News Release

TSX: LIM

Labrador Iron Mines Appoints New Chief Financial Officer and Announces Retirement and Appointment of Directors

Toronto, Ontario, November 21, 2012. Labrador Iron Mines Holdings Limited ("LIM" or the "Company") (TSX: LIM) is pleased to announce the appointment of Richard Pinkerton as Chief Financial Officer.

Mr. Pinkerton is a Chartered Accountant and has been Vice President Finance of LIM since 2010. Mr. Pinkerton obtained his BA (Economics) from Harvard University and also holds the Chartered Financial Analyst designation. Prior to joining LIM, Richard was an investment banker for ten years and prior thereto, he was a Chartered Accountant at PricewaterhouseCoopers LLP for five years.

LIM also announces that Danesh K. Varma, who has served as Chief Financial Officer of LIM since its Initial Public Offering in 2007, has been appointed as a Director to fill the vacancy arising from the retirement of Terence McKillen as Executive Vice President and Director.

In recognising Mr. McKillen's contribution to the Company, John Kearney, LIM's Chairman and Chief Executive Officer, stated: "Terence McKillen was one of three founding directors of Labrador Iron Mines and was intimately involved in the evaluation and acquisition of the properties that today comprise LIM’s Schefferville area iron ore deposits where his expertise in exploration geology, together with his leadership in aboriginal and community relations greatly contributed to the successful start-up of the Company."

About Labrador Iron Mines Holdings Limited (LIM)

Labrador Iron Mines (LIM) is Canada’s newest iron ore producer with a portfolio of direct shipping (DSO) iron ore operations and projects located in the prolific Labrador Trough. Initial production commenced at the James Mine in June 2011, with the sale of 386,000 dry tonnes of iron ore recorded in the first start-up year. The first full production season commenced in April 2012, with nine cape-size shipments totalling approximately 1,456,000 dry tonnes of iron ore sold in the seven months ended October 31, 2012.

The James Mine is connected by a direct rail link to the Port of Sept-îles, Québec. The project 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 with a plan to increase production towards 5 million tonnes per year from a portfolio of 20 iron ore deposits in Labrador and Quebec, all within 50 kilometres of the town of Schefferville.

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

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