



LIM reviews Successful Mine Start-Up at Annual Meeting of Shareholders

Schefferville Iron Ore Mine in Production

For Immediate Release

Toronto, Ontario. September 22, 2011: **Labrador Iron Mines Holdings Limited** (TSX: LIM) reports that at the Company's Annual Meeting of Shareholders, held at the TMX Broadcast Centre Gallery in Toronto on September 22, 2011, shareholders were presented with a review of the major developments over the past year at the Company's Schefferville Area Iron Ore project that have led to the commencement of production and transport and sale of iron ore.

"This past year since the last Annual General Meeting has been the most exciting in the Company's history. LIM has moved from being an exploration and development company and now joins the very limited number of companies mining iron ore in Canada," remarked John Kearney, LIM's Chairman & Chief Executive. "We have made great progress and passed important milestones and we look forward to continuing growth in iron ore production over the coming years," added Mr. Kearney.

Developments since September 2010

- The James Mine has been developed and is now in full scale production.
- The Silver Yards processing plant has been constructed and commissioned and is now running at design throughput and recovery levels.
- Rail agreements have been negotiated and LIM's iron ore is being railed from Silver Yards to the Port of Sept-Iles.
- An agreement was signed with the Iron Ore Company of Canada for the sale and shipping of all of LIM's 2011 iron ore production.

It is expected that, to the end of September 2011:

- a total of about 700,000 tonnes of ore will have been mined and some 1,700,000 tonnes of waste and overburden will have been removed.
- about 250,000 tonnes of high grade direct railing ore, included in the above total, have been mined of which almost 200,000 tonnes will have been sent to the Port of Sept-Iles.
- approximately 400,000 tonnes of ore will have been processed through the Silver Yards plant, producing about 210,000 tonnes of lump and sinter fines product.

Mining operations at the James Mine commenced in April 2011, full scale mining operations got underway in June 2011 and have since been gradually ramped up. The mining rate is now approximately 30,000 tonnes of ore and waste per day. The Company is very encouraged by the grade of James ore which has been in excess of expectations. Of the total production to the end of September, some 250,000 tonnes of

direct railable ore will have been mined at an average grade of around 65% iron which can be sent directly to Sept-Iles without further processing.

The Silver Yards beneficiation plant has been completely constructed and commissioned in under one year and is now running at design throughput and recovery levels. The second stage expansion of the plant (installation of Hydrosizer and filter) has been completed and the third stage expansion, which should add about 1,000,000 tonnes to annual production capacity, is being planned and designed and should be constructed in 2012.

Iron Ore Sale Agreement with IOC

In August 2011, LIM has entered into an agreement with the Iron Ore Company of Canada (“IOC”), for the sale and shipping of all of LIM’s calendar 2011 iron ore production. Under the confidential sales contract with IOC, the iron ore will be delivered to Asian markets and resold by IOC’s marketing organization on the spot market. The sale price for iron ore sold to IOC will be based on the actual realized prices to Chinese customers, less an allocation for handling, loading, shipping and sales costs.

The first ship carrying approximately 168,000 tonnes of iron ore mined and produced by Labrador Iron Mines, (the *Salt Lake City*), is scheduled to depart the Port of Sept-Iles on September 30, destined for China.

IOC, Canada’s largest iron ore producer, owns 100% of the QNS&L railway and, at the Port of Sept-Iles, owns established storage and ore handling facilities, including its ship dock capable of taking ocean going vessels up to 240,000 (dwt) tonnes. LIM’s agreement with IOC enables utilization of Cape Size Ocean going ships, where current freight rates are lower than for the alternative but smaller Panamax vessels, for the shipment of LIM’s iron ore.

LIM believes that the benefits associated with this arrangement, together with the benefits of the utilization of larger Cape Size Ocean going ships, will ensure that the maximum possible tonnage of LIM’s 2011 iron ore production will be efficiently shipped and sold during the remainder of calendar 2011.

The Company expects that three or perhaps four shiploads of iron ore will be shipped to China before the onset of winter.

Rail Operations

The first ore train loaded with direct shipping ore departed Silver Yards on June 29, 2011 and almost 200,000 tonnes of direct railed ore will have been shipped by rail to Sept-Iles by the end of September.

Earlier this year LIM purchased a fleet of 400 previously used rail cars of which 260 have been delivered and commissioned into service. This process took longer than anticipated due to the modifications needed to meet local operating conditions. At the present time the Company is running two ore trains between Silver Yards and the Port of Sept-Iles and is working to add a third but shorter train within the next few weeks.

The buildup in rail operations has not happened as efficiently as expected and this has led to shortfall in the tonnage of ore railed to date. The Company continues to work with the railway companies in an attempt to improve cycle times of the trains from mine to Port and back. The extent of such improvements, coupled with the onset of the winter period, will determine the volumes to be railed this year. It is now expected that the total tonnage to be delivered to the Port will be between 500,000 and 700,000 tonnes.

2011 Outlook

It is expected that a total of about 2,000,000 tonnes of ore will be mined from the James Mine during the current year. Forecast production and sales for the remainder of 2011 will to a large extent be dependent upon the weather and the time when winter conditions close in and curtail certain aspects of the operation.

The total tonnage treated in the Plant for the year is expected to lie within the range of 500,000 to 800,000 tonnes. This will yield saleable products of between 300,000 and 500,000 tonnes of lump ore and sinter fines to be added to the 200,000 tonnes of direct railable product already railed to the Port.

It is now expected that the total tonnage to be delivered to the Port will be between 500,000 and 700,000 tonnes.

If other conditions remain as forecast a stockpile of approximately 1,000,000 tonnes of ore will be built up in Silver Yards by year end and will be available for a rapid start to treatment, railing and sales in the spring of 2012.

The 2011 season is considered to be a short start-up and testing year and unit operating costs are expected to be higher than the anticipated life-of-mine average. The Company is in a strong financial position that will enable it to fund its working capital requirements for 2011 and to fund its ongoing exploration and expansion plans.

Summer Exploration Program

The summer 2011 drilling program on the Company's properties in both Labrador and Quebec has advanced steadily with three reverse circulation drill rigs being utilized. The principal drilling areas are the deposits that will comprise Stage 1 subsequent to James and Redmond, including Knob Lake, Ruth Lake and Gill and the Stage 2 deposits at Houston and Malcolm.

By the end of September approximately 7,500 metres of the planned 14,000 metres program will have been completed. It is expected that new resource estimates on a number of these deposits will be completed before the end of 2011.

Stage 2 Houston Deposit and Redmond Plant

LIM continues to evaluate the development of a new separate Stage 2 operation for the Houston deposit including a dedicated processing plant to be located at Redmond which, subject to environmental assessment, permitting and detailed engineering, could be brought into production commencing in 2013 at an eventual rate of 2.5 to 3 million tonnes per year. This would be in addition to the existing processing plant at Silver Yards which, with planned enhancements and additions, will have a similar design capacity.

First Nations Support

The Company's relations with its aboriginal neighbors and partners continue very satisfactorily, with aboriginal employees representing a substantial percentage of the workforce.

LIM had previously entered into an Impact Benefits Agreement with the Innu Nation of Labrador, which has been working satisfactorily since mid-2008.

In September 2010 LIM signed an Impact Benefit Agreement with the Naskapi Nation of Kawawachikamach (near Schefferville), following a long period of co-operation since the initial MOU was signed with Naskapi in April 2008.

In December 2010, the Company signed an Agreement in Principle with the Innu TakuaiKAN Uashat Mak Mani-Utenam (Sept-Iles), which stipulates the principal terms to be included in an IBA. Negotiations with the Innu TakuaiKAN Uashat Mak Mani-Utenam Quebec towards the completion of an IBA have been concluded, and it is expected that the agreement will be submitted to the community of TakuaiKAN Uashat Mak Mani-Utenam for ratification later in the year.

In June 2011 the Company signed an Impact Benefits Agreement with the Nation Innu Matimekush-Lac John of Schefferville, Quebec. The life-of-mine Agreement was a significant step for LIM and for the Innu Community of Matimekush-Lac John, and paved the way for the development of LIM's iron ore project that is providing opportunities for the local community at Schefferville, while at the same time protecting Innu traditional and cultural activities.

These Impact Benefits Agreements with the four local communities demonstrate LIM's commitment to work in a positive relationship with the aboriginal communities and to ensure that the members benefit through employment, training, business opportunities and financial participation in LIM's iron ore projects.

Qualified Person

Information of a scientific or technical nature contained in this release has been prepared by or under the supervision of D.W. Hooley, President of the Corporation and a Qualified Person within the meaning of National Instrument 43-101 of the Canadian Securities Administrators.

Grant of Stock Options

The Board of Directors has approved the grant of additional 100,000 options to new members of senior management at an exercise price of \$6.80 per share, all with an expiry date of September 20, 2016, all vesting as to one-eighth thereof quarterly over a period of two years.

About Labrador Iron Mines Holdings Limited (LIM)

LIM's Schefferville Projects involve the development of twenty direct shipping iron ore deposits in western Labrador and north-eastern Quebec near Schefferville, Quebec. The properties are part of the historic Schefferville area iron ore district where mining of adjacent deposits was previously carried out by the Iron Ore Company of Canada from 1954 to 1982.

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

John F. Kearney
Chairman and Chief Executive
Tel: (647) 728-4105

Donna Yoshimatsu
Vice-President, Investor Relations
Tel: (647) 728-4119
E-mail: Yoshimatsu.d@labradorironmines.ca

Cautionary Statements:

Some of the statements contained herein may be forward-looking statements which involve known and unknown risks and uncertainties. Without limitation, statements regarding potential mineralization and resources, exploration results, and future plans and objectives of the Company are forward looking statements that involve various degrees of risk. The following are important factors that could cause the Company's actual results to differ materially from those expressed or implied by such forward looking statements: changes in the world wide price of iron ore and steel, general market conditions, the uncertainty of future profitability and access to additional capital, risks inherent in mineral exploration and risks associated with development, construction and mining operations, delays in obtaining or failures to reach agreements with any potentially impacted aboriginal groups or to obtain required governmental, environmental or other project approvals. There can be no assurance that the Company will be successful in reaching any agreement with any First Nations groups who may assert aboriginal rights or may have a claim which affects the Company's properties or may be impacted by the Schefferville Area project. Caution should be exercised on placing undue reliance on forward looking information.