

# Grid Metals Receives Positive Engineering Study; Primero Report Outlines Viability and Costs of Reconfiguring True North Mill for Lithium Processing

October 25, 2023 TORONTO -- Grid Metals Corp. (TSXV: GRDM; OTCQB: MSMGF) ("Grid" or the "Company") is pleased to announce the receipt of a scoping-level mill reconfiguration study (the 'Study') completed by Primero Group for the True North Mill located in Bissett, Manitoba. The Study examined the viability and costing of reconfiguring the existing True North gold mill in order to process lithium ore from Grid's Donner Lake property to produce a saleable lithium concentrate. The Primero Study outlined best-in-class capital intensity and quantified operating costs, giving Grid the confidence to move forward with the mill lease. As a result of the positive findings, Grid is proceeding with the lease agreement with 1911 Gold Corporation - the owner of the True North Mill. Grid's objective of entering into the lease is to be one of the next producing lithium companies in North America.

## **Background and Primero Mandate**

Grid retained Primero Group, a global leader in lithium process engineering, in July 2023 to complete a scoping-level review of reconfiguring the existing mill to produce spodumene concentrate from Donner Lake feed. The mandate included:

- Developing a processing flow sheet for the mill based on a new round of concurrent metallurgical testwork and determining overall viability of the mill reconfiguration
- Developing a modified plant layout
- Determining electrical power requirements and an equipment list for the mill
- Determining capital ('capex') and operational ('opex') expenditure costs for the mill
- Generating a conceptual mass balance for the lithium spodumene processing circuit
- Estimating the scope and cost for a feasibility level study for the mill reconfiguration

# Highlights of the Study include:

- Mill capacity was estimated at 450,000 tonnes per annum ('tpa') of lithium feed for the production of spodumene concentrate, assuming 90% mill availability. This compares favourably to the stated nominal annual capacity of the current mill configuration of 475,000 tonnes. Note that the current mineral resource estimate at the Donner Lake property, announced on July 18, 2023, is 6.8 million tonnes grading 1.39% Li<sub>2</sub>O.
- An optimal grind size of 125 microns was determined (see testwork below). Existing mill grinding capacity was not considered a constraint on throughput.
- Initial capex for the mill reconfiguration is estimated at C\$50 million which includes a 30% contingency. This includes capex relating to crushing, grinding, mica flotation, magnetic separation, spodumene flotation, concentrate handling, and tailings handling. Existing infrastructure and utility connections will be used. Capex includes the addition of magnetic separation and mica flotation circuits required to produce a marketable spodumene concentrate.
- The processing cost was estimated at C\$34.81/t processed and G&A was estimated at C\$17.73/t processed. This equates to total milling costs of C\$316.14/t spodumene concentrate produced. Labour and reagents made up 42% and 32%, respectively, of the processing cost. Primero has identified opportunities to reduce G&A costs.
- Primero recommended a value engineering phase to complete further trade-off studies and optimization of the True North Mil for a cost of C\$400,0000.
- Primero gave an estimate for an Engineering, Procurement and Construction Management ('EPCM') study at a feasibility-level design at approximately C\$1.6 million.

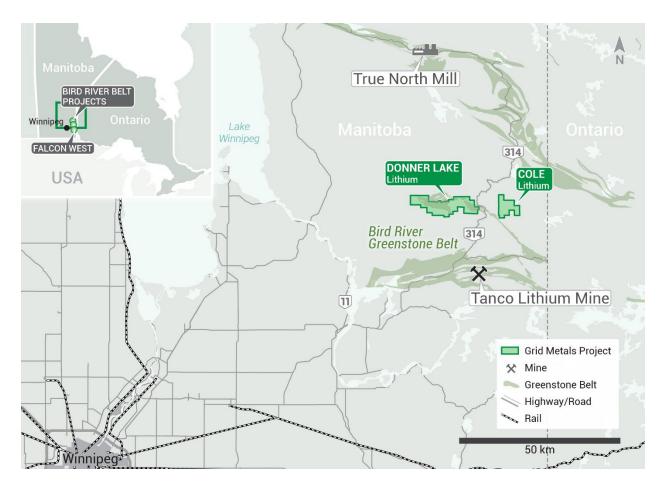
# **Testwork Program Completed to Support Primero Study**

- A metallurgical test program was completed by XPS Process Solutions Laboratories (Falconbridge, Ontario) during the course of the Primero study to support the design of the mill circuit.
- The new metallurgical test program resulted in ~70% recoveries using the new flow sheet. The recovery is subject to the mill receiving a crushed (to ~20 microns) and sorted product. The met work aligns well with prior metallurgical test work completed by the XPS lab earlier this year that achieved recoveries of ~75% (see Grid Metals' June 26, 2023 press release).
- The new metallurgical testing produced a marketable spodumene concentrate with a grade of 5.5% Li<sub>2</sub>O and a low iron content of 1.4% Fe<sub>2</sub>O<sub>3</sub>.

Robin Dunbar, CEO of Grid Metals, commented, "The work completed by Primero has outlined a low capital intensity project and has quantified operating and capital costs. This study gives us confidence to move forward with the lease agreement for the True North Mill. The True North Lease Agreement gives Grid access to a permitted mill and tailings facility within trucking distance of our Donner Lake lithium resource. We believe that with the True North Mill lease, the *Donner Lake lithium project can be one of the next producing lithium projects in North America.* We are moving ahead with further permitting, engineering and study work to advance our Donner Lake lithium project towards near-term production. We are conceptually targeting production of ~ 75,000 tpa of spodumene concentrate from True North based on 450,000 tonnes throughput and 70% recoveries."

#### **True North Mill Overview**

The True North mill, located in Bissett, Manitoba, sits approximately 85 km by existing all-weather road from the Donner Lake Lithium Project (see **Figure 1**). The project site boasts excellent infrastructure (see **Figure 2**) including an assay lab, large workshop, and camp facilities along with the recently idled processing facility and tailings management area. The mill was last operational in November 2022 when it was used to reprocess gold tailings. The current processing facility consists of crushing, milling, centrifugal gravity concentration and flotation circuits.



**Figure 1:** Location of the True North mill in the Rice Lake greenstone belt showing proximity to the Donner Lake lithium property and the City of Winnipeg.



Figure 2: Aerial View Of True North Mill



Figure 3: Primary mill at True North



Figure 4: Flotation circuit at True North mill

As part of its due diligence for the Donner Lake project, Grid commissioned a separate study on the tailings facility at True North focused on estimating both future capacity and engineering work required to utilize the existing tailings facility for future deposition from the reconfigured mill. The study determined that the existing tailings facility was sufficient to move ahead with the project.

#### **Lease Agreement for True North Mill**

On the basis of the positive Primero study, Grid is proceeding with the Lease Agreement for the True North Mill (the "Lease") that was announced on July 18, 2023. The Lease is subject to certain amendments that reduce the near-term cash funding requirements from Grid. The Lease included a due diligence period that was extended to October 24, 2023 by the mutual agreement of Grid and 1911 Gold Corporation. The initial payment under the Lease of C\$1 million (C\$400,000 via equity and C\$600,000 cash) is now due to 1911 Gold and will be paid out of Grid's working capital. The next scheduled payment under the amended terms of the Lease is a payment of C\$500,000 due on April 30, 2024.

The initial lease term is five years followed by a two-year notice period for cancellation and including an option to extend the lease, by mutual agreement, for an additional five years. The lease agreement provides Grid with the right to use the mill to process lithium feed and to reconfigure the existing mill. The Lessor has the right to utilize the mill to process gold ore in the future under certain terms and conditions during the term of the lease subject to bearing the capital and operating costs thereof.

Under the terms of the lease, following the payment of C\$500,000 due on April 30, 2024, C\$1,000,000 is due on December 31, 2024 and C\$900,000 is due on December 31, 2025. An additional C\$500,000 payment is due conditional on Grid completing an equity raise of more than C\$1,000,000. The total payments for the Lease including the conditional payment have been reduced from \$4,650,000 to C\$4,200,000 over the term of the Lease. In addition, Grid will cover certain operating payments of the mill for environmental monitoring, security and power costs commencing on January 1, 2024 which are expected to be in the range of C\$30,000 per month on average. Other operative terms of the Lease Agreement (including the use of the Lease payments by the Lessor) as announced on July 18, 2023 are unchanged.

**Permitting of Mining and Milling Operations** - Grid is pursuing a two-stage permitting process for the Donner Lake lithium project. An Advanced Exploration Permit ('AEP') application (announced on August 2, 2023) has been submitted by Grid. The permit application, when approved, will enable extraction of a bulk sample of up to 10,000 tonnes from the Donner Lake site. The second permitting step is an application for an Environmental Act Licence (mining permit) which is expected to be submitted to the provincial regulators in 2024. The True North Mill will require an amendment to its existing permits in order to enable the processing of lithium feed and use of the tailings facility.

#### **Qualified Persons Statements**

The Grid Metals Donner Lake project 2023 Mineral Resource Estimate was prepared by Mr. Rohan Millar, P.Geo., of SGS Geological Services, an Independent Qualified Person, in accordance with the guidelines of the Canadian Securities Administrators' National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"), with an effective date of the 27th June, 2023.

The Primero Study was authored by Ian Holl, P Eng., an employee of Primero Group Americas.

Dr. Dave Peck, P.Geo., has reviewed and approved the technical content of this release for purposes of National Instrument 43-101.

### **About Grid Metals Corp.**

Grid Metals is focused on its Donner Lake Lithium Project located in the Bird River greenstone belt in southeastern Manitoba, approximately 150 km northeast of

Winnipeg Manitoba. Grid has a 75% project interest in Donner Lake and is the project operator subject to a joint venture agreement with a fund controlled by Waratah Capital Advisors. Donner Lake is subject to various underlying NSR royalties. Grid also has an MOU with Tantalum Mining Corporation of Canada Limited who operates the nearby Tanco Mine which is currently producing lithium spodumene concentrate and is one of only two lithium-producing mines in Canada. In addition to the lithium assets, the Company controls a PEA stage Ni-Cu-PGM-Co project (Makwa-Mayville) undergoing exploration and development activity. Grid's properties are located in the traditional territory of the Sagkeeng First Nation.

On Behalf of the Board of Grid Metals Corp.

For more information about the Company, please see the Company website at www.gridmetalscorp.com or contact:

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