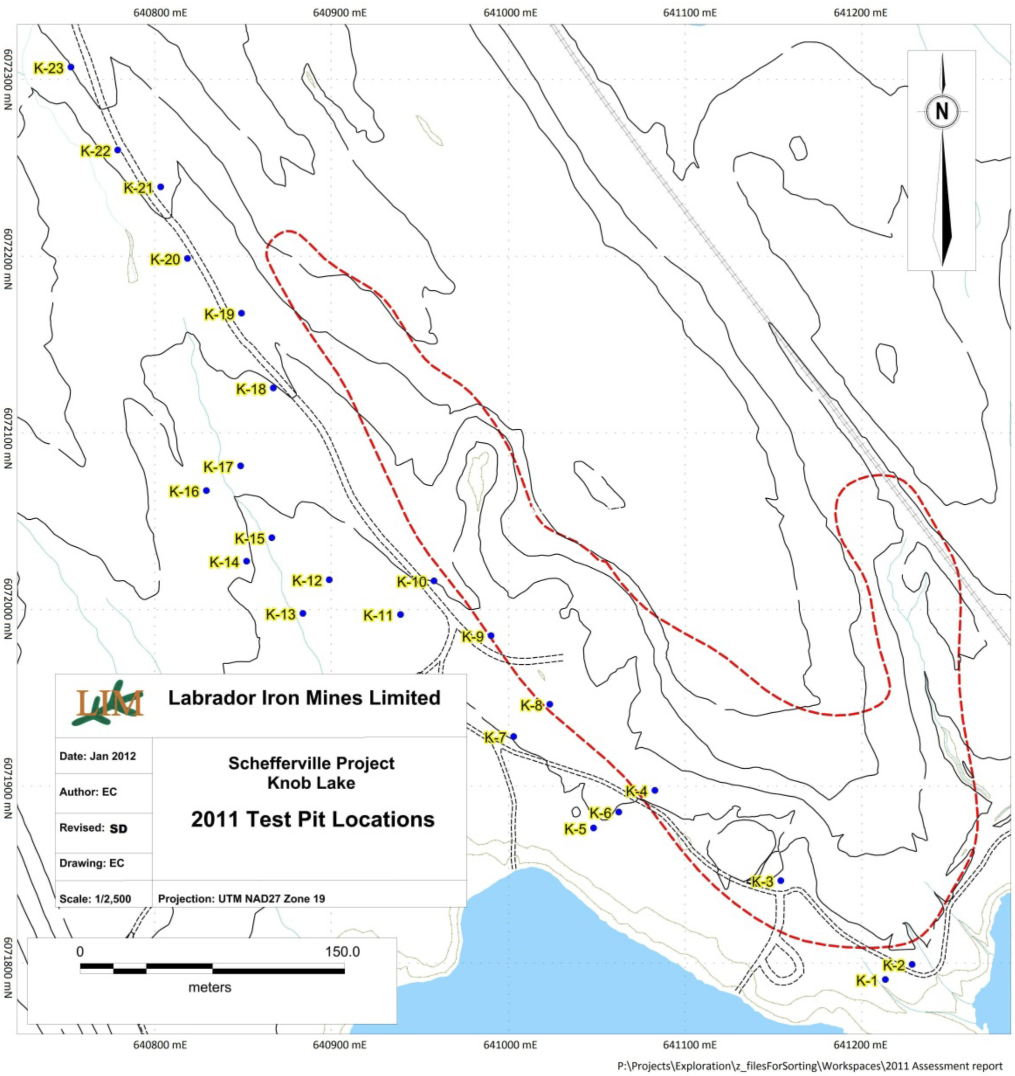
Knob Lake 2011 Test Pit Locations


Labrador Iron Mines Limited
Date: Jan 2012
Author: EC
Revised: SD
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Knob Lake
2011 Test Pit Locations
Projection: UTM NAD27 Zone 19
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150.0
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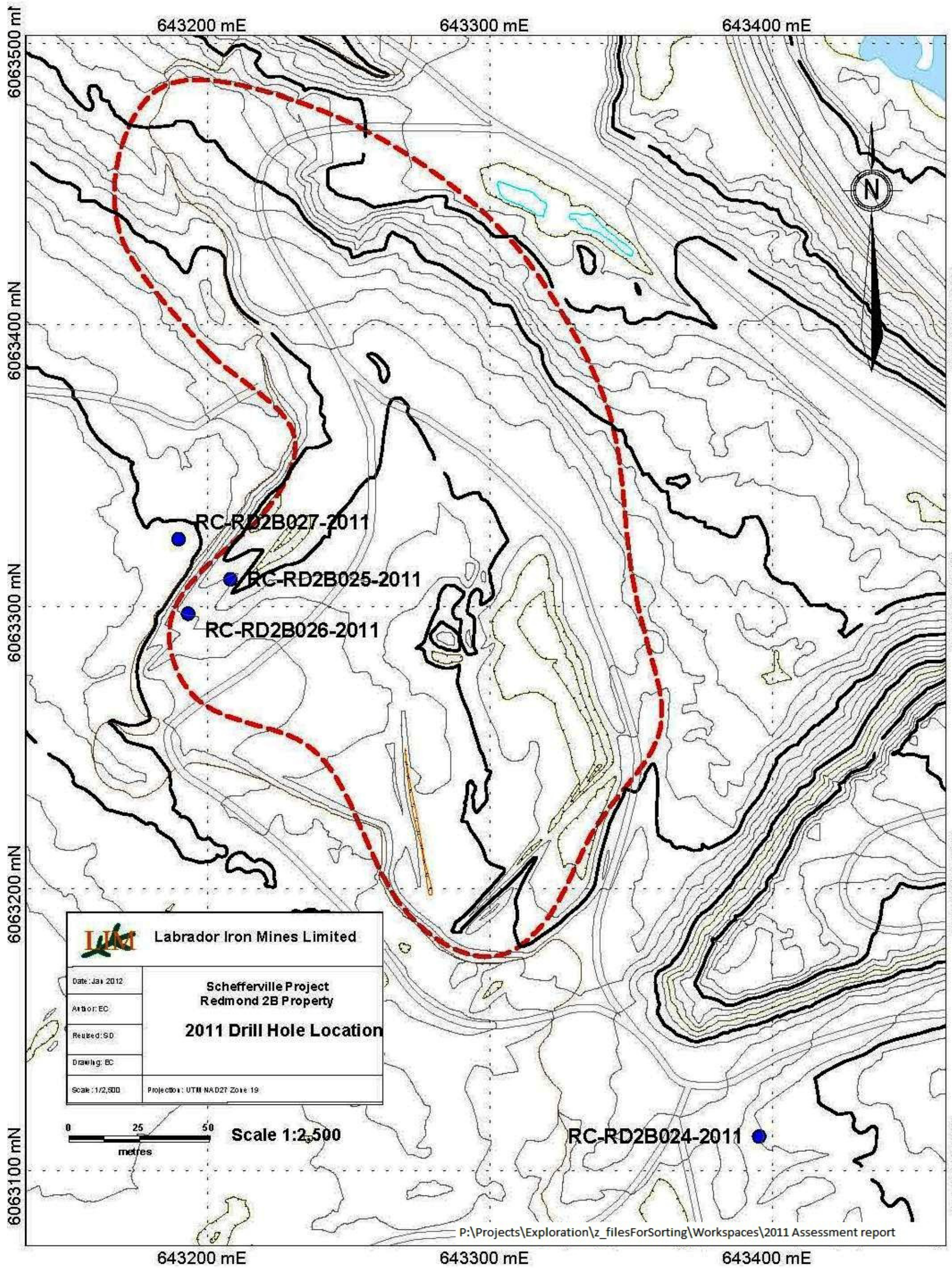
Redmond 2B 2011 Drilling Locations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RC-RD2B026-2011
RC-RD2B024-2011
Labrador Iron Mines Limited
Schefferville Project
Redmond 2B Property
2011 Drill Hole Location
Projection: UTM NAD27 Zone 19
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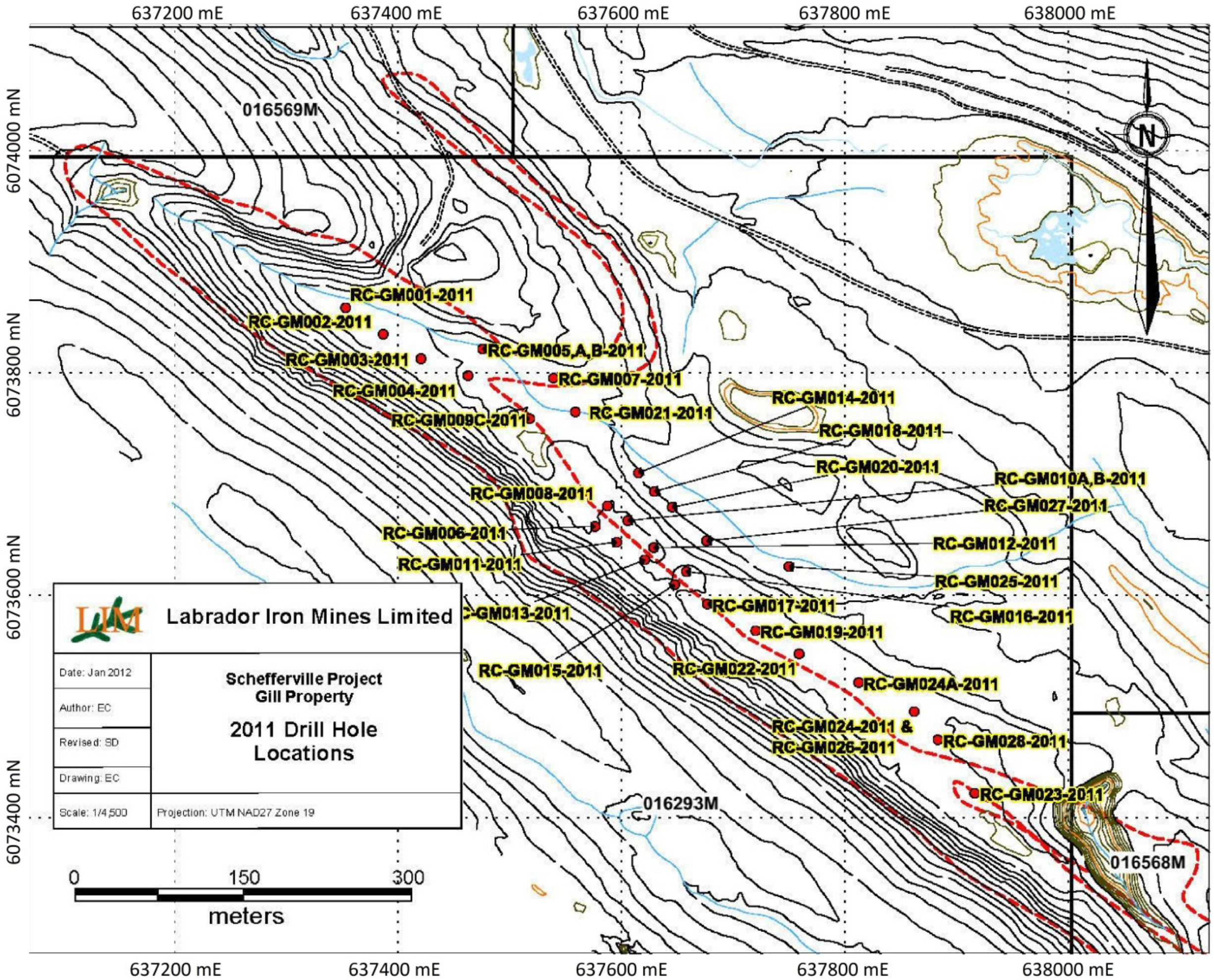
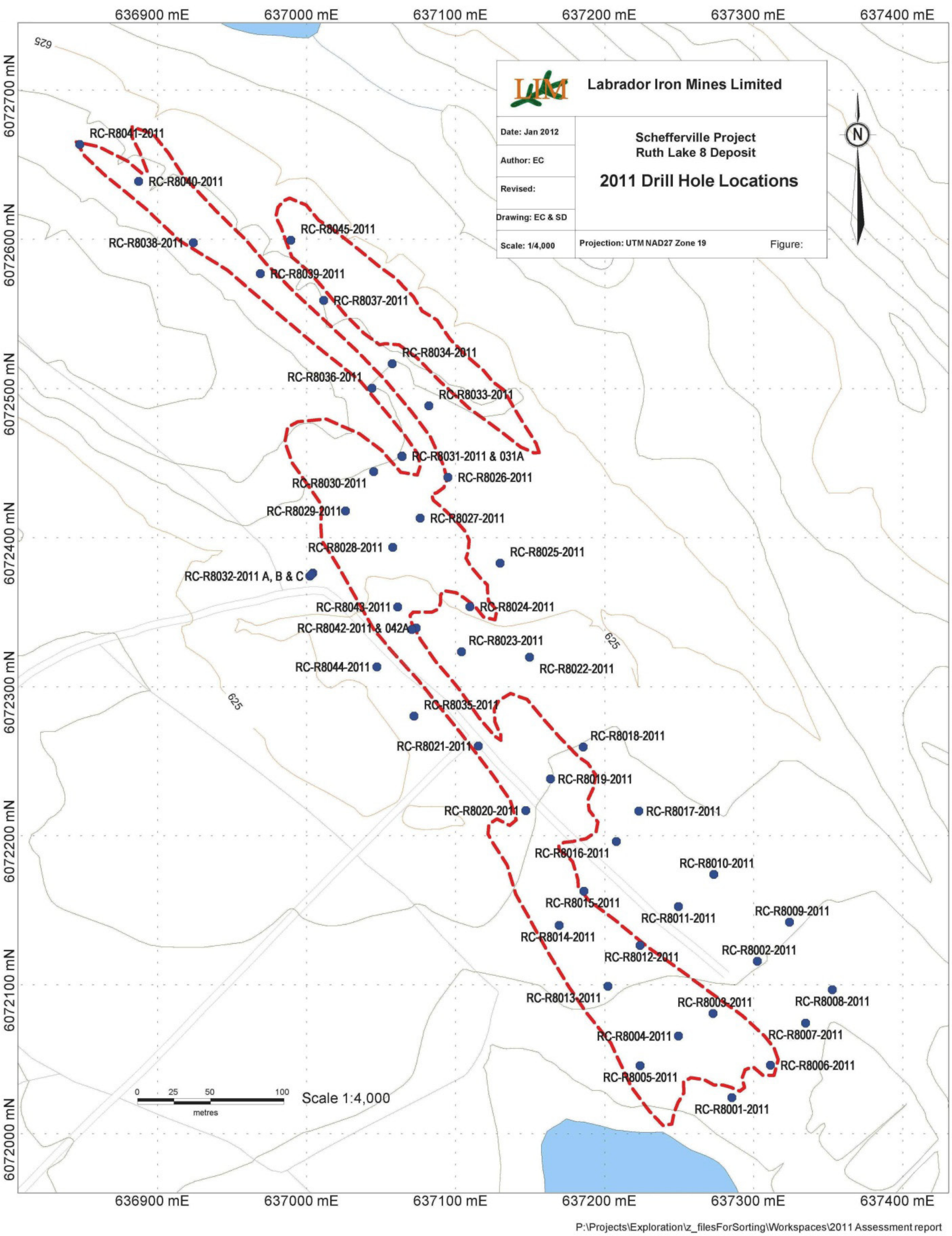
metres
Scale 1:2,500
P:\Projects\Exploration\z_filesForSorting\Workspaces\2011 Assessment report

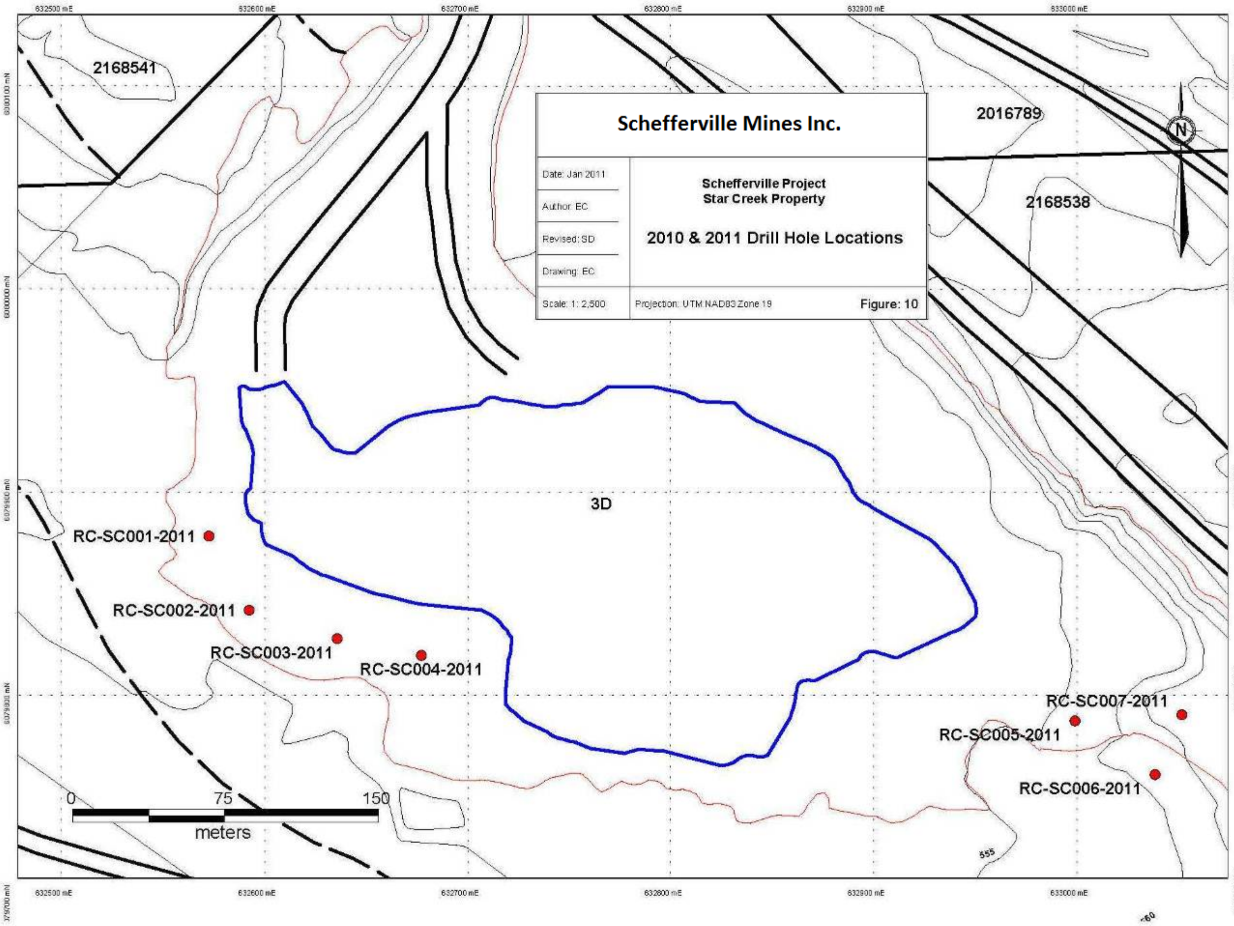
Gill 2011 Drilling Locations


637200 mE
637400 mE
637600 mE
637800 mE
638000 mE
6074000 mN
6073800 mN
6073600 mN
6073400 mN
016569M
016293M
016568M
RC-GM001-2011
RC-GM002-2011
RC-GM003-2011
RC-GM004-2011
RC-GM005,A,B-2011
RC-GM007-2011
RC-GM009C-2011
RC-GM021-2011
RC-GM014-2011
RC-GM018-2011
RC-GM020-2011
RC-GM010A,B-2011
RC-GM027-2011
RC-GM008-2011
RC-GM006-2011
RC-GM012-2011
RC-GM011-2011
RC-GM025-2011
RC-GM017-2011
RC-GM016-2011
RC-GM019-2011
RC-GM015-2011
RC-GM022-2011
RC-GM024A-2011
RC-GM024-2011 &
RC-GM026-2011
RC-GM028-2011
RC-GM023-2011
Labrador Iron Mines Limited
Date: Jan 2012
Author: EC
Revised: SD
Drawing: EC
Scale: 1/4,500
Schefferville Project
Gill Property
2011 Drill Hole
Locations
Projection: UTM NAD27 Zone 19
0
150
300
meters
N

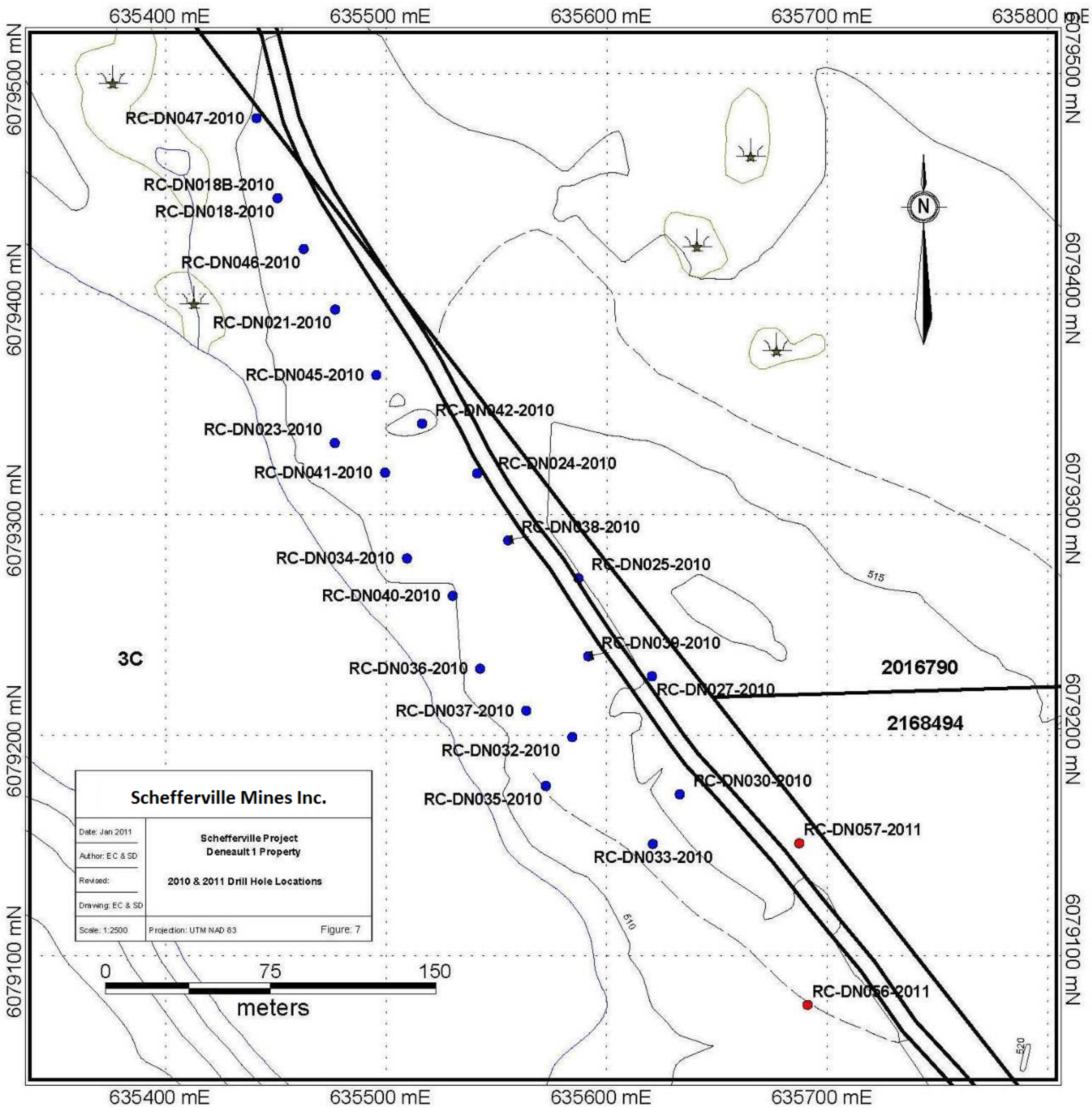
Ruth Lake 8 2011 Drilling Locations


Labrador Iron Mines Limited
Date: Jan 2012
Author: EC
Revised:
Drawing: EC & SD
Scale: 1/4,000
Schefferville Project
Ruth Lake 8 Deposit
2011 Drill Hole Locations
Projection: UTM NAD27 Zone 19
Figure:
636900 mE
637000 mE
637100 mE
637200 mE
637300 mE
637400 mE
6072700 mN
6072600 mN
6072500 mN
6072400 mN
6072300 mN
6072200 mN
6072100 mN
6072000 mN
RC-R8041-2011
RC-R8040-2011
RC-R8038-2011
RC-R8045-2011
RC-R8039-2011
RC-R8037-2011
RC-R8034-2011
RC-R8036-2011
RC-R8033-2011
RC-R8031-2011 & 031A
RC-R8026-2011
RC-R8030-2011
RC-R8029-2011
RC-R8027-2011
RC-R8028-2011
RC-R8025-2011
RC-R8032-2011 A, B & C
RC-R8043-2011
RC-R8024-2011
RC-R8042-2011 & 042A
RC-R8023-2011
RC-R8022-2011
RC-R8044-2011
RC-R8035-2011
RC-R8018-2011
RC-R8021-2011
RC-R8019-2011
RC-R8020-2011
RC-R8017-2011
RC-R8016-2011
RC-R8010-2011
RC-R8015-2011
RC-R8011-2011
RC-R8009-2011
RC-R8014-2011
RC-R8012-2011
RC-R8002-2011
RC-R8013-2011
RC-R8003-2011
RC-R8008-2011
RC-R8004-2011
RC-R8007-2011
RC-R8006-2011
RC-R8005-2011
RC-R8001-2011
625
0 25 50 100
metres
Scale 1:4,000
N
P:\Projects\Exploration\z_filesForSorting\Workspaces\2011 Assessment report

Star Creek 2011 Drilling Locations


Schefferville Mines Inc.
Date: Jan 2011
Author: EC
Revised: SD
Drawing: EC
Scale: 1: 2,500
Schefferville Project
Star Creek Property
2010 & 2011 Drill Hole Locations
Projection: UTM NAD83 Zone 19
Figure: 10
2168541
2016789
2168538
3D
RC-SC001-2011
RC-SC002-2011
RC-SC003-2011
RC-SC004-2011
RC-SC005-2011
RC-SC006-2011
RC-SC007-2011
0
75
150
meters
N

Denault 2011 Drilling Locations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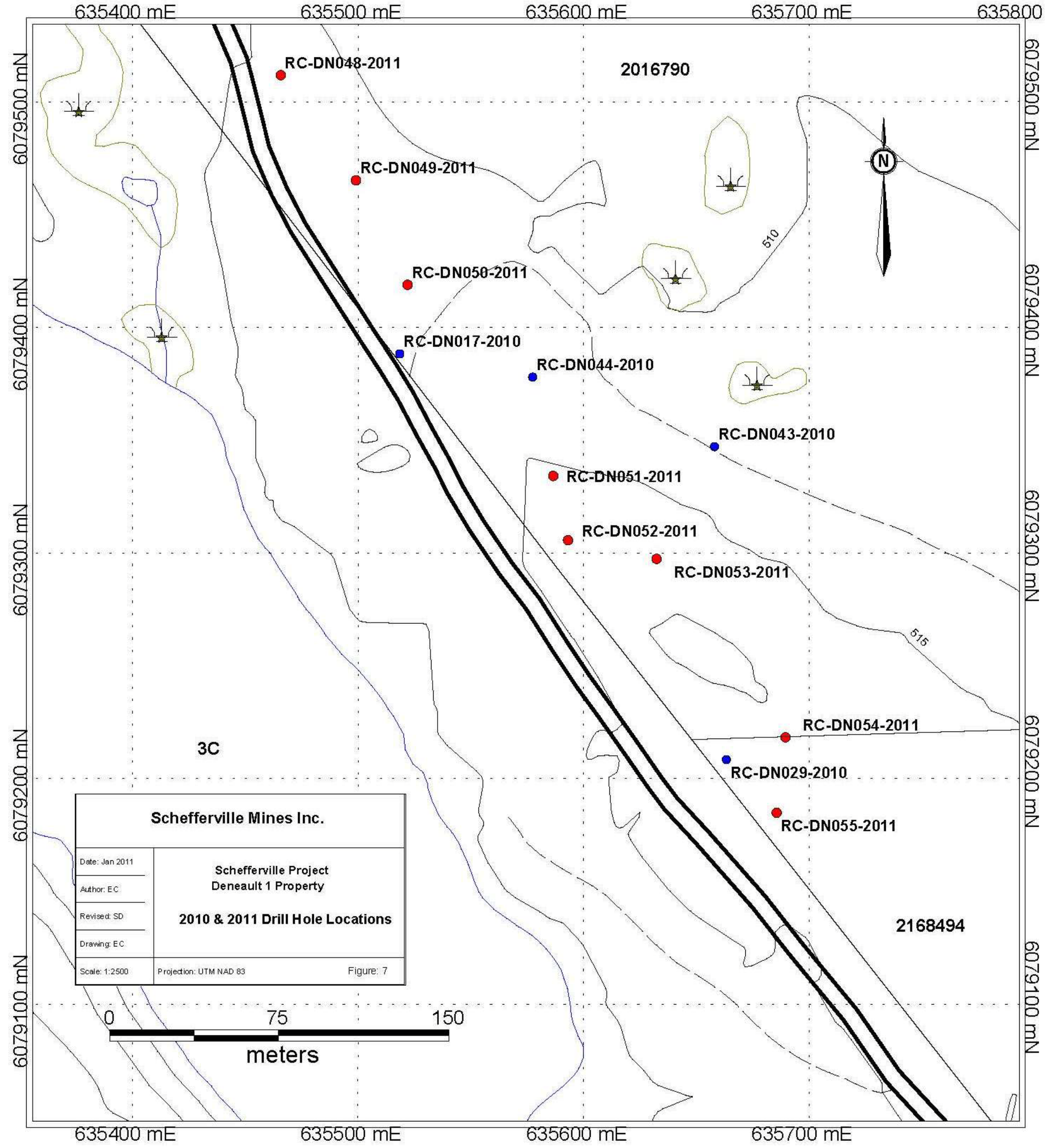
635500 mE
635600 mE
635700 mE
635800 mE
6079500 mN
6079400 mN
6079300 mN
6079200 mN
6079100 mN
RC-DN047-2010
RC-DN018B-2010
RC-DN018-2010
RC-DN046-2010
RC-DN021-2010
RC-DN045-2010
RC-DN042-2010
RC-DN023-2010
RC-DN041-2010
RC-DN024-2010
RC-DN038-2010
RC-DN034-2010
RC-DN025-2010
RC-DN040-2010
RC-DN039-2010
3C
RC-DN036-2010
RC-DN027-2010
2016790
2168494
RC-DN037-2010
RC-DN032-2010
RC-DN030-2010
RC-DN035-2010
RC-DN057-2011
RC-DN033-2010
RC-DN056-2011
515
510
520
N
Schefferville Mines Inc.
Date: Jan 2011
Author: EC & SD
Revised:
Drawing: EC & SD
Scale: 1:2500
Schefferville Project
Deneault 1 Property
2010 & 2011 Drill Hole Locations
Projection: UTM NAD 83
Figure: 7
0
75
150
meters


635400 mE
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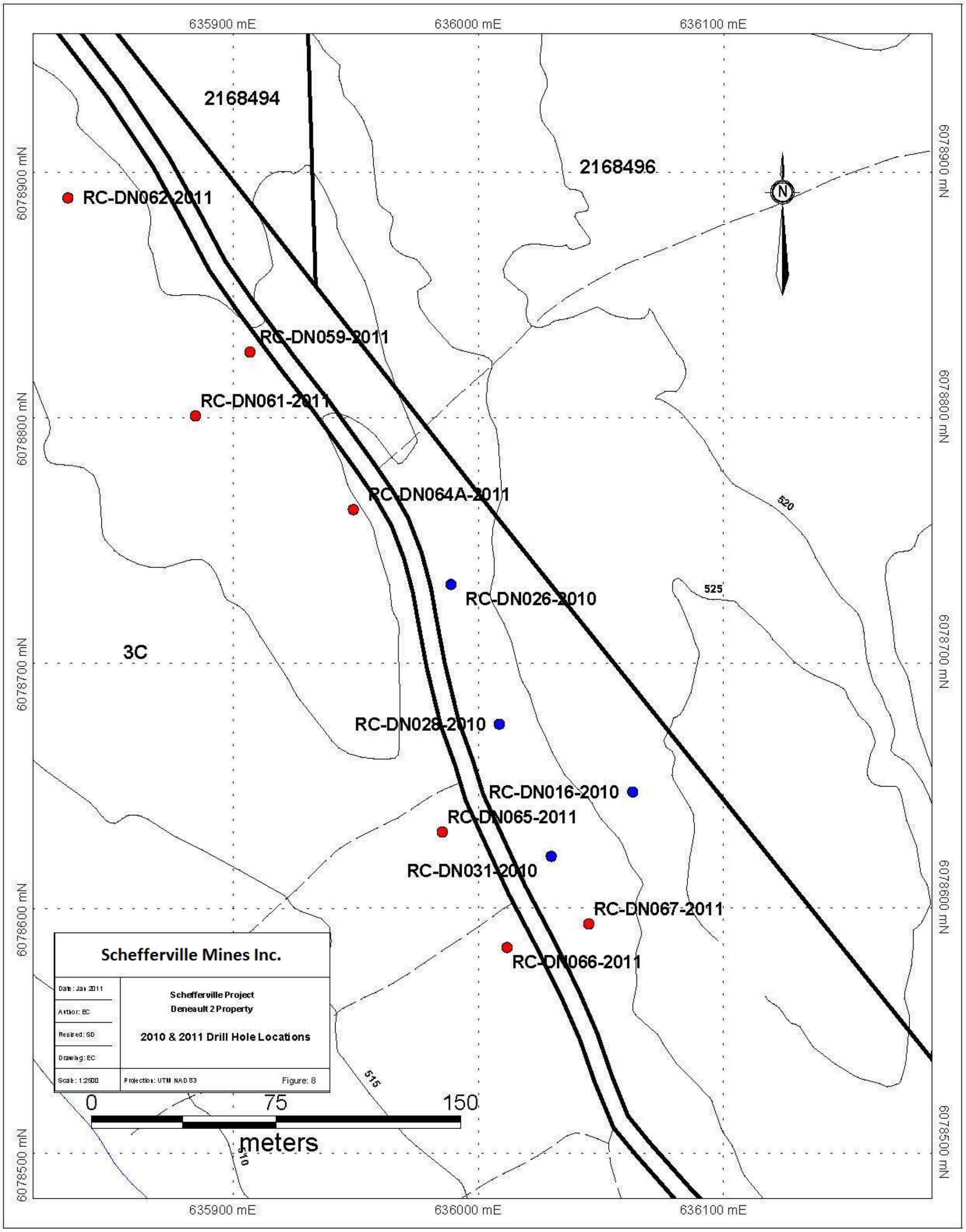
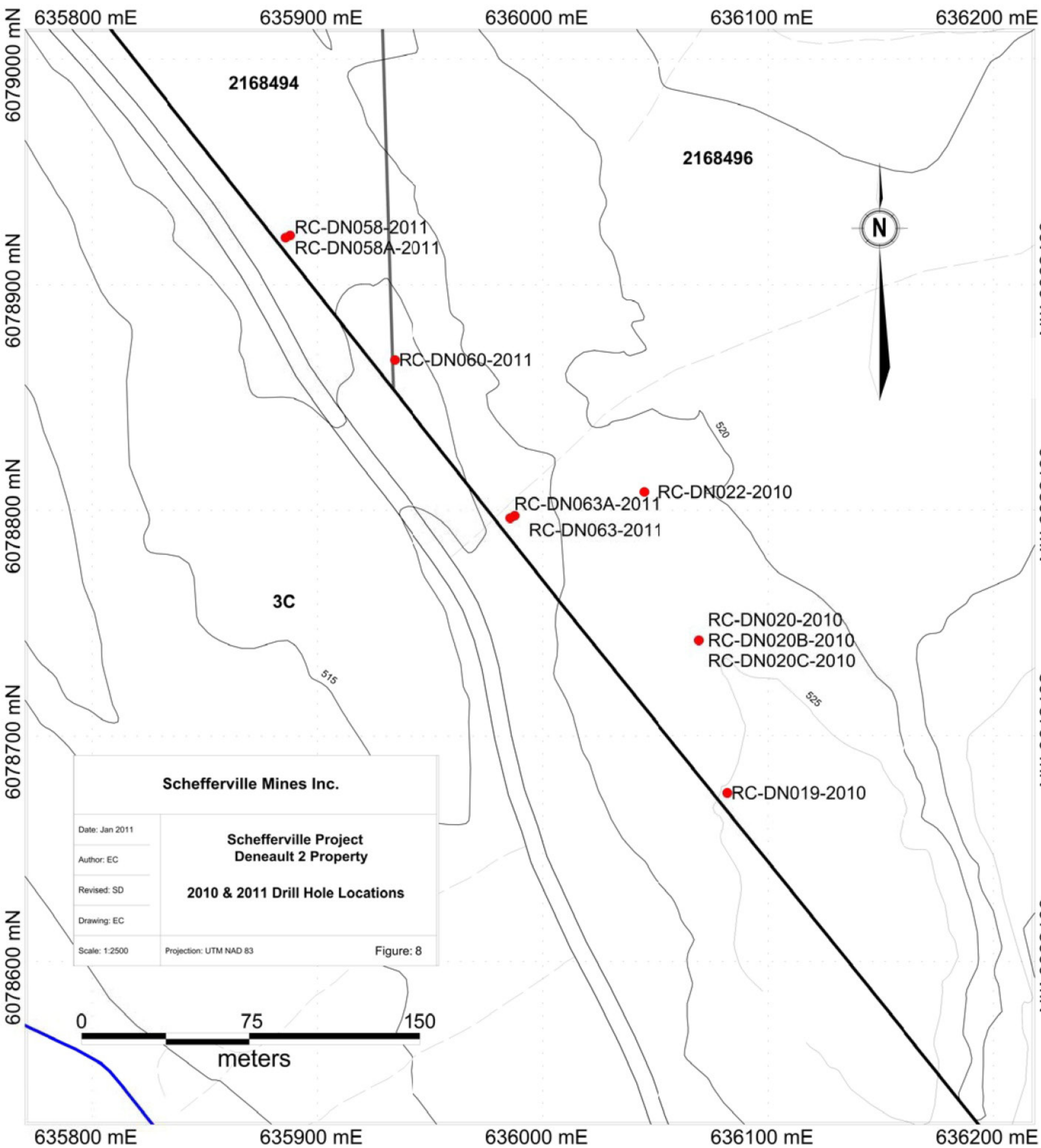
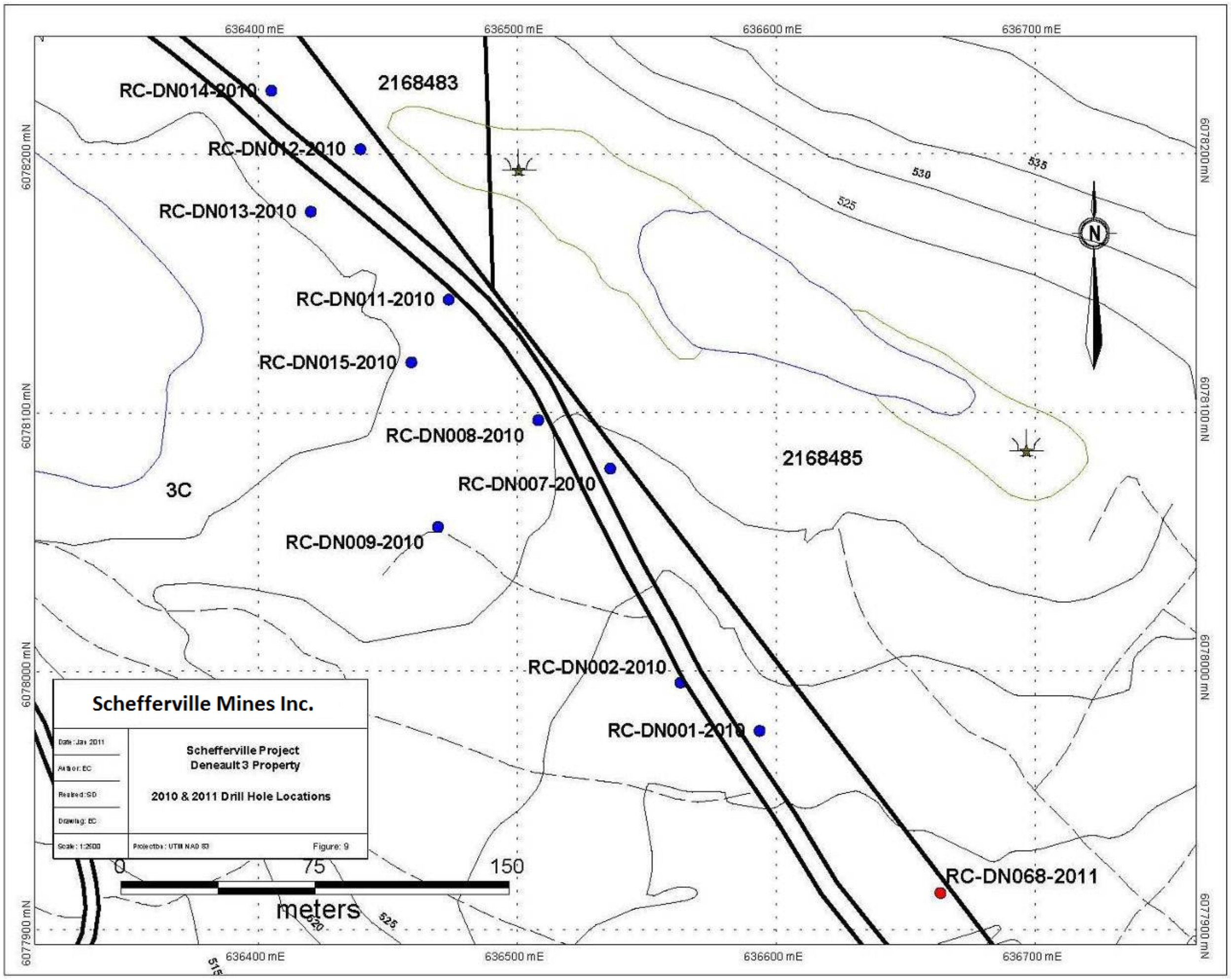
635600 mE
635700 mE
635800
6079500 mN
6079400 mN
6079300 mN
6079200 mN
6079100 mN
RC-DN048-2011
RC-DN049-2011
RC-DN050-2011
RC-DN017-2010
RC-DN044-2010
RC-DN043-2010
RC-DN051-2011
RC-DN052-2011
RC-DN053-2011
RC-DN054-2011
RC-DN029-2010
RC-DN055-2011
2016790
2168494
3C
510
515
N
Schefferville Mines Inc.
Date: Jan 2011
Author: EC
Revised: SD
Drawing: EC
Scale: 1:2500
Projection: UTM NAD 83
Figure: 7
Schefferville Project
Deneault 1 Property
2010 & 2011 Drill Hole Locations
0
75
150
meters

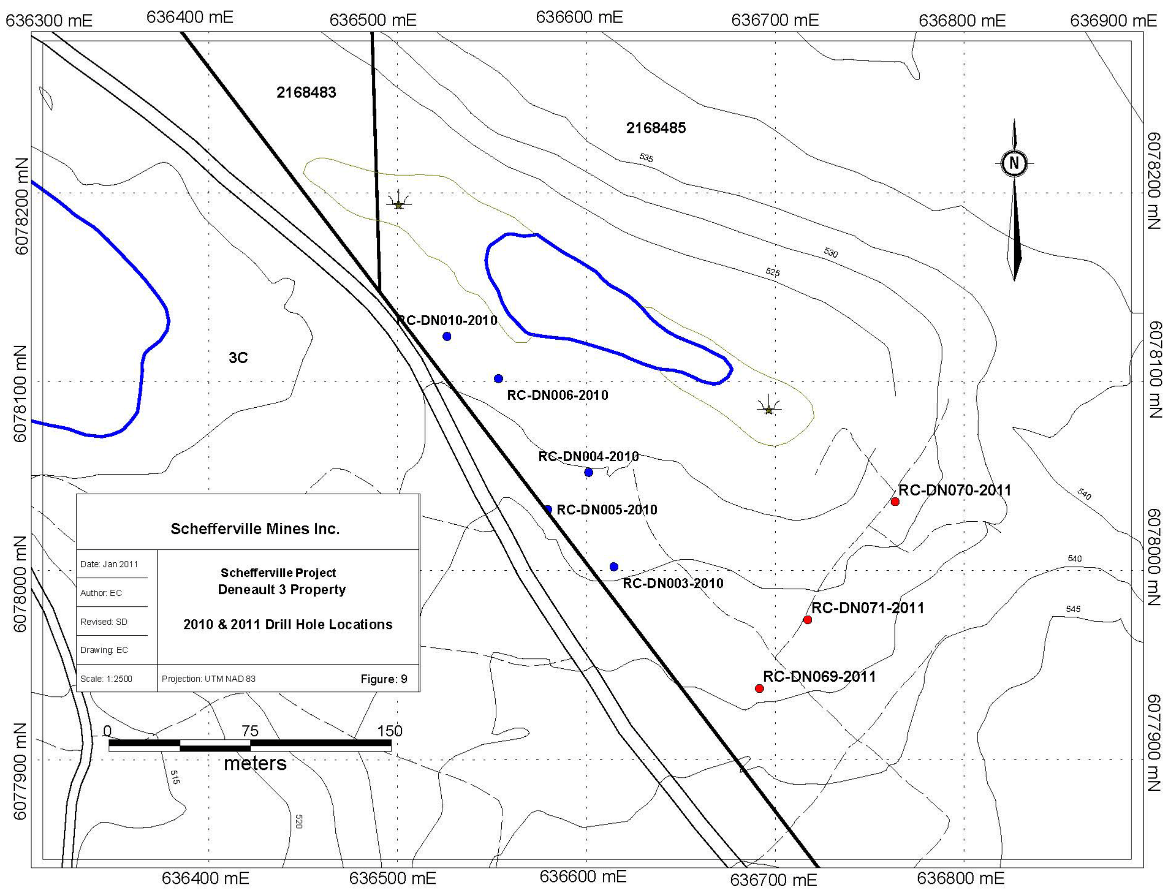

635900 mE
636000 mE
636100 mE
6078900 mN
6078800 mN
6078700 mN
6078600 mN
6078500 mN
2168494
2168496
3C
N
RC-DN062-2011
RC-DN059-2011
RC-DN061-2011
RC-DN064A-2011
RC-DN026-2010
RC-DN028-2010
RC-DN016-2010
RC-DN065-2011
RC-DN031-2010
RC-DN067-2011
RC-DN066-2011
520
525
515
510
Schefferville Mines Inc.
Schefferville Project
Deneault 2 Property
2010 & 2011 Drill Hole Locations
Projection: UTM NAD 83
Figure: 8
0
75
150
meters



635800 mE
635900 mE
636000 mE
636100 mE
636200 mE
6079000 mN
6078900 mN
6078800 mN
6078700 mN
6078600 mN
2168494
2168496
3C
N
RC-DN058-2011
RC-DN058A-2011
RC-DN060-2011
RC-DN063A-2011
RC-DN063-2011
RC-DN022-2010
RC-DN020-2010
RC-DN020B-2010
RC-DN020C-2010
RC-DN019-2010
520
515
525
Schefferville Mines Inc.
Date: Jan 2011
Author: EC
Revised: SD
Drawing: EC
Scale: 1:2500
Schefferville Project
Deneault 2 Property
2010 & 2011 Drill Hole Locations
Projection: UTM NAD 83
Figure: 8
0
75
150
meters



636400 mE
636500 mE
636600 mE
636700 mE
6078200 mN
6078100 mN
6078000 mN
6077900 mN
RC-DN014-2010
RC-DN012-2010
RC-DN013-2010
RC-DN011-2010
RC-DN015-2010
RC-DN008-2010
RC-DN007-2010
RC-DN009-2010
RC-DN002-2010
RC-DN001-2010
RC-DN068-2011
2168483
2168485
3C
530
535
525
520
515
N
0
75
150
meters
Schefferville Mines Inc.
Schefferville Project
Deneault 3 Property
2010 & 2011 Drill Hole Locations
Figure: 9


636300 mE
636400 mE
636500 mE
636600 mE
636700 mE
636800 mE
636900 mE
6078200 mN
6078100 mN
6078000 mN
6077900 mN
2168483
2168485
3C
RC-DN010-2010
RC-DN006-2010
RC-DN004-2010
RC-DN005-2010
RC-DN003-2010
RC-DN070-2011
RC-DN071-2011
RC-DN069-2011
Schefferville Mines Inc.
Date: Jan 2011
Author: EC
Revised: SD
Drawing: EC
Schefferville Project
Deneault 3 Property
2010 & 2011 Drill Hole Locations
Scale: 1:2500
Projection: UTM NAD 83
Figure: 9
0
75
150
meters