Technical Report:
Mineral Resource Update of the Houston Property, Labrador West Area, Newfoundland Labrador, Canada
For
Labrador Iron Mines Holdings Limited

Prepared By:
Maxime Dupéré, P. Geo. (SGS Canada Inc.)
Justin Taylor, P. Eng. (DRA Americas Inc.)

Respectfully submitted to:
Labrador Iron Mines Holdings Limited

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SGS Canada Inc.

Mineral Services
10 boul. de la Seigneurie Est, Suite 203, Blainville, Québec Canada
t (450) 433 1050 **f** (450) 433 1048 www.geostat.com www.met.sgs.com

Member of SGS Group (SGS SA)

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1. Summary

SGS Canada Inc. ("SGS Geostat") was given a mandate to update the NI 43-101 compliant Houston mineral deposit Resource and to include the Malcolm 1 occurrence on behalf of the client in order to support the Annual Information Form of 2011 as of March 31st, 2011.

This report supports the Houston Property mineral resource and is compliant with the requirements of National Instrument 43-101.

Mr. Maxime Dupéré P. Geo., the primary author of this report, is independent of Labrador Iron Mines Holdings Limited ("LIMHL"), Labrador Iron Mines Limited ("LIM") and Schefferville Mines Incorporated ("SMI"), wholly owned subsidiaries of LIMHL. LIM holds the mineral claims on which the Houston iron deposits are located and SMI holds the claims where the Malcolm 1 occurrence is located.

Mr. Justin Taylor P. Eng., the secondary author of this report, is also independent of Labrador Iron Mines Holdings Limited.

Mr. Maxime Dupéré P. Geo. and Mr. Justin Taylor P. Eng. are "qualified persons" within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators. The authors are independent as described in section 1.5 of NI 43-101.

1.1 The Houston Deposits

The current resource estimates for the Houston property is 22.9 million tonnes at an average grade of 57.3%Fe in the Measured and Indicated categories. The Houston deposits remain open to the northwest and southeast and to depth.

1.2 The Malcolm 1 Occurrence

Malcolm 1 lies on gently westward sloping land, is approximately 12 km southeast from Schefferville (Figure 4-4). In the Quebec side of the Labrador trough, work by IOC in the 1960's and 1970's delineated a zone of enrichment that was 1000m long by up to 90m wide which had a northwest/southeast trend and dipped at 60 to 70 degrees to the northeast. At this point drill holes at Malcolm have been drilled as deep as 112m and iron enrichment appears to continue to depth. A second smaller area of iron enrichment measuring 70m by 160m occurs to the southeast along strike from the former.

Malcolm 1 was mapped, sampled and drilled by IOC in several phases from the 1960's to 1982. A historical resources estimate was done at the time for Malcolm 1 by IOC and has not been validated yet by SMI or SGS. SMI has a partial database of historical IOC fieldwork including a geological map showing geology and the surface location of the occurrence.

1.3 Property Description and Location

As of March 31st, 2012, the Houston property comprises 13 Mineral Rights Licenses issued by the Department of Natural Resources, Province of Newfoundland and Labrador, representing 139 mineral claims located in western Labrador covering approximately 3,474 hectares. The property also includes 3 additional claims (64 ha) in the Québec side covering the Malcolm 1 mineral occurrence.

LIM holds 100% interest in the title to the Mineral Rights in Newfoundland and Labrador subject to a Royalty equal to 3% of the selling price freight on board (FOB) port of iron ore produced and shipped from the properties, subject to such royalty being not greater than $1.50 per tonne.

SMI holds 100% right to the claims in Québec.

The Houston project is located in the Province of Newfoundland and Labrador and is the western central part of the Labrador Trough Iron Range about 1,140 km northeast of Montreal and about 20 kilometres southeast of the town of Schefferville (Quebec). The Malcolm project is located in the Province of Quebec and is located contiguously to the northwest of the Malcolm deposit and mineral licenses. The Malcolm 1 mineral occurrence is believed to be the NW extension of the Houston project.

The Houston deposits comprise a number of separate deposits currently identified as Houston 1, 2 and 3. Malcolm 1 is directly located to the NW of the Houston Deposits.

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

The Iron Ore Company of Canada ("IOC") had previous mining activities close to the Houston property during the period of operations from 1954 to 1982 when part of the Houston deposit formed part of the IOC resource base.

1.4 History

The following information was provided by LIMHL:

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

There are currently four major iron ore producers in the Labrador City-Wabush region to the south, IOC, Quebec Cartier Mining Company, Consolidated Thompson Mines and Wabush Mines. New Millennium Capital in joint venture with Tata Steel is currently planning a Direct Shipping Ore project 30 kms north of Schefferville. A number of other projects in the Labrador area are in the exploration and review process.

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

Mining and shipping from the Schefferville area began in 1954 under the management of the IOC, a company specifically formed to exploit the Schefferville area iron deposits.

In 1954, IOC started to operate open pit mines in Schefferville containing 56-58% natural iron (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 Houston-Malcolm Project were part of the original IOC Schefferville area operations.

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.

During the 1960's, higher-grade iron deposits were developed in Australia and South America and customers' preferences shifted to products containing +62% Fe or higher. In 1963, IOC developed the Carol Lake deposit near Labrador City and started to produce concentrates and pellets with +64% Fe, so as to satisfy the customers' requirements for higher-grade products. High growth in the demand for steel, which began after the end of World War II, came to an abrupt end in the early 1980's due to the impact of increasing oil prices. The energy crisis affected steel production in the U.S. and Western Europe as consumers switched to energy-efficient products. As a result, the demand for iron ore plummeted, creating a severe overcapacity in the industry. In 1982, the IOC closed its operations in the Schefferville area. From 1954 to 1982, a total of some 150 million tonnes of ore was produced from the area.

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

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

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

In December 2009, LIMHL, through a wholly-owned subsidiary, acquired control over an additional 50 million tonnes of historical direct shipping iron ore in the Province of Quebec, together with a large package of mineral claims in Quebec in the Schefferville area which are considered prospective for exploration for iron ore and which also host a number of small high grade manganese deposits.

During the period from September 2005 to 2011, LIMHL conducted exploration, development and other work in the Schefferville area. Such work consisted of geological evaluation, sampling, geophysical surveys, trenching, drilling, bulk sampling, resource verification, assaying, metallurgical test work, mine planning, community consultation, transportation studies and other work.

1.5 Geology

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

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

The Labrador Trough contains four main types of iron deposits:

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

Secondary enrichment included the addition of secondary iron and manganese which appear to have moved in solution and filled pore spaces with limonite-goethite. Secondary manganese minerals, i.e., pyrolusite and manganite, form veinlets and vuggy pockets. The types of iron mineralizations developed in the deposits are directly related to the original mineral facies. The predominant blue granular mineralization was formed from the oxide facies of the middle iron formation. The yellowish-brown mineralization, composed of limonite-goethite, formed from the carbonate-silicate facies, and the red painty hematite ore originated from mixed facies in the argillaceous slaty members.

Only the soft iron mineralization is considered amenable to beneficiation to produce lump and sinter fines and forms part of the resources for LIMHL's DSO Projects.

1.6 Exploration

Most historic exploration on the Schefferville area iron ore properties was carried out by IOC until the closure of its operation in the 1980s. A considerable amount of data used in the evaluation of the resource and reserve estimates is provided in the documents, sections and maps produced by IOC or their consultants. More recent exploration has been carried out by LIMHL during the period 2006 to 2011 and includes tricone reverse circulation and diamond drilling, trenching, bulk sampling and data collection and verification.

The majority of the additional resource outlined in the 2011 program has resulted from the drilling of a not well defined area between Houston 1 and 2 deposits, as well as infill drilling. The Houston deposits remain open along strike particularly to the southeast where further drilling is planned for 2012. Additional bulk sampling for metallurgical testing may also be necessary to prepare the final process flow sheet for treatment of the iron and manganiferous ore resources.

1.7 Drilling and Sampling

Diamond drilling of the Schefferville area iron deposits has proven to be a challenge historically as the alternating hard and soft mineralized zones tend to preclude good core recovery. Traditionally IOC used a combination of reverse circulation drilling, diamond drilling and trenching to generate data for reserve and resource calculation. A large quantity of original IOC data has been recovered, reviewed and digitized by LIMHL.

For the most recent calculations of the resources for the Houston deposits, data from 4,418 metres of drilling in 86 historical reverse circulation drill holes comprising 1,496 samples has been used. The systematic drilling had been carried out on sections 100 feet (30 metres) apart.

IOC also sampled targets by trenching and test pits in addition to drilling. The test pits and trenches were to determine lithologies, ore body limits and quality of ore on surface. A total of 8,001 metres in 236 trenches and test pits with 2,106 samples from historical records were considered in this report. Samples were usually collected over 10 feet (3.0 metres) intervals.

In order to update historical data, LIM carried out several exploration programs at Houston since 2006 with the purpose of verifying the historical resources and evaluating its extensions. This included 9,098 metres in 128 RC drill holes, 1,105 metres in 13 trenches and 135 samples. Most of the drilling completed was using tricone reverse circulation.

Additionally, SMI carried out drilling activities at the Malcolm 1 occurrence for the first time in 2011 to compare with historical information. A total of 18 RC drill holes were completed with a total depth of 1,379 metres and 480 samples were sent for chemical analysis.

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

1.8 Sample Preparation, Security and Data Verification

The precise sampling procedures used by IOC are not known but it is believed that LIM has followed procedures that are similar to those used in the past. Sampling, as well as sample preparation, was carried out under supervision of LIMHL personnel in 2011 by experienced geologists and technicians following well-established procedures. The samples were reduced to representative, smaller size samples by a riffle splitter, and were sent to ACTLABS laboratory for analysis and testing.

1.8.1 Metallurgical Testing

The information below was provided by LIMHL

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

Four bulk trench samples of 600kg each taken in 2006 from the Houston No. 1 deposit were tested for compressive strength, crusher index and abrasion index at SGS Lakefield. Composite crushing, dry and wet screen analysis, washing and classification tests were done at "RPC-The Technical Solutions Centre" in Fredericton, New Brunswick.

During the 2008 bulk sample program, a total of 2,000 tonnes of ore was collected from the Houston No. 1 deposit from which 200 kg representative samples were taken for each of the raw ore types. At Houston, only blue ore was collected and sent to SGS Lakefield laboratories for metallurgical testing. Other tests (angle of repose, bulk density, moisture, and direct head assay and particle size analysis determinations) were also carried out.

Another bulk sample program was conducted in 2011. A total of 8 metric tonnes was excavated and sent to a metallurgical lab for an array of tests directly related to ore characterisation and processing. At the time of this report, the results are pending.

1.9 Mineral Resources and Mineral Reserves

Table 1-1 summarizes an updated resource estimate for the Houston deposits, on both iron and manganiferous iron resources, which has been carried out in compliance with NI 43-101. No mineral reserves are reported in this document.

Table 1-1 Summary of the Houston Estimated Resources

Area	Ore Type	Classification	Tonnage	SG	Fe(%)	Mn(%)	SiO2(%)
Houston	Total (Fe Ore and Mn Ore)	Measured (M)	19,300,000	3.43	57.32	0.91	13.52
		Indicated(I)	3,590,000	3.41	56.45	1.02	14.53
		TotalM+I	**22,890,000**	**3.43**	**57.18**	**0.93**	**13.68**
		Inferred	3,740,000	3.41	56.46	0.48	15.89

Resources are rounded to the nearest 10,000 tonnes.
Houston deposit dated to March 31st, 2012
*Relative density equation: = ((0.0258*Fe) + 2.338)*0.9*
CIM Definitions were followed for mineral resources
Mineral resources which are not mineral reserves do not have demonstrated economic viability

The current updated resource estimates for the Houston deposits total 22.9 million tonnes (including manganiferous iron and high-silica ores) at a grade of 57.2% Fe in the Measured and Indicated categories. The Houston deposit remains open to the northwest and southeast and to depth.

1.9.1 Block Modeling

In March 2012, SGS was mandated to update the March 2011 resource estimation for the Houston Property. SGS identified certain differences and updated the Houston resource using the same parameters as in March 2011.

SGS used its own software called BlockCad for the resource estimation. The SGS set of geostatistical software programs are reliable and validated and constantly improved by SGS experienced software and geostatistical team. The ordinary kriging interpolation method was used to estimate the resources by block modeling with block sizes of 5x5x5 metres and block rotation of 45.6° which corresponds to the general strike of the deposit. SGS used LIM's geological and ore models interpreted in the Gemcom software. The mineralised envelope prepared by LIM is considered reliable and current.

1.9.2 Analyses

Analyses for all of the samples from the 2011 drilling and trenching programs were carried out by Activation Laboratories. The analytical method used was borate fusion whole rock X-Ray Fluorescence.

1.9.3 Density

A variable specific gravity (density) was used for the modeled ore blocks using the following equation: SG (in-situ) = (2.3388 + Fe x 0.0258) x 0.9. The regression formula was calculated by LIM and validated by SGS based upon 229 specific gravity tests. The SG formula is considered reliable and current.

1.10 Other Relevant Data and Information

On March 28th 2012, LIM obtained release from further environmental assessment from the Government of Newfoundland and Labrador for the Houston 1 and 2 project. This marks the beginning of development of the project, starting with applications being made for the various technical permits to start this work. Plans for development of the property in 2012 include permitting and constructing a road from the Redmond area to the Houston deposits and a siding at Redmond on the main Tshiuetin railway line that links the Labrador City area with Schefferville.

Estimated capital costs for the Houston 1 and 2 project total $57.5 million with a 13% contingency for 2012 and 2013 combined, as indicated by DRA.

Out of this total, for 2012, $37.0 million with contingency is planned to be spent on Mine Engineering and Mine Development which includes road construction, rail siding construction, mine design, site design, acquiring all required permits, and consulting costs.

In 2013, the cost includes mine pre-stripping, including tree clearing, topsoil removal and storage for later reclamation use, and waste pre-stripping. Other civil work and facilities, including dewatering, is planned for 2013.

1.11 Interpretation and Conclusions

The author has reviewed all of the technical data in the possession of LIMHL relating to the Houston deposit owned by LIM and has detailed personal knowledge of LIM's projects from 2008. LIM's exploration work programs and technical evaluation programs carried out in 2008 were conducted under the supervision of the author. The author visited the site from August 1st to August 5th, 2011 as part of the reconnaissance visit of the all the properties of the Schefferville area for the 2011 RC drilling and trenching campaign. SGS–Geostat reviewed the different field, laboratory and QA/QC protocols and procedures. The 2009, 2010 and 2011 exploration work programs and technical evaluation programs follow the same methods and protocols (updated and improved) and although the author did not do a site visit in 2010, the information in this report according to the author's knowledge does not appear to be misleading.

The geological interpretation of the Houston deposits is restricted to the zones considered of reasonable economic extraction potential. The historical IOC parameters of the Non-Bessemer and Lean Non-Bessemer ore types were considered together for the geological interpretations and modeling. The High Silica ($HiSiO_2$) ore types containing>=50% Fe and from 18% up to 30% SiO_2 were also considered for the geological interpretation and modeling of the selected mineral deposits.

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

The results of LIMHL's work to date on the Houston deposits has shown that there is sufficient merit to continue with the development of the Houston 1 and 2 deposits and to carry out further exploration work to confirm and expand the resource potential of the Houston 3 deposit, as well as to conduct preliminary evaluation of the potential for lower grade taconite deposits along the eastern flank of the Houston DSO resource zones.

SGS also recommends continuing with further exploration work on the Malcolm 1 occurrence with the objective to validate and update historical resources.

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

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.

1.12 Recommendations

The results of exploration to date at Houston have confirmed the reliability of the historic IOC data and substantially increased the resource base at Houston.

Following a review of all data relative to the Houston deposits and the interpretation and conclusions of this review, there is sufficient justification to move towards a production and development decision with respect to the Houston 1 and Houston 2 deposits and simultaneously continue additional exploration to further expand the resource base of the Houston 3 deposit, as well as to evaluate the potential for lower grade taconite iron deposits along the eastern flank of the Houston iron ore deposits.

SGS recommends introducing non-destructive vibration-rotation drilling on the Houston 1, 2 and 3 iron deposits. This drilling technology consists of a rotary and vibrating drilling system capable of gathering sufficient material and lithological information with an almost constant volume in order to better define the in situ Specific Gravity and to gather material at depth for metallurgical tests and possibly geotechnical tests. The tests would include the same as previous ones done on the property such as: general mineralogy, QEMSCAN, grindability and Bond Work Index, scrubbing tests, size analysis and assays from before and after scrubbing, density separation, jigging tests, WHIMS tests, settling tests without using flocculants, Vacuum filtration (assuming vacuum disc filter).

SGS understands that the Houston 3 sector is at a lesser stage of development than the Houston 1 and 2 sectors but suggest carrying the metallurgical tests and rotary and vibrating drilling as well. This recommendation can also be transferred to other mineral deposits owned by the company.

The following budgetary recommendations are purely conceptual. The metallurgical tests costs estimates are purely conceptual. LIM should inquire on the update of a formal proposal for such tests. Please consider these analysis cots only as a reference.. The metallurgical tests costs estimates are purely conceptual. The access, logistics, camp, meals and equipment rental costs are not included in this proposal.

Description	number	unit	$/unit	total
Assays (RC)	700	units	40	28,000
RC infill and delineation Drilling Houston 3	1000	m	350	350,000
RC delineation Drilling Houston 1 & 2	1000	m	350	350,000
non destructive vibration-rotation drilling Houston 1	1100	m	350	385,000
non destructive vibration-rotation drilling Houston 2	1000	m	350	350,000
non destructive vibration-rotation drilling Houston 3	200	m	350	70,000
Reporting, Mineral resource update of the Property.	1			85,000
Reporting, Metallurgical testing update of the Property	1			200,000
SubTotal				1,818,000
Contingency & Miscellaneous (25%)				454,500
Total				**2,272,500**

2. Introduction

SGS–Geostat Ltd. was retained to prepare a 43-101 compliant Resource estimation technical report of the Houston mineral deposits in the Labrador province, near Schefferville, Quebec on behalf of the Client, LIMHL, in order to confirm their resources.

The author is a “qualified person” within the meaning of National Instrument 43-101 – Standards of Disclosure for Mineral Projects of the Canadian Securities Administrators and is independent of LIMHL.

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

The author has personal knowledge of the Houston deposits and the other nearby iron deposits held by LIMHL in western Labrador and directed exploration of the properties in 2009/2010/2011.

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).

LIMHL has carried out significant geological exploration programs on the Houston and other Labrador properties held by LIMHL during the 2006, 2008, 2009, 2010 and 2011 summer seasons.

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

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

This report was written by SGS – Geostat in accordance with the National Instrument 43-101 Policy guidelines. This report was requested by LIMHL for the update of the resource estimation of the Houston property. The author met on a regular basis with LIMHL management and relevant personnel by phone and in the SGS office located in Montréal, Quebec.

3. Reliance on Other Experts

In this report, the author did not rely on any other experts.

A number of metallurgical testing laboratories have carried out work on this project at the request of LIMHL. These include “RPC – The Technical Solutions” and, SGS Lakefield.

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

3.1 List of Terms

In this document, the following terms are used:

IOC: Iron Ore Company of Canada: Former producer of iron ore in the Schefferville area from 1954 to 1982.

LIMHL: Labrador Iron Mines Holdings Limited.

LIM: Labrador Iron Mines Limited.

SMI: Schefferville Mines Incorporated.

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

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

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

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

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

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

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

XRF: X-Ray Fluorescence Spectrometry. The type of analysis used for the assay analyses of 2006, 2008 to the date of this report.
DATUM NAD 27: North American Datum 1927 coordinates system

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

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

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

3.2 List of Abbreviations

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

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

Table 3-1 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
m^3	Cubic metres

4. Property Description and Location

4.1 Houston

The Houston property is located in the western central part of the Labrador Trough iron range and about 1,140 km northeast of Montreal and 20 km southeast of the town of Schefferville, Quebec Figure 4-1.

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

With respect to the Houston property, LIM holds the titles to 13 Mineral Rights Licenses (as of March 31st , 2012) issued by the Department of Natural Resources, Province of Newfoundland and Labrador, representing 139 mineral claims located in northwest Labrador covering approximately 3,475 hectares (Table 4-1 and Figure 4-2).

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

On October 22, 2009, LIMHL announced that it had entered into an agreement with NML to exchange certain of their respective mineral licences in Labrador. The exchange eliminated the fragmentation of the ownership of certain mining rights in the Schefferville area and will enable both parties to separately mine and optimise their respective DSO deposits in as efficient a manner as possible. As part of the Agreement, NML transferred to LIMHL 125 hectares in five mineral licenses in Labrador that adjoin or form part of LIM's Houston deposit.

(As of March 31, 2012)

Table 4-1 List of Licenses Comprising the Houston Project

LicNo	Location	Claims	Area Ha	Issued	License Renewal
016286M	Gilling River	22	550	12/04/2004	12/04/2014
016391M	Gilling River	1	25	27/08/2009	27/08/2014
016392M	Gilling River	1	25	27/08/2009	27/08/2014
016393M	Gilling River	1	25	27/08/2009	27/08/2014
016516M	Astray Lake	36	900	02/10/2009	02/10/2014
016575M	Houston Lake	1	25	10/02/2005	10/02/2015
016576M	Houston Lake	3	75	10/02/2005	10/02/2015
016577M	Houston Lake	1	25	10/02/2005	10/02/2015
017721M	Houston Lake	6	150	03/06/2010	03/06/2015
017722M	Gilling Lake	27	675	03/06/2010	03/06/2015
018284M	Gilling River	1	25	24/12/2010	24/12/2015
018521M	Petitsikapau Lake Area	5	125	14/02/2011	14/02/2016
018522M	Petitsikapau Lake Area	34	850	14/02/2011	14/02/2016
	Total	**139**	**3475**		

Figure 4-1 Project Location Map

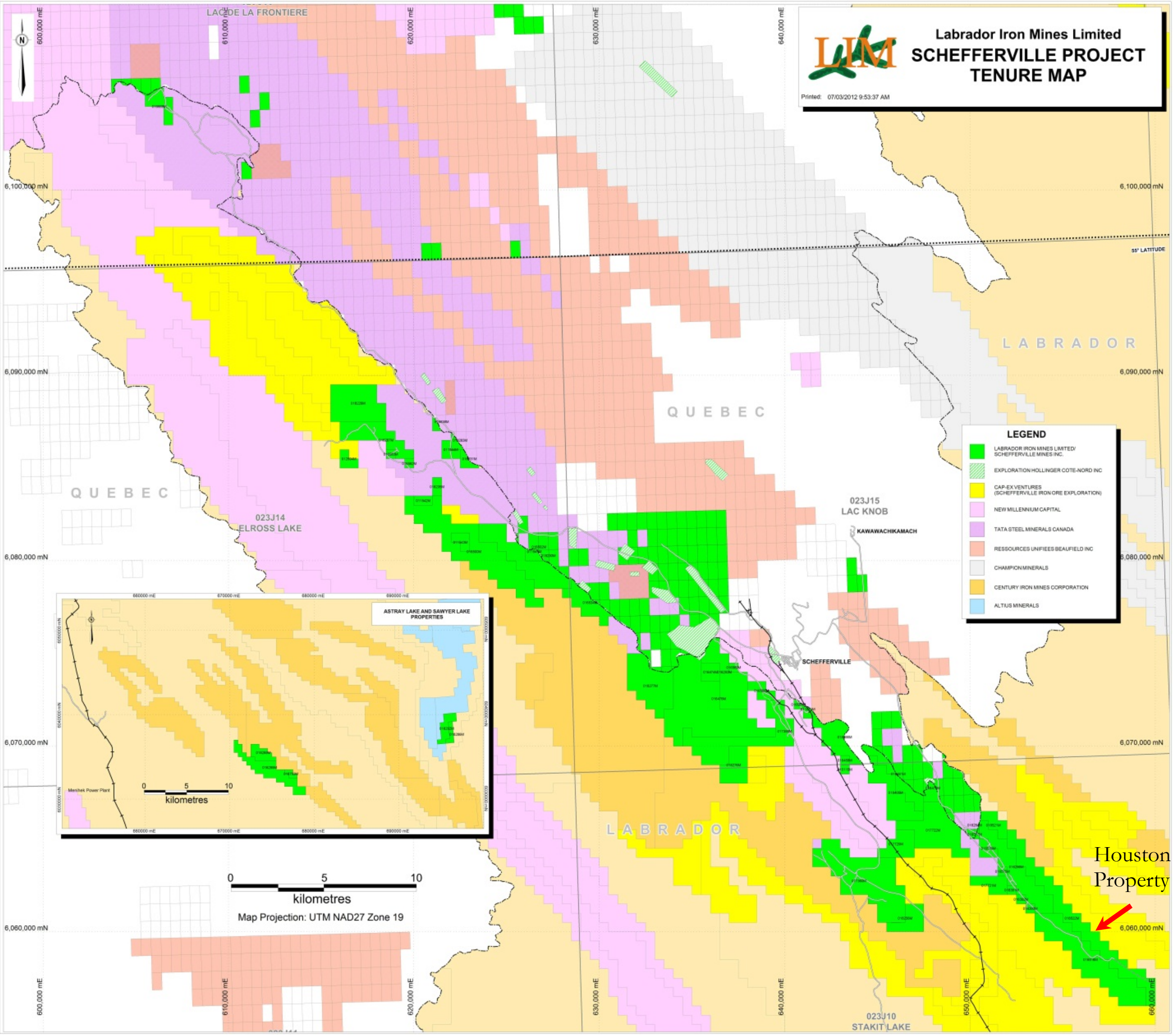


Figure 4-2 Map of LIMHL Mining Leases (as of March 2012)

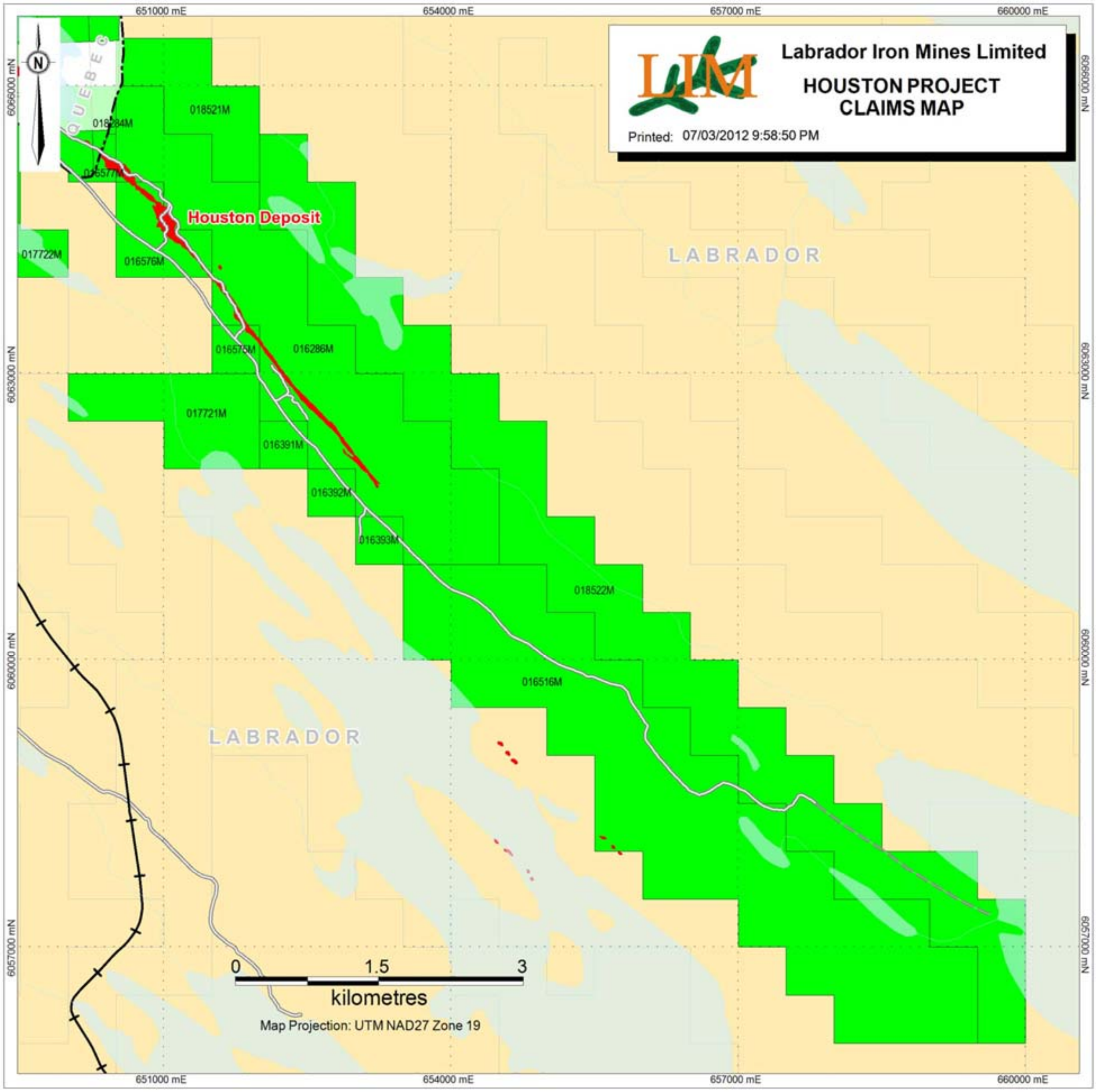


Figure 4-3 Claim Map showing Houston Mineral Licenses (as of March 2012)

4.2 Malcolm 1

Malcolm 1 lies on gently westward sloping land, is approximately 12 km southeast from Schefferville (Figure 4-4). Work by IOC in the 1960's and 1970's delineated a zone of enrichment that was 1000m long by up to 90m wide which had a northwest/southeast trend and dipped at 60 to 70 degrees to the northeast. At this point drill holes at Malcolm have been drilled as deep as 112m and iron enrichment appears to continue to depth. A second smaller area of iron enrichment measuring 70m by 160m occurs to the southeast along strike from the former.

The enrichment appears to occur mainly within the Ruth member and Lower iron Formation ("LIF") of the Sokoman Iron Formation and would be similar to the enrichment encountered at the Houston showing which is 5km to the southeast and occurs in the same band of iron formation.

Malcolm 1 was mapped, sampled and drilled by IOC in several phases from the 1960's to 1982. A 1982 resource for Malcolm 1 is listed in IOC records as being 2,879,000 tonnes at 56.2% Fe and 6.14% SiO_2. A manganiferous component of the resource is 422,000 tonnes grading 51.4% Fe, 4.9% SiO_2 and 5.80% Mn. SMI has a partial database of historical IOC fieldwork including a geological map showing geology and the surface location of the occurrence. The historical estimate was prepared according to the standards used by IOC and, while still considered relevant, is not compliant with NI 43-101.

Table 4-2 List of Malcolm Claims to March 2012

Malcolm Claims to March 2012					
	Title No.	**Sheet**	**Issued**	**Expiry**	**Area (ha.)**
16	CDC-58048	23J10	24/02/2005	23/02/2013	47
76	CDC-2188826	23J10	17/09/2009	16/09/2013	49
260	CDC-2279509	23J15	25/03/2011	24/03/2013	48

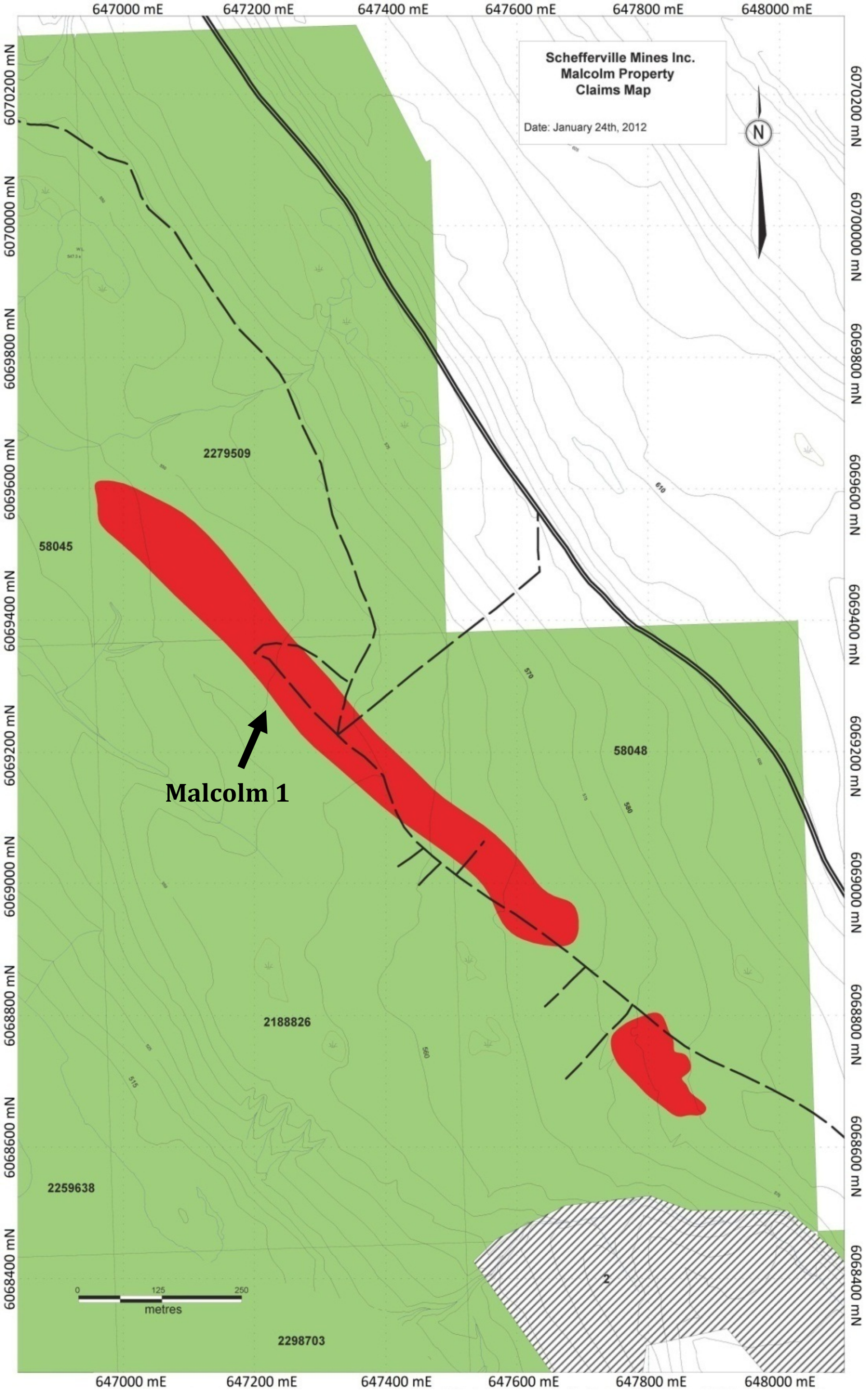


Figure 4-4 Malcolm Property Claim Map (Projection: UTM NAD83 zone 19)

5. Accessibility, Climate, Local Resources, Infrastructure, Physiography

5.1 Accessibility

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

The Houston deposit and the Malcolm 1 occurrence are located within reach of existing infrastructure approximately 20 km southeast of Schefferville and can be reached by existing gravel roads, although LIM plans to construct a new 10km all-weather access road to directly connect Houston with Silver Yards and the Redmond mine site.

5.2 Climate

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

Exploration work in the area can typically be carried out year-round, however RC drilling and trenching programs are typically preferred during the months of May to November.

Mine development operations can be carried out year-round as well. Operations during extreme cold conditions will stop intermittently. Production and shipping were historically limited to the months of May until November.

5.3 Local Resources

It is assumed that the majority of the workforce will come from the province of Newfoundland Labrador and employees will also be recruited from the Quebec communities close to the project site.

5.4 Infrastructure

The Houston property is located approximately 20 km southeast of Schefferville and approximately 10 km from the Redmond deposit which, together with the James deposit, currently forms part of LIM's first phase mine development.

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

A modern airport includes a 2,000 metre paved runway and navigational aids for passenger jet aircraft. Regular air service is provided to and from Wabush, Labrador, and to Montreal and Quebec City, via Sept-Îles.

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

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

5.4.1 The Railroad

Schefferville is accessible by train from Sept-Îles.

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 tonnes 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, Labrador City and Schefferville up to 2005. In 2005 IOC sold the 208 km section of the railway between Emeril Yard at Ross Bay Junction and Schefferville (the Menihek Division) to Tshiuetin Rail Transportation Inc. (TSH), a company owned by three Quebec First Nations. The mandate of TSH is to maintain the passenger and light freight traffic between Sept-Îles and Schefferville. Train departures from Sept-Îles and Schefferville occur three times a week.

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

5.5 Physiography

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

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

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

The thin veneer of till in the area is composed of both glacial and glacial fluvial sediments. Tills deposited during the early phases of glaciations were strongly affected by later sub glacial melt waters during glacial retreat. Commonly, the composition of till is sandy gravel with lesser silty clay, mostly preserved in topographic lows. Glacial melt water channels are preserved in the sides of ridges both north and south of Schefferville. Glacial ice flow in the area has been recorded as an early major NW to SE flow and a later less pronounced SW to NE flow. The early phase was along strike with the major geological features and the final episode was against the topography. The later NE flow becomes more pronounced towards the southern end of the district near Astray Lake or Dyke Lake.

6. History

The following information was provided by LIMHL

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

There are currently four major iron ore producers in the Labrador City-Wabush region to the south, IOC, Arcelor Mittal, Cliffs Natural Resources Bloom Lake Mine and Wabush Mines. Tata Steel is currently planning a Direct Shipping Ore project 30 kms north of Schefferville. A number of other projects in the Labrador area are in the exploration and review process.

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

Mining and shipping from the Schefferville area began in 1954 under the management of the IOC, a company specifically formed to exploit the Schefferville area iron deposits.

In 1954, IOC started to operate open pit mines in Schefferville containing 56-58% natural iron (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 Houston-Malcolm Project were part of the original IOC Schefferville area operations.

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.

During the 1960's, higher-grade iron deposits were developed in Australia and South America and customers' preferences shifted to products containing +62% Fe or higher. In 1963, IOC developed the Carol Lake deposit near Labrador City and started to produce concentrates and pellets with +64% Fe, so as to satisfy the customers' requirements for higher-grade products. High growth in the demand for steel, which began after the end of World War II, came to an abrupt end in the early 1980's due to the impact of increasing oil prices. The energy crisis affected steel production in the U.S. and Western Europe as consumers switched to energy-efficient products. As a result, the demand for iron ore plummeted, creating a severe overcapacity in the industry. In 1982, the IOC closed its operations in the Schefferville area. From 1954 to 1982, a total of some 150 million tonnes of ore was produced from the area.

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

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

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

In December 2009, LIMHL, through a wholly-owned subsidiary, acquired control over an additional 50 million tonnes of historical direct shipping iron ore in the Province of Quebec, together with a large package of mineral claims in Quebec in the Schefferville area which are considered prospective for exploration for iron ore and which also host a number of small high grade manganese deposits.

During the period from September 2005 to 2011, LIMHL conducted exploration, development and other work in the Schefferville area. Such work consisted of geological evaluation, sampling, geophysical surveys, trenching, drilling, bulk sampling, resource verification, assaying, metallurgical test work, mine planning, community consultation, transportation studies and other work.

In December of 2011, LIM submitted an Environmental Impact Statement to the Government of Newfoundland and Labrador, outlining the development of a series of small open pit mining operations on Houston #1 and Houston #2, which will be supported by an access road and a railway siding.

In March of 2012, LIM obtained environmental release from the Government of Newfoundland and Labrador for the Houston #1 and #2 project and initiated permit applications for construction. LIM also announced in March a development plan totalling $57.5 million for the development of Houston #1 and #2 in 2012 and 2013.

7. Geological Setting & Mineralization

7.1 Regional Geology

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

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

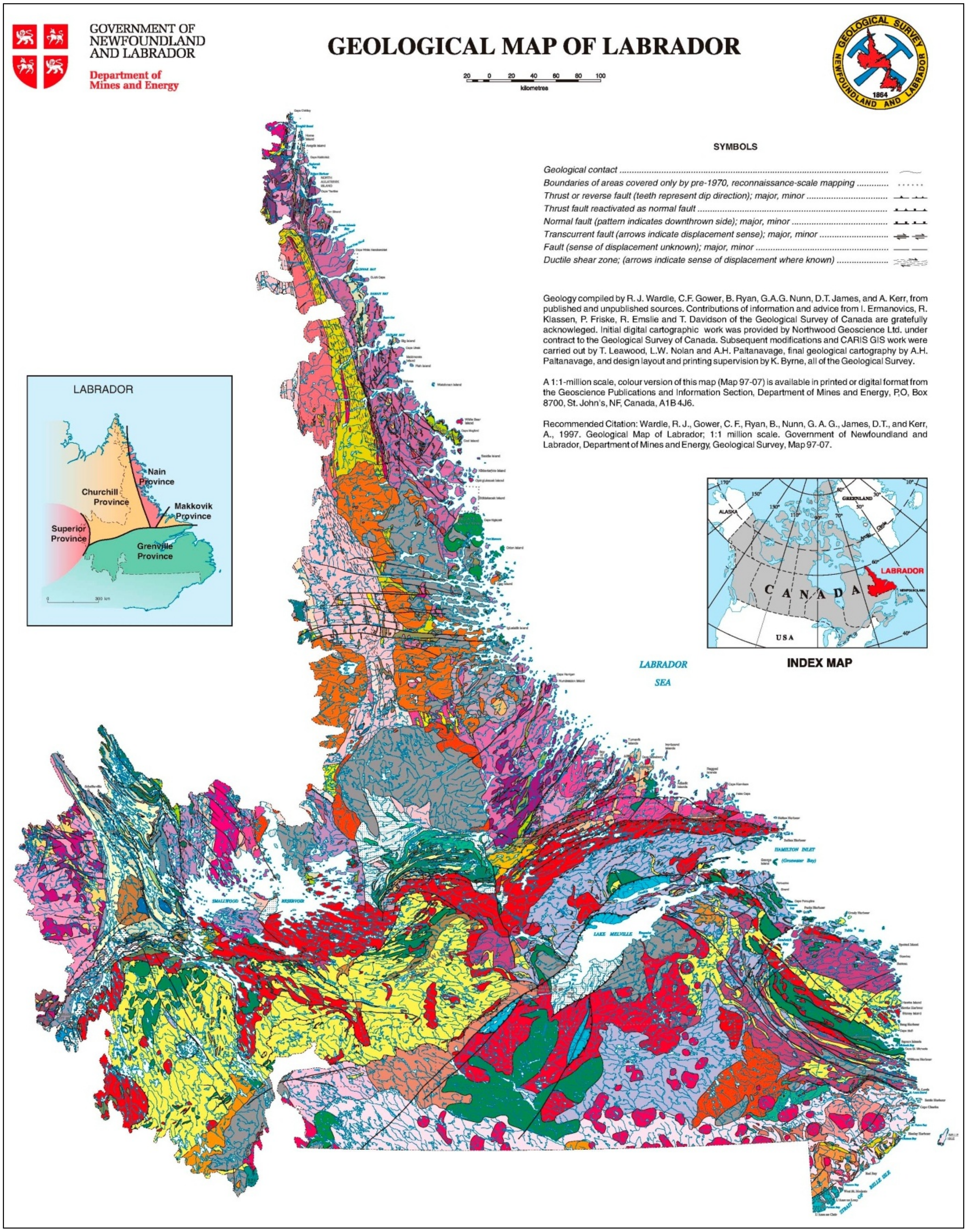
The Knob Lake properties are located on the western margin of the Labrador Trough adjacent to Archean basement gneisses. The Labrador Trough otherwise known as the Labrador-Quebec Fold Belt extends for more than 1,000 km along the eastern margin of the Superior craton from Ungava Bay to Lake Pletipi,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

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

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

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

The main part of the Trough north of the Grenville Front is in the Churchill Province and has been subjected to low-grade (greenschist facies) metamorphism. In areas west of Ungava Bay, metamorphism increases to lower amphibolite grade. The mines developed in the Schefferville area by IOC exploited residually enriched earthy iron deposits derived from taconite-type protores. Geological conditions throughout the central division of the Labrador Trough are generally similar to those in the Knob Lake Range. A general geological map of Labrador is shown in Figure 7-1.



Geology compiled by R. J. Wardle, C.F. Gower, B. Ryan, G.A.G. Nunn, D.T. James, and A. Kerr, from published and unpublished sources. Contributions of information and advice from I. Ermanovics, R. Klassen, P. Friske, R. Emslie and T. Davidson of the Geological Survey of Canada are gratefully acknowleged. Initial digital cartographic work was provided by Northwood Geoscience Ltd. under contract to the Geological Survey of Canada. Subsequent modifications and CARIS GIS work were carried out by T. Leawood, L.W. Nolan and A.H. Paltanavage, final geological cartography by A.H. Paltanavage, and design layout and printing supervision by K. Byrne, all of the Geological Survey.

A 1:1-million scale, colour version of this map (Map 97-07) is available in printed or digital format from the Geoscience Publications and Information Section, Department of Mines and Energy, P,O, Box 8700, St. John's, NF, Canada, A1B 4J6.

Recommended Citation: Wardle, R. J., Gower, C. F., Ryan, B., Nunn, G. A. G., James, D.T., and Kerr, A., 1997. Geological Map of Labrador; 1:1 million scale. Government of Newfoundland and Labrador, Department of Mines and Energy, Geological Survey, Map 97-07.

Figure 7-1 Geological Map of Labrador

7.2 Local Geology

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

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

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

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

7.2.1 Geology of Schefferville Area

The stratigraphy of the Schefferville area is as follows:

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

Denault Formation – is interbedded with the slates of the Attikamagen Formation at its base and grades upwards into the chert breccia or quartzite of the Fleming Formation. The Denault Formation consists primarily of dolomite, which weathers buff-grey to brown. Most of it occurs in

fairly massive beds which vary in thickness from a few centimetres to about one metre, some of which are composed of aggregates of dolomite fragments.
Near Knob Lake the formation probably has a maximum thickness of 180 metres but in many other places it forms discontinuous lenses that are, at most, 30 metres thick. Leached and altered beds near the iron deposits are rubbly, brown or cream coloured and contain an abundance of chert or quartz fragments in a soft white siliceous matrix.

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

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

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

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

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

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

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

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

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

7.2.2 Iron Ore

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

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

Table 7-1 Classification of Ore Type

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

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

The yellow ores, which are made up of the minerals limonite and goethite, are located in the lower section of the iron formation in a unit referred to as the "silicate carbonate iron formation" or SCIF. The red ore is predominantly a red earthy hematite. It forms the basal layer that underlies the lower section of the iron formation. Red ore is characterized by its clay and slate-like texture.

Direct shipping ores and lean ores mined in the Schefferville area during the period 1954-1982 amounted to some 150 million tonnes. Based on the original ore definition of IOC (+50% Fe <18% SiO_2 dry basis), approximately 250 million tonnes of iron resources remain in the Schefferville area, exclusive of magnetite taconite. LIM has acquired the rights to approximately 50% of this remaining historic iron resource in Labrador. These numbers are based on historic estimates made in compliance with the standards used by IOC. The information in this paragraph was provided by LIMHL.

7.2.3 Manganese

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

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

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

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

8. Deposit Types

8.1 Iron Deposits

The Labrador Trough contains four main types of iron deposits:

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

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

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

4. 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.

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

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

8.1.1 Houston and Malcolm 1

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

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

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

Striking northwest and dipping to the northeast, both Houston 1 and 2 mineralization has been found to extend down dip to the northeast. These down dip extensions had not been previously tested by IOC when mining operations in the area ended. At the present time there remains potential for additional mineralization believed to be extending to the southeast of the main deposit of Houston 1 and east of Houston 3.

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

8.2 Manganese Deposits

The manganese deposits in the Schefferville area were formed by residual and second stage (supergene) enrichment that affected the Sokoman (iron) Formation, some members of which contain up to 1% Mn in their unaltered state. The residual enrichment process involved the migration of meteoric fluids circulated through the proto-ore sequence oxidizing the iron formation, recrystallizing iron minerals to hematite, and leaching silica and carbonate. The result is a residually enriched iron formation that may contain up to 10% Mn. The second phase of this process, where it has occurred, is a true enrichment process (rather than a residual enrichment), whereby iron oxides (goethite, limonite), hematite and manganese are redistributed laterally or stratigraphically downward into the secondary porosity created by the removal of material during the primary enrichment phase. Deposition along faults, fractures and cleavage surfaces, and in veins and veinlets is also seen, and corroborates the accepted belief that the structural breaks act as channel-ways for migrating hydrothermal fluids causing metasomatic alteration and formation of manganiferous deposits. All the manganese occurrences in the Labrador Trough are considered to have been deposited by the processes described above.

8.2.1 Houston Deposits

The manganese mineralization in the Houston deposits is present in relatively low concentrations (~1% average) with sporadic concentrations of up to 24% apparently structurally controlled by folding and faulting along the western block of the east dipping reverse fault system.

9. Exploration

9.1 Past Exploration

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

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

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

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

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

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

9.2 LIMHL Exploration from 2005 - 2011

9.2.1 2005 Program

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

9.2.2 2006 Program

A diamond drill program totalled 605 metres in 11 holes during the summer season of 2006 on the Houston as well as the James, Knob Lake No.1, and Astray Lake deposits using Cartwright Drilling Inc. of Goose Bay, Labrador. Also, a short program of bulk sampling was carried out in 2006 consisting of 75 metres of trenching for bulk sampling at the Houston deposit.

A summary of the drilling program is given in Section 10. A summary of the bulk sampling and trench sampling of 2006 is shown in Table 9-1 for the Houston Deposit.

Table 9-1 Trench Sample Results (2006) – Houston 1 Deposit

From (m)	To (m)	Len (m)	Fe%	SiO_2%	Ore Type
0.00	26.00	26.00	66.14	1.39	NB
26.00	50.00	24.00	60.50	6.82	NBY
50.00	69.00	19.00	59.26	11.57	LNB
69.00	75.00	6.00	44.52	34.07	TRX

9.2.3 2007 Program

The exploration program for 2007comprised prospecting and trenching.

9.2.4 2008 Program

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

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

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

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

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

9.2.5 2009 Program

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

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

The exploration programs were intended to confirm and validate historic resources reported by IOC and to bring them into compliance with NI-43-101. Appendix I list drill holes and trenches completed by LIMHL between 2006 and 2011.

9.2.6 2010 Program

The 2010 program in Houston consisted of reverse circulation drilling. Drilling was targeted to test the presence of mineralization between cross sections 330 and 340 and as infill drilling in Houston 1 and Houston 2S. In 2010, 26 RC drill holes were completed at Houston for a total of 1,804 metres.

During the 2010 exploration season an airborne gravity and magnetic survey was flown over four claim blocks of LIM's Schefferville area properties centered on the Howse, Houston/Redmond, Astray and Sawyer Lake areas. High gravity anomalies associated with lower magnetism are considered prospective for DSO deposits. In total 1895.7 line kms was flown for the gravity and magnetic surveys. A total of 473.6 line kms were surveyed over the Howse area, 851.8 kms over Houston/Redmond areas, 354.6 kms over Astray and 215.7 line kms over the Sawyer Lake area.

An interim interpretation and evaluation of the processed and plotted airborne gravity gradiometer and magnetic data has confirmed the utility of the survey in detecting and outlining iron deposits and identified a number of new drill targets with the potential to expand currently known resources.

9.2.7 2011 Program

The 2011 exploration program consisted of reverse circulation drilling in Houston and Malcolm 1, with additional trenching and bulk sampling in Houston. Drilling was conducted to infill the Houston deposits and upgrade areas within Houston's inferred resources as defined with SGS report dated March 2011. Please refer to Section 10 for all current drilling data.

Trenching was used to confirm the limits of the Houston deposit and to collect samples from *Plant Feed* and DRO quality from both the hanging wall and foot wall of the Houston deposit.

Bulk sampling was conducted to collect *Plant Feed* and DRO quality samples for metallurgical testing on the Houston deposit. At the time of this report, the results of the metallurgical tests for the 2011 bulk samples are still pending.

At the time of this report, geological interpretation of the Malcolm 1 occurrence is being updated by SMI geological team. The bulk sampling results and interpretations on the Houston deposits are not available at the time of this report.

10. Drilling

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

LIMHL carried out exploration drilling programs in the 2006, 2008, 2009, 2010 and 2011 summer-fall seasons. The drill hole location maps and relevant best intercepts of the Houston mineral deposit are available in Appendix I. The drill hole location map and relevant best intercepts of Malcolm 1 Occurrence are available in Appendix II

10.1 Houston

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

Between 2008 and 2011, LIM used Acker RC tricone drill rigs from Cabo Drilling using 75mm ($2^{7/8}$inch) diameter rods. The drill rigs were mounted on Flex Trac Nodwell carriers or skids and outfitted with sample cyclones.

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

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

In 2010, 26 RC drill holes were completed at Houston for a total of 1,804 metres.

In 2011, 44 RC drill holes were completes at Houston for a total of 3,118 metres.

Table 10-1 below summarizes LIM's drilling programs at Houston to date and maps in Appendix I show all activity locations on the Houston property:

Table 10-1: Houston RC Drill Programs

		Drill Holes				
		DD	**RC**	**Metres**	**Samples**	**Assays**
Historical		-	86	4,418	1,496	1,496
LIM	2006	5	-	253	-	-
	2007	-	-	-	-	-
	2008	-	12	791	304	304
	2009	-	46	3,136	1,098	1,092
	2010	-	26	1,804	627	625
	2011	-	44	3,118	1,064	1,064
TOTAL		**5**	**214**	**13,520**	**4,589**	**4,581**

10.2 Malcolm 1 Occurrence

In 2011, the RC drill program consisted of 18 drill holes for 1,387m. Drilling began on August 19, 2011 and concluded on October 14, 2011. The geological interpretation of the Malcolm 1 occurrence is currently underway. The Table 10-2 details the RC drill hole locations of the 2011 drilling campaign done by SMI over the Malcolm 1 occurrence. The section 23 Appendix II and Table 23-1 detail the RC drill location map and RC best intercepts of Malcolm 1.

Table 10-2 Malcolm 1 RC Drill Programs

		Drill Holes				
		DD	**RC**	**Metres**	**Samples**	**Assays**
Historical		-	1	71	25	25
LIM	2006	-	-	-	-	-
	2007	-	-	-	-	-
	2008	-	-	-	-	-
	2009	-	-	-	-	-
	2010	-	-	-	-	-
	2011	-	18	1,379	480	480
TOTAL			19	1,450	505	505

11. Sample Preparation, Analysis and Security

The following sample preparation, Analysis and Security procedures were followed on all LIMHL and SMI properties on the western Labrador and Schefferville area (Québec).

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

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

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

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

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

11.1 RC Sample Size Reduction

11.1.1 2008 RC Sample Size Reduction

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

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

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

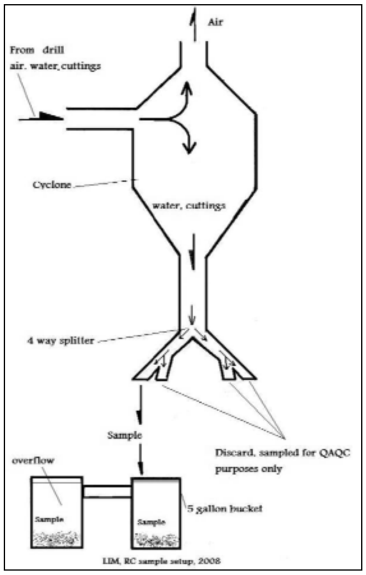


Figure 11-1 RC Size Reduction and Sampling (Method used in the 2008 drilling Program)

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

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

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

Starting 2010, LIM followed the same on-site sample reduction as described above; however the samples were collected in the pails lined with Sentry II Micro Pore bags which allowed water to slowly drain thru while capturing very fine sample material (Figure 11-2).

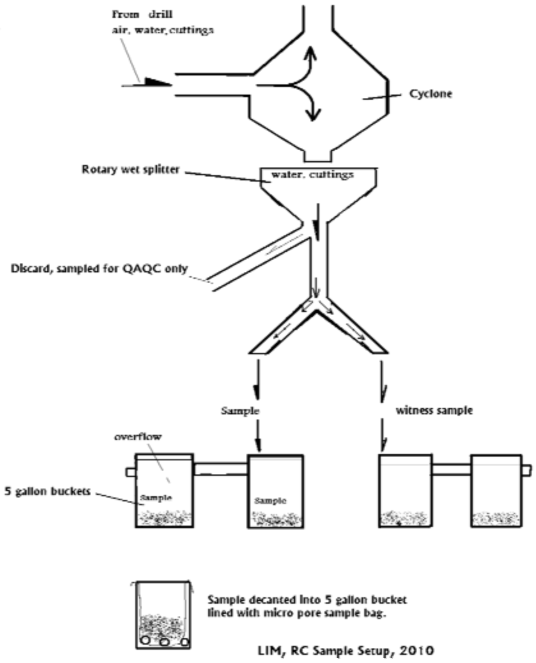


Figure 11-2 2010 & 2011 Reverse Circulation Sampling Setup Diagram

11.2 2006-2011 Trench Sampling

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

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

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

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

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

The relevant sample results and sample composites used for the resources estimation are described in Section 14.

11.3 Sample Preparation and Size Reduction in Schefferville

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

11.3.1 2008

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

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

11.3.2 2009

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

11.3.3 2010 - 2011

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

11.4 Sample Preparation at SGS-Lakefield Laboratory

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

Table 11-1 SGS-Lakefield Sample Preparation Methodology

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

11.5 Sample Analyses and Security at SGS-Lakefield

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

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

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

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

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

11.5.1 Quality control

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

The data approval steps are shown in the following table:

Table 11-3 SGS-Lakefield Laboratory Data Approval Steps

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

11.6 Sample Preparation at ACTLABS

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

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

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

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

Rock, Core and Drill Cuttings	
code RX1	crush (< 5 kg) up to 75% passing 2 mm, split (250 g), and pulverize (hardened steel) to 95% passing 105µ
code RX1 Terminator	crush (< 5 kg) up to 90% passing 2 mm, split (250 g), and pulverize (hardened steel) to 95% passing 105µ
code RX1+500	500 grams pulverized
code RX1+800	800 grams pulverized
code RX1+1.3	1.3 kg pulverized
code RX2	crush (< 5 kg), split and pulverize with mild steel (100 g) (best for low
code RX3	oversize charge per kilogram for crushing

code RX4	pulverization only (mild steel) coarse pulp or crushed rock) (< 800 g)
code RX5	pulverize ceramic (100 g)
code RX6	hand pulverize small samples (agate mortar & pestle)
code RX7	crush and split (< 5 kg)
code RX8	sample prep only surcharge, no analyses
code RX9	compositing (per composite) dry weight
code RX10	dry drill cuttings in plastic bags
code RX11	checking quality of pulps or rejects

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

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

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

11.7 Sample Analysis and security at ACTLABS

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

11.7.1 X-Ray Fluorescence Analysis Code: 4C

To minimize the matrix effects of the samples, the heavy absorber fusion technique of Norrish and Hutton (1969, Geochim. Cosmochim. Acta, volume 33, pp. 431-453) are used for major element oxide) analysis. Prior to fusion, the loss on ignition (LOI), which includes H_2O+, CO_2, S and other volatiles, can be determined from the weight loss after roasting the sample at 1050°C for 2 hours. The fusion disk is made by mixing a 0.5 g equivalent of the roasted sample with 6.5 g of a combination of lithium metaborate and lithium tetraborate with lithium bromide as a releasing agent. Samples are fused in Pt crucibles using an AFT fluxer and automatically poured into Ptmolds for casting. Samples are analyzed on a Panalytical-Axios Advanced XRF. The intensities are then measured and the concentrations are calculated against the standard G-16 provided by Dr. K. Norrish of CSIRO, Australia. Matrix corrections were done by using the oxide alpha – influence coefficients provided also by K. Norrish. In general, the limit of detection is about 0.01 wt% for most of the elements.

Elements Analyzed:

SiO_2 $Al2O_3$ Fe_2O_3(T) MnO MgO CaO Na_2O K_2O TiO_2 P_2O_5 Cr_2O_3, LOI

Code 4C Oxides and Detection Limits (%)

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

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

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

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

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

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

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

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

General QC procedures for XRF are:

- 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 LIM Sample Quality Assurance, Quality Control and Security

From the beginning of the 2008 RC drilling & trenching campaign, LIMHL initiated a quality assurance and quality control protocol. The procedure included the systematic addition of in-house blanks, in-house reference standards, field duplicates, and preparation lab duplicates (not included in 2010 sequence) to approximately each 25 batch samples sent for analysis at SGS Lakefield.
The sealed sample bags were handled by authorized personnel from LIMHL and SGS – Geostat (2008 RC drilling campaign) and sent to the preparation lab in Schefferville. Authorized personnel did the logging and sampling in the secured and guarded preparation lab.

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

11.8.2 Field Duplicates

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

11.8.3 Preparation Lab Duplicates

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

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

11.8.4 Blanks

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

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

11.8.5 Standard Material

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

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

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

11.8.6 2008 Exploration Program

The data verification of the iron (Fe), Phosphorus (P), Manganese (Mn), silica (SiO2) and alumina (Al2O3) values was done with the assay results from the 2008 RC drilling program. SGS – Geostat introduced a series of quality control procedures including the addition of preparation lab duplicates, exit 2 duplicates, exit 3 duplicates and blanks. SGS – Geostat supervised the RC sampling. In 2008, a total of 166 duplicates were taken and analyzed. SGS – Geostat followed the QAQC and considered the data to be precise and reliable.

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

11.8.7 2009 Exploration Program

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

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

11.8.8 2010 Exploration Program

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

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

11.8.9 2011 Exploration Program

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

11.8.9.1 2011 Blanks

A total of 75 blank samples were used to check for possible contamination in the analytical laboratories during the 2011 campaign including 22 on the RC drilling at Houston. During 2008, SGS – Geostat prepared the blank sample from a known slate outcrop located near Schefferville. Please see 11.8.4.

The Figure 11-3 shows that 16 out of the 75 blanks were outside the $\pm 3\sigma$ line. However, all of the blanks are under 5% iron grade and the majority is over 60% SiO_2. Given this information contamination issues appear to be low. However, SGS –Geostat suggests that LIMHL to buy pure blanks (commercial silica sand or decorative pebbles) that do not contain any iron. SGS –Geostat suggests also that Lim introduce more descriptive tolerance levels for Fe and SiO2. LIMHL is currently verifying anomalous results from the 2011 QAQC and is currently implementing appropriate measures for the data validation.

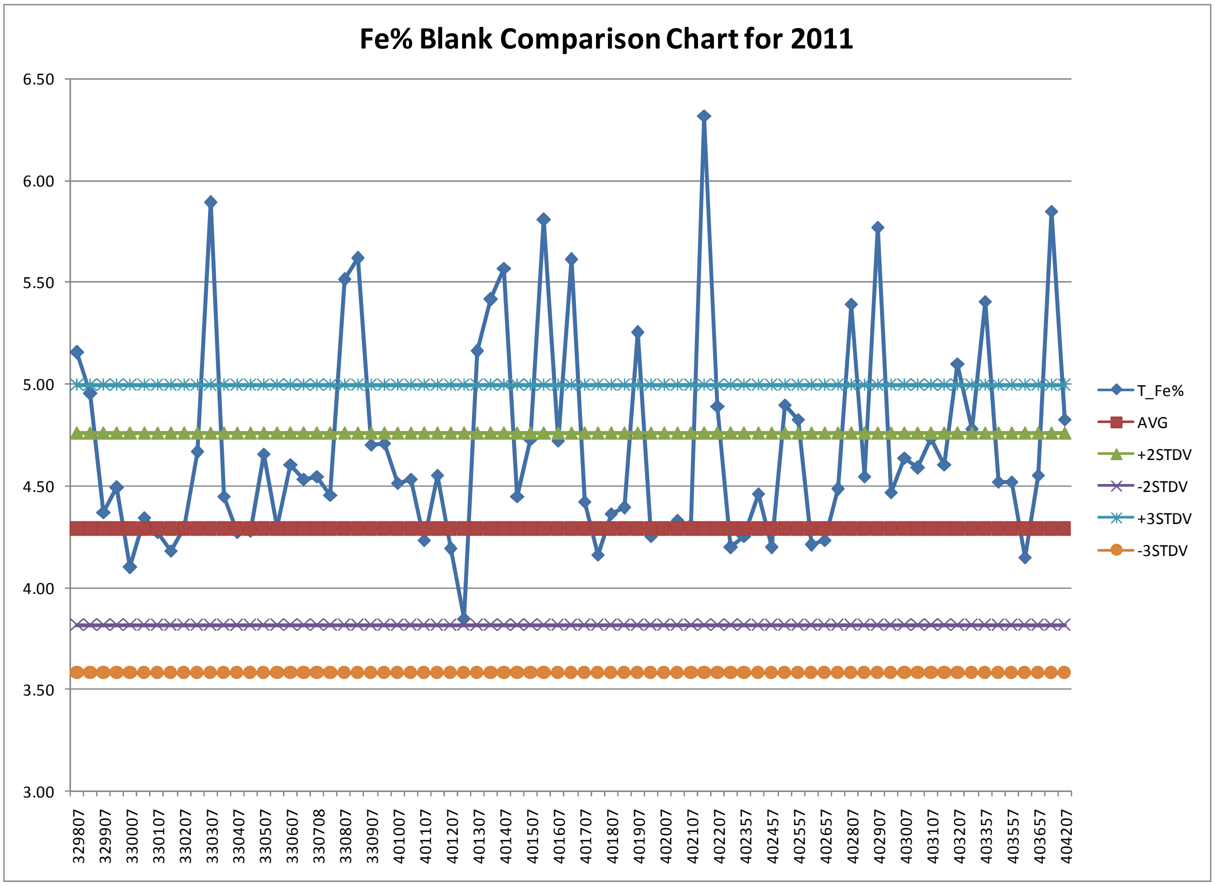


Figure 11-3 2011 Fe% Blanks Comparison

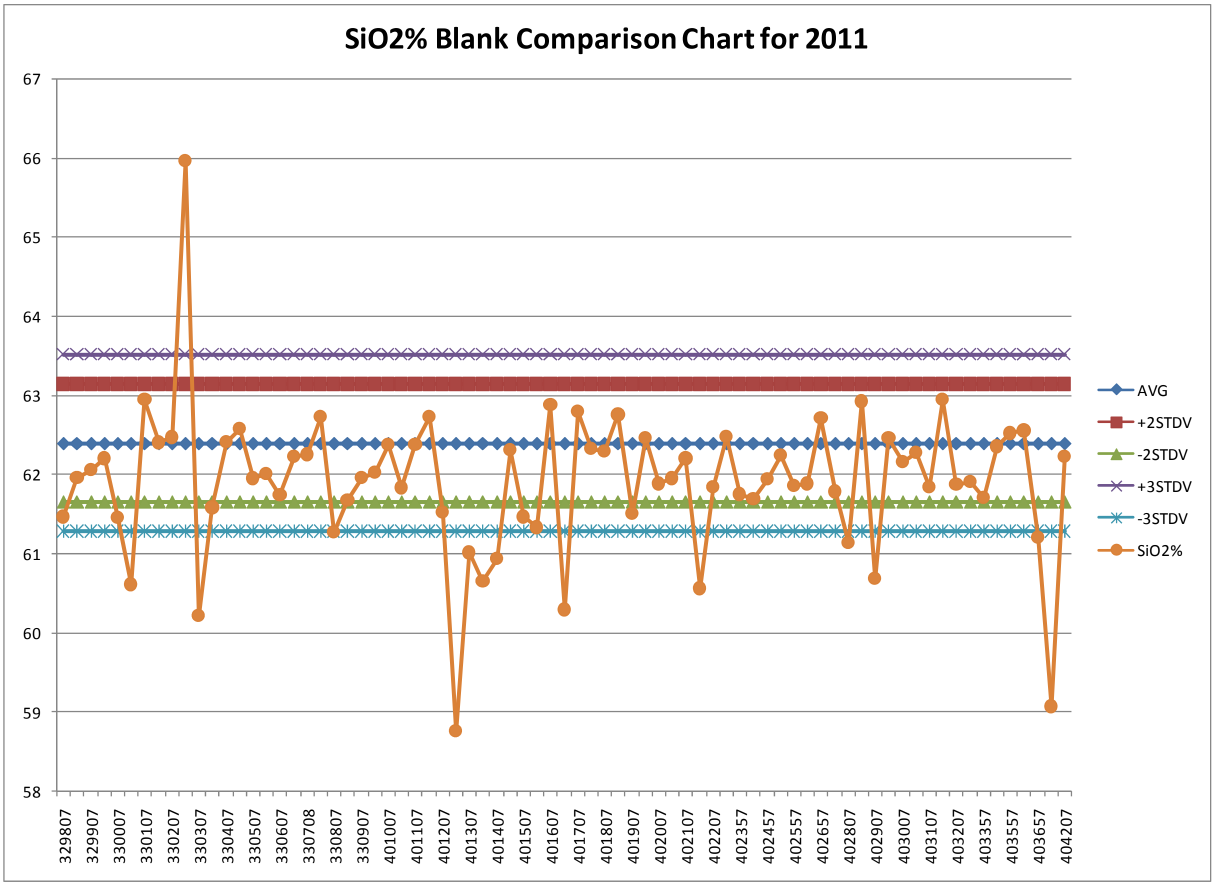


Figure 11-4 2011 SiO2% Blanks Comparison

11.8.9.2 In-House 2011 Reference Materials (Standards)

In 2011, LIMHL inserted 76 in-house standards (including 22 for Houston). Figure 11-5, Figure 11-6, Figure 11-7, and Figure 11-8 show the results plotted for the JM-STD and KL-STD standards. Two (2) samples (JM STD) were under the -3σ limit. Also two other standards were close to the -2σ limits. Two (2) samples (JM- STD) were over the +2σ limit and none over the +3σ.

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

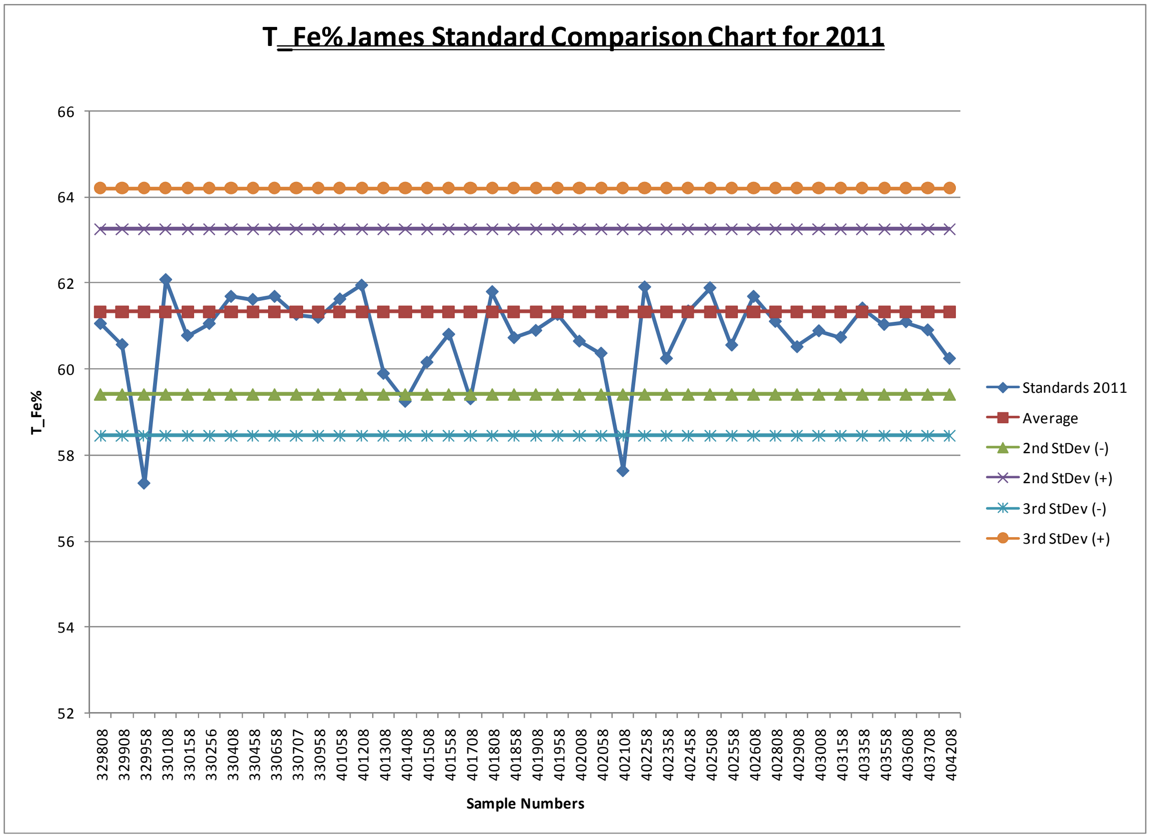


Figure 11-5 Fe High Grade JM-STD Standards in 2011

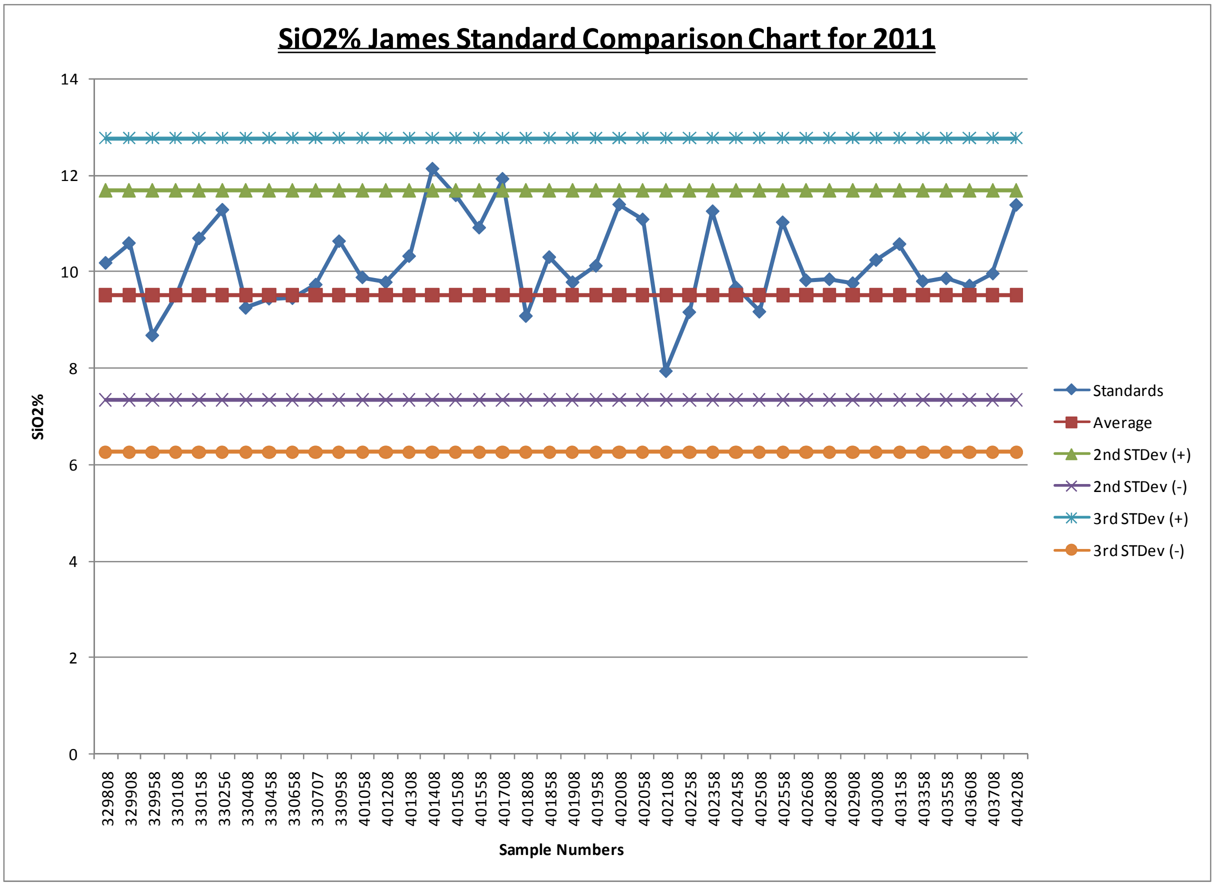


Figure 11-6 SiO2 Grades JM-STD Standards in 2011

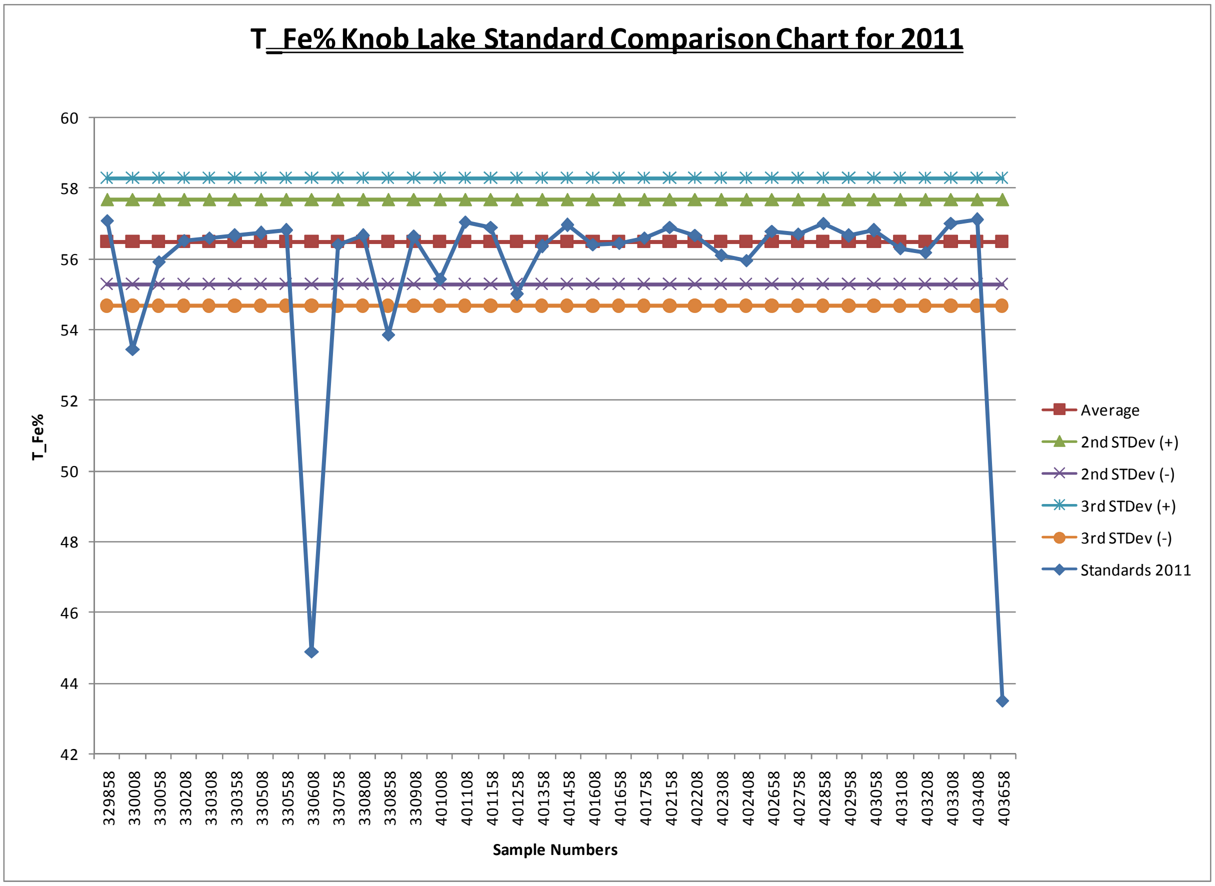


Figure 11-7 Fe Medium Grade KL-STD Standards in 2011

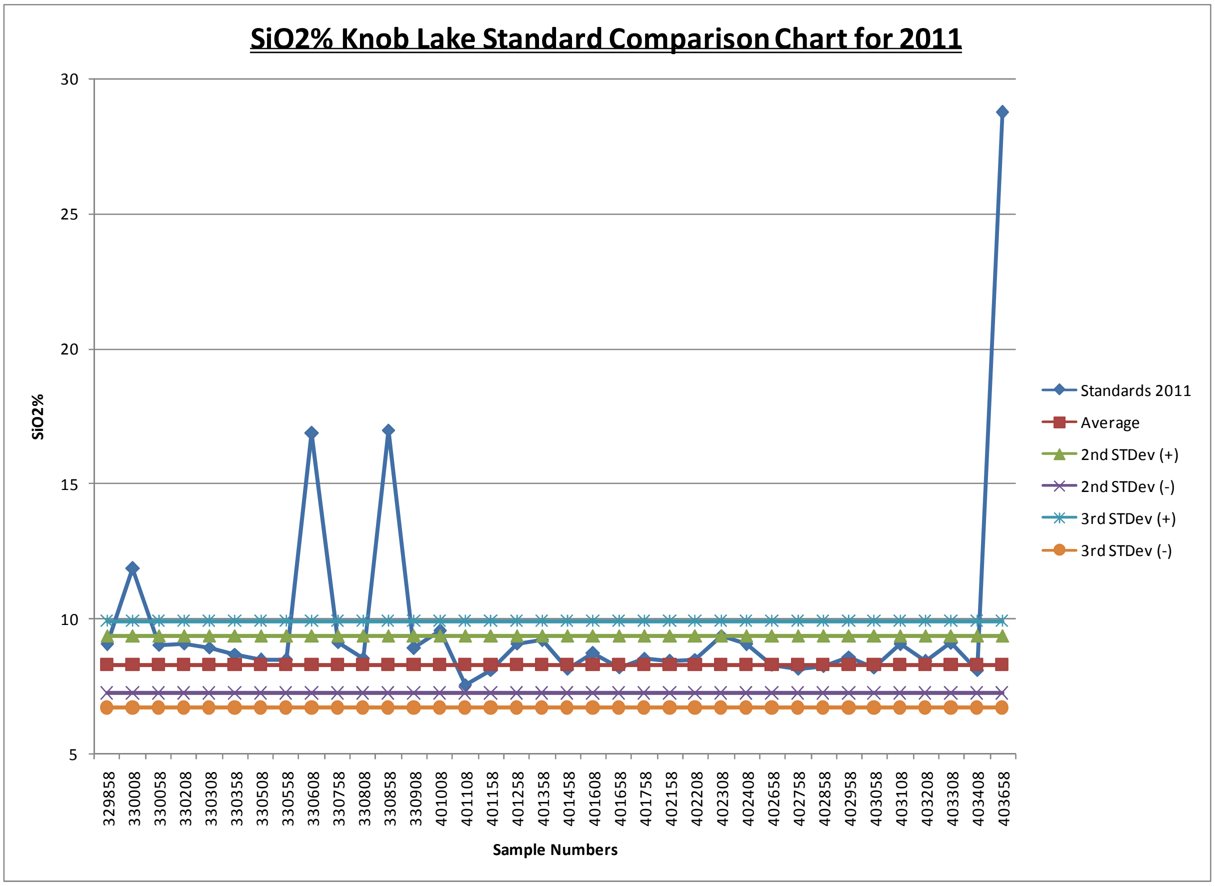


Figure 11-8 SiO2 Medium Grade KL-STD Standards in 2011

11.8.9.3 2011 Field and Preparation Lab Duplicates

In 2011 LIM sent 141 field duplicates, including 40 for Houston (effective date of the data is March 6th, 2012.). No preparation lab duplicates were analysed in 2011. The next figures and Tables show the comparison chart for the Fe(%) Table 11-8 and Figure 11-9 and SiO_2 (%) Table 11-9 and Figure 11-10 between original and field duplicate samples. The correlation is good between original and field duplicate results however, a bias was found.

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

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

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

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

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

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

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.

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

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

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

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

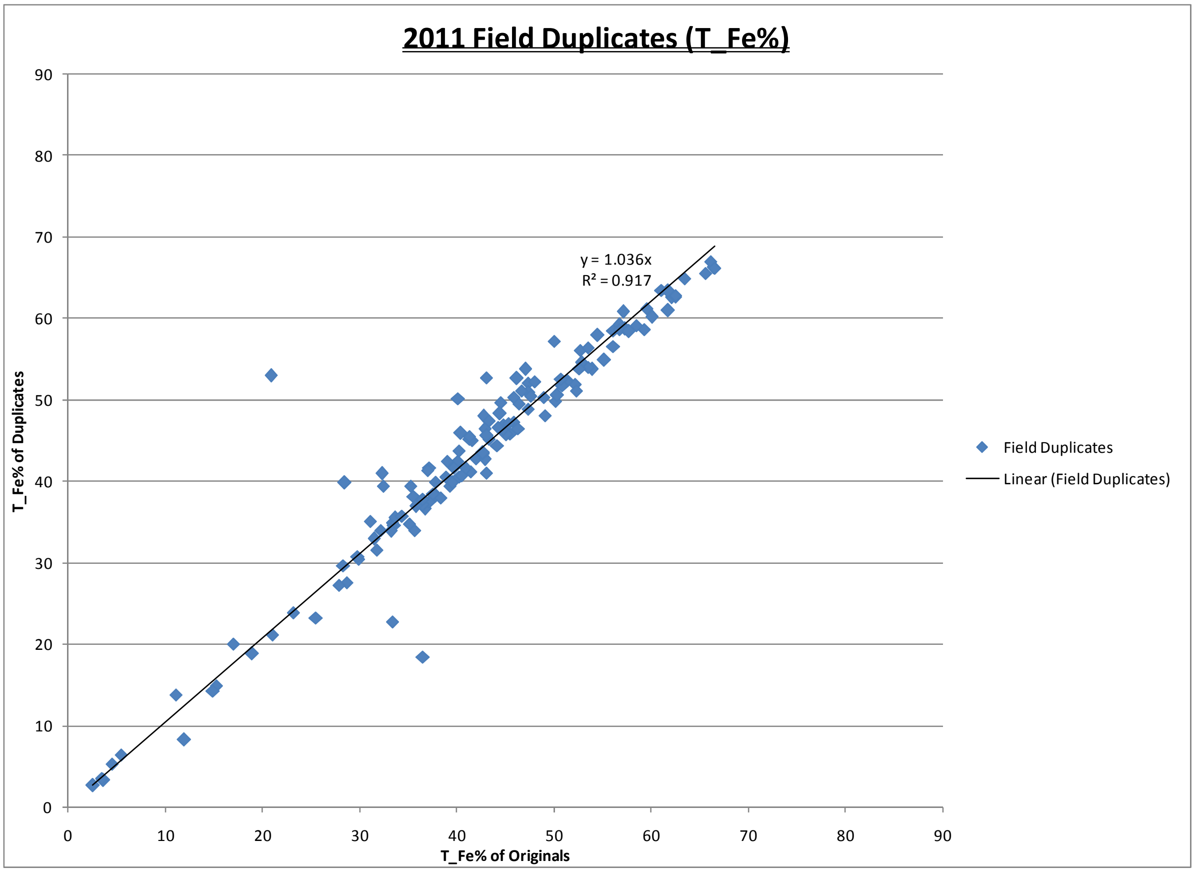


Figure 11-9 2011 Fe% Comparison Chart for Field Duplicates

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

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

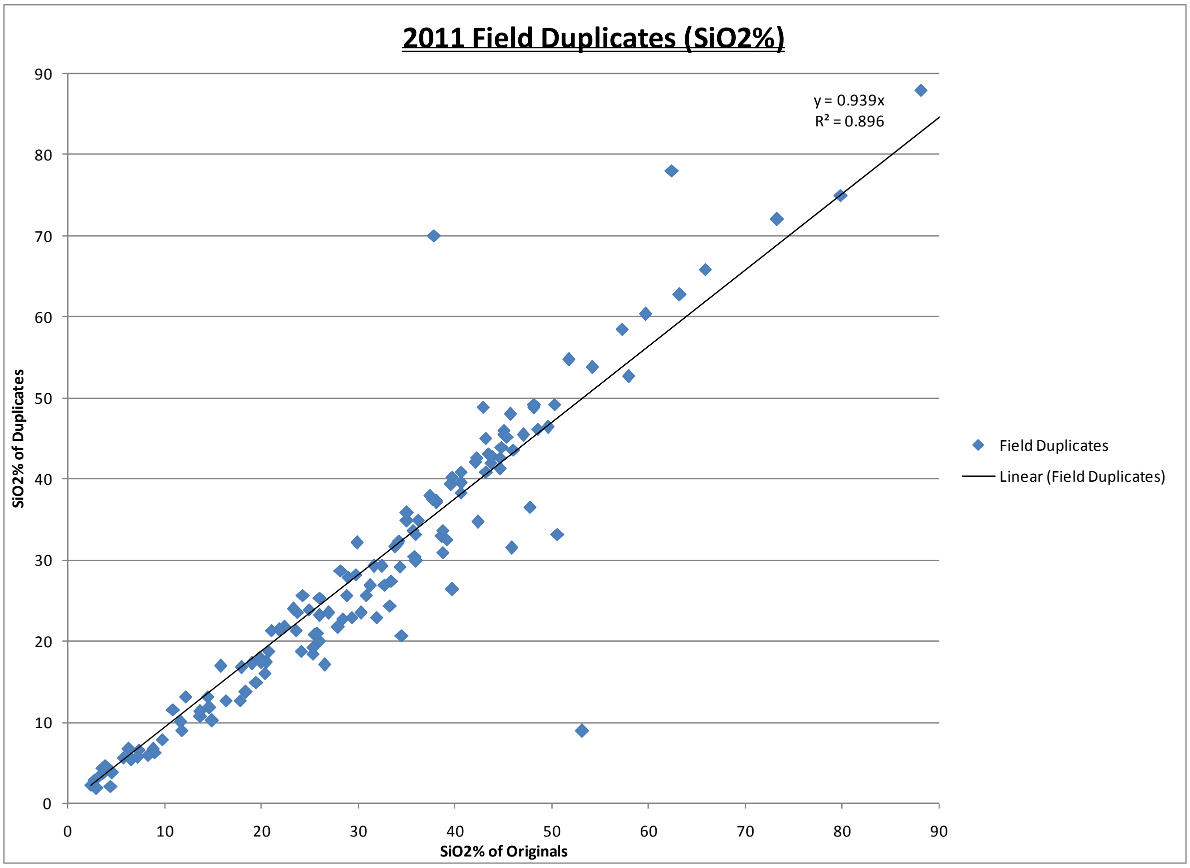


Figure 11-10 2011 SiO2% Comparison Chart for Field Duplicates

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

Summary Statistics SiO2 (%) 2011		
Statistic	**Original**	**Duplicate**
Number of data	141	141
Maximum	92.71	92.61
Minimum	2.31	1.84
Mean	32.36	29.88
Median	32.39	27.33
Skewness	0.73	0.95
Standard deviation	17.94	18.73

11.9 Assay Correlation of Twinned Holes

The data verification was done on the iron (Fe) and silica (SiO_2) assay results from the IOC historical RC drill results and the 2008-2010 RC drilling programs results. LIM twinned some IOC RC holes in order to verify the iron (Fe) content. A total of 6 paired RC holes from Houston were considered. Correlation coefficients showed adequate correlation. Refer to Figure 11-11 and Figure 11-12.

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

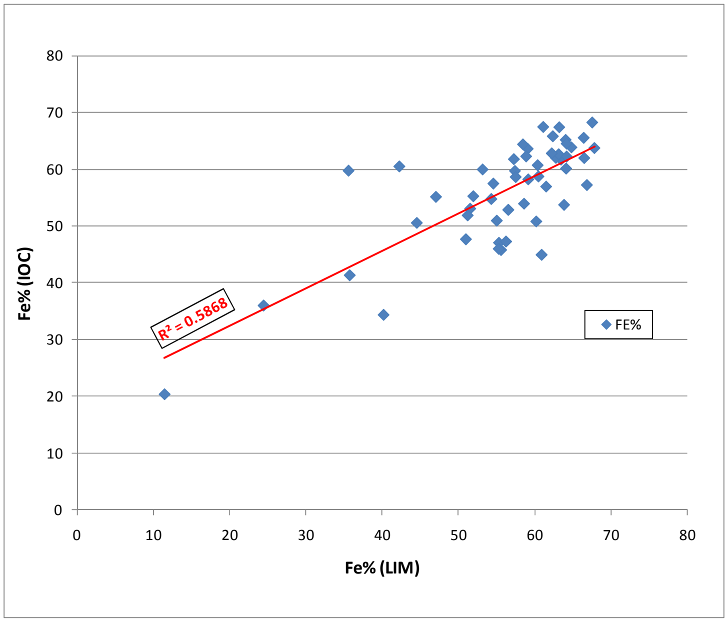


Figure 11-11 Graphic of Fe Assay Correlation of Twinned Holes

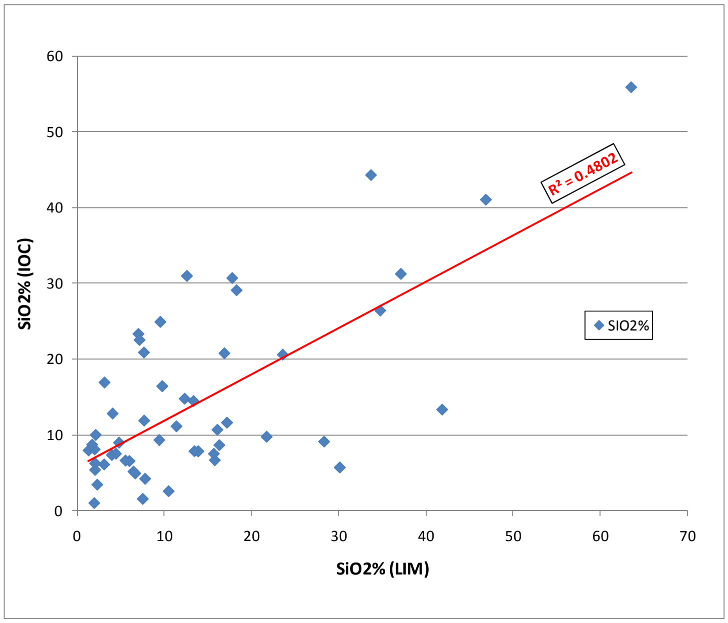


Figure 11-12 Graphic of SiO2 Assay of Twined Holes

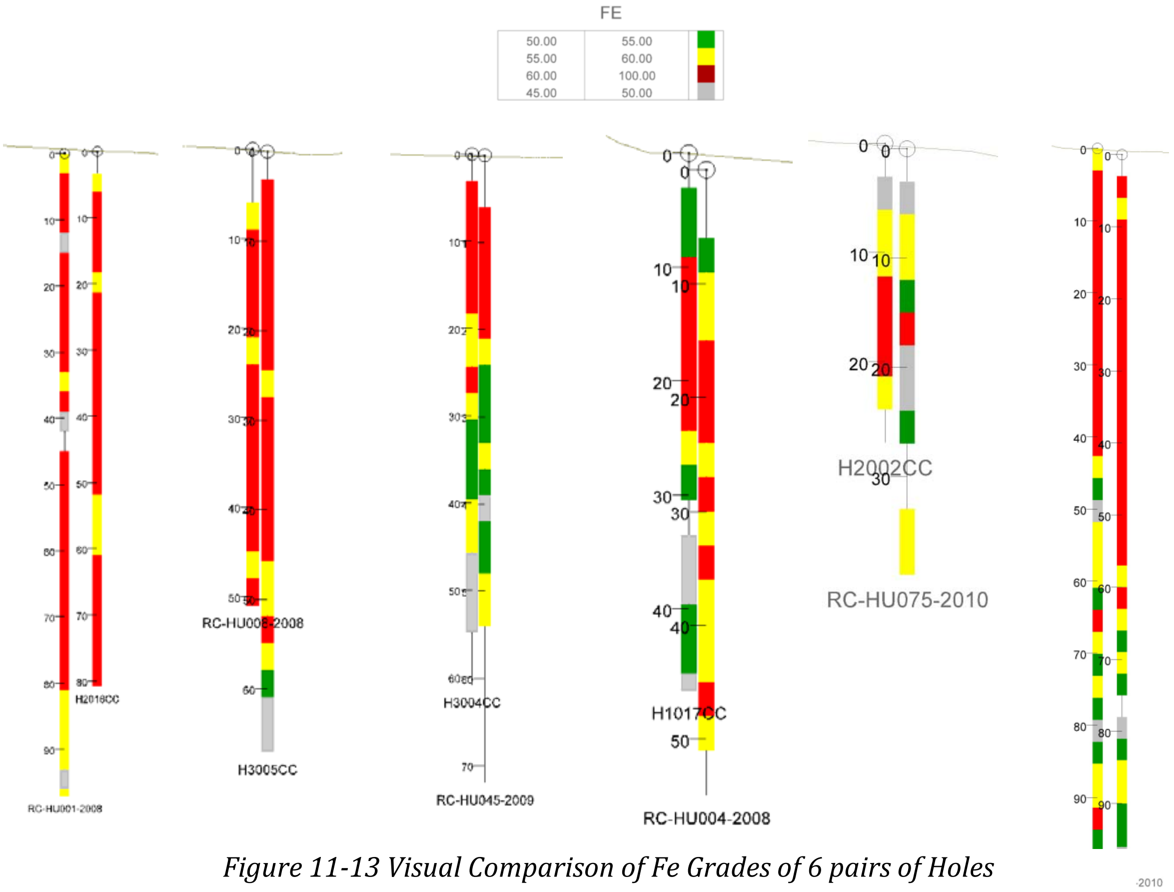


Figure 11-13 Visual Comparison of Fe Grades of 6 pairs of Holes

12. Data verification

The digital Houston deposits drill hole database supplied by LIM 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.

The Malcolm 1 drill hole database was not verified by SGS. SMI followed the sampling and RC drilling procedures described above.

The data verification of the iron (Fe), Phosphorus (P), Manganese (Mn), silica (SiO_2) and alumina (Al_2O_3) values was done with the assay results from the 2008 RC drilling program. SGS – Geostat introduced a series of quality control procedures including the addition of preparation lab duplicates, exit 2 duplicates, exit 3 duplicates and blanks. SGS – Geostat supervised the RC sampling. In 2008, a total of 166 duplicates were taken and analyzed. SGS – Geostat followed the QAQC and considered the data to be precise and reliable.

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

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 few outliers, which could be a result of contamination while processing or taking the sample.

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 $(+/-)3\sigma$ zones is possibly related to contaminated blank since the standards and duplicates included in the same batch showed not apparent problems.

The assay results of the 2010 SGS check sampling campaign allowed confirming the presence and the iron and SiO_2 content of the selected samples, as well as the integrity of the sample results used in the 2010 Houston resource estimation. With the exception of a limited number of assay results with a significant difference, we found the results to be adequate. A series of tests was performed considering the small amount of samples: Sign test, and Student normal test.

In March 2011, SGS Geostat sent a total of 51 samples for analysis from 4 drill holes: RC-HU-053-2010, RC-HU-061-2010, RC-HU-064-2010 and RC-HU-074-2010. The samples were sent to the SGS-Lakefield Laboratory in Lakefield, Ontario analysis following the sample preparation and analytical procedures described in Section 11.

Overall it shows good assay correlation. The Mn and Al_2O_3 and P sign tests and student normal T tests were inconclusive. However, the average difference LIM and SGS sample results were low for the Mn (1%). The difference of the average grades of the P (16%) and Mn (13%) appear high. SGS recommends the continuation of the QA/QC procedures in order to verify more precisely these differences.

In the author's opinion, the information in the section appears to be consistent and not misleading.

During the site visit conducted from August 1st to 5th, 2011 by the author, Maxime Dupéré P.Geo., a total of 78 mineralized field duplicates from the Houston deposit were collected from holesRC-HU091-2011, RC-HU094-2011, RC-HU095-2011, RC-HU077-2011, RC-HU104A-2011, RC-HU106-2011 and RC-HU081-2011under supervision of the author and submitted for whole rock analysis at SGS Minerals laboratory in Lakefield, , Ontario, Canada. The duplicate samples were processed using the assay procedures described in Section11.5. Table 2-1 and Table 2-2 show the correlation plots for the duplicate data versus the original data. A summary of the statistical analysis conducted on the data is shown in Table 2-3.

The final drill hole database includes historical and all LIM's Houston RC holes and trenches until hole RC-HU-116-2011 completed August 18th, 2011. The database cut-off date is March 6th, 2012. Table 12-1 summarises the data contained in the final drill hole database used for the mineral resource estimate in Appendix 1. The author and SGS Geostat are of the opinion that the final drill hole database is adequate to support a mineral resource estimate.

Table 12-1 Exploration Data Summary

		Drill Holes					Trenches			
		DD	**RC**	**Metres**	**Samples**	**Assays**	**Trenches**	**Metres**	**Samples**	**Assays**
Historical		-	86	4,418	1,496	1,496	236	8,001	2,106	2,106
LIM	2006	5	-	253	-	-	1	75	15	15
	2007	-	-	-	-	-	-	-	-	-
	2008	-	12	791	304	304	-	-	-	-
	2009	-	46	3,138	1,098	1,092	9	479	120	120
	2010	-	26	1,804	627	625	-	-	-	-
	2011	-	44	3,112	1,064	1,064	3	551	-	-
TOTAL		**5**	**214**	**13,516**	**4,589**	**4,581**	**249**	**9,106**	**2,241**	**2,241**

A statistical analysis of the selected 2011 original and duplicate analytical values involving a series of tests (Sign test, Student logarithmic test, Student normal test) shows a potential bias. 72% of the original values returning greater than the duplicate values for Fe (%)

The following figures and tables show a poor correlation ($R^2=0.4$ for Fe_2O_3 and $R^2=0.3$ for SiO_2) between check and original assays both for iron and silica. Taking out the high Fe (Fe_2O_3) values from the graph, the correlations are better. The mean averages of the check and original samples assays do not differ significantly.

Table 12-2 Comparative Mean Averages

	LIM	SGS
Fe(%)	43.45	41.19
SiO_2(%)	32.33	35.73

The following tables and figures show a positive bias towards Actlabs both for Fe_2O_3 and SiO_2especially for assays over 40% Fe. The information in the next table shows that the relative difference (in %), is higher for assays over 50% Fe.

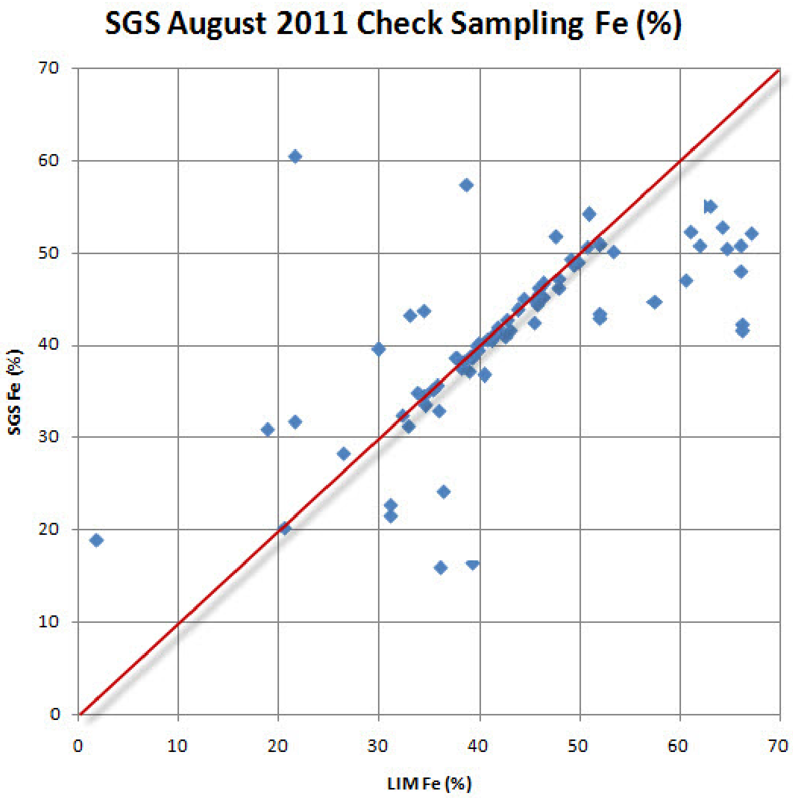


Figure 12-1 Iron Correlation LIMH and SGS

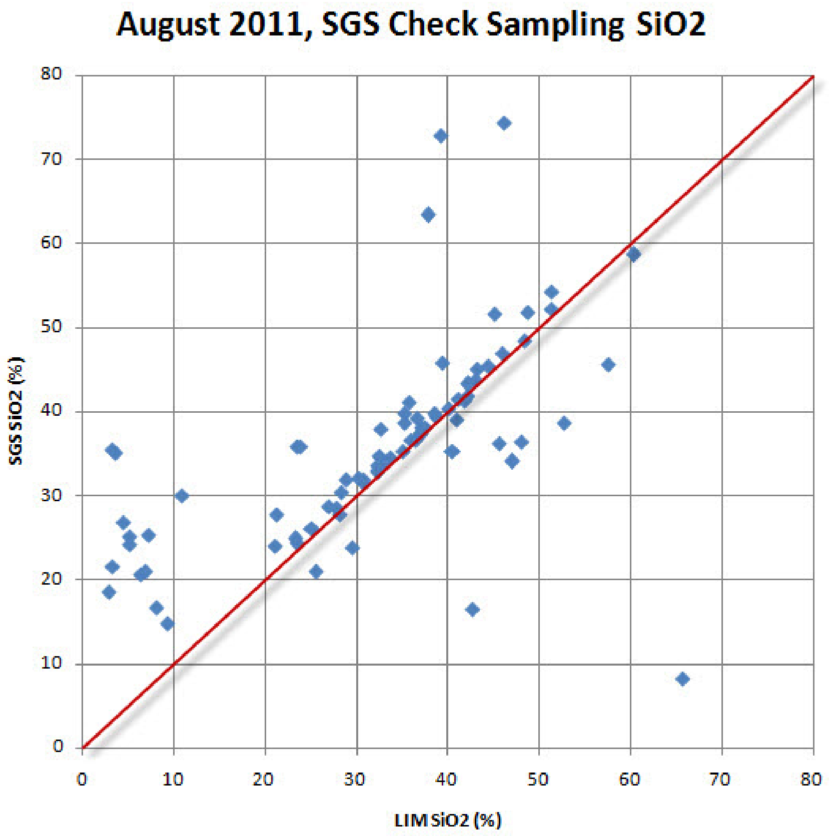


Figure 12-2 SiO2 correlation LIMH and SGS

Table 12-3 Summary of Analytical Results for Independent Check Samples

Criteria	Count	Original ≥Duplicate	Original < Duplicate	Criteria	Count	Samples within % relative Difference		
						±10%	±25%	±50%
All samples	78	56	22	All samples	78	50	62	73
		72%	28%			64%	79%	94%
<=40%Fe	34	18	16	<=40%Fe	34	21	21	29
		53%	47%			62%	62%	85%
>40%Fe<50%	25	20	5	>40%Fe<50%	25	25	25	25
		80%	20%			100%	100%	100%
<=50%Fe<60%	7	6	1	<=50%Fe<60%	7	4	7	7
		86%	14%			57%	100%	100%
>60%Fe	12	12	0	>60%Fe	12	0	9	12
		100%	0%			0%	75%	100%

12.1 Data Verification Conclusions and Recommendations

The results from the check sampling done on the 2011 RC cuttings indicate that sampling errors might have been inserted as early as the start of the sampling sequence. SGS does not have sufficient data to pin point the selected errors of sampling and strongly encourage LIM to run extensive QA/QC tests at the start of the sampling program. The rotary splitting could be a source of errors if not set correctly.

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

Additionally, the errors could also be from the analysis from the different labs. SGS did not investigate this matter and suggest LIMHL to investigate this matter.

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

Possible errors:

On the field and at the prep lab

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

At the analytical labs

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

The data verification done by SGS-Geostat on the 2008-2010 RC drilling samples showed overall good assay correlations. SGS is not inclined to write off any resources or lower the classification but suggest investigating this matter using a third lab for third party check.

In the author’s opinion, the information in the section appears to be consistent and not misleading.

13. Mineral Processing and Metallurgical Testing

The information below was provided by LIMHL.

No mineral processing and metallurgical testing was done on the Malcolm 1 occurrence. Although it lies in line with the Houston deposits, it is recommended to do additional tests on the Malcolm 1 occurrence in order to corroborate the following information.

13.1 Metallurgical Test Programs

13.1.1 Midrex Test Program

In 1989 Midrex Technologies, Inc. ("Midrex"), an international iron and steel making technology company based in Charlotte, North Carolina, sampled and tested lump ore sample# 625 from the Houston 1 deposit for standard raw material evaluation purposes. The sample analyses are presented in Table 13-1.

Table 13-1 Midrex Lump Ore Samples Analyses

Sample #	Dry Wt% Yield at +6.7 mm	Fe %	S %	P %
625/ Houston 1	92.33	68.32	0.007	0.057

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

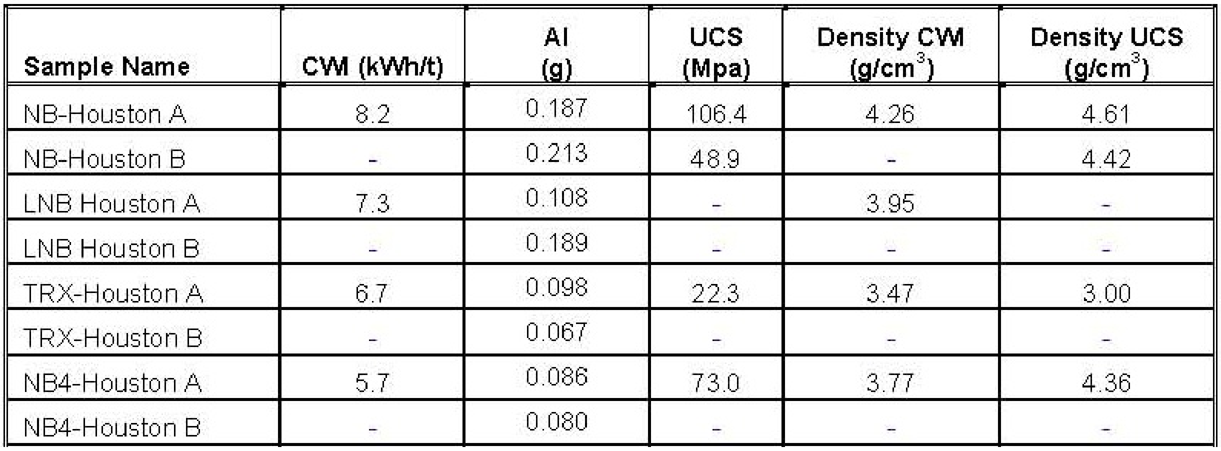
13.2 2006 Bulk sampling by LIM

Bulk samples from trenches at the Houston deposit were collected during the summer of 2006 from two trenches 113 metres and 78 metres long respectively. Three 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 which was used in the IOC calculations. Additional SG testing was completed during the 2009 exploration program, obtaining a Fe-dependant variable SG (See Section 19.4).

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

Table 13-2 Summary of Tests by SGS-Lakefield



Sample Name	CWI (kWh/t)	AI (g)	UCS (Mpa)	Density CWI (g/cm^3)	Density UCS (g/cm^3)
NB-Houston A	8.2	0.187	106.4	4.26	4.61
NB-Houston B	-	0.213	48.9	-	4.42
LNB Houston A	7.3	0.108	-	3.95	-
LNB Houston B	-	0.189	-	-	-
TRX-Houston A	6.7	0.098	22.3	3.47	3.00
TRX-Houston B	-	0.067	-	-	-
NB4-Houston A	5.7	0.086	73.0	3.77	4.36
NB4-Houston B	-	0.080	-	-	-

13.3 SGS Lakefield Program

A Bulk Sample program was undertaken during the summer of 2008. 2,000 tonne of samples were excavated with a CAT-330 type excavator from the Houston 1 deposit. The excavated material was hauled to the Silver Yard area for crushing and screening. The raw material was screened at approximately 6 mm into two products – a lump product (-50 mm+6 mm) and a sinter fine product (-6 mm). The material excavated from each deposit and the products produced from each deposit were kept separate from the others.

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

Preliminary scrubber tests were performed. 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 13-3 and Table 13-3.

Table 13-3 Calculated Grades from 2008 Bulk Samples (SGS-Lakefield)

Deposit	Houston
Ore Type	Blue Ore
Fe[1]	66.1
SiO_2	2.22
P[1]	0.07
Al_2O_3	0.30
LOI	1.33

[1] Calculated from WRA oxides

Table 13-4 2008 Bulk Samples Test Results (SGS-Lakefield)

Houston	(Blue Ore)	Assays %					Distribution
		Fe	SiO2	Al2O3	P	LOI	
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

The material collected from the 2008 bulk samples at both Houston and the James deposits was sent to a number of other laboratories for additional test work, including Derrick Corporation for screening tests, Outotec.

13.4 Derrick Corporation (2008)

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

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

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

Table 13-5 Derrick Screen Tests Results

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

14. Mineral Resource Estimation

14.1 Introduction

This section reports the results of the mineral resource estimate for the Houston mineral deposit based on new analytical data sampled from the drilling completed since the last mineral resource estimate, effective March, 6th, 2012. No mineral resource estimate was performed on the Malcolm 1 occurrence.

The mineral resource has been estimated by Maxime Dupéré P.Geo., Geologist for SGS Geostat. Mr. Dupéré is a professional geologist registered with the Ordre des Géologues du Québec and has worked in exploration for gold and diamonds, silver, base metals and iron ore. The author has been involved in mineral resource estimation work over different 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 and Houston iron deposits in 2009 2010 and 2011. Mr. Dupéré is an independent Qualified Person as per section 1.4 of the NI 43-101 Standards of Disclosure for Mineral Projects with respect to the owner of the mineral titles included in the Property.

SGS Geostat conducted the current mineral resource estimate for the Houston iron deposit using historical RC drill holes and trenches and recent 2008-2011 RC drill holes and trench data compiled from the 2008 to 2011 exploration programs conducted by Houston. The database used to produce the mineral resource estimate is derived from a total of 128 recent RC drill holes, 5 Diamond drill holes, and 13 recent trenches. Additionally; 86 historical RC drill holes and 236 historical trenches and contains the collar, survey, lithology, and analytical results information. The database cut-off date is March 6th, 2012. The database includes 44 additional RC drill holes from the previous resources estimation from the technical report dated March25th, 2011.

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.

LIM published second NI 43-101 compliant resource estimate for Houston in February 2011, of 22.2 million tonnes in the Measured and Indicated category at an average grade of 57.3% iron and 690 thousand tonnes in the Inferred category at an average grade of 54.9% iron from the technical report dated March 25th, 2011.

The current resource estimates for the Houston deposit are of 22.9 million tonnes including LMN, HMN and HiSiO2 in the Measured and Indicated categories at a grade of 57.2% Fe and 3.7 million tonnes in the inferred category at a grade of 56.4% Fe. The resources presented in this section are all inside the property boundary. An approximate 4000 estimated measured and indicated tonnes are outside the Houston property and were not included in the resources. 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 effective date of the updated Houston resources is March 6th, 2012.

The Houston data used for the estimation of current mineral resources was initially compiled and validated by LIM using MapInfo Professional software in combination with Encom Discover and Microsoft Office Access. Data was then imported into Gemcom GEMS Software Version 6.2.4.1., which was used to perform the final validation of the Houston database, to construct solids, to build composites, to run geostatistical analyses, to build the block model, to run grades interpolation and to estimate mineral resources.

14.2 Database and Validation

No significant inconsistencies were observed. LIM entered the historical data from IOC's data bank listing print outs of drill holes, trenching and surface analyses. All of the data entry was done by LIM. SGS did a limited validation of the data in 2009 but did not do a full validation in 2010.

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

The Houston database contains a total of 13,516 metres of RC drilling in 214 RC drill holes and 5 diamond drill holes for a total of 4,581 assays. Also, 9,106 metres of trenching and a total of 2,241 assays are included in the database. Table 22-1 provides a summary of the Houston database.

14.3 Geological Interpretation and Modeling

This information was provided by LIM. The geological interpretation of the Houston deposit was entirely constructed by LIM according to available data of the area.

The geological and ore model interpretation of the Houston deposit was completed considering a cut-off grade of 45% Fe; however the resources reported are based on a cut-off grade of 50%Fe for iron ore and 50% Fe+Mn for manganiferous iron ore. The IOC ore type parameters of Non-Bessemer (NB), lean non-Bessemer (LNB), high silica (HiSiO2), high manganiferous (HMN) and low manganiferous (LMN) were considered for the resource estimation. See Table 14-1.

The geological modeling of the Houston mineral deposit was done using 130 vertical cross sections with a direction of N043° spaced approximately 30 metres apart (100 feet). The cross section con figuration is the same as the one used by IOC. Fifty two (52) available historical paper cross sections from IOC were digitized and used for the geological interpretation and modeling. The original geological and ore interpretations were updated with information obtained during recent exploration programs. The solids were created from the sectional wireframes combining geological and mineralization interpretation.

The study area of the Houston deposit included in this report covers an extension of 4.7km long x450m wide and 160m vertical. Further infill drilling will be required to better define mineralization in some areas within the ore body subject of this report.

14.4 Specific Gravity (SG)

The information below was provided by LIM and is taken from SGS prior reports on the Schefferville area DSO properties.

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

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

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

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

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

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

14.5 Resources Estimation

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

The current classified resources of the Houston Deposit reported below are compliant with standards as outlined in the National Instrument 43-101. These resources were estimated using the IOC Classification of Ore described in the next table.

Table 14-1 Statistics of Composite Data Used in the Interpolation of Resource Blocks

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

14.5.1 Resource Estimation

As usual, Houston DSO resources are estimated through the construction of a resource block model with small blocks on a regular grid filling an interpreted mineralized envelope and with grades interpolated from measured grades of composites drill hole or trench samples around the blocks and within the same envelope. Blocks are then categorized according to average proximity to samples.

14.5.2 Blocks Model Information

Blocks are 5x5x5m on a grid within a rotated local coordinate system with a long axis along the N314.4. Maximum number of columns (along the N44.4) is 201 and maximum number of rows (along the N314.4) is 1374. Vertically, the maximum number of 5m benches is 47. The total of blocks is 101,868. The block centers are within the DSO envelope interpreted by LIM geologists. The parameters of the Block Model were done using the following parameters.

Table 14-2 Parameters of Block Model

Number of Blocks	
Colums	201
Rows	1374
Levels	47
Origin and Orientation	
X	652400
Y	6062550
Z	630
Orientation* (Counterclockwise)	45.6°
Block Size (m)	
Colums Size	5
Rows Size	5
Levels Size	5

* Orientation Origin Based on Block Centroid

14.5.3 Composites Used for Estimation

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

At total of 4,227 composites were generated. The modeled 3D wireframe of the mineralized envelope was used to constrain the composites. Table 14-3 summarises the statistics of the composite data. Figure 14-1 shows the histogram of the composites.

The Composites were built from assay intervals along sub-horizontal trenches and vertical RC holes. Spacing between holes and trenches varies along the 4.7km strike length but at the best, we have trenches and RC holes on cross-sections at 30m distance along the N314.4 strike and the spacing between holes on the section is the same 30m. In practice most sections just have a single hole (owing to the narrow width of the mineralized zone) plus a trench at the top. Only composites with a center within the same mineralized envelope as blocks are kept (some trench composites are outside blocks because of the yes/no block elimination around the topo surface) and they need have a minimum 1.5m documented length. All together there are 4,227 composites with at least a %Fe and a %SiO_2 grade within the DSO envelope.

14.5.4 Distribution of Composite Grades

Data to be populated in blocks around composites are the %Fe, %SiO_2, %Al_2O_3, %Mn and %P grades. Statistics of composite grades for those elements are on Table 14-3. Histograms are on Figure 14-1. Some correlation plots appear on Figure 14-2.

As expected the distribution of the %Fe of composites is negatively skewed (tail of low values) while the distribution of the %SiO_2 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 %SiO_2 (Figure 14-2). Distribution of alumina and manganese are heavily skewed with a long tail of high values. By comparison, the skewness of phosphorus is moderate Besides that of %Fe and %SiO_2, all other correlations between variables are weak (best with R around 0.25 are between %SiO_2 and %Al_2O_3 (positive), %Mn and %Fe (negative) and %Al_2O_3 and %P (positive).

Table 14-3 Statistics of Composite Data Used in the Interpolation of Resource Blocks

Statistics	*Fe*	*P*	*MN*	*SIO2*	*AL2O3*
Mean	53.70	0.06	0.98	18.33	0.98
Standard Error	0.17	0.00	0.03	0.22	0.03
Median	55.74	0.05	0.24	14.76	0.49
Standard Deviation	10.76	0.03	1.91	14.35	1.72
Sample Variance	115.85	0.00	3.66	206.00	2.95
Kurtosis	1.54	11.89	20.95	0.75	34.58
Skewness	-1.06	2.35	3.99	0.97	5.18
Range	67.39	0.46	22.02	88.05	22.21
Minimum	2.00	0.01	0.01	0.20	0.01
Maximum	69.39	0.47	22.03	88.25	22.22
Count	4227	4226	4190	4227	4036

14.5.5 Variograms of Composite Grades

The spatial continuity of the grades of composites is assessed through experimental correlograms computed along specific directions. A correlogram looks at the decrease of the correlation between samples as the distance between samples is increasing. It is presented like a variogram with a sill of 1 by graphing the function 1- correlogram (Figure 14-3).

Correlograms have been computed along the following directions:

- vertical holes and horizontal trenches at the same time i.e.an average of all directions with a short 3m lag to get the nugget effect and average range (in black on Figure 14-3)
- vertical holes only with the same short 3m lag (in light green on Figure 14-3)
- horizontal trenches only with the same 3m lag (in dark green on Figure 14-3)
- average N134.4 horizontal strike with a lag of 35m corresponding to the spacing between sections (in red on Figure 14-3)
- average dip of 60° to the N44.4 with a lag of 45m between holes and trenches on sections (in blue on Figure 14-3)
- average cross dip and strike with a dip of 30° to the N234 with the same lag of 45m between holes and trenches on sections (in brown on Figure 14-3)

The correlograms of %Fe show (1) a moderate nugget effect of 15% (2) ranges between 50 and 100m (3) the same long range of about 100m in both dip and strike (the two experimental correlograms are at the same place) (4) a very similar continuity for vertical drill hole samples and horizontal trench samples.

As it could be expected from the strong negative correlation between %Fe and %SiO_2 in composites, the correlograms of %SiO_2 are basically the same as those of %Fe (Figure 14-2).

The correlograms of all three minor elements (%Al_2O_3, %Mn and %P) show a higher relative nugget effect of 0.25%. For %Al_2O_3, the anisotropy pattern looks the same as with %Fe and %SiO_2 (best in strike and dip) but ranges are shorter (30m for short and 60m for long). For %Mn, the range along strike is longer (90m) than the range along dip (60m). For %P, the range along strike looks even longer (135m) while that along dip is about 75m and the short range is 45m.

All experimental variograms are modelled with the sum of a nugget effect and an exponential function.

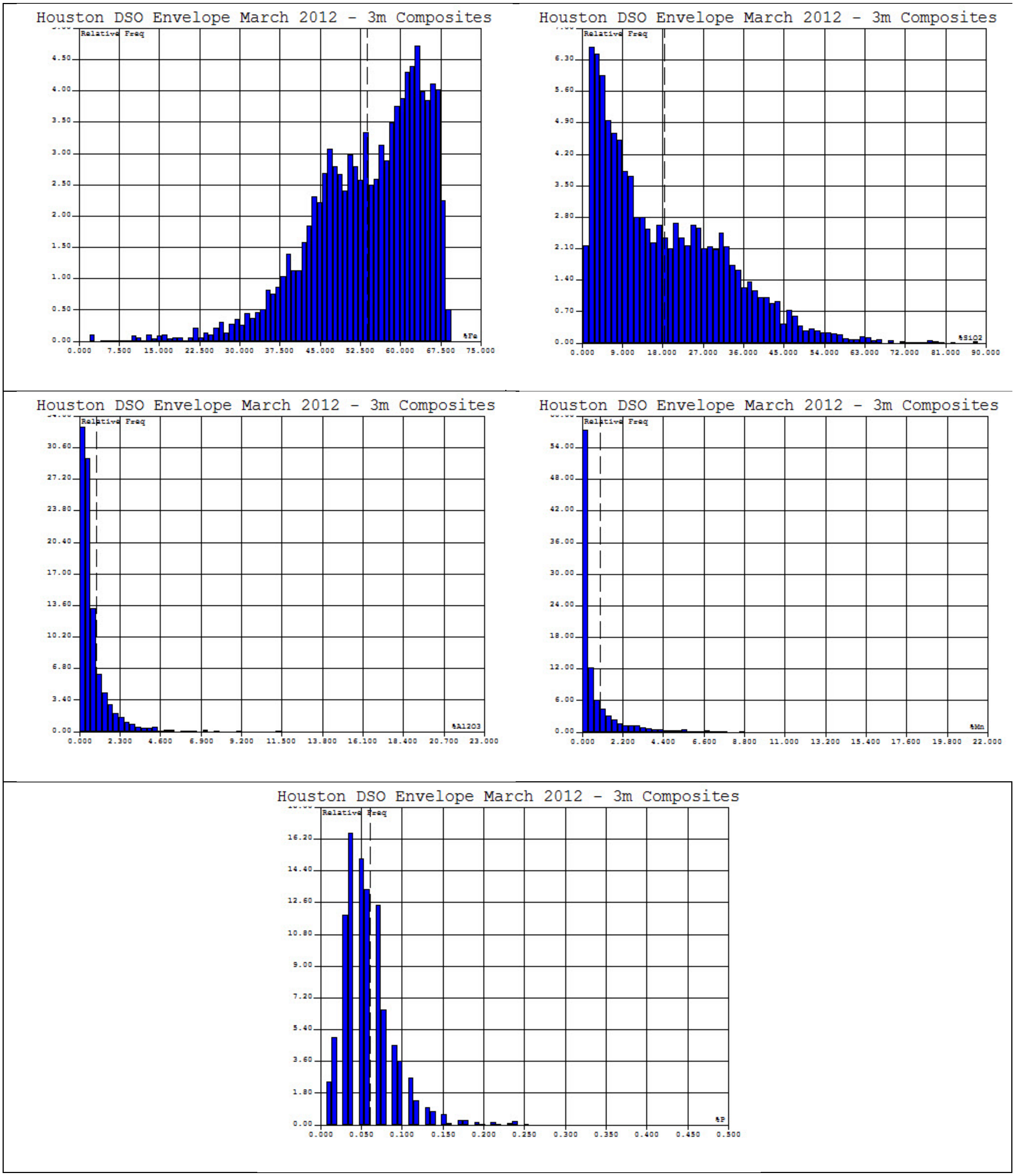


Figure 14-1 Histograms of DSO Composite Data

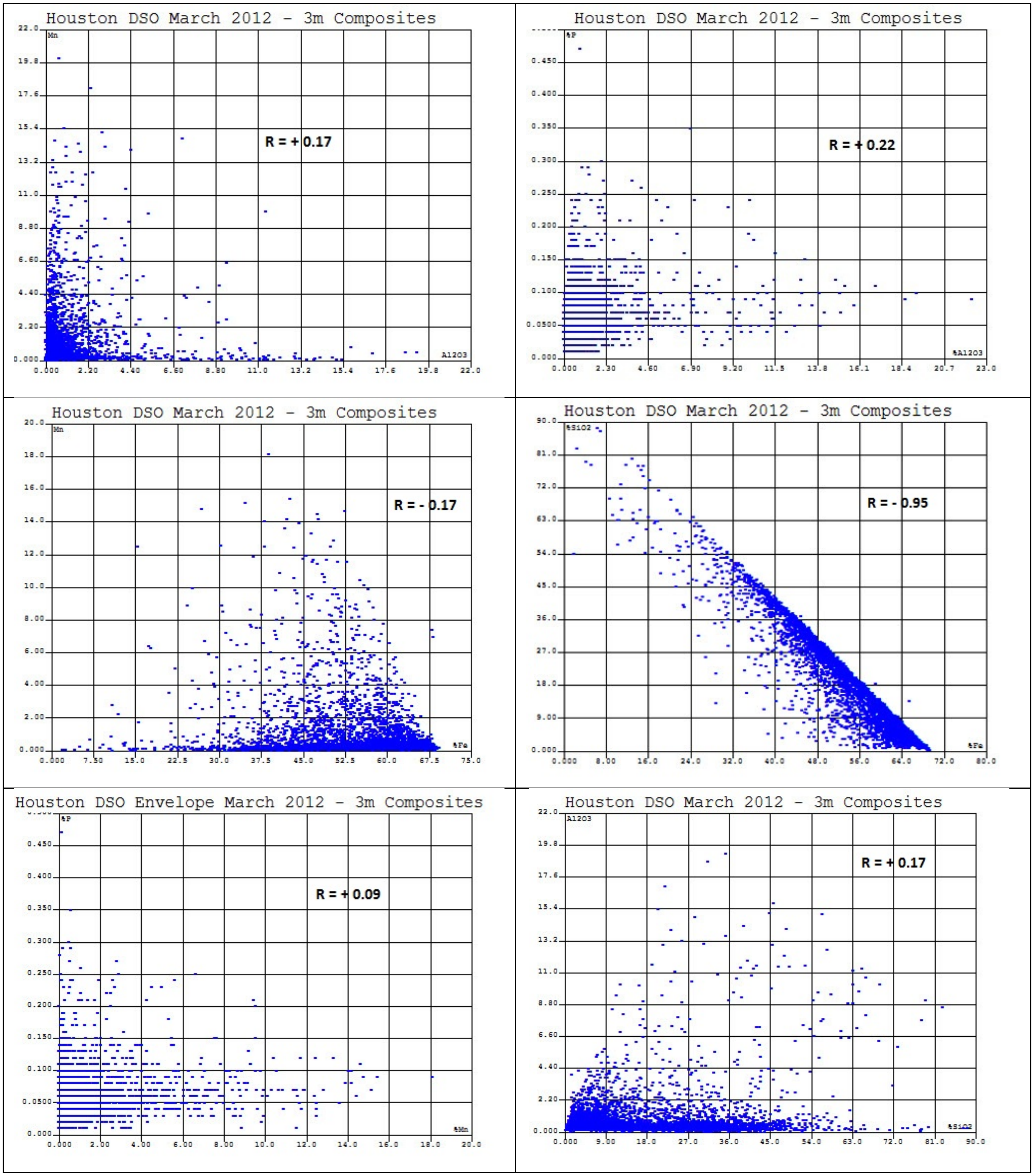
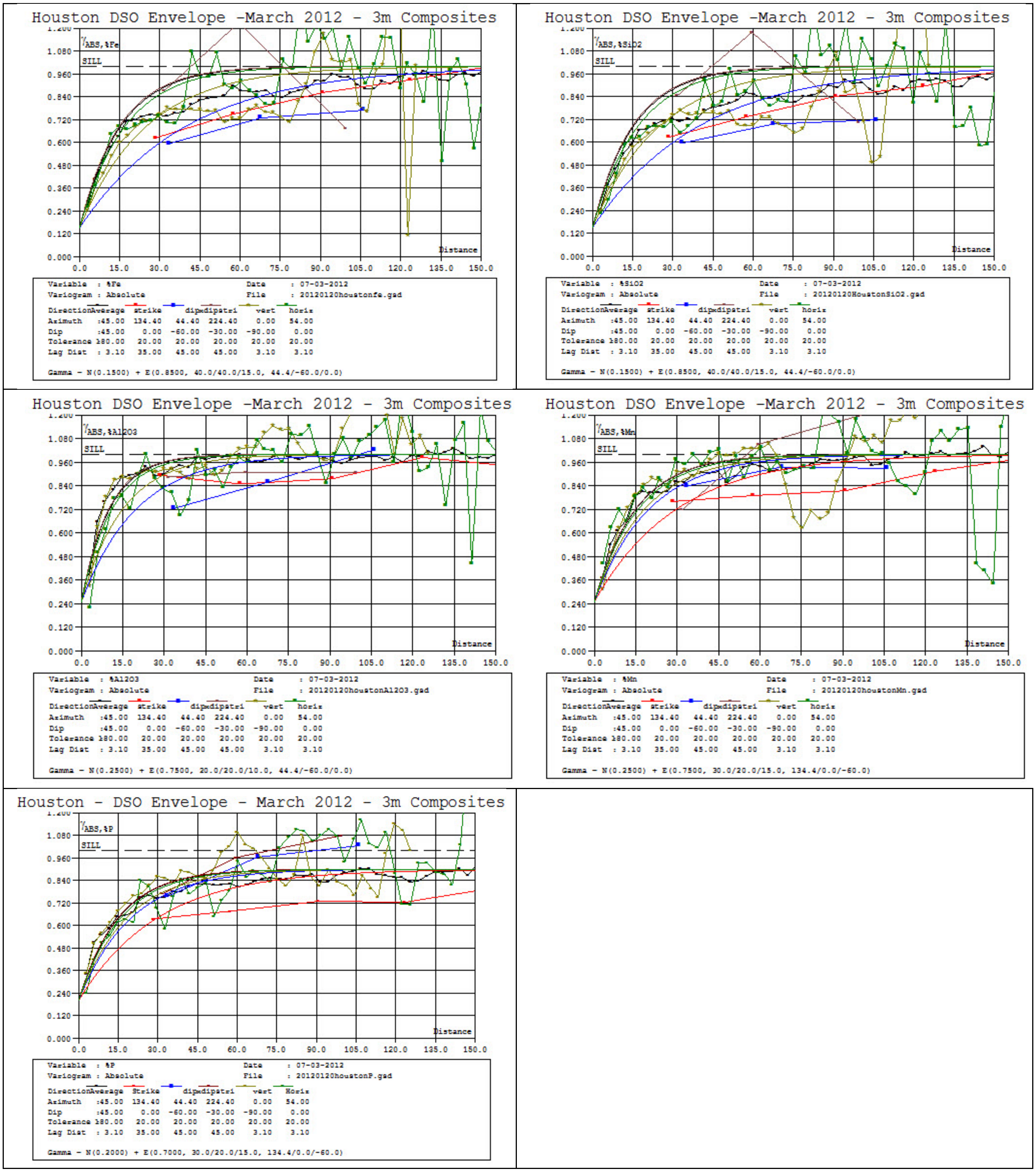


Figure 14-2 Some Correlation Plots of DSO Composite Grade Data (2012)



```
Variable  : %Fe                            Date      : 07-03-2012
Variogram : Absolute                       File      : 20120120houstonfe.gsd
DirectionAverage  strike   dipxdipstri  vert   horiz
Azimuth   :45.00 134.40  44.40 224.40   0.00  54.00
Dip       :45.00   0.00 -60.00 -30.00 -90.00   0.00
Tolerance 180.00  20.00  20.00  20.00  20.00  20.00
Lag Dist  : 3.10  35.00  45.00  45.00   3.10   3.10

Gamma - N(0.1500) + E(0.8500, 40.0/40.0/15.0, 44.4/-60.0/0.0)
```

```
Variable  : %SiO2                          Date      : 07-03-2012
Variogram : Absolute                       File      : 20120120HoustonSiO2.gsd
DirectionAverage  strike   dipxdipstri  vert   horiz
Azimuth   :45.00 134.40  44.40 224.40   0.00  54.00
Dip       :45.00   0.00 -60.00 -30.00 -90.00   0.00
Tolerance 180.00  20.00  20.00  20.00  20.00  20.00
Lag Dist  : 3.10  35.00  45.00  45.00   3.10   3.10

Gamma - N(0.1500) + E(0.8500, 40.0/40.0/15.0, 44.4/-60.0/0.0)
```

```
Variable  : %Al2O3                         Date      : 07-03-2012
Variogram : Absolute                       File      : 20120120houstonAl2O3.gsd
DirectionAverage  strike   dipxdipstri  vert   horiz
Azimuth   :45.00 134.40  44.40 224.40   0.00  54.00
Dip       :45.00   0.00 -60.00 -30.00 -90.00   0.00
Tolerance 180.00  20.00  20.00  20.00  20.00  20.00
Lag Dist  : 3.10  35.00  45.00  45.00   3.10   3.10

Gamma - N(0.2500) + E(0.7500, 20.0/20.0/10.0, 44.4/-60.0/0.0)
```

```
Variable  : %Mn                            Date      : 07-03-2012
Variogram : Absolute                       File      : 20120120houstonMn.gsd
DirectionAverage  strike   dipxdipstri  vert   horiz
Azimuth   :45.00 134.40  44.40 224.40   0.00  54.00
Dip       :45.00   0.00 -60.00 -30.00 -90.00   0.00
Tolerance 180.00  20.00  20.00  20.00  20.00  20.00
Lag Dist  : 3.10  35.00  45.00  45.00   3.10   3.10

Gamma - N(0.2500) + E(0.7500, 30.0/20.0/15.0, 134.4/0.0/-60.0)
```

```
Variable  : %P                             Date      : 07-03-2012
Variogram : Absolute                       File      : 20120120houstonP.gsd
DirectionAverage  Strike   dipxdipstri  vert   Horiz
Azimuth   :45.00 134.40  44.40 224.40   0.00  54.00
Dip       :45.00   0.00 -60.00 -30.00 -90.00   0.00
Tolerance 180.00  20.00  20.00  20.00  20.00  20.00
Lag Dist  : 3.10  35.00  45.00  45.00   3.10   3.10

Gamma - N(0.2000) + E(0.7000, 30.0/20.0/15.0, 134.4/0.0/-60.0)
```

Figure 14-3 Variograms of DSO Composite Grade Data

14.5.6 Block grades interpolation

The %Fe, %SiO_2, %Al_2O_3, %Mn and %P grades of each of the 72,276 blocks 5x5x5m within the DSO envelope are interpolated from the grades of nearby composites through the ordinary kriging method which fully uses the characteristics of variograms of each variable.

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

The basic search ellipsoid (to collect the nearby composites around a block to interpolate) is oriented according to the anisotropy of variogram i.e. its long radius is along the horizontal N144 strike, its intermediate radius is along the average dip of 60^o to the N54 and its short radius is along the perpendicular to the average strike+dip i.e. a dip of 30^o to the N234. For all variables the long radius is set to either 40m (%Al_2O_3) or 50m (all others) in order to catch samples on at least two adjacent sections. In the case of %Fe and %SiO_2, the intermediate radius is the same 50m and the short radius is 25m. In the case of %Al_2O_3, the intermediate radius is 40m and the short radius is 20m. In the case of %Mn, the intermediate radius is 35m and the short radius is 25m. In the case of %P, the intermediate radius is 30m and the short radius is 20m. Those dimensions are simply doubled in the second interpolation run.

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

Statistics of block grade estimates from the different runs are on Table 14-2. As a general rule, the variability of estimates (difference max.-min., %CV) decreases from first run to second run. A large majority of blocks is interpolated in the first run while just a few blocks are interpolated in the third and last run.

14.5.7 Block grade validation

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

14.6 Resources Classification

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

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

Blocks having a kriging variance from 0 to 0.7 were taken into account for the measured category solid construction. Blocks having a kriging variance from 0.7 to 0.8 were taken into account for the indicated category solid construction. Blocks having a kriging variance from 0.8 and up were taken into account for the indicated category selection. The drilling grid of 30m and the presence of trenches on most of the cross sections helped acknowledge the kriging variance and classification boundary as a preferred tool for classification.

14.7 Mineral Resources Estimation Conclusion

The current resource estimates for the Houston deposit are of 22.9 million tonnes including LMN, HMN and $HiSiO_2$ at a grade of 57.2% Fe in the Measured and Indicated categories. The resources presented in this section are all inside the property boundary. An approximate 4000 estimated measured and indicated tonnes are outside the Houston property and were not included in the resources. 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 Houston deposit remains open to the northwest and southeast and at depth. The results of the resource estimates for the Houston deposit are shown in Table 17-1. The Mineral resources were classified using the following parameters:

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

Table 14-4 Houston Property 43-101 Compliant Iron Resources

Area	Ore Type	Classification	Tonnage	SG	Fe(%)	MN(%)	SiO2(%)
Houston 3	HiSiO2	Measured (M)	660,000	3.32	52.53	0.6	21.16
Houston 3	LMN-HMN	Measured (M)	250,000	3.30	51.61	5.2	11.97
Houston 3	NB-LNB	Measured (M)	3,190,000	3.47	58.88	1.0	9.97
Houston 2S	HiSiO2	Measured (M)	2,660,000	3.32	52.23	0.8	21.65
Houston 2S	LMN-HMN	Measured (M)	60,000	3.39	55.35	4.6	10.48
Houston 2S	NB-LNB	Measured (M)	5,150,000	3.49	59.63	0.7	10.90
Houston 2N	HiSiO2	Measured (M)	30,000	3.31	52.09	1.3	21.77
Houston 2N	LMN-HMN	Measured (M)	20,000	3.27	50.15	5.9	13.86
Houston 2N	NB-LNB	Measured (M)	50,000	3.50	60.11	1.1	10.88
Houston 1	HiSiO2	Measured (M)	1,720,000	3.33	52.65	0.7	21.24
Houston 1	LMN-HMN	Measured (M)	330,000	3.37	54.39	4.9	9.86
Houston 1	NB-LNB	Measured (M)	5,180,000	3.48	59.34	0.8	10.94
		Total	**19,300,000**	**3.43**	**57.32**	**0.9**	**13.52**
Houston 3	HiSiO2	Indicated (i)	340,000	3.32	52.39	0.6	21.41
Houston 3	LMN-HMN	Indicated (i)	140,000	3.33	52.73	5.2	11.27
Houston 3	NB-LNB	Indicated (i)	1,510,000	3.45	58.15	1.0	11.32
Houston 2S	HiSiO2	Indicated (i)	280,000	3.33	52.68	0.9	21.55
Houston 2S	LMN-HMN	Indicated (i)	-	3.29	51.18	3.7	17.85
Houston 2S	NB-LNB	Indicated (i)	550,000	3.47	59.06	0.7	12.32
Houston 2N	HiSiO2	Indicated (i)	20,000	3.29	51.11	2.1	22.20
Houston 2N	LMN-HMN	Indicated (i)	-	3.37	54.59	4.2	11.56
Houston 2N	NB-LNB	Indicated (i)	10,000	3.46	58.44	1.6	12.23
Houston 1	HiSiO2	Indicated (i)	320,000	3.33	52.65	0.7	20.95
Houston 1	LMN-HMN	Indicated (i)	10,000	3.29	51.17	3.8	16.04
Houston 1	NB-LNB	Indicated (i)	410,000	3.43	57.22	0.6	14.38
		Total	**3,590,000**	**3.41**	**56.45**	**1.0**	**14.53**
Houston 3	HiSiO2	Inferred	1,112,000	3.32	52.56	0.3	22.09
Houston 3	LMN-HMN	Inferred	-	0.00	0.00	0.0	0.00
Houston 3	NB-LNB	Inferred	2,412,000	3.46	58.31	0.5	12.96
Houston 2S	HiSiO2	Inferred	101,000	3.34	53.25	0.9	21.07
Houston 2S	LMN-HMN	Inferred	3,000	3.40	55.61	5.0	10.71
Houston 2S	NB-LNB	Inferred	112,000	3.46	58.28	1.2	12.81
Houston 2N	HiSiO2	Inferred	-	3.27	50.30	0.7	25.86
Houston 2N	LMN-HMN	Inferred	-	0.00	0.00	0.0	0.00
Houston 2N	NB-LNB	Inferred	-	0.00	0.00	0.0	0.00
Houston 1	HiSiO2	Inferred	-	0.00	0.00	0.0	0.00
Houston 1	LMN-HMN	Inferred	-	0.00	0.00	0.0	0.00
Houston 1	NB-LNB	Inferred	-	0.00	0.00	0.0	0.00
		Total	**3,740,000**	**3.41**	**56.46**	**0.5**	**15.89**

Area	Ore Type	Classification	Tonnage	SG	Fe(%)	MN(%)	SiO2(%)
Houston	Total (Fe Ore and Mn Ore)	Measured (M)	19,300,000	3.43	57.32	0.91	13.52
		Indicated(I)	3,590,000	3.41	56.45	1.02	14.53
		TotalM+I	**22,890,000**	**3.43**	**57.18**	**0.93**	**13.68**
		Inferred	3,740,000	3.41	56.46	0.48	15.89

Resources are rounded to the nearest 10,000 tonnes.
Houston deposit dated to March 31^{st}, 2012
*Relative density equation: = ((0.0258*Fe) + 2.338)*0.9*
CIM Definitions were followed for mineral resources
Mineral resources which are not mineral reserves do not have demonstrated economic viability

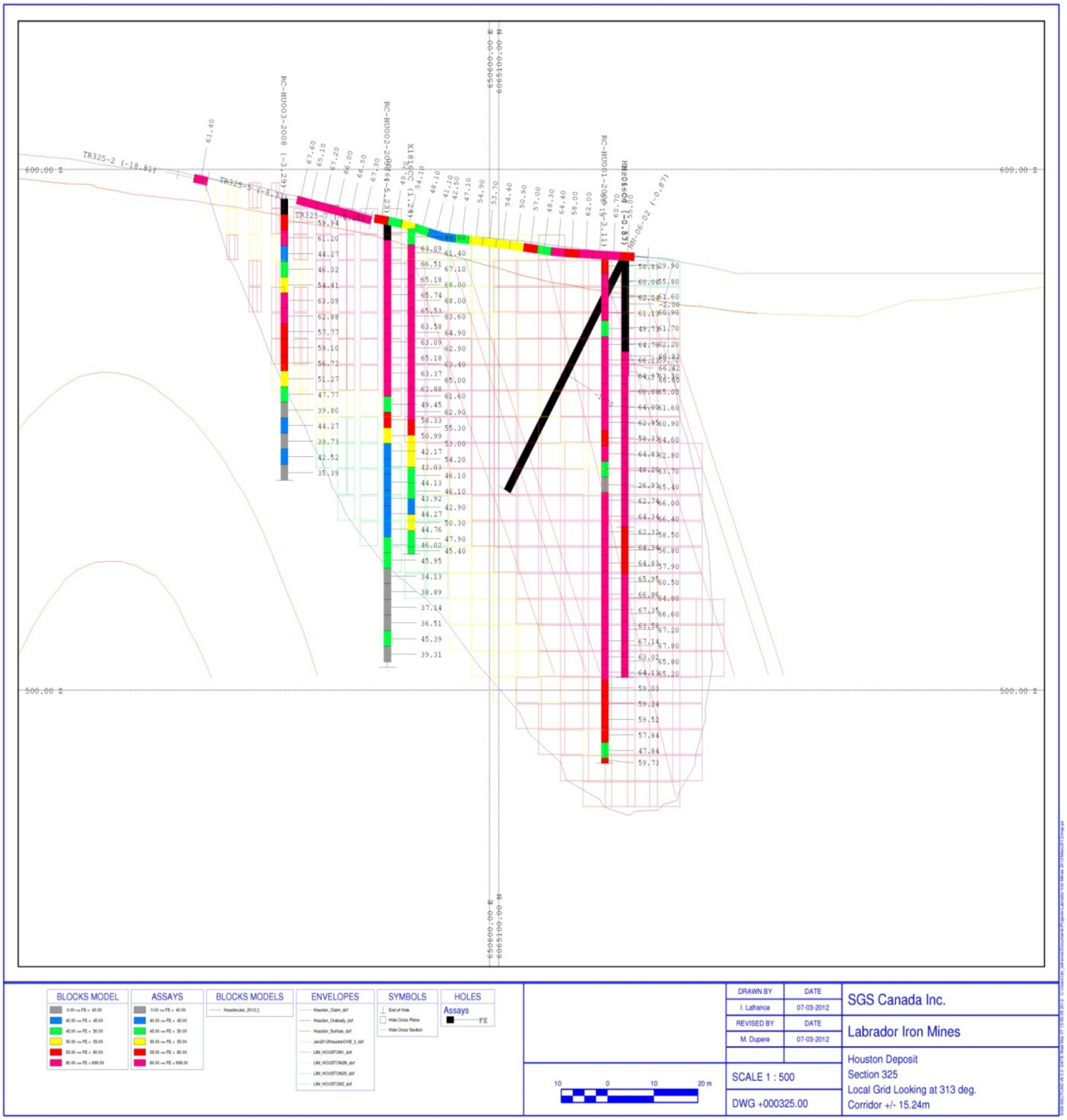


Figure 14-4 Section 325

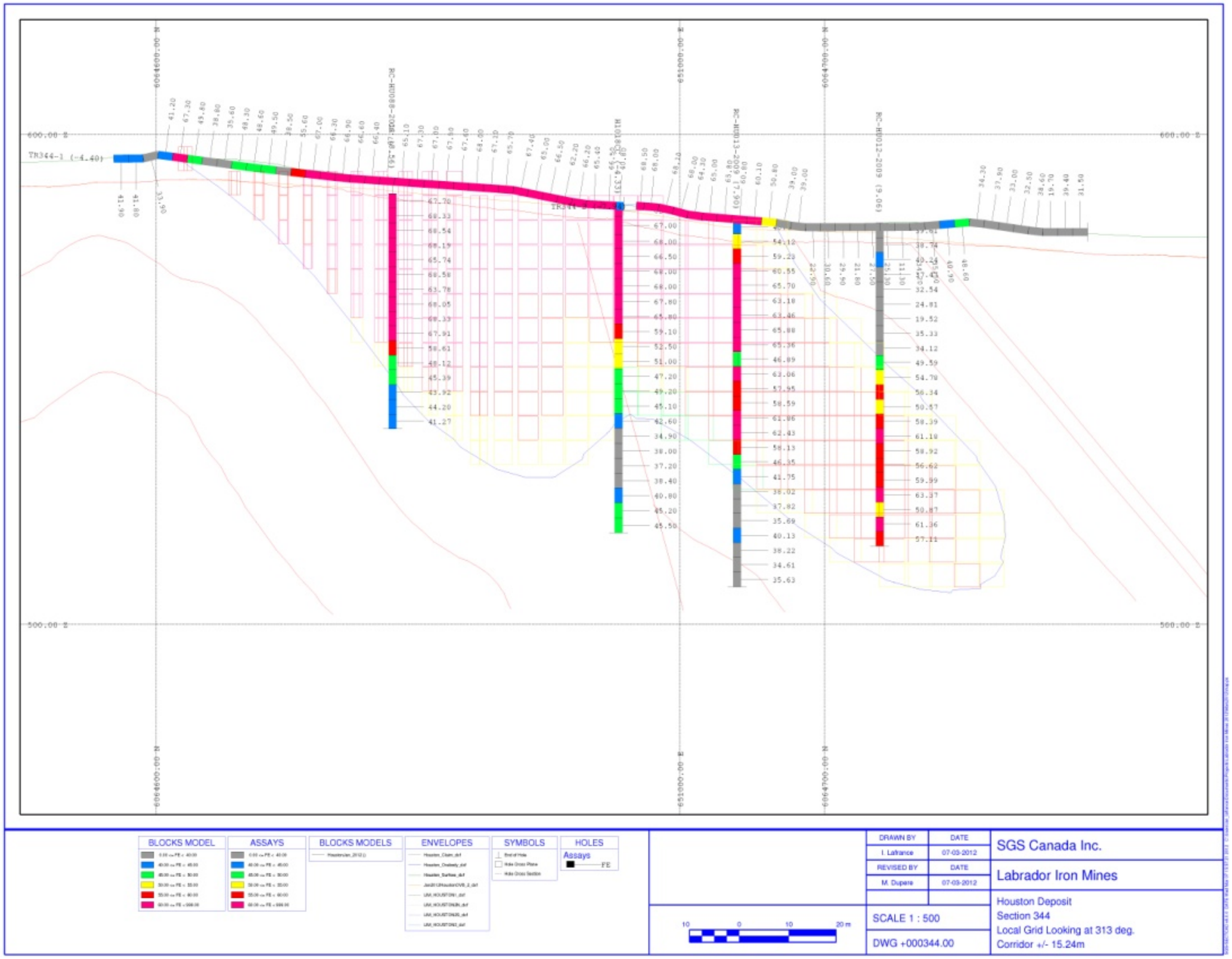


Figure 14-5 Section 344

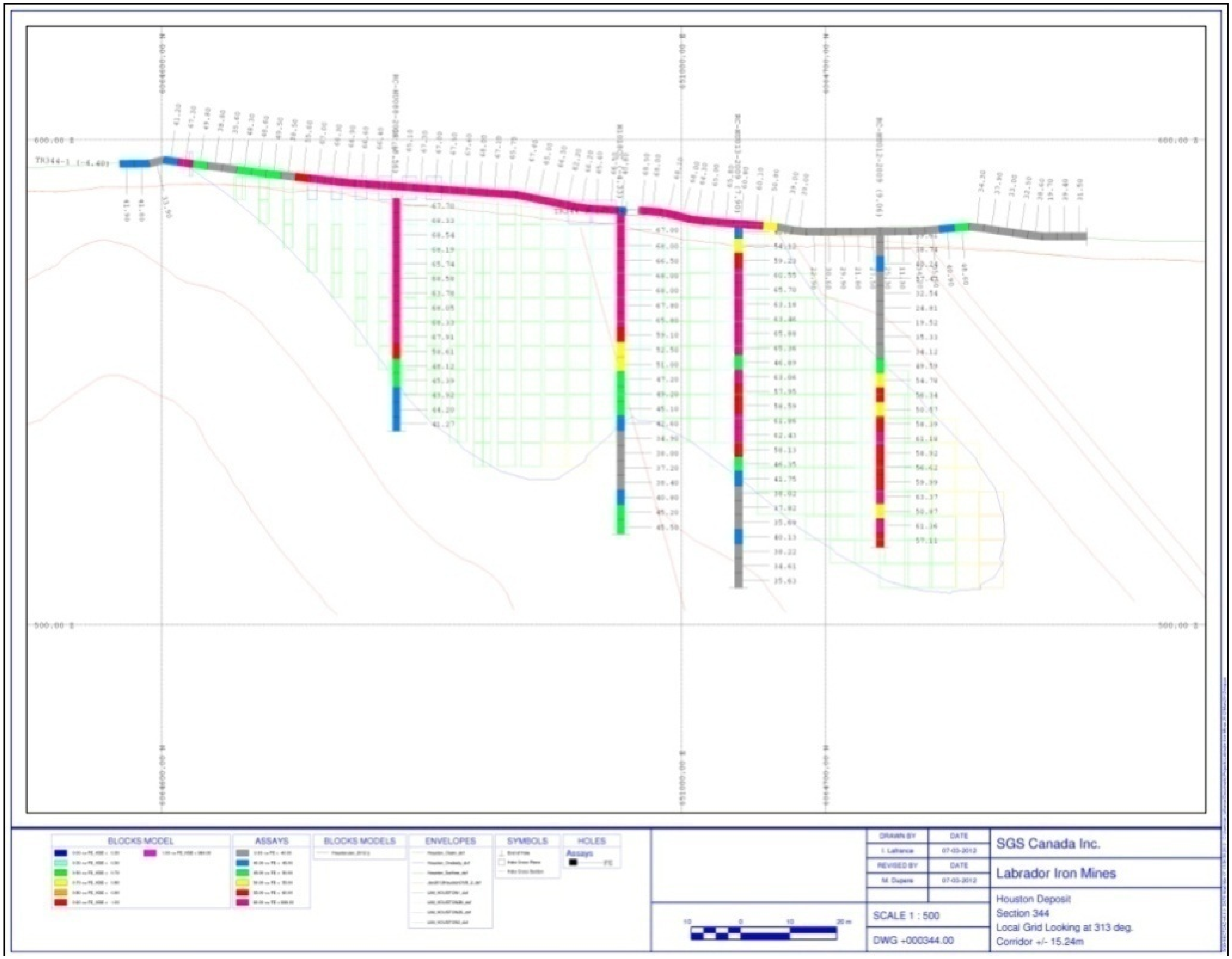


Figure 14-6 Section 325 (Block Classification by Kriging Variance)

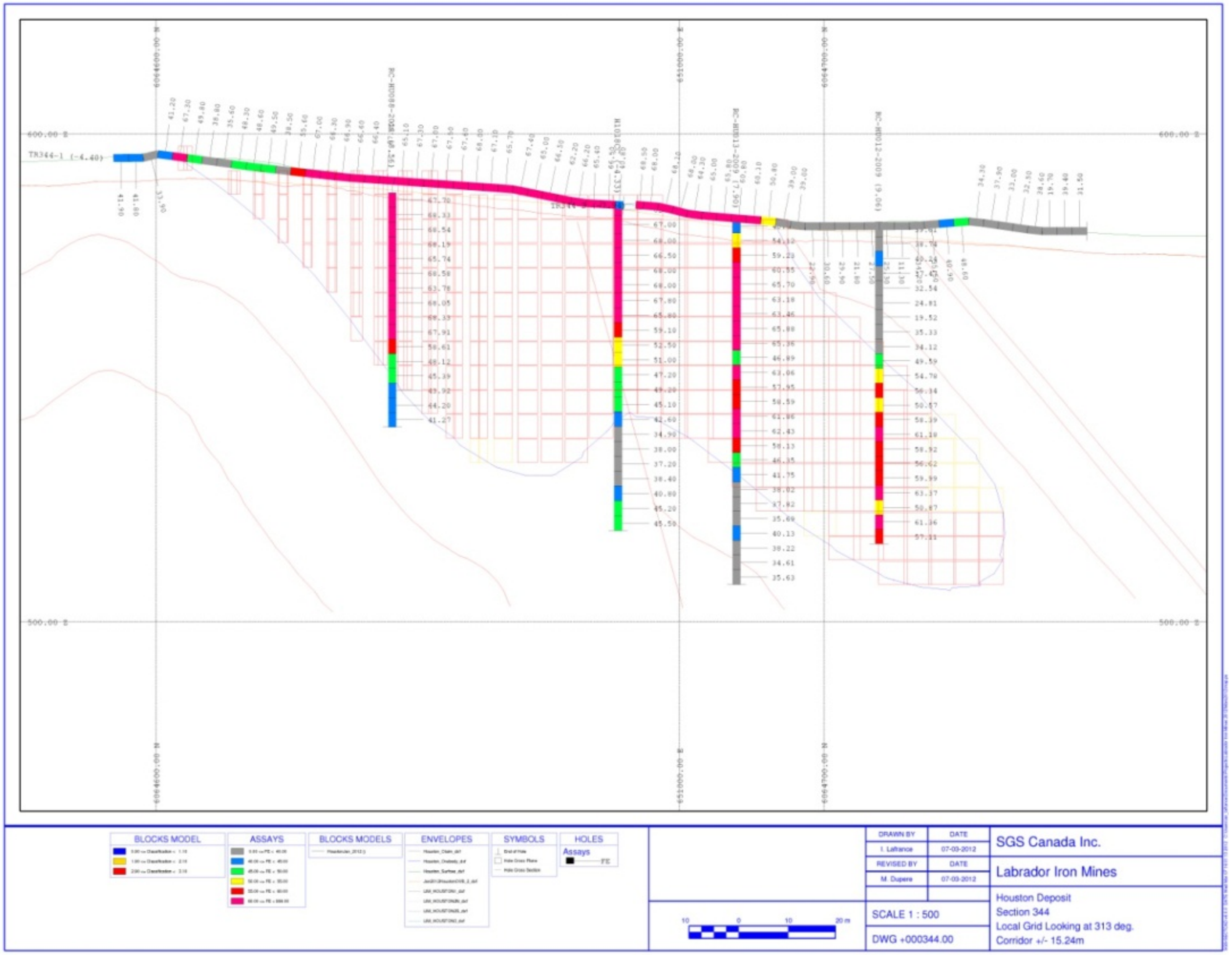


Figure 14-7 Section 325 Final Block Classification

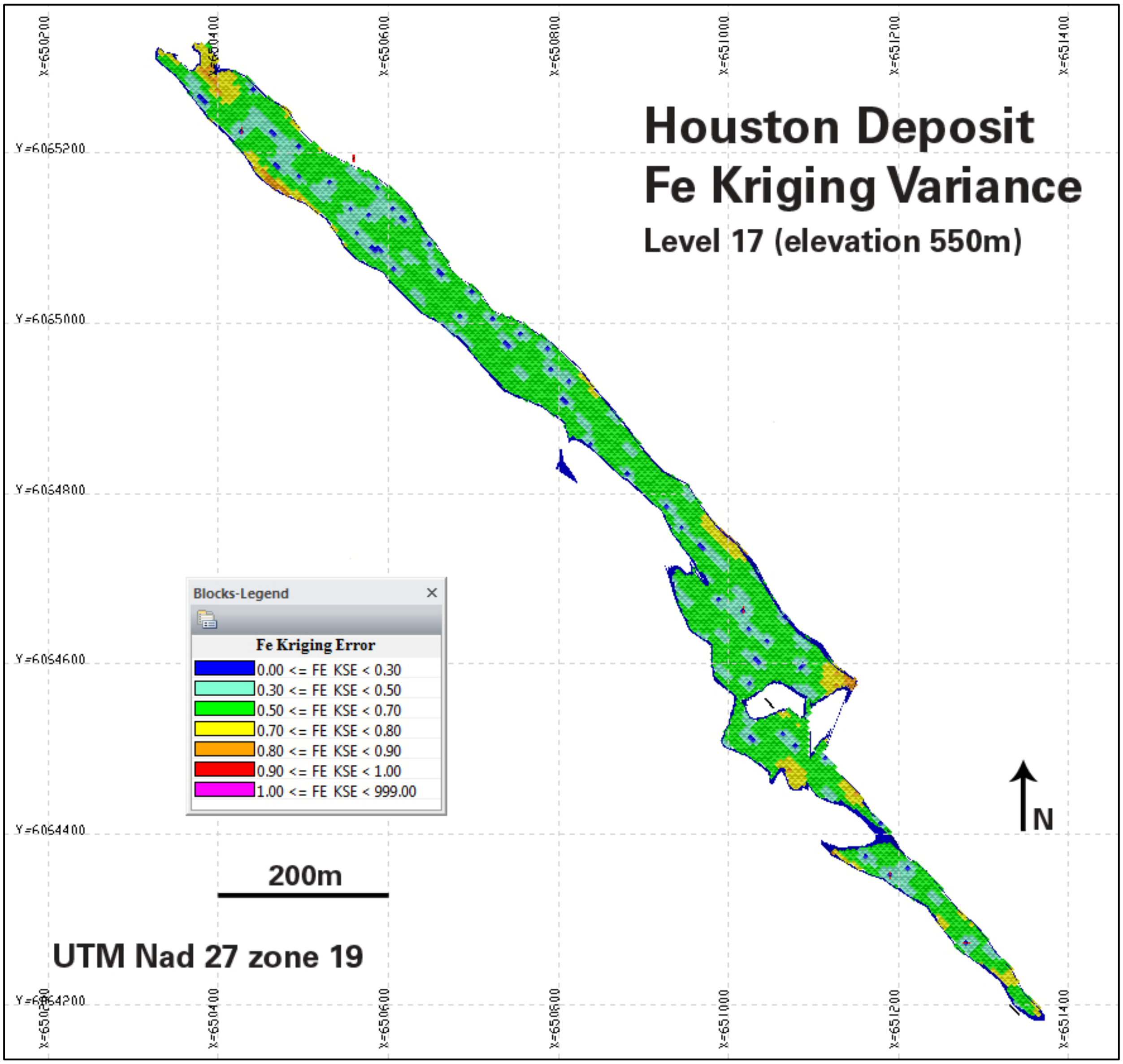


Figure 14-8 Level 30 (index) Block Classification by Kriging Variance

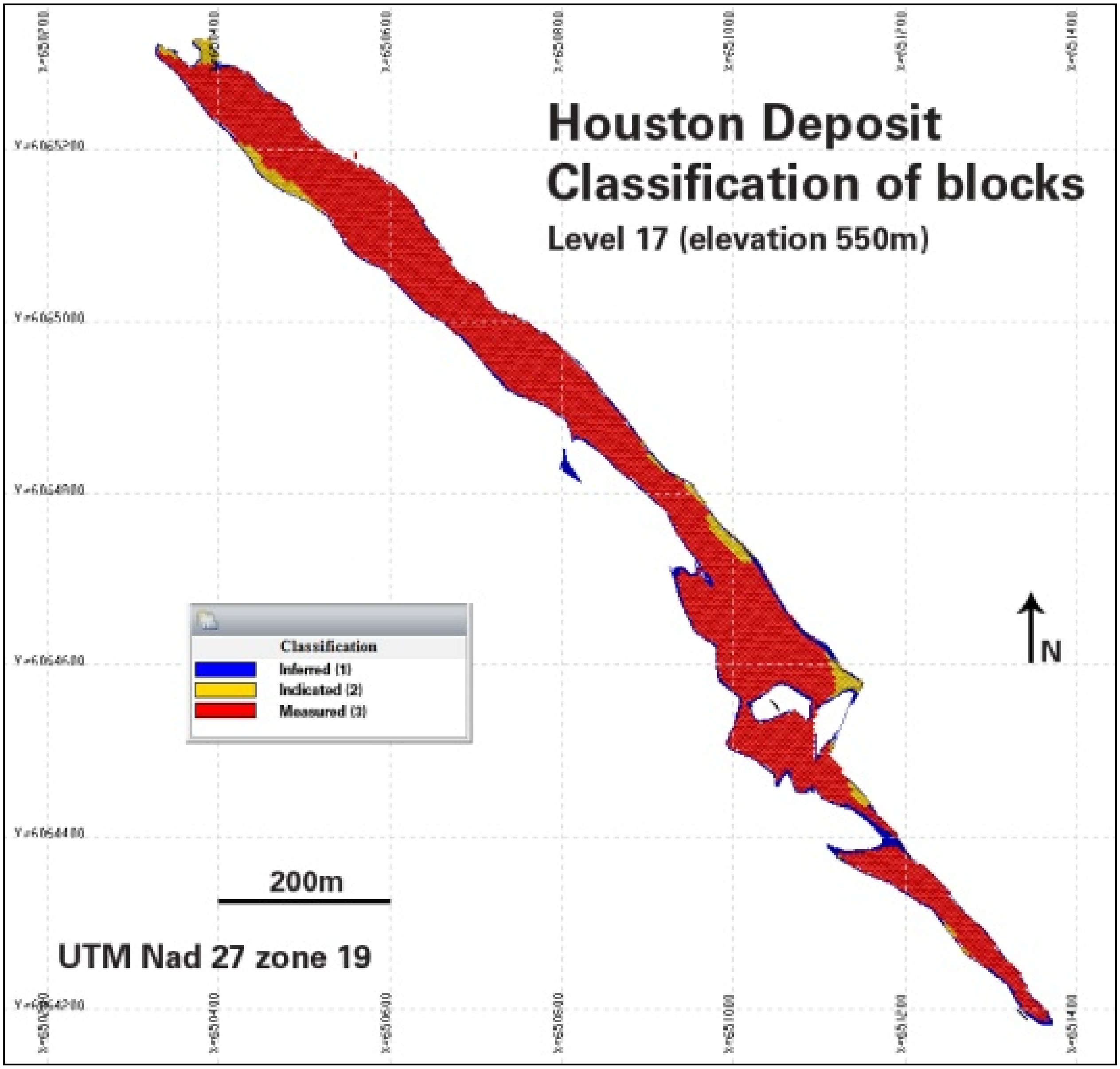


Figure 14-9 Level 30 (index) Final Block Classification

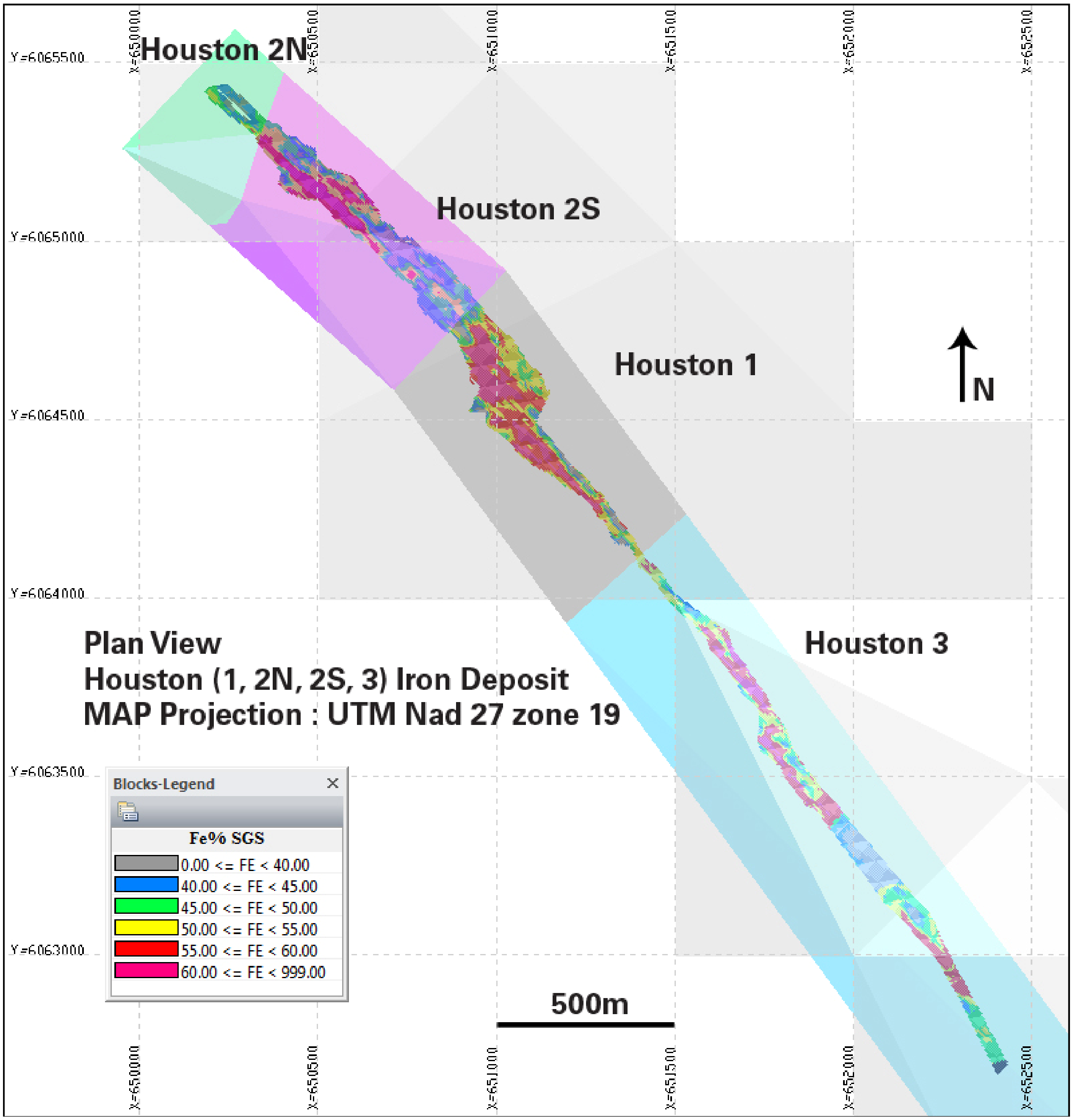


Figure 14-10 Plan View of Houston Block Model (Fe%)

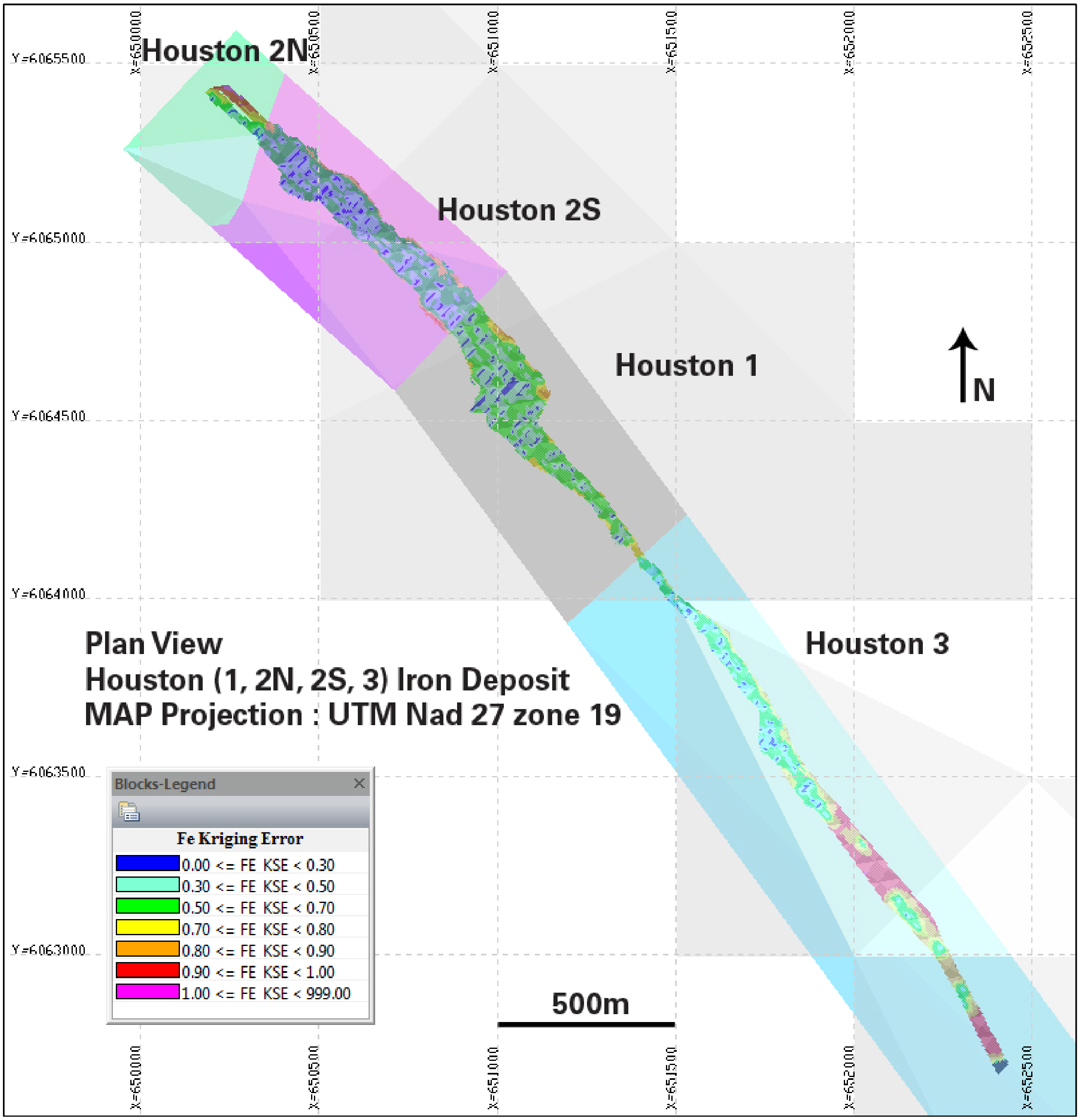


Figure 14-11 Plan View of Houston Block Model (Fe Interpolation Kriging Error)

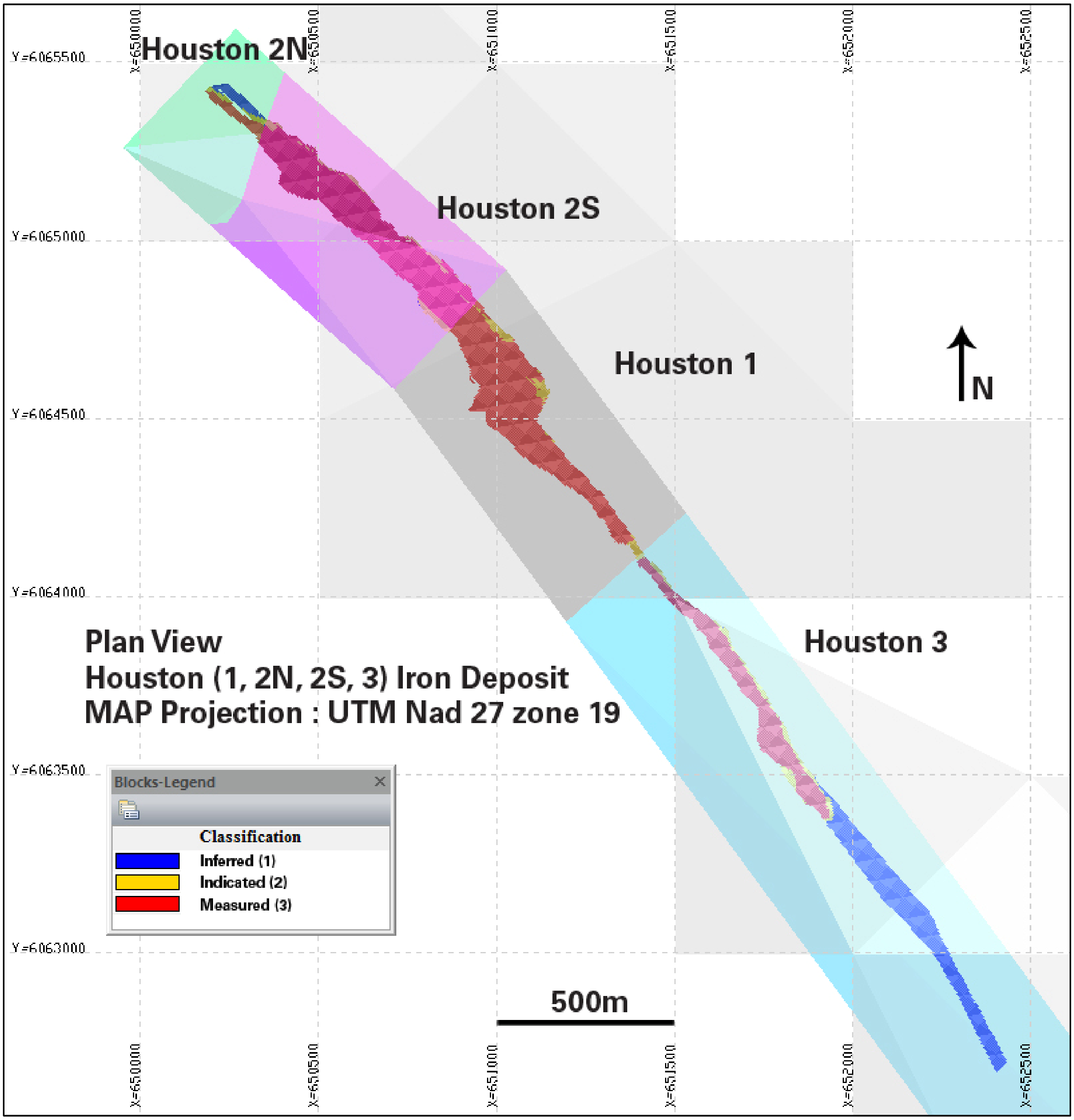


Figure 14-12 Plan View of Houston Block Model (Classification)

15. Adjacent Properties

Adjacent to the Houston property are several other iron ore deposits and claims owned by LIMHL subsidiaries in Labrador and Quebec, which formed part of the former DSO operations of IOC during the period 1954-1982.

IOC produced an approximate total of some 150 million tonnes of direct shipping iron ore from all their properties in Quebec and Labrador during the operating years of 1954 to 1982. IOC is currently operating the Carol Lake iron property some 200 km south of Schefferville near Labrador City in Labrador. After closure, previously owned IOC operations in Labrador reverted to the Crown, while the mining leases in Quebec remained with the underlying owner, Hollinger. The balance of the former IOC properties not held by LIMHL are mainly held by Tata Steel Minerals Canada Ltd.

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. These Mineral Rights Licenses are held subject to a royalty of 3% of the selling price freight on board ("FOB") port of iron ore produced and shipped from the properties, subject to such royalty being not greater than $1.50 per tonne.

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 in a mining lease covering 23 parcels totalling about 2,036 hectares. These mining rights and the operating license are held subject to a royalty of $2.00 per tonne of iron ore produced from the properties.

LIM started production of the James deposit in the spring of 2011. LIM has initiallyreported an NI 43-101 compliant indicated resource at James of 8.1 million tonnes at a grade of 57.7% iron (SGS, 2009).

LIM has reported that the Redmond 5 deposit contains an indicated resource of 2.1 million tonnes at a grade of 54.9% iron and at the Redmond 2B deposit contains an indicated resource of 0.85 million tonnes at a grade of 59.8% iron (SGS, 2009).

SMI has reported a measured and indicated resource of 6.1 million tonnes at the Denault deposit in Quebec. The remaining seventeen deposits (excluding James, Redmond, Denault and Houston), have a total combined historical resource estimated to be approximately 125 million tonnes based on work carried out by IOC prior to the closure of its Schefferville operations in 1982. The historical estimate was prepared according to the standards used by IOC and, while still considered relevant, is not compliant with NI 43-101. The Company plans to bring the historical resources on these other deposits into NI 43-101 compliant status sequentially in line with their intended phases of production.

The Astray and Sawyer deposits in Labrador (Stage 4), located approximately 50km to 65 km southeast of Schefferville (South Zone), do not currently have road access but can be reached by float plane or by helicopter.

The Kivivic 1 deposit of the Kivivic property in Labrador and the Eclipse property in Quebec are located between 40 km to 70 km northwest of Schefferville (North Zone) and may eventually become Stage 5, but will require substantial infrastructure and building of road access.

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

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

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

16. Other Relevant Data and Information

16.1 Environmental Release

On March 28th 2012, LIM obtained release from further environmental assessment from the Government of Newfoundland and Labrador for the Houston 1 and 2 project. This marks the beginning of development of the project, starting with applications being made for the various technical permits to start this work. Plans for development of the property in 2012 include permitting and constructing a road from the Redmond area to the Houston deposits and a siding at Redmond on the main Tshiuetin railway line that links the Labrador City area with Schefferville. Details of the development plans are included in the next section 16.2.

16.2 Houston 1 and 2 2012 and Total Capital Cost Estimate

The information included in this section was provided by Labrador Iron Mines and reviewed by DRAA. Mr. Justin Taylor, P.Eng. is the responsible authorfor the contents of this section.

Capital costs for the Houston 1 and 2 project is estimated at $57.5 million with a 13% contingency, these costs were compiled as part of a desktop study and have an accuracy of between +/- 30%. Out of this total, for 2012, $37.0 million with contingency will be spent. The cost breakdown is included in the following table:

Table 16-1 Capital Cost Summary

Houston 1 and 2 Capital Cost Summary

	2012 Cost	2013 Cost	TOTAL
Mine Engineering and Mine Development	$1,933,225	$5,000,000	$6,933,225
Road Construction	$21,330,848	$0	$21,330,848
Bridge and Culvert Construction	$2,563,070	$0	$2,563,070
Siding Construction	$7,192,584	$0	$7,192,584
Other Civil and Facilities	$2,755,504.57	$5,376,650	$8,132,155
Metallurgy and Process Design	$995,671	$0	$995,671
Dry Crushing and Screening Plant	$258,000	$10,120,000	$10,378,000
TOTAL	**$37,028,903**	**$20,496,650**	**$57,525,553**

Mine Engineering and Mine Development costs for 2012 include mine design, site design, acquiring all required permits, and consulting costs. In 2013, this cost includes mine pre-stripping including tree clearing, topsoil removal and storage for later reclamation use, and waste pre-stripping.

The road construction costs include 8 kilometres of 8.5m wide access road construction. This road will be configured for access to the Houston 1 and 2 deposits from the Redmond property which is connected by existing road to our Silver Yards and James mine properties. There will be a steel long span panel bridge across the Gilling River that allows for canoes and small watercraft to pass under and does not impact the high water mark of the watercourse. There are other small water crossings that will be crossed using bottomless culvert installation that again do not impact the high water mark of those watercourses.

A rail siding will be constructed along the main Tshiuetin rail line connecting Schefferville to Emeril Junction west of Labrador City. This siding will be 5.0 km long and allow for loading of rail cars at that location. Ore will initially be trucked along the new road to this siding where it will be loaded into rail cars for shipment south to the port of Sept Iles.

Other civil and facilities include dewatering planned for 2013, engineering and construction supervision costs, and minor facilities needed for the operation such as temporary security buildings, offices, and maintenance facilities.
Ore is planned to be crushed to allow for downstream handling requirements and dry screened into Lump ore (6mm to 37.5 mm size), coarse sinter (2mm to 6mm size), and fines (less than 2mm size). In 2012 the costs refer to metallurgical testing and design, and for 2013 the costs are for procurement and installation of equipment.

An independent desktop evaluation was undertaken by DRAA using the capital line items provided by Labrador Iron Mines and the capital numbers were arrived at independently was in the order of $60 million including a 13% overall contingency comprised of a weighted contingency per line item. Based on this evaluation, the DRAA numbers are within 4% of the anticipated capital costs presented here. This is within the estimating accuracy of a typical desktop study of +/- 30%, and therefore DRAA independently believes these costs to be a reasonable estimate of the overall costs for the Houston 1 and 2 project as described above.

17. Interpretation and Conclusions

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

All of the classified Resource estimates given in this report are within LIMHL's minerals licences boundaries for the property.

The summary of the Houston deposit resource estimate can be established in the Table 17-1 below. The complete description of the Houston deposit resource estimate is available in the Table 14-4.

Table 17-1 Summary of the Houston Estimated Resources

Area	Ore Type	Classification	Tonnage	SG	Fe(%)	Mn(%)	SiO2(%)
Houston	Total (Fe Ore and Mn Ore)	Measured (M)	19,300,000	3.43	57.32	0.91	13.52
		Indicated(I)	3,590,000	3.41	56.45	1.02	14.53
		TotalM+I	**22,890,000**	**3.43**	**57.18**	**0.93**	**13.68**
		Inferred	3,740,000	3.41	56.46	0.48	15.89

Resources are rounded to the nearest 10,000 tonnes.
Houston deposit dated to March 31st, 2012
*Relative density equation: = ((0.0258*Fe) + 2.338)*0.9*
CIM Definitions were followed for mineral resources
Mineral resources which are not mineral reserves do not have demonstrated economic viability

The author has reviewed all of the technical data in the possession of LIMHL relating to the Houston deposit owned by LIM and has detailed personal knowledge of LIM's projects from 2008. LIM's exploration work programs and technical evaluation programs carried out in 2008 were conducted under the supervision of the author. The author visited the site from August 1st to August 5th, 2011 as part of the reconnaissance visit of the all the properties of the Schefferville area for the 2011 RC drilling and trenching campaign. SGS – Geostat reviewed the different field, laboratory and QA/QC protocols and procedures. The 2009, 2010 and 2011 exploration work programs and technical evaluation programs follow the same methods and protocols (updated and improved) and although the author did not do a site visit in 2010, the information in this report according to the author's knowledge does not appear to be misleading.

The geological interpretation of the Houston deposits is restricted to the zones considered of reasonable economic extraction potential. The historical IOC parameters of the Non-Bessemer and Lean Non-Bessemer ore types were considered together for the geological interpretations and modeling. The High Silica ($HiSiO_2$) ore types containing>=50% Fe and from 18% up to 30% SiO_2 were also considered for the geological interpretation and modeling of the selected mineral deposits.

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

SGS used its own software called BlockCad for the resource estimation. The SGS set of geostatistical softwares are reliable and validated and constantly improved by SGS experienced software and geostatistical team. The ordinary kriging interpolation method was used to estimate the resources by block modeling with block sizes of 5x5x5 metres and block rotation of 45.6° which corresponds to the general strike of the deposit. SGS used LIM's geological and ore models interpreted in the Gemcom software. The mineralised envelope prepared by LIM is considered reliable and current.

The results of LIMHL's work to date on the Houston deposits has shown that there is sufficient merit to continue with the development of the Houston 1 and 2 deposits and to carry out further exploration work to confirm and expand the resource potential of the Houston 3 deposit, as well as to conduct preliminary evaluation of the potential for lower grade taconite deposits along the eastern flank of the Houston DSO resource zones.

SGS also recommends continuing with further exploration work on the Malcolm 1 occurrence with the objective to validate and update historical resources.

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

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

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

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

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

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.

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

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

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

Possible errors:
On the field and at the prep lab

- The RC method using water is a source of errors and the use of sonic drilling to a certain depth, or the use of diamond drilling could resolve these possible errors.
- A sampling bias directly at the rotary splitter due to improper setting.
- Sampling procedures used by the samplers could be inconsistent from sampler to sampler
- Sample mix up on the field, at the prep lab and/or before shipping.

At the analytical lab

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

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

18. Recommendations

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

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

SGS Geostat recommends adding information in the Houston 3 mineral deposit sector based on the RC drilling information. The added information, after verification and validation, will likely augment the level of confidence in the dataset and would affect positively the resources categories in that sector.

SGS recommends introducing non-destructive vibration-rotation drilling on the Houston 1, 2 and 3 iron deposits. It is consisting of a rotary and vibrating drilling system capable of gathering sufficient material and lithological information with an almost constant volume in order to better define the in situ Specific Gravity and to gather material at depth for metallurgical tests and possibly geotechnical tests. The tests would include the same as previous ones done on the property such as: General Mineralogy, QEMSCAN, grindability and Bond Work Index, scrubbing tests, size analysis and assays from before and after scrubbing, density separation, jigging tests, WHIMS tests, settling tests without using flocculants, vacuum filtration (assuming vacuum disc filter).

SGS understands that the Houston 3 deposit is at a lesser stage of development than the Houston 1 and 2 but suggest carrying the metallurgical tests and rotary and vibrating drilling as well. This recommendation can also be transferred to other mineral deposits owned by the Company.

The following budgetary recommendations are purely conceptual. The metallurgical tests costs estimates are purely conceptual. LIM should enquire on the update of a formal proposal foe such tests. The following analysis costs are included only as a reference. The metallurgical tests costs estimates are purely conceptual. The access, logistics, camp, meals and equipment rental costs are not included in this proposal.

Table 18-1 Budgetary Recommendations

Description	**number**	**unit**	**$/unit**	**total**
Assays (RC)	700	units	40	28,000
RC infill and delineation Drilling Houston 3	1000	m	350	350,000
RC delineation Drilling Houston 1 & 2	1000	m	350	350,000
non destructive vibration-rotation drilling Houston 1	1100	m	350	385,000
non destructive vibration-rotation drilling Houston 2	1000	m	350	350,000
non destructive vibration-rotation drilling Houston 3	200	m	350	70,000
Reporting, Mineral resource update of the Property.	1			85,000
Reporting, Metallurgical testing update of the Property	1			200,000
SubTotal				1,818,000
Contingency & Miscellaneous (25%)				454,500
Total				**2,272,500**

19. References

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

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"Reserve and Stripping Estimate". Iron Ore Company of Canada, January 1st, 1983.

"Overview Report on Hollinger Knob Lake Iron Deposits". Fenton Scott. November 2000.

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"Preliminary Scoping Study for the Labrador Iron Ore Project .Province of Newfoundland & Labrador, Canada. Volume I. Labrador Iron Mines Ltd. September 28, 2006.

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

"Report on Summer-Fall 2008 Exploration Program". Labrador Iron Mines Limited. February 2009.

"A Mineralogical Characterization of Five Composite Samples from James Iron Ore Deposit Located in Labrador Newfoundland". SGS Lakefield Research Ltd., February 2009.

"An Investigation into Direct Shipping Iron Ore from Labrador Iron Mine prepared for SNC-Lavalin Inc. on behalf Labrador Iron Mines Limited. Project 12010-001 – Final Report". SGS Lakefield Research Limited. February 2009.

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20. Date and Signature Page

This report entitled**: "Technical Report: Mineral Resource Update of the Houston Property, Labrador West Area, Newfoundland Labrador, Canada for Labrador Iron Mines Holdings Limited"** dated March 31st, 2012 was prepared and signed by the authors.

Signed in Blainville, Québec, Canada on June20th, 2012

SIGNED & SEALED

Maxime Dupéré P. Geo
Geologist
SGS Canada Inc.

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

SIGNED & SEALED

Justin Taylor, P. Eng.
Project Manager
DRA Americas

21. Certificate of Qualification

Certificate of Maxime Dupéré, P.Geo.

To accompany the Report entitled**: "Technical Report: Mineral Resource Update of the Houston Property, Labrador West Area, Newfoundland Labrador, Canada for Labrador Iron Mines Holdings Limited" dated March 31st, 2012.**

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

1. I reside 9660, Rue de la Chouette, Mirabel, Québec, Canada, J7N 0C9.
2. I am a graduate from the Université de Montréal, Quebec in 1999 with a B.Sc. in geology and I have practiced my profession continuously since 2001.
3. I am a registered member of the Ordre des Géologues du Québec (#501), and I am currently employed as a geologist by SGS – Geostat since May 2006.
4. I have 11 years of experience in mining exploration in diamonds, gold, silver, base metals, and Iron Ore. I worked on several resources estimation technical reports and I have prepared and made several mineral resource calculations for different exploration projects at different stages of exploration. I am aware of the different methods of calculation and the geostatistics applied to metallic and non-metallic projects as well as industrial mineral projects.
5. I am responsible for the preparation With exception of section 16 of this report entitled**:" Technical Report: Mineral Resource Update of the Houston Property, Labrador West Area, Newfoundland Labrador, Canada for Labrador Iron Mines Holdings Limited" dated March 31st, 2012.**
6. I visited the site from August 1st, to August 5th, 2011, and on several occasions since 2008. I helped to supervise the sampling and QA/QC procedures during the 2008 RC Drilling Program.
7. Neither I, nor any affiliated entity of mine, is at present, under an agreement, arrangement or understanding or expects to become, an insider, associate, affiliated entity or employee of Labrador Iron Mines Limited, or any associated or affiliated entities. I am an independent qualified person as described in section 1.5 of NI-43-101.
8. Neither I, nor any affiliated entity of mine, own directly or indirectly, nor expect to receive, any interest in the properties or securities of Labrador Iron Mines Limited, or any associated or affiliated companies.
9. I have read NI 43-101 and Form 43-101F1 and have prepared this report entitled**:" Technical Report: Mineral Resource Update of the Houston Property, Labrador West Area, Newfoundland Labrador, Canada for Labrador Iron Mines Holdings Limited" dated March 31st, 2012** in compliance with NI 43-101 and Form 43-101F1.
10. To the best of my knowledge, information and belief, and, as of the date of this certificate, this technical report contains all scientific and technical information that is required to be disclosed to make this section of the technical not misleading.

Signed in Blainville, Québec, Canada on June20th, 2012

SIGNED & SEALED

Maxime Dupéré P. Geo
Geologist
SGS Canada Inc.

Certificate of Justin Taylor P. Eng.

To accompany this report entitled**: "Technical Report: Mineral Resource Update of the Houston Property, Labrador West Area, Newfoundland Labrador, Canada for Labrador Iron Mines Holdings Limited"** dated March 31st, 2012.

I, Justin Taylor P. Eng., do hereby certify that:

1. I am a mechanical engineer residing at 84 Furrow Lane, Etobicke, ON, M8Z 0A3, Canada.
2. I am a co-author of the report entitled "Mineral Resource Update of the Houston Property in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited" dated April 15, 2011.
3. I graduated from the University of Pretoria South Africa with Bachelor of Engineering degree in Mechanical Engineering 1999; Maintenance Engineering (Hons)2002; Diploma Business Management 2003.
4. I am a registered member in good standing of the Professional Engineers of Ontario, Professional Engineers and Geoscientists Newfoundland and Labrador, Canada.
5. I am a registered member in good standing of the Engineering Council of South Africa.
6. I have worked as a mechanical engineer involved with minerals processing, materials handling in the mining and minerals industry for 13 years since my graduation from university.
7. I have read the definition of "qualified person" set out in National Instrument 43 101 (NI 43 101) and by reason of my education, membership of professional associations and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43 101.
8. I am responsible with the other authors singularly for part 16 of this Schefferville Area Direct Shipping Iron Ore Projects Resource Update in Western Labrador and North Eastern Quebec, Canada for Labrador Iron Mines Holdings Limited, Canada ("Technical Report"). I have visited the project site on many occasions most recently from May 15 to May 24, 2012 to evaluate the progress of the construction activities and to confirm the status of the construction completion within the program as described in this document.
9. I am independent of either Labrador Mines Limited or Labrador Iron Mines Holdings Limited or Schefferville Mines Inc.
10. I am the past project manager employed by DRA Americas Inc. responsible for the past and present design of the Beneficiation Plant in Silver Yard.
11. I have read National Instrument 43-101 – Standards of Disclosure for Mineral Projects and Form 43-101F1 and Companion Policy 43-101CP and certify that this Technical Report has been prepared in compliance with such instrument(s).
12. As of the date of the report and to the best of my knowledge, I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the report, the omission of which disclosure would make the Technical Report misleading.

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

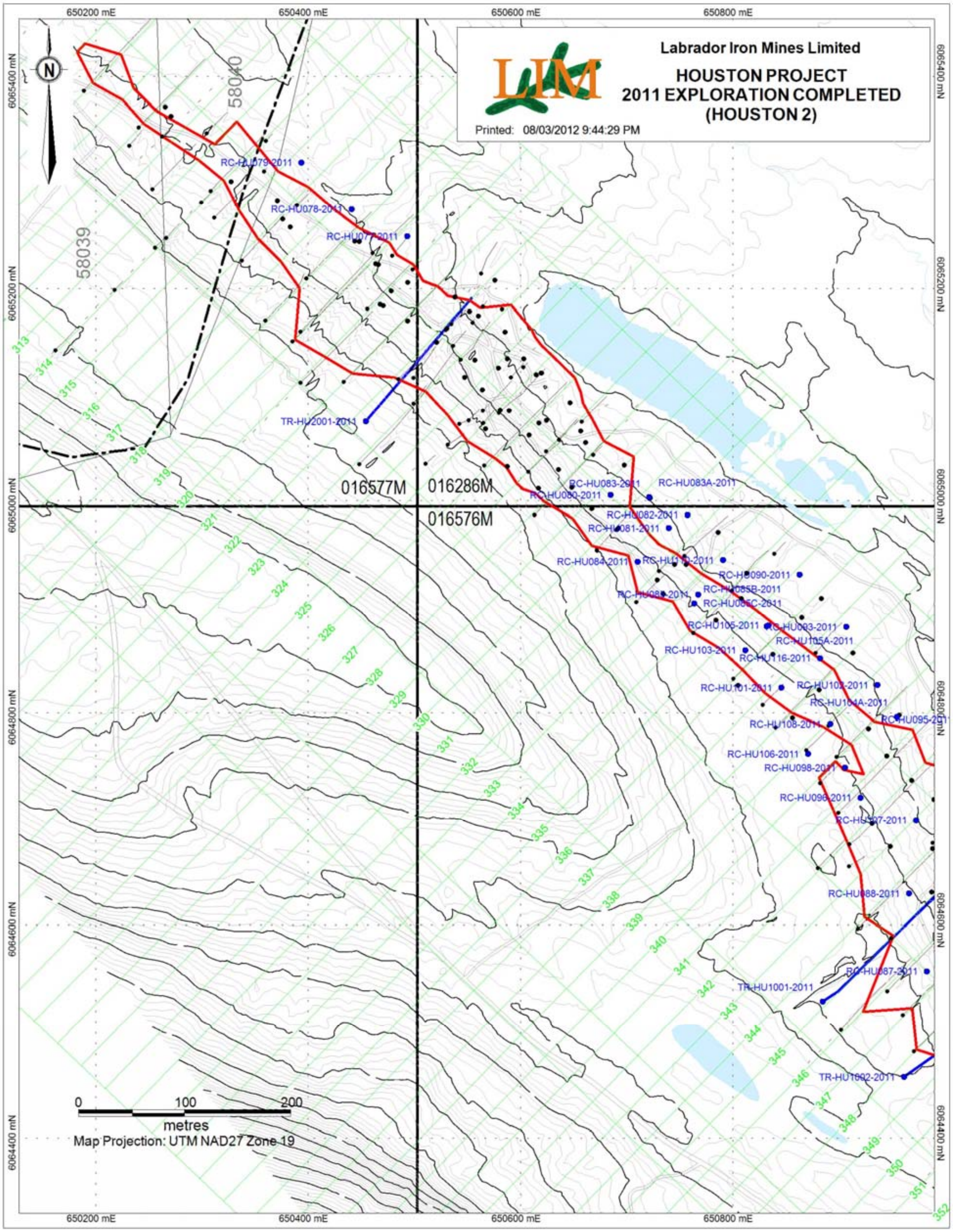
Signed in Toronto, Ontario, Canada on June 20th, 2012

SIGNED & SEALED

Justin Taylor, P. Eng.
Project Manager
DRA Americas

22. Appendix I

Map and List of drill holes, trenches and test pits in the Houston Mineral Deposit
Completed by Historical and LIM
Coordinates are based on UTM NAD27 Canada Zone 19


Labrador Iron Mines Limited
HOUSTON PROJECT
2011 EXPLORATION COMPLETED
(HOUSTON 2)
Printed: 08/03/2012 9:44:29 PM
LIM
N
650200 mE
650400 mE
650600 mE
650800 mE
6065400 mN
6065200 mN
6065000 mN
6064800 mN
6064600 mN
6064400 mN
58040
58039
016577M
016286M
016576M
RC-HU079-2011
RC-HU078-2011
RC-HU077-2011
TR-HU2001-2011
RC-HU083-2011
RC-HU083A-2011
RC-HU080-2011
RC-HU082-2011
RC-HU081-2011
RC-HU084-2011
RC-HU110-2011
RC-HU090-2011
RC-HU085B-2011
RC-HU085-2011
RC-HU085C-2011
RC-HU105-2011
RC-HU093-2011
RC-HU105A-2011
RC-HU103-2011
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RC-HU106-2011
RC-HU098-2011
RC-HU096-2011
RC-HU097-2011
RC-HU088-2011
RC-HU087-2011
TR-HU1001-2011
TR-HU1002-2011
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333
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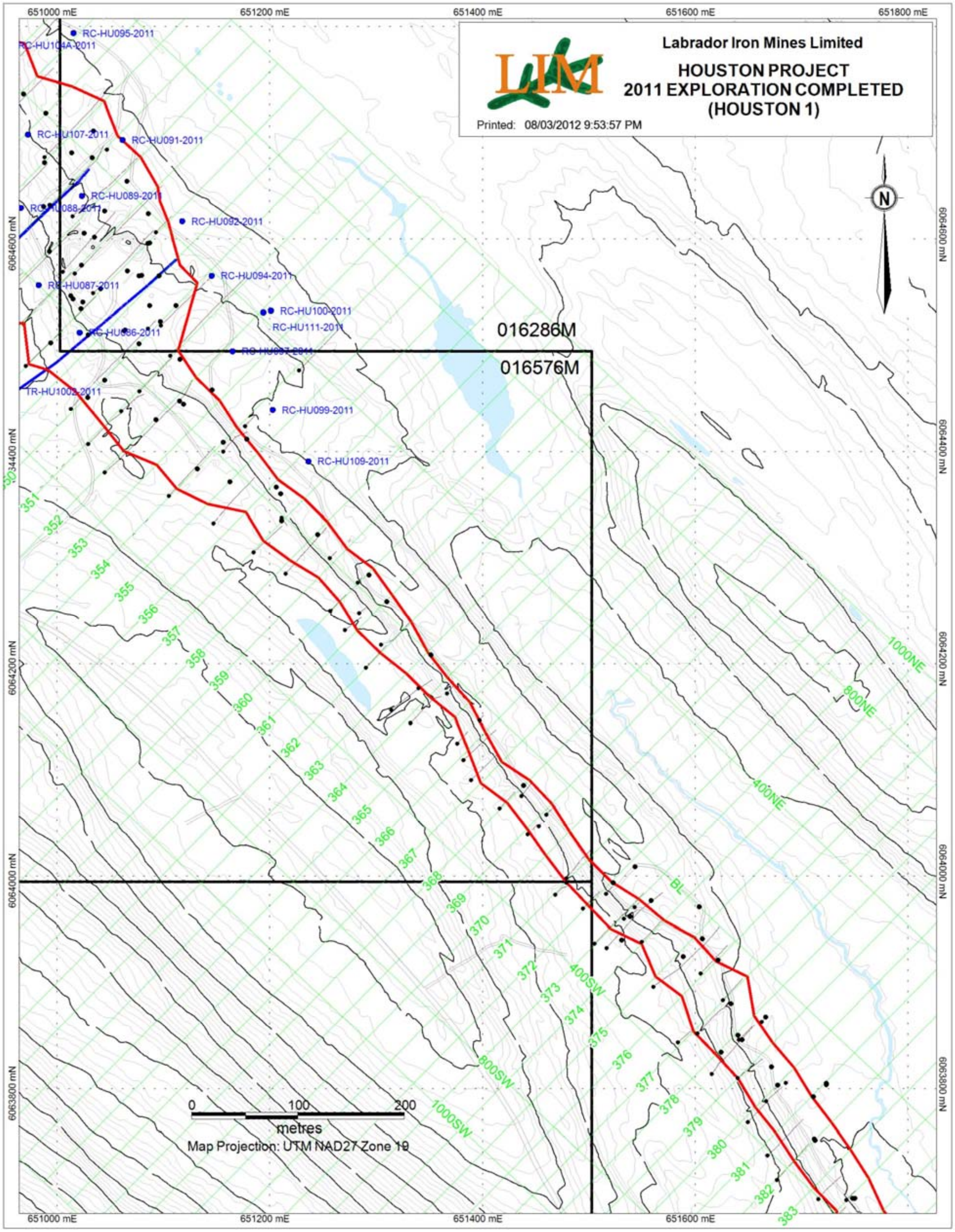
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
0
100
200
metres
Map Projection: UTM NAD27 Zone 19


Labrador Iron Mines Limited
LIM
HOUSTON PROJECT
2011 EXPLORATION COMPLETED
(HOUSTON 1)
Printed: 08/03/2012 9:53:57 PM
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651200 mE
651400 mE
651600 mE
651800 mE
6064600 mN
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6064200 mN
6064000 mN
6063800 mN
RC-HU095-2011
RC-HU104A-2011
RC-HU107-2011
RC-HU091-2011
RC-HU089-2011
RC-HU088-2011
RC-HU092-2011
RC-HU094-2011
RC-HU087-2011
RC-HU100-2011
RC-HU111-2011
RC-HU086-2011
RC-HU097-2011
TR-HU1002-2011
RC-HU099-2011
RC-HU109-2011
016286M
016576M
350
351
352
353
354
355
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357
358
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361
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363
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367
368
369
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371
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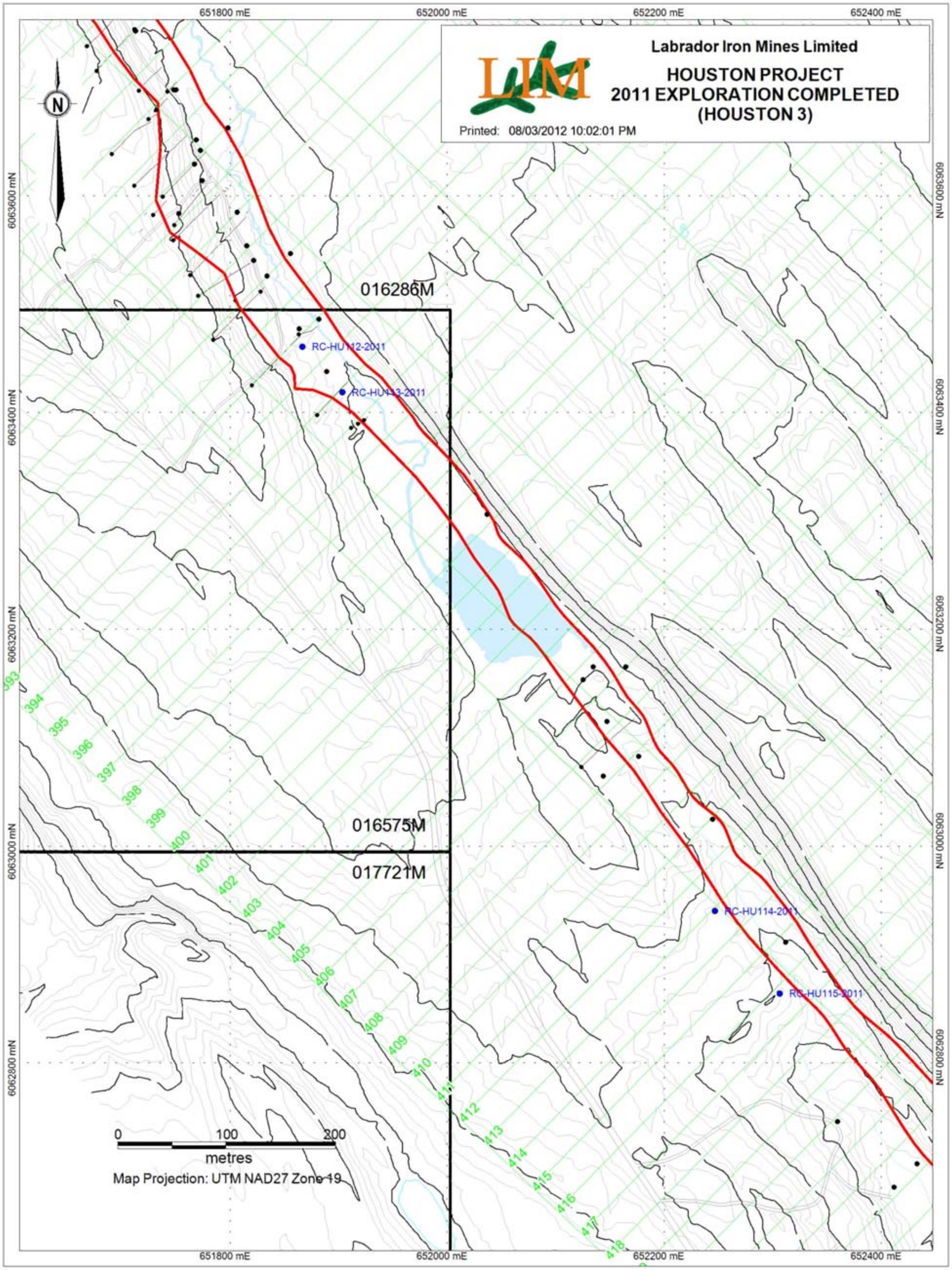
373
374
375
376
377
378
379
380
381
382
383
1000NE
800NE
400NE
BL
400SW
800SW
1000SW
0
100
200
metres
Map Projection: UTM NAD27 Zone 19


Labrador Iron Mines Limited
LIM
HOUSTON PROJECT
2011 EXPLORATION COMPLETED
(HOUSTON 3)
Printed: 08/03/2012 10:02:01 PM
N
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652000 mE
652200 mE
652400 mE
6063600 mN
6063400 mN
6063200 mN
6063000 mN
6062800 mN
016286M
016575M
017721M
RC-HU112-2011
RC-HU113-2011
RC-HU114-2011
RC-HU115-2011
393
394
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396
397
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411
412
413
414
415
416
417
418
0
100
200
metres
Map Projection: UTM NAD27 Zone 19

Table 22-1 Houston RC drill hole information

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
1	HN-06-01	650617.40	6065073.40	586.39	32.00	DD	0.00	-90.00	Cancelled	3-Aug-06	3-Aug-06
2	HN-06-02	650619.63	6065120.83	583.25	52.00	DD	230.00	-60.00	Cancelled	17-Aug-06	17-Aug-06
3	HN-06-03	651022.40	6064534.40	589.50	72.00	DD	0.00	-90.00	Completed	23-Jul-06	2-Aug-06
4	HN-06-04	650619.96	6065120.69	583.25	52.00	DD	0.00	-90.00	Cancelled	18-Aug-06	19-Aug-06
5	HN-06-05	651644.05	6063846.30	574.19	45.00	DD	0.00	-90.00	Abandoned	20-Aug-06	20-Aug-06
6	P306-1	650131.75	6065440.22	596.43	3.05	PIT	41.93	0.00	Completed		
7	P306-2	650143.89	6065450.40	595.39	3.35	PIT	37.14	0.00	Completed		
8	P306-3	650154.32	6065461.40	594.00	3.05	PIT	40.48	0.00	Completed		
9	P307-1	650122.40	6065390.07	603.14	3.05	PIT	44.99	0.00	Completed		
10	P307-2	650130.34	6065399.24	600.68	3.05	PIT	44.99	0.00	Completed		
11	P307-3	650139.84	6065407.96	598.44	3.05	PIT	41.14	0.00	Completed		
12	P312-1	650241.58	6065322.96	598.76	3.05	PIT	42.97	0.00	Completed		
13	P312-2	650252.53	6065333.31	597.49	3.05	PIT	44.98	0.00	Completed		
14	P312-3	650275.53	6065355.59	594.88	2.44	PIT	46.12	0.00	Completed		
15	P312-4	650286.12	6065365.51	594.26	2.44	PIT	46.17	0.00	Completed		
16	P312-5	650296.53	6065375.73	593.94	3.05	PIT	45.09	0.00	Completed		
17	P312-6	650307.31	6065386.44	593.99	3.05	PIT	45.76	0.00	Completed		
18	P312-7	650317.95	6065397.22	594.08	3.05	PIT	48.33	0.00	Completed		
19	P314-1	650136.80	6065117.60	614.64	3.05	PIT	43.90	0.00	Completed		
20	P314-10	650276.79	6065259.01	600.77	3.05	PIT	41.90	0.00	Completed		
21	P314-11	650288.54	6065270.90	599.50	3.05	PIT	40.71	0.00	Completed		
22	P314-12	650299.87	6065280.72	597.98	3.05	PIT	45.01	0.00	Completed		
23	P314-2	650148.58	6065129.70	612.90	3.05	PIT	45.60	0.00	Completed		
24	P314-3	650158.36	6065139.34	611.12	3.05	PIT	41.19	0.00	Completed		
25	P314-4	650179.68	6065161.10	610.00	3.05	PIT	40.95	0.00	Completed		
26	P314-5	650190.51	6065172.03	609.76	3.05	PIT	43.42	0.00	Completed		
27	P314-6	650200.54	6065183.19	609.34	2.74	PIT	43.98	0.00	Completed		
28	P314-7	650213.24	6065194.69	608.56	3.05	PIT	45.50	0.00	Completed		
29	P314-8	650233.22	6065215.68	606.51	3.05	PIT	44.07	0.00	Completed		
30	P314-9	650243.77	6065226.31	606.16	3.05	PIT	43.69	0.00	Completed		
31	P320-1	650338.85	6065055.50	608.85	3.05	PIT	44.07	0.00	Completed		
32	P320-2	650348.34	6065065.24	606.88	3.05	PIT	43.34	0.00	Completed		
33	P320-3	650359.07	6065076.15	605.96	3.05	PIT	44.42	0.00	Completed		
34	P320-4	650369.91	6065088.87	605.83	3.05	PIT	44.18	0.00	Completed		
35	P320-5	650378.37	6065095.76	605.85	3.05	PIT	43.36	0.00	Completed		
36	P320-6	650517.24	6065244.15	587.03	3.05	PIT	41.78	0.00	Completed		
37	P320-7	650530.11	6065255.12	585.27	3.05	PIT	42.50	0.00	Completed		

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
38	P320-8	650539.75	6065265.00	584.25	3.05	PIT	42.26	0.00	Completed		
39	P320-9	650550.57	6065275.93	583.93	3.05	PIT	42.52	0.00	Completed		
40	P322-1	650551.14	6065197.22	583.75	3.05	PIT	38.08	0.00	Completed		
41	P322-2	650559.26	6065200.11	582.97	3.05	PIT	36.41	0.00	Completed		
42	P322-3	650558.75	6065193.41	583.32	3.05	PIT	45.71	0.00	Completed		
43	P322-4	650569.51	6065200.37	582.13	3.05	PIT	41.76	0.00	Completed		
44	P325-1	650498.30	6065028.53	604.36	3.05	PIT	43.24	0.00	Completed		
45	P325-2	650612.06	6065142.43	582.19	3.05	PIT	44.08	0.00	Completed		
46	P327-1	650596.41	6065016.68	597.40	3.05	PIT	43.58	0.00	Completed		
47	P327-2	650679.79	6065089.31	581.05	3.05	PIT	53.94	0.00	Completed		
48	P328-1	650699.09	6065074.62	581.29	3.05	PIT	42.87	0.00	Completed		
49	P328-2	650708.16	6065088.40	580.09	3.66	PIT	41.91	0.00	Completed		
50	P337-1	650835.94	6064833.40	590.36	3.05	PIT	47.94	0.00	Completed		
51	P346-1	650861.60	6064456.96	595.97	3.05	PIT	46.56	0.00	Completed		
52	P346-2	650870.81	6064469.62	595.90	3.05	PIT	40.11	0.00	Completed		
53	P346-3	650881.25	6064480.31	595.02	3.05	PIT	46.71	0.00	Completed		
54	P346-4	650890.72	6064490.14	595.00	3.05	PIT	43.49	0.00	Completed		
55	P351-1	650984.15	6064365.44	594.49	3.05	PIT	46.37	0.00	Completed		
56	P351-2	650994.09	6064375.58	593.64	3.05	PIT	44.97	0.00	Completed		
57	P351-3	651004.55	6064385.83	593.02	3.05	PIT	42.24	0.00	Completed		
58	P351-4	651015.00	6064396.19	593.00	3.05	PIT	44.99	0.00	Completed		
59	P354-1	651071.27	6064321.11	593.01	3.05	PIT	44.45	0.00	Completed		
60	P354-2	651083.48	6064333.89	592.02	3.05	PIT	44.30	0.00	Completed		
61	P359-1	651273.86	6064315.00	586.04	3.05	PIT	43.49	0.00	Completed		
62	P386-1	651717.09	6063566.95	577.98	3.05	PIT	46.61	0.00	Completed		
63	P386-2	651720.81	6063582.07	577.42	3.05	PIT	41.78	0.00	Completed		
64	P387-1	651768.79	6063604.01	571.43	3.05	PIT	46.47	0.00	Completed		
65	P387-2	651780.07	6063615.77	568.89	3.05	PIT	45.08	0.00	Completed		
66	P387-3	651793.27	6063604.25	567.68	3.05	PIT	94.40	0.00	Completed		
67	P387-4	651795.91	6063607.61	567.41	3.05	PIT	128.38	0.00	Completed		
68	P388-1	651814.68	6063583.69	566.14	5.18	PIT	42.76	0.00	Completed		
69	P388-2	651804.09	6063583.98	566.70	6.10	PIT	44.23	0.00	Completed		
70	H1001CC	651118.93	6064444.79	590.60	46.02	RC		-90.00	Completed		
71	H1002CC	651310.00	6064258.50	584.00	53.34	RC		-90.00	Completed		
72	H1003CC	651245.00	6064322.00	587.84	51.82	RC		-90.00	Completed		
73	H1004CC	651162.53	6064371.26	593.31	76.20	RC		-90.00	Completed		
74	H1005CC	651156.29	6064408.72	590.10	57.91	RC		-90.00	Completed		
75	H1006CC	651093.13	6064430.24	592.32	30.48	RC		-90.00	Completed		

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
76	H1007CC	651115.32	6064447.70	590.50	50.90	RC		-90.00	Completed		
77	H1008CC	651076.87	6064501.74	587.70	128.02	RC	222.00	-55.00	Completed		
78	H1009CC	651111.92	6064537.46	586.61	25.91	RC		-90.00	Completed		
79	H1010CC	651041.22	6064553.26	587.20	19.81	RC		-90.00	Completed		
80	H1011CC	651024.25	6064540.58	589.10	33.53	RC		-90.00	Completed		
81	H1012CC	650993.04	6064588.55	590.00	52.73	RC		-90.00	Completed		
82	H1013CC	650948.46	6064674.27	589.90	48.77	RC		-90.00	Completed		
83	H1014CC	650989.50	6064718.68	582.33	39.62	RC		-90.00	Completed		
84	H1015CC	650945.08	6064759.51	585.96	51.82	RC		-90.00	Completed		
85	H1016CC	650993.28	6064632.08	588.34	60.96	RC		-90.00	Completed		
86	H1017CC	651085.45	6064595.92	585.00	47.24	RC	222.00	-55.00	Completed		
87	H1018CC	650988.28	6064672.13	585.71	67.06	RC		-90.00	Completed		
88	H1019CC	650994.07	6064502.40	593.93	44.20	RC		-90.00	Completed		
89	H1020CC	651028.95	6064451.01	593.50	30.48	RC		-90.00	Completed		
90	H1021CC	651044.85	6064467.35	592.61	79.25	RC		-90.00	Completed		
91	H1022CC	651131.92	6064383.37	593.00	54.86	RC		-90.00	Completed		
92	H1023CC	651095.85	6064565.57	585.50	53.34	RC		-90.00	Completed		
93	H1024CC	651035.37	6064601.87	587.03	54.86	RC		-90.00	Completed		
94	H1025CC	651022.87	6064575.63	586.00	62.48	RC		-90.00	Completed		
95	H1026CC	651097.27	6064522.80	587.00	41.15	RC		-90.00	Completed		
96	H1027CC	651351.60	6064208.50	583.50	39.62	RC	225.00	-55.00	Completed		
97	H1028CC	651211.38	6064334.78	592.50	56.39	RC		-90.00	Completed		
98	H2001CC	650728.95	6064925.71	591.93	21.34	RC		-90.00	Completed		
99	H2002CC	650690.96	6064973.19	589.75	27.43	RC		-90.00	Completed		
100	H2003CC	650648.26	6065012.88	589.50	15.24	RC		-90.00	Completed		
101	H2004CC	650608.34	6065062.17	589.04	76.20	RC		-90.00	Completed		
102	H2005CC	650587.54	6065134.33	585.12	35.05	RC		-90.00	Completed		
103	H2006CC	650551.84	6065178.72	584.70	18.59	RC		-90.00	Completed		
104	H2007CC	650521.04	6065149.90	591.20	94.49	RC		-90.00	Completed		
105	H2008CC	650493.85	6065170.02	591.05	118.57	RC		-90.00	Completed		
106	H2009CC	650467.57	6065185.29	591.79	99.06	RC		-90.00	Completed		
107	H2010CC	650493.65	6065205.94	588.60	44.20	RC		-90.00	Completed		
108	H2011CC	650376.09	6065265.70	593.00	57.91	RC		-90.00	Completed		
109	H2012CC	650327.46	6065300.84	595.65	35.05	RC		-90.00	Completed		
110	H2013CC	650265.17	6065371.34	594.74	15.24	RC		-90.00	Completed		
111	H2014CC	650579.29	6065125.55	586.43	103.63	RC		-90.00	Completed		
112	H2015CC	650667.19	6064992.38	589.29	54.86	RC		-90.00	Completed		
113	H2016CC	650619.63	6065120.83	583.25	80.77	RC		-90.00	Completed		

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
114	H2017CC	650530.79	6065162.82	588.97	62.48	RC		-90.00	Completed		
115	H2018CC	650478.14	6065197.97	589.44	56.39	RC		-90.00	Completed		
116	H2019CC	650624.63	6065075.81	585.27	54.86	RC		-90.00	Completed		
117	H2020CC	650656.72	6065066.01	583.64	39.93	RC		-90.00	Completed		
118	H3001CC	651833.73	6063525.69	566.28	105.46	RC		-90.00	Completed		
119	H3002CC	651806.33	6063584.54	566.61	64.31	RC		-90.00	Completed		
120	H3003CC	651863.52	6063477.05	566.10	30.48	RC		-90.00	Completed		
121	H3004CC	651747.84	6063697.53	569.49	60.96	RC		-90.00	Completed		
122	H3005CC	651712.98	6063751.94	570.70	67.06	RC		-90.00	Completed		
123	H3006CC	651677.82	6063803.52	572.30	67.06	RC		-90.00	Completed		
124	H3007CC	651640.51	6063850.37	574.31	57.91	RC		-90.00	Completed		
125	H3008CC	651438.91	6064085.72	583.20	44.20	RC		-90.00	Completed		
126	H3009CC	651523.02	6063993.75	579.38	35.05	RC	228.00	-55.00	Completed		
127	H3010CC	651621.49	6063921.08	575.80	61.87	RC	228.00	-53.00	Completed		
128	H3011CC	651723.19	6063805.33	571.00	54.86	RC	227.00	-56.00	Completed		
129	H3012CC	651766.93	6063628.91	570.71	49.38	RC	227.00	-53.00	Completed		
130	H3013CC	651798.00	6063662.33	568.96	42.67	RC	227.00	-55.00	Completed		
131	H3014CC	651855.48	6063546.64	567.19	53.04	RC	227.00	-64.00	Completed		
132	H3015CC	651881.58	6063485.84	566.00	19.51	RC	228.00	-55.00	Completed		
133	H3016CC	651888.87	6063437.56	565.91	61.26	RC	228.00	-57.00	Completed		
134	RC-HU001-2008	650615.01	6065119.17	582.92	97.00	RC	0.00	-90.00	Completed	28-Aug-08	1-Sep-08
135	RC-HU002-2008	650580.90	6065085.73	589.39	85.00	RC	0.00	-90.00	Completed	2-Sep-08	4-Sep-08
136	RC-HU003-2008	650566.88	6065067.87	594.30	54.00	RC	0.00	-90.00	Completed	4-Sep-08	6-Sep-08
137	RC-HU004-2008	651086.93	6064596.34	583.54	55.00	RC	0.00	-90.00	Completed	4-Sep-08	6-Sep-08
138	RC-HU005-2008	651077.26	6064565.33	584.94	33.00	RC	0.00	-90.00	Abandoned	1-Sep-08	3-Sep-08
139	RC-HU005A-2008	651079.79	6064565.64	584.94	87.00	RC	0.00	-90.00	Completed	1-Sep-08	3-Sep-08
140	RC-HU006-2008	651029.29	6064510.14	590.30	66.00	RC	0.00	-90.00	Completed	30-Aug-08	1-Sep-08
141	RC-HU007-2008	651723.25	6063803.73	570.03	45.00	RC	0.00	-90.00	Completed	7-Sep-08	8-Sep-08
142	RC-HU008-2008	651711.85	6063753.08	570.99	51.00	RC	0.00	-90.00	Completed	8-Sep-08	10-Sep-08
143	RC-HU009-2008	652125.40	6063153.65	565.10	93.00	RC	0.00	-90.00	Completed	9-Oct-08	11-Oct-08
144	RC-HU010-2008	652176.27	6063082.93	561.34	53.00	RC	0.00	-90.00	Completed	12-Oct-08	13-Oct-08
145	RC-HU011-2008	652143.98	6063064.82	564.68	72.00	RC	0.00	-90.00	Completed	13-Oct-08	15-Oct-08
146	RC-HU012-2009	651034.53	6064702.07	581.91	66.00	RC	0.00	-90.00	Completed	14-Aug-09	15-Aug-09
147	RC-HU013-2009	651013.77	6064681.52	582.62	75.00	RC	0.00	-90.00	Completed	15-Aug-09	17-Aug-09
148	RC-HU014-2009	651065.65	6064654.85	581.92	90.00	RC	0.00	-90.00	Completed	20-Aug-09	22-Aug-09
149	RC-HU015-2009	651044.72	6064626.52	584.40	69.00	RC	0.00	-90.00	Completed	22-Aug-09	23-Aug-09
150	RC-HU016-2009	651025.41	6064605.70	586.05	72.00	RC	0.00	-90.00	Completed	23-Aug-09	24-Aug-09
151	RC-HU017-2009	651085.67	6064624.06	581.32	79.00	RC	0.00	-90.00	Completed	24-Aug-09	27-Aug-09

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
152	RC-HU018-2009	651012.85	6064546.67	589.14	28.00	RC	0.00	-90.00	Completed	17-Aug-09	18-Aug-09
153	RC-HU018A-2009	651014.91	6064543.49	589.08	9.00	RC	0.00	-90.00	Completed	18-Aug-09	18-Aug-09
154	RC-HU019-2009	651087.05	6064537.19	585.70	69.00	RC	0.00	-90.00	Completed	27-Aug-09	28-Aug-09
155	RC-HU020-2009	651063.29	6064513.78	587.52	15.00	RC	0.00	-90.00	Abandoned	18-Aug-09	18-Aug-09
156	RC-HU020A-2009	651064.29	6064514.78	587.52	73.00	RC	0.00	-90.00	Completed	18-Aug-09	20-Aug-09
157	RC-HU021-2009	650538.35	6065192.22	584.71	30.00	RC	0.00	-90.00	Completed	29-Jul-09	29-Jul-09
158	RC-HU022-2009	650585.54	6065159.29	580.85	111.00	RC	0.00	-90.00	Completed	30-Aug-09	1-Sep-09
159	RC-HU023-2009	650556.83	6065133.10	588.80	99.00	RC	0.00	-90.00	Completed	2-Aug-09	4-Aug-09
160	RC-HU024-2009	650547.38	6065116.65	590.48	69.00	RC	0.00	-90.00	Completed	31-Jul-09	2-Aug-09
161	RC-HU025-2009	650603.19	6065134.29	583.40	126.00	RC	0.00	-90.00	Completed	28-Aug-09	30-Aug-09
162	RC-HU026-2009	650564.24	6065104.99	588.55	99.00	RC	0.00	-90.00	Completed	29-Jul-09	31-Jul-09
163	RC-HU027-2009	650646.78	6065092.64	580.83	120.00	RC	0.00	-90.00	Completed	4-Aug-09	6-Aug-09
164	RC-HU028-2009	650587.57	6065032.26	596.11	67.00	RC	0.00	-90.00	Completed	10-Aug-09	12-Aug-09
165	RC-HU029-2009	650661.25	6065054.94	583.41	93.00	RC	0.00	-90.00	Completed	6-Aug-09	8-Aug-09
166	RC-HU030-2009	650635.61	6065029.32	589.13	63.00	RC	0.00	-90.00	Completed	12-Aug-09	13-Aug-09
167	RC-HU031-2009	650616.92	6065011.73	594.01	33.00	RC	0.00	-90.00	Completed	13-Aug-09	14-Aug-09
168	RC-HU032-2009	650697.89	6065033.58	582.63	97.00	RC	0.00	-90.00	Completed	8-Aug-09	10-Aug-09
169	RC-HU033-2009	650560.18	6065174.57	584.00	90.00	RC	0.00	-90.00	Completed	1-Sep-09	2-Sep-09
170	RC-HU034-2009	651543.33	6064009.05	579.04	9.00	RC	0.00	-90.00	Completed	3-Sep-09	5-Sep-09
171	RC-HU034A-2009	651543.33	6064009.05	579.04	117.00	RC	0.00	-90.00	Completed	3-Sep-09	5-Sep-09
172	RC-HU035-2009	651558.81	6063977.04	577.68	82.00	RC	0.00	-90.00	Completed	5-Sep-09	6-Sep-09
173	RC-HU036-2009	651603.91	6063970.95	576.98	78.00	RC	0.00	-90.00	Completed	6-Sep-09	7-Sep-09
174	RC-HU037-2009	651666.29	6063867.81	572.60	81.00	RC	0.00	-90.00	Completed	7-Sep-09	8-Sep-09
175	RC-HU038-2009	651671.85	6063820.89	571.69	102.00	RC	0.00	-90.00	Completed	8-Sep-09	9-Sep-09
176	RC-HU039-2009	651633.81	6063880.08	574.17	96.00	RC	0.00	-90.00	Completed	9-Sep-09	11-Sep-09
177	RC-HU040-2009	651606.91	6063941.34	576.31	78.00	RC	0.00	-90.00	Completed	11-Sep-09	12-Sep-09
178	RC-HU041-2009	651538.89	6063962.01	579.85	72.00	RC	0.00	-90.00	Completed	12-Sep-09	14-Sep-09
179	RC-HU042-2009	651530.91	6063940.05	585.39	39.00	RC	0.00	-90.00	Completed	14-Sep-09	15-Sep-09
180	RC-HU043-2009	651624.32	6063834.54	578.42	42.00	RC	0.00	-90.00	Completed	15-Sep-09	16-Sep-09
181	RC-HU044-2009	651588.61	6063924.63	579.46	90.00	RC	0.00	-90.00	Completed	16-Sep-09	17-Sep-09
182	RC-HU045-2009	651749.96	6063697.55	569.35	72.00	RC	0.00	-90.00	Abandoned	17-Sep-09	18-Sep-09
183	RC-HU046-2009	651752.73	6063583.10	574.44	60.00	RC	0.00	-90.00	Completed	18-Sep-09	20-Sep-09
184	RC-HU047-2009	651774.34	6063613.61	570.02	66.00	RC	0.00	-90.00	Completed	20-Sep-09	21-Sep-09
185	RC-HU048-2009	651768.67	6063651.63	569.40	69.00	RC	0.00	-90.00	Completed	21-Sep-09	23-Sep-09
186	RC-HU049-2009	651711.30	6063792.70	570.82	72.00	RC	0.00	-90.00	Completed	23-Sep-09	25-Sep-09
187	RC-HU050-2009	651821.54	6063540.09	566.72	36.00	RC	0.00	-90.00	Abandoned	26-Sep-09	27-Sep-09
188	RC-HU050A-2009	651815.15	6063553.65	566.77	51.00	RC	0.00	-90.00	Abandoned	27-Sep-09	28-Sep-09
189	RC-HU051-2009	652147.12	6063114.87	564.03	9.00	RC	0.00	-90.00	Abandoned	29-Sep-09	29-Sep-09

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
190	RC-HU051A-2009	652147.12	6063114.87	564.03	6.00	RC	0.00	-90.00	Abandoned	29-Sep-09	29-Sep-09
191	RC-HU051B-2009	652147.12	6063114.87	564.03	69.00	RC	0.00	-90.00	Abandoned	29-Sep-09	1-Oct-09
192	RC-HU052-2010	650755.91	6064940.05	586.61	93.00	RC	0.00	-90.00	Completed	5-Oct-10	7-Oct-10
193	RC-HU053-2010	650864.94	6064889.77	583.32	93.00	RC	0.00	-90.00	Completed	7-Oct-10	8-Oct-10
194	RC-HU054-2010	650837.66	6064855.09	588.06	84.00	RC	0.00	-90.00	Completed	8-Oct-10	10-Oct-10
195	RC-HU055-2010	650805.02	6064825.88	591.90	60.00	RC	0.00	-90.00	Completed	10-Oct-10	11-Oct-10
196	RC-HU056-2010	650913.40	6064856.47	583.63	99.00	RC	0.00	-90.00	Completed	11-Oct-10	13-Oct-10
197	RC-HU057-2010	651115.75	6064487.26	585.18	60.00	RC	0.00	-90.00	Completed	13-Oct-10	14-Oct-10
198	RC-HU058-2010	651145.76	6064457.99	586.51	46.00	RC	0.00	-90.00	Completed	14-Oct-10	14-Oct-10
199	RC-HU059-2010	651178.68	6064411.60	585.74	54.00	RC	0.00	-90.00	Completed	14-Oct-10	15-Oct-10
200	RC-HU060-2010	651210.30	6064359.88	588.82	67.00	RC	0.00	-90.00	Completed	15-Oct-10	16-Oct-10
201	RC-HU061-2010	650881.48	6064821.71	588.86	87.00	RC	0.00	-90.00	Completed	16-Oct-10	17-Oct-10
202	RC-HU062-2010	650270.68	6065362.63	595.57	32.00	RC	0.00	-90.00	Completed	17-Oct-10	24-Oct-10
203	RC-HU063-2010	650856.20	6064795.01	590.13	72.00	RC	0.00	-90.00	Completed	18-Oct-10	19-Oct-10
204	RC-HU064-2010	650807.90	6064908.13	586.39	105.00	RC	0.00	-90.00	Completed	19-Oct-10	22-Oct-10
205	RC-HU065-2010	650883.46	6064907.84	581.71	64.00	RC	0.00	-90.00	Completed	22-Oct-10	24-Oct-10
206	RC-HU066-2010	650370.77	6065283.14	593.63	66.00	RC	0.00	-90.00	Completed	24-Oct-10	26-Oct-10
207	RC-HU067-2010	650786.36	6064970.58	580.52	48.00	RC	0.00	-90.00	Completed	24-Oct-10	25-Oct-10
208	RC-HU068-2010	650734.55	6064912.17	590.72	67.00	RC	0.00	-90.00	Completed	25-Oct-10	26-Oct-10
209	RC-HU069-2010	650383.21	6065258.26	592.63	69.00	RC	0.00	-90.00	Completed	26-Oct-10	27-Oct-10
210	RC-HU070-2010	650783.97	6064887.50	589.76	66.00	RC	0.00	-90.00	Completed	26-Oct-10	27-Oct-10
211	RC-HU071-2010	650470.72	6065184.06	590.93	99.00	RC	0.00	-90.00	Completed	27-Oct-10	29-Oct-10
212	RC-HU072-2010	650443.97	6065245.06	590.37	73.00	RC	0.00	-90.00	Completed	27-Oct-10	29-Oct-10
213	RC-HU073-2010	650465.99	6065222.50	589.57	58.00	RC	0.00	-90.00	Abandoned	29-Oct-10	30-Oct-10
214	RC-HU073A-2010	650463.59	6065223.36	589.22	52.00	RC	0.00	-90.00	Abandoned	30-Oct-10	31-Oct-10
215	RC-HU074-2010	650813.12	6064931.81	581.70	105.00	RC	0.00	-90.00	Completed	29-Oct-10	31-Oct-10
216	RC-HU075-2010	650692.39	6064974.64	589.24	39.00	RC	0.00	-90.00	Completed	31-Oct-10	1-Nov-10
217	RC-HU076-2010	650927.81	6064785.12	585.95	46.00	RC	0.00	-90.00	Completed	1-Nov-10	2-Nov-10
218	RC-HU077-2011	650493.21	6065249.35	590.71	90.00	RC	0.00	-90.00	Completed	23-Jun-11	25-Jun-11
219	RC-HU078-2011	650441.10	6065275.17	591.81	96.00	RC	0.00	-90.00	Completed	25-Jun-11	29-Jun-11
220	RC-HU079-2011	650393.36	6065319.23	593.07	66.00	RC	0.00	-90.00	Completed	29-Jun-11	1-Jul-11
221	RC-HU080-2011	650684.90	6065005.57	589.64	111.00	RC	0.00	-90.00	Completed	1-Jul-11	4-Jul-11
222	RC-HU081-2011	650739.68	6064974.54	588.22	76.00	RC	0.00	-90.00	Completed	4-Jul-11	6-Jul-11
223	RC-HU082-2011	650757.20	6064986.88	585.83	96.00	RC	0.00	-90.00	Completed	6-Jul-11	8-Jul-11
224	RC-HU083-2011	650721.68	6065002.74	587.39	33.00	RC	0.00	-90.00	Completed	8-Jul-11	10-Jul-11
225	RC-HU083A-2011	650721.11	6065003.54	588.04	54.00	RC	0.00	-90.00	Completed	13-Aug-11	15-Aug-11
226	RC-HU084-2011	650710.55	6064942.92	595.17	90.00	RC	0.00	-90.00	Completed	10-Jul-11	12-Jul-11
227	RC-HU085-2011	650767.48	6064911.90	591.45	15.00	RC	0.00	-90.00	Abandoned	12-Jul-11	13-Jul-11

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
228	RC-HU085B-2011	650763.42	6064903.48	592.68	3.00	RC	0.00	-90.00	Abandoned	13-Jul-11	13-Jul-11
229	RC-HU085C-2011	650763.42	6064903.48	592.68	75.00	RC	0.00	-90.00	Completed	11-Aug-11	12-Aug-11
230	RC-HU086-2011	651021.35	6064512.38	592.67	75.00	RC	0.00	-90.00	Completed	13-Jul-11	14-Jul-11
231	RC-HU087-2011	650982.86	6064556.51	595.33	54.00	RC	0.00	-90.00	Completed	14-Jul-11	15-Jul-11
232	RC-HU088-2011	650966.16	6064629.54	592.06	51.00	RC	0.00	-90.00	Completed	15-Jul-11	16-Jul-11
233	RC-HU089-2011	651023.45	6064640.94	588.17	71.00	RC	0.00	-90.00	Completed	16-Jul-11	17-Jul-11
234	RC-HU090-2011	650862.79	6064930.49	582.02	106.00	RC	0.00	-90.00	Completed	17-Jul-11	21-Jul-11
235	RC-HU091-2011	651061.45	6064693.54	584.16	114.00	RC	0.00	-90.00	Completed	17-Jul-11	19-Jul-11
236	RC-HU092-2011	651117.66	6064616.96	585.07	84.00	RC	0.00	-90.00	Completed	19-Jul-11	25-Jul-11
237	RC-HU093-2011	650906.84	6064880.99	585.24	84.00	RC	0.00	-90.00	Completed	21-Jul-11	25-Jul-11
238	RC-HU094-2011	651145.45	6064565.54	585.69	87.00	RC	0.00	-90.00	Completed	25-Jul-11	27-Jul-11
239	RC-HU095-2011	651015.60	6064793.71	582.31	87.00	RC	0.00	-90.00	Completed	25-Jul-11	27-Jul-11
240	RC-HU096-2011	650920.26	6064720.39	592.91	33.00	RC	0.00	-90.00	Completed	27-Jul-11	28-Jul-11
241	RC-HU097-2011	651165.12	6064494.61	590.30	86.00	RC	0.00	-90.00	Completed	27-Jul-11	29-Jul-11
242	RC-HU098-2011	650905.64	6064748.56	592.99	93.00	RC	0.00	-90.00	Completed	28-Jul-11	30-Jul-11
243	RC-HU099-2011	651202.96	6064439.18	587.41	45.00	RC	0.00	-90.00	Completed	29-Jul-11	30-Jul-11
244	RC-HU100-2011	651201.28	6064532.58	585.56	13.00	RC	0.00	-90.00	Abandoned	30-Jul-11	30-Jul-11
245	RC-HU101-2011	650845.69	6064823.58	593.54	91.00	RC	0.00	-90.00	Completed	30-Jul-11	31-Jul-11
246	RC-HU102-2011	650936.23	6064826.18	587.65	87.00	RC	0.00	-90.00	Completed	30-Jul-11	1-Aug-11
247	RC-HU103-2011	650811.84	6064859.04	593.62	87.00	RC	0.00	-90.00	Completed	31-Jul-11	2-Aug-11
248	RC-HU104-2 011	650956.81	6064797.86	586.19	99.00	RC	0.00	-90.00	Abandoned	1-Aug-11	4-Aug-11
249	RC-HU104A-2011	650954.81	6064795.86	586.19	99.00	RC	0.00	-90.00	Completed	1-Aug-11	4-Aug-11
250	RC-HU105-2011	650833.75	6064882.51	589.78	12.00	RC	0.00	-90.00	Abandoned	2-Aug-11	3-Aug-11
251	RC-HU105A-2011	650831.75	6064881.51	589.78	94.00	RC	0.00	-90.00	Completed	3-Aug-11	6-Aug-11
252	RC-HU106-2011	650871.10	6064761.51	594.27	72.00	RC	0.00	-90.00	Completed	4-Aug-11	6-Aug-11
253	RC-HU107-2011	650972.59	6064698.88	588.43	82.00	RC	0.00	-90.00	Completed	6-Aug-11	7-Aug-11
254	RC-HU108-2011	650891.98	6064789.66	593.71	58.00	RC	0.00	-90.00	Completed	7-Aug-11	8-Aug-11
255	RC-HU109-2011	651236.42	6064390.69	587.95	13.00	RC	0.00	-90.00	Completed	8-Aug-11	8-Aug-11
256	RC-HU110-2011	650790.65	6064944.29	586.29	105.00	RC	0.00	-90.00	Completed	9-Aug-11	11-Aug-11
257	RC-HU111-2011	651194.07	6064531.19	585.99	57.00	RC	0.00	-90.00	Completed	9-Aug-11	10-Aug-11
258	RC-HU112-2011	651866.51	6063460.63	568.30	67.00	RC	0.00	-90.00	Completed	10-Aug-11	11-Aug-11
259	RC-HU113-2011	651903.22	6063418.42	567.98	105.00	RC	0.00	-90.00	Completed	11-Aug-11	13-Aug-11
260	RC-HU114-2011	652246.51	6062940.01	560.87	30.00	RC	0.00	-90.00	Completed	14-Aug-11	14-Aug-11
261	RC-HU115-2011	652306.47	6062864.13	555.84	66.00	RC	0.00	-90.00	Completed	15-Aug-11	16-Aug-11
262	RC-HU116-2011	650882.21	6064851.47	589.37	99.00	RC	0.00	-90.00	Completed	15-Aug-11	18-Aug-11
263	X1806CC	652359.86	6062745.96	549.27		RC	0.00	-90.00	Completed		
264	X1807CC	651772.45	6063641.64	569.43		RC	0.00	-90.00	Completed		
265	X1808CC	651206.22	6064366.31	588.90	56.08	RC	225.00	-57.50	Completed		

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
266	X1809CC	651293.46	6064283.94	584.40	56.39	RC	224.50	-60.00	Completed		
267	X1810CC	651066.08	6064569.87	587.00	43.89	RC	227.00	-55.00	Completed		
268	X1811CC	650987.58	6064630.96	588.60	43.89	RC	227.00	-55.00	Completed		
269	X1812CC	651033.08	6064677.04	582.00	60.05	RC	227.00	-55.00	Completed		
270	X1813CC	650968.61	6064736.50	584.52	37.80	RC		-90.00	Completed		
271	X1814CC	650931.45	6064695.78	590.10	44.20	RC	0.00	-90.00	Completed		
272	X1815CC	650745.07	6064940.37	587.60	27.43	RC	227.00	-55.00	Completed		
273	X1816CC	650589.20	6065085.14	588.54	62.48	RC		-90.00	Completed		
274	X1817CC	650575.83	6065207.91	582.20	52.43	RC	227.00	-55.00	Completed		
275	X1818CC	650447.95	6065244.38	590.92	62.18	RC	227.00	-55.00	Completed		
276	X1842CC	652036.64	6063305.87	565.31	30.48	RC	305.00	-55.00	Completed	30-Aug-78	30-Aug-78
277	X1843CC	652311.96	6062911.43	554.86	57.00	RC	218.70	-57.00	Completed	31-Aug-78	31-Aug-78
278	X1844CC	652433.17	6062707.03	546.00	49.68	RC	224.60	-56.00	Completed	31-Aug-78	2-Sep-78
279	X1845CC	652244.73	6063024.99	559.16	49.68	RC	215.30	-56.00	Completed	2-Sep-78	4-Sep-78
280	X1846CC	652411.86	6062685.13	546.10	32.92	RC	224.50	-54.00	Completed	4-Sep-78	6-Sep-78
281	X1847CC	652704.86	6062347.13	544.00	54.86	RC	234.20	-57.00	Completed	6-Sep-78	7-Sep-78
282	X1848CC	653150.72	6061814.39	532.00	57.91	RC	234.20	-57.00	Completed	7-Sep-78	8-Sep-78
283	X1849CC	652164.69	6063165.45	565.30	28.35	RC	228.00	-56.00	Completed	8-Sep-78	9-Sep-78
284	X1850CC	652134.58	6063165.47	563.84	64.92	RC	228.00	-55.00	Completed	11-Sep-78	12-Sep-78
285	HN-TR-01-06	651005.59	6064569.37	587.00	75.00	TR	41.00	-2.00	Completed	22-Aug-06	23-Aug-06
286	TR306-1	650164.73	6065472.26	593.04	48.77	TR	41.19	0.00	Completed		
287	TR309-1	650188.55	6065386.57	597.97	94.49	TR	42.72	0.00	Completed		
288	TR311-1	650231.51	6065335.00	599.07	18.29	TR	39.81	0.00	Completed		
289	TR311-2	650240.03	6065352.05	598.07	89.92	TR	44.20	0.00	Completed		
290	TR312-1	650262.35	6065343.66	595.74	7.62	TR	44.63	0.00	Completed		
291	TR313-1	650253.19	6065293.73	599.11	59.44	TR	43.79	0.00	Completed		
292	TR313-2	650304.24	6065346.85	594.77	27.43	TR	44.58	0.00	Completed		
293	TR314-1	650161.89	6065142.30	610.93	24.38	TR	44.09	0.00	Completed		
294	TR314-2	650217.60	6065198.82	608.11	10.67	TR	44.09	0.00	Completed		
295	TR314-3	650255.61	6065238.57	606.46	15.24	TR	44.65	0.00	Completed		
296	TR314-4	650266.23	6065247.94	603.05	13.72	TR	43.47	0.00	Completed		
297	TR314-5	650299.33	6065281.23	597.92	15.24	TR	43.79	0.00	Completed		
298	TR314-6	650307.87	6065292.21	596.93	73.15	TR	43.55	0.00	Completed		
299	TR314-7	650359.95	6065339.74	592.84	9.14	TR	43.74	0.00	Completed		
300	TR315-1	650311.27	6065266.90	598.49	51.82	TR	44.99	0.00	Completed		
301	TR315-2	650358.22	6065310.66	594.13	4.57	TR	45.66	0.00	Completed		
302	TR316-1	650337.55	6065226.45	599.75	59.44	TR	42.42	0.00	Completed		
303	TR316-2	650389.22	6065278.97	592.51	18.29	TR	45.61	0.00	Completed		

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
304	TR318-1	650359.65	6065170.30	603.06	57.91	TR	44.45	0.00	Completed		
305	TR318-2	650398.16	6065209.66	596.24	88.39	TR	44.33	0.00	Completed		
306	TR319-1	650385.06	6065150.68	603.67	103.63	TR	45.96	0.00	Completed		
307	TR319-2	650478.95	6065231.23	588.85	22.86	TR	40.24	0.00	Completed		
308	TR319-3	650392.89	6065159.76	601.70	100.58	TR	43.40	0.00	Completed		
309	TR319-4	650460.53	6065233.46	590.20	53.34	TR	46.58	0.00	Completed		
310	TR320-1	650392.74	6065111.62	605.69	96.01	TR	46.20	0.00	Completed		
311	TR320-2	650455.57	6065181.16	592.97	57.91	TR	44.44	0.00	Completed		
312	TR320-3	650498.37	6065218.14	588.11	12.19	TR	44.02	0.00	Completed		
313	TR321-1	650433.33	6065112.51	602.60	140.21	TR	44.40	0.00	Completed		
314	TR322-1	650499.24	6065116.30	596.47	45.72	TR	35.50	0.00	Completed		
315	TR322-2	650534.78	6065166.81	588.55	28.96	TR	36.60	0.00	Completed		
316	TR322-3	650484.95	6065115.01	598.22	51.82	TR	46.04	0.00	Completed		
317	TR322-4	650529.67	6065161.30	588.97	27.43	TR	44.87	0.00	Completed		
318	TR322-5	650562.87	6065214.11	582.77	33.53	TR	19.55	0.00	Completed		
319	TR323-1	650447.87	6065034.57	605.00	140.21	TR	45.31	0.00	Completed		
320	TR323-2	650499.09	6065091.99	599.27	21.34	TR	35.82	0.00	Completed		
321	TR323-3	650536.60	6065146.51	589.82	18.29	TR	40.26	0.00	Completed		
322	TR323-4	650543.48	6065133.28	589.84	45.72	TR	47.32	0.00	Completed		
323	TR323-5	650564.67	6065183.39	583.13	6.10	TR	35.75	0.00	Completed		
324	TR323-6	650582.37	6065180.62	581.68	9.14	TR	43.39	0.00	Completed		
325	TR325-1	650510.64	6065034.90	603.94	12.19	TR	49.01	0.00	Completed		
326	TR325-2	650531.61	6065052.82	600.43	18.29	TR	56.21	0.00	Completed		
327	TR325-3	650542.19	6065072.81	597.47	18.29	TR	69.90	0.00	Completed		
328	TR325-4	650551.17	6065075.90	596.15	15.24	TR	44.33	0.00	Completed		
329	TR325-5	650565.08	6065073.32	594.13	16.76	TR	40.17	0.00	Completed		
330	TR325-6	650564.43	6065085.35	592.45	39.62	TR	44.74	0.00	Completed		
331	TR325-7	650579.67	6065082.98	590.55	60.96	TR	46.62	0.00	Completed		
332	TR325-8	650590.95	6065116.44	586.00	18.29	TR	41.35	0.00	Completed		
333	TR325-9	650602.63	6065126.11	584.07	6.10	TR	44.24	0.00	Completed		
334	TR326-1	650565.92	6065033.17	599.31	112.78	TR	44.63	0.00	Completed		
335	TR327-1	650607.32	6065027.42	594.51	42.67	TR	46.28	0.00	Completed		
336	TR327-2	650636.20	6065057.55	585.22	25.91	TR	45.32	0.00	Completed		
337	TR327-3	650624.11	6065046.50	588.97	42.67	TR	44.33	0.00	Completed		
338	TR327-4	650657.72	6065074.62	583.27	33.53	TR	43.87	0.00	Completed		
339	TR328-1	650613.24	6064986.71	597.70	112.78	TR	43.34	0.00	Completed		
340	TR328-2	650668.28	6065043.20	584.25	12.19	TR	45.27	0.00	Completed		
341	TR330-1	650671.68	6064953.58	594.82	45.72	TR	40.90	0.00	Completed		

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
342	TR332-1	650709.01	6064904.43	593.82	36.58	TR	45.66	0.00	Completed		
343	TR332-2	650730.54	6064934.00	590.43	27.43	TR	46.23	0.00	Completed		
344	TR332-3	650754.24	6064948.09	586.19	56.39	TR	45.02	0.00	Completed		
345	TR334-1	650762.90	6064875.16	591.81	51.82	TR	44.33	0.00	Completed		
346	TR334-2	650799.37	6064915.48	585.67	51.82	TR	38.30	0.00	Completed		
347	TR334-3	650839.07	6064950.25	581.01	15.24	TR	44.02	0.00	Completed		
348	TR336-1	650800.61	6064831.99	591.79	76.20	TR	44.54	0.00	Completed		
349	TR337-1	650828.35	6064807.29	591.33	27.43	TR	44.36	0.00	Completed		
350	TR337-2	650878.19	6064856.48	586.20	38.10	TR	41.87	0.00	Completed		
351	TR338-1	650840.16	6064786.38	592.25	79.25	TR	44.61	0.00	Completed		
352	TR339-1	650869.31	6064764.93	591.74	30.48	TR	45.14	0.00	Completed		
353	TR339-2	650890.32	6064788.00	590.97	24.38	TR	45.19	0.00	Completed		
354	TR340-1	650882.27	6064734.13	592.02	27.43	TR	45.55	0.00	Completed		
355	TR340-2	650897.92	6064758.67	590.34	94.49	TR	45.05	0.00	Completed		
356	TR341-1	650899.56	6064705.91	592.53	146.30	TR	44.66	0.00	Completed		
357	TR342-1	650880.00	6064653.60	594.69	36.58	TR	43.87	0.00	Completed		
358	TR342-2	650910.01	6064676.12	593.18	121.92	TR	54.24	0.00	Completed		
359	TR343-1	650909.26	6064655.02	594.04	18.29	TR	57.92	0.00	Completed		
360	TR344-1	650917.74	6064596.66	595.01	105.16	TR	44.72	0.00	Completed		
361	TR344-2	650988.14	6064677.27	585.41	92.96	TR	44.60	0.00	Completed		
362	TR345-1	650949.20	6064587.82	594.51	140.21	TR	45.28	0.00	Completed		
363	TR345-2	651047.11	6064684.52	582.00	3.05	TR	36.91	0.00	Completed		
364	TR346-1	650901.78	6064500.94	595.31	94.49	TR	42.02	0.00	Completed		
365	TR346-2	650945.29	6064537.60	596.00	109.73	TR	44.64	0.00	Completed		
366	TR346-3	651014.80	6064621.48	586.18	82.30	TR	44.99	0.00	Completed		
367	TR347-1	650960.01	6064514.83	595.38	76.20	TR	44.86	0.00	Completed		
368	TR347-2	651016.56	6064567.40	587.66	117.35	TR	44.77	0.00	Completed		
369	TR348-1	650970.70	6064480.68	595.35	92.96	TR	45.38	0.00	Completed		
370	TR348-2	651034.00	6064548.88	588.14	82.30	TR	47.52	0.00	Completed		
371	TR348-3	651092.82	6064606.43	583.44	21.34	TR	44.32	0.00	Completed		
372	TR350-1	651012.83	6064440.08	594.00	96.01	TR	41.64	0.00	Completed		
373	TR350-2	651085.28	6064515.95	587.00	10.67	TR	45.38	0.00	Completed		
374	TR350-3	651097.60	6064518.85	587.00	70.10	TR	46.20	0.00	Completed		
375	TR351-1	651029.43	6064407.06	593.54	42.67	TR	43.91	0.00	Completed		
376	TR351-2	651060.47	6064437.86	595.00	27.43	TR	48.11	0.00	Completed		
377	TR351-3	651077.69	6064456.99	591.89	44.20	TR	43.98	0.00	Completed		
378	TR351-4	651106.42	6064490.45	587.01	106.38	TR	42.43	0.00	Completed		
379	TR352-1	651044.65	6064380.01	593.00	121.92	TR	48.11	0.00	Completed		

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
380	TR354-1	651105.02	6064358.11	592.78	64.01	TR	43.17	0.00	Completed		
381	TR354-2	651156.45	6064399.86	591.56	30.48	TR	39.64	0.00	Completed		
382	TR354-3	651176.69	6064423.77	585.97	13.72	TR	43.27	0.00	Completed		
383	TR354-4	651227.57	6064476.42	585.40	57.91	TR	43.83	0.00	Completed		
384	TR355-1	651147.14	6064332.34	591.78	57.91	TR	40.21	0.00	Completed		
385	TR357-1	651184.90	6064305.21	590.87	36.58	TR	46.96	0.00	Completed		
386	TR357-2	651211.14	6064337.47	591.89	9.14	TR	141.56	0.00	Completed		
387	TR358-1	651214.83	6064285.18	590.98	59.44	TR	41.89	0.00	Completed		
388	TR359-1	651256.26	6064299.61	588.36	9.14	TR	45.02	0.00	Completed		
389	TR360-1	651256.99	6064249.97	590.11	21.34	TR	44.01	0.00	Completed		
390	TR360-2	651282.70	6064276.57	586.29	6.10	TR	38.26	0.00	Completed		
391	TR361-1	651270.51	6064231.69	590.00	19.81	TR	51.62	0.00	Completed		
392	TR361-2	651284.30	6064247.96	590.79	7.62	TR	52.33	0.00	Completed		
393	TR362-1	651290.54	6064196.25	589.46	27.43	TR	42.74	0.00	Completed		
394	TR362-2	651304.59	6064217.85	589.26	36.58	TR	69.21	0.00	Completed		
395	TR364-1	651314.32	6064156.24	589.99	30.48	TR	51.50	0.00	Completed		
396	TR364-2	651340.05	6064176.94	589.53	15.24	TR	62.47	0.00	Completed		
397	TR364-3	651332.38	6064144.13	590.73	39.62	TR	43.14	0.00	Completed		
398	TR364-4	651366.67	6064171.95	586.21	9.14	TR	40.23	0.00	Completed		
399	TR365-1	651376.26	6064125.15	589.49	15.24	TR	41.84	0.00	Completed		
400	TR365-2	651397.18	6064146.61	584.60	6.10	TR	39.94	0.00	Completed		
401	TR366-1	651382.30	6064109.62	588.68	42.67	TR	47.14	0.00	Completed		
402	TR367-1	651389.20	6064090.42	588.93	36.58	TR	45.48	0.00	Completed		
403	TR368-1	651415.97	6064063.98	587.65	21.34	TR	43.45	0.00	Completed		
404	TR368-2	651436.75	6064075.54	585.67	18.29	TR	37.14	0.00	Completed		
405	TR369-1	651442.69	6064039.40	587.17	12.19	TR	44.32	0.00	Completed		
406	TR369-2	651453.13	6064047.08	586.31	3.05	TR	42.27	0.00	Completed		
407	TR369-3	651459.99	6064058.04	582.81	12.19	TR	46.84	0.00	Completed		
408	TR371-1	651468.69	6063982.48	586.00	15.24	TR	42.73	0.00	Completed		
409	TR371-2	651479.13	6063993.95	585.64	3.05	TR	42.39	0.00	Completed		
410	TR371-3	651479.13	6063997.94	585.42	36.58	TR	38.55	0.00	Completed		
411	TR372-1	651494.39	6063969.31	586.00	22.86	TR	44.81	0.00	Completed		
412	TR372-2	651516.11	6063983.26	581.26	9.14	TR	42.49	0.00	Completed		
413	TR373-1	651533.05	6063959.78	581.96	15.24	TR	56.22	0.00	Completed		
414	TR373-2	651542.92	6063970.75	579.43	6.10	TR	45.05	0.00	Completed		
415	TR373-3	651505.36	6063936.62	586.00	67.06	TR	44.47	0.00	Completed		
416	TR374-1	651550.01	6063938.50	582.71	30.48	TR	43.68	0.00	Completed		
417	TR376-1	651605.19	6063908.70	578.05	36.58	TR	43.90	0.00	Completed		

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
418	TR377-1	651583.80	6063843.76	584.58	16.76	TR	49.53	0.00	Completed		
419	TR377-2	651602.08	6063852.18	581.81	39.62	TR	44.01	0.00	Completed		
420	TR377-3	651626.02	6063883.66	576.28	27.43	TR	43.07	0.00	Completed		
421	TR378-1	651641.31	6063846.42	574.64	17.07	TR	45.25	0.00	Completed		
422	TR378-2	651662.36	6063863.05	573.49	3.05	TR	48.11	0.00	Completed		
423	TR379-1	651639.76	6063810.19	578.89	30.48	TR	52.47	0.00	Completed		
424	TR380-1	651649.42	6063768.88	581.30	24.38	TR	44.40	0.00	Completed		
425	TR380-2	651666.83	6063788.57	574.95	20.42	TR	48.87	0.00	Completed		
426	TR380-3	651685.28	6063805.45	571.88	3.05	TR	50.60	0.00	Completed		
427	TR382-1	651676.78	6063714.79	580.20	45.72	TR	41.80	0.00	Completed		
428	TR384-1	651690.82	6063638.33	578.00	47.24	TR	44.53	0.00	Completed		
429	TR384-2	651724.65	6063670.59	576.61	12.19	TR	60.80	0.00	Completed		
430	TR384-3	651731.72	6063678.97	574.85	15.24	TR	43.37	0.00	Completed		
431	TR384-4	651742.10	6063695.84	570.39	12.19	TR	43.59	0.00	Completed		
432	TR385-1	651711.57	6063609.17	577.30	67.06	TR	46.08	0.00	Completed		
433	TR386-1	651728.73	6063581.83	576.76	18.29	TR	43.41	0.00	Completed		
434	TR386-2	651737.61	6063598.99	575.89	57.91	TR	44.25	0.00	Completed		
435	TR387-1	651747.68	6063558.67	575.14	60.96	TR	45.23	0.00	Completed		
436	TR388-1	651763.34	6063526.68	575.14	74.68	TR	43.76	0.00	Completed		
437	TR390-1	651784.23	6063467.02	575.22	60.05	TR	44.59	0.00	Completed		
438	TR390-2	651827.82	6063511.52	567.57	5.18	TR	43.88	0.00	Completed		
439	TR392-1	651820.03	6063425.08	574.09	64.01	TR	44.43	0.00	Completed		
440	TR392-2	651862.94	6063471.89	566.09	19.81	TR	75.89	0.00	Completed		
441	TR394-1	651879.97	6063397.58	567.02	45.72	TR	42.89	0.00	Completed		
442	TR395-1	651911.22	6063385.44	565.19	3.96	TR	63.45	0.00	Completed		
443	TR395-2	651917.69	6063389.32	565.01	3.66	TR	74.16	0.00	Completed		
444	TR395-3	651923.46	6063392.80	565.00	4.27	TR	44.02	0.00	Completed		
445	TR-HU1001-2011	650884.77	6064528.00	594.00	201.00	TR	56.40	4.60	Completed		
446	TR-HU1002-2011	650961.53	6064456.84	593.50	195.00	TR	54.60	0.20	Completed		
447	TR-HU2-001-2009	650555.00	6065168.00	585.00	3.50	TR	30.00	0.00	Completed	25-Aug-09	25-Aug-09
448	TR-HU2001-2011	650454.20	6065075.00	604.40	155.00	TR	40.68	-7.36	Completed		
449	TR-HU3-001-2009	651516.86	6063932.40	584.19	76.00	TR	34.73	-1.20	Completed	30-Aug-09	31-Aug-09
450	TR-HU3-002-2009	651560.61	6063896.22	583.97	84.67	TR	51.91	-8.67	Completed	1-Sep-09	1-Sep-09
451	TR-HU3-003-2009	651615.48	6063814.04	582.76	63.40	TR	42.11	-10.73	Completed	2-Sep-09	2-Sep-09
452	TR-HU3-004-2009	651668.13	6063737.85	578.86	49.00	TR	48.78	-5.11	Completed	2-Sep-09	2-Sep-09
453	TR-HU3-005-2009	651715.66	6063696.62	575.00	31.00	TR	35.07	-20.00	Completed	2-Sep-09	2-Sep-09
454	TR-HU3-006-2009	651748.32	6063572.90	575.12	48.00	TR	41.11	-6.58	Completed	3-Sep-09	3-Sep-09
455	TR-HU3-007-2009	651770.57	6063507.54	575.35	57.00	TR	58.44	-24.20	Completed	3-Sep-09	3-Sep-09

	Hole_ID	Easting	Northing	Elev	Length	Type	Az	Incline	Status	Start	Finish
456	TR-HU3-008-2009	652123.71	6063073.30	563.88	66.00	TR	48.92	-3.97	Completed	8-Sep-09	8-Sep-09

23. Appendix II

Map and List of drill holes, trenches and test pits in the Malcolm 1 Occurrence
Completed by Historical and LIM
Coordinates are based on UTM NAD27 Canada Zone 19

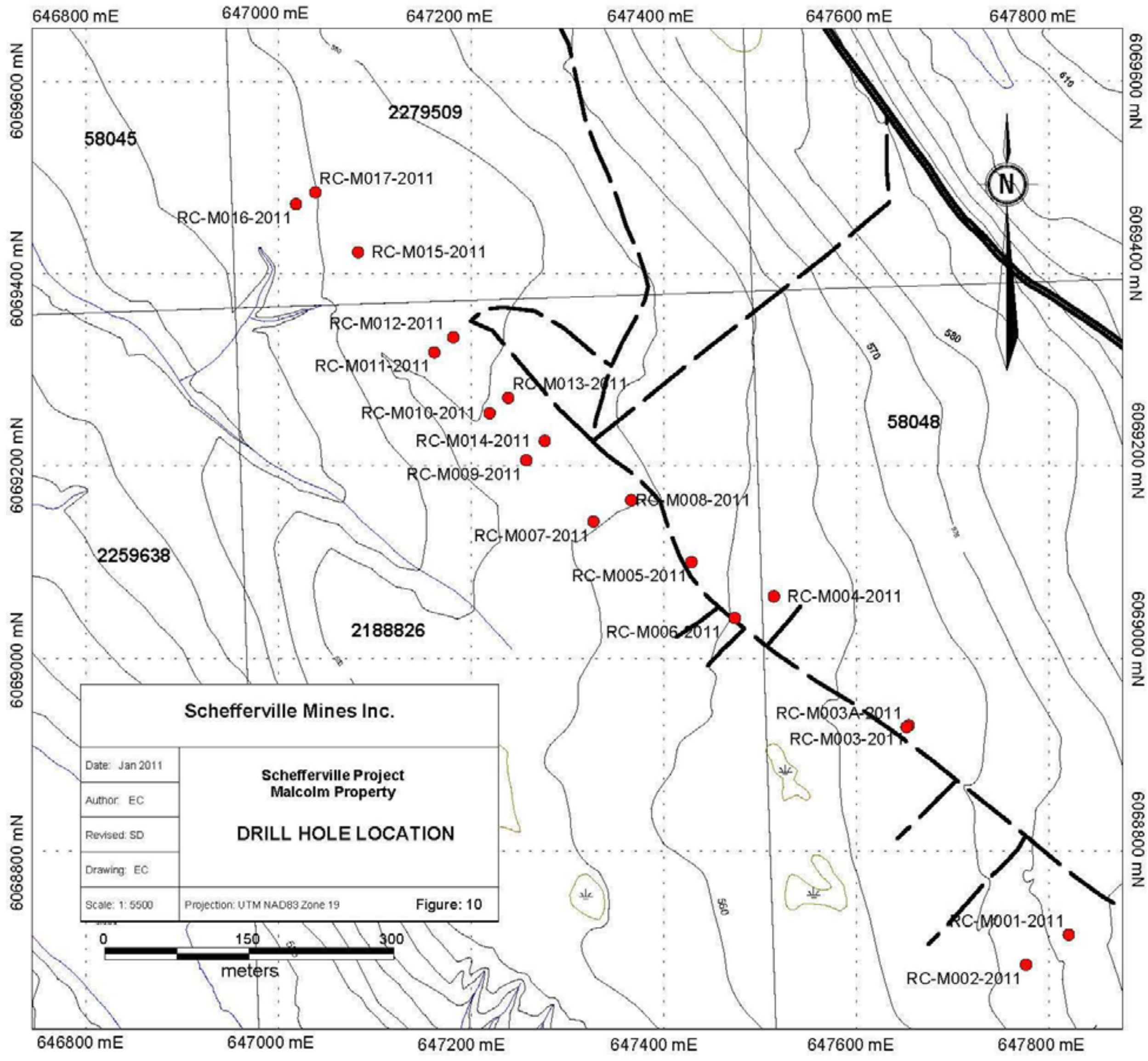
646800 mE
647000 mE
647200 mE
647400 mE
647600 mE
647800 mE
6069600 mN
6069400 mN
6069200 mN
6069000 mN
6068800 mN
N
58045
2279509
58048
2259638
2188826
RC-M017-2011
RC-M016-2011
RC-M015-2011
RC-M012-2011
RC-M011-2011
RC-M013-2011
RC-M010-2011
RC-M014-2011
RC-M009-2011
RC-M008-2011
RC-M007-2011
RC-M005-2011
RC-M004-2011
RC-M006-2011
RC-M003A-2011
RC-M003-2011
RC-M001-2011
RC-M002-2011
560
570
580
610
Schefferville Mines Inc.
Date: Jan 2011
Author: EC
Revised: SD
Drawing: EC
Scale: 1: 5500
Schefferville Project
Malcolm Property
DRILL HOLE LOCATION
Projection: UTM NAD83 Zone 19
Figure: 10
0
150
300
meters

Table 23-1 Malcolm 1 RC drill hole Best Intercepts

Hole Name	From	To	Sample	T_Fe%	T_Mn%	T_P%	SiO2%	Al2O3%	Lab	Smpe_Type	Property
RC-M001-2011	39	42	401287	53.90	0.21	0.048	15.39	0.11	Actlabs	RC	Malcolm 1
RC-M001-2011	48	51	401290	51.88	1.94	0.087	13.30	0.11	Actlabs	RC	Malcolm 1
RC-M001-2011	51	54	401291	52.49	2.25	0.074	12.13	0.10	Actlabs	RC	Malcolm 1
RC-M002-2011	3	6	401310	58.15	2.73	0.113	3.67	0.35	Actlabs	RC	Malcolm 1
RC-M002-2011	6	9	401311	64.59	0.41	0.039	3.95	0.29	Actlabs	RC	Malcolm 1
RC-M002-2011	9	12	401312	62.67	0.90	0.079	4.05	0.37	Actlabs	RC	Malcolm 1
RC-M002-2011	12	15	401313	61.25	0.65	0.087	1.71	0.42	Actlabs	RC	Malcolm 1
RC-M002-2011	15	18	401314	60.48	0.64	0.057	1.68	0.22	Actlabs	RC	Malcolm 1
RC-M002-2011	18	21	401315	58.39	1.85	0.087	2.13	0.35	Actlabs	RC	Malcolm 1
RC-M002-2011	21	24	401316	53.61	1.01	0.074	11.30	0.02	Actlabs	RC	Malcolm 1
RC-M002-2011	24	27	401317	53.15	0.64	0.079	13.74	0.09	Actlabs	RC	Malcolm 1
RC-M002-2011	30	33	401319	50.27	0.09	0.074	18.88	0.16	Actlabs	RC	Malcolm 1
RC-M002-2011	33	36	401320	51.01	0.07	0.096	16.29	0.13	Actlabs	RC	Malcolm 1
RC-M002-2011	39	42	401322	53.63	0.10	0.048	17.80	0.45	Actlabs	RC	Malcolm 1
RC-M002-2011	42	45	401323	53.22	0.11	0.035	23.06	0.24	Actlabs	RC	Malcolm 1
RC-M002-2011	45	48	401324	56.15	0.08	0.048	15.92	0.64	Actlabs	RC	Malcolm 1
RC-M002-2011	48	51	401325	55.21	0.14	0.057	15.75	0.29	Actlabs	RC	Malcolm 1
RC-M002-2011	51	54	401327	55.36	0.12	0.070	14.12	0.39	Actlabs	RC	Malcolm 1
RC-M002-2011	81	84	401337	50.91	0.08	0.048	24.90	0.34	Actlabs	RC	Malcolm 1
RC-M003A-2011	12	15	401355	50.49	0.10	0.179	18.84	0.35	Actlabs	RC	Malcolm 1
RC-M004-2011	18	21	401466	51.57	0.39	0.052	21.94	0.50	Actlabs	RC	Malcolm 1
RC-M004-2011	54	57	401479	53.69	5.51	0.074	11.94	0.62	Actlabs	RC	Malcolm 1
RC-M004-2011	57	60	401480	54.79	2.99	0.087	14.11	0.46	Actlabs	RC	Malcolm 1
RC-M004-2011	60	63	401481	55.19	0.49	0.153	16.75	0.24	Actlabs	RC	Malcolm 1
RC-M004-2011	63	66	401482	52.23	0.28	0.109	21.58	0.44	Actlabs	RC	Malcolm 1
RC-M004-2011	66	69	401483	57.65	0.14	0.175	12.00	0.44	Actlabs	RC	Malcolm 1
RC-M004-2011	69	72	401484	58.46	0.13	0.148	6.38	0.17	Actlabs	RC	Malcolm 1
RC-M004-2011	72	75	401485	55.90	0.28	0.105	12.90	0.42	Actlabs	RC	Malcolm 1
RC-M004-2011	75	78	401486	61.59	0.71	0.100	2.07	0.35	Actlabs	RC	Malcolm 1
RC-M004-2011	78	81	401487	50.27	0.25	0.100	19.44	0.20	Actlabs	RC	Malcolm 1
RC-M005-2011	3	6	401492	60.81	0.13	0.061	8.51	0.87	Actlabs	RC	Malcolm 1
RC-M005-2011	6	9	401493	55.36	0.60	0.144	11.37	0.89	Actlabs	RC	Malcolm 1
RC-M005-2011	9	12	401494	53.92	0.87	0.131	14.57	1.16	Actlabs	RC	Malcolm 1
RC-M005-2011	12	15	401495	59.75	0.06	0.148	6.77	0.83	Actlabs	RC	Malcolm 1
RC-M005-2011	15	18	401496	56.14	0.07	0.161	11.60	0.90	Actlabs	RC	Malcolm 1
RC-M005-2011	18	21	401497	62.79	0.07	0.070	6.62	0.48	Actlabs	RC	Malcolm 1
RC-M005-2011	21	24	401498	63.82	0.08	0.070	2.55	0.47	Actlabs	RC	Malcolm 1

Hole Name	From	To	Sample	T_Fe%	T_Mn%	T_P%	SiO2%	Al2O3%	Lab	Smpe_Type	Property
RC-M005-2011	24	27	401499	59.53	0.06	0.092	7.01	0.48	Actlabs	RC	Malcolm 1
RC-M005-2011	27	30	401500	62.14	0.11	0.074	7.29	0.89	Actlabs	RC	Malcolm 1
RC-M005-2011	30	33	401552	63.27	0.10	0.127	6.80	0.69	Actlabs	RC	Malcolm 1
RC-M005-2011	33	36	401553	54.81	3.07	0.113	12.82	1.02	Actlabs	RC	Malcolm 1
RC-M007-2011	3	6	401803	51.98	1.62	0.105	13.18	2.17	Actlabs	RC	Malcolm 1
RC-M007-2011	6	9	401804	61.67	1.57	0.070	2.54	1.65	Actlabs	RC	Malcolm 1
RC-M007-2011	9	12	401805	58.20	0.41	0.131	4.84	2.77	Actlabs	RC	Malcolm 1
RC-M007-2011	12	15	401806	57.87	1.53	0.079	4.53	2.77	Actlabs	RC	Malcolm 1
RC-M007-2011	15	18	401809	62.47	0.72	0.092	2.90	1.77	Actlabs	RC	Malcolm 1
RC-M007-2011	18	21	401810	64.53	0.91	0.065	2.54	1.13	Actlabs	RC	Malcolm 1
RC-M007-2011	21	24	401811	63.47	0.35	0.105	1.65	0.69	Actlabs	RC	Malcolm 1
RC-M007-2011	24	27	401812	61.23	1.21	0.096	2.30	1.31	Actlabs	RC	Malcolm 1
RC-M007-2011	27	30	401813	62.88	0.82	0.061	2.34	0.88	Actlabs	RC	Malcolm 1
RC-M007-2011	30	33	401814	60.65	2.54	0.061	1.79	0.64	Actlabs	RC	Malcolm 1
RC-M007-2011	33	36	401815	58.95	0.68	0.100	4.71	2.33	Actlabs	RC	Malcolm 1
RC-M007-2011	36	39	401816	62.74	0.44	0.096	1.77	0.70	Actlabs	RC	Malcolm 1
RC-M007-2011	39	42	401817	65.67	0.11	0.044	3.46	0.28	Actlabs	RC	Malcolm 1
RC-M007-2011	42	45	401818	62.47	1.05	0.039	7.55	0.31	Actlabs	RC	Malcolm 1
RC-M008-2011	15	18	401829	50.84	0.07	0.122	16.86	1.05	Actlabs	RC	Malcolm 1
RC-M008-2011	18	21	401830	54.19	0.07	0.135	11.89	0.54	Actlabs	RC	Malcolm 1
RC-M008-2011	42	45	401838	52.08	0.13	0.070	18.24	0.94	Actlabs	RC	Malcolm 1
RC-M008-2011	51	54	401841	53.64	0.02	0.035	20.78	0.78	Actlabs	RC	Malcolm 1
RC-M008-2011	57	60	401843	56.71	0.65	0.026	16.93	0.31	Actlabs	RC	Malcolm 1
RC-M008-2011	60	63	401844	57.00	0.64	0.026	16.40	0.45	Actlabs	RC	Malcolm 1
RC-M008-2011	63	66	401845	57.42	0.62	0.039	14.42	0.76	Actlabs	RC	Malcolm 1
RC-M008-2011	66	69	401846	54.04	1.92	0.039	17.91	0.64	Actlabs	RC	Malcolm 1
RC-M008-2011	69	72	401847	60.99	0.83	0.035	9.99	0.49	Actlabs	RC	Malcolm 1
RC-M008-2011	72	75	401848	54.53	0.29	0.031	20.03	0.20	Actlabs	RC	Malcolm 1
RC-M008-2011	75	78	401849	54.47	3.71	0.035	14.80	0.22	Actlabs	RC	Malcolm 1
RC-M008-2011	78	81	401850	57.25	4.69	0.052	8.98	0.46	Actlabs	RC	Malcolm 1
RC-M008-2011	81	84	401852	62.04	1.72	0.031	7.36	0.52	Actlabs	RC	Malcolm 1
RC-M008-2011	84	87	401853	62.86	0.24	0.061	4.73	0.43	Actlabs	RC	Malcolm 1
RC-M008-2011	87	90	401854	59.66	1.93	0.065	3.09	0.62	Actlabs	RC	Malcolm 1
RC-M008-2011	90	93	401855	64.50	0.38	0.052	3.50	0.43	Actlabs	RC	Malcolm 1
RC-M008-2011	93	96	401856	62.48	0.71	0.044	5.68	0.59	Actlabs	RC	Malcolm 1
RC-M008-2011	96	99	401859	62.39	0.31	0.026	9.58	0.35	Actlabs	RC	Malcolm 1
RC-M008-2011	99	102	401860	53.77	6.33	0.035	11.21	0.30	Actlabs	RC	Malcolm 1
RC-M009-2011	3	6	401862	63.92	0.21	0.035	6.07	0.80	Actlabs	RC	Malcolm 1

Hole Name	From	To	Sample	T_Fe%	T_Mn%	T_P%	SiO2%	Al2O3%	Lab	Smpe_Type	Property
RC-M009-2011	6	9	401863	66.06	0.41	0.074	2.97	0.62	Actlabs	RC	Malcolm 1
RC-M009-2011	9	12	401864	66.27	0.68	0.057	2.46	0.75	Actlabs	RC	Malcolm 1
RC-M009-2011	12	15	401865	65.37	0.21	0.065	1.69	0.56	Actlabs	RC	Malcolm 1
RC-M009-2011	15	18	401866	63.45	0.12	0.096	2.53	0.95	Actlabs	RC	Malcolm 1
RC-M009-2011	18	21	401867	64.44	0.08	0.048	6.60	0.28	Actlabs	RC	Malcolm 1
RC-M009-2011	21	24	401868	59.67	0.05	0.031	12.85	0.27	Actlabs	RC	Malcolm 1
RC-M009-2011	24	27	401869	52.84	0.75	0.022	21.84	0.28	Actlabs	RC	Malcolm 1
RC-M009-2011	27	30	401870	58.80	1.18	0.022	13.24	0.21	Actlabs	RC	Malcolm 1
RC-M010-2011	3	6	401873	64.94	0.19	0.061	3.85	0.48	Actlabs	RC	Malcolm 1
RC-M010-2011	6	9	401874	66.14	0.59	0.048	2.62	0.56	Actlabs	RC	Malcolm 1
RC-M010-2011	9	12	401875	66.51	0.24	0.048	2.31	0.41	Actlabs	RC	Malcolm 1
RC-M010-2011	12	15	401877	67.43	0.19	0.044	1.98	0.45	Actlabs	RC	Malcolm 1
RC-M010-2011	15	18	401878	66.97	0.08	0.039	2.52	0.30	Actlabs	RC	Malcolm 1
RC-M010-2011	18	21	401879	62.75	0.08	0.039	9.53	0.26	Actlabs	RC	Malcolm 1
RC-M010-2011	27	30	401882	51.13	0.08	0.013	25.84	0.22	Actlabs	RC	Malcolm 1
RC-M011-2011	4	6	401885	64.97	0.08	0.026	5.89	0.32	Actlabs	RC	Malcolm 1
RC-M011-2011	6	9	401886	63.56	0.20	0.026	6.96	0.46	Actlabs	RC	Malcolm 1
RC-M011-2011	9	12	401887	64.30	0.21	0.039	5.84	0.46	Actlabs	RC	Malcolm 1
RC-M011-2011	12	15	401888	64.93	0.13	0.035	5.79	0.36	Actlabs	RC	Malcolm 1
RC-M011-2011	15	18	401889	65.63	0.13	0.035	4.29	0.23	Actlabs	RC	Malcolm 1
RC-M011-2011	18	21	401890	66.28	0.17	0.035	4.32	0.27	Actlabs	RC	Malcolm 1
RC-M011-2011	21	24	401891	67.69	0.12	0.039	2.14	0.32	Actlabs	RC	Malcolm 1
RC-M011-2011	24	27	401892	66.11	0.14	0.057	3.53	0.56	Actlabs	RC	Malcolm 1
RC-M011-2011	27	30	401893	66.01	0.09	0.035	2.90	0.30	Actlabs	RC	Malcolm 1
RC-M011-2011	30	33	401894	66.81	0.13	0.048	2.22	0.37	Actlabs	RC	Malcolm 1
RC-M011-2011	33	36	401895	65.35	0.12	0.044	4.71	0.48	Actlabs	RC	Malcolm 1
RC-M011-2011	36	39	401896	66.28	0.11	0.039	1.60	0.40	Actlabs	RC	Malcolm 1
RC-M011-2011	39	42	401897	61.72	0.23	0.052	1.92	0.38	Actlabs	RC	Malcolm 1
RC-M011-2011	42	45	401898	65.04	0.57	0.044	1.62	0.68	Actlabs	RC	Malcolm 1
RC-M011-2011	45	48	401899	62.35	0.43	0.061	1.53	0.58	Actlabs	RC	Malcolm 1
RC-M011-2011	48	51	401900	59.28	4.71	0.048	2.84	1.11	Actlabs	RC	Malcolm 1
RC-M011-2011	51	54	401902	64.72	0.37	0.057	3.57	0.62	Actlabs	RC	Malcolm 1
RC-M011-2011	54	57	401903	61.96	0.22	0.057	7.17	0.42	Actlabs	RC	Malcolm 1
RC-M011-2011	57	60	401904	64.24	0.06	0.048	4.33	0.25	Actlabs	RC	Malcolm 1
RC-M011-2011	60	63	401905	65.14	0.05	0.035	4.36	0.25	Actlabs	RC	Malcolm 1
RC-M012-2011	45	48	401922	56.74	0.38	0.061	13.74	1.19	Actlabs	RC	Malcolm 1
RC-M012-2011	48	51	401923	55.67	0.71	0.035	16.52	1.33	Actlabs	RC	Malcolm 1
RC-M012-2011	51	54	401924	50.50	1.26	0.035	22.24	0.60	Actlabs	RC	Malcolm 1

Hole Name	From	To	Sample	T_Fe%	T_Mn%	T_P%	SiO2%	Al2O3%	Lab	Smpe_Type	Property
RC-M012-2011	54	57	401925	54.53	0.19	0.026	19.49	0.91	Actlabs	RC	Malcolm 1
RC-M012-2011	57	60	402202	60.83	0.42	0.026	11.25	0.44	Actlabs	RC	Malcolm 1
RC-M012-2011	60	63	402203	57.15	0.18	0.031	16.71	0.15	Actlabs	RC	Malcolm 1
RC-M012-2011	63	66	402204	56.87	0.21	0.031	16.65	0.20	Actlabs	RC	Malcolm 1
RC-M012-2011	66	69	402205	61.79	0.31	0.031	9.84	0.31	Actlabs	RC	Malcolm 1
RC-M012-2011	69	72	402206	63.16	0.18	0.035	8.40	0.18	Actlabs	RC	Malcolm 1
RC-M012-2011	72	75	402209	56.99	0.44	0.035	16.42	0.26	Actlabs	RC	Malcolm 1
RC-M012-2011	75	78	402210	64.79	1.02	0.031	5.14	0.39	Actlabs	RC	Malcolm 1
RC-M012-2011	78	81	402211	63.37	0.57	0.057	6.68	0.58	Actlabs	RC	Malcolm 1
RC-M012-2011	81	84	402212	60.04	4.47	0.044	5.96	0.48	Actlabs	RC	Malcolm 1
RC-M012-2011	84	87	402213	59.52	4.79	0.048	4.89	0.51	Actlabs	RC	Malcolm 1
RC-M012-2011	87	90	402214	52.01	0.03	0.022	21.95	0.06	Actlabs	RC	Malcolm 1
RC-M012-2011	90	93	402215	62.05	0.16	0.057	7.30	0.57	Actlabs	RC	Malcolm 1
RC-M012-2011	93	96	402216	64.72	0.08	0.079	4.59	0.42	Actlabs	RC	Malcolm 1
RC-M012-2011	96	99	402217	63.66	0.11	0.065	6.10	0.56	Actlabs	RC	Malcolm 1
RC-M012-2011	99	102	402218	63.07	0.09	0.087	6.59	0.61	Actlabs	RC	Malcolm 1
RC-M012-2011	102	105	402219	59.13	0.20	0.079	10.27	1.37	Actlabs	RC	Malcolm 1
RC-M012-2011	105	108	402220	62.57	0.18	0.057	8.58	0.53	Actlabs	RC	Malcolm 1
RC-M013-2011	24	27	402229	55.53	0.08	0.127	13.66	0.48	Actlabs	RC	Malcolm 1
RC-M013-2011	30	33	402231	58.04	0.10	0.044	14.75	0.73	Actlabs	RC	Malcolm 1
RC-M013-2011	33	36	402232	62.16	0.05	0.048	7.86	0.65	Actlabs	RC	Malcolm 1
RC-M013-2011	36	39	402233	61.71	0.04	0.039	9.16	1.00	Actlabs	RC	Malcolm 1
RC-M013-2011	39	42	402234	63.13	0.35	0.035	8.20	0.53	Actlabs	RC	Malcolm 1
RC-M013-2011	42	45	402235	62.29	0.25	0.048	8.13	0.23	Actlabs	RC	Malcolm 1
RC-M013-2011	45	48	402236	63.48	0.29	0.048	6.95	0.47	Actlabs	RC	Malcolm 1
RC-M013-2011	48	51	402237	61.43	0.27	0.048	9.91	0.34	Actlabs	RC	Malcolm 1
RC-M013-2011	51	54	402238	64.10	1.50	0.039	4.13	0.49	Actlabs	RC	Malcolm 1
RC-M013-2011	54	57	402239	64.98	0.78	0.039	5.58	0.33	Actlabs	RC	Malcolm 1
RC-M013-2011	57	60	402240	65.47	0.28	0.035	4.26	0.39	Actlabs	RC	Malcolm 1
RC-M013-2011	60	63	402241	61.68	0.13	0.087	2.54	0.43	Actlabs	RC	Malcolm 1
RC-M013-2011	63	66	402242	63.36	0.21	0.052	4.73	0.54	Actlabs	RC	Malcolm 1
RC-M013-2011	66	69	402243	62.54	0.19	0.061	2.13	0.37	Actlabs	RC	Malcolm 1
RC-M013-2011	69	72	402244	61.83	0.10	0.070	2.43	0.50	Actlabs	RC	Malcolm 1
RC-M013-2011	72	75	402245	63.29	0.15	0.074	2.21	0.37	Actlabs	RC	Malcolm 1
RC-M013-2011	75	78	402246	66.07	0.69	0.039	2.29	1.10	Actlabs	RC	Malcolm 1
RC-M013-2011	78	81	402247	63.58	0.81	0.031	5.98	0.96	Actlabs	RC	Malcolm 1
RC-M013-2011	81	84	402248	54.72	0.16	0.035	19.57	0.44	Actlabs	RC	Malcolm 1
RC-M014-2011	15	18	402461	54.23	0.08	0.131	13.45	0.86	Actlabs	RC	Malcolm 1

Hole Name	From	To	Sample	T_Fe%	T_Mn%	T_P%	SiO2%	Al2O3%	Lab	Smpe_Type	Property
RC-M014-2011	18	21	402462	55.62	0.05	0.044	16.50	0.29	Actlabs	RC	Malcolm 1
RC-M014-2011	21	24	402463	60.51	0.04	0.031	9.54	0.81	Actlabs	RC	Malcolm 1
RC-M014-2011	24	27	402464	61.33	0.04	0.044	10.13	0.59	Actlabs	RC	Malcolm 1
RC-M014-2011	27	30	402465	65.46	0.04	0.031	4.41	0.68	Actlabs	RC	Malcolm 1
RC-M014-2011	30	33	402466	66.86	0.24	0.039	2.53	0.35	Actlabs	RC	Malcolm 1
RC-M014-2011	33	36	402467	64.47	0.14	0.048	3.60	0.32	Actlabs	RC	Malcolm 1
RC-M014-2011	36	39	402468	64.31	1.73	0.057	3.31	0.40	Actlabs	RC	Malcolm 1
RC-M014-2011	39	42	402469	61.48	1.37	0.079	3.18	1.65	Actlabs	RC	Malcolm 1
RC-M014-2011	42	45	402470	62.34	2.48	0.061	2.23	1.07	Actlabs	RC	Malcolm 1
RC-M014-2011	45	48	402471	64.73	1.08	0.048	3.04	0.52	Actlabs	RC	Malcolm 1
RC-M014-2011	48	51	402472	62.74	0.14	0.092	2.14	0.34	Actlabs	RC	Malcolm 1
RC-M014-2011	51	54	402473	66.42	0.59	0.035	1.97	0.46	Actlabs	RC	Malcolm 1
RC-M014-2011	54	57	402474	66.39	0.47	0.035	2.60	0.40	Actlabs	RC	Malcolm 1
RC-M014-2011	57	60	402475	61.37	0.66	0.035	9.83	0.42	Actlabs	RC	Malcolm 1
RC-M014-2011	60	63	402476	64.24	0.85	0.031	5.46	0.42	Actlabs	RC	Malcolm 1
RC-M014-2011	63	66	402477	58.29	4.97	0.039	7.66	0.30	Actlabs	RC	Malcolm 1
RC-M014-2011	66	69	402478	59.33	0.79	0.022	11.50	0.32	Actlabs	RC	Malcolm 1
RC-M015-2011	3	6	402482	50.05	2.42	0.170	10.23	3.09	Actlabs	RC	Malcolm 1
RC-M015-2011	6	9	402483	55.67	1.19	0.166	4.84	0.97	Actlabs	RC	Malcolm 1
RC-M015-2011	9	12	402484	59.67	1.14	0.175	2.97	1.02	Actlabs	RC	Malcolm 1
RC-M015-2011	12	15	402485	58.43	0.93	0.188	2.86	0.60	Actlabs	RC	Malcolm 1
RC-M015-2011	15	18	402486	51.74	7.20	0.122	3.19	1.53	Actlabs	RC	Malcolm 1
RC-M015-2011	24	27	402489	61.17	0.12	0.052	10.46	0.26	Actlabs	RC	Malcolm 1
RC-M015-2011	27	30	402490	57.98	0.04	0.031	15.68	0.25	Actlabs	RC	Malcolm 1
RC-M015-2011	30	33	402491	63.04	0.05	0.044	8.52	0.37	Actlabs	RC	Malcolm 1
RC-M015-2011	33	36	402492	64.00	0.10	0.065	6.30	0.39	Actlabs	RC	Malcolm 1
RC-M015-2011	36	39	402493	62.02	0.07	0.052	9.07	0.39	Actlabs	RC	Malcolm 1
RC-M015-2011	39	42	402494	56.71	0.05	0.048	16.99	0.23	Actlabs	RC	Malcolm 1
RC-M015-2011	42	45	402495	63.16	0.10	0.061	8.50	0.29	Actlabs	RC	Malcolm 1
RC-M015-2011	45	48	402496	63.47	0.09	0.048	8.20	0.26	Actlabs	RC	Malcolm 1
RC-M015-2011	48	51	402497	63.29	0.05	0.044	8.25	0.24	Actlabs	RC	Malcolm 1
RC-M015-2011	51	54	402498	63.53	0.06	0.035	7.90	0.33	Actlabs	RC	Malcolm 1
RC-M015-2011	54	57	402499	63.69	0.07	0.052	8.03	0.25	Actlabs	RC	Malcolm 1
RC-M015-2011	57	60	402500	61.78	0.03	0.057	9.77	0.35	Actlabs	RC	Malcolm 1
RC-M015-2011	60	63	402652	61.77	0.04	0.079	9.15	0.36	Actlabs	RC	Malcolm 1
RC-M015-2011	63	66	402653	60.09	0.08	0.079	11.01	0.29	Actlabs	RC	Malcolm 1
RC-M016-2011	3	6	402666	57.46	0.07	0.052	14.06	0.16	Actlabs	RC	Malcolm 1
RC-M016-2011	6	9	402667	60.99	0.10	0.057	9.81	0.16	Actlabs	RC	Malcolm 1

Hole Name	From	To	Sample	T_Fe%	T_Mn%	T_P%	SiO2%	Al2O3%	Lab	Smpe_Type	Property
RC-M016-2011	9	12	402668	58.71	0.08	0.070	13.87	0.29	Actlabs	RC	Malcolm 1
RC-M016-2011	12	15	402669	63.62	0.06	0.048	5.22	0.12	Actlabs	RC	Malcolm 1
RC-M016-2011	15	18	402670	65.18	0.08	0.052	4.10	0.28	Actlabs	RC	Malcolm 1
RC-M016-2011	18	21	402671	60.17	0.04	0.052	8.94	0.08	Actlabs	RC	Malcolm 1
RC-M016-2011	21	24	402672	56.65	0.05	0.079	9.13	0.17	Actlabs	RC	Malcolm 1
RC-M016-2011	24	27	402673	57.03	0.05	0.083	9.98	0.06	Actlabs	RC	Malcolm 1
RC-M016-2011	27	30	402674	58.46	0.05	0.057	10.28	0.02	Actlabs	RC	Malcolm 1
RC-M016-2011	30	33	402675	58.46	0.04	0.048	14.43	0.05	Actlabs	RC	Malcolm 1
RC-M016-2011	33	36	402428	62.03	0.07	0.044	8.22	0.24	Actlabs	RC	Malcolm 1
RC-M016-2011	36	39	402429	61.05	0.06	0.044	9.95	0.23	Actlabs	RC	Malcolm 1
RC-M016-2011	39	42	402430	57.88	0.07	0.048	14.33	0.35	Actlabs	RC	Malcolm 1
RC-M016-2011	42	45	402431	53.19	0.03	0.052	21.17	0.22	Actlabs	RC	Malcolm 1
RC-M016-2011	45	48	402432	55.27	0.03	0.105	17.42	0.11	Actlabs	RC	Malcolm 1
RC-M017-2011	9	12	402441	53.16	2.22	0.179	6.68	1.47	Actlabs	RC	Malcolm 1
RC-M017-2011	12	15	402442	54.52	3.05	0.157	4.96	1.22	Actlabs	RC	Malcolm 1
RC-M017-2011	15	18	402443	58.56	0.68	0.157	3.70	0.48	Actlabs	RC	Malcolm 1
RC-M017-2011	18	21	402444	56.50	0.72	0.127	6.73	0.55	Actlabs	RC	Malcolm 1
RC-M017-2011	21	24	402445	59.48	0.38	0.100	3.32	0.55	Actlabs	RC	Malcolm 1
RC-M017-2011	24	27	402446	53.68	7.51	0.061	6.09	0.29	Actlabs	RC	Malcolm 1
RC-M017-2011	27	30	402447	57.95	1.48	0.161	2.58	0.65	Actlabs	RC	Malcolm 1
RC-M017-2011	30	33	402448	56.85	0.47	0.135	14.19	0.18	Actlabs	RC	Malcolm 1
RC-M017-2011	33	36	402449	62.11	0.08	0.057	7.75	0.23	Actlabs	RC	Malcolm 1
RC-M017-2011	36	39	402450	56.15	0.11	0.065	16.34	0.12	Actlabs	RC	Malcolm 1
RC-M017-2011	48	51	402680	50.68	0.04	0.044	25.34	0.21	Actlabs	RC	Malcolm 1
RC-M017-2011	51	54	402681	52.37	0.08	0.074	20.84	0.34	Actlabs	RC	Malcolm 1
RC-M017-2011	54	57	402682	58.40	0.06	0.039	13.59	0.13	Actlabs	RC	Malcolm 1
M-RS-010-2011	0	3	311560	63.52	0.01	0.065	6.08	0.14	Actlabs	TR	Malcolm 1
M-RS-011-2011	0	3	311561	60.30	0.01	0.044	9.05	0.20	Actlabs	TR	Malcolm 1
M-RS-012-2011	0	3	311562	65.86	0.08	0.044	2.74	0.22	Actlabs	TR	Malcolm 1
M-RS-013-2011	0	3	311563	62.30	0.07	0.100	1.01	0.16	Actlabs	TR	Malcolm 1
M-RS-014-2011	0	3	311564	57.13	0.02	0.070	12.09	0.07	Actlabs	TR	Malcolm 1
M-RS-016-2011	0	3	311566	55.27	0.02	0.070	17.14	0.12	Actlabs	TR	Malcolm 1