

US Battery Supply Chain: Talon Metals Announces Significant Increase to Mineral Resource Estimate at Tamarack Nickel Project

Talon Doubles Indicated Resource Tonnage, including 570% Increase in High-Grade Nickel

This news release constitutes a "designated news release" for the purposes of the Company's prospectus supplement dated December 16, 2021 to its short form base shelf prospectus dated December 7, 2021

Tamarack, Minnesota--(Newsfile Corp. - October 19, 2022) - Talon Metals Corp. (TSX: TLO) (OTC Pink: TLOFF) ("**Talon**" or the "**Company**") has updated its mineral resource estimate for the Tamarack Nickel Project located in central Minnesota.

The total indicated mineral resource estimate now stands at approximately 8.56 million tonnes grading 1.73% nickel plus by-products (2.34% NiEq) containing 148,000 tonnes of nickel (see Tables 1 and 2 below). This represents a 98% increase in the amount of contained nickel (in the indicated category) compared to the Company's previous indicated mineral resource estimate ("**PEA #3**")¹. The total inferred resource estimate, which is in addition to the total indicated mineral resource, is now at approximately 8.46 million tonnes grading 0.83% nickel plus by-products (1.19% NiEq) containing 70,000 tonnes of nickel (see Tables 1 and 2 below).

The high-grade Massive Sulphide (MSU) or Mixed Massive Sulphide (MMS) now stands at 1.05 million tonnes grading 4.53% nickel plus by-products (5.76% NiEq) (in the indicated category) (see Table 3 below), containing 47,000 tonnes of nickel. This represents a 570% increase in the amount of contained nickel (MSU/MMS) compared to PEA #3.

The mineral resource update also sets out the estimated amount of recoverable iron (Fe in sulphides) given this is a payable by-product under the Tesla-Talon agreement entered into on January 7, 2022 ("**Tesla-Talon Supply Agreement**") (see Table 1 below). Nonetheless, to be conservative, the Company has excluded the iron (Fe in sulphides) from its calculation of nickel equivalent (NiEq).

A significant portion of the increase in the Company's updated mineral resource estimate is attributable to Talon's recent discoveries and exploration success in the shallow, high-grade CGO East and CGO West exploration areas. Drilling outside of the updated mineral resource area is already underway, as Talon continues to work to further expand the mineral resource.

"During the successful discovery and delineation of the high-grade nickel CGO East and CGO West ore bodies, our team of drillers, geophysicists, geologists, engineers and environmental scientists developed a proprietary, Advanced Exploration System (AES), which is a unique combination of equipment and methods for deployment along the 11-mile Tamarack Intrusive Complex and in Michigan," said Henri van Rooyen, CEO of Talon Metals. "The 11-mile Tamarack Intrusive Complex and Michigan represent extremely prospective and underexplored high-grade nickel districts, primarily due to a lack of the consistent deployment of tailor-made mineral exploration technologies. The AES is to US Midcontinent Rift nickel discovery and delineation what Tesla is to EV: A revolution in successful innovation and deployment."

Todd Malan, Chief External Affairs Officer and Head of Climate Strategy at Talon, commented: *"The upgraded resource at the Tamarack Nickel Project combined with our acquisition of mineral rights in the Upper Peninsula of Michigan and our partnership with Fleet Technologies to use their satellite*

technology to expedite the discovery of more high-grade nickel in the Lake Superior region are all part of Talon's strategy to become a domestic supplier of nickel and other critical ingredients to the US battery supply chain." Malan continued: "Selection of our Battery Minerals Processing Facility for \$114.8 million in funding from the Bipartisan Infrastructure Law (BIL) by the Department of Energy is a strong signal that the United States intends to harness its own mineral resources like the nickel, iron, cobalt and copper in the Lake Superior region to become 'mineral independent'. There is a clear bipartisan consensus that we must end America's dependence on China, Russia and other foreign sources for the raw materials required in the energy transition that is required to address climate change. Responsible domestic mining and battery recycling are the solution."

Table 1: Tamarack North Project Updated 2022 Mineral Resource Estimate (Effective Date: October 10, 2022)

Mineral Resource Classification	Tonnes (000)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)	Fe in sulphides (%)	NiEq (%)
Total Indicated	8,564	1.73	0.92	0.05	0.34	0.21	0.17	8	2.34
Total Inferred	8,461	0.83	0.55	0.02	0.23	0.13	0.13	3	1.19

Notes:

- All resources are *in situ* and reported at a 0.50% Ni cut-off
- Tonnage estimates are rounded down to the nearest 1,000 tonnes
- Fe% in sulphides is based on sulphur concentration associated with sulphide minerals and a calculation of stoichiometric Fe concentration in Pentlandite and Pyrrhotite
- NiEq grade based metal prices in U.S. dollars of \$9.50/lb Ni, \$3.75/lb Cu, \$25.00/lb Co, \$1,000/oz Pt, \$1,000/oz Pd and \$1,400/oz Au using the following formula: $NiEq\% = Ni\% + Cu\% \times \$3.75/\$9.50 + Co\% \times \$25.00/\$9.50 + Pt[g/t]/31.103 \times \$1,000/\$9.50/22.04 + Pd[g/t]/31.103 \times \$1,000/\$9.50/22.04 + Au[g/t]/31.103 \times \$1,400/\$9.50/22.04$. Fe is not included in the NiEq calculation
- Mining recovery and dilution factors have not been applied to the estimates
- No adjustments were made for recovery or payability

Table 2. Tamarack North Project Updated 2022 Mineral Resource Estimate *In-Situ* Metal (Undiluted) at a 0.50% Ni Cut-off (Effective Date: October 10, 2022)

Classification	Tonnes of Ni <i>In Situ</i> (in the ground)	Tonnes of NiEq ⁽¹⁾ <i>In Situ</i> (in the ground)	Million lbs of Ni <i>In Situ</i> (in the ground)	Million lbs of NiEq ⁽¹⁾ <i>In Situ</i> (in the ground)
Indicated Resource	148,000	200,000	326	441
Inferred Resource	70,000	101,000	154	223

Notes:

- All resources are *in situ* and reported at a 0.50% Ni cut-off
- Mining recovery and dilution factors have not been applied to the estimates
- NiEq based on metal prices in U.S. dollars of \$9.50/lb Ni, \$3.75/lb Cu, \$25.00/lb Co, \$1,000/oz Pt, \$1,000/oz Pd and \$1,400/oz Au
- No adjustments were made for recovery or payability

Talon will file an updated technical report prepared in accordance with National Instrument 43-101 ("**NI 43-101**"), which will include the material increases to the mineral resource estimate within 45 days. In addition, once a location for the Battery Minerals Processing Facility in North Dakota has been finalized (see the Company's press release dated October 19, 2022) and inputs, operating costs and construction estimates have been determined, Talon plans to update the economic parameters, including cut-off grade, in respect of the Tamarack Nickel Project.

Significant Increase in Mineral Resource at the Tamarack Nickel Project

The updated and significantly increased independent mineral resource estimate is largely the result of Talon's successful 2021-2022 development and deployment of Talon's Advanced Exploration System ("**AES**") that enables Talon to rapidly conduct in-house exploration programs at the Tamarack Nickel Project. Talon's AES resulted in two new high-grade nickel-copper discoveries, known as the high-grade CGO East and CGO West areas. These newly discovered mineralized zones lie north of the Company's previous mineral resource area (see Figure 1 for areas of significant nickel-copper mineralization). The shallow, high-grade mineralization found within the CGO East and CGO West areas not only provide for growth in the size of the mineral resource (and ultimately resulted in the Tesla-Talon Supply Agreement) but is also expected to result in an accelerated development pathway for an underground mine.

Talon's AES consists of a unified set of technologies assembled and operated safely and in an environmentally responsible manner by the Company's in-house team of drillers, geophysicists, geologists, engineers and environmental scientists. It is the synergy of Talon's interdisciplinary teams and technologies - from multiple surface detection methods that can cover large areas, to rapidly drilling anomalies, conducting downhole surveys, assessing drilled core, and then leveraging the combined data within days instead of months to plot the next drillholes - that makes Talon's AES extremely efficient at identifying nickel deposits with strong prospects for economic extraction.

Talon's AES is presently deployed to the north of the present mineral resource area, with a plan for drilling to the south of the mineral resource area during the winter period. Additionally, Talon is preparing for deployment of its AES in Michigan. Talon's Michigan roll-out will consist of the use of new and innovative surface geophysical techniques on the back of the Company's geological team's unique understanding of prospective, high-grade nickel targets. Additionally, the Company's expanded drilling capabilities will be utilized to rapidly drill pre-identified targets as well as new targets followed by the use of cross-hole seismic and selective borehole electromagnetic surveys (geophysics).

Through this well-planned deployment of Talon's unique AES, Talon is poised to become the US solution to onshoring nickel concentrate production for a US battery nickel and battery iron supply chain that will be leading in effectiveness, cost and environmental responsibility.

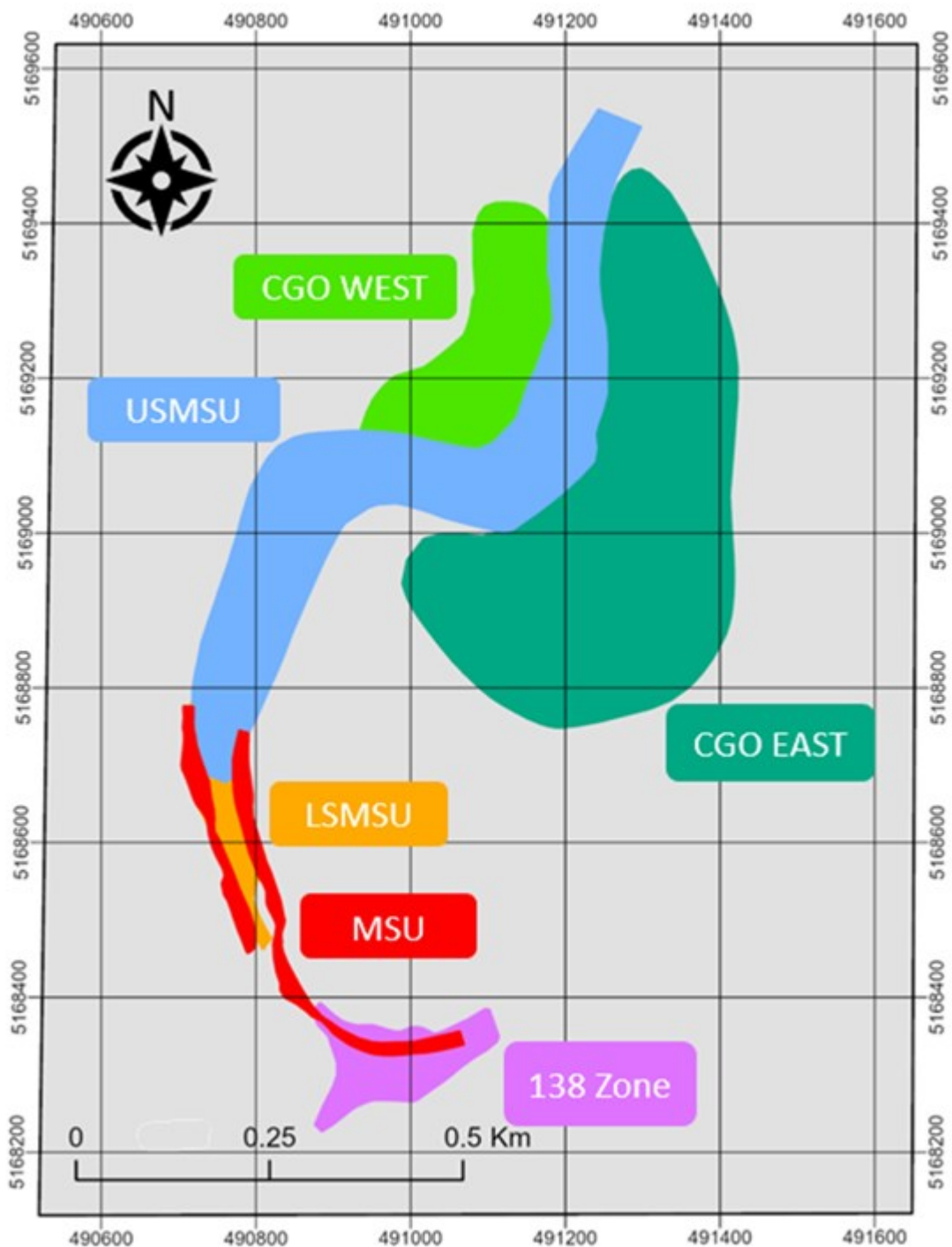


Figure 1. Plan view of the expanded mineral resource area at the Tamarack Nickel Project. Coordinate system UTM-NAD 83

To view an enhanced version of Figure 1, please visit:

https://images.newsfilecorp.com/files/2443/141193_4e25fd7a04daf86e_001full.jpg

Table 3: Tamarack North Project Updated 2022 Mineral Resource Estimate (Effective Date: October 10, 2022)

Domain	Tonnes (000)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)	Fe in sulphides (%)	NiEq (%)
CGO EAST MMS/MSU	228	2.84	1.19	0.09	0.31	0.20	0.21	21	3.66
CGO EAST DISSEMINATED	1,083	0.64	0.44	0.02	0.21	0.11	0.13	2	0.94

CGO WEST MMS/MSU	330	4.11	1.68	0.11	0.37	0.28	0.19	27	5.22
CGO WEST DISSEMINATED	586	0.67	0.46	0.02	0.11	0.07	0.07	2	0.96
MSU	490	5.60	2.44	0.12	0.68	0.46	0.26	26	7.10
LSMSU	2,506	1.94	1.05	0.05	0.57	0.34	0.26	8	2.68
USMSU	3,338	1.24	0.74	0.03	0.20	0.12	0.12	5	1.70
<i>Sub-total MSU/MMS</i>	1,048	4.53	1.93	0.11	0.50	0.35	0.23	25	5.76
Total Indicated Mineral Resource	8,564	1.73	0.92	0.05	0.34	0.21	0.17	8	2.34
CGO EAST MMS/MSU	158	2.53	1.09	0.08	0.28	0.18	0.19	19	3.29
CGO EAST DISSEMINATED	823	0.62	0.42	0.02	0.20	0.11	0.12	2	0.91
CGO WEST MMS/MSU	107	3.51	1.45	0.10	0.31	0.22	0.17	25	4.48
CGO WEST DISSEMINATED	320	0.66	0.44	0.02	0.10	0.06	0.07	3	0.92
MSU	39	5.94	2.53	0.11	0.54	0.45	0.23	25	7.45
LSMSU	121	0.84	0.60	0.02	0.50	0.28	0.23	2	1.31
USMSU	2,932	0.67	0.41	0.02	0.25	0.14	0.12	2	0.96
138 Zone	3,957	0.82	0.63	0.02	0.21	0.12	0.14	2	1.21
<i>Sub-total MSU/MMS</i>	304	3.31	1.40	0.09	0.33	0.23	0.19	22	4.24
Total Inferred Mineral Resource	8,461	0.83	0.55	0.02	0.23	0.13	0.13	3	1.19

Notes:

- All mineral resources are *in situ* and reported at a 0.50% Ni cut-off
- Tonnage estimates are rounded down to the nearest 1,000 tonnes and totals may not add up due to rounding
- Fe% in sulphides is based on sulphur concentration associated with sulphide minerals and a calculation of stoichiometric Fe concentration in Pentlandite and Pyrrhotite
- Mining recovery and dilution factors have not been applied to the estimates
- NEq grade based on metal prices in U.S. dollars of \$9.50/lb Ni, \$3.75/lb Cu, \$25.00/lb Co, \$1,000/oz Pt, \$1,000/oz Pd and \$1,400/oz Au using the following formula: $NEq\% = Ni\% + Cu\% \times \$3.75/\$9.50 + Co\% \times \$25.00/\$9.50 + Pt[g/t]/31.103 \times \$1,000/\$9.50/22.04 + Pd[g/t]/31.103 \times \$1,000/\$9.50/22.04 + Au[g/t]/31.103 \times \$1,400/\$9.50/22.04$. Fe is not included in the NEq calculation
- No adjustments were made for recovery or payability

The updated mineral resources are derived from a Datamine constructed block model with a block size of 5m x 5m x 5m for the Lower and Upper Semi-Massive Sulphide Unit ("**LSMSU**" and "**USMSU**") and the 138 Mixed Zone ("**138 Zone**"), and a block size of 2.5m x 2.5m x 2.5m for the Massive Sulphide Unit ("**MSU**"), and the Coarse Grained Peridotite domains ("**CGO West**" and "**CGO East**").

All Domains utilized the Datamine RM[®] "unfold" process and had top cuts applied to restrict outlier assay values (Ni, Cu, Co, Pt, Pd and/or Au). The eight domains utilized either Ordinary Kriged or Inverse Distance methodology to interpolate grades (Nickel ("**Ni**"), Copper ("**Cu**"), Cobalt ("**Co**"), Platinum ("**Pt**"), Palladium ("**Pd**") and Gold ("**Au**") from either 1.0 or 1.5 meter composited drill holes. Density estimates were based on specific gravity measurements and where absent, regression formulas were applied.

The mineral resources reported are based on a "blocks above a 0.5% Ni cut-off" basis and were then examined visually by Golder and found to have reasonable continuity suitable for underground selective and bulk mining methods. The proportion of Fe in sulphides was calculated stoichiometrically from Pyrrhotite and Pentlandite, using some basic mineralogical assumptions.

Table 4: Tamarack North Project Updated 2022 Mineral Resource Estimate Sensitivities with tonnages and grades at various Ni cut-offs (Effective Date: October 10, 2022)

Cut-Off (Ni %)	Mineral Resource Classification	Tonnes (000)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)	Fe in sulphides (%)	NiEq (%)
0.4	Indicated	9,891	1.56	0.84	0.04	0.31	0.19	0.16	7	2.11
	Inferred	11,079	0.74	0.49	0.02	0.21	0.12	0.12	2	1.07
0.5	Indicated	8,564	1.73	0.92	0.05	0.34	0.21	0.17	8	2.34
	Inferred	8,461	0.83	0.55	0.02	0.23	0.13	0.13	3	1.19
0.6	Indicated	7,215	1.96	1.03	0.05	0.36	0.23	0.18	9	2.62
	Inferred	5,824	0.96	0.64	0.03	0.25	0.15	0.15	3	1.37
0.7	Indicated	6,114	2.19	1.13	0.06	0.38	0.24	0.19	10	2.92
	Inferred	3,888	1.11	0.74	0.03	0.26	0.16	0.16	4	1.58
0.8	Indicated	5,377	2.39	1.21	0.06	0.39	0.25	0.20	12	3.17
	Inferred	2,590	1.29	0.85	0.04	0.26	0.16	0.17	5	1.82
0.9	Indicated	4,853	2.56	1.28	0.06	0.41	0.26	0.20	13	3.38
	Inferred	1,795	1.49	0.94	0.04	0.27	0.17	0.18	7	2.08
1.0	Indicated	4,423	2.71	1.34	0.07	0.41	0.27	0.21	13	3.57
	Inferred	1,238	1.74	1.05	0.05	0.30	0.19	0.19	8	2.39
1.1	Indicated	4,121	2.84	1.39	0.07	0.42	0.27	0.21	14	3.72
	Inferred	896	2.00	1.13	0.05	0.31	0.20	0.19	10	2.71

Notes:

- Official resources are *in situ* and reported at a 0.50% Ni cut-off and highlighted in bold
- Tonnage estimates are rounded down to the nearest 1,000 tonnes
- Fe% in sulphides is based on sulphur concentration associated with sulphide minerals and a calculation of stoichiometric Fe concentration in Pentlandite and Pyrrhotite
- Mining recovery and dilution factors have not been applied to the estimates
- NiEq grade based on metal prices in U.S. dollars of \$9.50/lb Ni, \$3.75/lb Cu, \$25.00/lb Co, \$1,000/oz Pt, \$1,000/oz Pd and \$1,400/oz Au using the following formula: $NiEq\% = Ni\% + Cu\% \times \$3.75/\$9.50 + Co\% \times \$25.00/\$9.50 + Pt[g/t]/31.103 \times \$1,000/\$9.50/22.04 + Pd[g/t]/31.103 \times \$1,000/\$9.50/22.04 + Au[g/t]/31.103 \times \$1,400/\$9.50/22.04$. Fe is not included in the NiEq calculation
- No adjustments were made for recovery or payability
- Resource estimate sensitivities stated below 0.5% Ni cut-off may not have reasonable prospects for economic extraction

QUALITY ASSURANCE, QUALITY CONTROL AND QUALIFIED PERSON

The "Qualified Person", as such term is defined in NI 43-101, who prepared the mineral resource estimate presented in this news release is Mr. Brian Thomas (P.Geol.), who is a geologist independent of Talon and a Principal Resource Geologist at Golder Associates Ltd. ("**Golder**"). Mr. Thomas has reviewed and approved the technical information relating to the mineral resource estimate in this news release, including sampling, analytical and test data underlying such information and reviewed and verified the QA/QC procedures used at the Tamarack Nickel Project. Roger Jackson (P.Geol.), an independent QP and employee of Golder, has visited the site and found the drilling, geological logging and sampling, and sample shipments to be consistent with the CIM Mineral Exploration Best Practice Guidelines (2018). Mr. Jackson constructed the mineral resource models used for this MRE following the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019).

Dr. Etienne Diné, Vice President, Geology of Talon, is a Qualified Person within the meaning of NI 43-101 and, other than the mineral resource estimate, is responsible for the technical information presented in this news release, including sampling, analytical and test data underlying the technical information. Dr. Diné is satisfied that the analytical and testing procedures used are standard industry operating procedures and methodologies.

Where used in this news release: $\text{NiEq\%} = \text{Ni\%} + \text{Cu\%} \times \$3.75/\$9.50 + \text{Co\%} \times \$25.00/\$9.50 + \text{Pt[g/t]}/31.103 \times \$1,000/\$9.50/22.04 + \text{Pd[g/t]}/31.103 \times \$1,000/\$9.50/22.04 + \text{Au[g/t]}/31.103 \times \$1,400/\$9.50/22.04$. Dollar amounts are in U.S. dollars. Fe is not included in the NiEq calculation.

Please see the Company's technical report prepared in accordance with National Instrument 43-101 entitled "NI 43-101 Technical Report Updated Preliminary Economic Assessment (PEA) #3 of the Tamarack Nickel Project - Tamarack Minnesota" with an effective date of January 8, 2021 for information on the QA/QC, analytical and testing procedures at the Tamarack Project. The laboratory used for geochemical sample assay analysis is ALS Minerals which is independent of the Company.

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 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 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 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 or contact:

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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 estimates of mineral resource quantities and qualities; the Tesla-Talon Supply Agreement, including the timing of development of a mine and production at the Tamarack Nickel Project; the timing, results and success of future exploration (including AES) and drilling, including expansion of the resource; the timing and results of a future technical report that includes economic parameters; US government support for building a domestic battery supply chain, including the *Bipartisan Infrastructure Act* (BIL); receipt of the of the Bipartisan Infrastructure Law grant and timing thereof; the timing and outcome of the environmental review process; the planned deployment and success the AES; future discoveries of high grade nickel and other exploration results; ability of the Company to be produce and supply nickel and other critical metals; economic parameters; . 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 which risks include (and are not limited to) the Company's ability to secure all necessary permits relating to the proposed operations, future exploration success, the Company's ability to design and construct an economically viable mine and processing plant as well as production risks. Other risks related to the Company and the Tamarack Nickel Project are set out in the Company's financial statements and Annual Information Form.

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.

The mineral resource figures disclosed in this news release are estimates and no assurances can be given that the indicated levels of nickel, copper, cobalt, platinum, palladium gold and iron will be produced. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. While the Company believes that the mineral resource estimates disclosed in this news release are reasonable, by their nature mineral resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. If such estimates are inaccurate or are reduced in the future, this could have a material adverse impact on the Company. There is no certainty that mineral resources can be upgraded to mineral reserves through continued exploration.

¹ See the Company's technical report prepared in accordance with NI 43-101 entitled "NI 43-101 Technical Report Updated Preliminary Economic Assessment (PEA) #3 of the Tamarack North Project - Tamarack, Minnesota" with an effective date of January 8, 2021.



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