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Gossan Options New Magnesium Production Process

March 16, 2007 – **Gossan Resources Limited** (GSS-TSX.V & GSR-Frankfurt/Freiverkehr) has entered into a Memorandum of Understanding to acquire up to a 100% exclusive interest in the worldwide rights to a new technology for the production of magnesium metal from dolomite.

The Memorandum of Understanding defines the terms and conditions of a licensing arrangement for a new high efficiency magnesium production process being developed by Douglas J. Zuliani. Gossan controls large deposits of high grade dolomite and silica sand in Manitoba, Canada, both key raw materials used in magnesium metal production. Zuliani who holds a Ph.D. in Metallurgical Engineering from the University of Toronto, has over twenty years of experience in magnesium technology and business development. From 1985 to 2000, he held a number of senior executive positions with Timminco Ltd., an internationally recognized leader in the production of high purity magnesium using the Pidgeon silicothermic vacuum reduction process which recovers magnesium metal from briquettes containing ferrosilicon and calcined dolomite. Zuliani and Gossan began joint collaboration to develop the new magnesium process in early 2004. As part of their agreement, Gossan retains an option to secure exclusive worldwide rights to the process.

Zuliani's technology is projected to significantly reduce the direct operating cost of magnesium metal production by as much as 25% compared to a typical Chinese Pidgeon process plant which, with China producing over 80% of the world's magnesium, has now become the industry norm. The new process is based on an efficient adaptation of the original Pechiney and Alcoa Magnatherm process which still remains the only successfully proven high temperature method for producing magnesium metal by silicothermic vacuum reduction of molten slag containing magnesia. By using an enhanced Magnatherm approach, the process can employ low cost hydro electricity abundantly available in Manitoba as its principle energy source.

The Zuliani process is designed to achieve dramatic operating cost savings by process efficiency improvements that significantly reduce both energy and key raw material requirements. These enhancements to the traditional Magnatherm method should materially improve both magnesium recovery and silicon reduction efficiency without the need for a vacuum. Energy use is reduced by development of a technically straightforward method that will ensure highly efficient condensation of liquid magnesium metal thereby avoiding the need to melt solid magnesium which has been a major problem plaguing both the Pidgeon and Magnatherm processes. The Zuliani

process can be commercialized in 10,000 tonne per annum production increments which will reduce initial investment risk and allow expansion of production capacity in tune with market demand.

In order to prove out the technology prior to commercialization, Gossan is undertaking a three phase evaluation process. Initially thermodynamic modelling is being used to verify the process fundamentals. The second phase will involve final bench scale testing and thereafter a third phase of pilot plant testing to demonstrate commercial viability. Gossan may seek a joint venture partner to assist in the pilot plant testing and subsequent commercialization of the process.

In May of 2006, Gossan conducted a 27-hole drill program on its 1633-hectare Inwood Magnesium Dolomite Property, located 80-km north of Winnipeg. Watts, Griffis and McOuat Limited (WGM), consulting geologists, have calculated a number of Mineral Resource Estimates for high purity dolomite at the Inwood Property. A National Instrument 43-101 Report is currently being finalized at which time it will be posted on SEDAR.

WGM's resource estimates for two zones are summarized in the table below.

Formation and zone	Resource Classification	Tonnage	Grade MgO (wt%)	Grade CaO (wt%)
Fisher Branch	Measured	34,783,000	21.18%	30.84%
Fisher Branch	Inferred	132,009,000	21.32%	30.78%

The Inwood Property hosts a very large deposit as the Measured Resource alone would be capable of sustaining a substantial production facility of 80,000 tonnes of magnesium per year for about 35 years (subject to a positive feasibility study).

Ryan Cooke, P.Geol., is the Qualified Person supervising the Inwood Magnesium Project on behalf of Gossan.

The consideration to Zuliani under the terms of the Memorandum of Understanding for the right of use within Manitoba are summarized as follows: 50,000 common shares of Gossan at each of the signing of the agreement, the delivery of a favourable process modelling report, and the delivery of a favourable bench scale testing report; a work commitment to initiate bench scale testing within 18 months and pilot plant testing within 60 months; and commercially-based consulting fees, some of which have been pre-determined for specific components of the evaluation. Success fees of \$50,000 would also be paid on the commencement of pilot plant testing and 1.5% to 3.0% of capital costs, varying with Gossan's investment in the evaluation of the process, would be paid on initiating construction of a commercial magnesium production facility.

Under the terms of the agreement, Gossan also has an option to acquire a 100% interest in the exclusive worldwide rights to the technology for a period of up to 5 years by making semi-annual payments, varying between \$5,000 and \$12,500 dependent upon the price of magnesium, and may exercise the option for the sum of \$1,050,000. Maintenance of the option in good standing and/or its exercise would eliminate or reduce

a number of the components of consideration for the Manitoba rights previously outlined above. The transaction remains subject to regulatory approval.

Douglas J. Zuliani was a director of Gossan from 2004 to March 5, 2007 during which time he provided the Company with valuable expertise on the magnesium industry. Mr. Zuliani will be retained as a consultant to the Company.

The US Geological Survey estimated world primary production of magnesium at 610,000 tonnes in 2005. Over the past 15 years, China has become the predominant supplier with production of 468,700 tonnes in 2005. Magnesium can be produced using a number of different processes and inputs. It is primarily used as an alloy with aluminum and as a structural metal with die casting for the auto industry being the fastest growing component. Magnesium is also used to remove sulfur in the production of iron and steel. Magnesium is the lightest of all the commonly used metals and may be substituted to some extent for aluminum and zinc in castings and wrought products. The price of magnesium has firmed during the past year with 2006 year end free market prices in Canada and Europe ranging between US \$2,000 to \$2,100 per metric tonne. Corresponding prices in the USA were \$2,975 to \$3,200 per tonne being significantly higher due to varying tariff protection against certain Chinese and Russian producers. The free market and USA magnesium prices are expected to continue to firm due to increasing substitution demand resulting from the high price for aluminum which is currently US \$2,800 per tonne as posted by the LME. Demand for magnesium is expected to remain strong particularly from the auto industry where high gasoline prices are leading to the design of lighter more fuel efficient vehicles.

Gossan Resources Limited is engaged in mineral exploration in Manitoba and northwestern Ontario. It has a well-diversified portfolio of properties hosting gold, platinum group and base metals, as well as the specialty metals, tantalum, chromium, titanium and vanadium. The Company also has a large deposit of magnesium-rich dolomite and a silica sand prospect. Gossan trades on the TSX Venture and the Frankfurt/Freiverkehr & Xetra Exchanges and has 21,765,900 common shares outstanding (27,765,676 shares fully diluted).

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The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of this news release.