NioBay Reports a Significant Increase in Resources at James Bay Niobium

09.07.2020 | GlobeNewswire

MONTREAL, July 09, 2020 - Niobay Metals Inc. (“NioBay” or the “Company”) (TSX-V: NBY) is pleased to report an updated Mineral Resource estimate (the “MRE”) for its James Bay Niobium Project, located in Northern Ontario. The MRE shows an increase in tonnage of 33.6% and 13.8%, respectively, for the Inferred and Indicated Resources categories. The MRE was prepared in accordance with CIM (2014) Definition Standards as referenced in Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”) and was prepared by Roscoe Postle Associates Inc. (“RPA”) following the successful completion of a seven hole/3,090 metre drill program conducted earlier this year. The effective date of the MRE is July 9, 2020 and the supporting NI 43-101 technical report will be filed on SEDAR no later than 45 days after the date of this press release.

HIGHLIGHTS OF THE UPDATED 2020 MINERAL RESOURCE ESTIMATE:

Classification	Tonnes (Mt)	Grade (%Nb_2O_5)	Contained Nb_2O_5 (Mkg)
Indicated	29.7	0.53	158
Inferred	33.8	0.52	177

Notes:

1. CIM (2014) Definitions Standards were followed for Mineral Resources.
2. Mineral Resources are reported at a cut-off grade of 0.3% Nb_2O_5 based on an underground mining operating cost of C$70/tonne and a metallurgical recovery of 70%.
3. Mineral Resources are estimated using a long-term niobium price of US$40 per kg and a US$/C$ exchange rate of 1:1.2.
4. Bulk density of 2.93 g/cm? was used.
5. A minimum mining width of approximately 7.5 m was used to build the resource wireframes.
6. Resources of 7.2 million tonnes situated in a 46 m thick crown pillar have been excluded.
7. The RPA Qualified Persons for the estimate are Dorota El Rassi, P.Eng. and Paul Chamois, P.Geo.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

“The James Bay Niobium deposit keeps on surprising us. The resource improvement is just amazing, and with just 3,090 metres of drilling, we’ve increased the mineral resource considerably. The PEA is well underway, and we are looking forward to its results which are expected to be published in early Q4 2020. Further, these results support our belief that the mineral resource could be increased significantly by continuing drilling in the northern section of the deposit.’’ commented Claude Dufresne, President and CEO.

The MRE is supported by the results from the recent 3,090 metre drill program by the re-logging and re-sampling of twelve (12) representative historical diamond drill holes, by the preliminary metallurgical testing performed by SGS Lakefield on a composite sample and by all the historical data Niobay recovered from the previous operator: drill logs, assay certificates, surveyed collar coordinates, interpreted geological surface and level plans, interpreted vertical sections, location of the exploration shaft and 1st level, and metallurgical tests.

The data used to estimate the Mineral Resource includes 86 diamond drill holes totaling 16,320 metres located within the resource model area. The data includes 3,449 assays, of which 64 have a value of zero for Nb_2O_5. The estimate was prepared using a block model constrained with 3-D wireframes of the mineralized zone. The niobium oxide grades were interpolated using ordinary kriging, dynamic anisotropy and two passes.

The seven-diamond-drill-hole program of last winter was successful in confirming the extension to the North and at depth of the high-grade zone at the heart of the deposit.

BEST INTERSECTIONS OF THE 2020 WINTER DRILL PROGRAM

Hole Name	From (m)	To (m)	Length (m)	Nb_2O_5 %
NBY-20-E1	93	278	184.4	0.69%
Including	171	233	61.8	1.02%
NBY-20-E2	139	329	189.8	0.66%
Including	195	257	62.5	0.97%
NBY-20-E3	334	444	110.2	0.58%
Including	392	408	15.5	0.80%
NBY-20-E4	250	419	168.5	0.56%
Including	282	309	26.6	0.75%
NBY-20-E5	169	415	246.0	0.57%
Including	272	344	72.3	0.63%
NBY-20-E6	335	463	127.6	0.60%
Including	379	416	37.0	0.79%
NBY-20-E7	274	481	206.9	0.58%
Including	289	396	107.0	0.67%

The current MRE incorporates this recent drilling and demonstrates an increase in contained metal of 13.7% for the Indicated Resources and 37.2% for the Inferred Resource.

COMPARISON TO PREVIOUS MINERAL RESOURCE ESTIMATE

	Category	Tonnage (Mt)	Grade (% Nb_2O_5)	Contained Metal (000 t Nb_2O_5)
2018	Indicated	26.1	0.53	139
	Inferred	25.3	0.51	129
2020	Indicated	29.7	0.53	158
	Inferred	33.8	0.52	177
Differences	Indicated	+ 13.8%	0.0%	+ 13.7%
	Inferred	+ 33.6%	2.0%	+ 37.2%

Notes:

1. CIM (2014) Definitions Standards were followed for Mineral Resources.
2. Mineral Resources are reported at a cut-off grade of 0.3% Nb_2O_5 based on an underground mining operating cost of C$70/tonne and a metallurgical recovery of 70%.
3. Mineral Resources are estimated using a long-term niobium price of US$40 per kg and a US$/C$ exchange rate of 1:1.2.
4. Bulk density of 2.93 g/cm? was used.
5. A minimum mining width of approximately 7.5 m was used to build the resource wireframes.
6. Resources of 7.2 million tonnes situated in a 46 m thick crown pillar have been excluded.
7. The RPA Qualified Persons for the estimate are Dorota El Rassi, P.Eng. and Paul Chamois, P.Geo.
8. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

RPA recommends a next phase drill program, including 9,000 metres focused on upgrading portions of the Inferred Resources to Indicated Resources and extending the Mineral Resources laterally as well as environmental, engineering and metallurgical studies required to support a future Feasibility Study.

Jacquelin Gauthier, P.Geo., P.Eng., consultant to the Company, acted as the Qualified Person as defined in

National Instrument 43-101. He reviewed and approved the technical and scientific content of this press release. RPA’s Qualified Persons for the mineral resource estimate are Dorota El Rassi, P.Eng. and Paul Chamois, P.Geo. They have reviewed and approved the above technical and scientific content of this press release related to the mineral resource estimate.

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 47% 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) accepts responsibility for the adequacy or accuracy of this release.

For more information, contact:

Claude Dufresne, P.Eng.
President & CEO
Niobay Metals Inc.
Tel.: 514 866-6500, Ext. 2221

Email: cdufresne@niobaymetals.com
Website: www.niobaymetals.com

Paradox Public Relations
Tel: (514) 341-0408 or 1-866-460-0408
jfmeilleur@paradox-pr.ca

Renmark Financial Communications Inc.
Melanie Barbeau
Tel: (416) 644-2020 or (212) 812-7680

mbarbeau@renmarkfinancial.com www.renmarkfinancial.com