

NIOBAY IMPROVES THE CONCENTRATE CONTENT BY 56% AS COMPARED TO HISTORICAL METALLURGICAL RESULTS

Montreal, Quebec, October 20, 2025 – NioBay Metals Inc. (“**NioBay**” or the “**Company**”) ([TSX-V: NBY](#)) ([OTCQB: NBYCF](#)) is proud to announce the highlights of its metallurgical work carried out by SGS in Quebec City. This work was made possible thanks to a grant received under the Mining Exploration Support Program for **Critical and Strategic Minerals** of the Ministère des Ressources naturelles et des Forêts (“MRNF”) for its Crevier niobium & tantalum project (the “Crevier Project”). The Crevier Project is located approximately 50 km north of the town of Girardville and approximately 150 km from the Niobec mine and is located in the Nitassinan (or ancestral territory) of the Pekuakamiulnuatsh, whose main population center is Mashteuiatsh.

Work completed

The title of the funded project, “**Demonstration of the niobium-tantalum concentration process on a pilot scale and production of niobium and tantalum oxides from the Crevier Project deposit located in the Lac St-Jean region,**” allowed the Company to test the robustness of the process flowsheet.

Just under 10 mt of ore from the Crevier Project was used for the tests at a grade of 0.2% Nb₂O₅ and 200 ppm Ta₂O₅.

Results

- Niobay shipped several types of concentrates at the request of customers and partners. These concentrates had a niobium content of 16%, 17%, 32%, and 36% Nb₂O₅.
- Recovery reached a peak of 84.6% Nb₂O₅. The Company can establish an average recovery of 65% during the production of 17 kg of concentrate at 32% Nb₂O₅.
- With this pilot, Niobay was able to reproduce the previous results obtained in the laboratory in 2023 (Press Release dated January 25, 2023).
- Compared to the 2012 laboratory tests, the Company **improved** the final Nb₂O₅ content of the concentrate **by 56%**, i.e., 20.3%** versus 36%.

**THE DEVELOPMENT OF A SELECTIVE PROCESS FOR THE EXTRACTION AND RECOVERY OF TANTALUM AND NIOBIUM FROM CREVIER ORE, final report, August 20, 2013, SGS Canada.

We believe there is still room for improvement in the process, and we must continue to deliver samples. To achieve this, the implementation of a second pilot with 145 mt of ore is the next step for the Company. As soon as the final report from SGS is available, it will be filed on SEDAR.

Message from the President and Chief Executive Officer of NioBay Metals on Crevier

“The results and work demonstrate that the Crevier Project is capable of providing valuable material for the industry. This pilot is an important milestone for NioBay and confirms the potential of the Crevier Project. Based on the results obtained and the positive reception received, we are currently planning pilot no. 2, which will process 145 tm of ore from the 2025 fieldwork. This pilot plant will allow us to have additional product to market. We hope our shareholders will be proud of this progress and we thank them in advance for their support,” concluded Mr. Jean-Sébastien David.

Qualified Person

This press release has been reviewed and approved by Jean-Sébastien David, P.Geo., a Qualified Person as defined by National Instrument 43-101. Mr. David is President and Chief Executive Officer of NioBay.

About NioBay Metals Inc.

NioBay aims to become a leader in the development of low-carbon mines and responsible water and wildlife management practices, while prioritizing the environment, social responsibility, good governance and the inclusion of all stakeholders. The top priority, which is critical to this success, is the consent and full participation of Indigenous communities in the territories or ancestral lands on which the Corporation operates. The Company holds, among other things, a 100% interest in the James Bay Niobium project located 45 km south of Moosonee in the James Bay Lowlands of Ontario. NioBay also holds a 72.5% interest in the Crevier niobium and tantalum project located in Quebec on the Nitassinan territory of the Pekuakamiulnuatsh First Nation.

About Niobium

Niobium is an element of natural origin. It is a ductile, malleable metal that is highly resistant to corrosion. Because it enhances properties and functionality, 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 such as steel, glass, and aluminum castings, niobium makes them more efficient and reduces their impact on the environment, while providing other benefits like better performance, increased safety, and greater value.

Cautionary statement

Certain statements contained in this press release constitute forward-looking information within the meaning of the provisions of Canadian securities laws, including statements about the Company's plans. These statements are necessarily based on a number of beliefs, assumptions and opinions of management as of the date they 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 are expected to change, except as required by law.

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