

CORPORATE UPDATE OF NIOBAY ACTIVITIES

Montreal, Québec, December 14, 2022 – NioBay Metals Inc. (“NioBay” or the “Company”) (TSX-V: NBY) (OTCQB: NBYCF) is pleased to announce the completion of the exploration work on the “extension” at the Crevier Project (the “Crevier Extension”), its participation in a research project with the University of Quebec at Trois-Rivières (“UQTR”) and its implication with the Minister's Mining Industry council (“MMIC”) in Ontario.

Completion of exploration work at the Crevier Extension

The Company completed the 2022 drilling campaign on the Crevier Extension (the “Drilling Campaign”). The exploration work was carried out within the planned schedule and the initial plan was to drill 12 holes (3,250 metres). The Drilling Campaign ended with a total of 4,000 metres spread over 10 holes. The modification to the planned campaign was dictated by observations made in the field throughout the campaign and the Company expects to receive laboratory results by the end of the year.

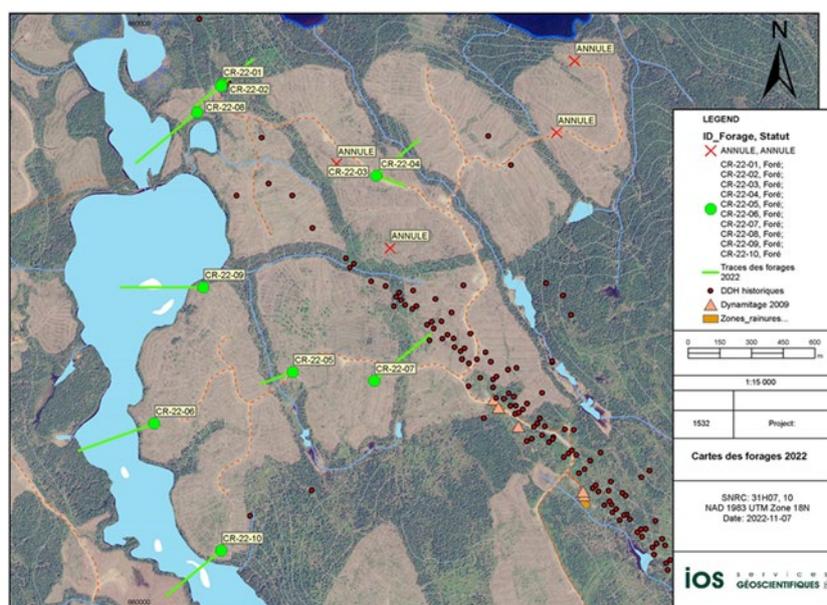
Reception of the petrographic report

The Company received a petrographic report (digital petrography of 6 polished thin section with artsection technology) from IOS Services Géoscientifiques to identify the minerals encountered in certain mineralized zones from the Drilling Campaign.

This report indicates that Niobium (“Nb”)-bearing minerals were detected. These are: pyrochlore, Ellsworthite, pyrochlore-microlite, rutile-Nb, illmenite and titanite. Carbonates and feldspathoids of interest were also identified such as: carbonate-REE, burbankite, nepheline and sodalite. The complete report will be posted on our website.

In order to offset the 81.3 t CO₂ eq. in greenhouse gas (GHG) emitted during the Drilling Campaign, Niobay made a contribution to Carbone Boréal (<https://carboneboreal.uqac.ca>) who will compensate by planting 584 trees in the province of Quebec.

Figure 1: Map of the Drilling Campaign 2022



NioBay and UQTR research project

NioBay is proud to announce its participation in a research project with UQTR. This project will focus on the “*Development of a new porous niobium-based transport layer for water electrolysis by proton exchange membrane*”.

Hydrogen is one of the most efficient energy carriers and can be produced by various methods. Among them, proton exchange membrane water electrolyzer (“PEMWE”) is considered the most promising technique to produce very pure hydrogen from renewable energy sources with pure oxygen as a by-product, without carbon emission.

The porous transport layers (“PTL”) must meet certain requirements to work inside the cell, such as good electrical and thermal conductivity, high corrosion resistance, minimal contact resistance and low mass transport losses. Niobay and UQTR will develop a new Niobium-based PTL for the PEMWE that will meet all these criteria. This project was made possible thanks to the participation of PRIMA Québec and the Natural Sciences and Engineering Research Council of Canada (NSERC).

It should be noted that Niobium is seen as a potential substitute for the commonly used platinum group elements (PGE).

Invitation to join Ontario’s MMIC

NioBay received an invitation from the Honorable George Pirie, Ontario’s Minister of Mines, to join the MMIC for 2023. The committee aims to improve the business environment for the mining sector in Ontario and to make Ontario the premier mining jurisdiction in the world.

Qualified person

This press release has been reviewed and approved by Mr. Jean-Sebastien David, P. geo, and Qualified Person under NI 43-101. Mr. David is NioBay’s President and Chief executive officer (“CEO”).

About NioBay Metals Inc.

NioBay is a company focused on exploration, development and use of critical green metals with an Environmentally, Sustainable, Governance, and Indigenous (ESGI) focus.

The Company holds a 100% interest in the James Bay Niobium Project located 45 km south of Moosonee, in the Moose Cree Traditional Territory of the James Bay Lowlands in Ontario. NioBay also holds a 72.5% interest in the Crevier Niobium and Tantalum project located in Quebec and on the Nitassinan territory of the Pekuakamiulnatsh First Nation.

About Niobium

Niobium is a naturally occurring element. It is a readily available, reliable, soft metal that is ductile, malleable and highly resistant to corrosion. Because it enhances properties and functionalities, niobium is used in a wide range of materials and applications in the Mobility, Structural and Energy sectors. Niobium transforms materials. When added to materials like steel, glass and aluminum castings, niobium makes them smarter and lower environmental impacts, while also delivering other benefits like better performance, improved safety and increased value.

Cautionary Statement

Certain statements contained in this press release constitute forward-looking information under the provisions of Canadian securities laws including statements about the Company's plans. Such statements are necessarily based upon a number of beliefs, assumptions, and opinions of management on the date the statements are made and are subject to numerous risks and uncertainties that could cause actual results and future events to differ materially from those anticipated or projected. The Company undertakes no obligation to update these forward-looking statements in the event that management's beliefs, estimates or opinions, or other factors should change, except as required by law.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accept responsibility for the adequacy or accuracy of this release.

FOR MORE INFORMATION, CONTACT:

NioBay Metals Inc.

Jean-Sébastien David, P.Geo., MPM

President & CEO

jsdavid@niobaymetals.com

www.niobaymetals.com