

Test Results Support Potential Carbon Neutrality of Giga's Turnagain Nickel Project

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Vancouver, June 1, 2021 - Martin Vydra, President of [Giga Metals Corp.](#) (TSXV: GIGA) (OTCQB: HNCKF) (FSE: BRR2) announced today that testwork conducted on Turnagain mineralized material at the University of British Columbia (UBC) has demonstrated significant mineral sequestration of CO₂. The greenhouse gas is absorbed by exposing tailings or other waste rock to the atmosphere, which converts the host rock minerals to carbonate minerals, locking away the CO₂ for geological time periods.

"This is exciting news," said Mr. Vydra. "We now have empirical data that supports our ambition to build the world's first true carbon neutral nickel mine, meaning a project that achieves carbon neutrality without purchasing carbon credits. As the only North American undeveloped nickel deposit of this scale solely focussed on the Class I and the battery chemical market, we think our emphasis on low carbon and other ESG principles will make us a desirable source of battery metals for electric vehicles."

The test work was conducted by a team led by UBC's Dr. Greg Dipple, who has been studying mineral sequestration of CO₂ in mine tailings around the world for more than 15 years and whose work has recently been cited in the MIT Technology Review outlining the potential for mineral carbonation processes to permanently sequester vast amounts of CO₂ and the interest that is being shown in generating carbon credits through this form of sequestration.

"The initial testing of the Turnagain material took place over a 4-week period and showed average absorption rates of 2.7 kg CO₂/m²/y for the control sample, with absorption continuing at this rate over the 4-week test period," said Dr. Dipple. "A second sample was tested with periodic mixing of the tailings layer, reflecting potential active management of a tailings facility; this second sample showed a sustained increase in carbon sequestration rates of 25%. During periods of optimal moisture and mixing, the sequestration rates increased up to 3 times the long-term average. We look forward to working with Giga Metals to conduct additional tests on larger samples."

In the 2020 Preliminary Economic Assessment (PEA), Giga Metals disclosed expected emissions from a commercial operation of less than 2.5 tonnes CO₂e/tonne of nickel produced in concentrate with a diesel haul fleet (Scope 1 + 2), and less than 0.75 t CO₂e/t Ni with an electrified haul fleet. This is an order of magnitude lower than the global weighted average of 25.6 tonnes of CO₂e/tonne of finished nickel reported by Wood Mackenzie.

At the demonstrated basic sequestration rate of 2.7 kg/m²/y and factoring in the tailings management facility size used in the PEA, Giga Metals estimates that approximately 900,000 tonnes of CO₂ would be sequestered over the mine life, or 0.72 tonnes CO₂ per tonne nickel produced. Seasonal variations and management strategies may cause CO₂ sequestration rates to vary. This sequestration rate would make Turnagain a carbon neutral project if an electrified haul fleet becomes available as depicted in the chart below.

Annual Average GHG Emissions (t CO₂e/t Ni)

To view an enhanced version of this graphic, please visit:

https://orders.newsfilecorp.com/files/856/85931_3d33682ad4308863_002full.jpg

The CO₂ sequestration rate used above is equivalent to 0.8 kg CO₂/tonne tailings, which is 40% below the 1.4 kg CO₂/tonne tailings recorded in the control sample. The tests showed that only about 10% of the

contained brucite was consumed in the sequestration reaction after 1 month, and that the reaction was continuing, indicating a potential for increasing sequestration over time provided continued access to atmospheric or dissolved CO₂. This upside was not incorporated in the calculations.

"We recognize the growing importance of strong ESG performance from commodity producers," said Martin Vydra. "Europe is already introducing a strong carbon policy which could provide economic incentives to low carbon sources of raw materials. We are proud that our project is at the forefront of being able to contribute to a carbon free industry. We are also looking forward to continuing work with Dr. Dipple as we see a potential for Turnagain to actually generate carbon credits under the right scenario, however there is still significant work ahead before we can address this potential."

About Giga Metals Corporation

[Giga Metals Corp.](#) is focused on metals critical to modern batteries, especially those used in Electric Vehicles and Energy Storage. The Company's core asset is the Turnagain Project, located in northern British Columbia, which contains one of the few significant undeveloped sulphide nickel and cobalt resources in the world. Turnagain is the only undeveloped Canadian nickel project of this scale that is focussed on the battery market rather than the steel market.

On behalf of the Board of Directors,
"Martin Vydra"

MARTIN VYDRA, PRESIDENT
[Giga Metals Corp.](#)
Tel - 604 681 2300

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Qualified Persons

The technical content of this news release has been prepared and reviewed by Lyle Trytten, P.Eng., a Qualified Person under NI 43-101 standards.

Forward-looking Statements

Certain statements in this news release are forward-looking statements, which reflect the expectations of management regarding the Turnagain Project. Forward-looking statements consist of statements that are not purely historical, including any statements regarding beliefs, plans, expectations or intentions regarding the future. Such statements include, but are not limited to, statements with respect to the future financial or operating performance of the Company and its mineral projects, the estimation of mineral resources and mineral prices, the amount of CO₂ that could be sequestered under real world conditions, steps to be taken towards commercialization of the resource, the timing and amount of estimated future production and capital, operating and exploration expenditures. Such statements are subject to risks and uncertainties that may cause actual results, performance or developments to differ materially from those contained in the statements. No assurance can be given that any of the events anticipated by the forward-looking statements will occur or, if they do occur, what benefits the Company will obtain from them. These forward-looking statements reflect management's current views and are based on certain expectations, estimates and assumptions which may prove to be incorrect, including the list of additional work prior to requisitioning a Pre-feasibility study, and statements relating to future exploration and development of the Project and mineral resource and mineral reserve estimations relating to the Project. A number of risks and uncertainties could cause our actual results to differ materially from those expressed or implied by the forward-looking statements, including: (1) the mineral resource estimates relating to the Project could prove to be inaccurate for any reason whatsoever, (2) Giga is unable to finance the Project, (3) prices for nickel and cobalt or project costs could differ substantially and make any commercialization uneconomic, (4) inferred and indicated resources may not materialize, (5) permits, environmental opposition, government regulation, cost overruns or any of many other factors may prevent the Company from commercializing the Turnagain Project, (6) additional but currently unforeseen work may be required to advance to the pre-feasibility stage,

and (7) even if the Project goes into production, there is no assurance that operations will be profitable. These forward-looking statements are made as of the date of this news release and, except as required by applicable securities laws, the Company assumes no obligation to update these forward-looking statements, or to update the reasons why actual results differed from those projected in the forward-looking statements. Additional information about these and other assumptions, risks and uncertainties are set out in the "Risks and Uncertainties" section in the Company's most recent MD&A filed with Canadian security regulators.

To view the source version of this press release, please visit <https://www.newsfilecorp.com/release/85931>

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