



PRESS RELEASE

Labrador Iron Mines third quarter highlights strong cash position towards production start-up

Toronto, Canada, February 17, 2009 – Labrador Iron Mines Holdings Limited (TSX: LIR) announces that it has filed its unaudited Financial Statements and MD&A for the third quarter and nine months ended December 31, 2008. The reports are available under the Company's profile at www.sedar.com or on the Company's website at www.labradorironmines.ca.

Cash and cash equivalents at December 31, 2008 stand at \$37.7 million. The Company has no borrowings or debt and remains in excellent financial condition to initiate production from the Phase One deposits of its Schefferville Area direct shipping iron ore project. Start-up of initial production is targeted for the summer of 2009 subject to final project approvals and timely receipt of operating permits and licenses.

At present, the Company is in the development stage and does not generate income except for interest income on its cash balances. For the three and nine month periods ended December 31, 2008, the Company reported a net loss of \$682,489 (\$0.02 per share) and \$1,279,715 (0.04 per share) respectively, the main components being stock-based compensation expense of \$498,562 and \$1,085,125 respectively. Corporate expenses and administration costs for the quarter totaling \$417,124 and \$854,100 for the nine months were partially offset by interest income of \$262,785 and \$971,943 respectively from cash investments in highly liquid GICs with major Canadian financial institutions.

During the quarter, the Company invested \$3.9 million in its mineral properties and \$10.2 million in the nine months ended December 31, 2008, the principal components of which were drilling, bulk-sampling, engineering, metallurgical testwork, environmental, permitting and community consultation. In the summer of 2008, a 4,500 metre reverse circulation and core drilling program was completed to provide data towards a compliant resource estimate on the Phase One deposits and to assist with mine and operational planning. This was supplemented by an exploration trenching program and detailed hydro-geological drilling of over 1,000 metres in 18 holes along with associated pump testing. Samples were sent to SGS-Lakefield for assay and results are being incorporated into the resource estimates.

In addition, test mining of 6,500 tonnes of bulk ore samples from the Phase One deposits was successfully carried out by RSM Mining of Labrador City. The material was crushed and screened and washed offsite to replicate the production process and produce samples of lump ore and sinter fines. No problems in mining or processing were encountered and metallurgical testwork indicated that the ore is readily amenable to simple washing and screening with a low level of impurities.

Some of the product was transported by rail to the Port of Sept Iles, which was the first iron ore to be shipped from the Schefferville area since the shut down of the previous operations by IOC in 1982.

Outlook for 2009

The Company submitted an Environmental Impact Statement (EIS) to the Minister of Environment and Conservation of Newfoundland and Labrador in December 2008 in accordance with the final guidelines received and following extensive environmental studies and public consultation in Labrador and Schefferville. Upon receipt of project approval, anticipated in the first quarter of 2009, the Company plans to submit applications for the necessary operating permits and licences to initiate mining. This will allow for modest production in 2009 concurrent with the testing of all operational and transport facilities in advance of commercial production in 2010.

The Company has signed MOUs with the Port Authority of Sept-Iles and stevedoring contractors for the use of the Authority's wharves for storage and ship-loading of its products and plans to finalize commercial transportation arrangements with the rail carriers.

In the first quarter of 2009, the Company expects to receive the resource and engineering study being prepared by SNC-Lavalin in conjunction with Geostat International Inc. and Labrador Innu Development Corporation for the design of the process circuit to enhance the grade of the lump ore and sinter fines products.

Discussions have begun with a number of steel mills, particularly in Europe, that have indicated encouraging interest in the Company's lump ore and sinter fines products and are currently conducting test work on the sample products. The high iron grades and low level of impurities achieved through the washing and screening process make the products desirable for end users. The Company's production targets and hence sales for 2009 are planned to be modest.

Benchmark iron ore pricing negotiations between the major iron ore suppliers and consuming countries for 2009 contract prices are expected to be concluded during the first half of 2009. The Company's future sales pricing will largely be based on these benchmark prices. As a result of the downturn in the steel industry it is almost certain that there will be some reduction in prices from the 2008 levels. The extent of such reductions is still being negotiated between major suppliers and steel mills but forecasters are predicting this is likely to be at least 20% and perhaps more. Beyond 2009 the future of iron ore pricing will be dependent on the rate of recovery of world-wide economies and especially on Chinese demand. The Company has a view that there will be some recovery in iron ore prices in 2010, over the reduced prices expected for 2009, and the Company is consequently targeting 2010 as its first year of significant commercial production.

Qualified Person

Terence N. McKillen, M.Sc., P. Geo., Executive Vice President and a Director of the Company is the Company's Qualified Person under Canadian NI 43-101 and has reviewed this press release.

About Labrador Iron Mines Holdings Limited

Labrador Iron Mines holds interests in over 5,300 hectares of direct shipping iron ore deposits in the Labrador Trough in the Province of Newfoundland and Labrador, near Schefferville, Quebec. The

Company's properties in Labrador form 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. Labrador Iron Mines is targeting the start of production of both lump ore and sinter fines in 2009.

Forward-Looking 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 mineral commodities, general market conditions, risks inherent in mineral exploration, risks associated with development, construction and mining operations, the uncertainty of future profitability and the uncertainty of access to additional capital.

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

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