TALON METALS CORP

News Release
TSX:TLO

TALON METALS DRILLS 101.71 METERS (333 FEET) OF 3.04% NICKEL EQUIVALENT AT THE TAMARACK NICKEL PROJECT

High levels of platinum group metals present, which is a key input for multiple clean energy systems

Tamarack, Minnesota (August 21, 2023) – Talon Metals Corp. ("**Talon**" or the "**Company**") (TSX:TLO) has successfully drilled 101.71 meters (333 feet) of high-grade nickel-copper mineralization at the Tamarack Nickel Project, grading 1.94% Ni,1.84% Cu, 0.35 g/t Pd, 0.64 g/t Pt and 0.62 g/t Au (1.61 g/t PGEt + Au) (3.04% NiEq) (see Table 1).

Highlights

- **Drill intercept of 101.71 meters grading 1.94% Ni, 1.84% Cu and 0.35 g/t Pd, 0.64 g/t Pt and 0.62 g/t Au (1.61 g/t PGEt + Au) (3.04% NiEq);**
- **Drill hole was completed in partnership with a research team from Columbia University that is funded by the Department of Energy (DOE) Advanced Research Projects Agency-Energy (ARPA-E) Mining Innovations for Negative Emissions Resource Recovery (MINER) program that funds novel approaches to enhanced metal recoveries within the mining industry** (**see** Columbia University | arpa-e.energy.gov).

Figure 1: Portion of Drill Hole 23TK0473 that forms part of 101.71 meters (333 feet) of high-grade nickel-copper mineralization, grading 1.94% Ni, 1.84% Cu and 0.35 g/t Pd, 0.64 g/t Pt and 0.62 g/t Au (1.61 g/t PGEt + Au) (3.04% NiEq)

Drill Hole	From	To	Length	Assay						NiEq (%)
(#)	(m)	(m)	(m)	Ni (%)	Cu (%)	Co (%)	Pd (g/t)	Pt (g/t)	Au (g/t)	
23TK0473	332.79	434.5	101.71	1.94	1.84	0.04	0.35	0.64	0.62	3.04
Including	381.02	392.89	11.87	2.36	1.26	0.06	0.21	0.30	0.15	3.09
Including	409.38	421.78	12.4	2.98	3.84	0.06	1.38	2.79	2.68	5.76

Table 1: Assay Results from Drill Hole 23TK0473 (see Table 3 for further technical details).

- A team from Columbia University has partnered with Talon to use critical mineral concentrates from the Tamarack Nickel Project to conduct lab studies that will explore potential novel processing technologies that lower the CO_2 footprint of mining operations, while increasing the amount of nickel and copper extracted from ore (beyond the high metallurgical recoveries already achievable at the Tamarack Nickel Project). These R&D programs aim to increase US nickel production and lower the overall cost of nickel extraction compared to standard industry practices.

- Using funds from Columbia's ARPA-E grant, Talon successfully drilled 101.71 meters (333 feet) of high-grade nickel-copper mineralization (3.04% NiEq) at the Tamarack Nickel Project. This drill hole is located within the Tamarack Resource Area (see Figure 2).

- The drill hole was part of Talon's approved annual drill program with the Minnesota Department of Natural Resources (an approval process that includes input from proximate tribal sovereign governments).

- Talon and the State of Minnesota gain additional geological knowledge with respect to the Tamarack Nickel Project through the Columbia funded drilling, while Columbia will obtain material to utilize in their lab experiments to test novel approaches to enhanced metal recoveries within the mining industry.

- The combination of Columbia University's initiatives, along with Talon's ongoing exploration and innovation programs, are part of Talon's "full value mining" strategy to ensure that society is able to utilize the maximum amount of critical minerals in the ore that is extracted.

"Intercepting 101.71 meters (333 feet) of high-grade nickel-copper mineralization is a reminder of the uniqueness of the Tamarack Nickel Project's US nickel resources," said Henri van Rooyen, CEO of Talon. *"Most projects aspire to intercept just 2 meters (6.6 feet) of high-grade nickel. The goal of this Columbia collaboration is to both add to our understanding of the ore body, while also supporting research aimed at recovering additional nickel, copper and other critical minerals used in clean energy systems."*

"One exciting aspect of this drill hole is that the copper and PGE grades are much higher than anticipated compared to the nickel grades, especially in the lower zone of mineralization where 12.4 meters assayed at 2.98% Ni, 3.84% Cu, 1.38 g/t Pd, 2.79 g/t Pt, and 2.68 g/t Au (6.85 g/t PGEt+Au)," said Brian Goldner, Chief Exploration Officer and Chief Operating Officer at Talon. *"The exploration team is working to model this unusual area of fractionated mineralization to identify other areas within the resource it may be residing."*

Alan West, Professor of Chemical Engineering in Columbia's School of Engineering and Applied Sciences, and the project's Principal Investigator, remarked: *"The Columbia Engineering team is very excited to partner with Talon and ARPA-e. This is a great opportunity to demonstrate and scale our processes aimed at improving the recovery of the critical materials that we need to transition energy systems and manufacturing to sustainable technologies, while also minimizing local environmental impacts of metals production."*

Talon's CEO, Henri van Rooyen concluded: *"Talon is taking a "full value mining" approach and harnessing innovation to understand how we can do mineral extraction in a better way. By working with top-notch US research and development institutions like Columbia University, we are hoping to deliver better outcomes that help the United States create secure domestic supplies of critical minerals for clean energy systems."*

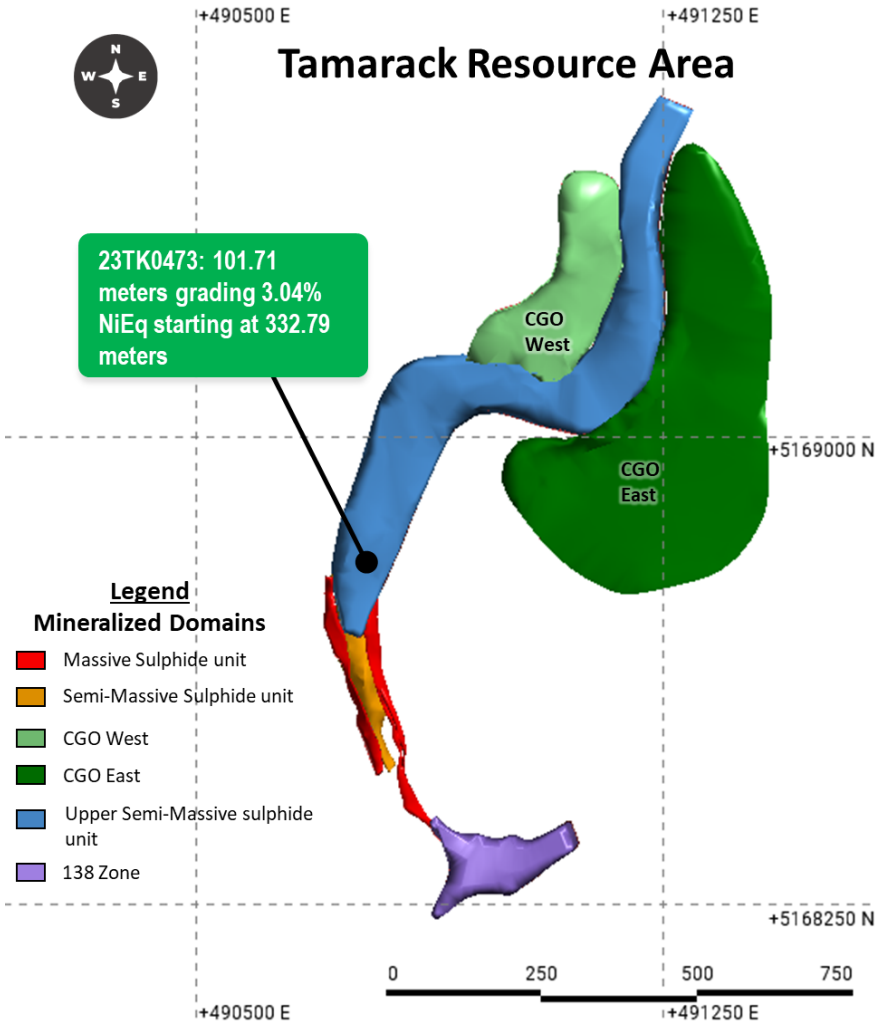

Figure 2: Map of the Tamarack Resource Area with approximate location of drill hole 23TK0473

Quality Assurance, Quality Control and Qualified Persons

Please see the technical report entitled "November 2022 National Instrument 43-101 Technical Report of the Tamarack North Project – Tamarack, Minnesota" with an effective date of November 2, 2022 ("**November 2022 Technical Report**") prepared by independent "Qualified Persons" (as that term is defined in National Instrument 43-101 ("**NI 43-101**")) Brian Thomas (P. Geo), Roger Jackson (P. Geo), Oliver Peters (P. Eng) and Christine Pint (P.G) for information on the QA/QC, data verification, analytical and testing procedures at the Tamarack Nickel Project. Copies are available on the Company's website (www.talonmetals.com) or on SEDAR at (www.sedar.com). The laboratory used is ALS Minerals who is independent of the Company.

Lengths are drill intersections and not necessarily true widths. True widths cannot be consistently calculated for comparison purposes between holes because of the irregular shapes of the mineralized zones. Drill intersections have been independently selected by Talon. Drill composites have been independently calculated by Talon. The geological interpretations in this news release are solely those of the Company. The locations and distances highlighted on all maps in this news release are approximate.

Dr. Etienne Dinel, Vice President, Geology of Talon, is a Qualified Person within the meaning of NI 43-101. Dr. Dinel is satisfied that the analytical and testing procedures used are standard industry operating procedures and methodologies, and he has reviewed, approved and verified the technical information disclosed in this news release, including sampling, analytical and test data underlying the technical information.

Where used in this news release:

NiEq% = Ni% + Cu% x $3.75/$9.50 x Cu Recovery/Ni Recovery + Co% x $25.00/$9.50 x Co Recovery/Ni Recovery + Pt [g/t]/31.103 x $1,000/$9.50/22.04 x Pt Recovery/Ni Recovery + Pd [g/t]/31.103 x $1,000/$9.50/22.04 x Pd Recovery/Ni Recovery + Au [g/t]/31.103 x $1,400/$9.50/22.04 x Au Recovery/Ni Recovery

For Ni and Cu recoveries, please refer to the formulae in the November 2022 Technical Report. Recovery of Ni to the Cu concentrate was excluded from the NiEq calculation.

The following recoveries were used for the other metals: 64.1% for Co, 82.5% for Pt, 69.3% for Pd and 72.6% for Au.

ABOUT TALON

Talon is a TSX-listed base metals company in a joint venture with Rio Tinto on the high-grade Tamarack Nickel-Copper-Cobalt Project located in central Minnesota. Talon's shares are also traded in the US over the OTC market under the symbol TLOFF. The Tamarack Nickel Project comprises a large land position (18km of strike length) with additional high-grade intercepts outside the current resource area. Talon has an earn-in right to acquire up to 60% of the Tamarack Nickel Project, and currently owns 51%. Talon is focused on (i) expanding and infilling its current high-grade nickel mineralization resource prepared in accordance with NI 43-101 to shape a mine plan for submission to Minnesota regulators, and (ii) following up on additional high-grade nickel mineralization in the Tamarack Intrusive Complex. Talon has an agreement with Tesla Inc. to supply it with 75,000 metric tonnes (165 million lbs) of nickel in concentrate (and certain by-products, including cobalt and iron)

from the Tamarack Nickel Project over an estimated six-year period once commercial production is achieved. Talon has a neutrality and workforce development agreement in place with the United Steelworkers union. Talon's Battery Mineral Processing Facility in Mercer County was selected by the US Department of Energy for US$114m funding grant from the Bipartisan Infrastructure Law. Talon has well-qualified experienced exploration, mine development, external affairs and mine permitting teams.

For additional information on Talon, please visit the Company's website at www.talonmetals.com

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FORWARD-LOOKING STATEMENTS

This news release contains certain "forward-looking statements". All statements, other than statements of historical fact that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future are forward-looking statements. These forward-looking statements reflect the current expectations or beliefs of the Company based on information currently available to the Company. Such forward-looking statements include statements relating to future exploration, drilling, and the results thereof; the results and potential utilization/commercialization of the Columbia and Talon R&D initiatives; the Company's "full value mining" strategy whereby Talon intends utilize as much of the ore that it extracts to provide valuable materials. Forward-looking statements are subject to significant risks and uncertainties and other factors that could cause the actual results to differ materially from those discussed in the forward-looking statements, and even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on the Company.

Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, the Company disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Although the Company believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance and accordingly undue reliance should not be put on such statements due to the inherent uncertainty therein.

Table 2: Collar Locations of Drill Hole 23TK0473

Drill Hole	Easting (m)	Northing (m)	Elevation (masl)	Azimuth	Dip	End Depth (m)
23TK0473	490722.7	5168791.3	388.0	110.0	-84.3	735.0

Collar coordinates are UTM Zone 15N, NAD83
Azimuths and dips are taken from survey record at collar unless otherwise noted

Table 3: Assay Results of Drill Hole 23TK0473

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Length refers to drill hole length and not True Width.

True Width is unknown at the time of publication.

All samples were analysed by ALS Minerals. Nickel, copper, and cobalt grades were first analysed by a 4-acid digestion and ICP AES (ME-MS61). Grades reporting greater than 0.25% Ni and/or 0.1% Cu, using ME-MS61, trigger a sodium peroxide fusion with ICP-AES finish (ICP81). Platinum, palladium and gold are initially analyzed by a 50g fire assay with an ICP-MS finish (PGM-MS24). Any samples reporting >1g/t Pt or Pd trigger an over-limit analysis by ICP-AES finish (PGM-ICP27) and any samples reporting >1g/t Au trigger an over-limit analysis by AAS (Au-AA26).

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