PRESS RELEASE

PROGRESS REPORT AT SHAREHOLDERS MEETING

Toronto, Canada, September 17, 2008 – Labrador Iron Mines Holdings Limited (TSX: LIR) reports that at the Annual Meeting held in Toronto on September 16th shareholders were told that good progress has been made during the summer months on the Company’s direct-shipping Schefferville Iron Ore Project in western Labrador.

Resource Definition Drilling:

A program of definition drilling is being undertaken on the four deposits which comprise the first development phase of the Schefferville project. A total of 51 reverse circulation holes have been drilled to date. In addition a program of diamond drilling is being carried out on the outlying Sawyer Lake Property Where seven holes having been drilled to date.

The results of the drilling will be utilized in the preparation of updated compliant resource estimates, which will be incorporated in a new 43-101 technical report expected to be completed by year end. The historical resources in the Company’s eight deposits were previously estimated at 93 million tons, with in-situ grades of 56%-58% Fe, based on previous work undertaken by the Iron Ore Company of Canada prior to 1983. These historical resource estimates are not NI 43-101 compliant.

Test Mining and Bulk Sampling:

To provide representative samples for metallurgical testing, process design and product marketing, bulk samples totaling 6,500 tonnes were mined from each of the James, Redmond, Knob and Houston deposits by contractors RSM Mining Services Inc. (Labrador City) and Gestion Innu. The samples were crushed and screened to produce stockpiles of representative lump and sinter fine ores. It is estimated that approximately 25% of the stockpiles is lump ore with 75% sinter fine ore. The samples will be transported by rail to the Port of Sept Iles, where they will be onward shipped to various steel plants and potential customers, with portion utilized for metallurgical testing.

Transportation:

Detailed studies were carried out on the ore transportation plans. Further technical assessment reports were completed on the railroad. Negotiations have been carried out with Tshiuetin Rail (TRT) and Quebec North Shore and Labrador Railroad (QNS&L) and freight rates for 2008 shipments are under negotiation. Ten gondola railcars, each with 100 tons capacity, have been leased to transport the bulk samples to port. Stevedoring rates have also been negotiated with the Logistec Inc. and with the Port of Sept Iles for storage and shiploading.

Permitting and Environment:

The Project Registration Document for the first phase development on the James and Redmond properties was submitted to the Government of Newfoundland and Labrador at the end of April, following extensive studies carried out over the previous three years by the Company’s engineering and environmental teams. The phase one development incorporates the mining plan for the first four years of mining operations.

The Ministry of Environment and Conservation completed its review on August 12th and the Minister directed the preparation of an Environmental Impact Statement (EIS). An EIS Technical Committee has been established by the Minister and the draft terms of reference are expected to be finalized by the end of September. Public consultation will take place immediately thereafter. It is anticipated that the submission of the Environmental Impact Statement will be made prior to the end of 2008. Authorization and release of the project by the Government of Newfoundland and Labrador can be anticipated to occur during the first quarter of 2009.

Detailed environmental work is under way for the preparation of the Environmental Impact Statement and meanwhile the Company’s ongoing environmental baseline program is continuing on schedule.
Community Consultations:

In July 2008 an Impact Benefit Agreement was signed with the Innu Nation of Labrador. The IBA is a life of mine agreement that establishes the processes and sharing of benefits that will ensure ongoing positive relationship between the Company and the Innu Nation.

Consultations and negotiations are also continuing with other First Nations in the Schefferville and Sept Iles areas. The Company has signed a Memorandum of Understanding with each of the Innu Nation of Matimekush-Lac John (Schefferville) and with the Naskapi Nation (Kawawachikamach) reflecting the agreement of the parties with respect to community support for the development of the project and the parties' commitment to negotiate more detailed cooperation agreements.

Plans for Remainder of 2008:

The ongoing definition drilling program will continue until November. It is planned to drill up to a total of 10,000 meters in the entire 2008 program. The iron ore bulk samples will be transported by rail to the Port of Sept Iles utilizing the Company’s ten rail cars and shipped to potential customers for testing. A Resource and Engineering Study is being undertaken with SNC Lavalin, supported by Geostat and Lakefield Research and which will incorporate the updated resources estimates, and is expected to be completed shortly after year end.

Outlook:

Subject to the receipt of permits, Labrador Iron Mines is targeting first production of its direct shipping iron ore in the second half of 2009. It is planned to mine 500,000 tonnes of iron ore in 2009, and this will increase to 1.5 million tonnes in 2010 and to 3.0 million tonnes in 2011/12 as production ramps up. The start-up date is dependent on the timely authorization release of the project by the Government of Newfoundland and Labrador and the issue of appropriate permits. The medium to long term outlook for iron ore prices remains positive, driven in large part by forecasts of strong Chinese steel demand.

Strong Cash Position:

At August 31, 2008 the Company had cash of approximately $45 million, which is held in short term deposits with Schedule 1 Canadian Chartered Banks.

About Labrador Iron Mines Holdings Limited:

Labrador Iron Mines Holdings Limited was established to develop “direct shipping” iron ore deposits on properties in which it holds interests located in the Labrador Trough, in the province of Newfoundland and Labrador, near Schefferville, Quebec. The Company was listed on the TSX in December 2007, following a successful IPO in which it raised over $52 million.

The Company’s properties in Labrador are part of the historic Schefferville 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. Subject to timely receipt of permits Labrador Iron Mines is targeting to commence production and sale of both lump and sinter fine iron ore in 2009.

The common shares and warrants of Labrador Iron Mines Holdings Limited are listed on the Toronto Stock Exchange under the symbols “LIR” and “LIR.WT”, respectively.

Company Contacts:

<table>
<thead>
<tr>
<th>John F. Kearney</th>
<th>Bill Hooley</th>
<th>Terence McKillen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chairman and CEO</td>
<td>President and COO</td>
<td>Executive Vice President</td>
</tr>
<tr>
<td>T: (647)728-4125</td>
<td>T: (647)728-4111</td>
<td>T: (647)728-4102</td>
</tr>
</tbody>
</table>