Labrador Iron Mines Reports March 2012 Year-End Results and Provides Outlook for 2012 Mining Season

Second and third sale and shipments of LIM iron ore recorded in June

Notice: Conference Call and Webcast held today at 11:00 am ET  Dial-in: +1-416-340-2218 or +1-866-226-1793

Toronto, Ontario, June 20, 2012. Labrador Iron Mines Holdings Limited ("LIM" or the "Company") (TSX: LIM) today reported its operating and audited financial results for the fiscal year ended March 31, 2012.

The Company is also pleased to report that it continues to successfully deliver results on a number of key initiatives for the start of the 2012 operating season, including three shipments and sales of iron ore totalling 515,000 tonnes.

Pre-Production Highlights

During the pre-production planning period from January 1 to March 31, 2012, LIM carried out a number of initiatives in support of a successful 2012 operating season:

- Signed an iron ore sales agreement with the Iron Ore Company of Canada (IOC) for the sale of LIM's 2012 production.
- Obtained Environmental Approval and project release for the Houston project in March.
- Completed an equity financing for gross proceeds of $71.6 million.
- Commenced waste stripping at the James Mine in March in preparation for the start of production in April.
- Signed an Impact Benefits Agreement (IBA) with the Innu Takuakan Uashat Mak Mani-Utenam with regard to LIM's Schefferville area mining projects. In addition, signed a co-operation agreement with the NunatuKavut Community Council with respect to LIM's mining projects in Labrador West.

John Kearney, LIM's Chairman and CEO, commented: "Our strategy during the off-production winter months was to carry out key objectives in order to build a strong foundation for the 2012 mining season. These objectives were designed to address both the operational and organizational requirements critical for the success of our business as we enter the first full season of mining operations in 2012."

Recent Highlights

Full-scale mining operations re-commenced at the James Mine on April 2, 2012 in its first full season of production. To date, the Company has executed key deliverables as follows:

- Sold three shipments of LIM iron ore for a total of 515,000 tonnes by mid-June 2012. LIM has advanced its shipping season and anticipates a fourth shipment to depart the Port of Sept-Îles around the end of June.
- Expanded railway capacity from two to four trains in moving the Company closer to its 'a train a day' objective.
- Restarted the Silver Yards processing facility in mid-May.
- Announced an increase in National Instrument (NI) 43-101 mineral resources to 22.9 million tonnes for the Houston deposits and a new NI 43-101 resource estimate of 5.7 million tonnes for the Knob Lake deposit.
- Launched its 2012 exploration program to expand and extend resources.

"Given the strong start and progress made to date, we fully expect to achieve our two million tonne production target in 2012" commented Rod Cooper, LIM's President and COO. "With the groundwork at hand, we will continue to focus on optimizing and expanding our operations to achieve excellent results in 2012 and beyond."
Outlook: On Track in 2012

James Mine and Silver Yards

On April 2, 2012, the James Mine re-commenced production for the 2012 mining season, which is expected to continue through to November. A total of 3.0 million tonnes, together with approximately 3.5 million tonnes of waste, is expected to be mined in the 2012 season. At the end of May, the mine was operating at a rate of 17,000 tonnes per day (ore and waste), ramping up to a planned mining rate of 28,000 tonnes per day.

The Silver Yards processing plant re-started for the 2012 mining season in mid-May. The Phase 3 expansion program, which includes the installation of a second washing and screening plant and a new magnetic separator to enhance the recovery of fines material, is expected to be completed this summer. The expansion is expected to increase plant throughput to 12,000 tonnes per day and improve weight recoveries to approximately 75% to 80%.

Rail and Iron Ore Sales

The Company continues to advance both its railway and shipping schedules. Railway operations re-commenced for the 2012 season when the first loaded iron ore train departed from the Silver Yards plant to the Port of Sept-Îles on April 4. By mid-May, LIM had expanded its available railway capacity from two to four operating trains, approximately one month ahead of the original schedule. The increased capacity has ensured the timely transportation of LIM’s iron ore product to the Port of Sept-Îles and moves the Company closer to fulfilling its ‘a train a day’ objective. In addition, early movement of stockpiles has allowed the Company to develop its ‘just-in-time’ rail yard stockpile system. During the months of April and May, LIM railed a total of 327,691 wet tonnes of direct rail ore (run-of-mine) stockpile to the Port of Sept-Îles.

So far in 2012, a total of 515,000 tonnes of direct rail ore has been sold. In mid-June, LIM recorded its second and third shipments of iron ore, which follows on the first sale and shipment of the year (175,000 tonnes) recorded in mid-May. The second shipment of approximately 175,000 wet metric tonnes sailed on the MV Tom Seller on June 14 and was sold to a Chinese steelmaker. The third shipment of approximately 165,000 wet metric tonnes was sold to the same steelmaker. The third ship, the MV Skythia, is currently loading at the Port of Sept-Îles. A fourth shipment of direct rail ore is expected to depart the Port around the end of June. Moving forward, an average of two shipments of iron ore is anticipated each month during the operating year.

The sale of LIM iron ore is made under provisional pricing arrangements and subject to final settlement, which occurs approximately one month after the ship has departed the Port. Beginning with the first quarter of fiscal 2013 (April 1, 2012), proceeds from LIM’s iron ore sales will be recognized as revenue in the Company’s Statement of Operations and Comprehensive Income and the Company will disclose proceeds from its aggregate sales of iron ore on a quarterly basis.

LIM is on track to meet its 2012 saleable production target of 2 million tonnes of iron ore. Operating costs for iron ore delivered to the Port of Sept-Îles are expected to be in the range of $60 to $65 per dry metric tonne, including mining, processing, general and administrative costs, railway costs and train unloading.

2012 Development, Resource Expansion and Exploration Program

Following the receipt of environmental approval and project release for its Houston Project, the Company awarded a contract to commence tree clearing work along the access road alignment in May. Development of this work is progressing as planned. Subject to receipt of the remaining permits, it is expected that full-scale construction at the Houston deposit, including construction of the haulage road and railway siding, will commence in the summer and fall of 2012. The Company expects initial production of Houston ore, including in-pit dry crushing and screening, will commence in the second half of 2013.
As a result of a successful 2011 drill campaign, LIM announced an updated resource estimate at its Houston deposits of 22.9 million tonnes at an average grade of 57.2% iron (Fe) and a new resource estimate at its Knob Lake deposit of 5.7 million tonnes at an average grade of 54.2% Fe (see press release dated May 31, 2012). At March 31, 2012, the Company had total NI 43-101 compliant mineral resources of 44.6 million tonnes at an average grade of 56.5% Fe in five of its direct shipping (DSO) iron ore deposits: James, Redmond, Knob Lake, Denault and Houston (see Technical Reports filed on SEDAR), which form part of the Company's first and second mining stages.

In June 2012, LIM launched an $8.6 million exploration program for the 2012 season. The program is the largest exploration program ever undertaken by the Company, comprising 11,280 metres (m) of drilling and 3,600 m of trenching, supported by geophysics, in 12 target areas. The objectives of the 2012 exploration program are to expand and extend mineral resources and to acquire geological information for detailed mine planning. Furthermore, a mineral resource definition and bulk sampling program of historic stockpiles, all located adjacent to former producing mines within 10 kilometres (km) of the Silver Yards processing plant, will be initiated with a view to providing supplemental plant feed.

In a new initiative to the main focus on DSO iron ore, LIM plans an initial diamond drill program (2,400 m) to target taconite iron mineralization in both its Quebec and Labrador properties. In addition, exploration work and metallurgical testing aimed at evaluating historical manganese resources will be carried out and the information will be used to outline various process flow sheet options including compatibility with the existing Silver Yards’ processing plant flow sheet.

Iron Ore Price Outlook

Iron ore prices strengthened from a low of approximately US$115 per dry metric tonne, 62% Fe CFR China basis, in October 2011 to over US$150 in the first quarter of 2012. Moving into the second quarter of 2012, prices have softened to approximately US$135 by mid-June. Port inventories in China remain high, while Chinese steelmakers are experiencing a squeezing of operating margins. The spot market remains very volatile with little sign of resurgence in construction activity. Recent comments from the Chinese government do suggest economic stimulus in the near term is underway, including authorization of multi-billion dollar steelworks and a reduction in interest rates.

Several market commentators continue to see a strengthening in iron ore prices in the second half of 2012 and are anticipating prices to rise to the US$140 to US$150 range. General market concerns over the level of debt in Europe, and an apparent drift into recession there, continue to overhang perceptions for global growth in steel demand. Indications of a recovery in North America are sporadic and as yet, markets do not appear fully convinced of the potential strengthening of industrial demand for steel.

March 2012 Year End Financial and Operational Review

This press release should be read in conjunction with LIM's Management’s Discussion and Analysis (MD&A) and audited financial statements for the year ended March 31, 2012, available on the company’s website at www.labradorironmines.ca, under the “Financials” section, or on SEDAR.

The Company considers the 2011 operating season (June – December 2011) as a short, start-up and testing year during which the Schefferville Projects, including the James Mine, had not yet reached commercial production.

The James Mine, together with the Silver Yards processing facility, operates on a seasonal basis. As a result, no mining (other than waste mining) or processing activities took place during the quarter ended March 31, 2012. Subsequent to the end of the fiscal year, both the James Mine and Silver Yards processing facility re-commenced for the 2012 operating season.

Beginning with the first quarter of fiscal 2013 (April 1, 2012), proceeds from LIM’s iron ore sales will be recognized as revenue in the Company’s Statement of Operations and Comprehensive Income.

All references to ‘years’ in this press release are ‘calendar years’, unless otherwise indicated. All dollar amounts are stated in Canadian dollars, unless otherwise noted.
Financial Review

During the fiscal year ended March 31, 2012, the Company sold three shipments totalling 386,000 tonnes of iron ore. The Company received proceeds of $32 million from the sale of these pre-commercial production ore shipments.

During the 2012 fiscal year, the Company invested approximately $70.5 million in its mineral property interests. This investment was mainly related to the development, stripping and operating expenditures at James and exploration drilling on other deposits. This compares with $12.2 million in the previous fiscal year, which did not include any operating expenditures.

During the 2012 fiscal year, the Company also invested approximately $55.1 million in property, plant and equipment, compared to approximately $14.9 million invested during the prior fiscal year. Of this total, approximately $31 million was invested in the Silver Yards beneficiation plant, including, in part, the purchase, transportation and installation of Phase 2 and Phase 3 equipment; approximately $19.4 million in transportation infrastructure and equipment and approximately $1.5 million in buildings and office equipment.

For the fiscal year ended March 31, 2012, the Company reported a loss of $14.7 million, or $0.27 per share, compared to a loss of $4.0 million, or $0.09 per share, during the prior fiscal year. The variance in the results of operations relates largely to transportation related start-up costs of approximately $9.6 million expensed during the fiscal year and an increase of $1.2 million of depreciation due to an increase in property, plant and equipment in use.

As at March 31, 2012, the Company had current assets of $103.5 million, including inventories with a carrying value of $15.6 million and accounts receivable and prepaid expenses of $15.5 million. Also at March 31, 2012, the Company had a total of $71.1 million in unrestricted cash and cash equivalents and an additional $8.9 million in restricted cash.

The Company had working capital of $60.6 million as at March 31, 2012. The Company currently has no debt.

Management regularly monitors conditions in the iron ore market and in particular, price trends for iron ore. Proposed capital expenditures are therefore reviewed on a regular basis in comparison to budgeted and projected operational cash flow in order to prudently manage cash balances.

A summarized table of the Company’s financial position is shown below.

<table>
<thead>
<tr>
<th>($ millions)</th>
<th>March 31, 2012</th>
<th>March 31, 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and Cash Equivalents (unrestricted)</td>
<td>$ 71.1</td>
<td>$ 7.6</td>
</tr>
<tr>
<td>Working Capital</td>
<td>60.6</td>
<td>(5.4)</td>
</tr>
<tr>
<td>Total Assets</td>
<td>379.8</td>
<td>184.3</td>
</tr>
<tr>
<td>Total Long-Term Liabilities</td>
<td>3.8</td>
<td>4.4</td>
</tr>
<tr>
<td>Shareholders’ Equity</td>
<td>333.1</td>
<td>164.6</td>
</tr>
</tbody>
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Operational Review

Mining at James commenced in June 2011 and continued until December in accordance with LIM’s seasonal mining plan. A total of approximately 1.2 million tonnes of ore and about 3 million tonnes of waste were mined at an average rate of approximately 16,000 tonnes per day. Of the total production to the end of December, approximately 440,000 tonnes were direct rail ore, at an average grade of approximately 65% iron, of which approximately 340,000 tonnes were shipped by rail directly to the Port of Sept-Îles without further processing.

Following commissioning and start-up in June 2011, the Silver Yards processing plant gradually improved its performance and frequently achieved over 8,000 tonnes per day in September and October prior to its seasonal
shutdown in November 2011. By the end of the 2011 operating season, approximately 570,000 tonnes of ore had been fed to the plant, yielding approximately 230,000 tonnes of lump and sinter fine products.

LIM’s operating results for the period June 1 – March 31, 2012, is outlined in the table below. No mining activities, other than waste stripping, took place during the quarter ended March 31, 2012.

<table>
<thead>
<tr>
<th>Production for June 1, 2011 to March 31, 2012</th>
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<tbody>
<tr>
<td>(all tonnes are dry metric tonnes)</td>
</tr>
<tr>
<td>Tonnes</td>
</tr>
<tr>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Total Ore Mined</td>
</tr>
<tr>
<td>Direct Rail Ore portion</td>
</tr>
<tr>
<td>Waste Mined</td>
</tr>
<tr>
<td>Ore Processed</td>
</tr>
<tr>
<td>Lump Ore Produced</td>
</tr>
<tr>
<td>Sinter Fines Produced</td>
</tr>
<tr>
<td>Total Product Railed</td>
</tr>
<tr>
<td>Tonnes Product Sold</td>
</tr>
<tr>
<td>Port Product Inventory</td>
</tr>
<tr>
<td>Site Product Inventory</td>
</tr>
<tr>
<td>Site Run-of-Mine Ore inventory</td>
</tr>
</tbody>
</table>

Rail

During 2011, the Company operated one train throughout the summer and added a second train in September. Approximately 565,000 tonnes of iron ore was railed to the Port of Sept-Îles during the start-up season before railway operations discontinued in mid-December.

Iron Ore Sales

During the fiscal year ended March 31, 2012, the Company sold three shipments totalling 386,000 tonnes of iron ore. The Company received proceeds of $32 million from the sale of its pre-commercial production ore shipments.

In February 2012, LIM entered into a new agreement with IOC for the sale of all of LIM’s 2012 iron ore production.

The Company continues to review its options for marketing its iron ore production in future years and is evaluating the optimum route to achieve these sales, while still maintaining maximum flexibility and independence. Marketing discussions are continuing with potential customers, both in Europe and in Asia. The Company is also continuing discussions with a number of internationally recognized commodity traders with specialist knowledge of the iron and steel industry. The Company has not concluded any agreements for the sale of any iron ore beyond 2012.

2011 Exploration Program

In its 2011 exploration programs, LIM completed 8,216 metres (m) of reverse circulation (RC) drilling in 139 holes drilled in its projects in Labrador and 2,794 m of RC drilling in 51 holes drilled in properties in Quebec.

The main objectives of the 2011 exploration programs carried out on LIM’s properties in Labrador were to expand the Houston resource to support its development as LIM’s next Stage 2 project and to test a number of the smaller deposits (Central Zone- Knob Lake, Ruth, Gill) all located in the vicinity of Silver Yards, which, in the future, could be developed as satellite feeder deposits to the Silver Yards Processing facility.
The main objectives of the 2011 exploration programs on LIM's properties in Quebec, held through its wholly-owned subsidiary Schefferville Mines Inc., were to carry out further drilling in the Denault 1, 2 and 3 areas, initiate a first phase program on Star Creek 1 and conduct a regional exploration program in and around the Malcolm 1 area. See press release dated May 31, 2012 for further information on the 2011 exploration programs.

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Conference Call and Webcast: Fourth Quarter and Year End Results

Members of the senior management team will host a conference call and webcast today at 11:00 am (ET). You may participate in our conference call by calling 416-340-2218 (local and international) or 1-866-226-1793 (Canada and US toll-free). To ensure your participation, please call five minutes prior to the scheduled start of the call.

A live audio webcast will be available on LIM's homepage at www.labradorironmines.ca and archived for 180 days.

For those who are unable to participate in the live conference call, a replay will be available until the end of day on July 4, 2012 by calling 905-694-9451 (local and international) or 1-800-408-3053 (Canada and US toll-free) and entering the passcode 702 80 42#.

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About Labrador Iron Mines Holdings Limited (LIM)

Labrador Iron Mines (LIM) is Canada's newest iron ore producer. We own a portfolio of direct shipping (DSO) iron ore operations and projects located in the prolific Labrador Trough. Initial production commenced at our 100%-owned James Mine in June 2011 and we recorded the sale of 400,000 tonnes of iron ore in our first start-up season. The first full production season commenced on April 2, 2012, with a sales target of 2 million tonnes of iron ore for the 2012 year.

LIM is focused on a strategic and robust growth plan arising from our portfolio of 20 iron ore deposits in Labrador and Quebec, all within 50 kilometres of the town of Schefferville. The James Mine is connected by a direct rail link to the Port of Sept-Iles, Quebec. The area also benefits from established infrastructure including the town, airport hydro power and railway service. Starting with the James Mine and leading to the development of the expanding Houston flagship project, our objective is to provide shareholders with long-term value as we ramp up production and sales towards 5 million tonnes per year by 2015.

We are currently the only independently-owned Canadian iron ore producer listed on the Toronto Stock Exchange and trade under the symbol LIM.

For further information, please visit LIM's website at www.labradorironmines.ca or contact:

Keren Yun
Vice President, Investor Relations & Communications
Tel: (647) 725-0795

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.