NioBay METALS

Press release

TSX-V: NBY OTCQB:NBYCF

NioBay Metals confirms mineralization to the north at depth at the James Bay Niobium Project

Montreal, Quebec, August 11, 2022 – NioBay Metals Inc. ("NioBay" or the "Company") (TSX-V: NBY) (OTCQB: NBYCF) is pleased to announce the discovery of significant extensions to the mineralized zone at the Company's wholly-owned James Bay Niobium Project, following the drilling of its second exploration campaign on the project.

The work allows us to confirm:

- Presence of high-grade mineralization and intersections in the unexplored zone at depth to the north
- Expansion of the mineralized zone
- Confirmation of mineralization (in field) on the west side of the deposit
- Potential to significantly increase the resource.

A surface plan showing the location of drilled and planned holes is shown in Figure 1.

The planned drilling campaign of approximately thirty holes, which was suspended last March following a request from the Moose Factory Band Council (see March 17, 2022 press release), was aimed to transform a significant part of the inferred resources into indicated resources and to verify the extension at depth and towards the north of the high-grade mineralized zone at the heart of the deposit. The three holes completed, just north of the sections drilled in 2020 (see press releases dated April 8, 2020 and May 21, 2020), confirmed the extension and widening of the mineralized zone at depth on two additional sections.

Hole NBY-22-08, drilled on section 8N, 60 meters north of the last section drilled in 2020, demonstrates the extension at depth of the East and West branches of the deposit, with a widening and high grade of the West branch.

Holes NBY-22-09 and NBY-22-10, 60 meters further north on section 10N, confirm the extension of the East branch at depth and a significant enrichment in Nb_2O_5 for the West branch compared to the results obtained in the 60s.

The high-grade mineralized zone (0.50 to 0.70% Nb_2O_5) which dips to the north was not intercepted by these three holes which were mainly aimed at extending the indicated resources. Drilling planned deeper on sections 4N, 6N, 8N and 10N were aimed at this target.

Again this year, visual observations of the drill core testify to the presence of very coarse grains of pyrochlore, the niobium mineral, which portends an exceptional recovery, as shown by previous metallurgical tests (see August 13, 2020 press release).

Figure 1: James Bay Niobium Project Geological Surface Plan

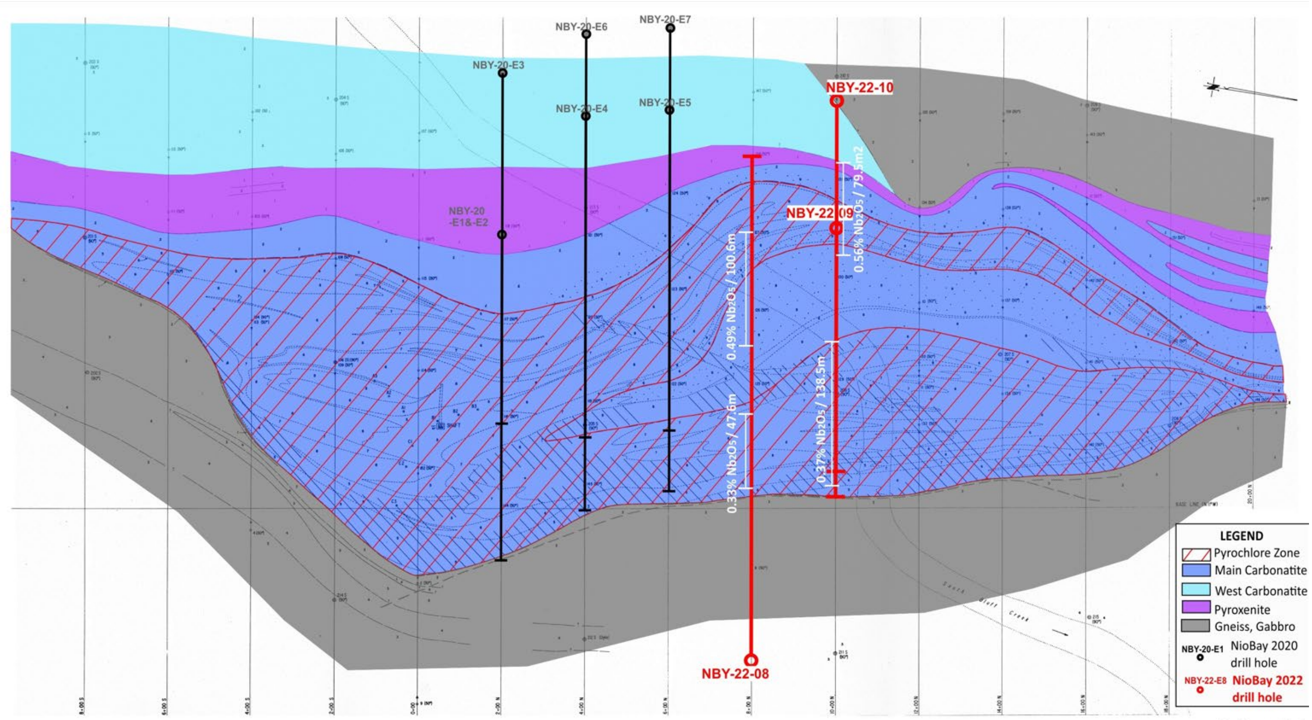

Table 1: Significant intervals in diamond drilling assay results

Name of hole	To (m)	From (m)	Length (m)	% Nb_2O_5
NBY-22-08	178.2	225.8	47.6	0,33
NBY-22-08	293.0	342.0	49.0	0,32
NBY-22-08	361.0	461.6	100.6	0,49
Including	404.0	459.3	55.3	0,59
NBY-22-09	161,0	218,0	57,0	0,32
NBY-22-09	224,0	299,5	75,5	0,43
Including	227,0	253,7	26,7	0,55
NBY-22-10	53,4	132,5	79,1	0,56
Including	53,4	75,0	21.6	0,76
Including	90,0	114,0	24	0,68

“The confirmation that the mineralized zone extends at depth in the northern sector allows us to say that this deposit has not finished to surprise us. Further drilling will be required in this area to verify the extent of the mineralization. We are also pleased to confirm the presence of mineralization between previous drill holes. We look forward to completing this drill program with all our stakeholders as soon as possible. Remember that this campaign was stopped for reasons beyond our control and these results come from the first holes of the initially planned campaign. Meanwhile, the Company will take advantage of the other projects in its portfolio and will advance exploration initiatives,” said Jean-Sébastien David, President and CEO.

Qualified person

This press release has been reviewed and approved by Jacquelin Gauthier, P.Geo. and Qualified Person under NI 43-101. Mr. Gauthier is Vice President, Geology of NioBay.

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 MCFN 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 Pekuakamiulnuatsh 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.

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