

Technical Report: Schefferville Area Phase 1 DSO Iron Projects Resource Update, Western Labrador – NE Quebec, Canada

Respectfully submitted to:

Labrador Iron Mines Holdings Limited

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1. Summary

Labrador Iron Mines Holdings Limited ("LIMHL") is engaged in the mining of iron ore and in the exploration and development of direct shipping ("DSO") iron ore projects (the "Schefferville Projects") in the central part of the Labrador Trough region. Situated in the Menihek area in the Province of Newfoundland and Labrador and near Schefferville in the Province of Québec, the Labrador Trough is one of the major iron producing regions in the world. The Company's Schefferville Projects are centered around the town of Schefferville, Québec.

The Schefferville Projects consist of the James Mine and adjacent Stage 1 deposits and Silver Yards processing facility ("Silver Yards"), the Stage 2 Houston property ("Houston"), which includes the Malcolm 1 deposit, the Stage 3 Howse property ("Howse"), now held in a joint venture with Tata Steel Minerals Canada Limited ("TSMC") and, subject to further exploration and development, other iron ore properties in the vicinity of Schefferville. LIM's Schefferville Projects are connected by a direct railway to the Port of Sept-Iles on the Atlantic Ocean and benefit from established infrastructure, including the town of Schefferville, airport, roads, hydro power and rail service.

This Technical Report addresses the latest Phase 1 exploration and development of the iron ore projects within LIMHL's Stage 1 Central Zone deposits. This Report does not discuss the Houston or Malcolm deposits as they are the subject of a separate report.

Mr. Maxime Dupéré P. Geo., is the author of this Report. Mr. Dupéré is independent of LIMHL, Labrador Iron Mines Limited ("LIM") and Schefferville Mines Incorporated ("SMI"), wholly-owned subsidiaries of LIMHL, which holds the mineral claims on which the iron deposits are located, as described in Section 1.1 of this Report.

In this Report, all currency amount are in Canadian dollars (CAD\$) unless otherwise stated.

Labrador Iron Mines Holdings Limited is considered a "producing issuer" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") as its audited financial statements for the year ended March 31, 2014, being the Company's most recently completed financial year, disclosed gross revenue, derived from mining operations of CAD\$85.9 million, compared to gross revenue of CAD\$95.7 million for the year ended March 31, 2013, which is more than an aggregate of CAD\$90 million for the Company's three most recently completed financial years, and accordingly, the information required under Item 22 of Form 43-101F1 for Technical Reports on properties currently in production is not included in this Technical Report.

LIMHL commenced production at its James Mine in June 2011 and completed its third year of mining operations in November 2013. From 2011 to the end of 2013, LIM sold 23 cape-size shipments into the Chinese spot market totalling approximately 3.6 million dry tonnes of iron ore, all sourced from the Company's Stage 1 deposits and historical stockpiles.

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices, particularly during the period from mid-2012 to early 2013 and again in the year-to-date 2014, This has had an adverse impact on LIM's economic analysis, with a significant decrease in available mineralized material and recoverable resources. Consequently, the information under the *Additional Requirements for Advanced Property*, prepared by Justin Taylor, P.Eng., DRA Americas Inc., in a previous Technical Report (dated April 12, 2013) is no longer current. This information has subsequently been updated and summarized in Section 17 – Other Relevant Data and Information of this Technical Report.

The Company's mine operations are typically seasonal, from approximately the beginning of April to the end of November each year, with a planned winter shut down from approximately the beginning of December to the end of March each year. LIMHL does not plan to recommence mine operating activities for the 2014 operating season, due to a combination of the prevailing low price of iron ore in 2014 to date (to less than US\$100 per dry metric tonne, CFR China 62% Fe basis), An assessment of the current economics of the remaining resources of the James Mine and other Stage 1 deposits and a strategic shift in corporate focus towards completing development of the Company's flagship Stage 2 Houston Mine, while concurrently negotiating the commercial terms of certain major contracts and seeking additional capital investment and working capital.

The Company does not plan to permanently close its Stage 1 mining project. Rather, the Stage 1 deposits and related infrastructure, including the processing plant, are being maintained in standby condition for the time being, which will allow for a potential restart of Stage 1 production in a future year when economic conditions improve.

This Technical Report discloses the updated mineral resources of the relevant mineral deposits in the Schefferville area.

Mineral depletion at the James Mine has reached the optimal pit design under current economic conditions. Consequently, mineral resources previously estimated within the James Mine are no longer current and have been removed from resources estimates. Additional diamond drilling carried out in the winter months of late 2013 and early 2014 outlined a small zone of mineralised material outside pit design called James Pit ("James Pit"), but does not contained sufficient material to sustain mining operations at James under current economic conditions. In addition, the closest southwestern extension of the James Mine, referred to as Bean Lake ("Bean Lake"),



did not contain sufficient material to sustain mining operations at Silver Yards under current economic conditions.

The following information in Table 1-1 briefly describes the reconciliation of the resources of the James Mine from original mineral resources estimates in 2009 to the adjusted mineral resource estimates at December 31, 2013. Table 1-1 also indicates the remaining resources at the James Mine, consisting of the James Pit mineral resource of 232,000 tonnes at 55.8% Fe (see Section 14.5) and the Bean Lake mineral resource of 208,000 tonnes at 53.2% (see section 0).

James Deposit-Mineral Resource Reconciliation Table									
	Year	Volume (m ³)	Density (t/m ³)	Tonnage (t)	% Fe	Category			
Original Mineral Resource SGS	2009	2,347,246	3.45	8,098,000	57.8	Measured & Indicated			
Pit Design Adjustment- LIM	2011	-422,260	3.45	-1,456,797	N/A	Measured & Indicated			
Mining Mineral Resource-LIM	2011	1,922,298	3.45	6,641,203	58.8	Measured & Indicated			
Total Mining Depletion 2011	2011	-466,311	2.71	-1,263,566	58.6	Measured			
Total Mining Depletion 2012	2012	-620,603	2.95	-1,828,398	61.3	Measured			
Model Density Adjustment 2013	2013	-416,154	2.84	-1,181,877	N/A	N/A			
Model Volume Adjustment 2013	2013	-237,992	2.84	-675,897	N/A	N/A			
Total Mining Depletion 2013	2013	-545,465	2.84	-1,549,122	56.0	Measured			
Calculated Mineral Resource as at Dec 31, 2013	2013	50,121	2.84	142,343	N/A	N/A			
Final Reconciliation Model Adjustment Dec 31, 2013	2014	-50,121	2.84	-142,343	N/A	N/A			
SGS Mineral Resource (results of new drilling)	2014	81,690	2.84	232,000	55.8	Inferred			
SGS Bean Lake Mineral Resource	2014	73,239	2.84	208,000	53.2	Inferred			

Table 1-1: James Mine Reconciliation Summary

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 ("DSO") is considered amenable to beneficiation to produce lump and sinter feed, which forms part of the resources for LIM's Schefferville Area Projects. LIM has updated its Ore Type category: the DSO is categorised by LIMH using categories based mainly on chemical and textural compositions. This classification is shown in the following table.

Schefferville Ore types (LIMH SETTINGS)										
TYPE	Fe(%)	P(%)	Mn(%)	SiO ₂ (%)	Al ₂ O ₃ (%)					
DRO (Direct Railing Ore)	>60	<0.05	<3.5							
PHG(Plant High Grade)	>55 & <60	<0.05	<3.5							
PLG(Plant Low Grade)	>50 & <55	<0.05	<3.5							
Yellow (Hi Phosphorous)	>50	>0.05	<3.5							
TRX(Treat Rock)	>45 & <50		<3.5							
PF	>50 & <60	<0.05	<3.5							
MN	Fe+Mn>=50		>3.5	<18	<5					

Table 1-2: Classification of Ore Type by LIMH

The DRO, PHG and PLG ores, are composed mainly of the minerals hematite and martite and are generally coarse grained and friable. They are usually found in the middle section of the iron formation. Historically, these were considered as Blue Ore according to the Iron Ore Company of Canada ("IOC"), the previous operator in the area.

The current compliant iron resource estimates for the James Pit, Bean Lake, Redmond, Knob Lake, and Denault deposits follow updated iron ore categories (see Table 1-2) as per mining operations and nomenclature used by LIM since the beginning of mining operations.

The total mineral resources in the Schefferville Area for the Stage 1 deposits, which includes the James Pit, Bean Lake, Redmond 2B, Redmond 5, Denault and Knob Lake 1 deposits, contain 11.9 million tonnes of measured and indicated resources at an average grade of 54.95% Fe and are summarised in Table 1-3, while current compliant manganese resources for Knob Lake and Denault deposits total 2.4 million tonnes at 51.4% Fe and 6.13% Mn, summarized in Table 1-5.

In addition to the foregoing, LIM also holds some previously-mined stockpiles with a confirmed NI 43-101 compliant, indicated resource of approximately 3.5 million tonnes with an average grade of 49.1% Fe and an inferred resource of approximately 2.9 million tonnes with an average grade of 48.8% Fe. These stockpiles are located within 15 km of the Silver Yards processing plant and form part of LIM's Stage 1 deposits.

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO ₂ (%)	Al ₂ O ₃ (%)
	Fe Ore	Measured (M)	-	-	-	-	-	-
L D't	(DRO,	Indicated(I)	-	-	-	-	-	-
JamesPit	PHG,	Total M+I	-	-	-	-	-	-
	PLG,	Inferred	232,000	52.77	0.024	0.99	21.67	0.36
	Fe Ore	Measured (M)	-	-	-	-	-	-
Bean Lake	(DRO,	Indicated(I)	-	-	-	-	-	-
Dean Lake	PHG,	Total M+I	-	-	-	-	-	-
	PLG,	Inferred	208,000	53.21	0.028	0.04	22.59	0.37
	Fe Ore	Measured (M)	-	-	-	-	-	-
Redmond 2B	(DRO,	Indicated(I)	518,000	59.07	0.130	0.44	5.80	2.25
Redmond 2D	PHG,	Total M+I	518,000	59.07	0.130	0.44	5.80	2.25
	PLG,	Inferred	25,000	57.19	0.130	0.66	5.92	4.12
	Fe Ore	Measured (M)	-	-	-	-	-	-
Redmond 5	(DRO,	Indicated(I)	1,576,000	55.03	0.039	0.78	11.76	0.73
Reditiona 5	PHG,	Total M+I	1,576,000	55.03	0.039	0.78	11.76	0.73
	PLG,	Inferred	60,000	52.33	0.063	1.72	11.28	0.97
	Fe Ore	Measured (M)	4,167,000	54.92	0.077	0.85	9.64	1.13
Denault	(DRO,	Indicated(I)	507,100	53.17	0.080	0.76	11.96	0.97
Denault	PHG,	Total M+I	4,674,500	54.73	0.077	0.84	9.89	1.11
	PLG,	Inferred	-	-	-	-	-	-
	Fe Ore	Measured (M)	2,824,000	55.01	0.070	1.00	10.21	0.48
Knob Lake No.1	(DRO,	Indicated(I)	2,259,100	54.33	0.061	1.07	11.19	0.46
Knob Lake INO.1	PHG,	Total M+I	5,083,500	54.71	0.066	1.03	10.65	0.47
	PLG,	Inferred	643,800	51.78	0.085	1.21	13.53	0.45
	Fe Ore	Measured (M)	6,991,000	54.96	0.074	0.91	9.87	0.87
All	(DRO,	Indicated(I)	4,860,200	54.94	0.063	0.88	10.88	0.79
ЛШ	PHG,	Total M+I	11,852,000	54.95	0.070	0.90	10.28	0.84
	PLG,	Inferred	1,168,800	52.37	0.06	0.97	16.48	0.52

Table 1-3: NI 43-101 Compliant Iron Resources – Schefferville Area

Updated March 31, 2014



Area	Classification	Tonnage	Fe(%)	P(%)	Mn(%)	SiO2(%)	Al2O3(%)
	Measured (M)	-	-	-	-	-	-
Ferriman 1 (C&D)	Indicated(I)	2,394,000	49.34	0.053	1.21	21.63	1.01
Stockpile	Total M+I	2,394,000	49.34	0.053	1.21	21.63	1.01
зюскрие	Inferred	1,616,000	49.30	0.045	1.17	22.06	0.87
	Measured (M)	-	-	-	-	-	-
Wishart	Indicated(I)	1,151,000	48.57	0.039	0.09	27.14	0.50
Stockpile	Total M+I	1,151,000	48.57	0.039	0.09	27.14	0.50
	Inferred	1,280,000	48.24	0.038	0.08	27.54	0.50
	Measured (M)	-	-	-	-	-	-
All	Indicated(I)	3,545,000	49.09	0.049	0.84	23.42	0.84
	Total M+I	3,545,000	49.09	0.049	0.84	23.42	0.84
	Inferred	2,896,000	48.83	0.042	0.69	24.48	0.71

Table 1-4: Stockpiles Mineral Resource Estimates, by Deposit, as at March 31, 2013

Dated March 31st, 2014

Mineral resources which are not mineral reserves do not have demonstrated economic viability

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
Denault		Measured (M)	1,443,000	52.05	0.078	6.36	6.00	1.09
	M. O.	Indicated(I)	361,000	51.72	0.071	6.49	6.61	0.97
	Mn Ore	Total M+I	1,805,000	51.98	0.077	6.39	6.13	1.07
		Inferred	-	-	-	-	-	-
	Mn Ore	Measured (M)	375,000	50.55	0.086	5.59	8.45	0.68
KL1		Indicated(I)	214,000	49.56	0.076	4.87	9.60	0.80
KLI		Total M+I	588,000	50.19	0.082	5.33	8.86	0.72
		Inferred	127,000	49.18	0.046	4.80	9.66	0.40
		Measured (M)	1,818,000	51.74	0.080	6.20	6.51	1.01
A11	N O	Indicated(I)	575,000	50.91	0.073	5.89	7.72	0.91
	Mn Ore	Total M+I	2,393,000	51.54	0.078	6.13	6.80	0.98
		Inferred	127,000	49.18	0.046	4.80	9.66	0.40

Updated March 31, 2014

1.1 The Property

As of the date of this Report, LIM holds four mining leases covering approximately 510 hectares ("ha"), eleven surface leases covering approximately 2,008 ha and 25 Mineral Rights Licenses issued by the Department of Natural Resources, Province of Newfoundland and Labrador, covering approximately 15,650 ha. SMI holds interests in 447 Mining Claims in Québec, covering approximately 14,342 ha. SMI also holds an exclusive operating license over 142 mining claims covering approximately 2,050 ha formerly contained in a mining lease. This lease expired in 2013, and was replaced by the 142 mining claims, which cover all of the land previously subject to the lease.

Under the terms of a joint venture agreement with Tata Steel Minerals Canada (LIM 49% and Howse Minerals Limited ("HML") 51%), LIM and HML hold two mineral rights licences in Newfoundland and Labrador transferred from LIM in 2013 (a single licence divided into two new mineral rights licences), covering approximately 975 hectares in Western Newfoundland and Labrador.

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 (Québec).

There are no roads connecting the area to southern Labrador or to Québec. 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. LIM commenced production from the James Mine in 2011 and the Redmond Mine and Ferriman stockpiles in 2013.

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 located about 85 km away. 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 (in Québec and Labrador) were operated by the Iron Ore Company of



Canada ("IOC") and 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 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. 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.

LIM commenced initial production at its James Mine in June 2011 and through to the end of 2013, has sold 3.6 million dry tonnes of iron ore in 23 cape-size ocean shipments into the Chinese spot market. The Company considers the fiscal year ended March 31, 2012 as having been a short, start-up and testing operating season during which the Schefferville Projects had not yet reached commercial production.

The IOC historical iron ore resources contained within LIM's properties in Labrador, not including James, Redmond 2B, Redmond 5 and Houston deposits, total 56 million tonnes with grades greater than 62% Fe 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 total 52.4 million tonnes with grades greater than 60% Fe.





1.3 Exploration and Drilling Activity

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. Since 2005, LIMHL has carried out exploration activities, including trench sampling as well as bulk sampling on some of the properties. 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.

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 m 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 m). 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, and 2008 to 2012, predominantly with RC drilling. In 2012, LIM began using diamond drilling as newer techniques were able to rectify historical recovery issues. 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 and Malcolm Property drill holes), a total of 16,713 m of RC drilling in 347 holes, and 2,087 m of diamond drilling in 24 holes, were drilled to the effective date of this Report. A total of 54 trenches totalling 3,438 m of trenching have been carried out on the James, Knob Lake No.1, Redmond 2B, Redmond 5, Gill and Ruth Lake 8 deposits. Between 2008 and 2012, sampling from test pitting totalled 1,407 assays. The test pitting program was conducted on the stockpiles located in the Wishart, Ferriman, Burnt Creek, Gagnon, Knox and Redmond locations. Test pitting is used exclusively for historical



stockpile assessment, with the exception of test pitting at Knob Lake 1, which was used to determine the location of the western edge of the deposit.

A bulk sample program was started in 2006 (3,600 kg 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.

1.4 Geology

At least 45 hematite-goethite ore deposits have been discovered in an area that spans 20 km wide and extends 100 km northwest of Astray Lake, referred to as the Knob Lake Iron Range. This area 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 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.

Only the direct shipping ore is considered beneficial to produce lump and sinter feed and forms part of the resources for LIMHL's Schefferville Area Projects.

1.5 Resource Estimates

As of the date of this Report, the current resource estimates for the James, Bean Lake, Redmond 2B, Redmond 5, Knob Lake No.1 and Denault deposits are summarised in Tables 1-6 to 1-11. The resource update for stockpiles located in the Wishart and Ferriman properties are summarized in Table 1-12 and Table 1-13. Mineral resources within the James Pit, Bean Lake, Redmond 2B, Redmond 5, Knob Lake and Denault have been updated to meet LIM's current Ore Type descriptions. The Ferriman (C&D) and Wishart stockpiles have not been restated. All mineral resources stated below are current and effective as of March 31, 2014. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

SGS conducted an audit of an extensive reconciliation carried out by LIM personnel in the fall of 2013 of the James Mine 2013 production with estimated resources in a block model produced by SGS at the end of 2009. In 2013, SGS concluded that the average dry bulk density in the James Mine should be reduced from 3.45t/ m3 down to 2.85t/ m3 and recommended an added porosity of 15% (total 25%).

As of the date of the Report, the James Mine is under care and maintenance. Mineral depletion at James Mine has reached the optimal pit design. Revised Economical factors based on depletion and geological model outlined that remaining mineral resources based on the 2009 block model are no longer current and were removed from resources estimates. Additional diamond drilling carried out in the winter months of late 2013 and early 2014 outlined a small zone of mineralised material outside pit design called James Pit ("James Pit"), but does not contained sufficient material to sustain mining operations at James under current economic conditions. Additionally the closest south western extension of James Mine called Bean Lake does not contained sufficient material to sustain mining operations in Silver Yards under current economic conditions.

The current resource estimates for the James deposit correspond to the James Pit area. Based on observations and conclusions from the 2013 reconciliation the mineral resources of James (James Pit) total 232, 000 tonnes, of iron Ore (Fe Ore: DRO, PHG, PLG, Yellow) ore types as described above in the Inferred category at a grade of 55.77% Fe.



Area	Ore	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
	Туре							
James (James Pit)	Fe Ore	Measured (M)	-	-	-	-	-	-
	(DRO,	Indicated(I)	-	-	-	-	-	-
	PHG,	Total M+I	-	-	-	-	-	-
	PLG, Yellow)	Inferred	232,000	55.77	0.024	0.986	21.67	0.36

Table 1-6: Estimated Mineral Resources James Pit Deposit (NI 43-101 Compliant)

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

SGS Geostat verified the available data and proposed mineralised solid for the Bean Lake deposit located south west of James Mine using the new and updated November 30th, 2013 topographic surface provided by LIM. The Bean Lake deposit in situ SG formula used is the same as the 2013 James Pit based on %Fe was also updated according to reconciliation work by LIM and from validation by Michel Dagbert, Senior Geostatistician for SGS Geostat.

As of the date of the Report, the James Mine is under care and maintenance. Mineral depletion at James Mine has reached the optimal pit design. Previous mineral resources in James (2009 block Model) are no longer current. According to LIMH, economical, recovery and grade factors demonstrated that remaining resources according to the original block model (2009) were no longer economic. The James Mine block model (2009) was removed from total resources estimates. Additional diamond drilling during 2013 and in the winter months of late 2013 and early 2014 were carried out, which further defined a small zone of mineralised material SW of the James Mine but does not contained sufficient material to sustain mining operations at James under current economic conditions.

The mineral resources of Bean Lake total 208,000 tonnes of iron Ore (Fe Ore: DRO, PHG, PLG, Yellow) ore types as described above in the Inferred category at a grade of 53.21% Fe.

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO ₂ (%)	Al ₂ O ₃ (%)
	Fe Ore	Measured (M)	-	-	-	-	-	-
Bean	(DRO,	Indicated(I)	-	-	-	-	-	-
Lake	PHG, PLG,	Total M+I	-	-	-	-	-	-
	Yellow)	Inferred	208,000	53.21	0.028	0.04	22.59	0.37

Updated March 31, 2014

Table	1-8:	Updated	Mineral	Resources	of	the	Redmond	2B	Deposits	(NI	43-101
Compl	liant)										

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn	SiO ₂	Al ₂ O ₃
						(%)	(%)	(%)
	Fe Ore	Measured (M)	-	-	-	-	-	-
Redmond	(DRO,	Indicated(I)	518,000	59.07	0.130	0.44	5.80	2.25
2B	PHG, PLG,	Total M+I	518,000	59.07	0.130	0.44	5.80	2.25
	Yellow)	Inferred	25,000	57.19	0.130	0.66	5.92	4.12

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

Table 1-9: Estimated Mineral Resources	Redmond 5 Deposits (NI 43-101 Compliant)

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO ₂ (%)	Al ₂ O ₃ (%)
	Fe Ore	Measured (M)	-	-	-	-	-	-
Redmond	(DRO,	Indicated(I)	1,576,000	55.03	0.039	0.78	11.76	0.73
5	PHG, PLG,	Total M+I	1,576,000	55.03	0.039	0.78	11.76	0.73
	Yellow)	Inferred	60,000	52.33	0.063	1.72	11.28	0.97

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

Table 1-10: Estimated Mineral Resources for Knob Lake	1 (NI 43-101 Compliant)
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Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
	Fe Ore	Measured (M)	2,824,000	55.01	0.070	1.00	10.21	0.48
	(DRO, PHG,	Indicated(I)	2,259,100	54.33	0.061	1.07	11.19	0.46
Knob	PLG,	Total M+I	5,083,500	54.71	0.066	1.03	10.65	0.47
Lake	Yellow)	Inferred	643,800	51.78	0.085	1.21	13.53	0.45
No.1	Mn Ore	Measured (M)	1,818,000	51.74	0.080	6.20	6.51	1.01
		Indicated(I)	575,000	50.91	0.073	5.89	7.72	0.91
		Total M+I	2,393,000	51.54	0.078	6.13	6.80	0.98
		Inferred	127,000	49.18	0.046	4.80	9.66	0.40

Updated March 31, 2014



Area Denault	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn	SiO2	AI2O3
	ore type	Glassification	Tonnage	10(70)		(%)	(%)	(%)
	Fe Ore	Measured (M)	4,167,000	54.92	0.077	0.85	9.64	1.13
	(DRO, PHG,	Indicated(I)	507,100	53.17	0.080	0.76	11.96	0.97
	PLG,	Total M+I	4,674,500	54.73	0.077	0.84	9.89	1.11
Denault	Yellow)	Inferred	-	-	-	-	-	-
	Mn Ore	Measured (M)	375,000	50.55	0.086	5.59	8.45	0.68
		Indicated(I)	214,000	49.56	0.076	4.87	9.60	0.80
		Total M+I	588,000	50.19	0.082	5.33	8.86	0.72
		Inferred	127,000	49.18	0.046	4.80	9.66	0.40

Table 1-11: Estimated Mineral Resources for Dena	ult (NI 43-101 Compliant)
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Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

Table 1-12: Estimated Mineral Resources	for Wishart Stockpiles (NI 43-101 Compliant)
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Area	COG	Classificatio n	Tonnage	Fe (%)	P (%)	Mn (%)	SiO₂ (%)	Al ₂ O ₃ (%)
	>45% Fe	Indicated	1,151,000	48.57	0.04	0.09	27.14	0.50
	(Base Case)	Inferred	1,280,000	48.24	0.04	0.08	27.54	0.50
Wishart	>0% Fe	Indicated	1,512,000	47.07	0.04	0.09	28.97	0.67
	>0 /0 T C	Inferred	2,134,000	45.72	0.04	0.09	30.64	0.78
	<45%Fe	Indicated	338,000	41.77	0.04	0.08	35.49	1.24
	<4J%F8	Inferred	837,000	41.78	0.04	0.09	35.42	1.21

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

Table 1-13: Estimated Mineral Resources, Ferriman C&D Stockpiles (NI 43-101 Compliant)

Area	COG	Classificatio n	Tonnage	Fe (%)	P (%)	Mn (%)	SiO ₂ (%)	Al ₂ O ₃ (%)
Ferriman 1 (C&D) Stockpile	>45% Fe	Indicated	2,394,000	49.34	0.05	1.21	21.63	1.01
	(Base Case)	Inferred	1,616,000	49.3	0.05	1.17	22.06	0.87
	>0% Fe	Indicated	3,454,000	46.83	0.07	1.22	24.50	1.40
		Inferred	2,396,000	47.41	0.05	1.55	23.83	1.02
	<45%Fe	Indicated	1,059,000	41.18	0.1	1.25	31.01	2.30
		Inferred	778,000	43.47	0.07	2.32	27.50	1.34

Updated March 31, 2014

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. Table 1-14 shows the combined summaries of the estimates of the historical mineral resources (non-compliant with NI 43-101) of the LIM-owned deposits in Labrador and the SMI deposits in Quebec. IOC categorized their estimates as "reserves". The historical reserves described below differ slightly than resources described by LIM. IOC included the SiO2 and Al2O3 in their ore type descriptions.

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

Province	Iron Resources			Manganese Resources			
	Tonnes (x 1000)	Fe%	SiO ₂ %	Tonnes (x 1000)	Fe%	SiO ₂ %	Mn%
NL	56,020	63.5	7.7	269	48.7	10.2	10.2
QC	52,420	60.9	6.8	4,182	52.5	6.0	6.2
Combined	108,440	62.2	7.3	4,451	52.3	6.3	6.4

Table 1-14: Combined Summary Historical IOC Resource estimates (Non- Compliant)

* Historical resources in this table are reported on a dry basis. IOC reported historical resources on a "natural" basis, including moisture content. Non-compliant with NI 43-101.

These historical estimates described above 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.

1.6 Interpretations & Conclusions

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices, particularly during the period from mid-2012 to early 2013 and again in the year-to-date 2014, where the price of iron ore has declined to below US\$100 per tonne (CFR China 62% Fe basis). This has had an adverse impact on LIM's economic analysis, with a significant decrease of available mineralized material and recoverable resources. Consequently, the information under *Additional Requirements for Advanced Property*, prepared by Justin Taylor, P.Eng., DRA Americas Inc., in a Technical Report (dated April 12, 2013) is no longer current. This information has subsequently been updated and summarized in Section 17 – Other Relevant Data and Information of this Report.

Only the direct shipping ore is considered amenable to beneficiation to produce lump and sinter feed, which forms part of the resources for LIMHL's development projects. LIM has updated its Ore Type category in 2014. The DSO is categorised by LIM using categories based mainly on chemical and textural compositions. This classification is shown in Table 7-1.

The current compliant iron resource estimates for the James Pit, Bean Lake, Redmond 2B, Redmond 5, Knob Lake, and Denault deposits follow updated iron ore categories as per mining operations and nomenclature used by LIM since the beginning of mining operations.

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.

Considerable variation in analytical data of blank material was observed in 2013, particularly for blanks from Gill Mine. It is strongly suggested to revaluate the material being submitted for blanks.

Given the variability of the new blank material compared with that of the 2008 results, it may be difficult to interpret contamination issues. However, since all the values are below 9% Fe and the mean value is 3.53% Fe then it is not likely there is any major contamination. In 2013, LIMHL inserted a total of 79 standards for analysis, of which 31 were James standards, and 48 were Knob Lake standards. Based on the charts for iron and silica of the James Standards, we would conclude there is not likely any serious contamination or mislabels or other issues. For the Knob Lake Standards, results were good with the exception of sample 86350, which warrants further investigation. It is recommended to revaluate the expected value and standard deviation of the Knob Lake Standard.

The results from the 87 duplicate analyses to a second lab are judged satisfactory. Small bias was observed for silica and iron. SGS and LIM concluded that there was good correlation between ACTLABS results and ALS Chemex results, indicating that there is confidence in the exploration results. LIM 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.

1.7 Recommendations

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices, particularly during the period from mid-2012 to early 2013 and again in the year-to-date 2014, where the price of iron ore has declined to below US\$100 per tonne (CFR China 62% Fe basis). This has had an adverse impact on LIM's economic analysis, with a significant decrease of available mineralized material and recoverable resources. Consequently, the information under *Additional Requirements for Advanced Property*, prepared by Justin Taylor, P.Eng., DRA Americas Inc., in a Technical Report (dated April 12, 2013) is no longer current. This information has subsequently been updated and summarized in Section 17 - Other Relevant Data and Information of this Report.

Only the direct shipping ore is considered amenable to beneficiation to produce lump and sinter feed, which forms part of the resources for LIMHL's development projects.

Following the review of all relevant data and the interpretation and conclusions of this review, it is recommended that exploration be focused on LIM's other properties such as Houston, Malcolm and Howse. Until LIM has resolved all aspects of the mining and recovery, it is not recommended to conduct further exploration on the Redmond 2B, Redmond 5, Denault and Gill, properties. Assay results from past exploration have been positive and have demonstrated the reliability of the IOC data, which has also been confirmed with the recent exploration.

SGS recommends the continued use of diamond drilling on prime targets in order to obtain core from all of its work areas. However, since the Company has not resumed mining activity at the James Mine, the author is not in a position to address further drilling campaigns and respective drilling budget until LIM's operations and activity in Labrador-Schefferville area have been confirmed.

2. Introduction

This Report discloses the updated mineral resources of the relevant mineral deposits in the Schefferville area. As of the date of the Report, the James Mine is under care and maintenance. Mineral depletion at James Mine has reached the optimal pit design. Previous mineral resources in James are no longer current and were removed from resources estimates. Additional diamond drilling carried out in the winter months of late 2013 and early 2014 outlined a small zone of mineralised material outside pit design called James Pit ("James Pit"), but does not contained sufficient material to sustain mining operations at James Mine called Bean Lake ("Bean Lake") does not contained sufficient material to sustain mining operations in Silver Yards under current economic conditions.

Mr. Maxime Dupéré P. Geo. is the author of this Report. Mr. Dupéré is independent of Labrador Iron Mines Holdings Limited ("LIMHL"), Labrador Iron Mines Limited ("LIM") and Schefferville Mines Incorporated ("SMI"), wholly owned subsidiaries of LIMHL which holds the mineral claims on which the iron deposits are located, as described in section 1.5 of NI 43-101. The authors is a "qualified persons" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators.

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 an author of the SNC Lavalin report (A. Kroon) to co-author, with Maxime Dupéré of SGS – Geostat 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).

Maxime Dupéré and Justin Taylor are co-authors of the following Technical Reports:

"Technical Report Mineral Resource Estimation of the Houston Property Mineral Deposit for Labrador Iron Mines Limited" by Maxime Dupéré, P.Geo., SGS Canada Inc. concerning the Houston property in Labrador and filed on SEDAR March 25, 2011

"Technical Report Silver Yards Direct Shipping Iron Ore Projects in Western Labrador Province of Newfoundland and Labrador and North Eastern Québec Province of Québec Canada" by Justin Taylor, P.Eng., DRA Americas Inc., and Maxime Dupéré, P.Geo., SGS Canada Inc.



concerning the exploitation of the James, Redmond 2B, Redmond 5, Gill, Ruth Lake 8 and Knob Lake deposits in Labrador and filed on SEDAR April 19, 2011.

"Revised Technical Report: Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Québec, Canada for Labrador Iron Mines Holdings Limited" by, Maxime Dupéré, P.Geo., SGS Canada Inc. and Justin Taylor, P.Eng., DRA Americas Inc. concerning the James Mine and Silver Yards project and the Redmond 2B, Redmond 5 and Knob Lake deposits in Labrador., dated March 31st, 2012 and revised October 24, 2012 and filed on SEDAR October 30, 2012

Maxime Dupéré last visited the site from December 9th to December 12th, 2013 as part of the reconnaissance visit of the all the properties of the Schefferville area for the 2013 diamond drilling and trenching campaign. SGS – Geostat reviewed the different field, laboratory and QA/QC protocols and procedures.

The Schefferville Projects consist of the James Mine, currently under care and maintenance, and adjacent Stage 1 deposits and Silver Yards processing plants ("Silver Yards"). The James Mine Project is no longer an "advanced property" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101").

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 General

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 LIM and SMI.

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

Labrador Iron Mines Holdings Limited is considered a "producing issuer" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") as its audited financial statements for the year ended March 31, 2014, being the Company's most recently completed financial year, disclosed gross revenue, derived from mining operations of CAD\$85.9 million, compared to gross revenue of CAD\$95.7 million for the year ended March 31, 2013, which is more than an aggregate of CAD\$90 million for the Company's three most recently completed financial years, and accordingly, the information required under Item



22 of Form 43-101F1 for Technical Reports on properties currently in production is not included in this Technical Report.

LIM's Schefferville Projects comprise 20 different iron ore deposits, which were part of the original IOC direct shipping operations conducted from 1954 to 1982.

Through its wholly-owned subsidiary Labrador Iron Mines Limited, LIMHL holds four mining leases covering approximately 510 ha, eleven surface leases covering approximately 2,008 ha and 25 Mineral Rights Licenses issued by the Department of Natural Resources, Province of Newfoundland and Labrador, covering approximately 15,650 ha.

Through its wholly-owned subsidiary, SMI, LIMHL holds interests in 447 Mining Claims in Québec, covering approximately 14,342 ha. SMI also holds an exclusive operating license over 142 mining claims covering approximately 2,050 ha formerly contained in a mining lease. This lease expired in 2013, and was replaced by the 142 mining claims, which cover all of the land previously subject to the lease.

Under the terms of a joint venture agreement with Tata Steel Minerals Canada (LIM 49% and Howse Minerals Limited ("HML") 51%), LIM and HML hold two mineral rights licences in Newfoundland and Labrador transferred from LIM in 2013 (a single licence divided into two new mineral rights licences), covering approximately 975 hectares in Western Newfoundland and Labrador.

Globally, the price for iron ore is down 26 percent in 2014, to less than US\$100 per dry metric tonne (CFR 62% Fe China basis), compared to the average benchmark price of US\$135.46 per dry metric tonne experienced in 2013. As such, production and development plans for the Phase 1 DSO project have changed. The James open pit mining operation is currently under care and maintenance, and under current market conditions, there are no plans to further develop the other Phase 1 DSO projects. Should market conditions improve, development and production plans will be re-assessed.

LIMH is focusing on Stage 2, which will also be undertaken in phases and will involve the exploration, development and mining of the Houston and adjacent deposits.

A feasibility study has not been conducted on any of the Schefferville Projects and the Corporation's decision to undertake commercial production from the James and ongoing exploration and development of the Houston deposits has not been based upon a feasibility study of mineral reserves demonstrating economic and technical viability.



It is intended that the development of Stage 2 deposits, planning will be undertaken for the future operation of the other deposits in subsequent stages.

Stage 3 comprising the Howse (Labrador) and Barney (Quebec) deposits located approximately 25 km northwest of Schefferville (North Central Zone) and relatively close to existing infrastructure. The Howse deposit, located about 25 km north of LIM's James Mine and Silver Yards processing plant, has a historical resource of 25.7 million tonnes at 63.7% Fe and 5.5% SiO₂. 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 resources. 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.

In March 2013, LIM entered into a framework arrangement with Tata Steel Minerals Canada Limited ("TSMC"), as part of which LIM and TSMC have agreed to enter into a transaction for the joint development of the Howse deposit, whereby LIM will sell a 51% interest in Howse to TSMC. In the future, TSMC may increase its interest to 70%. It is hoped that the agreement with TSMC will expedite the development of the Howse deposit and that significant cost savings and synergies can be achieved by processing Howse ore through TSMC's adjacent Timmins Area plant.

Stage 4 comprising the Astray and Sawyer deposits in Labrador, located approximately 50 km to 65 km southeast of Schefferville (South Zone) and currently accessible by float plane or by helicopter; and Stage 5 comprising the Kivivic deposit in Labrador and the Eclipse, Partington and Trough deposits in Quebec located between 40 km to 70 km northwest of Schefferville (North Zone).

The resources that comprise Stages 3, 4 and 5 of LIM's Schefferville Projects consist of non NI 43-101 compliant historical resources. There is currently insufficient detailed information available on these deposits to make any long-term estimate of future production schedules. Substantial additional exploration, infrastructure and road access will be required for the development of these stages.

2.2 Terms of Reference

In this document, the following terms are used:



Actlabs: Activation Laboratories Ltd. Accredited independent Laboratory used for XRF analysis in Ancaster, Ontario, Canada.

DATUM NAD 27: North American Datum 1927 coordinates system

DRA Americas Inc: Located in Toronto, Canada, a subsidiary of a multinational EPCM firm specializing in minerals processing and beneficiation.

DSO: Direct Shipping Ore, Fe content must be greater than 50% on a dry basis; SiO2 must be less than 18% on a dry basis.

Energold: Energold Minerals Inc., a junior exploration company having a joint venture agreement with Fonteneau.

Fonteneau: Fonteneau Resources Ltd., a junior exploration company having a joint venture agreement with Energold.

IOC: Iron Ore Company of Canada: Former producer of iron ore in the Schefferville area from 1954 to 1982 and owner of QNS&L Railway and IOC port facilities in Sept Iles.

LIM: Labrador Iron Mines Limited.

LIMHL: Labrador Iron Mines Holdings Limited.

Mineral deposit: A mineral deposit is a continuous, well-defined mass of material containing a sufficient volume of mineralized material.

MRE: Mineral Resources Estimates

NML: New Millennium Iron Corp. A junior exploration and development company having adjacent properties to Houston and other LIM properties.

Property: In this Report, a property is described as an area comprised of one or a series of continuous claims and/or mineral licenses outlining in part or in total a mineral deposit, exploration target or a geological feature.

SGS: SGS–Geostat Canada Inc. Limited, part of SGS SA, a firm of consultants mandated to complete this study.

SGS-Lakefield: SGS Mineral services Laboratory, Accredited independent Laboratory and Member of the SGS group, used for XRF analysis in Lakefield, Ontario, Canada.



SMI: Schefferville Mines Incorporated.

SNC-Lavalin: SNC-Lavalin, an international engineering firm.

TSMC: Tata Steel Minerals Canada, a joint venture developing a DSO project adjacent to LIM properties

XRF: X-Ray Fluorescence Spectrometry. The type of analysis used for the assay analyses of 2006, and from 2008 to the date of this Report.

Canadian dollars are used throughout this Report unless stated otherwise.

2.3 Currency, Units, abbreviations and Definitions

The metric units and measurements system is used throughout the report except for historical data mentioned in section 6. In this Report, all currency amount are in Canadian dollars(CAD\$) unless otherwise stated. A table showing abbreviations used in this Report is provided below (Table 2-1):

Table 2-1: List of Abbreviations

tonnes or mt	Metric tonnes
tpd	Tonnes per day
tons	Short tons (0.907185 tonnes)
Long Tons	Long tons (1.016047 tonnes)
kg	Kilograms
g	Grams
ppm, ppb	Parts per million, parts per billion
%	Percentage
ha	Hectares
m	Metres
km	Kilometres
m³	Cubic metres
\$	Canadian dollars



2.4 Disclaimer

It must be stated that mineral resources which are not mineral reserves do not have demonstrated economic viability. The mineral resources presented in this technical report are estimates based on available sampling and on assumptions and parameters available to the author. The comments in this technical report reflect the best judgment in light of the information available.

Assumptions were made during the calculation of resources for modelling cut-off grades, resources cut-off grades and categories of iron ore types while respecting the "reasonable prospect for economic extraction" stated by the NI 43-101 regulation.

2.5 Cautionary Note regarding the Additional Requirements for Advanced Property

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices, particularly during the period from mid-2012 to early 2013 and again in the year-to-date 2014. This has had an adverse impact on LIM's economic analysis, with a significant decrease of available mineralized material and recoverable resources. Consequently, the *Additional Requirements for Advanced Property*, prepared by DRA Americas in a previous report (see report dated April 12, 2013) are no longer current. This information has subsequently been updated and summarized from the previous report in the section 17 (other Relevant Data and Information) of this Report.





3. Reliance on Other Experts

This Report has been prepared for LIMHL. The findings, conclusions and recommendations are based on the author's 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 2006-20123 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, FLSCHMIDTchmidt, MBB and Outokumpu.

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices, particularly during the period from mid-2012 to early 2013 and again in the year-to-date 2014. This has had an adverse impact on LIM's economic analysis, with a significant decrease of available mineralized material and recoverable resources. Consequently, the *Additional Requirements for Advanced Property*, prepared by DRA Americas in a previous report (see report dated April 12, 2013) are no longer current. This information has subsequently been updated and summarized from the previous report in the section 17 (other Relevant Data and Information) of this Report. The author has verified the ownership of the mineral claims by reference to the websites of the Department 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 inhouse technical reports is gratefully acknowledged.



SGS

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 the date of this Report, LIM holds, subject to various agreements described below, four mining leases covering approximately 510 ha, eleven surface leases covering approximately 2,008 ha and 25 Mineral Rights Licenses issued by the Department of Natural Resources, Province of Newfoundland and Labrador, covering approximately 15,650 ha.

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 licenses in Labrador. This exchange eliminated the fragmentation of the ownership of certain mining rights in the Schefferville area and will enable both parties to separately mine and optimize their respective DSO deposits in as efficient manner as possible.

Under the Agreement, NML transferred to LIMHL 375 ha in 10 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 447 Mining Claims in Québec, covering approximately 14,342 ha. SMI also holds an exclusive operating license over 142 mining claims covering approximately 2,050 ha formerly contained in a mining lease. This lease expired in 2013, and was replaced by the 142 mining claims, which cover all of the land previously subject to the lease. These mining claims and the exclusive operating license in Québec are held subject to a royalty of \$2.00 per tonne of iron ore produced, shipped and sold from the properties covered by the claims and license.

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

(As of March 31st, 2014)

Lic No. Map Sheet Property		Droporty	Location	# of Area		Staked	Issued
LIC NO.	Map Sheet	Property	Location	Claims	(ha.)	Slakeu	Issued
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
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
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
016669M	23003	Kivivic No.1	Kivivic Lake	7	175		2-May-05
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
018283M	23J14	Timmins 6	Howells River	3	75	24-Nov-10	24-Dec-10
018638M	23J14	Timmins 6	Howells River	3	75	14-Feb-11	16-Mar-11
019461M	23J10 23J15	Malcolm	Gilling Lake	17	425	21-Sep-11	21-Oct-11
020317M	23J14	Timmins 6	Howells River	1	25	5-Jun-12	5-Jul-12
020318M	23J14	Timmins 6/Barney	Howells River	1	25	5-Jun-12	5-Jul-12
020319M	23J14	Timmins 6/Barney	Howells River	1	25	5-Jun-12	5-Jul-12
020320M	23J14	Timmins 6/Barney	Howells River	1	25	5-Jun-12	5-Jul-12
020321M	23J14	Timmins 6/Barney	Howells	2	50	5-Jun-12	5-Jul-12



			River			
020432M	23J10	James-Wishart	Knob Lake	148	3700	12-Apr-04
020402101	23J15	James-Wishart	KIIOD Lake	140	5700	12-Api-04
020433M	23J10	Houston	Gilling River	112	2800	12-Apr-04
020434M	23J08	Astray Lake	Astray Lake	70	1750	17-Dec-04
020435M	23105	Sawyer Lake	Sawyer Lake	22	550	18-Sep-03
020440M	23J10	Knob	Knob Lake	132	3300	16-Dec-04
020440101	23J15	Lake/Redmond	KIIOD Lake	152	5500	10-000-04
021314M	23 114	Howse*	Howells	32	800	16-Dec-04
0210140	20014	110W3C	River	02		10 000 04
021315M	23J14 Howse*		Howells	7	175	16-Dec-04
02 10 TOW	20017		River			10 200 04
			Total	665	16,625	

* Labrador Iron Mines Limited (49%) / Howse Minerals Ltd (51%) TSMC

Table 4-2: Mining and Surface Leases in Labrador

Туре	Name	No.	Area (Ha)
Surface lease	Bean Lake Camp	111, 115	3.3
Surface lease	Ruth Pit	112	77.1
Surface lease	Pipe Line	113	3.29
Surface lease	Rail Spur Line	109	79.12
Surface lease	James Creek Culvert Area	120	35.75
Surface lease	James Discharge	119	34.9
Mining lease	James	200	96.14
Mining lease	Redmond 5	201	27.59
Mining lease	Redmond 2B	202	35.24
Surface lease	Redmond Haul Road	114	11.03
Surface lease	Silver Yards	110	81.79
Surface lease	Gill Surface Lease	125	70.03
Mining Lease	Houston 1 and 2 Project	216	351.94
Surface Lease	Houston 1 and 2 Project	135	1061.53
Surface Lease	Redmond Surface Lease	132	550.08
Surface Lease	Silver Yard Extension	137	17.53
		Total	2536.36



Table 4-3 Mining Titles in Schefferville Area – Quebec (As of March 31st, 2013)

Title No.	Sheet	Issued	Area (ha.)
CDC 58039	23J10	24/02/2005	20.81
CDC 58040	23J10	24/02/2005	4.44
CDC 2016779	23J15	20/06/2006	49.64
CDC 2016780	23J15	20/06/2006	49.63
CDC 2016781	23J15	20/06/2006	49.61
CDC 2016787	23J15	20/06/2006	49.11
CDC 2016789	23J15	20/06/2006	46.99
CDC 2016790	23J15	20/06/2006	44.96
CDC 2016791	23J15	20/06/2006	24.97
CDC 2016797	23003	20/06/2006	49.36
CDC 2016800	23003	20/06/2006	49.35
CDC 2016803	23003	20/06/2006	49.34
CDC 2016805	23003	20/06/2006	48.01
CDC 2016806	23003	20/06/2006	47.23
CDC 2016807	23003	20/06/2006	45.14
CDC 2016808	23003	20/06/2006	35.78
CDC 2016925	23003	20/06/2006	49.45
CDC 2016926	23003	20/06/2006	49.45
CDC 2016927	23003	20/06/2006	49.45
CDC 2168457	23J14	30/07/2008	3.35
CDC 2168458	23J14	30/07/2008	23.81
CDC 2168459	23J14	30/07/2008	0.6
CDC 2168460	23J14	30/07/2008	26.64
CDC 2168461	23J14	30/07/2008	46.59
CDC 2168462	23J14	30/07/2008	1.39
CDC 2168463	23J14	30/07/2008	48.09
CDC 2168464	23J14	30/07/2008	49.62
CDC 2168465	23J14	30/07/2008	49.62
CDC 2168466	23J15	30/07/2008	9.96
CDC 2168467	23J15	30/07/2008	14.85
CDC 2168468	23J15	30/07/2008	3.07
CDC 2168469	23J15	30/07/2008	0.31
CDC 2168470	23J15	30/07/2008	19.86
CDC 2168472	23J15	30/07/2008	14.42
CDC 2168473	23J15	30/07/2008	5.02
CDC 2168474	23J15	30/07/2008	24.43
CDC 2168475	23J15	30/07/2008	34.47
CDC 2168476	23J15	30/07/2008	20.11



Title No.	Sheet	Issued	Area (ha.)
CDC 2168477	23J15	30/07/2008	22.13
CDC 2168478	23J15	30/07/2008	3.71
CDC 2168479	23J15	30/07/2008	25.28
CDC 2168480	23J15	30/07/2008	49.66
CDC 2168481	23J15	30/07/2008	49.66
CDC 2168482	23J15	30/07/2008	49.44
CDC 2168483	23J15	30/07/2008	1
CDC 2168484	23J15	30/07/2008	26.58
CDC 2168485	23J15	30/07/2008	34.59
CDC 2168486	23J15	30/07/2008	1.07
CDC 2168487	23J15	30/07/2008	0.18
CDC 2168488	23J15	30/07/2008	2.33
CDC 2168489	23J15	30/07/2008	1.01
CDC 2168490	23J15	30/07/2008	46.83
CDC 2168491	23J15	30/07/2008	43.56
CDC 2168492	23J15	30/07/2008	49.65
CDC 2168493	23J15	30/07/2008	46.18
CDC 2168494	23J15	30/07/2008	5.11
CDC 2168495	23J15	30/07/2008	14.91
CDC 2168496	23J15	30/07/2008	38.11
CDC 2168497	23J15	30/07/2008	49.65
CDC 2168498	23J15	30/07/2008	49.64
CDC 2168499	23J15	30/07/2008	46.99
CDC 2168500	23J15	30/07/2008	14.44
CDC 2168501	23J15	30/07/2008	6.16
CDC 2168502	23J15	30/07/2008	49.64
CDC 2168503	23J15	30/07/2008	49.64
CDC 2168504	23J15	30/07/2008	49.63
CDC 2168505	23J15	30/07/2008	49.63
CDC 2168506	23J15	30/07/2008	49.63
CDC 2168507	23J15	30/07/2008	49.63
CDC 2168508	23J15	30/07/2008	49.63
CDC 2168509	23J15	30/07/2008	49.63
CDC 2168510	23J15	30/07/2008	49.63
CDC 2168511	23J15	30/07/2008	49.62
CDC 2168512	23J15	30/07/2008	49.62
CDC 2168513	23J15	30/07/2008	49.62
CDC 2168514	23J15	30/07/2008	49.62
CDC 2168515	23J15	30/07/2008	49.62
CDC 2168516	23J15	30/07/2008	49.62



Title No.	Sheet	Issued	Area (ha.)
CDC 2168517	23J15	30/07/2008	49.62
CDC 2168518	23J15	30/07/2008	49.62
CDC 2168519	23J15	30/07/2008	49.61
CDC 2168520	23J15	30/07/2008	49.61
CDC 2168521	23J15	30/07/2008	49.61
CDC 2168522	23J15	30/07/2008	49.61
CDC 2168523	23J15	30/07/2008	49.61
CDC 2168524	23J15	30/07/2008	49.61
CDC 2168525	23J15	30/07/2008	49.61
CDC 2168526	23J15	30/07/2008	49.61
CDC 2168527	23J15	30/07/2008	49.61
CDC 2168528	23J15	30/07/2008	49.61
CDC 2168529	23J15	30/07/2008	49.61
CDC 2168530	23J15	30/07/2008	49.61
CDC 2168531	23003	30/07/2008	20.33
CDC 2168532	23003	30/07/2008	17.71
CDC 2168533	23003	30/07/2008	27.79
CDC 2168534	23J14	30/07/2008	3.06
CDC 2168535	23J15	30/07/2008	0.37
CDC 2168537	23J15	30/07/2008	34.11
CDC 2168538	23J15	30/07/2008	29.59
CDC 2168539	23J15	30/07/2008	21.17
CDC 2168540	23J15	30/07/2008	36.25
CDC 2168541	23J15	30/07/2008	48.39
CDC 2168612	23J15	31/07/2008	3.45
CDC 2172892	23J14	14/10/2008	40.63
CDC 2183173	23J15	08/05/2009	49.74
CDC 2183174	23J15	08/05/2009	49.74
CDC 2183176	23J15	08/05/2009	39.78
CDC 2188494	23007	16/09/2009	39.17
CDC 2188495	23007	16/09/2009	49.11
CDC 2188496	23007	16/09/2009	49.11
CDC 2188497	23007	16/09/2009	49.11
CDC 2188498	23007	16/09/2009	15.9
CDC 2188499	23007	16/09/2009	48.83
CDC 2188500	23007	16/09/2009	49.1
CDC 2188501	23007	16/09/2009	49.1
CDC 2188502	23007	16/09/2009	49.1
CDC 2188503	23007	16/09/2009	49.1
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Title No.	Sheet	Issued	Area (ha.)
CDC 2188505	23007	16/09/2009	49.09
CDC 2188506	23007	16/09/2009	49.09
CDC 2188507	23007	16/09/2009	49.09
CDC 2188508	23007	16/09/2009	33.24
CDC 2188509	23007	16/09/2009	49.08
CDC 2188510	23007	16/09/2009	49.08
CDC 2188511	23007	16/09/2009	20.81
CDC 2188512	23007	16/09/2009	22.13
CDC 2188513	23007	16/09/2009	25.2
CDC 2188514	23007	16/09/2009	46.33
CDC 2188515	23007	16/09/2009	49.07
CDC 2188516	23007	16/09/2009	49.07
CDC 2188517	23007	16/09/2009	11.28
CDC 2188518	23007	16/09/2009	44.65
CDC 2188519	23007	16/09/2009	49.06
CDC 2188520	23007	16/09/2009	49.06
CDC 2188521	23007	16/09/2009	49.06
CDC 2188522	23007	16/09/2009	48.51
CDC 2188523	23007	16/09/2009	49.04
CDC 2188524	23007	16/09/2009	49.04
CDC 2188525	23007	16/09/2009	49.05
CDC 2188526	23007	16/09/2009	49.05
CDC 2188527	23O10	16/09/2009	48.71
CDC 2188528	23O10	16/09/2009	48.71
CDC 2188529	23O10	16/09/2009	48.71
CDC 2188530	23O10	16/09/2009	48.71
CDC 2188531	23O10	16/09/2009	48.71
CDC 2188532	23O10	16/09/2009	48.71
CDC 2188533	23O10	16/09/2009	48.7
CDC 2188534	23O10	16/09/2009	48.7
CDC 2188535	23O10	16/09/2009	48.7
CDC 2188536	23010	16/09/2009	48.7
CDC 2188537	23010	16/09/2009	48.7
CDC 2188538	23010	16/09/2009	48.7
CDC 2188539	23010	16/09/2009	48.69
CDC 2188540	23010	16/09/2009	48.69
CDC 2188541	23010	16/09/2009	48.69
CDC 2188542	23010	16/09/2009	48.67
CDC 2188543	23010	16/09/2009	48.67
CDC 2188544	23010	16/09/2009	48.68



Title No.	Sheet	Issued	Area (ha.)
CDC 2188545	23010	16/09/2009	48.68
CDC 2188546	23010	16/09/2009	48.68
CDC 2188547	23010	16/09/2009	48.68
CDC 2188548	23O10	16/09/2009	48.69
CDC 2188549	23010	16/09/2009	48.69
CDC 2189054	23J14	17/09/2009	0.09
CDC 2189055	23J15	17/09/2009	45.36
CDC 2189056	23J15	17/09/2009	47.34
CDC 2189057	23J15	17/09/2009	49.66
CDC 2189058	23J15	17/09/2009	49.66
CDC 2189059	23J15	17/09/2009	49.66
CDC 2189060	23J15	17/09/2009	49.65
CDC 2198039	23010	18/12/2009	48.69
CDC 2198040	23O10	18/12/2009	48.66
CDC 2198041	23O10	18/12/2009	48.66
CDC 2198042	23O10	18/12/2009	48.66
CDC 2198043	23O10	18/12/2009	48.67
CDC 2198044	23O10	18/12/2009	48.67
CDC 2198045	23O10	18/12/2009	48.67
CDC 2198046	23O10	18/12/2009	48.65
CDC 2198047	23O10	18/12/2009	48.65
CDC 2198048	23O10	18/12/2009	48.65
CDC 2198049	23O10	18/12/2009	48.64
CDC 2198050	23O10	18/12/2009	48.64
CDC 2198889	23003	13/01/2010	49.31
CDC 2198890	23003	13/01/2010	49.31
CDC 2198891	23003	13/01/2010	49.32
CDC 2198892	23003	13/01/2010	49.3
CDC 2198893	23003	13/01/2010	49.3
CDC 2198894	23003	13/01/2010	49.3
CDC 2198895	23003	13/01/2010	49.29
CDC 2198896	23003	13/01/2010	49.29
CDC 2198897	23003	13/01/2010	49.29
CDC 2198898	23003	13/01/2010	49.29
CDC 2198899	23003	13/01/2010	49.28
CDC 2198900	23003	13/01/2010	49.28
CDC 2198901	23003	13/01/2010	49.28
CDC 2198902	23003	13/01/2010	49.28
CDC 2198903	23003	13/01/2010	49.28
CDC 2198904	23003	13/01/2010	49.27



Title No.	Sheet	Issued	Area (ha.)
CDC 2198905	23003	13/01/2010	49.27
CDC 2198906	23003	13/01/2010	49.27
CDC 2198907	23003	13/01/2010	49.27
CDC 2198908	23003	13/01/2010	49.26
CDC 2198909	23003	13/01/2010	49.26
CDC 2198910	23003	13/01/2010	49.26
CDC 2198911	23003	13/01/2010	49.26
CDC 2198912	23003	13/01/2010	49.25
CDC 2198913	23003	13/01/2010	49.25
CDC 2198914	23003	13/01/2010	49.25
CDC 2198915	23003	13/01/2010	49.25
CDC 2198916	23003	13/01/2010	49.25
CDC 2198917	23003	13/01/2010	49.24
CDC 2198918	23003	13/01/2010	49.24
CDC 2198919	23003	13/01/2010	49.24
CDC 2214980	23007	16/04/2010	49.01
CDC 2214981	23007	16/04/2010	49.01
CDC 2214982	23007	16/04/2010	49.01
CDC 2214983	23007	16/04/2010	49.01
CDC 2214984	23007	16/04/2010	49.01
CDC 2214985	23007	16/04/2010	49.01
CDC 2214986	23007	16/04/2010	49
CDC 2214987	23007	16/04/2010	49
CDC 2214988	23007	16/04/2010	49
CDC 2214989	23007	16/04/2010	49
CDC 2214990	23007	16/04/2010	49
CDC 2214991	23007	16/04/2010	49
CDC 2214992	23007	16/04/2010	48.99
CDC 2214993	23007	16/04/2010	48.99
CDC 2214994	23007	16/04/2010	48.99
CDC 2214995	23007	16/04/2010	48.99
CDC 2214996	23007	16/04/2010	48.99
CDC 2214997	23007	16/04/2010	48.98
CDC 2214998	23007	16/04/2010	48.98
CDC 2214999	23007	16/04/2010	48.98
CDC 2215000	23007	16/04/2010	48.98
CDC 2215001	23007	16/04/2010	48.98
CDC 2215002	23007	16/04/2010	48.98
CDC 2223062	23J15	28/04/2010	49.69
CDC 2223063	23J15	28/04/2010	37.51



Title No.	Sheet	Issued	Area (ha.)
CDC 2223064	23J15	28/04/2010	49.68
CDC 2223066	23J15	28/04/2010	49.67
CDC 2233265	23J10	11/05/2010	11.63
CDC 2233266	23J10	11/05/2010	10.28
CDC 2233267	23J10	11/05/2010	48.76
CDC 2233268	23J10	11/05/2010	49.79
CDC 2233269	23J10	11/05/2010	37.6
CDC 2233270	23J10	11/05/2010	49.78
CDC 2242564	24E08	27/07/2010	46.35
CDC 2242565	24E08	27/07/2010	46.35
CDC 2242566	24E08	27/07/2010	46.35
CDC 2242567	24E08	27/07/2010	46.35
CDC 2242568	24E08	27/07/2010	46.35
CDC 2242569	24E08	27/07/2010	46.34
CDC 2242570	24E08	27/07/2010	46.34
CDC 2242571	24E08	27/07/2010	46.34
CDC 2242572	24E08	27/07/2010	46.34
CDC 2242573	24E08	27/07/2010	46.34
CDC 2242574	24E09	27/07/2010	46.33
CDC 2242575	24E09	27/07/2010	46.33
CDC 2242576	24E09	27/07/2010	46.33
CDC 2242577	24E09	27/07/2010	46.33
CDC 2242578	24E09	27/07/2010	46.32
CDC 2242579	24E09	27/07/2010	46.32
CDC 2242580	24E09	27/07/2010	46.31
CDC 2242581	24E09	27/07/2010	46.31
CDC 2242582	24E09	27/07/2010	46.3
CDC 2242583	24E09	27/07/2010	46.29
CDC 2242584	24E09	27/07/2010	46.29
CDC 2298702	23J10	22/06/2011	17.22
CDC 2298703	23J10	22/06/2011	40.99
CDC 2298704	23J10	22/06/2011	10.88
CDC 2298705	23J10	22/06/2011	1.7
CDC 2298706	23J10	22/06/2011	36.79
CDC 2298707	23J15	22/06/2011	11.62
CDC 2298708	23J15	22/06/2011	37.3
CDC 2298709	23J15	22/06/2011	49.75
CDC 2298710	23J15	22/06/2011	49.74
CDC 2317779	23J10	13/10/2011	49.79
CDC 2317780	23J10	13/10/2011	32.37



Title No.	Sheet	Issued	Area (ha.)
CDC 2317781	23J10	13/10/2011	49.78
CDC 2317782	23J10	13/10/2011	28.74
CDC 2317783	23J10	13/10/2011	4.01
CDC 2317784	23J10	13/10/2011	39.44
CDC 2317785	23J10	13/10/2011	21.59
CDC 2317786	23J15	13/10/2011	3.61
CDC 2317787	23J15	13/10/2011	0.67
CDC 2350893	23J15	12/06/2012	49.69
CDC 2375170	23J15	14/01/2013	8.54
CDC 2375172	23J15	14/01/2013	36.57
CDC 2375173	23J15	14/01/2013	34.28
CDC 2375174	23J15	14/01/2013	7.77
CDC 2386623	23J10	18/06/2013	10.17
CDC 2386624	23J10	18/06/2013	1.78
	Total	292 Titles	11,824.8

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

Title No.	NTS Sheet	Date of Registration	Area (ha.)
CDC 2386626	23J14	18/06/2013	2.84
CDC 2386627	23J14	18/06/2013	8.98
CDC 2386628	23J14	18/06/2013	6.85
CDC 2386629	23J14	18/06/2013	0.95
CDC 2386630	23J14	18/06/2013	1.18
CDC 2386631	23J14	18/06/2013	3.62
CDC 2386632	23J14	18/06/2013	5.85
CDC 2386633	23J14	18/06/2013	0.14
CDC 2386634	23J14	18/06/2013	6.33
CDC 2386635	23J14	18/06/2013	1.13
CDC 2386636	23J14	18/06/2013	11.62
CDC 2386637	23J14	18/06/2013	8.8
CDC 2386638	23J14	18/06/2013	0.51
CDC 2386639	23J14	18/06/2013	0.04
CDC 2386640	23J14	18/06/2013	2.44
CDC 2386641	23J14	18/06/2013	4.37
CDC 2386642	23J14	18/06/2013	17.33
CDC 2386643	23J14	18/06/2013	5.35

T '(1, N),		Date of	
Title No.	NTS Sheet	Registration	Area (ha.)
CDC 2386644	23J14	18/06/2013	5.17
CDC 2386645	23J15	18/06/2013	0.88
CDC 2386647	23J15	18/06/2013	25.39
CDC 2386648	23J15	18/06/2013	12.68
CDC 2386649	23J15	18/06/2013	1.65
CDC 2386650	23J15	18/06/2013	28.27
CDC 2386651	23J15	18/06/2013	0.54
CDC 2386652	23J15	18/06/2013	3.03
CDC 2386653	23J15	18/06/2013	36.66
CDC 2386654	23J15	18/06/2013	49.63
CDC 2386655	23J15	18/06/2013	49.68
CDC 2386656	23J15	18/06/2013	45.6
CDC 2386657	23J15	18/06/2013	15.62
CDC 2386658	23J15	18/06/2013	0.03
CDC 2386659	23J15	18/06/2013	0.21
CDC 2386660	23J15	18/06/2013	9.9
CDC 2386661	23J15	18/06/2013	16.87
CDC 2386662	23J15	18/06/2013	15.21
CDC 2386663	23J15	18/06/2013	29.57
CDC 2386664	23J15	18/06/2013	27.5
CDC 2386665	23J15	18/06/2013	0.42
CDC 2386666	23J15	18/06/2013	8.9
CDC 2386667	23J15	18/06/2013	11.17
CDC 2386668	23J15	18/06/2013	0.22
CDC 2386669	23J15	18/06/2013	22.08
CDC 2386670	23J15	18/06/2013	15.08
CDC 2386671	23J15	18/06/2013	0.3
CDC 2386672	23J15	18/06/2013	17.44
CDC 2386673	23J15	18/06/2013	0.88
CDC 2386674	23J15	18/06/2013	15.54
CDC 2386675	23J15	18/06/2013	24.64
CDC 2386676	23J15	18/06/2013	6.09
CDC 2386677	23J15	18/06/2013	3.48
CDC 2386678	23J15	18/06/2013	29.63
CDC 2386679	23J15	18/06/2013	11.55
CDC 2386680	23J15	18/06/2013	1.98
CDC 2386681	23J15	18/06/2013	1.53
CDC 2386682	23J15	18/06/2013	9.54
CDC 2386683	23J15	18/06/2013	9.62



		Date of	
Title No.	NTS Sheet	Registration	Area (ha.)
CDC 2386684	23J15	18/06/2013	10.46
CDC 2386685	23J15	18/06/2013	9.12
CDC 2386686	23J15	18/06/2013	0.89
CDC 2386687	23J15	18/06/2013	20.06
CDC 2386688	23J15	18/06/2013	2.65
CDC 2386689	23J15	18/06/2013	29.05
CDC 2386690	23J15	18/06/2013	4.68
CDC 2386691	23J15	18/06/2013	0.02
CDC 2386692	23J15	18/06/2013	3.59
CDC 2386693	23J15	18/06/2013	10.2
CDC 2386694	23J15	18/06/2013	2.34
CDC 2386695	23J15	18/06/2013	25.02
CDC 2386696	23J15	18/06/2013	13.38
CDC 2386697	23J15	18/06/2013	1.24
CDC 2386698	23J15	18/06/2013	2.64
CDC 2386699	23J15	18/06/2013	33.63
CDC 2386700	23J15	18/06/2013	3.82
CDC 2386701	23J15	18/06/2013	0.52
CDC 2386702	23J15	18/06/2013	8.46
CDC 2386703	23J15	18/06/2013	6.86
CDC 2386704	23J15	18/06/2013	1.09
CDC 2386705	23J15	18/06/2013	22.13
CDC 2386706	23J15	18/06/2013	24.97
CDC 2386707	23J15	18/06/2013	2.29
CDC 2386708	23002	18/06/2013	10.03
CDC 2386709	23O02	18/06/2013	30.11
CDC 2386710	23002	18/06/2013	3.65
CDC 2386711	23002	18/06/2013	3.97
CDC 2386712	23002	18/06/2013	28.55
CDC 2386713	23002	18/06/2013	23.53
CDC 2386714	23002	18/06/2013	1.59
CDC 2386715	23O02	18/06/2013	0.76
CDC 2386716	23O02	18/06/2013	4.43
CDC 2386717	23O03	18/06/2013	0.03
CDC 2386718	23O03	18/06/2013	0.55
CDC 2386719	23O03	18/06/2013	1.23
CDC 2386720	23O03	18/06/2013	0.39
CDC 2386721	23O03	18/06/2013	12.01
CDC 2386722	23O03	18/06/2013	47.96



		Date of	
Title No.	NTS Sheet	Registration	Area (ha.)
CDC 2386723	23003	18/06/2013	49.07
CDC 2386724	23O03	18/06/2013	47.5
CDC 2386725	23O03	18/06/2013	22.69
CDC 2386726	23O03	18/06/2013	0.69
CDC 2386727	23O03	18/06/2013	3.69
CDC 2386728	23O03	18/06/2013	43.8
CDC 2386729	23O03	18/06/2013	49.22
CDC 2386730	23003	18/06/2013	37.21
CDC 2386731	23O03	18/06/2013	7.22
CDC 2386732	23O03	18/06/2013	1.65
CDC 2386733	23003	18/06/2013	4.85
CDC 2386734	23003	18/06/2013	5.31
CDC 2386735	23003	18/06/2013	0.29
CDC 2386736	23005	18/06/2013	4.77
CDC 2386737	23005	18/06/2013	34.45
CDC 2386738	23005	18/06/2013	34.47
CDC 2386739	23O05	18/06/2013	22.47
CDC 2386740	23O05	18/06/2013	4.67
CDC 2386741	23005	18/06/2013	9.55
CDC 2386742	23O05	18/06/2013	43.51
CDC 2386743	23005	18/06/2013	49.03
CDC 2386744	23005	18/06/2013	48.98
CDC 2386745	23005	18/06/2013	27.09
CDC 2386746	23005	18/06/2013	0.63
CDC 2386747	23O05	18/06/2013	16.93
CDC 2386748	23O05	18/06/2013	47.13
CDC 2386749	23005	18/06/2013	49.02
CDC 2386750	23O05	18/06/2013	47.6
CDC 2386751	23O05	18/06/2013	18.25
CDC 2386752	23O05	18/06/2013	10.62
CDC 2386753	23005	18/06/2013	31.93
CDC 2386754	23O05	18/06/2013	31.57
CDC 2386755	23O05	18/06/2013	31.07
CDC 2386756	23O05	18/06/2013	10.87
CDC 2386757	23006	18/06/2013	7.2
CDC 2386758	23006	18/06/2013	30.66
CDC 2386759	23006	18/06/2013	6.94
CDC 2386760	23O06	18/06/2013	4.42
CDC 2386761	23006	18/06/2013	28.66

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Title No.	NTS Sheet	Date of Registration	Area (ha.)
CDC 2386762	23006	18/06/2013	35.58
CDC 2386763	23006	18/06/2013	10.01
CDC 2386764	23006	18/06/2013	5.43
CDC 2386765	23006	18/06/2013	12.91
CDC 2386766	23006	18/06/2013	0.01
CDC 2386767	23J15	18/06/2013	0.01
CDC 2386768	23J15	18/06/2013	0.01
	Total	142 Titles	2,050.05

LIM applied for mining leases on 13 claims from the Ministry of Natural Resources, Province of Quebec. Claims are currently suspended until final decision from the Ministry.

Title No.	Sheet	Issued	Area (ha.)
CDC 58045	23J15	24/02/2005	49.76
CDC 58048	23J10	24/02/2005	47.86
CDC 2168471	23J15	30/07/2008	8.07
CDC 2168536	23J15	30/07/2008	13.02
CDC 2183175	23J15	08/05/2009	49.67
CDC 2188826	23J10	17/09/2009	49.77
CDC 2223065	23J15	28/04/2010	46.66
CDC 2223067	23J15	28/04/2010	49.67
CDC 2259638	23J10	09/11/2010	49.77
CDC 2279509	23J15	25/03/2011	48.55
CDC 2375171	23J15	14/01/2013	45.41
CDC 2386625	23J10	18/06/2013	1.91
CDC 2386646	23J15	18/06/2013	6.84

Table 4-5: Claims applied for mining lease in QC





Figure 4-1: Project Location Map



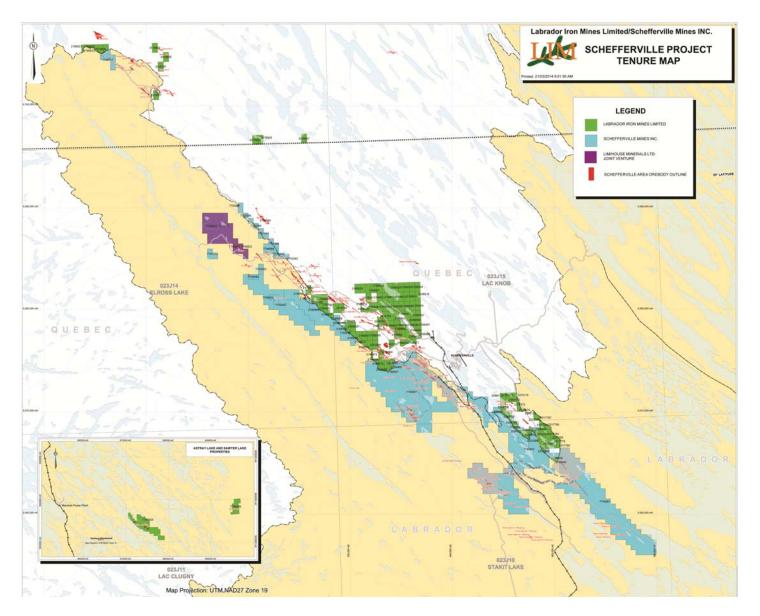


Figure 4-2: Map of LIMHL Mining Licenses and Titles (as of April 12th, 2013)

SGS Canada Inc.

The properties considered in LIM's Stage One are:

4.1 James Deposit

The James deposit is located in the NE portion of the license 020432M; which covers an area of 37 km2. The license is held by LIM (Table 4-6) and entirely covers the James deposit. The status of this license is in good standing.

Table 4-6: James Deposit Mineral License

License No.	Holder	Issued	Claims	Extension (km2)	Comments
020432M	Labrador Iron Mines Limited	Apr 12, 2004	148	37	This license is a "regrouping" that was executed during 2012 and replaces all previous licenses.

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 020440M which covers an area of 33.00 km2. It is held by LIM (Table 4-7). The deposits considered by LIM for exploitation are Redmond 2B and Redmond 5 and both are covered by the license. The status of this license is in good standing.

Table 4-7: Redmond Deposits Mineral License

License No.	Holder	Issued	Claims	Extension (km2)	Comments
020440M	Labrador Iron Mines Limited	Aug 16, 2004	132	33	This license is a "regrouping" that was executed during 2012 and replaces all previous licenses.

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 license number 020432M comprising 37.00 km2 held by Labrador Iron Mines Limited (Table 4-8). The status of these licenses is in good standing.

Table 4-8: Gill Deposit Mineral Licenses

License No.	Holder	Issued	Claims	Extension (km2)	Comments
020432M	Labrador Iron Mines Limited	Apr 12, 2004	148	37	This license is a "regrouping" that was executed during 2012 and replaces all previous licenses.



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 020432M (Table 4-9). The status of this license is in good standing.

Table 4-9: Ruth Lake 8 Property Mineral License

License No.	Holder	Issued	Claims	Extension (km2)	Comments
020432M	Labrador Iron Mines Limited	Apr 12, 2004	148	37.00	This license is a "regrouping" that was executed during 2012 and replaces all previous licenses.

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 license number 020440M with a total area of 33.00 km2 held by Labrador Iron Mines Limited (Table 4-10). The mineral license is in good standing.

Table 4-10: Knob Lake 1 Deposit Mineral Licenses

License No.	Holder	Issued	Claims	Extension (km2)	Comments
020440M	Labrador Iron Mines Limited	Aug 16, 2004	132	33.00	This license is a "regrouping" that was executed during 2012 and replaces all previous licenses.

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 claims CDC2168483 and CDC2168494 held by SMI and by mining claims CDC2386678 and CDC2386690 held by Hollinger.



Mining Claims	Holder	Issued	Area (ha.)	Comments
CDC2168483	Schefferville Mines Inc.	July 30, 2008	1	
CDC2168494	Schefferville Mines Inc.	July 30, 2008	5.11	
CDC2386678	Hollinger North Shore Exploration Inc.	Jun 18, 2013	29.63	Held under operating license
CDC2386690	Hollinger North Shore Exploration Inc.	Jun 18, 2013	4.68	Held under operating license

Table 4-11: Denault 1 Deposit Mining Claims

4.7 Wishart Property

The Wishart property is located 6.5 km southwest of Schefferville, past a large ridge formation west of the Knob Lake deposit, in Newfoundland. It is characterized by a historical IOCC mining pit and 2 distinct large stockpiles to the north and south of the pit. Table 4-10 summarizes the claim information.

Table 4-12: Wishart Property

Mine Claim No.	Holder	Issued	Claims	Extension (km2)	Comments
020432M	Labrador Iron Mines Limited	Apr 12, 2004	148	37.00	This license is a "regrouping" that was executed during 2012 and replaces all previous licenses.

4.8 Ferriman Property

The Ferriman property is located 7 km west of Schefferville, in Quebec. It is characterized by a historical mining open pit from IOCC, with 3 distinct stockpiles. Quebec claim numbers 2223067, 2183175 and 2223065 contain the stockpiles that had work conducted during the 2012 season. Table 4-11 below summarizes the claim information.

Table 4-13: Ferriman Property

Mine Claim No.	Holder	Issued	Claims	Area (Has)	Comments
CDC 2223067	Schefferville Mines Inc.	April 28, 2010	1	49.67	
CDC 2183175	Schefferville Mines Inc.	May 8, 2009	1	49.67	
CDC 2223065	Schefferville Mines Inc.	April 28, 2010	1	46.66	



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5. Accessibility, Climate, Local Resources, Infrastructure and 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 LIM 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 was, since the closure of the mining operations of IOC and until the recent recommencement of mining, 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, remained 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 Kawawachikamach (Naskapi) reserves. Kawawachikamach, 20 km north of Schefferville, is a modern community with its own school, medical clinic and recreational complex.

The majority of the workforce that is currently engaged in LIM's mining operation in Labrador is 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 LIM's mining operations.

5.4 Infrastructure

Redmond 2B and Redmond 5 are within 12 km of each other and after James will form the next 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, 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. In addition to transporting iron ore TSH operates a passenger and light freight traffic between Sept-Îles and Schefferville three times a week.

LIM has established a 6 km spur line which connects the Silver Yards to the TSH railway.

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 Mine to Wabush; and Arnaud Railways hauling iron ore for Wabush Mines ("Wabush") and the Bloom Lake Mine between Arnaud Junction and Pointe Noire. CRC hauls iron concentrates from Fermont area to Port-Cartier for Arcelor Mittal. The latter railway is not connected to TSH, QNS&L, Bloom Lake or Arnaud.

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 energyefficient 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 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 LIM. LIM 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 tonnes 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 dry-basis 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.



	Iron Resources			Manganese Resources			
Property	Tonnes (x 1000)	Fe%	SiO ₂ %	Tonnes (x 1000)	Fe%	SiO ₂ %	Mn%
* Astray Lake	7,271	70.5	4.2				
Howse	25,687	63.7	5.5				
Sawyer Lake	11,520	64.4	11.9				
Gill Mine	4,149	55.9	11.7	269	48.7	10.2	10.2
Green Lake	329	57.1	8.7				
Kivivic-1	6,004	59.2	9.3				
Ruth Lake-8	373	58.6	10.6				
Wishart Mine	188	59.0	13.4				
Wishart-2	499	57.8	14.3				
TOTAL	56,020	63.5	7.7	269	48.7	10.2	10.2

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

*Historical resources in this table are reported on a dry basis. IOC reported historical resources on a "natural" basis, including moisture content. Non-compliant with NI 43-101.



	Iron Resources			Manganese Resources			
Property	Tonnes (x 1000)	Fe%	SiO ₂ %	Tonnes (x 1000)	Fe%	SiO ₂ %	Mn%
Barney 1	5,665	59.8	8.5	56	54.4	3.9	5.5
Eclipse	33,963	61.6	5.7	1,890	54.6	4.9	4.5
Fleming 6	700	55.3	10.1	20	48.2	8.0	8.4
Fleming 7S	1,777	61.3	8.3				
Fleming 9	383	58.9	9.7				
Lance Ridge	1,249	59.1	9.3	256	45.5	6.3	11.3
Partington 2	3,107	60.0	10.0				
Wollett 1	2,052	61.6	6.5				
Star Creek 1	1,331	57.2	8.2	1,759	51.5	7.0	7.3
Star Creek 3	56	61.9	9.4				
Sunny 3	421	63.1	7.3				
Trough 1	1,715	56.0	9.8	200	50.3	7.5	6.7
Total:	52,420	60.9	6.8	4,182	52.5	6.0	6.2

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

* Historical resources in this table are reported on a dry basis. IOC reported historical resources on a "natural" basis, including moisture content. Non-compliant with NI 43-101.

Iron Resources			Manganese Resources				
Province	Tonnes (x 1000)	Fe%	SiO ₂ %	Tonnes (x 1000)	Fe%	SiO ₂ %	Mn%
NL	56,020	63.5	7.7	269	48.7	10.2	10.2
QC	52,420	60.9	6.8	4,182	52.5	6.0	6.2
Combined	108,440	62.2	7.3	4,451	52.27	6.3	6.4

* Historical resources in this table are reported on a dry basis. IOC reported historical resources on a "natural" basis, including moisture content. Non-compliant with NI 43-101

The historical dry-basis 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. For LIMH production results, see section 17.



7. Geological Setting and Mineralization

7.1 Regional Geology

The following summarizes the general geological settings of the 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 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.





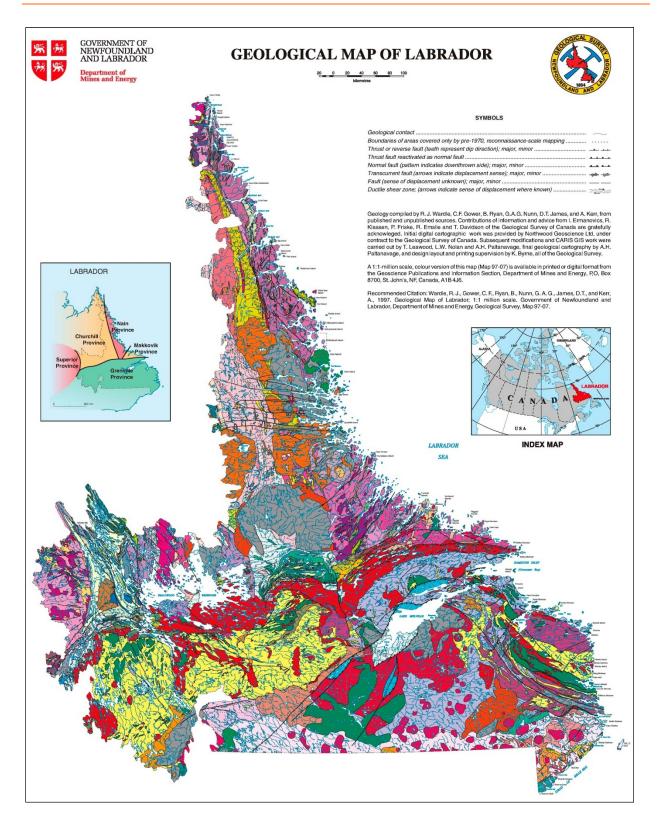


Figure 7-1: Geological Map of Labrador

SGS Canada Inc.



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 this 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 m near the western margin of the belt to more than 365 m 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 m but in many other places it forms discontinuous lenses that are, at most, 30 m 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 m 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 m 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 m 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 forms part of the resources for LIMHL's development projects. LIM updated its Ore Type category in 2014. The direct shipping is categorised by LIMH using categories based mainly on chemical and textural compositions. This classification is shown in Table 7-1.

Schefferville Ore types (LIMH SETTINGS)						
TYPE	Fe(%)	P(%)				
DRO (Direct Railing Ore)	>60	<0.05				
PHG(Plant High Grade)	>55 & <60	<0.05				
PLG(Plant Low Grade)	>50 & <55	<0.05				
Yellow (Hi Phosphorous)	>50	>0.05				
TRX(Treat Rock)	>45 & <50					

 Table 7-1: Classification of Ore Type

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

The yellow ore, which is made up of the minerals limonite and goethite, is 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% SiO₂ dry basis), approximately 250 million tonnes of iron resources remain in the Schefferville area, exclusive of magnetite taconite. LIM has acquired the rights to approximately 50% of this



remaining historic iron resource in 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 LIM.

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 occurring 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 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 m 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 m by 80 m wide and 100 m 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.

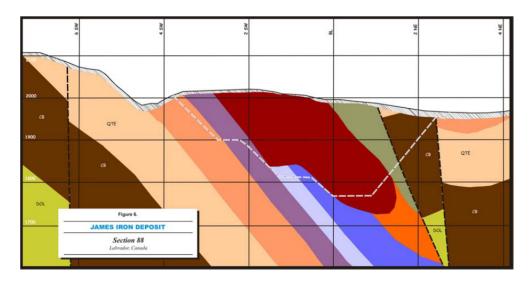


Figure 8-1: Generalized Cross Section – James Deposits

Source: Labrador Iron Mines Limited

8.1.1.2 Fleming 9

The Fleming 9 deposit is located approximately 15 km 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 conformable 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. 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 12 m. 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 drilled two large treat rock piles that are located immediately to the southwest of the Wishart 1 pit and calculated an indicated resource of 1.1 million tonnes and an inferred resource of 1.2 million tonnes at 48.24%Fe.

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 207,000 tonnes grading 53.69% Fe and 12.17% SiO₂. Wishart 2 resources are given as 554,000 tonnes grading 52.02% Fe and 12.93% SiO₂. The Wishart 2 property contains a Mn resource of 9,000 tonnes grading 46.37% Fe, 4.93% SiO₂ and 4.35% Mn.

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 760 m, was hook-shaped in plan, and had a maximum width in the central part of 240 m. 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 Lejeune 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 northnorthwest 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 5 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 and 2008 to 2012 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 drillholes 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°.

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) drillholes. 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 drillhole 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 m.

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 northplunging 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 reeflike 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. The structure of Kivivic 1 is a faulted syncline. The average depth of the deposit was said to be 43 m and the maximum depth greater than 60 m. 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.

8.1.5.5 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.

8.1.5.6 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, 137 m along strike, with a maximum thickness of 6 m. The Ruth B occurrence is 91 m northwest of Ruth A and is completely hosted within Fleming Formation chert breccia. The Ruth C deposit is 67 m north of Ruth B and is recognized over a length of 183 m, after which it is covered by the Ruth iron mine waste pile. The mineralized zone, which has a maximum reported thickness is 34 m, is hosted entirely by altered, Fleming Formation chert breccia.

8.2.1.3 Dry Lake

Located 500 m 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 1 171 m 9 m) contains up to 25% Mn, with Mn:Fe ratios around 1.0, whereas Lens 2 183 m 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 m 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% SiO₂ 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 southsoutheast 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 by 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° to 70° 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 m 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 4.5 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 exploration 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% MN 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 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 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.



In 1990, La Fosse returned to the Ryan manganese showing to continue exploration. Their work further defined the two manganese lenses into Zone 1 171 m 9 m containing up to 25% Mn with Mn: Fe ratios around 1.0 and, Zone 2 183 m 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 488m, 3 diamond-drillholes 136 m, and 4 airtrac drillholes 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 tonne 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, located 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 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 m were excavated and 1,042 grab and 35 core samples from 8 drillholes 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 m) 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 drillholes), 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 m 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 m 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. LIM 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.



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

Table 9-1: Trench Sample Results – James Deposit

9.3 2008 and 2009 to 2012 Exploration

LIMHL continued its exploration program on the properties in the Schefferville area during 2008, and 2009 to 2012.

9.3.1 2008 Program

In addition to the drilling program (See Section10) 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 drillholes, as well as the trenches and a total of 90 old IOC RC drillholes 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 m long trench excavated in 2006, LIMHL developed 5 trenches (for a total of 333.82 m) on the James property, 3 trenches (for a total of 348.02 m) on Redmond 2B property and 4 trenches (for a total of 252 m) 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 tonne 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 drillholes, trenches as well as any old IOC RC drillholes 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 m of trenching were excavated. LIM developed 8 trenches (for a total of 439 m) on the Houston 3 property, 5 trenches (for a total of 294 m) on Redmond 2B property, 4 trenches (for a total of 189 m) on the Redmond 5 deposit and 14 trenches (for a total of 603 m) 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 Section14.

9.3.3 2010 Program

The work carried out during the 2010 exploration program included reverse circulation drilling in the Houston area totalled 1804 m in 26 drillholes. A trenching program on the Ruth Lake 8 deposit totalled 1452 m 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 were used to plan 4 to 5 RC drillholes 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. LIM contracted Fugro Airborne Surveys Pty Ltd, Australia to conduct the survey.

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 were 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 drillholes 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. LIM contracted to Fugro Airborne Surveys Pty Ltd, Osborne Park, WA Australia.

In addition, the consulting services of Mr. Jerry Roth, Strata Gex Geophysics were used in planning and interpreting the survey.





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.

9.3.4.2 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° and spaced at 200m. Tie lines were flown at 308° and the total area covered was 1346 sq km.

9.3.5 2012 Program

For the 2012 season, a total of 102 drillholes totaling 4,393.4 m were completed. LIM had contracted Cabo Drilling to complete RC drilling activities, and contracted Major Drilling for the completion of diamond drillholes.

A stockpile assessment program of test pitting was carried out on historic IOCC treat rock and low grade stockpiles in the Wishart, Ferriman, Burnt Creek, Gagnon and Knox properties. A total of 1090 samples were collected from 1m deep test pits excavated by a small backhoe. Table 9-2 below summarizes the program.



Table 9-2: 2012 Testpit Program Summary

Property	# of Stockpiles	Total Number of Testpits
Wishart	3	769
Ferriman	2	166
Burnt Creek	4	29
Gagnon	3	58
Knox	2	68
1	Total	1090

Samples were collected from 1m deep test pits excavated by a backhoe. The backhoe would remove the top 30 or 40 cm of material and then remove one scoop of material and pile it beside the pit. The geologist would then collect representative sample material for assaying using a shovel. The spacing of test pits varied from 10m to 30m depending on the size of the stockpile.

9.3.5.1 2012 Geophysics Program

9.3.5.1.1 Ground Gravity and Total Field Magnetic Survey

During the 2012 season between June 15th and July 18th a Ground Gravity and Total Field Magnetics survey was carried out over four LIM properties. A total of 34,525 m in 40 lines was surveyed. A summary is below in Table 9-3. The company contracted to perform the work was GeoSig Inc.

Table 9-3: Ground Gravity Survey

LIM, 2012 Ground Gravity and Total field Magnetic Surveys						
Area	License	No. of Lines	Meters surveyed			
Howse	020430M	12	14550			
James Mine	020432M	14	7075			
Elizabeth lake	020432M	3	6400			
Gagnon		3	6500			
	Total	32	34,525			



9.3.5.1.2 Down Hole Gravilog Survey

A borehole gravity survey (Gravilog) was carried out in selected drillholes in the James South Extension and Houston properties. The goal of this geophysical campaign was to determine the bulk density of the hematite mineralization having friable texture (strongly altered), intersected by the boreholes. Holes selected for the survey and details are listed in Table 9-4 below. The contractor carrying out the survey was Abitibi Géophysique Inc.

LIM 2012 Down Hole Geophysical Survey					
License	icense Area Hole Surveyed				
020432M	James	DD-JM031-2012	85		
020432M	James	DD-JM033-2012	70		
020432M	James	DD-JM039-2012	100		
020432M	James	DD-JM040-2012	100		
			355		

Table 9-4: Down Hole Geophysical Survey

9.3.6 2013 Program

This description is taken from the 2013 assessment report (NFLD) provided by LIMH and describes the work carried out during the 2013 exploration program. Planning for the 2013 Exploration Program began in January 2013 and crews began arriving in Labrador West on July 24th. The late start date was due to logistics and mining priorities and resulted into a very late shutdown date. The first drilling commenced on September 10th and the final drillhole was completed on December 15th. The last of the field crew departed the Schefferville project area on December 20th.

Between September 10th and December 15th 2013, a total of 70 HQ3 size core diamond drillholes totaling 7,062m were completed on the Schefferville area properties. All drilling during 2013 was carried out by Major Drilling. The maximum number of drill rigs on site at any one time was five. A summary of drilling in each area is given below.

LIM NL Drill Program, 2013 DDH (# Holes) DDH (m) License Area James/Gill/Bean Lake 020432M 6548 61 020440M Redmond 5 9 514 Total 70 7,062

Table 9-5: LIMH NL Drill Program, 2013



A total of 61 exploration drillholes (6,548 m) were also completed on the James property which comprises the James Mine, Gill Mine and Bean Lake Project areas. Five trenches (142.7m) and 9 infill/confirmation drillholes (514m) were completed on Redmond 5.

DETAILS	Core	meters	RC	meters
Gill Mine	33	4,455		
James Pit	15	1,074		
Bean Lake	13	1,019		
SUB-TOTAL	61	6,548		
James TRX			30	566.0
Ferriman RC			13	504.0
Ferriman Core	2	54		
Redmond 5	9	514		

All assaying for exploration was carried out by Actlabs (Ancaster).



10. Drilling

Traditionally, IOC used a combination of reverse circulation (RC) drilling, diamond drilling and trenching to generate data for reserve and resource calculation. A large amount 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 to 2012. A diamond drill was used in 2006, for a total of 352 m from 6 diamond drillholes with limited success due to recovery issues. It was not until 2012 that exploration drilling began using diamond drills on a regular basis using newer techniques that greatly improved recovery in the soft ground.

In 2008, LIMHL used an 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, provided LIMHL with highly mobile and stable drilling platforms with very small environmental footprints. LIMHL's drill rigs from Cabo were 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.

In 2008, 10 diamond drillholes were drilled for a total of 552 m. The majority of the drilling program was carried out with RC drilling namely 67 RC holes for a total of 3,856 m.

For 2009, a total of 29 RC drillholes were completed for a total of 1,639 m in the James, Redmond 2B and 5, Knob Lake 1 and Howse properties.

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

In the 2011 drilling program a total of 6,669m of RC drilling was carried out in 129 drillholes excluding the Houston property drilling.

For the 2012 season, a total of 102 drillholes totaling 4,393.4 m were completed. Diamond drills operated by Major Drilling carried out 2,087.4 m of core drilling in 24 drillholes. A reverse circulation rig operated by Cabo Drilling completed 2,306m of drilling in 79 drillholes in the Wishart and Ferrimen properties from August 4th to October 4th.

During 2013, all drilling was done by Major Drilling. A total of 33 drillholes totaling 6,440.95m were completed. Diamond drills operated by Major Drilling carried out 2,087.4 m of core drilling in 24 drillholes.



Table 10-1 to Table 10-7 show the various drilling programs the results of which were included in the LIM/SMI database for the resource estimations. Drillhole general location maps are available in appendix (Illustrations)

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

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

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

Property	Туре	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 drillholes to sample "Treat Rock" stock pile (4 holes)

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

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

Property	Туре	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 [*]

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

*This total does not include the Houston property drilling program

Table 10-6: 2012 Drill Program (DD & RC, NL & QC)

Property	Туре	Holes	Length (m.)
James Mine	DD	24	2,087.4
Wishart	RC	55	1,525
Ferrimen	RC	24	781
	Total	102	4,393.4 [*]

*This total does not include the Houston property drilling program

Table 10-7: 2013 Drill Program (DD & RC, NL & QC)

Property	Туре	Holes	Length (m.)
James Pit	DD	15	1089
Bean Lake	DD	13	1015.1
Gill	DD	33	4426.95
	Total	61	6,531.05 [*]

*This total does not include the Houston property drilling program

10.1 Drilling Procedures

10.1.1 Diamond Drilling Procedures

Drillholes were planned (azimuth, dip, length) by geologists on available vertical cross-sections and on vertical longitudinal sections. Historically, drill collars were spotted on the field lines with the use of surveying equipment. Usually, two front sights, identified with wood pickets, were used to align the drill rig. Drillhole locations were spotted with a Trimble digital GPS (DGPS) with added precision. After the drilling was completed, the collars were surveyed with the same DGPS. The core diameter for all drillholes starting 2013 was NQ (47.6 mm). Down hole survey measurements (azimuth, dip, and depth) were measured with the Maxibor borehole survey instruments approximately every 50 m. These instruments are not affected by magnetism and are taken inside drill rods. They provide accuracy better than $\pm 1^{\circ}$. In 2013, the Maxibor instrument was used intermittently due to faulty readings. The instrument was sent back but never returned. It is the author's position that the relatively shallow depths of the 2013 drillholes and the potential deviations will have little effect on the Mineral Resource estimate.

Once retrieved from core barrel the core was placed in sequential order in marked and prepared core boxes labeled with the hole number. Each run, usually 1.5 to 3 m meters, depending on ground conditions is identified by a wood block on which the depth of the hole was marked. At the end of each shift, core boxes were bound and transported by the drill foreman to the core logging facility where the boxes were opened by LIMH personnel in Schefferville. Core was logged and sampled upon reception however some back log occurred in 2012 and 2013 and extended the core logging and sampling campaign until beginning of 2014. Core was measured and logged for lithology, structure, texture, and alteration by LIMH staff. Rock Quality Determination data (RQD) and specific gravity (SG) measurements were also recorded. LIMH also reports that core photographs were taken for all the drillholes. LIMH geologists selected samples for SG determinations based on visually estimated iron content, high or low, to make the results as representative as possible. LIMH evaluated that core recovery from drilling operations is over than 85% with an average of 90%.

10.1.2 RC Drilling Procedures

Cabo's RC drills include the Acker long stroke drills which, when mounted on one of the Flex TracNodwell carriers or fly skids, provided LIMHL with highly mobile and stable drilling platforms with very small environmental footprints. LIMHL's drill rigs from Cabo were 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. Additional information on RC drilling procedures is described in section 11. Based on RC drill supervision by SGS in 2008 and 2012 and by LIMH, the recovery from RC drilling was estimated to be of sufficient quantity.



11. Sample Preparation, Analyses 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 m). 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 2012 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 drillholes were sampled. The average length of the RC samples was 3 m. 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.

In 2012 LIMHL started drilling DDH holes in addition to RC holes. A geotechnician observed the drilling process and conducted basic geotechnical descriptions of the core at the drill. The drill core was boxed and tied with metal wire. The core was brought back to the LIMHL core shed on a regular basis. A geologist logged the core at the core shed, the core boxed we resealed with tape and the witness samples are stored. A technician split the core manually in combination with a hydraulic splitter and the samples were sent to LIMHL lab for preparation.



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 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.

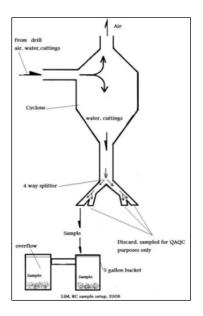


Figure 11-1: RC Size Reduction and Sampling (Method used in the 2008 drilling Program)

11.1.2 Rotary Splitter RC Sample Size Reduction (2009-2012)

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 micropore bags which allowed water to slowly drain through while capturing very fine sample material (Figure 11-2).

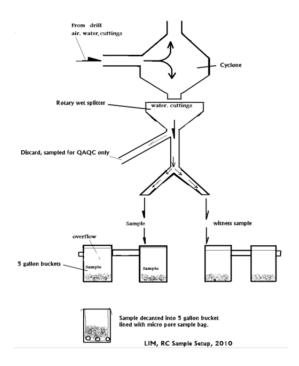


Figure 11-2: 2010 & 2011 Reverse Circulation Sampling Setup Diagram

11.1.3 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 m, 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.

11.2 Diamond Drill Core Sampling

Core was delivered from the rig to the company core shed on a regular basis by LIM employees or the drill contractors. Geotechnicians would first calculate recovery and photograph the core. A geologist would log the core and mark out sample intervals. After this the geotechnicians would take a split of the core for assaying leaving a ½ split in the box for reference.

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.

In 2012 core samples were brought to the preparation laboratory on a regular basis. Samples were place in sequential order in durable zip tied plastic bags. Sample numbers where written on the bags and a ticket was placed in the bag.

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 m, 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.

11.3.4 2012

For the 2012 season, two types of samples were gathered, RC chips and diamond drill core.

RC drill cuttings followed previously established procedures from following years. All cores were delivered to LIM's James Mine Laboratory for sample preparation. The mine lab would prepare a pulp and coarse reject of each sample. The pulp would then be shipped via Canada Post to Actlabs (Ancaster) and the coarse reject would be stored on site for future reference.

11.4 Sample Preparation at SGS-Lakefield Laboratory

The following is a table taken from the SGS – Geostat report, describing the RC drillhole 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				
111103	PRP89 Pulverize up to 250g of riffle split sample to 75µm			

11.4.1 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 drillhole analysis protocols used at the SGS-Lakefield laboratory facility in Lakefield, Ontario. This description below was given by SGS-Lakefield:

- X-Ray Fluorescence Analysis Code: XRF76Z
- Parameters measured, units: SiO₂, Al₂O₃, Fe₂O₃, MgO, CaO, Na₂O, K₂O, P₂O₅, MnO, TiO₂, Cr₂O₃, Ni, Co, La₂O₃, Ce₂O₃,Nd₂O₃, Pr₂O₃, Sm₂O₃, BaO, SrO, ZrO₂, HfO₂, Y₂O₃, Nb₂O₅, ThO₂, U₃O₈, SnO₂, WO₃, Ta₂O₅,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.

Element	Limit (%)	Element	Limit (%)	Element	Limit (%)	
SiO ₂	0.01	Na ₂ O	0.01	CaO	0.01	
Al ₂ O ₃	0.01	TiO ₂	0.01	MgO	0.01	
Fetotal as Fe ₂ O ₃	0.01	Cr ₂ O ₃	0.01	K ₂ O	0.01	
P ₂ O ₅	0.01	V ₂ O ₅	0.01	MnO	0.01	
Also includes Loss on Ignition						

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

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 Quality Control at SGS Lakefield

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:

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 2012 exploration 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.

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				

The following table shows the 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	AI (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

In order to minimize the matrix effects of the samples, the heavy absorber fusion technique of Norrish and Hutton (1969, Geochim. Cosmochim. Acta, volume 33, pp. 431-453) are used for major element oxide) analysis. Prior to fusion, the loss on ignition (LOI), which includes H2O+, CO2, S and other volatiles, can be determined from the weight loss after roasting the sample at 1050°C for 2 hours. The fusion disk is made by mixing a 0.5 g equivalent of the roasted sample with 6.5 g of a combination of lithium metaborate and lithium tetraborate with lithium bromide as a releasing agent. Samples are fused in Pt crucibles using an AFT fluxer and automatically poured into 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:

Elements Analyzed:

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

Code 4C Oxides and Detection limits (%)

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

Oxide	Detection limit
SiO ₂	0.01
TiO ₂	0.01
AI_2O_3	0.01
Fe_2O_3	0.01
MnO	0.001
MgO	0.01
CaO	0.01
Na ₂ O	0.01
K ₂ O	0.01
P_2O_5	0.01
Cr ₂ O ₃	0.01
LOI	0.01

Table 11-6: Code 4C Oxides and Detection limits (%)

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 re-analyzed.

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 inhouse 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. During the 2012 field season core boxes were brought back to the warehouse facility on a regular basis by LIMHL personnel. They were stacked either in crossbox formation or on core racks. All core boxes are sealed with wire before transport from the drill site.



The lab is locked down during the night. Sample batches are sealed and sent by train or by express mail (by air). Traceability is present throughout the shipment to Lakefield and/or Ancaster.

11.9 Field Duplicates

11.9.1 RC 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 24th sample was collected at exit 2. The 26th sample was collected at exit 3. These samples went through the same sample preparation, analysis and security procedures and protocols as the regular 3 metre samples collected from the exit 1. From 2009 through 2012, 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.

11.9.2 DDH Duplicates

There we no field duplicates included in the 2012 field program only lab duplicates for DDH core.

11.10 Preparation Lab Duplicates

11.10.1 RC 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.

11.10.2 DDH Lab Duplicates

The procedure included the systematic addition of lab duplicates of approximately 1 in 25 samples sent to the lab for analysis. In 2012 a split of the sample pulp is made and sent as a blind sample to the laboratory.

11.10.3 Blanks

Blank samples were created onsite in Schefferville from barren slates located south east of the town. These blanks were used to check for possible contamination in laboratories. Some were sent to SGS-Lakefield and others to Corem and ALS-Chemex for verification of the average tenure in the blanks. Blank samples were 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% SiO2 was noted for the entire batch of 60 blank samples. For SGS-Lakefield, an average of 5.37% Fe and 61.40% SiO2 was noted. For ALS-Chemex, an average of 4.22% Fe and 62.60% SiO2 was reported. For COREM, an average of 4.34% Fe and 62.25% SiO2 was reported.

Since the original batch of 200kg LIMHL has retrieved more blank material from the same location and homogenized the material using similar techniques, further sample was retrieved in 2010 and 2012 field seasons.

During the 2012 field season blanks were inserted into the RC sample stream one for every 50 samples. The 2010 blank material was fully exhausted for the 2012 RC program; the similar type of blank material collected in 2012 was used for the DDH program and inserted into the DDH sample stream one for every 20 samples sent to the laboratory.

11.10.4 Reference Material (Standards)

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.

Location	Ref Materia		al Coun		Expected Fe%			Observed Fe%							Mislabeled			
Location Rei Materi		riai	Cou	nı	Avera	Average Std.		Dev.	Average		Std	. Dev.		Min		Max	Wisiabeled	
James	JM-ST)	8	61.		33	0.96		56.24		9	.54	40.01		6	51.81		2
James	KL-STD)	6	6 !		5.47 0.6		.6	60.76		2	2.05 56.76		6.76	6	52.31		0
Bean Lake	JM-ST)	5	61.		33	3 0.96		60).79	1.95		5	57.31		51.92		1
Deall Lake	KL-STD)	9		56.47 0		.6	58.26		2	2.01	56.59		6	51.72		2	
Gill Mine	JM-ST)	18	8 6		.33 0.		96	60).54	4.06		44.43		62.31			1
Gill Mille	KL-STD)	33	3	56.	6.47 0		0.6		56.66		3.91 35.0		5.08		58.39		1
				E	xpecte	d SiC) ₂%			Obs	serve	d SiO ₂ %	6			Mielaha	مامط	
ĸ	ef Material Co		ount	Ave	erage Std. Dev.		Average		Std. D	Dev. Mir		1	Max		Mislabelee			
	JM-STD		31	9	9.51 1.09		11.77		7.5	1 6.76		5 41.07		7 2				
	KL-STD		48	8	8.3 0.54		9.8		4.3	3	8.06		37.84	4 2				

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

During the 2013 field season standards were inserted into the RC sample stream one (1) for every 50 samples and inserted into the DDH sample stream at a frequency of one (1) for every 20 samples sent to the laboratory.

11.11 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 $\pm 1\%$, which is relatively good and unbiased.

11.12 2009 Exploration Program

LIMHL followed the same method of taking duplicates as in 2008. However, the field duplicate did not come from three 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 serve as the host for the lab duplicate. The duplicates were treated as normal samples, 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 outliers, which could be a result of contamination while processing or taking the sample.

11.13 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.

11.14 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.

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. A total of 16 out of the 75 blanks were outside the $\pm 3\sigma$ line, however, all of the blanks are under 5% iron grade. Geostat suggested that LIMHL to buy pure blanks that do not contain any iron.

In 2011, LIMHL inserted 76 in-house standards. There may have been some potential errors within the KL-STD; however most of the standards demonstrated controlled results.

In 2011 LIMHL sent 141 field duplicates. No preparation lab duplicates were analysed in 2011. The correlation is good between original and field duplicate results however, a bias was found. 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 $\pm 10\%$ 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.

11.15 2012 Exploration Program

During the 2012 Exploration season, LIMHL drilled holes with both RC rigs and DDH rigs. RC drilling was conducted at both Malcolm 1 and Houston, and the diamond drilling was conducted for Houston.

For the 2012 RC drilling and diamond drilling exploration program, LIMHL followed its quality assurance and quality control protocol (QAQC). The procedure included the systematic addition of in-house blanks, in-house reference standards, field duplicates, and preparation lab duplicates to batch samples sent for analysis at ACTLABS.

During the 2012 RC drilling and exploration program, LIMHL followed its quality assurance and quality control protocol. The procedure included the systematic addition of in-house blanks (1 per 50), in-house reference standards (1 per 50), field duplicates (1 per 25). The approximate amount of control samples is 8% of the batch samples sent for analysis at ACTLABS. These sample bags were sent to the sample receiving warehouse empty, and the appropriate material was put into the bags before going to the prep laboratory in Silver Yard. The field duplicates (or rig duplicates) were collected from the "discard line".



For the 2012 DDH drilling and exploration program, LIMHL inserted control samples along with their diamond drill samples. For the 2012 field season the standards remained the same as those used for the RC program. The procedure included the systematic insertion of in-house blanks (1 per 20), in-house reference standards (1 per 20), and lab duplicates (1 per 25). The total is about 14% of the samples submitted for analyses are control samples. The lab duplicates constitute a representative split of the original pulp.

11.16 2013 Exploration Program

For the 2013 DDH drilling and exploration program, LIMHL inserted control samples along with their diamond drill samples. The standards remained the same as those used for the RC program. The procedure included the systematic insertion of in-house blanks (1 per 20), in-house reference standards (1 per 20), and lab duplicates (1 per 25). The total is about 14% of the samples submitted for analyses are control samples. The lab duplicates constitute a representative split of the original pulp.

11.16.1 2013 Blanks

A total of 342 blank samples were used to check for possible contamination in the analytical laboratories during the 2013 campaign. During 2008, SGS Geostat prepared blank samples from a known slate outcrop near Schefferville (Section 11.10.3). Since then LIM has accumulated more material from the same outcrop, homogenized it using similar processes to create additional blank material.

For QAQC on the diamond drill rig, while diamond drill core was being logged, the QAQC sample locations were marked out by the logging geologist. A geotechnician then inserted standards and blanks as required approximately 1 per 20 samples.

Considerable variation in analytical data of blank material was observed, particularly for blanks from Gill Mine. It is strongly suggested to revaluate the material being submitted for blanks. The statistics and graph are displayed in Figure 11-3, Figure 11-4 and

Table 11-8.



Table 11-8: 2013 Blank statistics

Fe ₂ O ₃ Blanks	5
Mean	5.08
Standard Error	0.61
Median	1.46
Mode	0.56
Standard Deviation	11.25
Sample Variance	126.55
Kurtosis	38.85
Skewness	6.04
Range	88.29
Minimum	0.17
Maximum	88.46
Sum	1738.16
Count	342

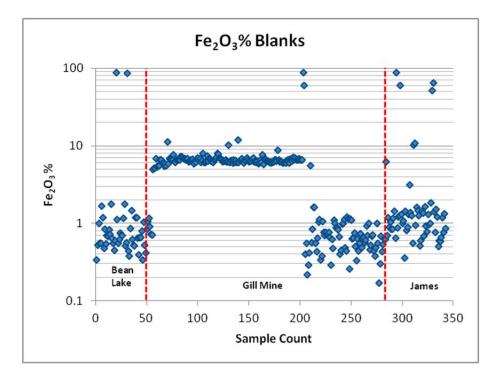


Figure 11-3: Distribution of the 2013 Fe_2O_3 (%) blanks

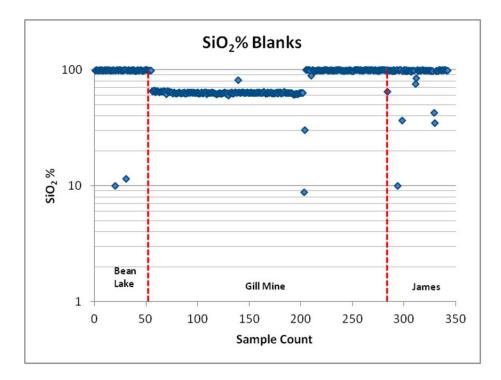


Figure 11-4: Distribution of the 2013 SiO2 (%) blanks

The blank material used with the RC samples (samples up to 524757) was from material collected and homogenized during 2010. However, this material ran out, and was replenished in 2012. The newly collected material started to be used with the blanks introduced into the diamond drill samples. The blank material was collected from the same Dolly Shale along the road to Houston. The only explanation that could have caused the drastic change from the RC blanks to the diamond drill blanks is that the material may have been collected from deeper down from the surface of the Dolly Shale. The material collected in 2010, were surface samples, and material was not collected deeper from the surface.



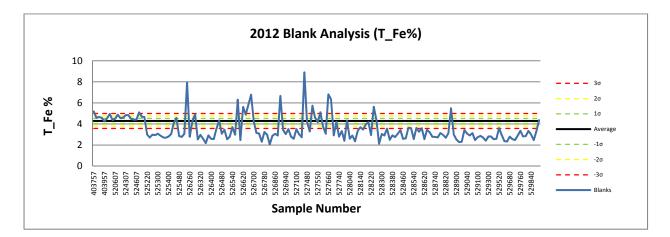


Figure 11-5: 2012 T_Fe% Blanks Comparison

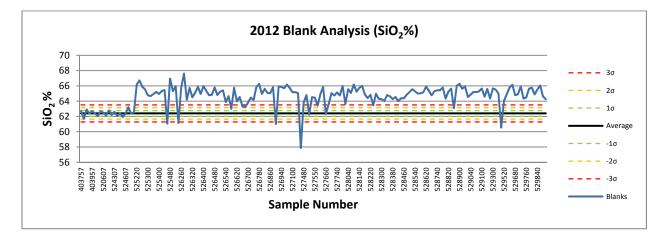


Figure 11-6: 2012 SiO2% Blanks Comparison

Given the variability of the new blank material compared with that of the 2008 results, Figure 11-7 was plotted using the standard deviation of the 170 blanks from 2012 as the control gates. With that in mind only two samples are outside the $+3\sigma$. We also get a clear picture of how the mean has shifted down for the new material. Given this information, it may be difficult to interpret contamination issues, however since all the values are below 9% Fe and the mean value is 3.53% Fe then it is not likely there is any major contamination. This is further supported by the analysis of the standards in the next section. It is recommended that LIMHL buy pure blanks (either commercial silica sand or decorative pebbles) that do not contain any iron.



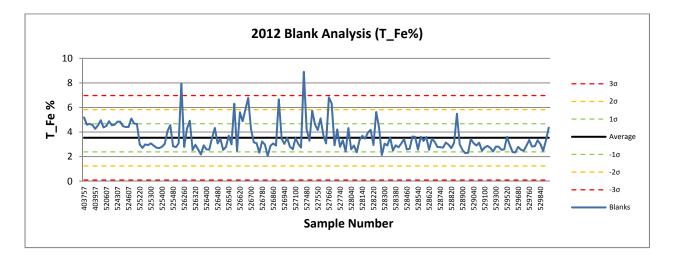


Figure 11-7: 2012 Fe% Blanks Comparison

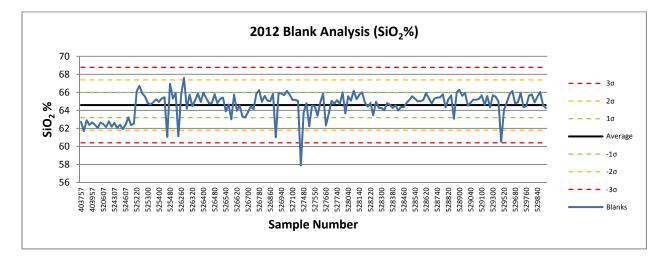


Figure 11-8: 2012 SiO2% Blanks Comparison

To quantify the number of standards between each standard deviation (performance gate) the following table has been tabulated. The number of samples outside of the $\pm 3\sigma$ based on the 2008 defined control gates is 126 samples or 90% of the samples. Performance gates were recalculated based only on the ACTLABS results of the 140 samples in the second chart and with a wider standard deviation and lowered mean. Only 2 samples are outside the natural 3rd standard deviation, or 1.4% of the data. If LIM does not want utilize store bought blank material, it is recommended to re-homogenize the material and do another round of inter-laboratory testing.



Table 11-9: Comparison of Performance Gates

Using 2008 Performance Gates				Performance Gates Calculated on 2012 Values					
Bin	Frequency	Cumulative %		Bin	Frequency	Cumulative %			
3.580686	111	66.07%		0.093631	0	0.00%			
3.816346	8	70.83%		1.240436	0	0.00%			
4.052006	1	71.43%		2.387242	9	5.36%			
4.287667	8	76.19%		3.534048	101	65.48%			
4.523327	9	81.55%		4.680853	36	86.90%			
4.758987	10	87.50%		5.827659	14	95.24%			
4.994647	6	91.07%		6.974465	6	98.81%			
More	15	100.00%		More	2	100.00%			



11.16.2 2013 Standards

In 2013, LIMHL inserted a total of 79 standards for analysis, of which 31 were James standards, and 48 were Knob Lake standards. Figure 11-8 and Figure 11-12 show the results plotted for JM-STD and KL-STD.

For the James standard four (4) of the standards were below the -3 σ totaling 13% of the samples outside of the ±3 σ lines. Slightly better performance was witnessed for the SiO2 results with only 6% of the samples outside of the ±3 σ lines. The slight bias high is reflected in the sign test for silica (0.32 \leq 0.77 \leq 0.68), and the iron values have no apparent bias which is also reflected in the sign test (0.32 < 0.68 < 0.68). Based on the charts for iron and silica of the James Standards I would conclude there is not likely any serious contamination or mislabels or other issues.

The James standard samples that fell outside the zones of acceptance for the iron content are 12130, 12150, and 88270; those for silica content are 12130 and 12150. There are only two samples that fell outside the zones of acceptance for both the iron and silica content (12130 and 12150 as shown in Figure 11-9 and Figure 11-11. It is possible that the material for these two standard samples could have been composed of slightly lower grade material within the larger barrel of the standard material. Figure 11-11 displays Fe for the James standard separated by location.

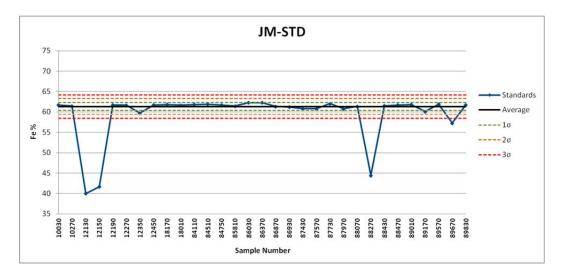
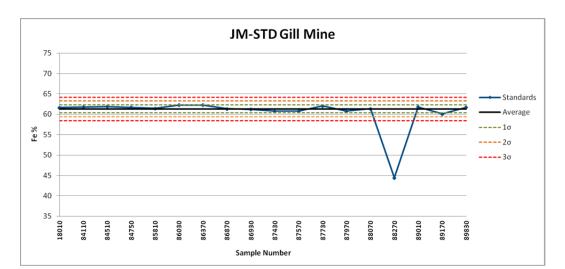
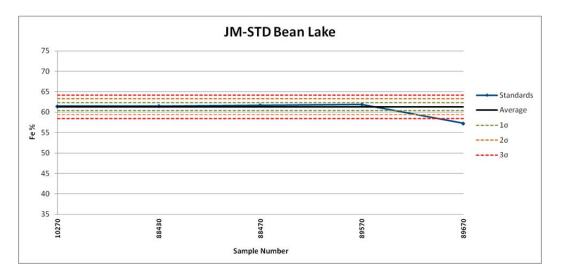


Figure 11-9: Fe High Grade JM-STD Standards in 2013





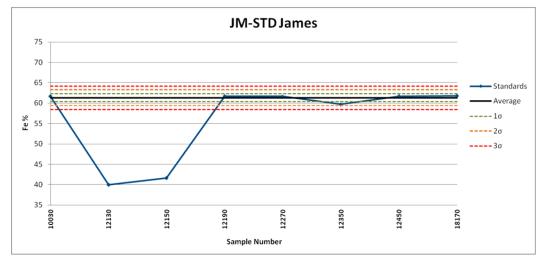


Figure 11-10: 2013 Fe High Grade JM-STD Standards on Gill Mine, Bean Lake & James Pit

SGS Canada Inc.



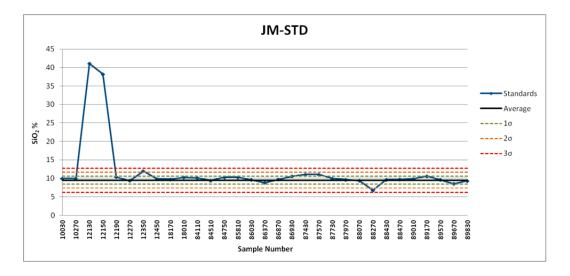


Figure 11-11: SiO₂ Grades JM-STD Standards in 2013

For the knob lake standards only one (1) standard was below the -3 σ and seven (7) above the +3 σ for iron, representing 17% of the samples outside the control limits. Furthermore there were five (5) silica value above the +3 σ and none below the -3 σ . Again there is a bias high for the iron values, as visible on the figure and from the sign test (0.36 \leq 0.96 \leq 0.64), as well as the silica values 0.36 \leq 0.93 \leq 0.64 Results were good with the exception of sample 86350, which warrants further investigation. It is recommended to revaluate the expected value and standard deviation of the Knob Lake standard.

The Knob Lake standards that fell outside the zones of acceptance for the iron content are 10150, 12110, 12410, 18210, 18250, 18010, 86350, and 89990. For silica content, samples beyond acceptance levels include 18210, 19890, 86350, and 89990. There are three samples that fell outside the zones of acceptance for both the iron and silica content, which are 18210, 86350, and 89990, illustrated Figure 11-12 and Figure 11-14. The explanation for this could be that the material for these two standard samples could have had slightly different compositions than that of the larger barrel of the standard material. Iron values for the Knob Lake standard were arranged by location and are displayed Figure 11-14.



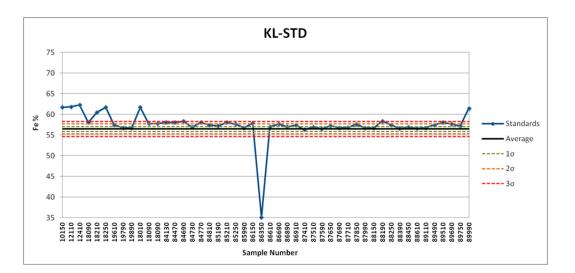
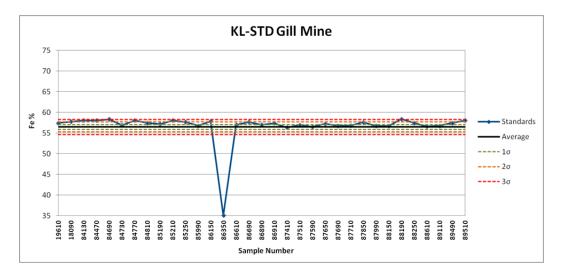
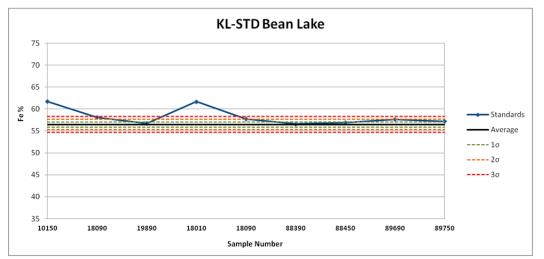


Figure 11-12: Fe High Grade KL-STD Standards in 2013





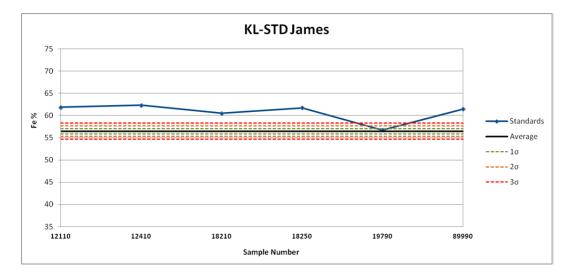


Figure 11-13: 2013 Fe High Grade KL-STD Standards on Gill Mine, Bean Lake & James Pit

SGS Canada Inc.

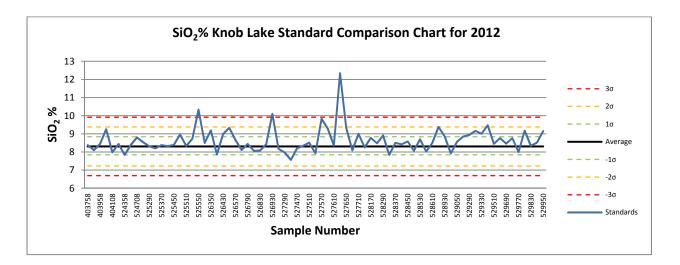


Figure 11-14: 2013 SiO₂ Grades KL-STD Standards

11.16.3 2013 Duplicates

11.16.3.1 Inter-laboratory Duplicates

Lim sent in 82 samples to ACTLABS and also to ALS Chemex for duplicate analysis. The coefficient of correlation is 0.9937 for iron and 0.9902 for silica, indicating a strong correlation. The t-stat for silica does not indicate any bias, however there is a bias for iron, even though the two sets are strongly correlated (as you can see from Figure 11-15) there is an obvious bias high on iron results from ACTLABS compared to ALS, this bias is also reflected in the sign test $(0.39 \leq 0.22 \leq 0.61)$ indicting that only 22% of the time the ALS values are higher than ACTLABS, and a comparison of the means 35.115Actlabs T Fe% versus 34.832ALS T Fe%. There is no strong bias for silica values. Even though there is significant bias, it is not concerning because the correlation is so high and the absolute difference between samples is so low, furthermore almost all of the data is within 20% difference. The bias could be explained by small differences in analytical techniques and digestions at the two different labs. From Figure 11-16 most of the data is below the 1% line and all of the data is below the 5% line, using the 10% line as a cautionary line and the 20% line as warranting investigation. The spread of the data indicates that as grade increases there is less difference between the pairs of results between laboratories, and there is a small overall difference in the two values compared with the paired mean value for iron and silica. This indicates that there are no extremely strong outliers.



There were three samples that were outsiders on the analytical graphs for the iron and silica content, which were 524892, 529893 and 529879. Figure 11-15 And Figure 11-17 show these results.

It can be concluded that there is good correlation between ACTLABS results and ALS Chemex results, indicating that there is confidence in the exploration results.

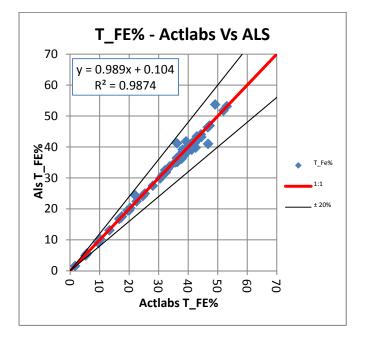


Figure 11-15: Duplicate Comparison of T_Fe% from ALS Chemex vs. ActLabs



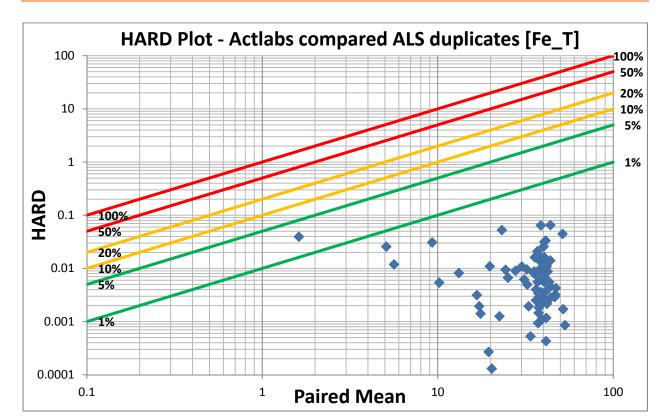
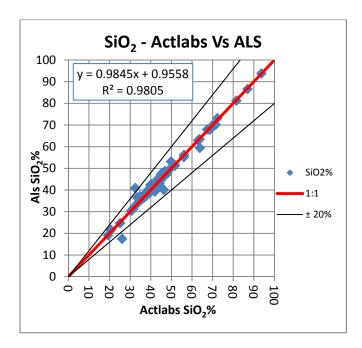


Figure 11-16: Pair Mean vs. HARD of Duplicate Comparison of T_Fe% from ALS Chemex vs. ActLabs



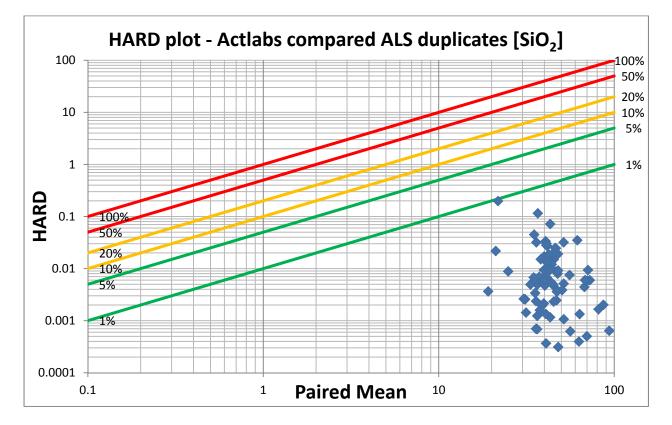


Figure 11-17: Duplicate Comparison of SiO2% from ALS Chemex vs. ActLabs

Figure 11-18: Pair Mean vs. HARD of Duplicate Comparison of SiO2% from ALS Chemex vs. ActLabs

11.16.3.2 DDH Duplicates to Actlabs

Lim sent in 1762 duplicate samples to ACTLABS from their DDH core. The coefficient of correlation is 0.5887 for iron and 0.586 for silica, indicating a very strong correlation. The sign test indicates a bias for iron in which duplicate analyses are higher and in silica for which original values are higher Duplicate values were organized into location to examine if one site in particular displayed lower repeatability. Duplicate data submitted for 430 James samples displayed the weaker correlation of the three. The R2 value was 0.2668 and the sign test displayed a higher bias $0.45 \leq 0.59 \leq 0.55$. Figure 11-19 and Figure 11-20 display the results of the duplicate study.





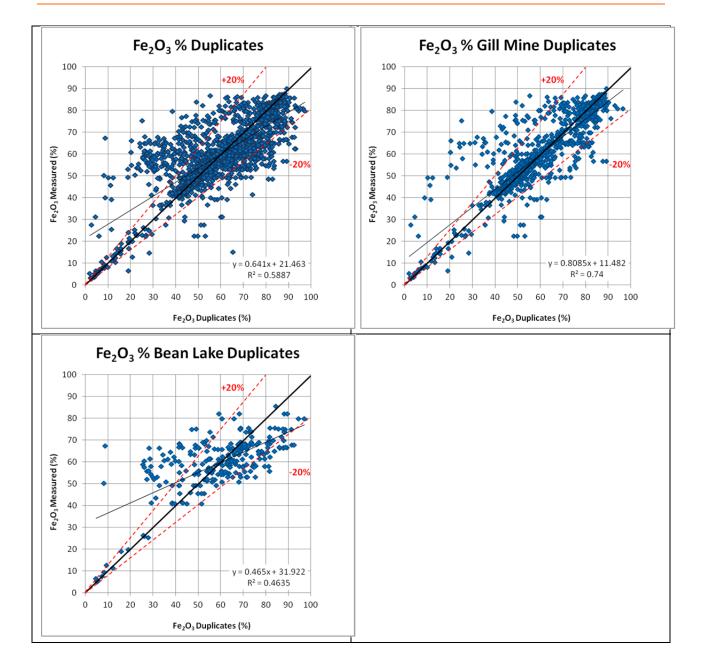


Figure 11-19: 2013 Fe2O3 Duplicate correlation plots according to location





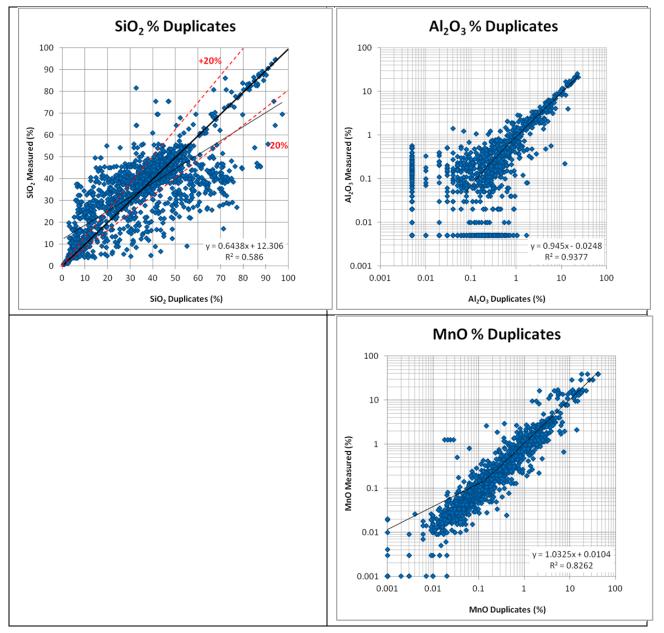


Figure 11-20: 2013 Duplicate correlation plots of SiO₂, Al₂O₃ and MnO

11.16.4 Check Samples sent to Lakefield by LIM

Lim sent in 49 duplicate samples (quarter core) to SGS Lakefield from their DDH core. The coefficient of correlation is 0.9919 for Fe_2O_3 and 0.9925 for SiO₂, indicating a very strong correlation. The sign test indicates a bias for iron in which duplicate analyses are higher and in silica for which original values are higher. Figure 11-21 display the results of the duplicate study.



Although the results from this study outline a bias between labs, SGS considers the bias as acceptable considering the strong correlation, the average small difference between assay results (0.49%) and the fact that the say results used correspond to the Actlabs which is the lowest of both labs. Further investigations are recommended for future work.

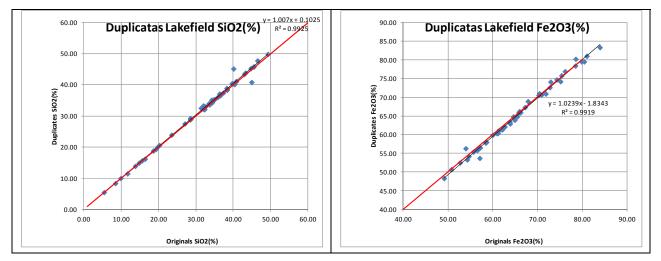


Figure 11-21: 2013 Fe₂O₃ & SiO₂ Duplicate correlation (Lakefield)

12. Data Verification

A site visit was conducted by Maxime Dupéré, P.Geo. on the Project from December 9th to 12th, 2013. The site visit enabled the author to visit the core storing facilities, the deposit area corresponding to the James Mine (James Pit), Gill and Bean Lake areas in Labrador near Schefferville and verify the drilling done in 2012 and 2013. During the site visit, the author was informed of the string, logging and sampling procedures. The LIMH geologists reviewed with the author the different lithological units available from stored core at the Core Shack. The author did a data verification on the 2013 drilling including: Validation of the database and relations between each table (collars, deviations, lithologies and assays).

The Data Verification results and procedures from 2008 to 2012 on the James, Redmond 2B, Redmond 5, KL1, Denault deposits; and the Ferriman and Wishart stockpiles are described fully in the April 12, 2013 technical report available on SEDAR. No major issuers were noted and small corrections were done accordingly on a regular basis. No additional drilling affected the deposits mentioned above for resources calculation. It is believed that the respective databases used for the mineral deposits mentioned above are suitable for resource estimation. The James and Redmond 2B were mined during 2013 and a full description is available in section 14.

12.1 James Pit and Bean Lake Database Verification

The final drillhole database includes historical and all LIM's RC holes and trenches. The database cut-off date is March 31st, 2014. SGS considers the resource database used for the resource estimation to be adequate. Relevant information on the database validation is also available in section 12.1.

The drillhole databases supplied by LIMH has been validated for the following fields: collar location, azimuth, dip, hole length, survey data and analytical values. The validation did not return any significant issues. As part of the data verification, the analytical data from the database has been validated with values reported in the laboratories analytical certificates. The total laboratory certificates verified amounts to approximately 10%+ of the overall laboratory certificates available for the Project. No errors or discrepancies were noted during the validation.

12.2 Data Verification Conclusions

In the author's opinion, the information in the section appears to be consistent and not misleading. Differences were noted on LIMH's QAQC results Please see according recommendations.



13. Mineral Processing and Metallurgical Testing

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices, particularly during the period from mid-2012 to early 2013 and again in the year-to-date 2014. This has had an adverse impact on LIM's economic analysis, with a significant decrease of available mineralized material and recoverable resources. Consequently, the Additional Requirements for Advanced Property, prepared by DRA Americas in a previous report (see report dated April 12, 2013) are no longer current. This information has subsequently been updated and summarized from the previous report in the section 17 (other Relevant Data and Information) of this Report.

13.1 Lakefield Research Laboratories

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

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



	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	

Table 13-1: Lakefield Washing Test Results

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.

13.2 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 13-2.



Sample #	Dry Wt% Yield at +6.7 mm	Fe %	S %	Ρ%
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 for suitable commercial production using its technology.

13.3 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 Minérales (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 1/4 in. The results from the screen tests on this bulk sample are summarized in Table 13-3.

Table 13-3: 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 +1⁄4 "	2,340	75.0%	81.8%
-1/4 "	398	12.8%	13.9%
Assumed fines	124	4.0%	4.3%

In addition to the James bulk sample, a sample from Sawyer Lake was submitted for testing. The results of the screening and size fraction assays are presented in Table 13-4.



Size Fraction	wt%	Fe %	SiO2	Al2 O3	Mn	Р
-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				

Table 13-4: Sawyer Lake Sample Screen and Chemical Analysis (CRM)

13.4 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 m and 78 m 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 drillholes.



Table 13-5 show the summary of the results of the tests on the 2006 bulk samples for the various ore types.



Sample Name	CWI (kWh/t)	Al (g)	UCS (Mpa)	Density CWI (g/cm³)	Density UCS (g/cm³)
NB-Houston A	8.2	0.187	106.4	4.26	4.61
NB-Houston B	-	0.213	48.9	-	4.42
LNB Houston A	7.3	0.108	-	3.95	-
LNB Houston B	<u>_</u>	0.189	2	3	1 <u>12</u> 1
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	2	3,35
JM-NB A	4.8	0.143	-	3.48	(,+)
JM-NB B	18 - 1	0.144	-	5	1.51
Average	6.1	0.107	42.2	3.6	3.8

Table 13-5: Summary of Tests by SGS-Lakefield

13.5 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 μ m, +850 μ m and + 300 μ m 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 13-6.

Sample	156109	160566	156090	156032	156037	Analyzed
Hole	RC-JM001-	RC-JM001-	RC-JM001-	RC-JM001-	RC-JM001-	Sections
I IOIE	2008	2008	2008	2008	2008	Sections
From	30	18	42	45	60	
То	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

 Table 13-6: Results of Mineralogical Characterization Tests (SGS – Lakefield)

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.

13.6 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 13-7 and Table 13-8.

Deposit	James South	Knob Lake 1	Houston	Redmond 5
Ore Type	Blue Ore	Red Ore	Blue Ore	Blue ore
Fe1	63.8%	58.5%	66.1%	57.8%
SiO2	6.64%	7.29%	2.22%	13.1%
P1	0.02%	0.11%	0.07%	0.02%
AI2O3	0.21%	1.05%	0.30%	0.32%
LOI	1.88%	8.51%	1.33%	2.63%

Table 13-7: Calculated Grades from 2008 Bulk Samples (SGS-Lakefield)

1 Calculated from WRA oxides

		Assays %				Distribution	
James South	(Blue Ore)	Fe	SiO2	Al2O3	Р	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	SiO2	Al2O3	Р	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 (Blu	e Ore)	Fe	SiO2	Al2O3	Р	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	SiO2	Al2O3	Р	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

Table 13-8: 2008 Bulk Samples Test Results (SGS-Lakefield)

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.

13.7 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 μ m and 600 μ m openings give very promising recoveries:

Table 13-9: 2008 Screen Results

Screen	Feed	Oversize	Undersize	Efficiency
Openings	Fe tot, %	Fe tot, %	Fetot, %	%
300 µm	61.23	68.26	58.91	99.2
600 µm	61.23	66.62	59.28	99.6

13.8 Outotec (2009)

From the material sent to Derrick Corporation, a sample of -300 µm 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.

13.9 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% Fe 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% Fe, 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 % Fe. Accordingly high gangue contents of 6.89% SiO2 and 0.84% Al2O3 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 13-10.

	Total Fe%	SiO2 %	Al2 03 %	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

Table 13-10: SGA Test Results

13.10 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 13-11: Screen Analysis of the Lump Ore Sample as Received

Grain sizing [mm]	Weight [%]	Residue [%]	Fe [%]	SiO₂ [%]	Al ₂ O ₃ [%]	Density [g/cm ³]	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	62.33	9.92	0.49	4.55	2.84
8.0-5.6	3	91	61.9	12.6	0.38	4.5	2.39
5.6-0	9	100	55.53	18.1	0.82	4.21	2.88
Feed _{anal}	100		60.29	13.34	0.24	4.45	3.04

Table 13-12: Chemical Analysis of Jigging Products – Course Ore

Layer #	Weight (kg)	Weight %	Fe %	SiO ₂ %	Al ₂ O ₃ %	Р%	Density (g/cm3)	LOI
Layer 1	11.91	9.6	52.17	22.9	1.17	< 0.05	4	4.33
Layer 2	16.89	13.61	57.05	13.3	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	4.5	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	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	76.1	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	90.4	62.64	9.34	0.37	<0.05	4.58	2.77

Grain sizing (mm)	Weight (%)	Residue %	Fe%	SiO ₂ %	Al ₂ O ₃ %	Р%	Density (g/cm3)	LOI
>8.0	3.7	3.7	63.5	8.4	0.22	<0.05	4.65	2.7
8.0-5.6	9.4	13.1	63.6	8.58	0.31	<0.05	4.59	3.2
5.6-2.8	14.7	27.8	63.5	8.24	0.39	<0.05	4.58	3.2
2.8-1.0	13.8	41.6	62.8	8.74	0.52	<0.05	4.55	3.2
1.0-0.50	6	47.6	62.6	9.23	0.49	<0.05	4.55	2.9
0.50-0.315	9.9	57.5	64.5	9	0.47	<0.05	4.6	2.5
0.315- 0.125	12.4	69.9	58.8	16.15	0.43	<0.05	4.38	2.1
0.125-0	30.1	100	49.6	32.77	0.42	<0.05	3.96	1.8
Feed anal			58.5	15.84	0.48	<0.05	4.34	2.6
Fraction <1mm	214.5	-	54.8	0.57	24.2	<0.05	4.21	2.1

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

Table 13-14: Chemical Analysis of Jigging Products – Fine Ore

Layer #	Weight (kg)	Weight (%)	Fe%	SiO ₂ %	Al ₂ O ₃ %	Р%	Density (g/cm3)	LOI
Layer 1	7.6	6.35	59.9	12.36	1.16	< 0.05	4.3	4.2
Layer 2	9.91	8.28	60.9	10.59	0.83	< 0.05	4.4	4
Layer 3	11.64	9.72	61.3	10.39	0.83	< 0.05	4.42	3.8
Layer 4	18.42	15.38	61.5	9.56	0.7	< 0.05	4.46	3.8
Layer 5	17.52	14.63	63.2	8.76	0.55	< 0.05	4.53	3.6
Layer 6	16.11	13.45	64	7.42	0.39	< 0.05	4.61	3.1
Layer 7	38.55	32.19	66.4	5.35	0.34	< 0.05	4.83	2.1
Feedcalc.	119.75	100	64.5	8.14	0.57	< 0.05	4.59	3.2
Feedanal.	-	-	63.2	8.29	0.52	< 0.05	4.56	3.2
Layer 6-7	54.66	45.64	65.7	5.96	0.35	< 0.05	4.77	2.4
Layer 5-7	72.18	60.27	65.1	6.64	0.4	< 0.05	4.71	2.7
Layer 4-7	90.6	75.38	64.4	7.23	0.46	< 0.05	4.66	2.9
Layer 3-7	102.24	85.37	64	7.59	0.5	< 0.05	4.63	3
Layer 2-7	112.15	95.65	63.7	7.86	0.53	< 0.05	4.61	3.1

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.

13.11 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 comminution 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 total 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 μ m 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:



Product	% Weight ROM	Fe tot	SiO2	Mn	Ρ	AI2O3	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	

Table 13-15: Corem Yellow Ore Test Results

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% SiO2, 0.5% Mn, 0.1% PSinter Feed:62% Fe tot, 4% SiO2, 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% Fetot.

13.12 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 μ m and +1180 μ m 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 drillholes.

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 QEMSCANTM analysis.

The chemical analyses showed that these samples are composed mainly of Fe and Si with low levels of AI 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 QEMSCANTM analysis showed that quartz and other silicates accumulate with decreasing size, generally in the +106 μ m and -300/+106 μ m size fractions.

The mineral release curves show display that, for the finer material (-300 μ m), a good liberation is achieved between 100 μ m and 200 μ m (~80% liberation) with the exception of one sample, which has more middling particles than the others.

13.13 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 μ m, -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 μ m, -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 μ m, -6 mm).

For the tests conducted in July 2010 particle size analysis showed approximately 78% of the sample under 100 μ m. After de-sliming and classification the fraction (-100 μ m) was only 60% and respectively 1.4% (-45 μ m). 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 13-1 below shows the particle size distribution (psd) of both the original sample and the sample after classification.

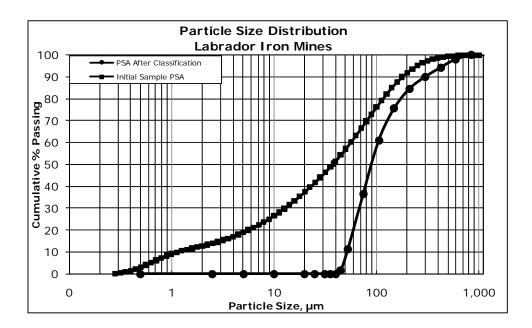


Figure 13-1: Particle Size Distribution for Labrador Iron Sample (July 2010)

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 μ m, -6 mm). Figure 13-2, below, shows the particle size distribution for two of the samples tested and also the psd that is expected for a hydrosizer underflow.

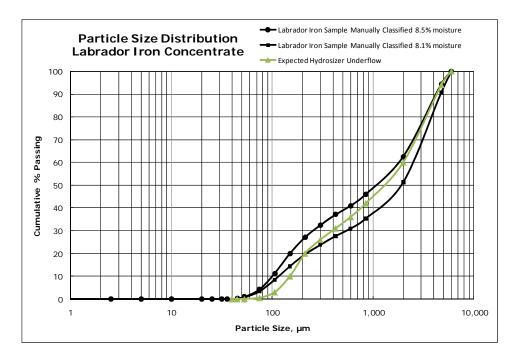


Figure 13-2: PSD for Labrador Iron Sample Tested November 2010

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.

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

Table 13-16: Vacuum Filtration Sizing results

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.

13.14 SGS Lakefield Manganese Tests (2012)

In 2012, manganese resource samples were tested by SGS Lakefield for compatibility with the Silver Yards wet plant flowsheet. The manganese samples were not beneficiated using the flowsheet, implying the Silver Yards plant is not capable of upgrading manganese resources to saleable manganese products. For this reason, manganese and iron ore resources are tabulated separately in this Report and are not considered additive.



14. Mineral Resource Estimates

14.1 Introduction

This section reports the results of the Schefferville Area Direct Shipping Iron Ore Projects Resource Update which is based on new analytical data sampled from the drilling completed on the James Pit and Bean Lake deposits and from an independent review of LIM's 2013 reconciliation work on the James Mine and the Redmond 2B deposit. This section reports also the updated James Mine mineral resources estimates (MRE) based on SGS diligent review of LIM's reconciliation work and statement of mine production in 2013 and according to the updated November 2013 topographic surface after mining depletion. The previous mineral resource update was completed by SGS Geostat and was disclosed in the Company's year-end Technical Report dated April 12th, 2013.

All the mineral resources of the Schefferville area deposits were updated & restated from previous validated information. The KL1, Redmond 5, and Denault information has not changed since last technical information disclosure but were restated. All of the mentioned MRE presented herein are considered current.

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.

The 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. Mr. Dupéré has been involved in mineral resource estimation work over different iron deposits on a continuous basis since he joined SGS Canada Inc. in 2006, which includes the participation in mineral resource estimate for the James, Redmond 2B, Redmond 5, Knob Lake 1, Denault, Houston and Malcolm 1 iron deposits in 2009 2010, 2011 and 2012. Mr. Dupéré is an independent Qualified Person as per section 1.5 of the NI 43-101 Standards of Disclosure for Mineral Projects and by virtue of education, experience and membership in a professional organization.

The previous mineral resource estimate of James, Redmond 2B and Redmond 5 mineral deposits was completed by Maxime Dupéré P.Geo., Geologist for SGS Geostat and was first disclosed in the Technical report dated December 18, 2009. The technical information is also



summarised in the Silver Yards Technical Report dated April 15, 2011 and in the Silver Yards technical report dated March 31st, 2012.

SGS Geostat updated the mineral resource estimate for the James iron deposit (James Mine) using the new and updated November 30th, 2012 topographic surface provided by LIM. The James deposit in-situ SG formula based on %Fe was also updated according to reconciliation work by LIM and from validation by Michel Dagbert, senior geostatistician for SGS Geostat.

Based on the additional information and from the diligent review of the reconciliation work on James, and Redmond 2B it is the author's opinion that the current James and Redmond 2B MRE updates presented herein are adequate and considered not misleading.

The current classified resources of the present Deposits reported below are compliant with standards as outlined in the National Instrument 43-101. The present resources were restated and are disclosed according to LIMH's Ore Type categories (Table 14-1) introduced during the mining of James. The IOC ore type category is no longer current according to LIMH understanding of its ore types and therefore should no longer be used for resources disclosure purposes.

Schefferville Ore types (LIMH SETTINGS)										
TYPE	Fe(%)	P(%)	Mn(%)	SiO2	Al2O3(%)					
DRO (Direct Railing Ore)	>60	<0.05	<3.5							
PHG(Plant High Grand)	>55 & <60	<0.05	<3.5							
PLG(Plant Low Grand)	>50 & <55	<0.05	<3.5							
Yellow (Hi Phosphorous)	>50	>0.05	<3.5							
TRX(Treat Rock)	>45 & <50		<3.5							
MN	Fe+Mn>=50		>3.5	<18	<5					

Table 14-1: LIMH Ore Types Categories

14.2 Specific Gravity (SG)

The SG testing was carried out on core using the conventional water immersion method. The SG was obtained by measuring a quantity of core in air and then pouring the core into a graduated cylinder containing a measured amount of water to determine the volume of water displacement. The core was first coated with wax. A volume of water equal to the observed displacement was weighed and the SG of chips was calculated using the equation listed below.

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



Ww=Weight of Water displaced

Since 2009, a variable specific gravity, Fe dependant, was used for the resource estimation of each deposit which was calculated using the formula below. The formula (SG (in situ) = [(0.0258 * Fe) + 2.338] * 0.9) was calculated from regression analyses in MS Excel using 229 specific gravity tests completed during the 2009 drilling program on the James, KL1, Redmond 2B, Redmond 5 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.

Updates were done on the James and Redmond 2B deposits according to reconciliation data provided in the James Reconciliation section **Table 14-4** and it was decided to apply 25% porosity (0.75 in the equation) according to these findings. The Wishart and Ferriman SG are fixed based on reasonable assumptions related to stockpiles.

Deposit	SG Formula (In Situ)
James	((0.0258*Fe)+2.338)*0.75
Redmond 2B	((0.0258*Fe)+2.338)*0.75
Redmond 5	((0.0258*Fe)+2.338)*0.9
Knob Lake 1	((0.0258*Fe)+2.338)*0.9
Denault	((0.0258*Fe)+2.338)*0.9
Wishart	2.2 (Fixed)
Ferriman	2.2 (Fixed)

Table 14-2: Deposit SG Formulas

14.3 Database and Validation

No significant inconsistencies were observed. LIM entered the historical data from IOC's data bank listing print outs of drillholes, trenching and surface analyses. All of the data entry was done by LIM. SGS did a full validation of the data in 2009 and a Limited but accurate validation of the 2010, 2011 and 2012 data. Most 2009 to 2012 certificates of analysis were verified on an average of 10-25%.

Most collar coordinate locations of drillholes 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 m. Historical cross sections were also digitized using MapInfo/Discover software then imported into Gemcom Gems software. The table below is a summary of the database information used for each deposit estimated in this Report.



Denesit	Hole	Count	Meterage	LIM	Meterage	IOC	Meterage
Deposit	Туре	Count	(m)	Count	(m)	Count	(m)
James	DD	30	2133.1	30	2133.1		
(James Pit &	RC	125	7094.18	19	1278	106	5816.19
Bean Lake)	Trench	77	3554.09	6	447.12	71	3106.97
	DD	0	0	0	0	0	0
Redmond 2B	RC	25	1365	25	1365	0	0
	Trench	10	663.02	10	663.02	0	0
	DD	0	0	0	0	0	0
Redmond 5	RC	68	2331.686	20	964	48	1370.97
	Trench	8	461.04	8	461.04	0	0
	DD	1	44.2	1	44.2	0	0
Knob Lake 1	RC	69	2596.49	19	1218	50	1378.49
	Trench	23	77	23	77	0	0
	DD	0	0	0	0	0	0
Denault	RC	136	5051.18	76	3791	60	1260.18
	Trench	0	0	0	0	0	0
	DD	0	0	0	0	0	0
Wishart	RC	55	1525	55	1525	0	0
	Test Pits	809	788.5	809	788.5	0	0
	DD	0	0	0	0	0	0
Ferriman	RC	23	781	23	781	0	0
	Test Pits	236	223.5	236	223.5	0	0

SGS Canada Inc.

14.4 Audit of James Mine 2013 Reconciliation

14.4.1 Reconciliation Summary

Based on recommendations in 2013 from reconciliation Audit by Mr. Michel Dagbert, SGS' senior geostatistician, LIM personnel conducted in 2013 on a monthly basis the reconciliation of the James Mine production with estimated resources in a block model produced by SGS at the end of 2009 ("SGS 2009"). The reconciliation work conducted by LIM was given to SGS in the form of excel sheets, 3D solids and monthly flow charts. SGS was asked to audit that work.

LIM's reconciliation work is divided in two parts. 1- In Situ 2013 Resources Vs Production Model. 2- Ore Tonnage and Density Reconciliation

The first part (14.4.2) is a comparison of (in-situ) resource estimates using the original resource block model from DH data to that of the production resource model from grade control samples. This first part looks at a comparison of volumes and grades for different types of ore; illustrated in the following table, which summarizes a similar table from LIM 2013 as described in the Table 14-4, SGS concluded that:

- Average grades of ore fractions are similar.
- The SGS resource model shows 4% more volume of total ore (DRO+PHG+PLG+Yellow). These volume differences are more significant in the PHG (-95%), PLG (48%) and Yellow (53%) ore. On the other hand, the production model shows 93% more TRX material.

	LIM Prod	uction M	odel	SGS Resource Model			
Ore type	Volume (m³)	%Fe	%SiO₂	Volume (m³)	%Fe	%SiO₂	
DRO	125,299	61.49	8.70	148,534	61.86	9.54	
PHG	146,538	55.09	17.72	268,786	57.91	13.92	
PLG	242,483	53.66	20.08	126,505	52.86	21.07	
Yellow	20,257	58.76	4.66	9,460	56.46	9.03	
Total	534,577	56.08	16.18	563,809	57.79	14.30	
TRX	155,946	49.36	24.83	10,524	48.54	23.66	
Total	690,523	54.56	18.13	563,809	57.62	14.47	

Table 14-4: LIM Resource Comparison (Grade + Volume) Year 2013

Weighted averages based on volumes

Whereas:

- DRO is the direct railing ore with %Fe> 60% and %P<0.05%
- PHG is the plant feed ore with 55%<%Fe<60% and %P<0.05%

- PHG is the plant feed ore with 50%<%Fe<55% and %P<0.05%
- Yellow is a silicate carbonate iron formation with %Fe > 50% and %P>0.05%
- TRX is the treat rock material with 45%<%Fe<50%

The second part of the reconciliation work completed by LIM involves ore tonnages and density. LIM concluded that the 534,577 m^3 of in-situ ore volume extracted from April 2013 to the end of November 2013 corresponds to total material railed + ending inventories of 1,549,122 t (dry metric tonnes).

From this LIM calculated an average density of 2.84t/ m^3 , which is corresponding to the average estimated density of about 2.86 t/ m^3 in ore blocks of the SGS resource model. The density formula used is the updated 2014 SG as described in section 14.2

14.4.2 Mined 2013 Resources from Original (SGS 2009) Block Model

The Original 2009 SGS resource block model for James comprises 20,999 blocks 5x5x5m below the original starting topography. Blocks are on a grid with up to 81 columns, 201 rows and 41 benches (block edges between Z=397.5 to Z=602.5) in a local reference system with an origin at X=639800E, Y=6,071,100N (which is the center of the block in the first column and the first row) and a local X along N43.5° plus a local Y along N315.5°.

In addition to its location and fraction below topography, each block is assigned estimated concentrations of up to 13 major and minor elements (Fe_2O_3 hence Fe, SiO₂, Al₂O₃, LOI, MgO, CaO,K₂O,TiO₂,Cr₂O₃, V₂O₅, MnO hence Mn, P₂O₅ hence P and Na₂O). A density is also assigned to the blocks based on its %Fe grade estimate and using a linear regression of density over iron content from 200+ chip samples corrected for an assumed 25% porosity (see 14.2). Blocks are also categorized into either an indicated (20,725 blocks) or inferred (274 blocks) resource.

A pit surface at the end of November 2013 was made available to SGS in the form of a DXF file (November_2013.dxf) on Jan. 08, 2014. At about the same time, SGS also received from LIM the pit surfaces at the end of each month of 2013. Within the James area, the lowest point of the pit at the end of November 2013 is at elevation Z=462.5.

SGS also received the original topography file as well as the last final pit design shell from LIM on Jan. 08, 2014.

As seen in Figure 14-1, the three reference surfaces (topography, November 2013 and final pit design) are shown with blocks of the SGS 2009 model colored according to their estimated %Fe. It appears that LIM attained the bottom of the planned final pit design with exception to



certain small areas. And that most of the blocks of the 2009 resource model above Z=462.5 had been mined at the end of November 2013.

SGS extracted block fractions from the 2009 block model between the November 2012 and the November 2013 Month End topographic surfaces. SGS extracted 7,091 blocks (with block fraction) representing a total volume of 603,361.55 m³. Grades were weighted based on volume, not volume*density.

As a general rule, the volumes extracted from the SGS model that SGS has computed are closer to the production volumes than those calculated by LIM. As an example, SGS calculated the DRO to be 129,237 m³ i.e. 2.5% more than LIMs production model of 125,999 m³, but better than the LIM's calculation of 148,534 m³ or 15% difference. Globally, when compared to total Ore Type volume (DRO, PHG, PLG, Yellow), SGS calculated 588,664 m³ i.e. 10% more than LIMs production model of 534,577 m³, and better than the LIM's calculation of 553,285 m³ or 5% difference. See Table 14-4 and Table 14-8.

Globally, for the 2013 period, the DRO+PF+YELLOW volume of 585,595 m³ from the 2009 block model calculated by SGS is 9% higher than the LIM production solid of 534,577 m³. TRX calculated by SGS of 13,036 m³ is almost the same as what LIM calculated (10,524 m³), which is much less than the LIM production volume of 155,946 m³.

Notable Differences in average %Fe and SiO₂ grades were observed. Globally, both LIM production solid and resources model tend to have higher %Fe and lower %SiO₂ grades than the SGS calculated Production solid and 2009 SGS resources model. Our understanding of the LIM production solid design is that it was built by the addition of Ore Type solids bench by bench and by the application of a simple arithmetic average of the %Fe and %SiO₂. In comparison, SGS used geostatistical tools for the grades interpolation within a temporary block model. Please See 0.

For DRO, The LIM Production solid average Fe value of 64.49%Fe is higher by 2.9% than the SGS production solid of 59.69%Fe. Similar %Fe observations were noted for Global resources (DRO, PHG, PLG and Yellow) (56.08%Fe (LIM) vs 54.96%Fe (SGS). For SiO2, the opposite is observed. The LIM Production solid DRO average SiO2 value of 8.70% SiO2 is lower by 23% than the SGS production solid of 11.31% SiO2.

Ore Type	Bench	Classification	% Fe	% P	%	%	%	Volume
	Dench				Mn	SiO ₂	Al ₂ O ₃	(m³)
DRO	17-29	indicated	61.80	0.02	0.45	9.78	0.34	129,237
PHG	14-28	indicated	57.92	0.02	0.70	14.21	0.42	277,012
PLG	14-29	indicated	52.76	0.02	0.64	21.44	0.37	139,545
YELLOW	14-24	indicated	55.89	0.08	1.60	10.21	0.54	39,800
SubTotal	14-29	-	57.47	0.03	0.69	14.61	0.40	585,595
TRX	16-25	indicated	48.70	0.02	0.28	24.25	0.49	13,036
Total	14-29	-	57.29	0.03	0.68	14.80	0.40	598,630

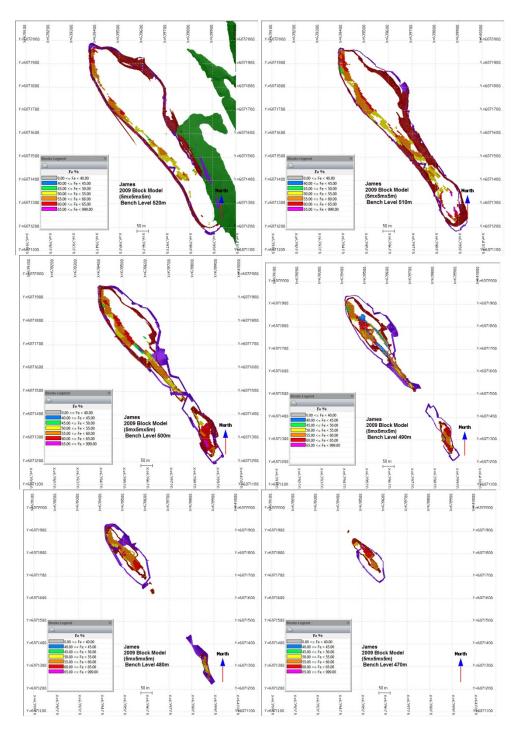


Figure 14-1: Bench Maps with SGS Model Blocks and Pit limits

The original topographic surface is in green, the pit surface at the end of November 2013 is in red and the James pit design is in purple.



14.4.3 Extracted Resources from LIM 2013 production model

The objective of the work described in this section is to audit the production model resource numbers proposed by LIM.

The James open pit operation uses 10m benches with pit floor at elevations at Z=530, 520, 510 and so on. The material in the exposed benches is classified into the same DRO (or DSO), PF (or PLANT), YELLOW and TRX types based on blast hole and face samples that we shall call grade control (hereafter GC) samples. The exact nature of these samples is not detailed but SGS received on January 8th, 2014 the Master Sample Sheet 2013.xlsx with 2,380 "face" sample results for year 2013. On January 15th, 2014, SGS received 13 blast hole sample sheets for a total of 424 blast hole ("BH") assay results mostly for areas of waste surrounding the main ore outlines for a total of 424.

The grade control sample data has been used by LIM personnel to delineate material of the different types in each bench. Contour lines describing each bench ore types have been supplied to SGS as volumes in DXF files for each bench for a total of 59 solids. Lines are tagged as DRO, PHG, PLG, YELLOW, TRX but also PF (Plant Feed, a combination of PHG and PLG). Contour lines of several benches and grade control ("GC") samples corresponding to Face and BH samples are shown in Figure 14-2.

As a general rule, the contour lines are consistent with the GC sample data e.g. most GC samples within the red contour line of DRO have a %Fe above 60% (red color). However, it can be noted that, as SGS go down the benches, the bench coverage by GC samples tends to decrease. In the lower benches, these GC samples are concentrated along fences or close to contact between types. There is no GC sample in the bottom bench. Additionally, the Yellow Ore type contains only 41 GC samples which are very little for resources modeling and comparison.

From the contour lines, the general interpretation of the James deposit structure is that of a narrow syncline along a NW-SE strike with a DRO Core surrounded by PHG and PLG flanks and, finally, a TRX shell. The Yellow is mostly concentrated to the NW of the deposit.

GC samples can be classified into the various ore types (DRO, PHG, PLG, Yellow, TRX) based on the interpreted contour lines of LIM mine geologists covering the entire mined benches.

As expected, average values are consistent with the definition of ore types (note, however, that the average %Fe of GC samples in TRX, of 48.06% Fe, is close to the upper limit of 50% Fe for that type).

Given the irregular grid of GC samples, straight mean sample data are not necessarily representative of the average grades of the material within the same contour lines. To acquire more representative average grades, SGS built a temporary *short term* block model for comparison consisting of blocks and limited by contour lines. The block grades were interpolated using their corresponding GC samples within each Ore Type contour lines. For that temporary *short term* block model, SGS used blocks 2mx3mx10m with the short 2m side along the NE axis and the longer 3m along the NW strike. Blocks were rotated using the same parameters and block model origin as specified in section 14.4.2.

Block grades within each ore type were interpolated using GC samples limited to each ore type contour lines. An inverse distance squared (ID2) interpolation with a base search ellipsoid 20 x 20 x 10 m tilted by 60° to the NE. SGS needs at least 3 GC samples in 3 different octants for interpolation to proceed (maximum number of samples retained in the ellipsoid is 15 and 2 in each octant). Blocks not interpolated in that first run are interpolated in subsequent runs with enlarged ellipsoids (40x40x20m, 80x80x40m and 160x160x80m) and the same conditions on the minimum number of samples.

Once all blocks within contour lines have been interpolated, SGS created a block model of only blocks between the November ME 2012 and November ME 1013 (with block fraction). The production model resource numbers were taken from this block model.

Extracted resources from the SGS 2009 model have been compared to the resources of the SGS *short term* production model. Note the differences between average sample values and average block values in the same ore type.

Volume wise, SGS concludes that the SGS 2009 model overestimates the DRO ore volume by 4% (vs. a LIM overestimation of 19%) and underestimated the PHG+PLG ore volume by 5% (vs. a LIM overestimation of 2%).

The volumes of the two minor types Yellow and TRX are difficult to predict. SGS concludes that the SGS 2009 model overestimated the Yellow volume by 90% (vs. A LIM underestimation of 53%) and underestimated the TRX ore by 92% (vs. 93% underestimation for LIM).

When DRO+PHG=PLG+Yellow are lumped together, the SGS 2009 volume underestimation is only 1% compared to an overestimation of 5% by LIM. If SGS added the TRX ore to that total, SGS's would underestimate by 20% vs. 18% according to LIM.

Grade wise, Both SGS and LIM come to the same conclusions. SGS's resource Model tends to overestimate Fe by 3% for the Ore (DRO+PHG+PLG+Yellow). Grade difference for % Fe is between 1 and 5%, except for the Yellow ore at 6% underestimation. As for LIM, the resource



Model tends to overestimate Fe by 1% for the Ore. Grade difference for % Fe is between 1 and 5%, except for the PLG and Yellow ore at 1% and 4% underestimation.

Grade differences are higher for %SiO2.Grade wise, Both SGS and LIM come to the same conclusions. SGS's resource Model tends to underestimate SiO2 by 18% for the Ore (DRO+PHG+PLG+Yellow). Grade difference for % SiO2 is between 4% and 19% underestimation, except for the Yellow ore at 46% overestimation. As for LIM, the resource Model tends to underestimate SiO2 by 12% for the Ore. Grade difference for % SiO2 is at 10% (DRO), 5% (PLG) and 94% (Yellow) overestimation, except for the PHG ore at 21% underestimation.

At this stage of the reconciliation work (volume + grades), the SGS 2009 resource model derived from historical exploration and definition holes appears adequate in predicting the long term volume and average quality of the different ore types which can be extracted. Some improvement could be gained in the prediction of the minor ore types by:

- Using those ore type limits in the domain of the resource model.
- Using rectangular blocks of 10x2.5x5 m (10m along the NW strike) rather than the cubic 5 x 5 x 5 m in order to match the fairly narrow extension of ore type bands.

Туре	# GC samples	%Fe	%P	%Mn	%SiO ₂	%Al ₂ O ₃
DRO	430	60.65	0.017	0.53	10.28	0.17
PHG	484	55.98	0.017	0.85	16.64	0.21
PLG	719	52.68	0.018	0.58	21.60	0.23
Yellow	41	58.99	0.097	1.29	7.18	0.55
TRX	500	48.06	0.023	1.12	26.68	0.49

Table 14-6: Statistics of GC Sample Values using Ore Types from Dig Lines

Туре	#Blocks	Volume	% Fe	% Mn	% P	% SiO2	% AI2O3
DRO	6,215	124,827	59.74	0.61	0.019	11.24	0.16
PHG	7,043	170,620	55.41	0.78	0.018	17.49	0.21
PLG	11,460	262,823	52.07	0.68	0.018	22.37	0.26
Yellow	1,123	20,896	59.24	1.29	0.097	7.01	0.56
SubTotal	25,841	579,166	54.96	0.71	0.021	17.98	0.23
TRX	6,283	154,923	47.94	1.15	0.025	26.65	0.49
TOTALS	32,124	734,089	53.48	0.81	0.02	19.81	0.29

Table 14-7: 2013 Extracted Resources based on LIM Contour Lines and GC samples

Table 14-8: Ore Resource Comparison (grade + volume) of 2013

	Our LIM Production Model			Our LIM Resource Model			
Ore	Volume	% Fe	% SiO2	Volume	% Fe	% SiO2	
Туре	(m3)			(m3)			
DRO	124,827	59.74	11.24	129,237	61.78	9.80	
PHG	170,620	55.41	17.49	277,012	57.91	14.22	
PLG	262,823	52.07	22.37	139,545	52.75	21.45	
Yellow	20,896	59.24	7.01	39,800	55.88	10.22	
SubTotal	579,166	54.96	17.98	585,595	57.40	14.70	
TRX	154,923	47.94	26.65	13,036	48.69	24.25	
Total	734,089	53.48	19.81	598,630	57.21	14.91	

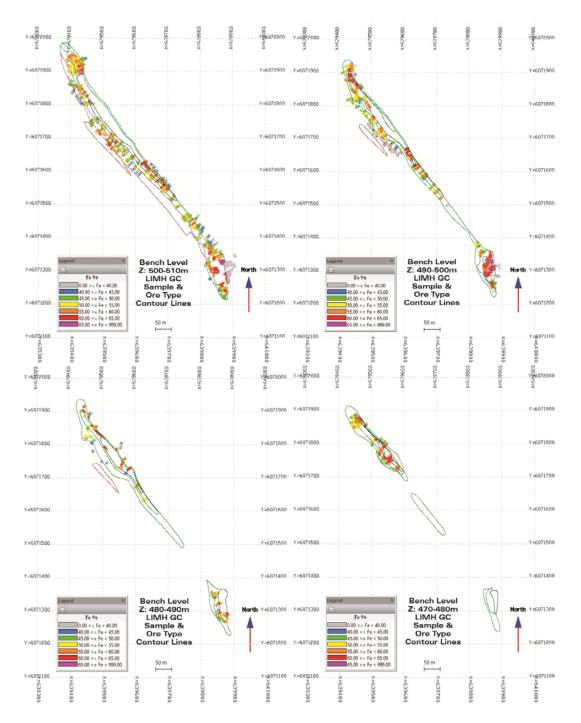


Figure 14-2: Bench Maps with LIM Dig Lines and GC Samples

Contour lines colored according to type: DRO=red, PHG+PLG=green, YELLOW=Orange, TRX=Pink. GC samples are shown with a + sign, colored according to %Fe.



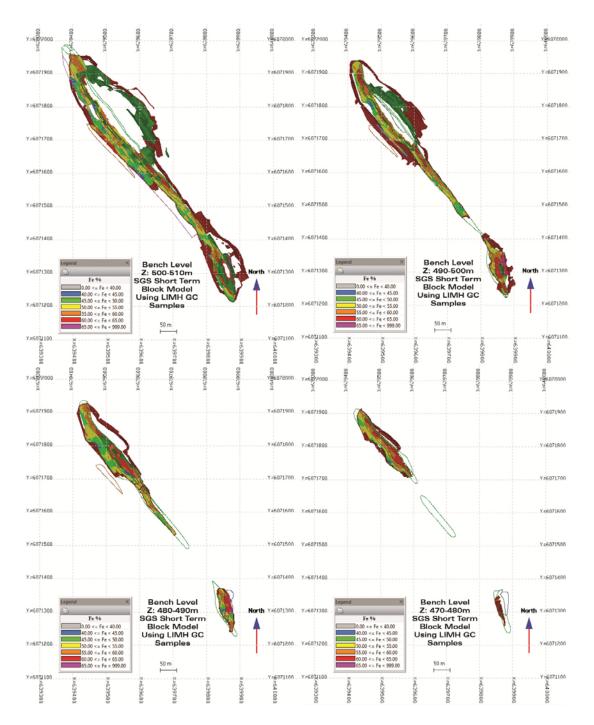


Figure 14-3: Bench Maps with Resource Block Model from GC Samples and Dig Lines

DRO=red, PHG+PLG=green, YELLOW=Orange, TRX=Pink. 2x3m blocks below the November 2012 topography (green) and above the pit surface at the end of November 2013 (Red) are shown with a color according to interpolated %Fe from GC samples in the same type.

14.4.4 Produced Ore Tonnages in 2012-2013 and Resulting Density

According to LIM, total ore extracted from the James from December 1st 2012 to November 30th, 2013 is 1,549,122 dry metric tonnes (dmt). When compared to an in-situ ore volume of 534,577 m³, it gives an average bulk dry density of 2.84t/ m³. In 2013, LIM updated the density calculation to meet the results and recommendations of the 2012 previous James Audit of reconciliation & update. The in-situ ore volume of originates from the calculated in-situ ore volume of LIM's production model.

The in-situ volume of DRO+PF+Yellow ore extracted in 2013 has been audited in the previous section and found to be adequate (SGS found 588,664 m³ vs. 534,577 m³).

Extracted, processed and transported ore and product tonnage numbers can be found in the November reconciliation.xlsx spreadsheet files made available to SGS on January 8th 2014. The Table 14-9 provides a summary of production numbers, to the best of SGS understanding. Some comments on the tonnage figures are as follows:

- 2013 production started in April and finished in November.
- ore from the pit can be either stockpiled, directly railed or processed. Two types of processing were conducted: (1) a wet plant (2) a screening plant. Both plants generate a sized product described as, lump, coarse sinter, sinter and fines. In the two cases, there is some reject, i.e. a difference between the tonnage of feed and the tonnage of product. This difference is minimal for the screening plant (approximately 15% in the form of oversize), but much more important (close to 50%) for the wet plant. The railed (and ultimately shipped) material is either DRO or products from processing.
- all tonnage numbers are expressed in dry tonnes which is the actual tonnage reduced by a % of moisture, which keeps around 5%.
- The total tonnage railed matches the total tonnage shipped plus changes in the port stockpile i.e. in 2013: 1,606,565 dmt shipped = 1,546,134 dmt railed + 60,432 dmt shipped stockpiles.
- SGS verified examples of Ore railed, weighted and shipments assay certificates. SGS did not fully verify all available sheets but rater assessed the Month to Date Table.xlsm file that is summarizing. SGS did not find any significant differences and is in the opinion that necessary steps and data processing procedures have been done according to industry best practices. The mining, railing, and shipping activities done by or on behalf of LIM during 2013.
- As of The end of November 2013, the remaining stockpile inventory is 50,576 dmt.
- SGS acknowledges that it is conceivable that the tonnage of ore stockpiled, railed and shipped is given with some uncertainty.



Table 14-9: Summary of Production Tonnages from James Pit in 2012-2013

Mining	012		л	-	C	7	0	0	10	4.4	10	
	013		4 APR	5 MAY	6 JUN	7 JUL	8 AUG	9 SEP	10 ОСТ	11 NOV	12 DEC	YTD
Plant Feed		dmt	9,044	73,547	171,577	223,552	259,282	158,244	279,392	120,214	DLC	1,294,852
DRO		dmt	-	1,939	54,632	35,758	55,154	22,822	10,596	16,260		197,161
Yellow Ore		dmt	34,323	-	-	17,693	-	2,306	2,788	-		57,110
Total Ora		dmat	42.267	75 496	226 210	277 002	214 426	102 271		126 474		
Total Ore Total Waste		dmt dmt	43,367 362,486	75,486 318,116	226,210 353,078	277,003 475,056	314,436 103,914	183,371 187,867	292,776 150,425	136,474 71,555		1,549,122 2,022,498
Total Material		dmt	405,853	393,602	579,288	752,058	418,351	371,238	443,201	208,029		3,571,620
Secondary Mining		unit	403,033	333,002	373,200	752,050	410,551	571,250	443,201	200,025		3,371,020
Redmond HG		dmt	-	-	-	4,342	101,748	83,467	-	15,839		205,395
Redmond LG		dmt	-	-	-	-	-	-	-	-		-
Total Redmond Ore		dmt	-	-	-	4,342	101,748	83,467	-	15,839		205,395
Redmond Waste		dmt	-	-	-	-	-	-	-	-		-
James Treat Rock		dmt				-	-	12,413	-	-		12,413
ROM Pad Floor		dmt				-	-	-	10,667	5,055		15,722
Feriman		dmt	-	-	-	-	-	18,562	156,162	746		175,469
Total Ore Total Material Moved		dmt dmt	-	-	-	4,342 4,342	101,748 101,748	114,442 114,442	166,829 166,829	21,639 21,639		409,000 409,000
Wet Processing		unit	-	-	-	4,542	101,740	114,442	100,829	21,059		409,000
Feed		dmt	-	-	125,445	253,941	239,404	225,108	239,687	32,786		1,116,371
Lump		dmt	-	-	125,445	40,540	50,477	48,434	50,258	7,025		207,284
Sinter		dmt	-	-	46,972	92,824	86,773	80,150	84,679	11,719		403,117
Plant Tonnes Produced		dmt	-	-	57,522	133,364	137,250	128,583	134,937	18,744		610,400
Poincto		dmt			67,923	120,577	102,154	96,524	104,750	14,042		505,970
Rejects TRIPLE-DECK SCREENING (Rav	v Plant			-	07,923	120,577	102,154	90,524	104,750	14,042		505,970
Total Screened		dmt	124,182	153,355	142,968	127,115	196,746	211,137	261,347	136,272		1,353,121
Waste		unit	127,102	رررريد	172,300	121,113	-		29,657	130,272		46,795
Re-Feed		dmt	76,859	23,650	37,650	41,451	23,783	102,573	48,253	11,185		365,404
Total Material for Reprocess	ing	dmt	76,859	23,650	37,650	41,451	23,783	102,573	48,253	11,185		365,404
Lump		dmt	-	-	-	-	-	-	-	6,315		6,315
Sinter		dmt	47,323	129,705	105,318	85,664	172,963	108,564	183,437	94,890		927,862
Total Screened Ore Produce	ed	dmt	47,323	129,705	105,318	85,664	172,963	108,564	183,437	101,205		934,177
Total Ore Produced		dmt	47,323	129,705	162,840	219,028	310,213	237,147	318,373	119,949		1,544,578
Total Ore Processed		dmt	124,182	153,355	268,413	381,056	436,150	436,245	501,034	169,058		2,469,491
Rail						_						
Lump		dmt	-	-	-	44,944	46,209	31,218	-	91,568		213,939
58% Sinter		dmt	31,099	96,067	- 157,265	-	-	-	-	- 119,537	-	127,166
62% Sinter Total Sinter Products		dmt dmt	- 31,099	43,139	,	156,301	267,608	176,811	284,368	119,537		1,205,029
Total Railed		dmt dmt	31,099 31,099	139,206 139,206	157,265 157,265	156,301 201,245	267,608 313,818	176,811 208,028	284,368 284,368	211,104		1,332,195 1,546,134
Total Railed (Wet)		wmt	33,264	149,589	169,945	215,988	341,237	229,741	310,588	227,790		1,678,141
							• . = ,= • ·	,	010,000			_,
Boats Shipped		winc										
Boats Shipped			-	-	-	_	45,559	-	47,967	-	129,085	222,611
Boats Shipped Lump 58% Sinter		dmt dmt	-	-	- 234,603	-	45,559 -	-	47,967	-	129,085	222,611 234,603
Lump		dmt	-	-	- 234,603 93,422	- - 174,036	45,559 - 278,364	- - 151,565	47,967 - 110,322	- - 309,084	129,085 	,
Lump 58% Sinter		dmt dmt	- - - -	-		- - 174,036 174,036	-	- - 151,565 151,565	-	- - 309,084 309,084		234,603
Lump 58% Sinter 62% Sinter		dmt dmt dmt	- - - -	-	93,422		- 278,364	,	- 110,322		32,558	234,603 1,149,351
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles		dmt dmt dmt dmt	- - - - - April	-	93,422 328,026	174,036	- 278,364 323,923	151,565	- 110,322 158,288	309,084	32,558 161,643	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining		dmt dmt dmt dmt wmt March	•	- - - - May	93,422 328,026 351,886 June	174,036 186,334 July	- 278,364 323,923 350,253 August	151,565 166,008 September	- 110,322 158,288 170,692 October	309,084 337,244 November	32,558 161,643 172,329 December	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed d		dmt dmt dmt dmt March 206,482	91,344	- - - - - - May 88,957	93,422 328,026 351,886	174,036 186,334 July 19,595	- 278,364 323,923 350,253	151,565 166,008	- 110,322 158,288 170,692	309,084 337,244	32,558 161,643 172,329	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed d Oversize d	dmt	dmt dmt dmt dmt wmt March 206,482 35,240	91,344 64,452	- - - - - - May - 88,957 -	93,422 328,026 351,886 June 9,104 -	174,036 186,334 July 19,595 -	- 278,364 323,923 350,253 August 8,468	151,565 166,008 September 64,917 -	- 110,322 158,288 170,692 October 74,080 -	309,084 337,244 November	32,558 161,643 172,329 December	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed d Oversize d Undersize d	dmt dmt	dmt dmt dmt dmt March 206,482	91,344	- - - - - - May 88,957	93,422 328,026 351,886 June	174,036 186,334 July 19,595	- 278,364 323,923 350,253 August	151,565 166,008 September	- 110,322 158,288 170,692 October	309,084 337,244 November	32,558 161,643 172,329 December	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed d Oversize d Undersize d DRO d	dmt dmt dmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452	- - - - - - - - 88,957 - 133,308	93,422 328,026 351,886 June 9,104 - 170,958	174,036 186,334 July 19,595 -	- 278,364 323,923 350,253 August 8,468	151,565 166,008 September 64,917 - -	- 110,322 158,288 170,692 October 74,080 - -	309,084 337,244 November 76,010 - -	32,558 161,643 172,329 December	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed d Oversize d Undersize d DRO d	dmt dmt dmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 -	174,036 186,334 July 19,595 - 94,513 -	- 278,364 323,923 350,253 August 8,468 62,210 -	151,565 166,008 September 64,917 - - -	- 110,322 158,288 170,692 October 74,080 - - - -	309,084 337,244 November 76,010 - - - -	32,558 161,643 172,329 December 76,010 - - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed d Oversize d Undersize d DRO d Yellow Ore d	dmt dmt dmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 -	174,036 186,334 July 19,595 - 94,513 -	- 278,364 323,923 350,253 August 8,468 62,210 -	151,565 166,008 September 64,917 - - -	- 110,322 158,288 170,692 October 74,080 - - - -	309,084 337,244 November 76,010 - - - -	32,558 161,643 172,329 December 76,010 - - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO d Yellow Ore d Redmond	dmt dmt dmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 -	174,036 186,334 July 19,595 - 94,513 -	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229	151,565 166,008 September - - - - 176,535	- 110,322 158,288 170,692 October 74,080 - - 179,323	309,084 337,244 November 76,010 - - - 179,323	32,558 161,643 172,329 December 76,010 - - - 179,323	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d Oversize d PRO Yellow Ore Redmond Raw High Grade Oversize (refeed) Ferriman	dmt dmt dmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 -	174,036 186,334 July 19,595 - 94,513 -	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465	151,565 166,008 September - - - - 176,535	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,323 - - 6,745	309,084 337,244 November - - - 179,323 - -	32,558 161,643 172,329 December - 76,010 - - 179,323 - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO Yellow Ore Redmond Raw High Grade Oversize (refeed) Ferriman Floor	dmt dmt dmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 -	174,036 186,334 July 19,595 - 94,513 -	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465	151,565 166,008 September - - - - 176,535	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,323 - -	309,084 337,244 November - 76,010 - - 179,323 -	32,558 161,643 172,329 December 76,010 - - - 179,323	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO Yellow Ore Redmond Raw High Grade Oversize (refeed) Ferriman Floor Wet Plant	dmt dmt dmt dmt dmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 - 166,536	174,036 186,334 July 19,595 - 94,513 - 174,229	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465 7,783	151,565 166,008 September 64,917 - - 176,535 - 176,535	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,323 - - 6,745 2,973 -	309,084 337,244 November - - - 179,323 - -	32,558 161,643 172,329 December - 76,010 - - 179,323 - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO Yellow Ore Redmond Raw High Grade Oversize (refeed) Ferriman Floor Wet Plant Lump d	Jmt Jmt Jmt Jmt Jmt Jmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 - 166,536 - 166,536 - 10,890	174,036 186,334 July 19,595 - 94,513 - 174,229	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465 7,783 - 10,754	151,565 166,008 September 64,917 - - 176,535 176,535 14,845 27,970	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,323 - - 6,745 2,973 - 78,228	309,084 337,244 November - - - 179,323 - -	32,558 161,643 172,329 December - 76,010 - - 179,323 - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize DRO Vellow Ore Redmond Raw High Grade Oversize (refeed) Ferriman Floor Wet Plant Lump d	dmt dmt dmt dmt dmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 - 166,536	174,036 186,334 July 19,595 - 94,513 - 174,229	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465 7,783	151,565 166,008 September 64,917 - - 176,535 - 176,535	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,323 - - 6,745 2,973 -	309,084 337,244 November - - - 179,323 - -	32,558 161,643 172,329 December - 76,010 - - 179,323 - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO Yellow Ore Redmond Raw High Grade Oversize (refeed) Ferriman Floor Wet Plant Lump d Sinter d	Jimt Jimt Jimt Jimt Jimt Jimt Jimt	dmt dmt dmt wmt March 206,482 35,240 62,010 - 143,243 - 143,243	91,344 64,452 109,658 177,566	- - - - - - - - 133,308 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 134,307 - 144,307 -	93,422 328,026 351,886 June 9,104 - 170,958 - 166,536 - 166,536 - 10,890	174,036 186,334 July 19,595 - 94,513 - 174,229	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465 7,783 - 10,754	151,565 166,008 September 64,917 - - 176,535 176,535 14,845 27,970	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,323 - - 6,745 2,973 - 78,228	309,084 337,244 November - - - 179,323 - -	32,558 161,643 172,329 December - 76,010 - - 179,323 - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO d Yellow Ore d Redmond Raw High Grade Oversize (refeed) Ferriman Floor Wet Plant Lump d Triple-Deck Screeners Lump d	Jmt Jmt Jmt Jmt Jmt Jmt	dmt dmt dmt dmt wmt March 206,482 35,240 62,010	91,344 64,452 109,658	- - - - - - - - - - 133,308 -	93,422 328,026 351,886 June 9,104 - 170,958 - 166,536 - 166,536 - 10,890 3,583	174,036 186,334 July 19,595 - 94,513 - 174,229	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465 7,783 - 10,754 9,765	151,565 166,008 September 64,917 - - 176,535 176,535 14,845 27,970	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,323 - - 6,745 2,973 - 78,228	309,084 337,244 November - - - 179,323 - -	32,558 161,643 172,329 December - 76,010 - - 179,323 - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO d Yellow Ore d Redmond Raw High Grade Oversize (refeed) Ferriman Floor Wet Plant Lump d Triple-Deck Screeners Lump d	Jimt Jimt Jimt Jimt Jimt Jimt Jimt Jimt	dmt dmt dmt wmt March 206,482 35,240 62,010 62,010 - 143,243 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	91,344 64,452 109,658 177,566	- - - - - - - 133,308 - 134,307 - 134,307 - 134,307 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 144,404 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,4000 - 144,40000000000000000000000000000000000	93,422 328,026 351,886 June 9,104 - 170,958 - 166,536 - 166,536 - 10,890 3,583 -	174,036 186,334 July 19,595 - 94,513 - 174,229	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465 7,783 10,754 9,765 10,754	151,565 166,008 September - - - 176,535 - 14,845 - 14,845 - 27,970 3,743	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,228 - 125,228 - - - - - - - - - - - - -	309,084 337,244 November - 76,010 - - 179,323 - 8,028 - 8,028 - -	32,558 161,643 172,329 December 76,010 - - - 179,323 - 179,323 - - 8,028 - - - - - - - - - - - - - - - - - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO d Yellow Ore d Redmond Raw High Grade Oversize (refeed) Ferriman Floor Wet Plant Lump d Sinter d Sinter d Port d	Jimt Jimt Jimt Jimt Jimt Jimt Jimt Jimt	dmt dmt dmt wmt March 206,482 35,240 62,010 62,010 - 143,243 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	91,344 64,452 109,658 177,566	- - - - - - - 133,308 - 134,307 - 134,307 - 134,307 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 134,308 - 144,404 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,400 - 144,4000 - 144,40000000000000000000000000000000000	93,422 328,026 351,886 June 9,104 - 170,958 - 166,536 - 166,536 - 10,890 3,583 -	174,036 186,334 July 19,595 - 94,513 - 174,229	- 278,364 323,923 350,253 August 8,468 62,210 - 174,229 39,465 7,783 10,754 9,765 10,754	151,565 166,008 September - - - 176,535 - 14,845 - 14,845 - 27,970 3,743	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,228 - 125,228 - - - - - - - - - - - - -	309,084 337,244 November - 76,010 - - 179,323 - 8,028 - 8,028 - -	32,558 161,643 172,329 December 76,010 - - - 179,323 - 179,323 - - 8,028 - - - - - - - - - - - - - - - - - - -	234,603 1,149,351 1,606,565
Lump 58% Sinter 62% Sinter Total Shipments Total Shipped (Wet) Closing Inv. Stockpiles Mining Plant Feed Oversize d DRO d Yellow Ore d Raw High Grade Oversize (refeed) Ferriman Floor Wet Plant Lump d. Sinter d Sinter d Port DRO Lump G	Jimt Jimt Jimt Jimt Jimt Jimt Jimt Jimt	dmt dmt dmt dmt dmt gmt 206,482 35,240 62,010 - 143,243 - 143,243 - 5,240 - 143,243 - - 5,87 2,964	91,344 64,452 109,658 177,566 	- - - - - - - - - - 133,308 - - 166,536 - - 166,536 - - 166,536 - - 166,536 - - 166,536 - - 166,536 - - - 166,536 - - - - - - - - - - - - - - - - - - -	93,422 328,026 351,886 June 9,104 - 170,958 - 166,536 10,890 3,583 10,890 3,583 - 1,375 50,743 -	174,036 186,334 July 19,595 - 94,513 - 174,229 174,229 6,486 2,535 - 24,610 50,743 44,944	- 278,364 323,923 350,253 August 62,210 - 174,229 39,465 7,783 39,465 7,783 10,754 9,765 - 10,754 9,765	151,565 166,008 September - - - 176,535 - 14,845 - 14,845 - 27,970 3,743 - 27,433	- 110,322 158,288 170,692 October 74,080 - - 179,323 - 179,323 - - 6,745 2,973 - 78,228 125 - 14,798	309,084 337,244 November - - - 179,323 - - - 8,028 - - 8,028 - - - - - - - - - - - - - - - - - - -	32,558 161,643 172,329 December 76,010 - - 179,323 - 179,323 - 179,323 - 179,323 - 179,323 - 1,99,52 - 1,9	234,603 1,149,351 1,606,565
Lump58% Sinter62% SinterTotal ShipmentsTotal Shipped (Wet)Closing Inv. StockpilesMiningPlant FeedOversizedOversizedDROdYellow OredRaw High GradeOversize (refeed)FerrimanFloorWet PlantLumpdSinterdSinterdDROdSinterdSinterdDROdSinter	Jimt Jimt	dmt dmt dmt 0mt 206,482 35,240 62,010 62,010 143,243 143,243 1 143,243 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	91,344 64,452 109,658 177,566 	- - - - - - - - - - - 133,308 - - 166,536 - - 166,536 - - 166,536 - - 166,536 - - 166,536 - - 166,536 - - - 166,536 - - - - - - - - - - - - - - - - - - -	93,422 328,026 351,886 June 9,104 - 170,958 - 170,958 - 106,536 3 10,890 3,583 10,890 3,583 10,890 3,583 - 1,375 50,743 - 50,743	174,036 186,334 July 19,595 		151,565 166,008 September 64,917 - - 176,535 176,535 - 14,845 - 14,845 - 27,970 3,743 - 27,433 - 27,433 - 50,743 - 50,743	- 110,322 158,288 170,692 October 74,080 - 179,323 - 179,323 - 179,323 - 179,323 - 179,323 - 179,323 - 179,323 - 14,798 - 14,798 - 50,743 28,846 -	309,084 337,244 November - - - 179,323 - - - 8,028 - - 8,028 - - 1,995 50,743 120,413	32,558 161,643 172,329 December 76,010 - - - 179,323 - 179,323 - - 8,028 - - - - - - - - - - - - - - - - - - -	234,603 1,149,351 1,606,565
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SGS Canada Inc.



14.4.5 Discussion

Following completion of its Audit, SGS concludes that the volume and grades of in-situ ore planned to be mined in James pit from December 1^{st} 2012 to the end of November 2013 are well defined (1,105 k m³ @ 59.4% Fe and 11.6% SiO₂ our BM PROD) and reasonably well predicted by the current SGS resource block model (1,140 km³ @ 59.2% Fe and 12.1% SiO₂ OUR Resources BM). SGS also accepts the Total Ore Mined from James of 1,549,122 dmt, the entire Total Ore Produced tonnage of about 1,544,578 dmt (involving the Ferriman, and Redmond 2B), and the total railed Ore Tonnage of 1,546,134 dmt, for the same period. As indicated before, this leads to a calculated average dry bulk density of about 2.84 t/ m³ for James which is respecting the updated bulk density equation ((Fe*0.0258)+2.338)*0.75.

Another factor to consider might be the difference between planned ore production (from contour lines) and actual volume of material excavated as ore. This is what was previously called "modifying factor" between resources (in-situ material) and reserves (what goes to the plant or is directly shipped).

One of those modifying factors is mine recovery (or loss) that affects metal and tonnage, the other one being dilution, which affects grade and tonnage. Typically, a mining recovery can be in the order of 90%-95% if ore selection in the pit (what goes where) is rather conservative for fear of dilution. That means that the actual excavated ore volume is only 90% of the planned volume. In that case, the re-calculated average bulk density is about 10% more than what can be derived from the planned volume, which in SGS's case is about 3.15 t/ m³ instead of 2.86 t/ m³.

Some discussions with LIM operating staff indicate that a 90% mine recovery is very unlikely. Mining of James material is fairly selective with the use of a backhoe to recover specific ore material close to contour lines drawn on bench maps from available grade control samples. Moreover, the transition from one type of material to the next (say from DRO to PLG of PHG (PG)) across the contour line is gradational and, hence, the effect of potential dilution is minimal.

SGS therefore concludes that the previously recommended reduced average density is adequate and suitable for resources estimation. SGS recommends continuing the reconciliation process on a regular basis (at least every quarter) with the above suggested corrections to predicted resources from the block model in order to verify that they continue to be valid.

14.5 James (James Pit) Mineral Resource Estimation

As described above, SGS Geostat updated the mineral resource estimate for the James iron ore deposit (James Mine) using the new and updated November 30th, 2013 topographic surface provided by LIM. The James Mine in situ SG formula based on %Fe was also updated according to reconciliation work by LIM and from validation by Michel Dagbert, Senior Geostatistician for SGS Geostat.

This is an update of LIM's previously published NI 43-101 compliant mineral resource estimate (MRE) for the Silver Yards Direct Shipping Iron Ore Projects Effective Date: April 12th, 2013, (signed June 2nd, 2013) and filed on SEDAR. All of the geological interpretations, 3D solid creation, block modeling and resource estimation information is fully described in the initial SGS March 2010 Technical Report.

LIM's present mining and processing operations are mainly composed dry screening and washing the James deposit mineralised material. , For mineral resources disclosure, SGS opted for an Ore Type category designed by LIM. These categories are reflecting what LIM is actually mining, processing/upgrading and providing to the market.

Whereas:

- DRO is the direct railing ore with %Fe> 60% and %P<0.05%
- PHG is the high grade plant feed ore with 55%<%Fe<60% and %P<0.05%
- PHG is the low grade plant feed ore with 50%<%Fe<55% and %P<0.05%
- Yellow is a silicate carbonate iron formation with %Fe > 50% and %P>0.05%
- TRX is the treat rock material with 45%<%Fe<50%, which need to be upgraded by the treatment plant
- Mn: is the Manganeferous material where %Fe+%Mn >=50%, % Mn>3.5%, %SiO₂
 <18%, %Al₂O₃<5%

As of the date of this Report, LIM's direction and personnel agree that the only true economic category to consider on James is the DRO type as described above. It is therefore decided by LIM and SGS that the IOC Ore type category would no longer be applicable for this type of deposit.

As of the date of the Report, the James Mine is under care and maintenance. Mineral depletion at James Mine has reached the optimal pit design. Previous mineral resources in James (2009 block Model) are no longer current. According to LIMH, economical, recovery and grade factors demonstrated that remaining resources according to the original block model (2009) were no longer economic. The block model was removed from total resources estimates. Additional diamond drilling carried out in the winter months of late 2013 and early 2014 outlined a small zone of mineralised material outside pit design called James Pit ("James Pit"), but does not



contained sufficient material to sustain mining operations at James under current economic conditions. Please see information below.

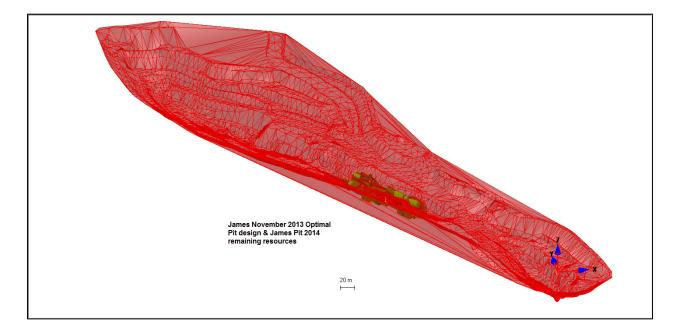


Figure 14-4: November James final Pit design and Deposit

LIMH started the delineation of the south central part of the James deposit mainly under the November 2013 pit design (James Pit).

SGS Geostat conducted the current mineral resource estimate for the James Pit iron deposit using 8 historical RC drillholes, 1 2008 RC, and 9 recent 2013 diamond drillholes data compiled from the 2008 to 2013 exploration programs conducted on James. The database used for James Pit contains a total of 585 m of DDH drilling in 9 RC drillholes and 9 RC drillhole (551.65m) for a total of 731 assays. The database cut-off date used for resources estimation and reconciliation is March 31st 2014.

Compositing was done on the mineralized intervals that are inside the 3d solid. A minimum length of 1.5 m was set. No capping was necessary.

At total of 90 composites were generated. The modeled 3D wireframe of the mineralized envelope was used to constrain the composites Table 14-10 summarizes the statistics of the composite data. Figure 14-5 shows the histogram of the composites.



The Composites were built from assay intervals from DDH and vertical RC holes. Spacing between holes and trenches varies along a 100 m strike length at the best. At the best trenches and RC holes are spaced on cross-sections at 30m distance along the N313.5° 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). Only composites with a center within the same mineralized envelope as blocks are kept.

14.5.1 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 14-10. Histograms are on Figure 14-5. Some correlation plots appear on Figure 14-6.

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 14-5, Figure 14-6). Distribution of alumina and manganese and phosphorous are positively skewed with a long tail of high values. All other correlations between variables are weak.

Statistics	Fe	Phos	Mn	SiO2	Al2O3
Mean	53.07	0.02	1.01	21.55	0.36
Standard Error	0.56	0.00	0.10	0.78	0.04
Median	53.76	0.02	0.76	20.83	0.30
Mode	52.25	0.01	0.12	25.80	0.20
Standard Deviation	5.32	0.01	0.98	7.40	0.30
Sample Variance	28.31	0.00	0.96	54.70	0.09
Kurtosis	1.33	0.53	5.51	0.78	3.69
Skewness	-1.20	0.81	1.96	0.84	1.66
Range	24.36	0.06	5.72	34.99	1.48
Minimum	36.55	0.00	0.05	9.40	0.01
Maximum	60.91	0.06	5.77	44.39	1.49
Count	90	85	89	90	59

Table 14-10: 3m Composite Statistics, James Pit Resource Blocks

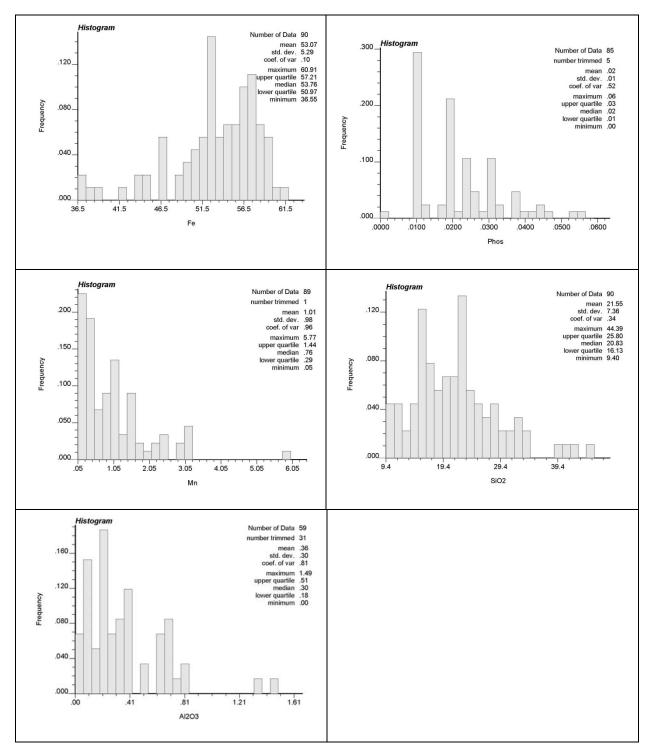


Figure 14-5: Histograms of James Pit Composite Data



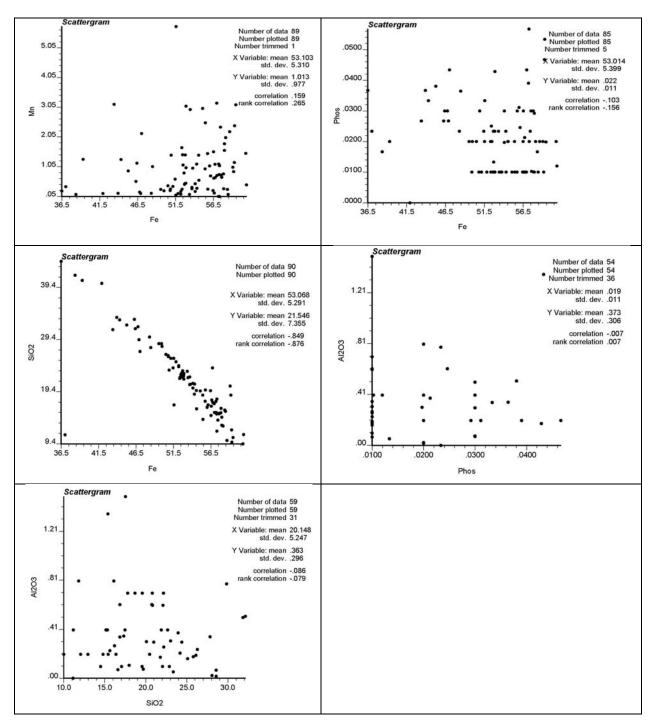


Figure 14-6: Correlation Plots of DSO Composite Grade Data (2013)

14.5.2 Block Grades Interpolation

The %Fe, %SiO₂, %Al2O₃, %Mn and %P grades of each of the 695 blocks (5x5x5m) within the DSO envelope were interpolated from the grades of nearby composites through the Inverse distance squared (ID2) method. No kriging was done and no variograms were built du to the small amount of available data.

The interpolation was done in successive runs with minimum search conditions relaxed from one run to the next until all blocks were 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 313.5 deg. strike, its intermediate radius is along the average dip of 60° to the 43.5 deg. and its short radius is along the perpendicular to the average strike+dip i.e. a dip of 60° to the NE. For all variables the long and the intermediate radii were set to 20m for sample availability. The short radius was set to 10m. Dimensions of additional search ellipse were doubled in the second and third interpolation run.

The minimum and maximum number of composites used was respectively 3 and 15 with a maximum of 2 composites per hole. The conditions were set to insure that a block grade is truly interpolated from samples in several holes (on different sides of the block) and not extrapolated from a few samples in the same drillhole or trench.

Figure 14-7 and Figure 14-7 represent typical sections of the James Pit deposit showing the geological interpretations and resource block models:

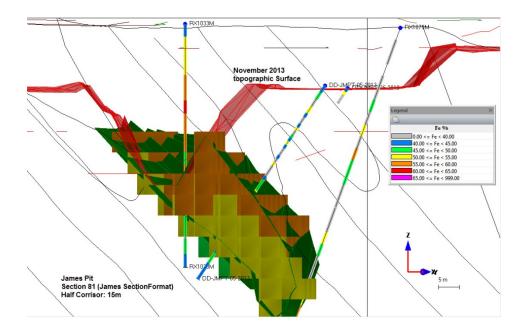


Figure 14-7: James Pit Section 81 – Geological Interpretation

14.5.3 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. 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.

14.5.4 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 took into consideration the amount of data available for geological interpretation, grade interpolation and classification. The entire James Pit mineral resources were classified as inferred.

14.5.5 Mineral Resources Estimation Conclusion

The current resource estimates for the James deposit tonnes including the DRO, PHG, PLG, YELLOW and MN Ore types (Table 14-11) are 232,000 tonnes in the inferred category at a grade of 55.77% 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 resources are dated as of March 31st 2014.



The James Pit deposit remains open to the northwest and southeast however, additional DD drilling is required. The results of the resource estimates for the James Pit deposit are shown in Table 14-11.

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 14-11: James	s Pit – Resource Estimates
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Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
James	Fe Ore	Measured (M)	-	-	-	-	-	-
(James	(DRO,	Indicated(I)	-	-	-	-	-	-
Pit)	PHG, PLG,	Total M+I	-	-	-	-	-	-
,	Yellow)	Inferred	232,000	55.77	0.028	0.99	21.67	0.36

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability



14.6 Audit of Redmond 2B 2013 Reconciliation

LIM personnel conducted in 2013 a limited reconciliation of the RD2B deposit production with estimated resources in a block model produced by SGS at the end of 2009 ("SGS 2009"). The reconciliation work conducted by LIM was given to SGS in the form of excel sheets, 3D solids and monthly flow charts. SGS was asked to audit the work.

Reconciliation work is divided in two parts. The first part (14.6.1) is the comparison between the In-situ resources and the production model. Since LIM did not provide a production model, SGS created its own production model from available production data (blast holes and updated open pit surfaces. SGS used also LIM's ore type categories (Mn Ore not present in Rd2B):

Whereas:

- %Fe> 60% and %P<0.05% • **DRO** (Direct Railing Ore): • **PHG** (Plant Feed Ore):
- **PLG** (Plant Feed Ore):

- 55%<%Fe<60% and %P<0.05%
- 50%<%Fe<55% and %P<0.05%
- Yellow (Silicate Carbonate Iron Formation): %Fe > 50% and %P>0.05%
- **TRX** (Treat Rock Material): 45%<%Fe<50%

The second part (14.6.2) of the reconciliation work completed by SGS was the validation of LIM's tonnages from their monthly calculation tables. SGS concluded that the volume (m³) of insitu ore extracted from April 2013 to the end of November 2013 corresponds to total material railed + ending inventories of 205,395 dmt (dry metric tonnes).

Based on LIM reconciliation data (volume and tonnage extracted in 2013), SGS calculated an average density of 3.00 t/m³. SGS estimated an average density of 2.95 t/m³ in ore blocks of the SGS 2009 resource model. The density formula used is the updated 2014 SG as described in section 14.2.

14.6.1 Volume Comparison between In-Situ Resources and Production Model 14.6.1.1 Mined 2013 Resources from original (SGS 2009) Block Model

SGS extracted all blocks under the latest topography and above the pit surfaces of September and November 2013 with an assigned block percentage. The SG 2014 was assigned to each block.

Figure 14-1 shows the November 2013 topography for the southern and northern part of RD2B 2009 blocks colored according to their estimated %Fe.

SGS extracted blocks (fractions) between the topography and the pit surfaces of September and November 2013. It is totalling 763 blocks (with block fraction) representing a total volume of 57,277 m³. Grades were weighted based on volume, not volume*density.

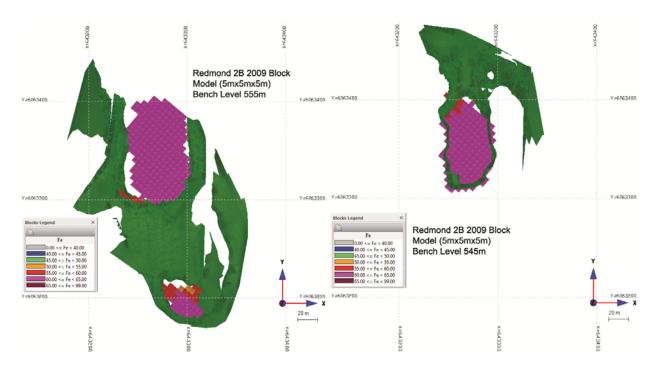


Area	Ore Type	Classification	Volume(m ³)	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
		Measured (M)	-	-	-	-	-	-
RD2B	DRO*	Indicated(I)	57,277	62.25	0.103	0.13	2.84	1.63
		Total M+I	57,277	62.25	0.103	0.13	2.84	1.63
		Inferred	77	60.34	0.114	0.09	4.11	3.03

Table 14-12: DRC	Resources, end	l of November	2013 According	to SGS Model
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Grades based on volume

*Described as DRO by LIM but falls into Yellow according to LIM Ore Type parameters



Green: September and November pit surfaces.

Figure 14-8: Bench Maps with SGS Model Blocks and Pit limits

14.6.1.2 2013 Mined Resources based on LIM 2013 production model

SGS verified the production model (short term).Contrary to the James Mine, LIM did not outline the material according to Ore Type but generally considered all the material as DRO. LIM used Face samples as grade control (hereafter GC samples) but did not base nor create contour lines based on the GC samples done on RD2B. Two separate volumes of extracted Ore were created instead. SGS received on January 8th, 2014 the Master Sample Sheet 2013.xlsx with 835 "face" sample results for year 2013. See Figure 14-2.



The 2013 Ore Solids correspond to the extracted material of September and November 2013. Although not validated by SGS the contour lines are generally consistent with the GC sample data. Most GC samples within the 2013 Ore solids (DRO) were above 60% Fe.

Although the Average values of the GC samples are corresponding to Yellow Ore Type i.e. Average Fe grade is 60.08% Fe, 0.09%P, 0.26% Mn and 4.46% SiO₂, LIM considered all material and GC samples as DRO.

Given the irregular grid of GC samples, straight mean sample data are not necessarily representative of the average grades of the material within the same contour lines. To acquire more representative average grades, SGS built a temporary *short term* block model between the updated topography and inside the September and November pit surfaces. SGS used blocks 2mx2mx2.5m. Blocks were rotated using the same parameters and block model origin.

SGS used the simple inverse distance (ID) interpolation with a flattened search ellipsoid 20 x 20 x 10 m. SGS used a minimum of 3 GC samples and a maximum of 15. A second run was used to complete the estimation process with enlarged ellipsoids ($40 \times 40 \times 20$ m). No maximum GC samples per holes were used.

Volume wise, SGS concludes that the SGS 2009 resources model underestimated DRO (Yellow) ore volume by 4% and underestimated the PHG, PLG, and DRO since no resources were outlined as these types in the 2009 Resources Model. Globally and grade wise, The SGS 2009 resource Model tends to overestimate Fe and P respectively by 2% and 13% and underestimates SiO₂ by 10%. Grade differences are higher for %P and %SiO₂.

At this stage of the reconciliation work (volume + grades), the SGS 2009 resource model derived from historical exploration and definition holes appears adequate in predicting only the average grades. It is SGS understanding that the LIM Ore Volumes on RD2B are different than previously interpreted in 2009. Especially at the edges and/or near contacts between the two previously used 2009 solids (N & S).

There is a notable difference between the *short term* and *long term* volumes. Some improvement could be gained in the prediction of the minor ore types by:

- Using the Ore Type limits (DRO, PHG, PLG and Yellow) and interpretations on sections as references for the update of the Rd2B resources model.
- Using blocks of 10x2.5x5 m (10m along the NW strike) rather than the cubic (5x5x5 m) in order to match the fairly narrow extension and separation of the two distinct solids (N & S) of the resources model.
- Updating the entire block model with new finding from the 2013 mining work.



	SGS Pro	oduction N	1odel			SGS 20	009 Resource	s Model	
Ore	Volume				Ore	Volume			
Туре	(m₃)	Fe (%)	P (%)	SiO2 (%)	Туре	(m₃)	Fe (%)	P (%)	SiO2 (%)
yellow	63,901.49	61.12	0.09	3.13	Yellow	57,354.16	62.24	0.10	2.85
DRO	355.14	61.78	0.05	5.47	DRO	-	-	-	-
PLG	518.39	57.60	0.03	17.83	PLG	-	-	-	-
PHG	760.58	53.01	0.03	11.44	PHG	-	-	-	-
Total	67,318.36	61.53	0.09	3.29	Total	57,354.16	62.24	0.10	2.85

Table 14-13: Rd2B Ore Resource Comparison (grade + volume) as of end of Nov. 2013



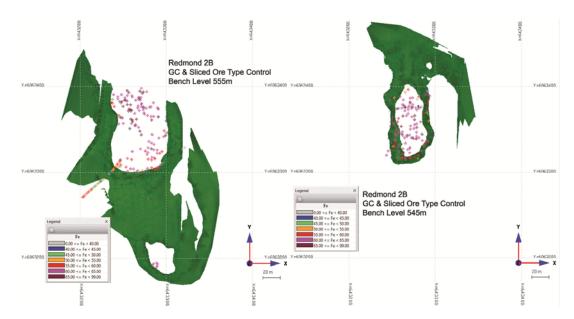


Figure 14-9: Bench Maps with LIM Dig Lines and GC Samples

September and November pit surfaces. GC samples are shown with a filled box, colored according to %Fe

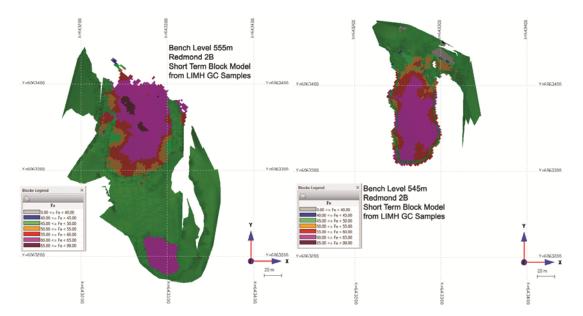


Figure 14-10: SGS short term Block Model from GC Samples and Ore Solids

September and November pit surfaces. Short term blocks colored according to %Fe.

14.6.2 Redmond 2B Produced Ore Tonnages in 2013 and Resulting Density

According to LIM, total ore extracted from the Redmond 2B for year 2013 (September and November 2013) is 205,395 dry metric tonnes (dmt). When compared to LIM in-situ ore volume of 68,458 m³, it gives an average bulk dry density of 3.00 t/m3. In 2013, LIM updated the density calculation to meet the results and recommendations of the 2012 previous James Audit of reconciliation & update. The in-situ ore volume of originates from the calculated in-situ ore volume of LIM's production model.

The in-situ volume originates from two periods of mining at RD2B. The first one is from the difference in topography between the beginnings of 2013 to October 2013. LIM calculated 63,178 m3. In November, SGS mined for 5 days. A month-end pit survey was conducted to yield $5,280 \text{ m}^3$.

14.6.3 Redmond 2B Discussion

Following completion of its Audit, SGS concludes that there is not enough production data in terms of volumes, grades and ORE type contouring for short term production models and need additional definition in the eventuality that LIM would want to continue Ore extraction at Redmond 2B.. The difference between the SGS production model of 67,318 m³ and LIM's extracted Volumes totalling 68,458m3 is relatively close (2%) but the shape of the block model need additional updating. According to mined out areas, a significant difference is observed between the planned geological solid (2009) and the onsite observations It is noted however that the average Fe grades are comparable to a certain extent.

Additionally, the resulting mined tonnage from the short term production block model of 196,965.55 dmt is relatively close to LIM disclosed tonnages processed of 205,395 dmt for a difference of 4%. The difference is difficult to explain but may be due to the difference between planned resources and the actual mined out resources.

Given the relatively small difference in tonnages between the short term production model and the actual disclosed processed tonnage, SGS therefore concludes that the previously recommended reduced average density is adequate and suitable for resources estimation but need additional attention and data to fully understand its behavior on Redmond 2B.

SGS recommends continuing the reconciliation process on a regular basis (at least every quarter) with the above suggested corrections to predicted resources from the block model in order to verify that they continue to be valid.



14.7 Redmond 2B Mineral Resource Update

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 14-1, they are all inside LIM property boundary and under the current topographic surface.

SGS Geostat updated the mineral resource estimate for the Redmond 2B iron ore deposit ("RD2B") using the new and updated November 30th, 2013 topographic surface provided by LIM. The Rd2B in-situ updated SG formula (SG 2014) is based on %Fe and was updated according to reconciliation work by LIM and from validation by Michel Dagbert(2013), Senior Geostatistician for SGS Geostat.

This is an update of LIM's previously published NI 43-101 compliant mineral resource estimate (MRE) for the Silver Yards Direct Shipping Iron Ore Projects Effective Date: April 12th, 2013, (signed June 2nd , 2013) and filed on SEDAR. All of the geological interpretations, 3D solid creation, block modeling and resource estimation information is fully described in the initial SGS March 2010 Technical Report.

The mineral resource estimate of the Redmond 2B deposit was 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 SG formula as per to reconciliation audit by Michel Dagbert (2013), Senior Geostatistician for SGS Geostat was implemented on mineral resources.

The Redmond 2B database contains a total of 1,626 m of RC drilling in 25 RC drillholes for a total of 524 assays. Also, 10 trenches for a total of 663 m of trenching and a total of 205 assays were included in the database. The database cut-off date used for resources estimation is March 31st 2014.

The current updated mineral resource estimate as of March 31st, 2014 (Table 14-14), for the Redmond 2B deposit based on updated density formula (M. Dagbert, 2013) is of 518,000 tonnes including DRO, PHG, PLG and Yellow (Fe Ore) ore types in the Measured and Indicated categories at a grade of 59.21% Fe and 21,000 tonnes in the inferred category at a grade of 59.07% Fe.

To the author's knowledge, 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 extracted in 2013 mineralized material from RD2B. 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.

Area	Ore Type	Classificatio n	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	AI2O3 (%)
	Fe Ore (DRO, PHG, PLG, Yellow)	Measured (M)	-	-	-	-	-	-
Redmond		Indicated(I)	518,000	59.07	0.13	0.44	5.80	2.25
2B		Total M+I	518,000	59.07	0.13	0.44	5.80	2.25
	r chow)	Inferred	25,000	57.19	0.13	0.66	5.92	4.12

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

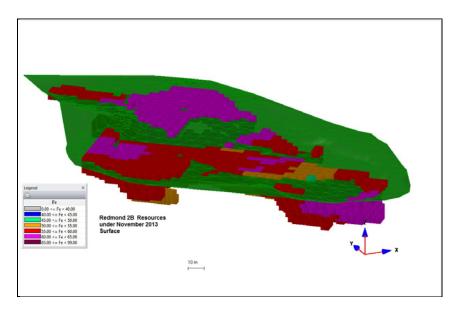


Figure 14-11: Updated Redmond 2B Topographic Surface and Deposit

14.8 Bean Lake Mineral Resource Estimation

SGS Geostat verified the available data and proposed mineralised solid for the Bean Lake deposit located south west of James Mine using the new and updated November 30th, 2013 topographic surface provided by LIM. The Bean Lake deposit in situ SG formula used is the same as the 2013 James Pit based on %Fe was also updated according to reconciliation work by LIM and from validation by Michel Dagbert, Senior Geostatistician for SGS Geostat.

LIM's present mining and processing operations are mainly composed dry screening and washing the James deposit mineralized material. For mineral resources disclosure, SGS opted for an Ore Type category designed by LIM. These categories are reflecting what LIM is actually mining, processing/upgrading and providing to the market.

Whereas:

- DRO is the direct railing ore with %Fe> 60% and %P<0.05%
- PHG is the high grade plant feed ore with 55%<%Fe<60% and %P<0.05%
- PHG is the low grade plant feed ore with 50%<%Fe<55% and %P<0.05%
- Yellow is a silicate carbonate iron formation with %Fe > 50% and %P>0.05%
- TRX is the treat rock material with 45%<%Fe<50%, which need to be upgraded by the treatment plant
- Mn: is the Manganeferous material where %Fe+%Mn >=50%, % Mn>3.5%, %SiO2<18%, %Al2O3<5%

As of the date of this Report, LIM's direction and personnel agree that the only true economic category to consider on James is the DRO type as described above. It is therefore decided by LIM and SGS that the IOC Ore type category would no longer be applicable for this type of deposit.

As of the date of the Report, the James Mine is under care and maintenance. Mineral depletion at James Mine has reached the optimal pit design. Previous mineral resources in James (2009 block Model) are no longer current. According to LIMH, economical, recovery and grade factors demonstrated that remaining resources according to the original block model (2009) were no longer economic. The James Mine block model (2009) was removed from total resources estimates. Additional diamond drilling carried out in the winter months of late 2013 and early 2014 outlined a small zone of mineralised material outside pit design called James Pit ("James Pit"), but does not contained sufficient material to sustain mining operations at James under current economic conditions. Please see information below.



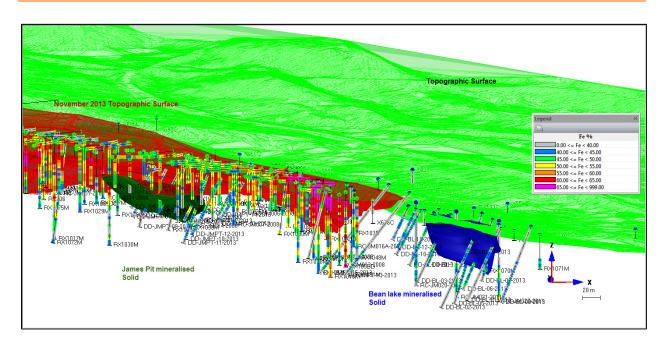


Figure 14-12: Bean Lake & James Pit Deposits

SGS Geostat conducted the current mineral resource estimate for Bean Lake iron deposit using 1 historical RC drillhole and 6 recent 2013 diamond drillholes data compiled from the 2008 to 2013 exploration programs conducted near the James Mine. The database used for Bean Lake contains a total of 552.42 m of drilling. 1 RC drillhole (51.82 m) and 6 DD drillhole (500.6m) for a total of 469 assays. The database cut-off date is March 31st 2014.

3m Compositing was done on the mineralized intervals that are inside the 3d solid. A minimum length of 1.5 m was set. No capping was necessary. At total of 33 composites were generated. The modeled 3D wireframe of the mineralized envelope was used to constrain the composites Table 14-10 summarizes the statistics of the composite data. Figure 14-5 shows the histogram of the composites.

The Composites were built from assay intervals from ddh and vertical RC holes. Spacing between holes and trenches varies along a 100 m strike length at the best. At the best trenches and RC holes are spaced on cross-sections at 30m distance along the N313.5° 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). Only composites with a center within the same mineralized envelope as blocks are kept.



14.8.1 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 14-10. Histograms are on Figure 14-5.

The small amount of data available for Bean Lake makes the distribution of the The %Fe, %SiO₂, %Al2O₃, %Mn and %P is difficult to integrate. Correlations between variables are weak.

Statistics	Fe	Phos	Mn	SiO2	Al2O3
Mean	52.55	0.02	0.04	23.56	0.30
Standard Error	0.78	0.00	0.00	1.07	0.07
Median	51.95	0.02	0.03	24.01	0.21
Mode	51.47	0.01	0.02	24.29	0.20
Standard Deviation	4.50	0.02	0.02	6.12	0.19
Sample Variance	20.22	0.00	0.00	37.45	0.04
Kurtosis	0.40	1.20	-0.93	0.91	6.12
Skewness	0.51	1.11	0.72	-0.43	2.42
Range	21.08	0.07	0.07	30.29	0.56
Minimum	43.45	0.00	0.01	6.70	0.20
Maximum	64.53	0.07	0.08	36.99	0.76
Count	33	33	33	33	8

 Table 14-15: 3m Composite Data Statistics of James Pit

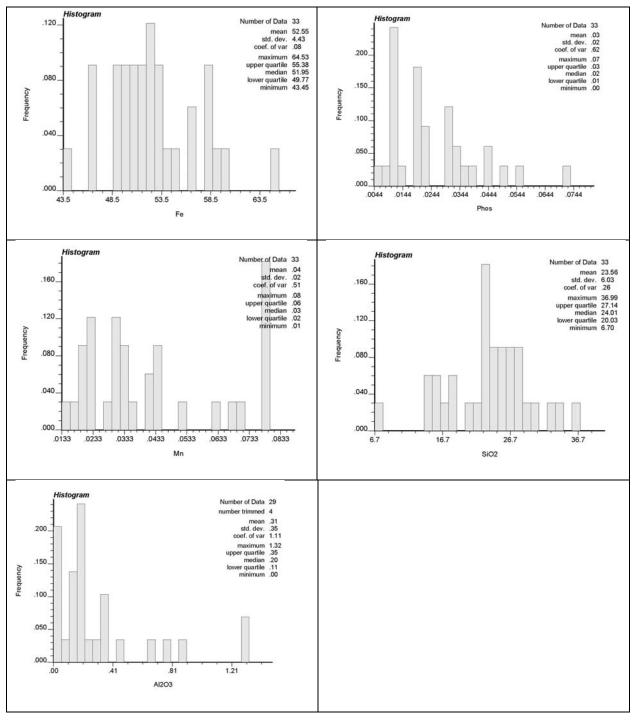


Figure 14-13: Histograms of James Pit Composite Data

14.8.2 Block Grades Interpolation

%Fe, %SiO₂, %Al2O₃, %Mn and %P grades of each of the 1,115 blocks (5x5x5m) within the DSO envelope were interpolated from nearby composites through the Inverse distance Squared (ID2) method. No kriging was done and no variograms were built due to the small amount of available data. Interpolation was done in successive runs with minimum search conditions relaxed from one run to the next until all blocks were interpolated.

The basic search ellipsoid was oriented according to the shape of the solid. its long radius is along the horizontal 324 deg. strike, its intermediate radius is along the average dip of 60° to the 54 deg. and its short radius is along the perpendicular to the average strike+dip i.e. a dip of 60° to the NE. For all variables the long and the intermediate radii were set to 20m for sample availability. The short radius was set to 10m. Dimensions of additional search ellipses were doubled in the second and third interpolation run.

The minimum and maximum number of composites used was respectively 3 and 15 with a maximum of 2 composites per hole. The conditions were set to insure that a block grade is truly interpolated from samples in several holes (on different sides of the block) and not extrapolated from a few samples in the same drillhole or trench. Figure 14-7 represents a typical section of the Bean Lake deposit showing the geological interpretations and resource block models:

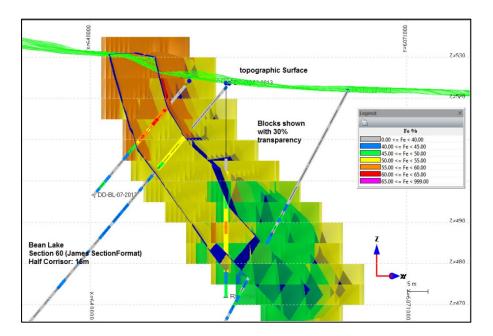


Figure 14-14: Bean Lake Section 60 – Geological Interpretation



14.8.3 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. 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.

14.8.4 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 took into consideration the amount of data available for geological interpretation, grade interpolation and classification. The entire James Pit mineral resources were classified as inferred.

14.8.5 Mineral Resources Estimation Conclusion

The current resource estimates for the Bean Lake deposit are 208,000 tonnes including the DRO, PHG, PLG, YELLOW Ore types (Table 14-11) in the inferred category at a grade of 53.21% 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 resources are dated as of March 31st 2014. The Bean Lake deposit remains open to the northwest and southeast. Surrounding geological information and an sassy results do not encourage further drilling. The results of the resource estimates for the James Pit deposit are shown inTable 14-11 Table 14-11: James Pit – 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.

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO ₂ (%)	Al ₂ O ₃ (%)
	Fe Ore	Measured (M)	-	-	-	-	-	-
Bean	(DRO, PHG,	Indicated(I)	-	-	-	-	-	-
Lake	PLG,	Total M+I	-	-	-	-	-	-
	Yellow)	Inferred	208,000	53.21	0.028	0.04	22.59	0.37

Table 14-16: James Pit – Resource Estimates

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

14.9 Redmond 5 Mineral resources estimates

The mineral resource estimate of the Redmond 5 deposit was 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. The Redmond 5 MRE were updated according to LIMH Ore type category.

The Redmond 5 database used contains a total of 2,335 m of RC drilling in 68 RC drillholes for a total of 681 assays. Also, 8 trenches for a total of 461 m of trenching and a total of 100 assays were included in the database. The database cut-off date used for resources estimation is November 9th, 2009.

The current resource estimate for the Redmond 5 deposit is of 1.6 million tonnes from DRO, PHG, PLG and Yellow Ore types. Ore types as described in Table 14-17 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 mineral 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 5 resources are dated as of March 31st 2014.

Table 14-17: Updated Mineral Resources of the Redmond 5 Depo	sits
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Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	AI2O3 (%)
	Fe Ore	Measured (M)	-	-	-	-	-	-
Redmond	(DRO,	Indicated(I)	1,576,000	55.03	0.039	0.78	11.76	0.73
5	PHG,	Total M+I	1,576,000	55.03	0.039	0.78	11.76	0.73
	PLG, Yellow)	Inferred	60,000	52.33	0.063	1.716	11.280	0.969

Updated March 31, 2014

Mineral Resources are not mineral reserves and 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.

14.10 Knob Lake No.1 Mineral Resource Estimates

The mineral resource estimate of Knob Lake No.1 was completed by Maxime Dupéré P.Geo., Geologist for SGS Geostat stated in the Silver Yards Technical Report dated October 24, 2012. The following information is a summary. 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 Knob Lake No.1 deposit. The KL1 MRE was updated according to LIMH Ore type category.

The database used contains a total of 2,095 m of RC drilling in 47 RC drillholes and 1 diamond drillhole for a total of 1008 assays. Also, 877.1 m of trenching and a total of 196 assays are included in the database. The database cut-off date is February 6th, 2012. The Redmond resources are dated as of March 31st 2014. Compositing was done on the entire RC drillholes 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 14-10 summarises the statistics of the composite data.

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 on successive runs (and successive ellipse) which fully uses the characteristics of variograms of each variable.

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. 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.

The current resource estimates for the Knob Lake No.1 deposit are of 5.1 million tonnes including the DRO, PHG, PLG and Yellow Ore types (XX) in the Measured and Indicated categories at a grade of 54.7% Fe and 643,800 tonnes in the inferred category at a grade of 51.7% 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.



KL1 also holds manganeferous resources (Mn Ore) of 588,000 tonnes at 50.2% Fe and 5.3% Mn. and 127,000 tonnes in the inferred category at a grade of 49.2% Fe and 4.8% Mn.

The block model was cut by the topography and to a maximum depth of 80 m. 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 14-18. 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 14-18: Knob Lake 1 – Resource Estimates

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
	Fe Ore (DRO, PHG, PLG, Yellow)	Measured (M)	2,824,000	55.01	0.07	1.00	10.21	0.48
KI 1		Indicated(I)	2,259,100	54.33	0.06	1.07	11.19	0.46
		Total M+I	5,083,500	54.71	0.07	1.03	10.65	0.47
		Inferred	643,800	51.78	0.09	1.21	13.53	0.45

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

	Ore							
Area	Туре	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
		Measured (M)	375,000	50.55	0.09	5.59	8.45	0.68
		Indicated(I)	214,000	49.56	0.08	4.87	9.60	0.80
KL1 M	Mn Ore							
		Total M+I	588,000	50.19	0.08	5.33	8.86	0.72
		Inferred	127,000	49.18	0.046	4.80	9.66	0.40

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

14.11 Denault Mineral Resource Estimates

The updated Denault mineral resources estimates were first completed in February 2013 by Maxime Dupéré P.Geo., Geologist for SGS Geostat and stated in the Technical report dated April 12, 2013.

The current mineral resources presented herein are reported in accordance with the National Instrument43-101 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 first estimated by Maxime Dupéré P.Geo in updated in March 31, 2014 using LIMH Ore type categories as described in the Table 14-1.

The database used contains a total of 5,142.68 m of RC drilling in 109 RC drillholes for a total of 1,753 assays. The database cut-off date is December 8th, 2011. The Data Verification section provides a summary of the database.

The study area of Denault included in this Report covers an extension of 425 m long by a maximum of 125 m wide and a maximum of 100m vertical. The DSO resources were estimated from LIMH 3D validated solid through the construction of a resource block model (5x5x5 m)with small blocks on a regular grid filling an interpreted mineralized envelope and with grades interpolated from measured grades of composites drillhole or trench samples around the blocks and within the same envelope. Blocks are then categorized according to average proximity to samples.

The current resource estimates (Table 14-19) for the Denault deposit are now of 4.2 million tonnes including DRO, PHG, PLG and Yellow ore types as described in in the Measured category at a grade of 54.92% Fe, 507,100 tonnes in the indicated category at a grade of 53.17% 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 Denault resources are dated as of February 12th, 2013.

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
	Fe Ore	Measured (M)	4,167,000	54.92	0.08	0.85	9.64	1.13
	(DRO,	Indicated(I)	507,100	53.17	0.08	0.76	11.96	0.97
Denault	PHG,	Total M+I	4,674,500	54.73	0.08	0.84	9.89	1.11
	PLG,							
	Yellow)	Inferred	-	-	-	-	-	-

Table 14-19	: Denault –	Resource	Estimates
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Geological Interpretation and Modeling

The %Fe, %SiO2, %Al2O3, %Mn and %P grades of each of the 20,855 blocks 5x5x5m within the DSO 3d Solid (envelope) were interpolated from the grades of nearby 3m composites (808) through the ordinary kriging method which fully uses the characteristics of variograms of each variable. The interpolation was done in 2 successive runs with minimum search conditions relaxed from one run to the next until all blocks are interpolated.

The estimated resources were classified in accordance with the specifications of the NI 43-101 Policy, namely in measured, indicated, and inferred resources. Classification was done by a process of automatic classification that selects around each composite a minimum number of composites nearby, from a minimum number of holes inside a research ellipsoid of a given orientation and size. For the Measured category, a first phase of research was carried out with a 50 m by 50 m 25 m ellipsoid (direction, dip and thickness) with a minimum of 7 composites in at least 4 different holes. All blocks within the research ellipse are then categorized as measured to a maximum of 50 % of its maximum radius. The classification of indicated resources step uses the same parameters with a larger research ellipse (twice the size) and a fill to a maximum of 45% of the ellipse radius. The classification of inferred resources corresponds to the remaining part of the non-classified blocks during the first two stages of classification.

14.12 Ferriman Mineral Resource Estimates

The Ferriman mineral resources estimates were first completed by Maxime Dupéré P.Geo., Geologist for SGS Geostat and stated in the Technical Report dated April 12, 2013.

The current mineral resources presented herein are reported in accordance with the National Instrument43-101 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... The MRE are reported using a cut-off grade (COG) of 45% Fe.

The Ferriman area database given by LIM contains a total of 783 m of RC drilling in 23 RC drillholes for a total of 217 assays. Also, 122, 1m length, Test Pits (122 assays) are included in the database. No significant inconsistencies were observed. All of the data entry was done by LIM. SGS did a Limited validation of the data. Most collar coordinate locations of drillholes were obtained using a Trimble DGPS with accuracies under 30cms. The estimated accuracy of the digitized data is approximately 5 m. The database cut-off date is February 11th, 2013.

Key assumptions are made in order to state the resources. Preliminary tests done by LIM tend to have a general iron recovery of 50% on selected low-grade Stockpiles only by screen (Treat-Rock – Sieve and Triple Decking Screen Analysis Report of October 16, 2012, E. Roul & M. Snow). We presume blending of the Ferriman Stockpile Resources with other LIM resources (Houston & Schefferville Area technical reports) will be done. A different cut-off grade (COG) is applied since the rock is already available for treatment to the upgrading plant. In QP's opinion, in these conditions with the information available, we consider that a COG of 45% as the base case and is believed to be adequate for resources estimates disclosure.

Using a COG of 45% Fe, the current Ferriman stockpile MRE are 2.39 million tonnes in the Indicated category at a grade of 49.34% Fe and 1.62 million tonnes in the inferred category at a grade of 49.30% Fe. The resources presented in this section are all inside the property boundary. The block model was built inside the 3D solid provided by LIM. The block percentage had to be at least 50% inside the mineralised solid in order to be considered in the resource estimation. The Ferriman MRE are dated as of March 27, 2013.

The geological interpretation of Ferriman was entirely constructed by LIM according to available data of the area. The Ferriman model was completed considering the entire modelled stockpile volume. The geological modeling was done by LIM using the updated topographic surface from collar locations and a LIDAR surface. SGS built also a bottom surface from RC drilling information on the stockpiles. The solids were created in Gemcom. The study area included covers a cumulated length of 1,150m long by 550 m wide and an average of 30m vertical

SGS built the block model using blocks of $5 \times 5 \times 5$ m on a UTM NAD 27 regular grid. No rotation was applied. Maximum number of columns is 161 and maximum number of rows is 281. Vertically, the maximum number of 5 m benches is 21. The total of blocks is 21,272. The block centers are within the 3d solid modeled by LIM geologists. The parameters of the Block Model were done using the following parameters. The coordinates of the origin of the block Model and all blocks are given as block centres.

Block model grade interpolation is conducted on composited assay data (808) from composite lengths of 3 m from both RC and testpits on Ferriman. No capping was necessary.

The %Fe, %SiO2, %Al2O3, %Mn and %P grades of each of the 21,272 blocks 5x5x5m within the 3d Solid (Ferriman1 C & D envelopes) were interpolated from the grades of nearby composites through the inverse distance squared method of interpolation in 2 successive runs. SGS made assumptions that it is expected to have within the stockpile, very poor correlation/high variability in grade spatial continuity.

The estimated resources were classified in accordance with the specifications of the NI 43-101 Policy, namely in measured, indicated, and inferred resources. The Classification was done by a process of automatic classification that selects around each composite a minimum number of composites nearby, from a minimum number of holes inside a research ellipsoid of a given orientation and size. For the Indicated category, a first phase of research was carried out with a 20 m by 20 m 10 m disk shape horizontal ellipsoid (direction, dip and thickness) with a minimum of 3 composites in at least 3 different holes. All blocks within the research ellipse are then categorized as indicated to a maximum of 75 % of its maximum radius. The classification of inferred resources step uses the same parameters with a larger research ellipse (twice the size) and a fill to a maximum of 70% of the ellipse radius. 100% of the blocks were classified using this automatic method.

The Ferriman stockpile current MRE are 2,394,000 tonnes at 49.34% Fe in the Indicated Category and 1,616,000 tonnes at 49.30% Fe in the Inferred Category, using a cut-off grade (COG) of 45%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 Ferriman Stockpile resources are dated as of March 27th, 2013.

The Ferriman stockpile is constrained by its shape and by regional topography. The results of the resource estimates are shown in Table 14-20.

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.

							SiO2	AI2O3
Area	COG	Classification	Tonnage	Fe(%)	P(%)	Mn(%)	(%)	(%)
Ferriman 1 (C&D) Stockpile	>45% Fe	Indicated	2,394,000	49.34	0.05	1.21	21.63	1.01
	(Base Case)	Inferred	1,616,000	49.30	0.05	1.17	22.06	0.87
	>0% Fe	Indicated	3,454,000	46.83	0.07	1.22	24.50	1.40
		Inferred	2,396,000	47.41	0.05	1.55	23.83	1.02
	<45%Fe	Indicated	1,059,000	41.18	0.10	1.25	31.01	2.30
	40701 C	Inferred	778,000	43.47	0.07	2.32	27.50	1.34

Table 14-20: Ferriman – Resource Estimates

14.13 Wishart Mineral Resource Estimation

The Wishart mineral resources estimates were first completed by Maxime Dupéré P.Geo., Geologist for SGS Geostat and stated in the Technical report dated April 12, 2013.

The current mineral resources presented herein are reported in accordance with the National Instrument43-101 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... The MRE are reported using a cut-off grade (COG) of 45% Fe.

The Wishart area database given by LIM contains a total of 1,547 m of RC drilling in 55 RC drillholes for a total of 467 assays. Also, 789.5 m Test pits (averaging 1-1.5m depth) and 768 assays are included in the database. No significant inconsistencies were observed. All of the data entry was done by LIM. SGS did a Limited validation of the data. Most collar coordinate locations of drillholes were obtained using a Trimble DGPS with accuracies under 30cms. The estimated accuracy of the digitized data is approximately 5 m. The database cut-off date is February 11th, 2013. The Data verification section provides a more detailed summary of the database.

Key assumptions are made in order to state the resources. Preliminary tests done by LIM tend to have a general iron recovery of 50% on selected low-grade Stockpiles only by screen (Treat-Rock – Sieve and Triple Decking Screen Analysis Report of October 16, 2012, E. Roul & M. Snow). We presume blending of the Wishart Stockpile Resources with other LIM resources (Houston & Schefferville Area technical reports) will be done. A different cut-off grade (COG) is applied since the rock is already available for treatment to the upgrading plant. In QP's opinion, in these conditions with the information available, we consider that a COG of 45% as the base case and is believed to be adequate for resources estimates disclosure.

Using a COG of 45% Fe, the current Wishart stockpile MRE are 1.15 million tonnes the Indicated category at a grade of 48.57% Fem and 1.28 million tonnes in the inferred category at a grade of 48.24% Fe. The resources presented in this section are all inside the property boundary. The block model was built inside the 3D solid provided by LIM. The block percentage had to be at least 50% inside the mineralised solid in order to be considered in the resource estimation. The Wishart MRE are dated as of March 22, 2013.

The geological interpretation of Wishart was entirely constructed by LIM according to available data of the area. The Wishart model was completed considering the entire modelled stockpile volume. The geological modeling was done by LIM using the updated topographic surface from



collar locations and a Lidar surface. SGS built also a bottom surface from RC drilling information on the stockpiles. The solids were created in Gemcom. The study area included covers an extension of 900 m long by a maximum of 225 m wide and a maximum of 30m vertical

SGS built the block model using blocks of 5x5x5m on a UTM NAD 27 regular grid. No rotation was applied. Maximum number of columns is 401 and maximum number of rows is 351. Vertically, the maximum number of 5m benches is 41. The total of blocks is 13,262. The block centers are within the 3d solid modeled by LIM geologists.

The %Fe, %SiO2, %Al2O3, %Mn and %P grades of each of the 13,262 blocks 5 x 5 x 5 m within the 3d Solid (Wishart South A & B envelopes) are interpolated from the grades of nearby composites(A: 140 and B: 681) through the inverse distance squared method of interpolation. SGS made assumptions that it is expected to have within the stockpile, very poor correlation/high variability in grade spatial continuity. The interpolation was done in 2 successive runs with minimum search conditions relaxed from one run to the next until all blocks are interpolated.

Block grade validation was done revolving around the idea that grade estimates of blocks close to samples should reflect the grades of those samples. 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.

The estimated resources were classified in accordance with the specifications of the NI 43-101 Policy, namely in measured, indicated, and inferred resources. Classification was done by a process of automatic classification that selects around each composite a minimum number of composites nearby, from a minimum number of holes inside a research ellipsoid of a given orientation and size. For the indicated category, a first phase of research was carried out with a 20 m by 20 m 10 m disk shape horizontal ellipsoid (direction, dip and thickness) with a minimum of 3 composites in at least 3 different holes. All blocks within the research ellipse are then categorized as indicated to a maximum of 75 % of its maximum radius. The classification of inferred resources step uses the same parameters with a larger research ellipse (twice the size) and a fill to a maximum of 70% of the ellipse radius. 100% of the blocks were classified using this automatic method.

The Wishart stockpile current MRE are 1,511,000 tonnes at 48.57% Fe in the Indicated Category and 1,280,000 tonnes at 48.24% Fe in the Inferred Category, using a cut-off grade (COG) of 45%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 Wishart Stockpile resources are dated as of March 22nd 2013.



The Wishart stockpile is constrained by its shape and by regional topography. The results of the resource estimates are shown in Table 14-21.

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.

Area	COG	Classification	Tonnage	SG	Fe (%)	P (%)	Mn(%)	SiO2(%)	AI2O3(%)
	>45% Fe	Indicated	1,151,000	2.20	48.57	0.04	0.09	27.14	0.50
	(Base Case)	Inferred	1,280,000	2.20	48.24	0.04	0.08	27.54	0.50
Wishart	>0% Fe	Indicated	1,512,000	2.20	47.07	0.04	0.09	28.97	0.67
Stockpile	207016	Inferred	2,134,000	2.20	45.72	0.04	0.09	30.64	0.78
	<45%Fe	Indicated	338,000	2.20	41.77	0.04	0.08	35.49	1.24
		Inferred	837,000	2.20	41.78	0.04	0.09	35.42	1.21

Table 14-21: Wishart – Resource Estimates

Dated March 22, 2013

Mineral resources which are not mineral reserves do not have demonstrated economic viability

14.14 Phase 1 Schefferville Area Mineral Resources Estimate Summary

Globally, the price for iron ore is down 26 percent in 2014, to less than US\$100 per dry metric tonne (CFR 62% Fe China basis), compared to the average benchmark price of US\$135.46 per dry metric tonne experienced in 2013. As such, production and development plans for the Phase 1 DSO project have changed. The James open pit mining operation is now completed, and under current market conditions, there are no plans to further develop the other Phase 1 DSO projects. Should market conditions improve, development and production plans will be re-assessed.

The following information (Table 14-22) describes briefly the reconciliation of James from original mineral resources estimates of 2009 until its mineral resources adjustment in December 31, 2013. Table 14-22 indicates also the remaining resources at James consisting of the James (James Pit) mineral resources of 232,000 tonnes at 55.77% Fe (section 14.5) and the bean lake mineral resources located immediately to the SW of James (section 0).

Table 14-22: James Mine Final Reconciliation Summary



James Deposit-Mineral Resource Reconciliation Table									
	Year	Volume (m ³)	Density (t/m ³)	Tonnage (t)	% Fe	Category			
Original Mineral Resource SGS	2009	2,347,246	3.45	8,098,000	57.8	Measured & Indicated			
Pit Design Adjustment- LIM	2011	-422,260	3.45	-1,456,797		Measured & Indicated			
Mining Mineral Resource-LIM	2011	1,922,298	3.45	6,641,203	58.8	Measured & Indicated			
Total Mining Depletion 2011	2011	-466,311	2.71	-1,263,566		Measured			
Total Mining Depletion 2012	2012	-620,603	2.95	-1,828,398		Measured			
Density adjustment	2013	-416,154	2.84	-1,181,877		Measured & Indicated			
Total Mining Depletion 2013	2013	-545,465	2.84	-1,549,122		Measured			
Model Adjustment	2013	-237,992	2.84	-675,897		Measured & Indicated			
Mineral Resource after model Adjustment as at Dec. 31, 2013	2013	50,121	2.84	89,657	55.8	Measured & Indicated			
SGS Mineral Resource	2014	81,690	2.84	232,000	55.8	Inferred			
SGS Bean Lake Mineral Resource	2014	73,239	2.84	208,000	53.2	Inferred			

The current compliant iron resource estimates for the Redmond 2B, Redmond 5, James Pit, Bean Lake, Redmond, Knob Lake, and Denault deposits follow updated iron ore categories as per mining operations and nomenclature used by LIM since the beginning of mining operations.

The updated Iron resources for the Schefferville Direct Shipping Iron Ore Projects involving the James, Redmond 2B, Redmond 5, Knob Lake No.1 and the Denault deposits are reported in Table 14-23. The iron mineral resources of the Wishart and Ferriman stockpiles are reported in Table 14-24. The manganeferous resources of the Knob Lake and Denault deposits are reported in Table 14-25.

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO ₂ (%)	Al ₂ O ₃ (%)
	Fe Ore	Measured (M)	-	-	-	-	-	-
LDit	(DRO,	Indicated(I)	-	-	-	-	-	-
JamesPit	PHG,	Total M+I	-	-	-	-	-	-
	PLG,	Inferred	232,000	52.77	0.024	0.99	-	0.36
	Fe Ore	Measured (M)	-	-	-	-	-	-
Doog Labo	(DRO,	Indicated(I)	-	-	-	-	-	-
Bean Lake	PHG,	Total M+I	-	-	-	-	-	-
	PLG,	Inferred	208,000	53.21	0.028	0.04	- - 21.67 - - 22.59 - - 22.59 - - 5.80 5.80 5.80 5.92 - 11.76 11.76 11.76 11.28 9.64 11.96 9.89 - 10.21 11.19 10.65 13.53 9.87 10.88 10.28	0.37
	Fe Ore	Measured (M)	-	-	-	-		-
Redmond 2B	(DRO,	Indicated(I)	518,000	59.07	0.130	0.44	5.80	2.25
Reamona 2B	PHG,	Total M+I	518,000	59.07	0.130	0.44	0.99 21.67 - - - - 0.04 22.59 - - 0.44 5.80 0.44 5.80 0.44 5.80 0.44 5.80 0.66 5.92 - - 0.78 11.76 0.78 11.76 0.78 11.96 0.85 9.64 0.76 11.96 0.84 9.89 - - 1.00 10.21 1.03 10.65 1.21 13.53 0.91 9.87 0.88 10.88 0.90 10.28	2.25
	PLG,	Inferred	25,000	57.19	0.130	0.66	5.92	4.12
	Fe Ore	Measured (M)	-	-	-	-	-	-
Redmond 5	(DRO,	Indicated(I)	1,576,000	55.03	0.039	0.78	11.76	0.73
Realitona 3	PHG,	Total M+I	1,576,000	55.03	0.039	0.78	- - 99 21.67 - - 99 21.67 - - 04 - 04 22.59 - - 44 5.80 66 5.92 - - 78 11.76 78 11.76 72 11.28 85 9.64 76 11.96 84 9.89 0 10.21 07 11.19 03 10.65 21 13.53 91 9.87 88 10.88 90 10.28	0.73
	PLG,	Inferred	60,000	52.33	0.063	1.72		0.97
	Fe Ore	Measured (M)	4,167,000	54.92	0.077	0.85	3 11.76 3 11.76 2 11.28	1.13
Denault	(DRO,	Indicated(I)	507,100	53.17	0.080	0.76	11.96	0.97
Denaut	PHG,	Total M+I	4,674,500	54.73	0.077	0.84	9.89	1.11
	PLG,	Inferred	-	-	-	-	-	-
	Fe Ore	Measured (M)	2,824,000	55.01	0.070	1.00	10.21	0.48
Knob Lake No.1	(DRO,	Indicated(I)	2,259,100	54.33	0.061	1.07	11.19	0.46
KHOD Lake NO.1	PHG,	Total M+I	5,083,500	54.71	0.066	1.03	10.65	0.47
	PLG,	Inferred	643,800	51.78	0.085	1.21	- 21.67 - 21.67 - 22.59 - 22.59 - 5.80 5.80 5.80 5.92 - 11.76 11.76 11.76 11.28 9.64 11.96 9.89 - 10.21 11.19 10.65 13.53 9.87 10.88 10.28	0.45
	Fe Ore	Measured (M)	6,991,000	54.96	0.074	0.91	9.87	0.87
All	(DRO,	Indicated(I)	4,860,200	54.94	0.063	0.88	10.88	0.79
7111	PHG,	Total M+I	- - - - - - - - - - - - - - - - - - - - - - - - - - - - 208,000 53.21 0 - - - 208,000 53.21 0 - - - 208,000 59.07 0.0 518,000 59.07 0 25,000 57.19 0 - - - 1,576,000 55.03 0 - 1,576,000 55.03 0 60,000 507,100 53.17 0 - 2,824,000 55.01 0 2,	0.070	0.90	10.28	0.84	
	PLG,	Inferred	1,168,800	52.37	0.06	0.97	- - - - - - 0.99 21.67 - - - - - - - - - - - - - - - - 0.04 22.59 - - 0.44 5.80 0.44 5.80 0.44 5.80 0.66 5.92 - - 0.78 11.76 0.78 11.76 0.78 11.76 0.78 9.64 0.76 11.96 0.84 9.89 - - 1.00 10.21 1.03 10.65 1.21 13.53 0.91 9.87 0.88 10.88 0.90 10.28	0.52

Table 14-23: Compliant Iron Resources – Schefferville Area Phase 1

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

Area	Classification	Tonnage	Fe(%)	P(%)	Mn(%)	SiO2(%)	Al2O3(%)
Ferriman 1	Measured (M)	-	-	-	_	-	-
	Indicated(I)	2,394,000	49.34	0.053	1.21	21.63	1.01
(C&D) Stockpile	Total M+I	2,394,000	49.34	0.053	1.21	21.63	1.01
Stockpile	Inferred	1,616,000	49.30	0.045	1.17	22.06	0.87
	Measured (M)	-	-	-	_	-	-
Wishart	Indicated(I)	1,151,000	48.57	0.039	0.09	27.14	0.50
Stockpile	Total M+I	1,151,000	48.57	0.039	0.09	27.14	0.50
	Inferred	1,280,000	48.24	0.038	0.08	27.54	0.50
	Measured (M)	-	-	-	_	-	-
A 11	Indicated(I)	3,545,000	49.09	0.049	0.84	23.42	0.84
All	Total M+I	3,545,000	49.09	0.049	0.84	23.42	0.84
	Inferred	2,896,000	48.83	0.042	0.69	24.48	0.71

Table 14-24: Stockpiles Mineral Resource Estimates, by Deposit, as at March 31, 2013

Dated March 31st, 2014

Mineral resources which are not mineral reserves do not have demonstrated economic viability

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)
		Measured (M)	1,443,000	52.05	0.078	6.36	6.00	1.09
Denault	Mn Ore	Indicated(I)	361,000	51.72	0.071	6.49	6.61	0.97
Denaut	will Ole	Total M+I	1,805,000	51.98	0.077	6.39	6.13	1.07
		Inferred	-	-	-	-	-	-
	Mn Ore	Measured (M)	375,000	50.55	0.086	5.59	8.45	0.68
KL1		Indicated(I)	214,000	49.56	0.076	4.87	9.60	0.80
KL1	Mil Ore	Total M+I	588,000	50.19	0.082	5.33	6.00 6.61 6.13 - 8.45	0.72
		Inferred	127,000	49.18	0.046	4.80		0.40
		Measured (M)	1,818,000	51.74	0.080	6.20	6.51	1.01
All	Mn Ore	Indicated(I)	575,000	50.91	0.073	5.89	7.72	0.91
	MII Ore	Total M+I	2,393,000	51.54	0.078	6.13	6.80	0.98
		Inferred	127,000	49.18	0.046	4.80	9.66	0.40

Table 14-25: NI 43-101 Compliant Manganiferous Resources - Knob Lake & Denault

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability

15. Mineral Reserve Estimates

There are no mineral reserves presented and no mineral reserves have been estimated on any of the mineral deposits described in this Report.



16. Adjacent Properties

LIM's Schefferville Projects comprise 20 different iron ore deposits, which were part of the original IOC direct shipping operations conducted from 1954 to 1982.

Through its wholly-owned subsidiary Labrador Iron Mines Limited, LIMHL holds 3 Mining Leases and 55 Mining Rights Licenses (including 13 Licenses covering the Houston Property), issued by the Department of Natural Resources, Province of Newfoundland and Labrador, covering approximately 16,475 hectares.

Through its wholly-owned subsidiary, SMI, LIMHL holds interests in 277 Title Claims issued by the Ministry of Natural Resources, Province of Quebec, covering approximately 11,131 hectares in the Schefferville area. SMI also holds an exclusive operating license covering 23 parcels totalling about 2,036 hectares.

LIM's plans for its Schefferville Projects envision the development and mining of the various deposits in stages. Stage 1, which is being undertaken in phases, comprises the deposits closest to existing infrastructure located at Silver Yards in an area identified as the Central Zone. The first phase of Stage 1 is done and involved mining of the James deposits in Labrador.

Stage 2, which will also be undertaken in phases, will involve the exploration, development and mining of the Houston, Malcolm and adjacent deposits.

It is intended that during the mining of the Stage 1 and development of Stage 2 deposits, planning will be undertaken for the future development of the other deposits in subsequent stages.

Stage 3 comprising the Howse (Labrador) and Barney (Quebec) deposits located approximately 25 km northwest of Schefferville (North Central Zone) and relatively close to existing infrastructure. The Howse deposit, located about 25 km north of the James Mine and Silver Yards processing plant, has a historical resource of 28 million tonnes. In March 2013 LIM entered into a framework arrangement with Tata Steel Minerals Canada Limited ("TSMC"), as part of which LIM and TSMC have agreed to enter into a transaction for the joint development of the Howse deposit, whereby LIM will sell a 51% interest in Howse to TSMC. In the future, TSMC may increase its interest to 70%. It is hoped that the agreement with TSMC will expedite the development of the Howse deposit and that significant cost savings and synergies can be achieved by processing Howse ore through TSMC's adjacent Timmins Area plant.

Tata Steel Minerals Canada (TSMC) a Joint Venture between Tata Steel Minerals Canada, (80%) (a member of the Tata Group, the world's sixth largest steel producer) and New



Millennium Corporation. NML (20%) is developing an adjacent DSO project on 22 deposits, some of which are situated in Labrador and the remaining situated in Québec to the northwest of the town of Schefferville, approximately 25 km from LIM's James Mine and Silver Yards plant.

The TSMC Feasibility Study dated April 10, 2010 amended as of February 16, 2011 is based on mining ten deposits and blending the ore to provide consistent feed to the TSMC Timmins area process plant. The current schedule provides a ten-year mine life. The mining and processing operations will be carried out on a year round basis. The Timmins area plant will process 5.0 million natural tonnes per year to produce 4.0 million dry tonnes of sinter fines and super fines. The mining method selected is conventional open-pit mining with a front-end loader/truck operation. The rock will be drilled, blasted and loaded into haul trucks that will deliver run-ofmine ore to the primary mineral sizer, located at the Timmins Site. The TSMC DSO Project is currently under construction and reported by New Millennium to contain 64.1 million tonnes of Proven and Probable Mineral Reserves at an average grade of 58.8% Fe.

A Feasibility Study has also been carried out for a joint venture between NML and Tata Steel Minerals Canada on a taconite iron deposit known as the LabMag Property in the Howells River area of Labrador located some 30 km northwest of Schefferville, and a Pre-Feasibility study has been carried out on the adjacent KéMag taconite Property in Quebec.

LabMag is reported by New Millennium Corp to contain 3.5 billion tonnes of Proven and Probable reserves at a grade of 29.6% Fe plus 1.0 billion tonnes of Measured and Indicated resources at an average grade of 29.5% Fe and 1.2 billion tonnes of Inferred resources at an average grade of 29.3% Fe. KéMag is reported by New Millennium Corp to contain 2.1 billion tonnes of Proven and Probable reserves at an average grade of 31.3% Fe, 0.3 billion tonnes of Measured and Indicated resources at an average grade of 31.3% Fe and 1.0 billion tonnes of Inferred resources at an average grade of 31.2% Fe. The authors of this Technical Report have not reviewed or audited the above New Millennium resource and reserve estimates.

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.

LIMH possess the Elizabeth Taconite Project (early stage exploration) located in Labrador near Schefferville, Quebec (G H Wahl, April 2013).

The Elizabeth Taconite is situated in the Labrador Trough, stratigraphically above the Archean basement gneiss. The Trough, otherwise known as the Labrador-Québec Fold Belt, extends for more than 1,000 km along the eastern margin of the Superior Craton from Ungava Bay to Lake



Pletipi, Québec. The belt is about 100 km wide in its central part and narrows considerably to the north and south.

Total estimated inferred tonnage is 620 million tonnes at 31.80% Fe. Tonnage is based on dry tonnes. The resources were not reported within an economic pit shell. Potential Tonnage was also included in the report for the Elisabeth 2 deposit consisting of between 350 and 600 million tonnes at 31.94% Fe.

17. Other Relevant Data and Information

Labrador Iron Mines commenced iron ore operations in Schefferville starting with the James Mine in June 2011. Through to November 2013, the Company has completed three mine operating seasons. In this Report, all currency amount are in Canadian dollars (CAD\$) unless otherwise stated.

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices. This has had an adverse impact on LIM's economic analysis, with a significant decrease of available mineralized material and recoverable resources. Consequently, the information under *Additional Requirements for Advanced Property*, prepared by Justin Taylor, P.Eng., DRA Americas Inc., in a Technical Report (dated April 12, 2013) is no longer current. This information has subsequently been updated and summarized from the previous report, as outlined below.

17.1 Operations

LIM commenced its first season of production starting with the James Mine in June 2011 and completed its third season of mining operations in November 2013. From 2011 to the end of 2013, LIM has sold 23 cape-size shipments totaling approximately 3.6 million dry tonnes of iron ore into the Chinese sport market. The Company's mine operations are seasonal, from approximately the beginning of April to the end of November each year, with a planned winter shut down from approximately the beginning of December to the end of March each year.

LIM's operating results for the fiscal years ended March 31, 2014, 2013 and 2012 are summarized in the table below.





	Fiscal Year Endec	I March 31, 2014	Fiscal Year Ended March 31, 2013		
(all tonnes are dry metric tonnes)	Tonnes	Grade (%Fe)	Tonnes	Grade (%Fe)	
Total Ore Mined	1,945,708	56.2%	1,828,398	61.3%	
Waste Mined	2,022,498	-	3,215,985	-	
Ore Processed and Screened	2,469,491	55.0%	954,813	58.2%	
Lump Ore Produced	213,598	57.2%	98,693	61.2%	
Sinter Fines Produced	1,330,979	59.9%	693,173	61.4%	
Total Product Railed	1,546,134	59.2%	1,492,960	62.3%	
Total Product Sold	1,606,566	59.3%	1,559,620	62.5%	
Port Product Inventory	-	-	111,009	60.9%	
Cumulative Inventory Adjustment (1)	50,577	56.0%	-	-	
Site Product Inventory	1,995	55.6%	3,551	58.4%	
Site Run-of-Mine Ore inventory	263,361	54.0%	446,975	56.2%	

Table 17-1: LIM Operating Results Summary

⁽¹⁾ Cumulative inventory adjustment represents product lost in the normal course during train unloading, port handling and ship loading since 2011.

17.2 Mining Methods

Mining operations at LIM's James Mine are conducted using conventional open pit mining methods. The mining rate has ranged from 20,000 tpd to 30,000 tpd. The James ore has generally been free digging, not requiring the use of explosives. Mining is undertaken using contractor equipment and manpower on a cost-plus basis. Planning and grade control is the responsibility of the Company. Waste is trucked to dumps located immediately adjacent to the open pits while ore is trucked to the Silver Yards processing facility and stockpiled. Ore is generally divided into three categories: high grade, low grade and yellow ore.

- High grade ores (>60% Fe) are referred to as Direct Rail Ores ("DRO").
- Low grade ores (>50% Fe<60%Fe) are referred to as Plant Feed ("PF").
- Yellow ore (>50%Fe, >0.05% P, <3.5% Mn) is blended into the sinter fine product in minor proportions.



17.3 Silver Yards Processing Plants (Recovery Methods)

LIM employs two separate process streams for mined ore depending on the Fe head grade of the ore mined: a dry and a wet process stream.

The dry crushing and screening process is used to classify the higher grade ore. The wet process (crushing, scrubbing, screening, hydrosizing, magnetic separation and filtration) is used to upgrade the lower grade ore into saleable products.

The dry process is in operation from April to November. The wet process plant is in operation from May to October. The seasonal operation has been dictated by the freezing of finer iron ore products. No chemicals are used in either of the processes.

17.4 Project Infrastructure

LIM's Schefferville Projects benefit from established and extensive infrastructure including railway service, roads, airstrip, hydro power, processing facilities and the nearby town of Schefferville. Grid power connection has been established at the mine site and the system was energized in November 2013.

In addition, a maintenance shop, warehouse and a 140-person mine accommodation camp are located at site.

17.5 Market Studies and Contracts

Since mining operations commenced in June 2011, LIM has successfully sold 23 cape-size shipments of sinter fines and lump into the Chinese spot market, for total sales of approximately 3.6 million dry tonnes during the 2011, 2012 and 2013 operating seasons. During 2011 and 2012, LIM's iron ore product was sold to IOC. The Rio Tinto marketing organization resold the product on the spot market for delivery to China.

In May 2013, the Company signed a new two-year iron ore sales agreement with IOC for the 2013 and 2014 operating seasons. At the same time, IOC entered into an iron ore off-take agreement with RBRG Trading (UK) Limited ("RBRG") (formerly RB Metalloyd Limited), now part of the Gerald Group, under which RBRG agreed to buy LIM's iron ore from IOC. Under this sales agreement, IOC pays for the iron ore progressively, as the ore is resold, with the price calculation based on the monthly average of the market index.

Marketing arrangements have not been concluded for sales beyond 2014.



17.6 Environmental Studies, Permitting and Social or Community Impact

LIM has completed three environmental assessments and has worked its Schefferville Projects successfully though the Newfoundland and Labrador environmental assessment process and the federal Canadian Environmental Assessment Act to obtain project release. All of the regulatory approvals required tomine and process the James and Redmond open pits are in place. LIM is currently operating in compliance with all laws and permit requirements of the Province and Canada. Approvals for other mining and processing activities will be obtained as required, and no significant issues have been identified that would preclude obtaining regulatory approvals on a timely basis.

LIM has established positive working relationships with five Aboriginal governments and communities in Labrador and Quebec, having signed Impact Benefit Agreements and providing regular and proactive consultation.

LIM has also established two Newfoundland and Labrador Benefits Plans for existing operations and projects, which focus on areas of employment of residents, women's employment, aboriginal employment and procurement in the province of Newfoundland and Labrador.

17.7 Capital and Operating Costs

As at March 31, 2014, LIM has invested approximately \$134.6 million in capital expenditures on property, plant and equipment on its Schefferville Area Iron Ore Projects. This includes approximately \$86.6 million for construction of the Silver Yards beneficiation plant and related equipment, \$35.8 million in transportation infrastructure and approximately \$12.2 million in service buildings, mine accommodation camp and office equipment. This investment does not include expenditures on exploration and mine development.

The capital expenditures for the Silver Yards beneficiation plant include the Phase 3 upgrade and expansion, as well as connection to grid power, both which were completed and installed in 2013.

For the fiscal year ended March 31, 2014, LIM's cash operating costs, consisting of mining, processing, rail and transportation and general and administrative costs, were approximately \$87 per tonne of product sold, unloaded at the Port of Sept-Iles, including non-recurring charges. This compares to a cash operating cost of \$78 per tonne of product sold during the fiscal year ended March 31, 2013.



Operating costs per tonne during the 2013 operating season were unsustainably high, due partly to production volumes, but largely to the commercial terms of certain major contracts. The Company is currently negotiating the commercial terms of its major contracts.

The Company has not restarted mining operations in April 2014, and has suspended mining operations at its Stage 1 deposits, including the James Mine, Redmond Mine and the previously-mined stockpiles. This decision was based on a number of interrelated factors, including the prevailing low price of iron ore in 2014 to date, the expected costs of extracting the remaining ore in the James Mine, the availability of seasonal start-up working capital, and the incomplete status of financing negotiations and contract negotiations for mining, transportation and port services. The Company has not permanently closed its Stage 1 mining project. Rather, the Stage 1 deposits and related infrastructure, including the processing plant, are being maintained in standby condition for the time being, which will allow for a potential restart of Stage 1 production in a future year when economic conditions improve.

The Company does not currently plan any mining or processing activity in 2014, which is planned instead to be a development year.

As part of its plan to substantially reduce operating costs in future operating years, the Company is seeking to negotiate revised and improved terms with its major contractors and rail and port infrastructure providers. Operating cost saving initiatives are underway with respect to mining equipment rates, fuel procurement, aviation services, hydro-electric power, exploration costs, winter cost management, rail car leasing rates, human resources and man power and corporate and administration costs.

In addition to the above, the Company is also pursuing longer term strategic initiatives aimed at necessary permanent structural reductions in operating costs and revenue deductions. These include increasing sales volumes, while maintaining product quality, improving recoveries, potentially owner mining, alternative port arrangements at Sept-Îles, sharing facilities with TSMC and developing alternative destination markets for the Company's products. These strategic initiatives have targeted potential reductions in operating costs and revenue deductions of a minimum of \$20 per tonne of saleable product. However, although such reductions are considered essential to ensure the longer term economic viability of LIM's operations, there can be no guarantee that these strategic initiatives will be concluded successfully or on a timely basis.





18. Interpretation and Conclusions

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices. This has had an adverse impact on LIM's economic analysis, with a significant decrease of available mineralized material and recoverable resources. Consequently, the information under *Additional Requirements for Advanced Property*, prepared by Justin Taylor, P.Eng., DRA Americas Inc. in a Technical Report (dated April 12, 2013) is no longer current. This information has subsequently been updated and summarized in Section 17 – Other Relevant Data and Information of this Technical Report.

The Company's mine operations are typically seasonal, from approximately the beginning of April to the end of November each year, with a planned winter shut down from approximately the beginning of December to the end of March each year.

LIMHL does not plan to recommence mine operating activities for the 2014 operating season, due to a combination of the prevailing low price of iron ore in 2014 to date (to less than US\$100 per dry metric tonne, CFR China 62% Fe basis), an assessment of the current economics of the remaining resources of the James Mine and other Stage 1 deposits and a strategic shift in corporate focus towards completing development of the Company's flagship Stage 2 Houston Mine, while concurrently negotiating the commercial terms of certain major contracts and seeking additional capital investment and working capital.

The Company does not plan to permanently close its Stage 1 mining project. Rather, the Stage 1 deposits and related infrastructure, including the wet processing plant, are being maintained in standby condition for the time being, which will allow for a potential restart of Stage 1 production in a future year when economic conditions improve.

Only the direct shipping ore which is considered amenable to beneficiation to produce lump and sinter feed forms part of the resources for LIMHL's development projects. LIMH updated its Ore Type category in 2014. The direct shipping Ore is categorised by LIMH using categories based mainly on chemical and textural compositions. This classification is shown in Table 7-1.

The current compliant iron resource estimates for the Redmond 2B, Redmond 5, James Pit, Bean Lake, Redmond, Knob Lake, and Denault deposits follow updated iron ore categories as per mining operations and nomenclature used by LIM since the beginning of mining operations.

The updated Iron resources for the Schefferville Direct Shipping Iron Ore Projects involving the James, Redmond 2B, Redmond 5, Knob Lake No.1 and the Denault deposits are reported in Table 18-1. The iron mineral resources of the Wishart and Ferriman stockpiles are reported in



Table 18-2. The manganeferous resources of the Knob Lake and Denault deposits are reported in Table 18-3.

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.

Considerable variation in analytical data of blank material was observed, particularly for blanks from Gill Mine. It is strongly suggested to revaluate the material being submitted for blanks.

Given the variability of the new blank material compared with that of the 2008 results, it may be difficult to interpret contamination issues, however since all the values are below 9% Fe and the mean value is 3.53% Fe then it is not likely there is any major contamination. It is recommended that LIMHL buy pure blanks (either commercial silica sand or decorative pebbles) that do not contain any iron

In 2013, LIMHL inserted a total of 79 standards for analysis, of which 31 were James standards, and 48 were Knob Lake standards.

For the James standard four (4) of the standards were below the -3 σ totaling 13% of the samples outside of the ±3 σ lines. Slightly better performance was witnessed for the SiO₂ results with only 6% of the samples outside of the ±3 σ lines. The slight bias high is reflected in the sign test for silica (0.32 \leq 0.77 \leq 0.68), and the iron values have no apparent bias which is also reflected in the sign test (0.32 < 0.68 < 0.68). Based on the charts for iron and silica of the James Standards we would conclude there is not likely any serious contamination or mislabels or other issues.

For the Knob Lake standards only one (1) standard was below the -3σ and seven (7) above the $+3\sigma$ for iron, representing 17% of the samples outside the control limits. Furthermore there were five (5) silica value above the $+3\sigma$ and none below the -3σ . Again there is a bias high for the iron values, as visible on the figure and from the sign test ($0.36 \leq 0.96 \leq 0.64$), as well as the silica values $0.36 \leq 0.93 \leq 0.64$ Results were good with the exception of sample 86350, which warrants further investigation. It is recommended to revaluate the expected value and standard deviation of the Knob Lake standard.

LIM sent in 82 samples to ACTLABS and also to ALS Chemex for duplicate analysis. The coefficient of correlation is 0.9937 for iron and 0.9902 for silica, indicating a strong correlation. The t-stat for silica does not indicate any bias, however there is a bias for iron, even though the two sets are strongly correlated. A high bias was observed on iron results from ACTLABS



compared to ALS, this bias is also reflected in the sign test (0.39 \leq 0.22 \leq 0.61) indicting that only 22% of the time the ALS values are higher than ACTLABS, and a comparison of the means 35.115 Actlabs T_Fe% versus 34.832 ALS T_Fe%. There is no strong bias for silica values. Even though there is significant bias, it is not concerning because the correlation is so high and the absolute difference between samples is so low, furthermore almost all of the data is within 20% difference. The bias could be explained by small differences in analytical techniques and digestions at the two different labs. From Figure 11-16 most of the data is below the 1% line and all of the data is below the 5% line, using the 10% line as a cautionary line and the 20% line as warranting investigation. The spread of the data indicates that as grade increases there is less difference between the pairs of results between laboratories, and there is a small overall difference in the two values compared with the paired mean value for iron and silica. This indicates that there are no extremely strong outliers. It can be concluded that there is good correlation between ACTLABS results and ALS Chemex results, indicating that there is confidence in the exploration results.

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 2012 RC cuttings and core by SGS-Geostat indicate a small bias. The results indicate that there is sufficient reproducibility between laboratories and that the data has demonstrated validity.



Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO ₂ (%)	Al ₂ O ₃ (%)
	Fe Ore	Measured (M)	-	-	-	-	-	-
La ma coDit	(DRO,	Indicated(I)	-	-	-	-	-	-
JamesPit	PHG,	Total M+I	-	-	-	-	-	-
	PLG,	Inferred	232,000	52.77	0.024	0.99	21.67	0.36
	Fe Ore	Measured (M)	-	-	-	-	-	-
Bean Lake	(DRO,	Indicated(I)	-	-	-	-	-	-
Deall Lake	PHG,	Total M+I	-	-	-	-	-	-
	PLG,	Inferred	208,000	53.21	0.028	0.04		0.37
	Fe Ore	Measured (M)	-	-	-	-		-
Redmond 2B	(DRO,	Indicated(I)	518,000	59.07	0.130	0.44	5.80	2.25
Rediffolid 2D	PHG,	Total M+I	518,000	59.07	0.130	0.44	- - 0.99 21.67 - - - - - - 0.04 22.59 - - 0.44 5.80 0.44 5.80 0.44 5.80 0.66 5.92 - - 0.78 11.76 0.78 11.76 0.78 11.76 0.78 11.76 0.78 11.76 0.76 11.96 0.85 9.64 0.76 11.96 0.84 9.89 - - 1.00 10.21 1.07 11.19 1.03 10.65 1.21 13.53 0.91 9.87 0.88 10.88 0.90 10.28	2.25
	PLG,	Inferred	25,000	57.19	0.130	0.66	5.92	4.12
	Fe Ore	Measured (M)	-	-	-	-	-	-
Redmond 5	(DRO,	Indicated(I)	1,576,000	55.03	0.039	0.78	11.76	0.73
Reditiona 5	PHG,	Total M+I	1,576,000	55.03	0.039	0.78	- - - - - - 0.99 21.67 - - - - - - - - - - - - - - - - 0.04 22.59 - - 0.44 5.80 0.44 5.80 0.44 5.80 0.66 5.92 - - 0.78 11.76 0.78 11.76 0.78 11.76 0.78 11.96 0.85 9.64 0.76 11.96 0.84 9.89 - - 1.00 10.21 1.03 10.65 1.21 13.53 0.91 9.87 0.88 10.88 0.90 10.28	0.73
	PLG,	Inferred	60,000	52.33	0.063	1.72		0.97
	Fe Ore	Measured (M)	4,167,000	54.92	0.077	0.85		1.13
Denault	(DRO,	Indicated(I)	507,100	53.17	0.080	0.76		0.97
Denaun	PHG,	Total M+I	4,674,500	54.73	0.077	0.84	9.89	1.11
	PLG,	Inferred	-	-	-	-	-	-
	Fe Ore	Measured (M)	2,824,000	55.01	0.070	1.00		0.48
Knob Lake No.1	(DRO,	Indicated(I)	2,259,100	54.33	0.061	1.07	11.19	0.46
KIIOD Lake NO.1	PHG,	Total M+I	5,083,500	54.71	0.066	1.03	10.65	0.47
	PLG,	Inferred	643,800	51.78	0.085	1.21	- 21.67 - 221.67 - 22.59 - 22.59 - 5.80 5.80 5.92 - 11.76 11.76 11.76 11.28 9.64 11.96 9.89 - 10.21 11.19 10.65 13.53 9.87 10.88 10.28	0.45
	Fe Ore	Measured (M)	6,991,000	54.96	0.074	0.91	9.87	0.87
All	(DRO,	Indicated(I)	4,860,200	54.94	0.063	0.88	10.88	0.79
ЛШ	PHG,	Total M+I	11,852,000	54.95	0.070	0.90	- - 21.67 - 22.59 - 22.59 - 22.59 - 1.76 5.80 5.80 5.92 - 11.76 11.76 11.76 11.28 9.64 11.96 9.89 - 10.21 11.19 10.65 13.53 9.87 10.88 10.28	0.84
	PLG,	Inferred	1,168,800	52.37	0.06	0.97		0.52

Table 18-1: NI 43-101 Compliant Iron Resources – Schefferville Area Phase 1

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability



Area	Classification	Tonnage	Fe(%)	P(%)	Mn(%)	SiO2(%)	A12O3(%)
	Measured (M)	-	-	-	-	-	-
Ferriman 1	Indicated(I)	2,394,000	49.34	0.053	1.21	21.63	1.01
(C&D) Stockpile	Total M+I	2,394,000	49.34	0.053	1.21	21.63	1.01
зюскрие	Inferred	1,616,000	49.30	0.045	1.17	22.06	0.87
	Measured (M)	-	-	-	-	-	-
Wishart	Indicated(I)	1,151,000	48.57	0.039	0.09	27.14	0.50
Stockpile	Total M+I	1,151,000	48.57	0.039	0.09	27.14	0.50
	Inferred	1,280,000	48.24	0.038	0.08	27.54	0.50
	Measured (M)	-	-	-	-	-	-
All	Indicated(I)	3,545,000	49.09	0.049	0.84	23.42	0.84
All	Total M+I	3,545,000	49.09	0.049	0.84	23.42	0.84
	Inferred	2,896,000	48.83	0.042	0.69	24.48	0.71

Table 18-2: Stockpiles Mineral Resource Estimates, by Deposit, as at March 31, 2013

Dated March 31st, 2014

Mineral resources which are not mineral reserves do not have demonstrated economic viability

Area	Ore Type	Classification	Tonnage	Fe (%)	P (%)	Mn (%)	SiO2 (%)	Al2O3 (%)	
		Measured (M)	1,443,000	52.05	0.078	6.36	6.00	1.09	
Derrelt	Mn Ore	Indicated(I)	361,000	51.72	0.071	6.49	6.61	0.97	
Denault	Mn Ore	Total M+I	1,805,000	51.98	0.077	6.39	6.13	1.07	
		Inferred	-	-	-	-	-	-	
	N O		Measured (M)	375,000	50.55	0.086	5.59	8.45	0.68
		Indicated(I)	214,000	49.56	0.076	4.87	9.60	0.80	
KL1	Mn Ore	Total M+I	588,000	50.19	0.082	5.33	6.00 6.61 6.13 - 8.45	0.72	
		Inferred	127,000	49.18	0.046	4.80		0.40	
		Measured (M)	1,818,000	51.74	0.080	6.20	6.51	1.01	
All	Ma Ora	Indicated(I)	575,000	50.91	0.073	5.89	7.72	0.91	
All	Mn Ore	Total M+I	2,393,000	51.54	0.078	6.13	6.80	0.98	
		Inferred	127,000	49.18	0.046	4.80	9.66	0.40	

Updated March 31, 2014

Mineral Resources are not mineral reserves and do not have demonstrated economic viability



19. Recommendations

Since production began in 2011, the Company has been exposed to significant market volatility in iron ore prices. This has had an adverse impact on LIM's economic analysis, with a significant decrease of available mineralized material and recoverable resources. Consequently, the information under *Additional Requirements for Advanced Property*, prepared by Justin Taylor, P.Eng., DRA Americas Inc., in a Technical report (dated April 12, 2013) is no longer current. This information has subsequently been updated and summarized in the section 17 - Other Relevant Data and Information of this Report. Only the direct shipping ore, which is considered amenable to beneficiation to produce lump and sinter feed, forms part of the resources for LIM's development projects.

Until LIM has resolved all aspects of the mining and recovery, it is not recommended to continue exploration on the Redmond 2B, Redmond 5, Denault, Gill, properties.

SGS recommends the continued use of diamond drilling on prime targets in order to obtain core from all of its work areas. However, since the Company has not resumed mining activity at the James Mine, the author is not in a position to address further drilling campaigns and respective drilling budget until the future of LIM's operations and activity in Labrador-Schefferville area is confirmed.



20. References

The following documents were in the author's files or were made available by LIMHL:

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"Technical Report on an Iron Project in Northern Quebec. Province of Quebec". A.S. Kroon. March 10th, 2010;

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"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.

"Abitibi Geophysics, 2013, Borehole gravity survey (Gravilog). James South Extension and Houston properties. Schefferville Area, Quebec, Canada. Logistics and Interpretation Report". 37p.

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LIM, 2012b, 2012 Grade Reconciliation Procedure, 22p.

"Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada" SGS-Geostat. October 24st, 2012.

"SGS 2013, Technical Report: Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada. June 20th,2013. 330p.

"Mineral Resource Technical Report, Elizabeth Taconite Project, Labrador, Dated June 15, 2013, Wahl,G.H., 79p.



21. Date and Signature Page

This Report "**Technical report: Schefferville Area Phase 1 DSO Iron Projects Resource Update, Western Labrador – NE Quebec, Canada**" dated June 27th, 2014 was prepared and signed by the author.

Signed in Blainville, Québec, Canada on June 27th, 2014

SIGNED & SEALED

Maxime Dupéré, P.Geo.

Geologist

SGS Canada Inc.

22. Certificates of Qualified Persons

This certificate regards the technical report entitled "Technical report: Schefferville Area Phase 1 DSO Iron Projects Resource Update, Western Labrador – NE Quebec, Canada" dated June 27 th, 2014. ("Technical Report");

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

- 1. I am a geologist with SGS Canada Inc., Geostat with an office at 10 Boul. de la Seigneurie Est, Suite 203, Blainville Quebec Canada, J7C 3V5;
- 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 member in good standing of the Ordre des Géologues du Québec (#501), I have 12 years of experience in mining exploration in diamonds, gold, silver, base metals, and Iron Ore. I have prepared and made several mineral resource estimations for different exploration projects at different stages of exploration. I am aware of the different methods of estimation and the geostatistics applied to metallic, non-metallic and industrial mineral projects.
- 4. I am a qualified person for the purposes of the National Instrument 43-101 (the "Instrument");
- 5. I am responsible for the preparation of all sections of the Technical Report;
- 6. I visited the site from December 9th to 12th, 2013;
- 7. I am independent of Labrador Iron Mines Holdings Limited ("Company") as defined by Section 1.5 of the Instrument;
- 8. My prior involvements with the Company are for the resource estimation and respective technical reports in respect of the Houston Property and the Schefferville Areas DSO Projects since 2008.
- 9. I have read the Instrument of the Technical Report has been prepared in compliance with the Instrument;
- 10. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report, contains all scientific and technical information that is required to be disclosed to make the technical not misleading.

Signed and dated this 27th day of June 2014 at Blainville, Quebec, Canada.

(Signed) Maxime Dupéré

Maxime Dupéré P.Geo. SGS Canada Inc. – Geostat



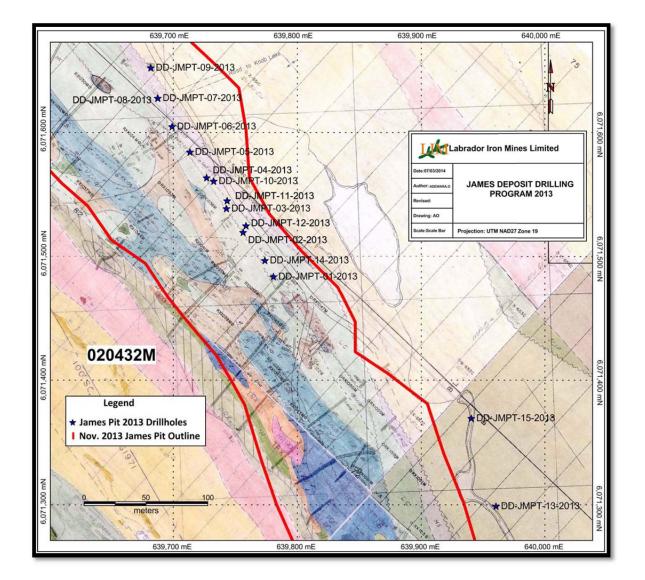
23. Illustrations

The following plans are attached as illustrations of the exploration drilling and testpit sampling programs carried out LIMHL during 2012 to date.

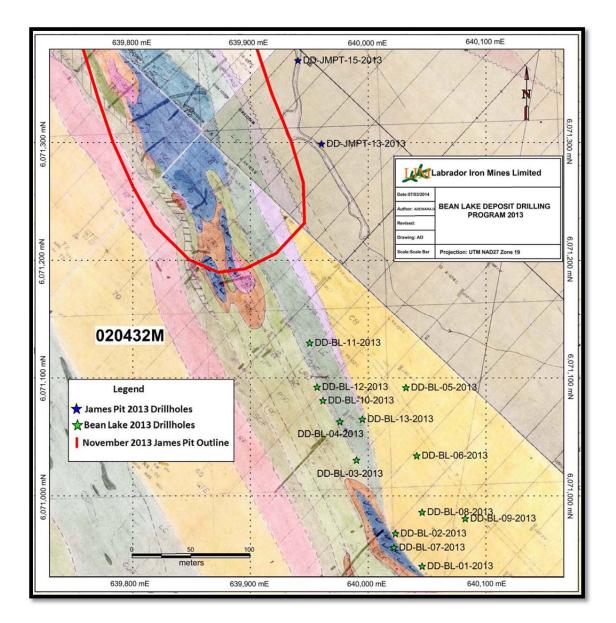
List of Plans

- 1. 2013 James Diamond Drillhole Location Map
- 2. 2013 Bean Lake Diamond Drillhole Location Map
- 3. 2013 Gill Mine diamond drillhole Location Map
- 4. 2013 Redmond 5 Diamond Drillhole Location Map



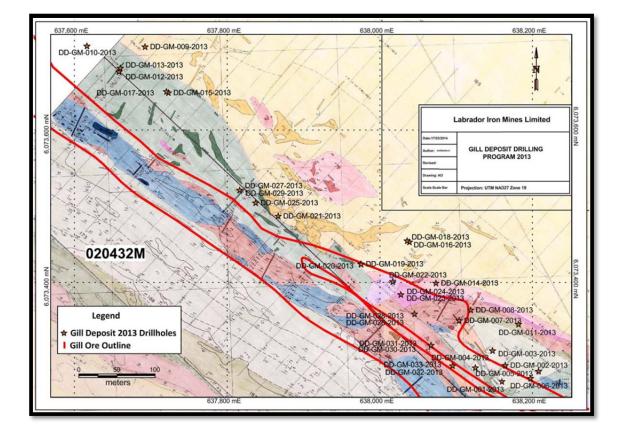






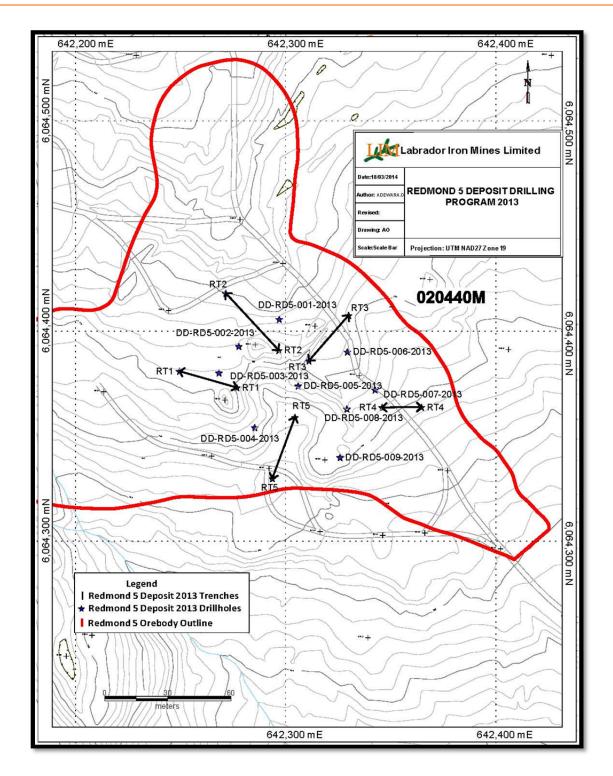
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