

**PROPERTY FILE**

# Leader Mining International Inc.

(Calgary, Alberta, Canada)

**NEWS RELEASE**

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**TSX.V: Trade Symbol: LMN**

**[www.leadermining.com](http://www.leadermining.com)**

## **Cogburn Magnesium Project Project Report**

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Leader Mining International Inc. (TSX.V: LMN) management is pleased to report the results to date of the ongoing Cogburn Magnesium Project Production Feasibility Study. Refer to Company news release of February 13, 2002 for original Feasibility work assignments.

**Magnesium Deposit Definition:** A core-drilling program of 2,152 meters in 38 holes (Crest Geological Consultants Limited) has defined a Measured Mineral Resource of 25.5 million metric tons grading 40.5% MgO (24.5% magnesium) by weight (Geospectrum Engineering). This resource base is adequate to support a mine life of over 37 years at a production rate of 120,000mt magnesium metal per year. Reserve classification awaits completion of the overall capital and operating cost estimates in the feasibility before the Mineral Resource may be moved into Ore Reserve status.

**Plant Site Selection:** Two potential magnesium reduction plant sites have been selected (Merit Consultants International Inc.) near Ruby Creek at Highway #7, that have been the subject of extensive geotechnical, environmental and archeological surveys. The Scoping Study completed in October 2001 indicates the reduction plant would have a foot print of 100,000 square meters and would require a fenced site, with ancillary infrastructure, measuring approximately 1km x 1km. Site selections have been made based upon proximity to the Emory Zone magnesium deposit and close proximity to infrastructure. The two sites are being subjected to full studies in order to ensure best possible site selection.

**Quarry Mining & Ore Transportation:** Preliminary quarry plans have been prepared (Geospectrum Engineering) and the road system between the quarry site and proposed plant sites has been designed (Emil Anderson Construction Co. Ltd. and Geospectrum Engineering). The proposed ultimate quarry area is approximately 300m x 300m. The road system between the quarry and proposed plant sites is approximately 22km and utilizes the existing Garnet Creek logging road alignment.

**Environmental & Permitting:** Flora and fauna (Keystone Wildlife Research), environmental (Lorax Environmental Services Ltd.) and archeological studies (Brown & Oakes) have been completed in the areas of the proposed quarry, road and both proposed plant sites. Formal permitting applications have not yet been made as discussions are ongoing regarding conflicting provincial and federal jurisdiction.

**Geotechnical:** Geotechnical studies have been completed on both proposed plant sites (Jacques Whitford Group of Companies and Emil Anderson Construction Co. Ltd.).

**Power Lines & Sub-Station:** A study of power supply options has been completed (Ian Hayward International Ltd.) and has been submitted to B.C. Hydro and Power Authority for discussion.

**Ore Processing & Metal Production:** Bench scale metallurgical characterization and optimization testing as well as pilot testing have been completed on composite samples from Emory Zone drill core (Process Research Ortech Inc. and Hatch Associates Ltd.) and a report is pending. Pregnant leach solutions are currently undergoing carnallite crystallization testing at K-Utech, Sondershausen, Germany. Some preliminary magnesium reduction plant drawings have been received (Hatch Associates Ltd.) and are being reviewed (Merit Consultants International Inc.).

On May 16, 2002 Leader Mining signed a Technology Transfer Agreement with the State Research and Design Titanium Institute of Zaporozhye, Ukraine (STI) and the joint stock company 'VAMI' of St. Petersburg, Russia (VAMI) to transfer technology related to the key process areas for the Cogburn Magnesium Project. The STI/VAMI technology for production of magnesium metal is a commercially proven technology that was recommended by HATCH Associates Ltd., as the world's leading magnesium reduction technology, in their October 2001 Cogburn Scoping Study. Under the agreement, Leader Mining will receive technology information and assistance in pilot-scale testing magnesium metal recovery from Cogburn magnesium silicate samples. The agreement between Leader Mining and STI/VAMI provides for Leader Mining to acquire a STI/VAMI technology license for the Cogburn Magnesium Project and it includes technology performance guarantees by STI/VAMI.

**Residue Management Facilities:** A residue management plan for development and operation has been received (Knight Piesold Ltd.).

**Socio-Economic Impacts:** Reports have been received (Sveinson Mineral Services Inc. and Jo Harris & Associates). The study indicates the creation of 1,100 direct jobs during construction and 700 direct jobs during operations (average wage indicated is \$1,100 per week).

Several community meetings have been held in Hope and Agassiz and with local First Nations. In public meetings the Company continues to convey its commitment to the local First Nations to create joint ventures for their participation with experienced contractors such as Emil Anderson Construction Co. Ltd. on development and operating activities such as quarrying, ore transportation and residue storage. Open house questionnaires evidenced strong support for the Project in both Hope and Agassiz. Additionally, Hope District and Kent District (Agassiz) Councils have distributed formal resolutions in support of the Project.

**Marketing & Off-Take Contracts:** A marketing study is in progress (Butterfield Mineral Consultants). A window of marketing opportunity has been identified, and preliminary discussions have been conducted with auto manufacturers regarding magnesium off-take contracts. However, these potential buyers require certainty on long-term power pricing, the single largest magnesium reduction plant operating cost component.

**Electrical Power & Natural Gas Contracts:** Discussions are still underway regarding these contracts. To date B.C. Hydro has confirmed an appropriate industrial tariff that would be applied to the Cogburn Project and the company is seeking a minimum of five-year power price protection, which is being examined by the provincial government. Pending changes to power generation and supply policy promised by the B.C. Liberal government (announcement has been delayed several times during 2002) has created a state of suspended animation. In order to ensure Project success the Company is also studying the potential to wheel power in from Alberta or Washington State (this action would require changes to the Utilities Commission Act regarding power importation).

**Economic Valuation:** The valuation awaits inputs on capital and operating costs as well marketing. The Scoping Study of October 2001 (Hatch Associates Ltd.) indicated capital cost estimate of US\$1.02 billion yielding annual sales revenue of US\$410 million, annual operating costs of US\$166 million and annual taxes of US\$55 million, at a production rate of 120,000 mtpy of magnesium metal and using the ten year average magnesium price of US\$1.55 per pound.

**Production Feasibility Study Schedule:** Delays in receiving permits from the provincial government for core drilling and related timber removal in spring 2002 have delayed scheduled completion of the Production Feasibility Study from December 2002 to February 2003.

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The Canadian Venture Exchange has neither approved nor disapproved of the information contained herein.

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