

## NIOBAY EXTENDS HIGH-GRADE MINERALIZATION AT JAMES BAY NIOBIUM

**Montreal, May 20, 2020.** NioBay Metals Inc. (“NioBay” or the “Company”) (TSX-V: NBY) is pleased to announce new and significant high-grade intersections at the James Bay Niobium Project (the “Project”) in Northern Ontario. These results are in addition to the announcement of [April 8<sup>th</sup>, 2020](#).

The assay results for the remaining four drill holes are in-line with the previous three holes. In total, the Company completed seven drill holes for a total of 3,090 metres, and confirmed;

- The presence of a high-grade core raking north;
- Increasing width moving north of the deposit;
- Mineralization open at depth (deepest hole at 330 meters);
- Significant potential to further extend the known resource.

A surface plan showing the location of the seven holes drilled this winter is presented on Figure 1. Vertical section 200N, where the first three holes were completed, vertical sections 400N and 600N, are respectively illustrated on Figure 2, 3 and 4 and include the following highlights:

**HIGHLIGHTS:** [\(see figures 1 to 4\)](#)

- Hole **NBY-20-E4** intersected **0.56% Nb<sub>2</sub>O<sub>5</sub>** over **169 metres**, including **0.75% Nb<sub>2</sub>O<sub>5</sub>** over **27 metres**.
- Hole **NBY-20-E5** intersected **0.57% Nb<sub>2</sub>O<sub>5</sub>** over **246 metres**, including **0.69% Nb<sub>2</sub>O<sub>5</sub>** over **24 metres**.
- Hole **NBY-20-E6** intersected **0.60% Nb<sub>2</sub>O<sub>5</sub>** over **128 metres**, including **0.79% Nb<sub>2</sub>O<sub>5</sub>** over **37 metres**.
- Hole **NBY-20-E7** intersected **0.58% Nb<sub>2</sub>O<sub>5</sub>** over **207 metres**, including **0.67% Nb<sub>2</sub>O<sub>5</sub>** over **107 metres**.

A Mineral Resource estimate of 26 million tonnes indicated @ 0.53 % Nb<sub>2</sub>O<sub>5</sub> and 25 million tonnes inferred @ 0.51 % Nb<sub>2</sub>O<sub>5</sub> was prepared by Roscoe Postle Associates Inc. (“RPA”) on the James Bay Niobium deposit and dated October 31, 2018 (see *NioBay press release dated [November 22, 2018](#)*).

*“With the completion of this small drill program, we confirmed the continuation of a high-grade zone heading north, and support our objective of finding a high-grade core. The results gives us great confidence about the potential to increase the resource if needed. We are looking forward to the outcome of our Preliminary Economic Assessment scheduled for completion in Q4 2020.”*, said Claude Dufresne, President & CEO of NioBay Metals Inc.

The Project next steps includes i) an update of the Mineral Resource Estimate (summer 2020), ii) metallurgical testing (already underway), and iii) a Preliminary Economic Assessment (“PEA”) (Q4 2020).

**TABLE 1: IMPORTANT INTERVALS FROM DIAMOND DRILL ASSAY RESULTS.**

<u>Hole Name</u>	<u>From(m)</u>	<u>To(m)</u>	<u>Length(m)</u>	<u>Nb<sub>2</sub>O<sub>5</sub> %</u>
NBY-20-E4	250	419	168.5	0.56%
Including	282	309	26.6	0.75%
Including	309	354	45.4	0.64%
NBY-20-E5	169	415	246.0	0.57%
Including	224	263	39.4	0.65%
Including	272	344	72.3	0.63%
NBY-20-E6	335	463	127.6	0.60%
Including	335	379	43.8	0.62%
Including	379	416	37.0	0.79%
NBY-20-E7	274	481	206.9	0.58%
Including	289	396	107.0	0.67%

The interval lengths reported here are between 65% and 80% of true horizontal widths.

**TABLE 2: DETAILED INFORMATION OF THE DIAMOND DRILL HOLES.**

<b>Hole Name</b>	<b>Easting</b>	<b>Northing</b>	<b>Azimuth</b>	<b>Dip</b>	<b>Length</b>	<b>Section</b>	<b>State</b>
NBY-20-E1	526296	5632105	81	-50	349m	200N	Analyzed
NBY-20-E2	526296	5632105	81	-63	388m	200N	Analyzed
NBY-20-E3	526147	5632074	81	-50	465m	200N	Analyzed
NBY-20-E4	526179	5632143	81	-45	441m	400N	Analyzed
NBY-20-E5	526182	5632206	81	-50	444m	600N	Analyzed
NBY-20-E6	526120	5632131	81	-45	498m	400N	Analyzed
NBY-20-E7	526122	5632194	81	-50	504m	600N	Analyzed

### **QUALITY CONTROL / QUALITY ASSURANCE (QA/QC)**

A complete and thorough quality assurance/quality control protocol was implemented and supervised by IOS Services Geoscientifiques, in accordance with the Canadian Institute of Mining best practices guidelines.

The drill core was split in two, with one half of the core returned to the core box for storage on site, while the second half of the core was placed in a plastic bag with the sample tag and sealed prior to be shipped to the SGS Canada laboratory in Cochrane, Ontario. The QA/QC program included the assaying of four different certified reference materials, one internal reference material, three type of blank and field duplicates that were inserted in the samples sequence before the shipping for analysis at ALS Minerals laboratory. Then at about every 10 samples, blank, internal reference material and duplicate are alternated for the entire length of the hole.

At SGS the ½ core samples were crushed to 6 to 10 mesh before splitting representative subsamples for assay. The Nb<sub>2</sub>O<sub>5</sub> was analysed by X-Ray Fluorescence (XRF), while the balance of elements via ICP AES/MS multi-element scan. The rest of the coarse material was kept for metallurgical testing.

## **QUALIFIED PERSON**

This press release was verified and approved by Jacquelin Gauthier, P.Geo, and Qualified Person as defined by National Instrument 43-101. Mr. Gauthier is the Vice-President Geology of Niobay Metals Inc.

## **REMARK FINANCIAL**

The Company is also pleased to announce that it has retained the services of Remark Financial Communications Inc. to handle its investor relations activities.

In consideration of the services to be provided, the monthly fees incurred by NioBay Metals Inc. will be a cash consideration of up to \$5,000 CAD, starting May 1st, 2020 for a period of six months ending on October 31st, 2020 and monthly thereafter if the Company desire to extend the contract.

Remark Financial Communications does not have any interest, directly or indirectly, in NioBay Metals Inc. or its securities, or any right or intent to acquire such an interest.

## **ABOUT NIOBAY METALS INC.**

NioBay Metals Inc. is a mining exploration company holding a 100% interest in the James Bay Niobium Project located 45 km south of Moosonee, in the James Bay Lowlands in Ontario. Niobay also holds a 72.5% interest in the Crevier niobium and tantalum project located in Quebec and a 49% direct participation in mineral titles situated in the Chibougamau and Normetal region, Quebec, under a joint venture agreement with SOQUEM.

## **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 to increase its niobium resource *and to complete a PEA*. 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:**

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