

Canadian North Resources Inc. Provides an Update on its Metallurgical Testing Programs at the Ferguson Lake Project

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Highlights

- Successful metallurgical flotation tests indicate potential for three valuable concentrates: copper, nickel, and PGMs
- Results based on diverse mineralized materials within Ferguson Lake Project's NI 43-101 Mineral Resource
- Promising outlook for low-capital cost development option
- Underscores significant milestone in project advancement

TORONTO, April 03, 2024 -- [Canadian North Resources Inc.](#) ("CNRI" or "the Company," TSXV: CNRI; OTCQX: CNRSF; FSE: EO0 (E-O-zero)) is pleased to report encouraging results from its series of flotation bench tests of various domains of mineralized samples obtained from its 100% owned Ferguson Lake Project ("Ferguson Lake Project") in Nunavut, Canada which were conducted during 2023. The program and results are built upon metallurgical testing that completed by the Company in 2016.

"The consideration of this flotation flowsheet could significantly improve the economic potential and viability of the Ferguson Lake project," said Dr. Trevor Boyd, the Technical Advisor and QP of the Company. "It provides a roadmap forward in its development. The test results also demonstrate more options are available for the continued improvement of the metal concentrates and recoveries."

The Company believes that this flotation-gravity flowsheet could be a low-capital-cost option for the potential mine development of the Ferguson Lake Project, although the metal recoveries are lower than hydrometallurgy. Much effort has been devoted to the hydrometallurgical tests historically and by the Company, and the results demonstrated very high (>90%) recoveries for copper, nickel, cobalt, palladium and platinum from the massive sulfide materials. Alternatively, hydrometallurgy could be a technically highly effective option for the mine development of the Ferguson Lake Project, of which the capital and operating costs are higher.

Based on these results, in 2024, the Company plans to continue to conduct follow-up investigations of both flotation and hydrometallurgical processes, including new technologies such as bio-hydrometallurgy, for the extraction of metals for the Ferguson Lake Project. The Company will focus on the low-carbon footprint and green energy options for the project development.

The 2023 test work program was completed on two domain types of sample material selected from the 2022 CNRI diamond drilling program containing semi-massive to stringer to disseminated sulphide mineralization with sample head grades, as shown in Table 1. These samples are compared to the high-grade massive sulphide bulk sample material used in the 2016 testing program. All the testing programs were completed at the SGS Canada Inc. Lakefield facility in Ontario.

Table 1

Sample ID	Cu %	Ni %	Co %	S %	Pd g/t	Pt g/t
2023 Batch 1 drilling	0.33	0.29	0.038	9.33	0.69	0.085
2023 Batch 2 drilling	0.042	0.062	0.01	1.01	0.98	0.72
2016 Bulk Sample	0.86	0.96	NA	31.5	1.88	0.18

The program and independent review of Batch 1 and 2016 Bulk Sample, medium to high sulphide type

mineralized materials encompassed gravity, flotation and magnetic separation test work. Bench tests successfully produced saleable up to 30% Cu and between 37 and 62 g/t PGMs concentrates with 80% Cu recovery. An independent review of the mineralogy of the deposit estimates the pyrrhotite (iron sulphide) to pentlandite (Ni sulphide) ratio is in the range of 35:1 in the massive and semi-massive sulphide zones of the deposit, with the Ni deportment to pentlandite to be about 71% envisioning the creation of a potentially payable 10% Ni bearing concentrate with 51% Ni recovery.

In general, the bench testing of the Batch 1 and 2016 samples, produced high-grade copper and variable grade Ni/Cu concentrates ranging on a grade - recovery curve from 5 to 20% Cu-Ni with recoveries of up to 98% Cu, 61% Ni and 35-75% PGMs. It was concluded that there is potential to significantly improve these results with additional testing using optimized conditions based upon our improved understanding of the Cu, Ni and PGM's mineral deportment.

Bench testing of the Batch 2 sample, which was obtained from the low-sulphide PGM rich type mineralized material successfully created potentially payable precious metal concentrates in which the highest PGM grade achieved was 92.1 g/t Pd plus 96.5 g/t Pt (totalling 189 g/t) and recoveries of up to 75% Pd and 55% Pt when gravity separation was included in the flotation flowsheet. Additional tests and investigations of the PGM mineralogy of the deposit are expected to improve these results.

Based upon the review of the historic and CNRI flotation test results completed by SRK Consulting for the three types of mineralized materials at the Ferguson Lake Project, it was concluded, for the first time in the history of the project, that three payable Cu-PGM, Ni-Cu-Co, and PGM-Cu concentrates could be produced using a flotation-gravity flowsheet.

This work resulted in the application of total recoveries of 95% Cu, 51% Ni, 89% Co, 76% Pd, and 60% Pt for the massive sulphide mineralized material and 78% Cu, 29% Ni, 48% Co, 60% Pd and 70% Pt for the low sulphide PGM mineralized material in the creation of the independent 43-101 Mineral Resource Statement (CNRI News Release, March 19, 2024) and accounts for these inputs in the estimate of the deposit's cut-off NSR.

Qualified Person:

The technical contents of this News Release have been reviewed and approved by Dr. Trevor Boyd, P.Geo., a Qualified Person as defined by Canadian National Instrument 43-101 standards.

About Canadian North Resources Inc.:

[Canadian North Resources Inc.](#) is an exploration and development company focusing on the critical metals for the clean-energy, electric vehicles, battery and high-tech industries. The company is advancing its 100% owned Ferguson Lake nickel, copper, cobalt, palladium, and platinum project in the Kivalliq Region of Nunavut, Canada.

The Ferguson Lake mining property contains a substantial National Instrument 43-101 compliant Mineral Resource Estimate announced on March 19 2024, which include Indicated Mineral Resources of 66.1 million tonnes (Mt) containing 1,093 million pounds (Mlb) copper at 0.75%, 678Mlb nickel at 0.47%, 79.3Mlb cobalt at 0.05%, 2.34 million ounces (Moz) palladium at 1.10gpt and 0.419Moz platinum at 0.19gpt; and Inferred Mineral Resources of 25.9Mt containing 558Mlb copper at 0.98%, 333Mlb nickel at 0.58%, 39.6Mlb cobalt at 0.07%, 1.192Moz palladium at 1.43gpt and 0.205Moz platinum at 0.25gpt. The Mineral Resource model indicates significant potential for resource expansion along strike and at depth over the 15 km long mineralized belt.

This updated Mineral Resource incorporates the recent 39,270 metres of diamond drilling in 145 holes completed by the Company. (Refer to the press release "Canadian North Resources Reports Substantial Increase of Copper, Nickel, Cobalt, Palladium and Platinum NI 43-101 Compliant Mineral Resources for its 100% owned Ferguson Lake Project in Canada" dated March 19, 2024, available on the Company's website and Sedar+. The technical report on the resource estimates, which is being prepared in accordance with National Instrument 43-101 ("NI 43-101"), will be available on SEDAR+ (www.sedarplus.ca) under the Company's issuer profile within 45 days.) The effective date of the current Mineral Resource Statement is March 19, 2024.

Further information of the Company can be found at www.cnresources.com.

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These factors should be considered carefully, and readers should not place undue reliance on the Company's forward-looking statements. The Company believes that the expectations reflected in the forward-looking statements contained in this news release and the documents incorporated by reference herein are reasonable, but no assurance can be given that these expectations will prove to be correct. In addition, although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. The Company undertakes no obligation to release publicly any future revisions to forward-looking statements to reflect events or circumstances after the date of this news or to reflect the occurrence of unanticipated events, except as expressly required by law, anticipated events, except as expressly required by law.

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