



Labrador Iron Mines progresses to production in 2010

For Immediate Release

TORONTO, ONTARIO. September 16, 2009. Labrador Iron Mines Holdings Limited (TSX: LIM) reports that at the Annual and Special Meeting of Shareholders held yesterday at the TMX Broadcast Centre in Toronto, Chairman *John Kearney* reported that the Company is making steady progress towards its target to achieve production at its Schefferville Area Iron Ore Project in Western Labrador in 2010.

2009 field work

The 2009 summer exploration program began in early June and comprises a total of 6,000 metres of reverse circulation drilling and 3,000 metres of trenching. From June until early September, in excess of 3,600m of RC drilling in 56 holes was completed at an average depth of 70m.

Drilling has been completed at the James and Redmond deposits, part of the Phase One deposits targeted for production in the summer of 2010. Drilling has also been completed on the Knob Lake deposit and continues on the Houston deposit, both scheduled for production in the second part of Phase One. In addition, five holes were drilled on the larger Howse deposit forming part of Phase Three. Details are shown in the following table:

| Deposit | No. of Holes | Metres | Number of Samples |
|----------------|---------------------|---------------|--------------------------|
| James | 2 | 137 | 45 |
| Redmond 2B | 6 | 219 | 77 |
| Redmond 5 | 8 | 420 | 150 |
| Houston | 30 | 2,200 | 430 |
| Knob Lake | 5 | 271 | 101 |
| Howse | 5 | 396 | 125 |
| Total | 56 | 3,643 | 928 |

Concurrent with the drilling program, trenching on the Redmond and Houston deposits has been completed with a total of 900m in 18 trenches.

During the remainder of the season, completion of drilling at the Houston deposit is planned, as well as drilling some additional holes in James to test the possible continuity of mineralization identified earlier.

The 2009 drilling program is designed to confirm and update the historical resource base which, together with the results from the 2008 drilling program, will be incorporated into a new resource estimate and applied to the final Engineering Study, both expected to be completed later this year.

A second program of hydro-geological drilling and testing has also been undertaken designed to confirm expected flow rates and water quality from future mining operations. This work involves drilling three large diameter test wells that will be used for future pit dewatering and will enable dewatering plans including perimeter wells to be designed and installed in a timely manner.

Encouraging metallurgical test results

During 2008 a test mining program to excavate 6,500 tonnes of bulk ore samples from the Phase One deposits was carried out. This material was crushed and screened to produce samples replicating the lump ore and sinter fines.

Some of this material was used by SGS Lakefield in the metallurgical testing program and in the design of the process circuit required to meet market specifications for the particular types of iron ore. The results indicated high iron grades with low levels of impurities as shown below:

| | Metallurgical Test Results | | | | |
|------------------------|----------------------------|----------------------------|---|---|------------------|
| | Iron Fe | Silica SiO ₂ | Aluminium Al ₂ O ₃ | Phosphorus P ₂ O ₅ | Manganese MnO |
| James Deposit | | | | | |
| Lump | 67.7 | 1.34 | 0.12 | 0.03 | 0.10 |
| Sinter | 66.8 | 2.52 | 0.20 | 0.05 | 0.12 |
| Redmond Deposit | | | | | |
| Lump | 62.4 | 6.55 | 0.24 | 0.05 | 0.44 |
| Sinter | 61.2 | 8.50 | 0.68 | 0.05 | 0.27 |
| Houston Deposit | | | | | |
| Lump | 68.1 | 1.20 | 0.20 | 0.14 | 0.05 |
| Sinter | 65.8 | 3.80 | 0.43 | 0.18 | 0.07 |
| Knob Deposit | | | | | |
| Lump | 58.9 | 5.02 | 0.69 | 0.26 | 0.09 |
| Sinter | 58.1 | 6.80 | 1.18 | 0.25 | 0.10 |

In addition to earlier work at RPC, SGS Lakefield, Outotec and Derrick Corporation, metallurgical testwork is being conducted at SGA and at Humboldt Wedag in Germany, as well as at COREM in Quebec City. James sinter ore is being tested for sintering properties at SGA. A BATAAC Jig test will be carried out this fall at Humboldt Wedag. The Redmond yellow ore is being tested at the COREM for washability characteristics.

Permitting advances

In August 2009 the Company submitted its revised Environmental Impact Statement (EIS) to the Department of Environment and Conservation of Newfoundland and Labrador. The revised EIS incorporates the Company's original EIS submission of December 2008 and specifically addresses the requests for certain additional information issued by the Department in March 2009.

The EIS concludes that significant adverse environmental effects are not predicted in relation to the Project's construction, operation, and decommissioning phases. Filing of the EIS on August 21, 2009 is followed by a 50-day public comment period and up to a further 20 days for the Minister of Environment and Conservation to determine the Project's environmental acceptability.

Newfoundland and Labrador Benefit Plan

As part of the preparation of the EIS, the Company engaged in extensive discussions with the Government of Newfoundland and Labrador and has developed a "Newfoundland and Labrador Benefits Plan," which is incorporated in the Socio-Economic part of the EIS.

Under the Benefits Plan, the Company has committed to the maximization of benefits, including employment, procurement, education, training and economic development to the Province and in particular to Labrador, and to providing full and fair opportunity and giving first consideration to residents and businesses of the Province to participate in, and benefit from, the Project.

In its Newfoundland and Labrador Benefits Plan, LIM has committed to achieving a minimum of 78 percent of Construction, and Operations Phase employment accruing to residents of Newfoundland and Labrador, and to achieving a minimum of 85 percent of total value of Construction and 85 percent of total value of Operations phase contracts and goods and services being awarded/procured through companies and suppliers based in the Province.

It is expected that during both the Construction Phase and Operations Phase, approximately 25 percent of total employees will be members of the Aboriginal First Nations. In 2008, the Company signed an Impact Benefit Agreement (IBA) with Innu Nation of Labrador. The Company has also signed Memoranda of Understanding with two local Aboriginal First Nations communities, the Innu Nation of Matimekush-Lac Jean (Schefferville) and the Naskapi Nation (Kawawachikamach), both located in Quebec in proximity to the Project, and expects that a similar agreement will also be signed with the Innu communities of Uashat and Mani-Utenam, near Sept-Îles.

Plans for the remainder of 2009

Metallurgical testwork will continue aimed at improving expected recovery levels from mined material while maintaining the high iron and low impurity levels in the final product. This work will be associated with final design of the process flow-sheet and selection of the suitable items of plant and equipment. This selection will be based on achieving the expected initial start-up production rate of one million tonnes per year, meeting the grade and product specifications, while ensuring that the plant is easily movable from deposit to deposit.

Extensive ongoing bio-physical and environmental baseline activities are being conducted in the current James and Redmond project areas, as well as in the proposed development areas of the second part of Phase One. The baseline data collected will be used to support the preparation of the Project Registration document for the next phase of the proposed development.

Upon release and approval of the EIS, the Company will submit the applications for the necessary operating permits and licenses. Assuming the relevant permits and licences are issued on a timely basis the Company is currently planning initial production of iron ore in the second quarter of calendar 2010.

Qualified Person:

Terence McKillen, Executive Vice President for the Company and a Qualified Person under NI 43-101 has approved the technical content of this release.

About Labrador Iron Mines Holdings Limited

Labrador Iron Mines Holdings Limited (LIM) was established to develop direct shipping iron ore deposits on properties in which it holds interests in the Labrador Trough of Canada's main iron ore producing region in the Province of Newfoundland and Labrador near Schefferville, Quebec.

The Company's properties are part of the historic Schefferville area iron ore district from which over 150 million tons of direct shipping iron ore was previously mined by the Iron Ore Company of Canada from 1954 to 1982.

Labrador Iron Mines is working to reactivate direct shipping iron ore operations in the region with plans to commence production in the second quarter of calendar 2010.

For further information, please view the Company's website at www.labradorironmines.ca or contact:

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