

# **TAMARACK NICKEL PROJECT**

## **HIGH-GRADE NICKEL-COPPER-COBALT**

*THE NEXT LOW-COST PRODUCER OF NICKEL IN THE USA*



**TALON METALS CORP. (TSX:TLO)**  
**RIO TINTO (KENNECOTT EXPLORATION COMPANY) JOINT VENTURE**  
*July 2021*

# CONDITIONS OF PRESENTATION

This presentation has been prepared by Talon Metals Corp. (“**Talon**” or the “**Company**”) and is being delivered for informational purposes only. The information contained herein may be subject to updating, completion, revision, verification and further amendment. Except as may be required by applicable securities laws, Talon disclaims any intent or obligation to update any information herein, whether as a result of new information, future events or results or otherwise. Neither Talon nor any of its shareholders, directors, officers, agents, employees or advisers take any responsibility for, or will accept any liability whether direct or indirect, express or implied, contractual, tortious, statutory or otherwise, in respect of the accuracy or completeness of the information or for any errors, omissions or misstatements or for any loss, howsoever arising from the use of this presentation.

This presentation should not be considered as the giving of investment advice by Talon or any of its shareholders, directors, officers, agents, employees or advisers. Each person to whom this presentation is made available must make its own independent assessment of Talon after making such investigations and taking such advice as may be deemed necessary. In particular, any estimates or projections or opinions contained herein necessarily involve significant elements of subjective judgment, analysis and assumption and each recipient should satisfy itself in relation to such matters. Neither the issue of this presentation nor any part of its contents is to be taken as any form of commitment on the part of Talon to proceed with any transaction and Talon reserves the right to terminate any discussions or negotiations with prospective investors. In no circumstances will Talon be responsible for any costs, losses or expenses incurred in connection with any appraisal or investigation of Talon.

This presentation does not constitute, or form part of, any offer or invitation to sell or issue, or any solicitation of any offer to subscribe for or purchase any securities in Talon, nor shall it, or the fact of its distribution, form the basis of, or be relied upon in connection with, or act as any inducement to enter into, any contract or commitment whatsoever with respect to such securities.



# FORWARD-LOOKING INFORMATION

This presentation contains certain “forward-looking statements”. All statements, other than statements of historical fact that address activities, events or developments that Talon 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 Talon based on information currently available to Talon. Such forward-looking statements include, among other things, statements relating to future exploration potential at the Tamarack North Project, including the potential expansion of the resource and strike length; undertaking 25,000 to 30,000 meter drilling program throughout 2021; the potential for additional geophysics to cost-effectively identify and drill targets to unlock the potential of the Tamarack Project (including, the Tamarack South Project); the continuation of the resource from the inferred category to the indicated category; the Company’s ability to complete an earn-in up to a 60% ownership interest in the Tamarack Project (comprised of the Tamarack North Project and the Tamarack South Project); the Company’s planned work program for the Tamarack North Project, including potential drill results; the Company’s investigations into producing battery-grade nickel sulphate from Tamarack nickel concentrate; the Company’s expectations with respect to the electric vehicle and related battery market; the Company’s strategy to (i) expand the present resource, (ii) complete a prefeasibility study, secure an offtake partner for an integrated battery supply chain or produce a concentrate for the stainless steel supply chain, and commence permitting, and (ii) explore the remaining 16.5km of the Tamarack Intrusive Complex; the Company’s expectations relating to timing of and results of future studies, including a further updated PEA based on three scenarios; the Company’s expectations of demand for Nickel, supply of nickel and the price of nickel; the Company’s expectations concerning ongoing and future metallurgical test work; the Company’s expectations concerning the economic viability of the Tamarack Project; the Company’s plans for tailings and permitting; the Company’s goal produce Green-Nickel; the Company’s plans to secure an off-take partner for an integrated battery supply chain or produce a concentrate for the stainless steel supply chain; the Company’s expectation of further analyst research coverage; a potential listing on a major U.S. stock exchange; the Company’s expectations with respect to its financial resources, royalties, and targets, opex, capex, goals, NPV, objectives and plans and the timing associated therewith.

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 Talon. Factors that could cause actual results or events to differ materially from current expectations include, but are not limited to: changes in commodity prices, including nickel; the Company’s inability to raise capital and/or pay Kennecott Exploration Company pursuant to the Option Agreement dated November 7, 2018 (and the amendments thereto); the lack of electric vehicle adoption or in the event of such adoption, such not resulting in an increased demand for nickel or there being a nickel deficit; negative metallurgical results; changes in interest rates; risks inherent in exploration results, timing and success, including the failure to identify mineral resources or mineral reserves; the uncertainties involved in interpreting geophysical surveys (including DHEM, MMR, Surface EM, RIM), drilling results and other geological data; inaccurate geological and metallurgical assumptions (including with respect to the size, grade and recoverability of mineral reserves and mineral resources); uncertainties relating to the financing needed to further explore and develop the Tamarack North Project or to put a mine into production; the costs of commencing production varying significantly from estimates; unexpected geological conditions; changes in power prices; unanticipated operational difficulties (including failure of plant, equipment or processes to operate in accordance with specifications, cost escalation, unavailability of materials, equipment and third-party contractors, inability to obtain or delays in receiving government or regulatory approvals, industrial disturbances or other job action, and unanticipated events related to health, safety and environmental matters); political risk, social unrest, and changes in general economic conditions or conditions in the financial markets.

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, Talon 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 Talon 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.

# TECHNICAL REFERENCE

The mineral resource figures disclosed in this presentation are estimates and no assurances can be given that the indicated levels of nickel, copper, cobalt, platinum, palladium and gold 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 resource estimates disclosed in this presentation are well established, by their nature 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.

***Mineral resources are not mineral reserves and do not have demonstrated economic viability. Inferred mineral resources are estimated on limited information not sufficient to verify geological and grade continuity or to allow technical and economic parameters to be applied. Inferred mineral resources are too speculative geologically to have economic considerations applied to them to enable them to be categorized as mineral reserves. There is no certainty that mineral resources can be upgraded to mineral reserves through continued exploration.***

Please see the technical report 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 (the “**2021 PEA**”) prepared by independent “Qualified Persons” (as that term is defined in National Instrument 43-101 (“NI 43-101”)) Leslie Correia (Pr. Eng), Andre-Francois Gravel (P. Eng.), Tim Fletcher (P. Eng.), Daniel Gagnon (P. Eng.), Volodymyr Liskovych (P. Eng.), David Ritchie (P. Eng.), Oliver Peters (P. Eng.), Andrea Martin (P.E.) and Brian Thomas (P. Geo) for information on the QA/QC, data verification, analytical and testing procedures at the Tamarack Project. Copies are available on the Company’s website ([www.talonmetals.com](http://www.talonmetals.com)) or on SEDAR at ([www.sedar.com](http://www.sedar.com)). The laboratory used is ALS Minerals who is independent of the Company.

## **Where used in this presentation:**

**$$\text{NiEq \%} = \text{Ni\%} + \text{Cu\%} \times \$3.00/\$8.00 + \text{Co\%} \times \$25.00/\$8.00 + \text{Pt [g/t]}/31.103 \times \$1,000/\$8.00/22.04 + \text{Pd [g/t]}/31.103 \times \$1,000/\$8.00/22.04 + \text{Au [g/t]}/31.103 \times \$1,300/\$8.00/22.04$$**

**$$\text{CuEq\%} = \text{Cu\%} + \text{Ni\%} \times \$8.00/\$3.00 + \text{Co\%} \times \$25.00/\$3.00 + \text{Pt [g/t]}/31.103 \times \$1,000/\$3.00/22.04 + \text{Pd [g/t]}/31.103 \times \$1,000/\$3.00/22.04 + \text{Au [g/t]}/31.103 \times \$1,300/\$3.00/22.04$$**

The 2021 PEA is preliminary in nature. The 2021 PEA includes inferred mineral resources. Inferred mineral resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the 2021 PEA will be realized.

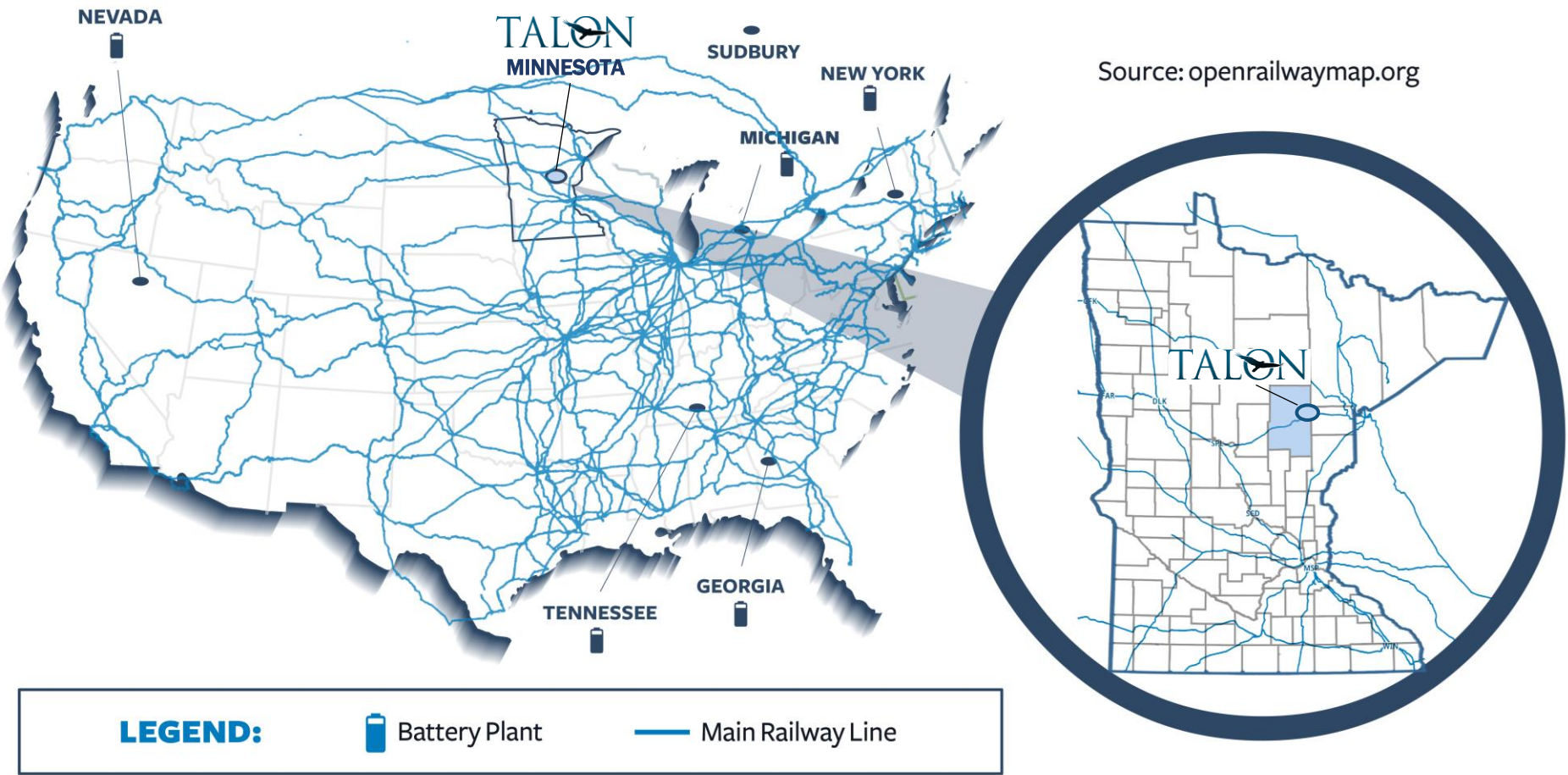
The mineral resource estimate contained in this presentation was prepared by or under the supervision of Mr. Brian Thomas (P.Geo.), who is a geologist independent of Talon and an employee of Golder Associates Ltd. In addition, Mr. Thomas has reviewed the sampling, analytical and test data underlying such information and has visited the site and reviewed and verified the QA/QC procedures used at the Tamarack North Project and found them to be consistent with industry standards. Dr. Etienne Diné, Vice President, Exploration of Talon, is a Qualified Person within the meaning of NI 43-101. Dr. Diné 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 in this presentation, including sampling, analytical and test data underlying the technical information.

Lengths in this presentation 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.

# LOCATED IN THE UNITED STATES ON INFRASTRUCTURE



## THE TAMARACK HIGH GRADE NICKEL PROJECT 54 MILES WEST OF DULUTH, MINNESOTA



# TAMARACK NICKEL PROJECT - KEY HIGHLIGHTS



## BATTERY GRADE CLASS 1 NICKEL PROJECT

The Tamarack Nickel Project is one of two high-grade Ni-Cu-Co projects on infrastructure discovered in the 21<sup>st</sup> century with a resource prepared in accordance with NI 43-101 suitable for batteries that is pre-development. The ONLY high-grade development stage nickel project in the USA.



## INSTITUTIONAL PRESENCE

To date, the Company has been predominantly funded by sophisticated resource funds with specific focus on the mining or electric vehicle industries.



## EXPANSION POTENTIAL

The resource, prepared in accordance with NI 43-101, comprises 1 km along the 18 km Tamarack Intrusive Complex (TIC). The Talon team has proven that significant exploration potential can now be unlocked cost effectively using various geophysical techniques.



## TIGHTLY HELD

Over 75% of the shares are held by management, board and institutions.



## EXPERIENCED TEAM

Combined Talon Metals and Rio Tinto (Kennecott Exploration) team. The team also has in-house nickel expertise from the Voisey's Bay Nickel Project, Sudbury Basin (Vale) and Falconbridge/Glencore. Other in-house experience includes Rio Tinto, Freeport, Hecla, Anglo American, Ivanhoe.



## ANALYST COVERAGE

Paradigm Capital, Sprott Capital, Roth Capital and Cantor Fitzgerald. Additional coverage to follow.



## OPERATIONAL CONTROL

Talon secured the right to be the Operator and become the majority JV partner in October 2019. This is the first time that a junior exploration company has operated a Rio Tinto project.



## PROVEN HISTORY OF PERFORMANCE

Talon management and board have previously developed, built and sold numerous companies that realized significant returns to investors. The Tamarack Project is the group's sole focus.



## WELL FINANCED

C\$37 million in the treasury as of June 30, 2021.



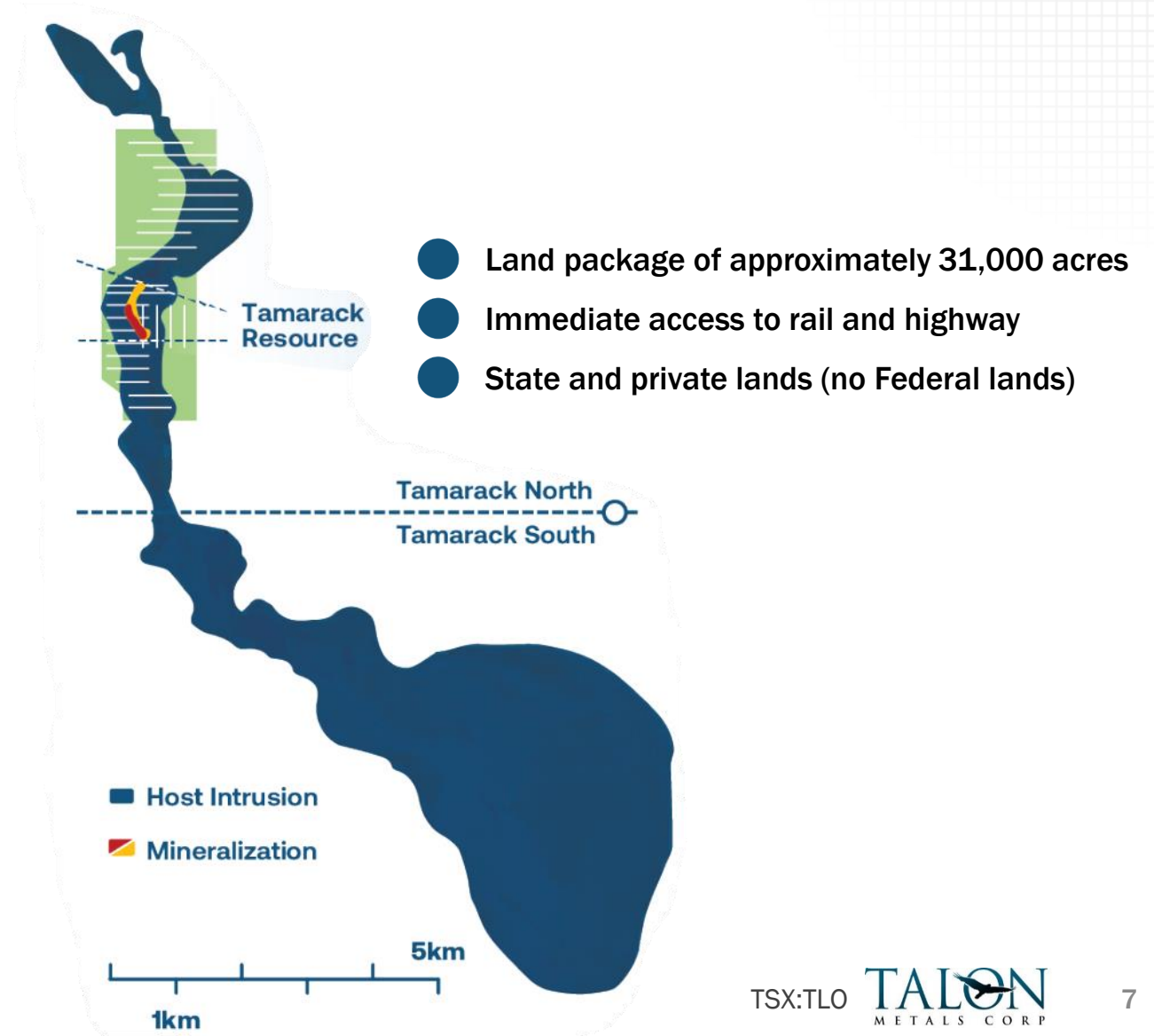
## STRONG BASE CASE

The Company's PEA (Press Release dated February 4, 2021) shows strategic optionality and robust economics even using low nickel prices due to the high-grade nature of the Tamarack Nickel Project.



# RIO TINTO IS OUR ACTIVE JOINT VENTURE PARTNER

- The Tamarack Nickel Project is comprised of the Tamarack North Project and the Tamarack South Project with 31,000 acres of Private Land and State Leases
- To earn a 51% interest in the Tamarack Nickel Project, Talon is required to (by March 2022):
  - ✓ Pay US\$6 million in cash and US\$1.5 million in shares to Rio Tinto (completed in March 2019);
  - ▶ Spend US\$10 million on exploration & development (US\$10+ million spent as of March 2021) and pay US\$5 million to Rio Tinto
- To earn an additional 9% interest for a total of 60% (by March 2026):
  - Complete a feasibility study and pay US\$10 million to Rio Tinto
- Under the Option Agreement, Talon is appointed as the operator of the Tamarack Nickel Project, with total control over future exploration strategy: Rio Tinto has no back-in right and Talon controls 100% off-take rights



# A COMBINED TALON AND RIO TINTO\* TEAM



## Henri van Rooyen

CEO

B. Com (Hons), CA (SA)

Previously COO at Tau Capital. Secured and managed large exploration projects across 3 continents since 2007. Started working with Rio Tinto's KEX/Tamarack team in 2014. Responsible for strategy and project delivery.

## Sean Werger

President, Head of Investor Relations

LL.B, MBA

Previously General Counsel and Director of Mergers & Acquisitions at Tau Capital, with project divestments of mining projects totalling in excess of C\$700M. Started working with Rio Tinto's Tamarack team in 2014. Responsible for corporate and legal matters and investor relations.

## Brian Goldner\*

Head of Exploration

(Seconded from Rio Tinto together with the Tamarack team)  
Bachelors in Geology, Masters in Geology

Exploration Geologist with Rio Tinto since 2006. Completed a MSc degree on the Tamarack Intrusive Complex in 2012. Seconded by Rio Tinto to lead exploration at the Tamarack Project.

## Mark Groulx

VP Mine Engineering

B.Sc.E Mine Engineering, MBA

Professional mining engineer with 20+ years experience in mine operations, project execution and consulting. Previously held senior positions with Rio Tinto, Amec Foster Wheeler and PT Freeport Indonesia. A specialist in the delivery of engineering studies, having managed numerous multi-disciplinary studies for companies including Vale, Rio Tinto and Newmont.

## Brian Bengert

Head of Geophysics

(B.Sc Geophysics, M.Sc)

Geophysicist 15 years experience including Inco (now Vale). Major responsibility was Voisey's Bay Nickel Project. Principal member of the team that discovered the Voisey's Bay underground deposit.

## Vince Conte

CFO, Head of HR

B.Math, CPA, CFA, CBV

Previously Senior Manager with Deloitte in the audit and financial advisory/valuations groups specializing in mining valuations. Responsible for financial modelling of the Tamarack Nickel Project since 2014 as well as Talon's accounting, financial controls, treasury, auditing, reporting and HR.

## Dr. Etienne Diné

VP Geology

Bachelor of Geology, Physics (Honours), PH.D, Economic Geology

Twenty years of experience in structural geology, petrology and geochemistry. Since 2014, he has been instrumental in predicting massive sulphide extensions at the Tamarack Nickel Project.

## Oliver Peters

Head of Metallurgy

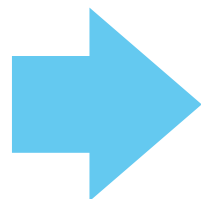
Masters in Engineering, MBA

Previously Falconbridge (now Glencore). Experience with over twenty (20) nickel, copper and PGM projects. Has been working on the Tamarack Nickel Project since 2016.

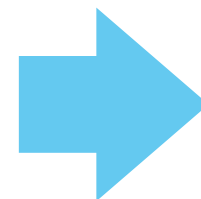


# HIGH-GRADE NICKEL SULPHIDE DEPOSITS ARE EXTREMELY RARE

NEW HIGH-GRADE NICKEL  
SULPHIDE DISCOVERIES  
ARE DIFFICULT TO FIND



AND EXISTING NICKEL  
SULPHIDE MINE GRADES  
CONTINUE TO DECLINE

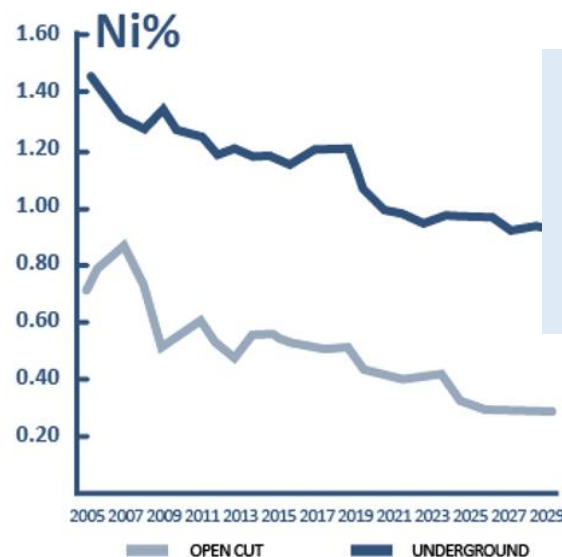


THEREFORE NICKEL  
SULPHIDE MINE PRODUCTION  
AS A % OF TOTAL NICKEL  
PRODUCTION WILL CONTINUE  
TO DECLINE

Only two 21st century discoveries with resources on infrastructure are in the pre-development stage

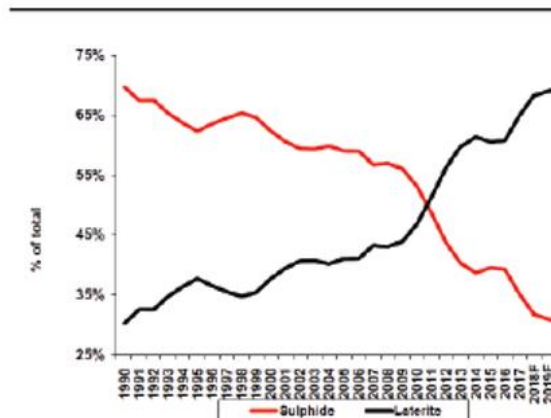
**2008** - Tamarack Intrusive Complex (TIC) – Minnesota Talon-Rio Tinto (through subsidiary KEX) Joint Venture

**2009** – Sakatti (Anglo-American): PFS Completed; Environmental & Social Impact Assessment submitted in 2019



Source: AME, Nickel Mine Grade Decline, November 2015

SHARE OF FINISHED NICKEL PRODUCTION FROM  
SULPHIDE AND LATERITE ORES



Source: Company reports, INSG, Macquarie Research, March 2018

It is more expensive to produce nickel from laterites than from high-grade sulphides. As the industry moves to more laterite production, the industry or marginal cost of production increases and prices are expected to follow

# TAMARACK INTRUSIVE COMPLEX (TIC) STRIKES OVER APPROXIMATELY 18 KM

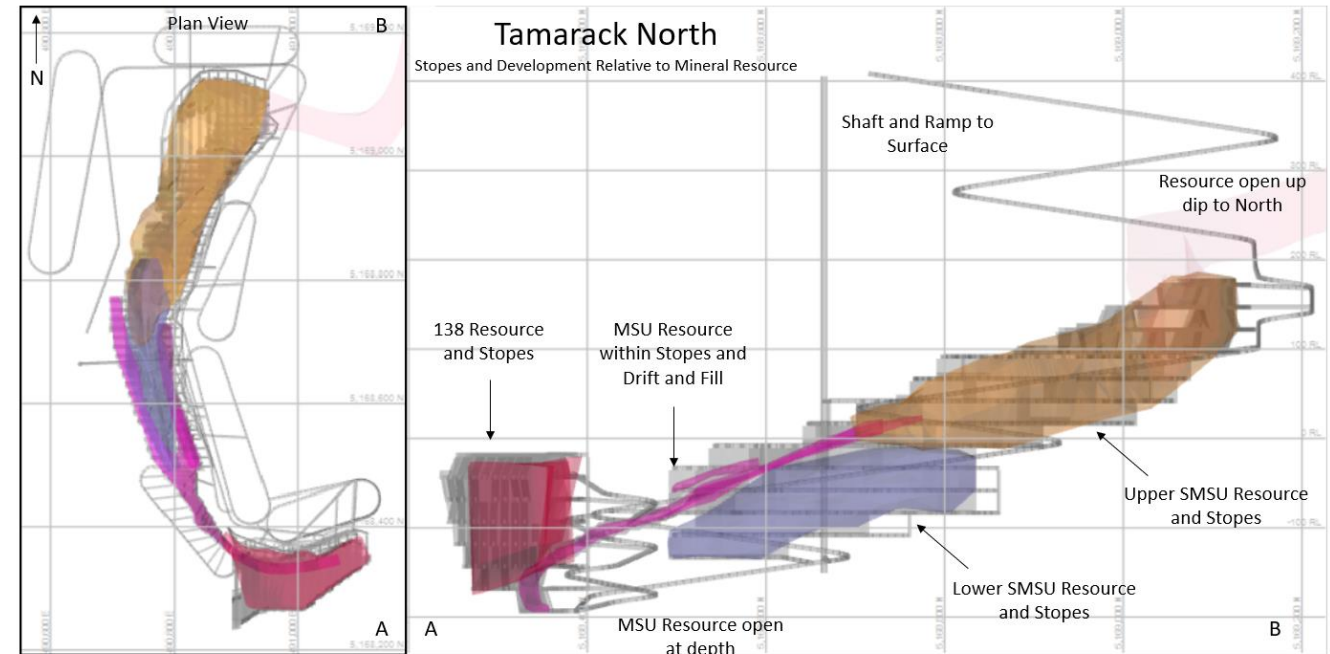
## RESOURCE ESTIMATE IS BASED ON ONLY ~750 METRES



Tamarack North Project NI 43-101 Mineral Resource Estimate (Effective Date: January 8, 2021)

	Classification	%Ni Cut-Off	Tonnes (000)	Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	Au (g/t)	NiEq (%)
Total	Indicated Resource	0.5	3,926	1.91	1.02	0.05	0.41	0.26	0.20	2.62
Total	Inferred Resource	0.5	7,163	1.11	0.68	0.03	0.26	0.16	0.14	1.57

0.5% Ni cut-off.  
 No modifying factors have been applied to the estimates.  
 Tonnage estimates are rounded to the nearest 1,000 tonnes.  
 Metallurgical recovery factored into the reporting cut-off.  
 NiEq grade based on base case metal prices of \$8.00/lb Ni, \$3.00/lb Cu, \$25.00/lb Co, \$1,000/oz Pt, \$1,000/oz Pd and \$1,300/oz Au using the following formula:  $NiEq\% = Ni\% + Cu\% \times \$3.00/\$8.00 + Co\% \times \$25.00/\$8.00 + Pt [g/t]/31.103 \times \$1,000/\$8.00/22.04 + Pd [g/t]/31.103 \times \$1,000/\$8.00/22.04 + Au [g/t]/31.103 \times \$1,300/\$8.00/22.04$ . No adjustments were made for recovery or payability.



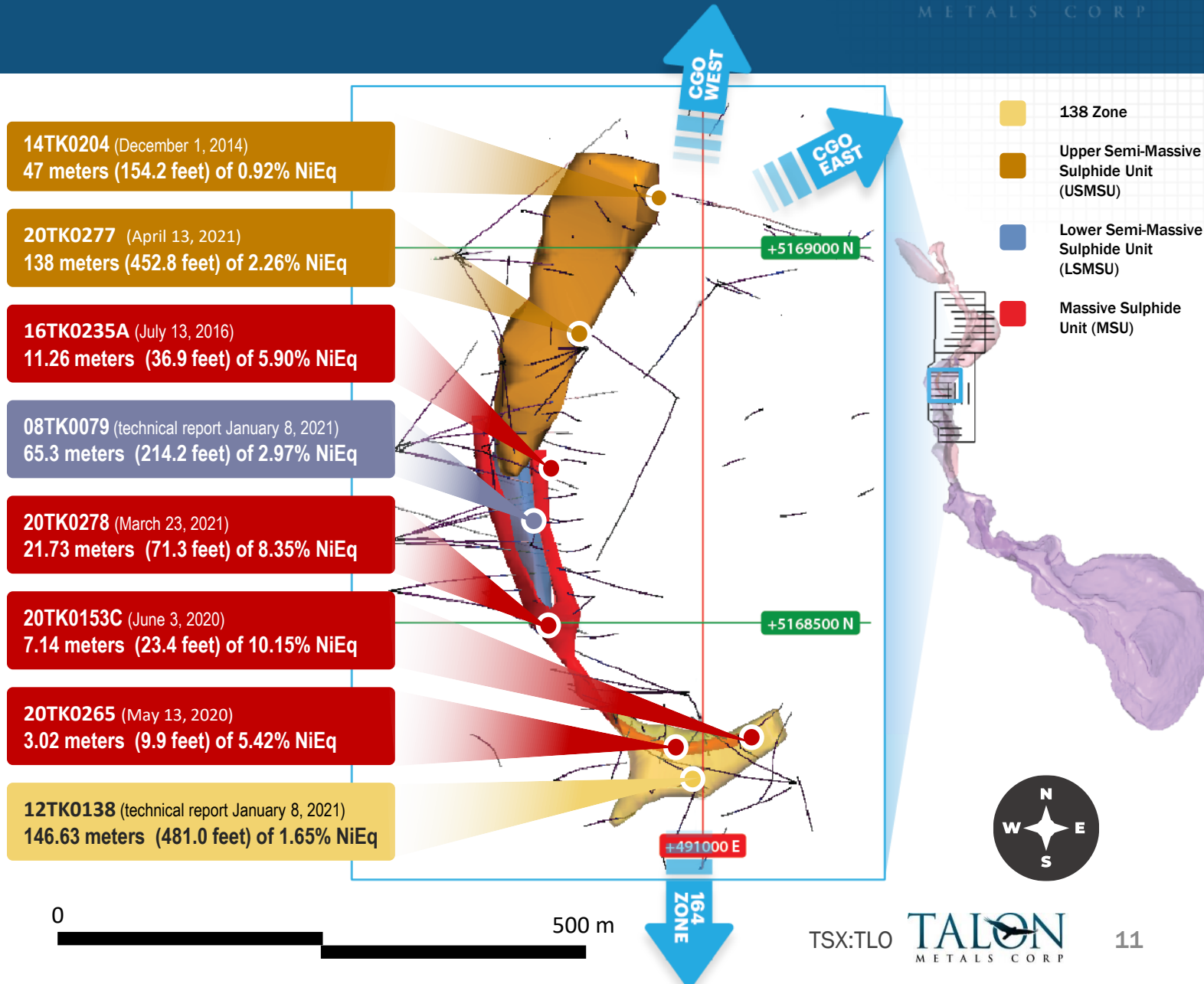
### EFFICIENT TO MINE DUE TO:

- ✓ Decline ramp access from surface
- ✓ Long-hole stoping/drift and fill
- ✓ 9 year mine life (excluding construction)
- ✓ First ore within 2 years from start of construction
- ✓ 10.8 Mt mined at 1.34% Ni (1.85% NiEq)
- ✓ 3,600 t/d mill feed
- ✓ Cemented paste backfill utilizing all high sulphur tailings generated
- ✓ Co-disposed Filtered Tailings Facility (CFTF)
  - Studying the potential for sequestering CO<sub>2</sub> within the CFTF.

# TAMARACK RESOURCE : RESOURCE DOMAINS AND DRILL HOLE INTERSECTS

## Tamarack Resource area

- ✓ High-grade nickel-copper mineralization
- ✓ Resource area extends from 288 meters to 580 meters deep over a strike length of 800 meters
- ✓ All resource domains possess high-grade nickel and copper mineralization
- ✓ Mineralization is open in all directions
- ✓ Current drilling area focused on defining new resources in the CGO EAST, CGO WEST and expanding the SMSU and MSU in the resource area.
- ✓ 16.5 km of the Tamarack Intrusive Complex (TIC) left to explore and find other deposits





# TALON'S STRATEGY

## 1 Expand the present resource: Targeting 2.3 km strike length

- ✓ Present resource strike length: 0.8 km
- ✓ Expansion strike length: 1.5 km: Target both massive and disseminated sulphides

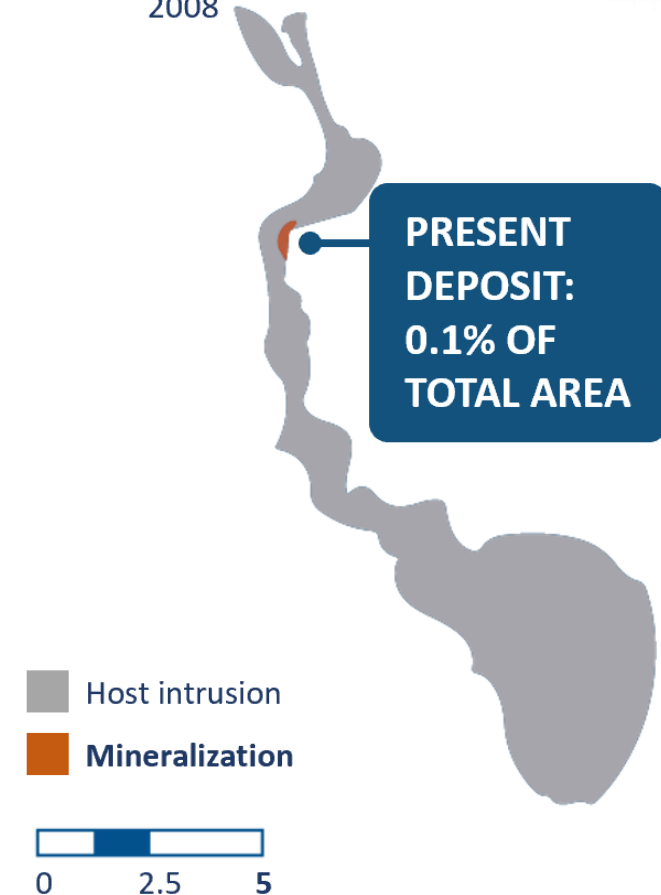
## 2 Complete a Prefeasibility Study

- ✓ Secure an off-take partner for an integrated battery supply chain or produce a concentrate for the stainless steel supply chain – based on the expanded resource
- ✓ Commence permitting

## 3 Explore the remaining 16.5 km of the Tamarack Intrusive Complex (TIC)

- ✓ Follow-up on historical >9% Ni intercepts outside of the expanded resource area
- ✓ Continue-cost effective, advanced surface and borehole Electro-Magnetic (EM) surveys

The Tamarack Intrusive Complex (TIC) – First discovery drill hole: 2008

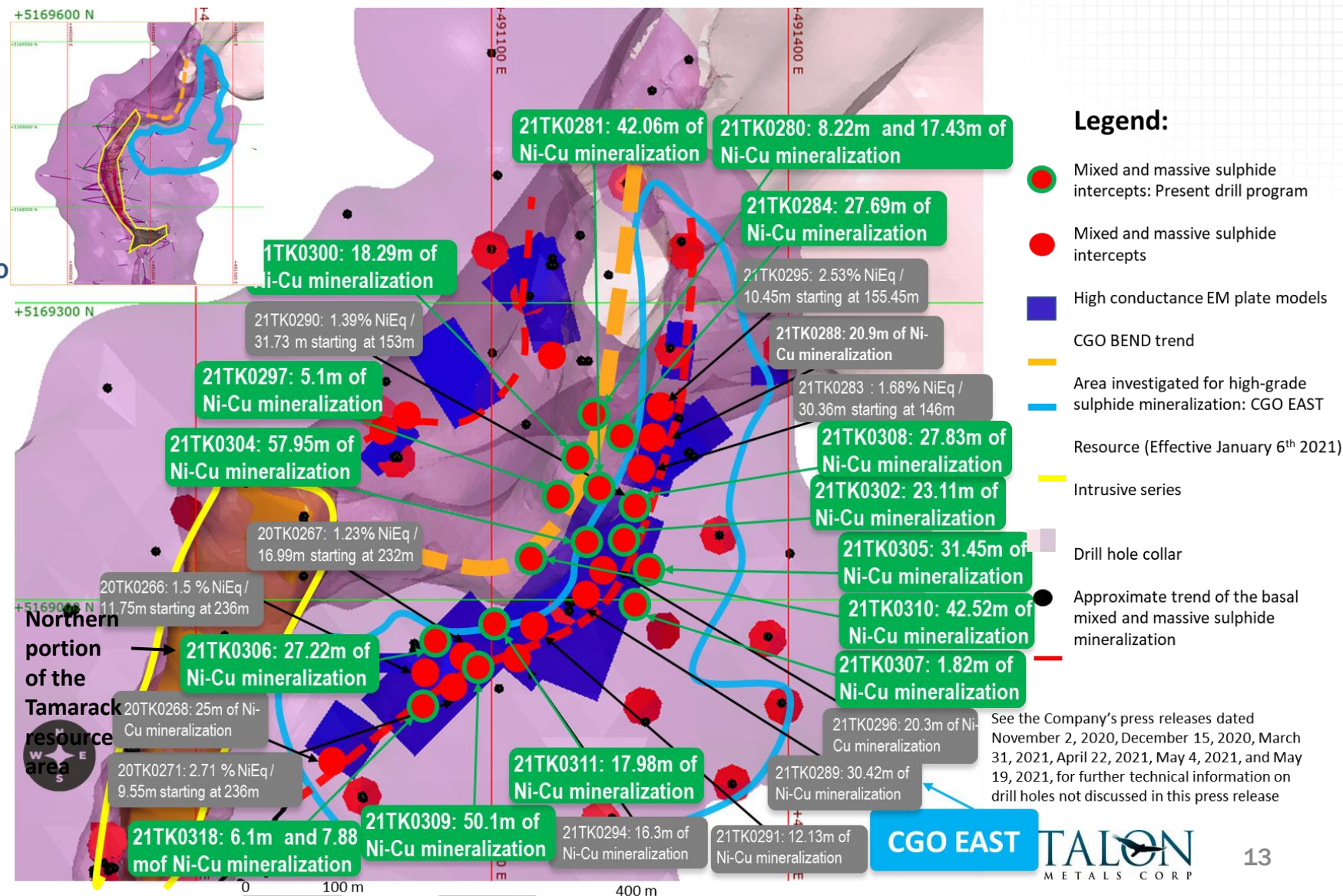


# (1) EXPAND PRESENT RESOURCE

## RECENT RESULTS: CGO EAST AND CGO BEND

Vast exploration area with shallow mineralization outside of the resource area.

- Area is defined as “CGO East”
- The current drilling suggest a continuous sulphide mineralization of +500 meters of strike length with thickness variation of 10 to 32 meters and width of ~75 meters
- 21 new holes with spacing of 35 to 60 meters.
- Assays received for six holes  
(See press releases of December 15<sup>th</sup>, 2020 and May 4 ,2021)
- Drilling is ongoing testing lateral extension and strike length
- Testing a 100m (w) x 10m (h) x 800m (l) channel of high-grade mineralization



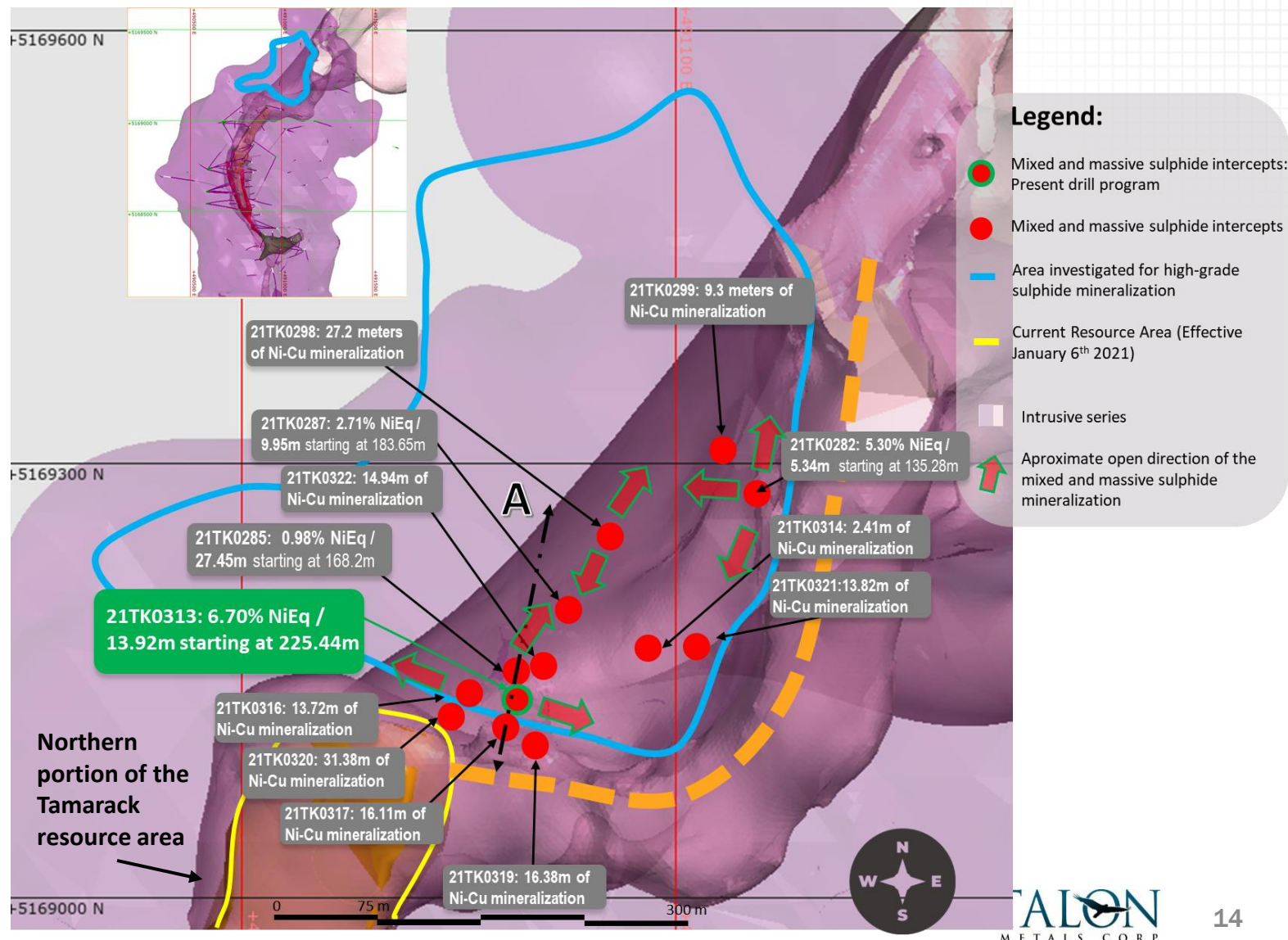


# (1) EXPAND PRESENT RESOURCE

## RECENT RESULTS: CGO WEST

### Vast exploration area with shallow mineralization outside of the resource area

- Area is defined as “CGO WEST”
- Current drilling (up to 300 meters outside the resource area) suggests continuous shallow nickel-copper mineralization of +200 meters of strike length with thickness of between 5 to 35 meters.
- Assays for 4 holes announced on April 22, 2021 and July 6, 2021– all holes successfully intersected high-grade massive sulphide mineralization



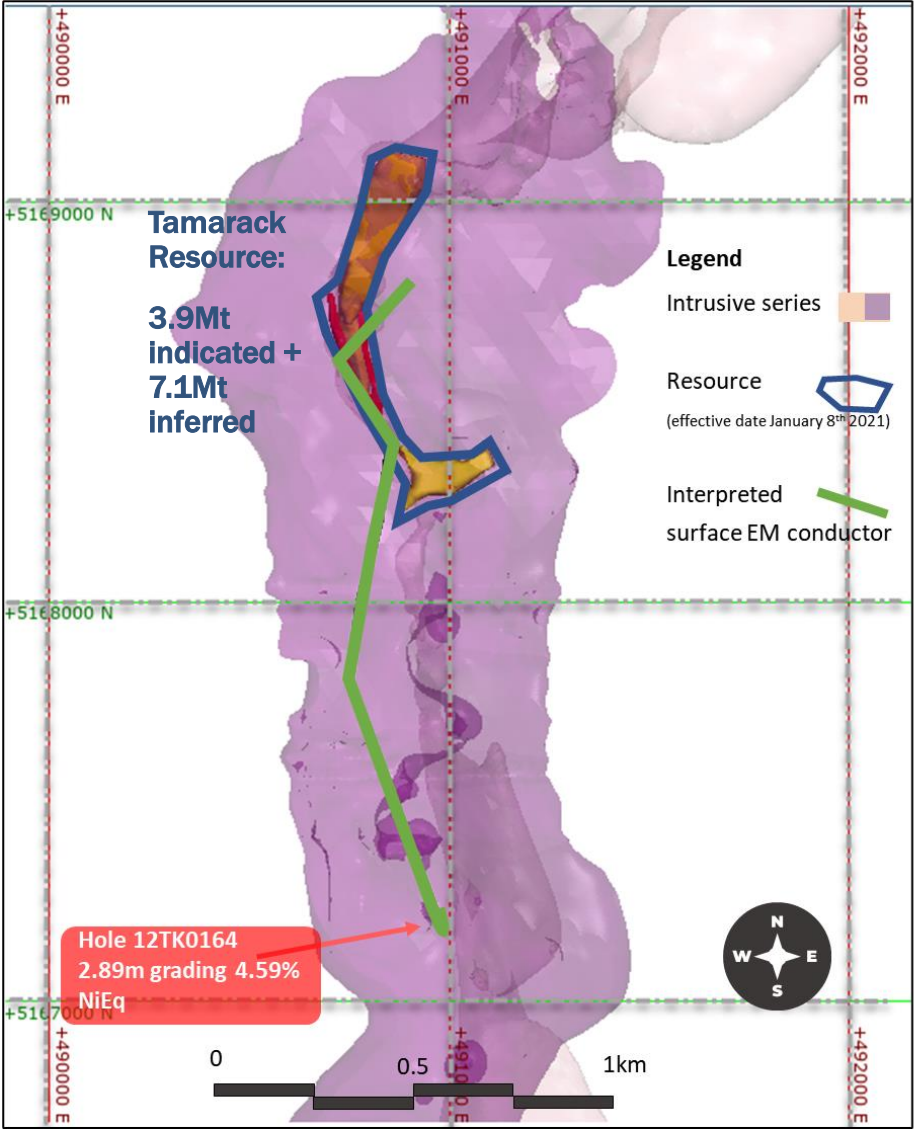


# (1) EXPAND PRESENT RESOURCE

## TO THE SOUTH AND EAST TARGETING 2.3 KM STRIKE LENGTH

- Geology of the Tamarack resource area potentially extends south to or beyond drill hole 12TK0164 (1km south of the resource area)
- The potential to extend the resource mineralization relies on the use of geophysics to identify targets
- Talon has identified a string of Surface EM conductors forming a long, linear trend to the south (June 3<sup>rd</sup> 2020). This still needs to be tested with drilling.

POTENTIAL RESOURCE SOUTH OF THE TAMARACK RESOURCE



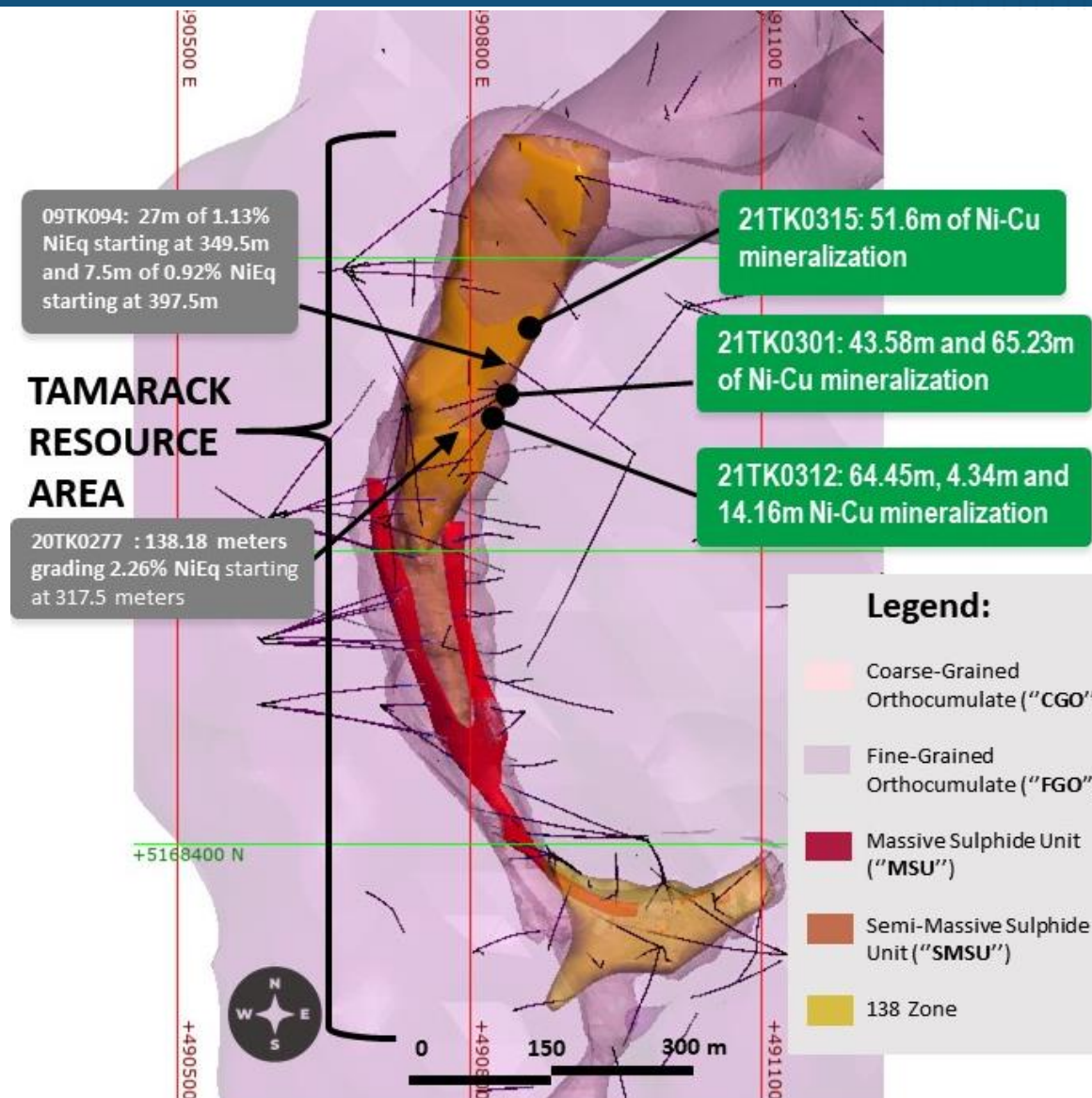
Hole ID	Easting (m)	Northing (m)	Elevation (masl)	Azm	Dip	End Depth (m)
12TK0164	5167136	5169084.4	386.72	349.98	-78.88	587.35
Hole ID	From (m)		To (m)	Length (m)		
12TK0164	473.43		476.32	2.89		
3.67% Ni	1.97% Cu	0.08% Co	0.11g/t Pd	0.12g/t Pt	0.10g/t Au	4.59% NiEq
						12.25% CuEq

## (2) COMPLETE A PRE-FEASIBILITY STUDY

RESOURCE AREA EXPANSION: 138.18 METERS (453.35 FEET) OF 2.26% NIEQ

### Drill Hole 20TK0277

- Intersected **138.18 meters (453.35 feet) of semi-massive and disseminated sulphide mineralization grading 2.26 % NiEq**. The drill hole extends both the Upper SMSU (semi-massive sulphide unit) and Lower SMSU to the east and north.
- Extends the high-grade mineralization to the east with 39 meters (128 feet) of semi-massive sulphides grading 3.94% NiEq
- New drill holes (i.e., 301, 312, 315) show thick mineralized of Ni-Cu mineralization towards the east
- Potential resource expansion
- Assay remain pending for 301, 312 and 315



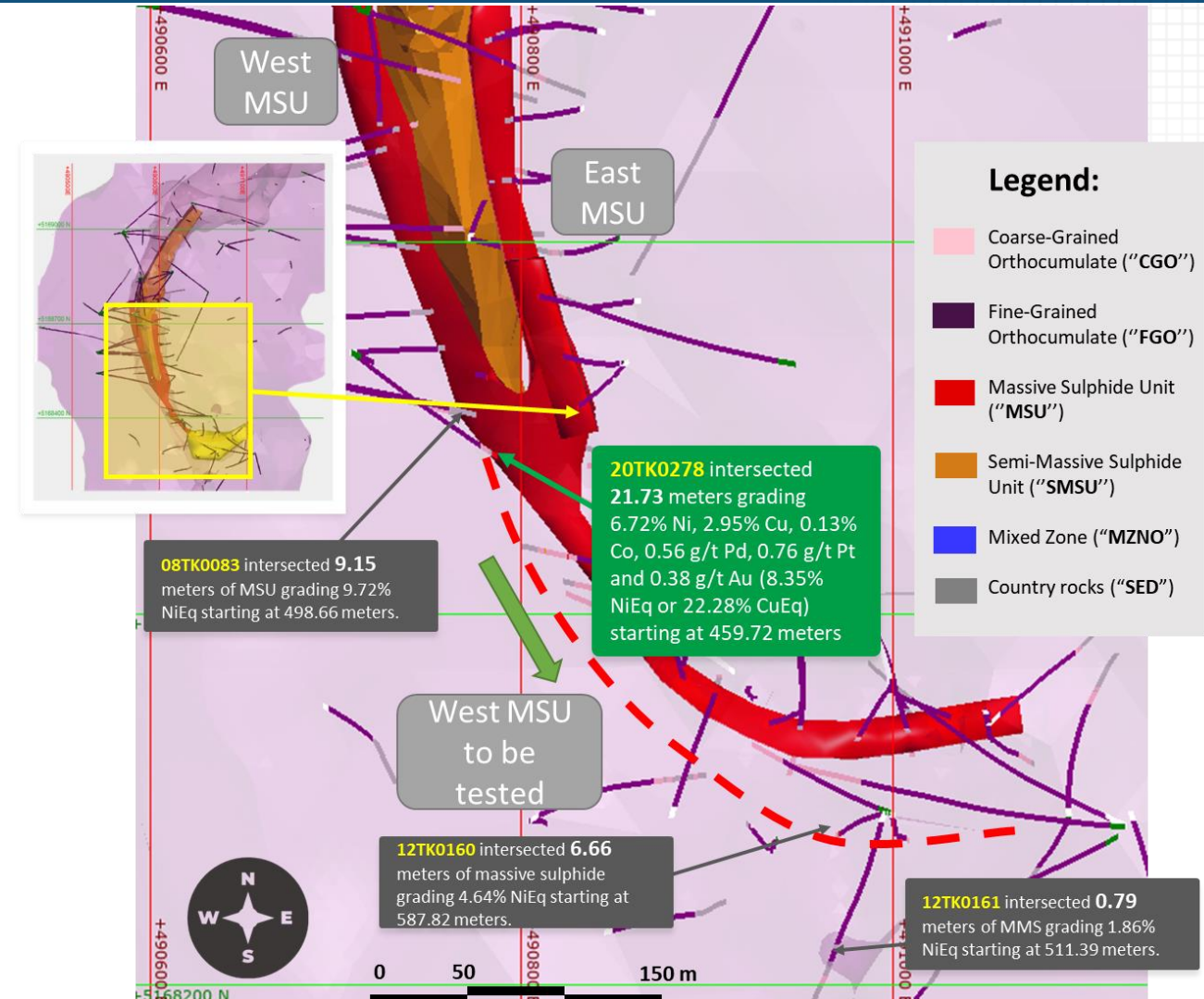
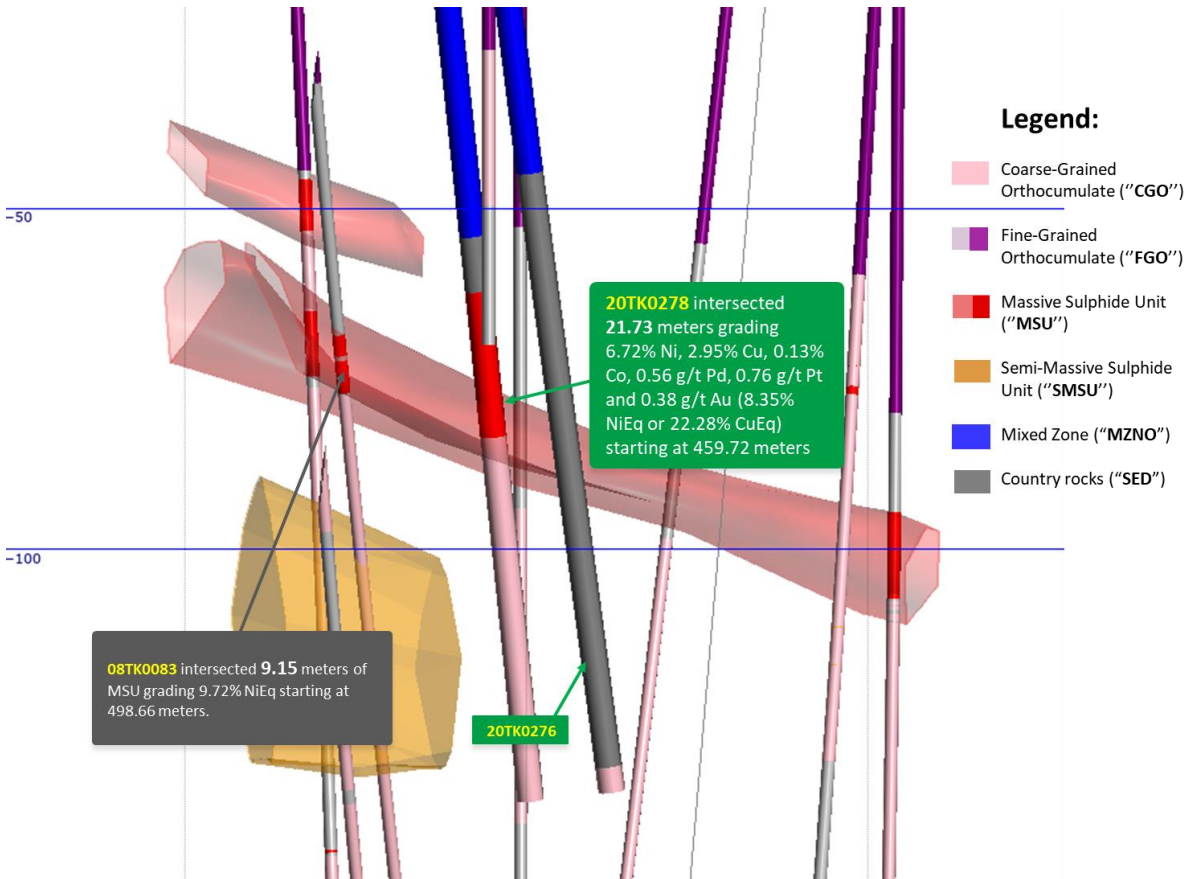


# (2) COMPLETE A PRE-FEASIBILITY STUDY

## RESOURCE AREA DEFINITION DRILLING AND EXPANSION

### Drill Hole 20TK0278 (West MSU)

- Intersected **21.73 meters (71.3 feet)** grading **6.72% Ni, 2.95% Cu, 0.13% Co, 0.56 g/t Pd, 0.76 g/t Pt and 0.38 g/t Au (8.35% NiEq or 22.28% CuEq)** starting at 459.72 meters



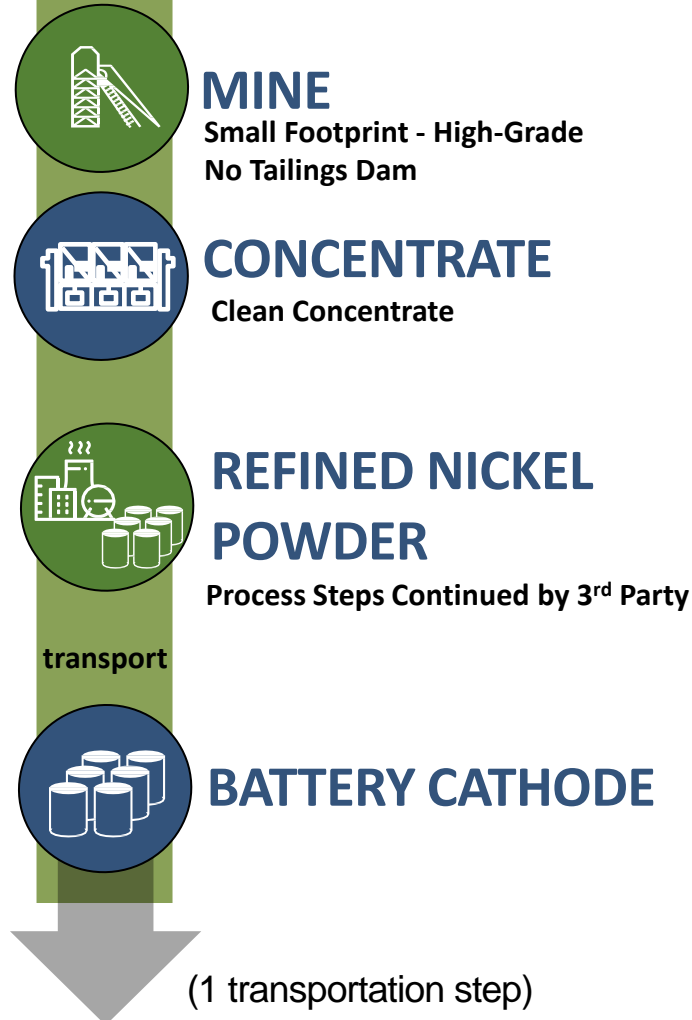


## (2) COMPLETE A PRE-FEASIBILITY STUDY

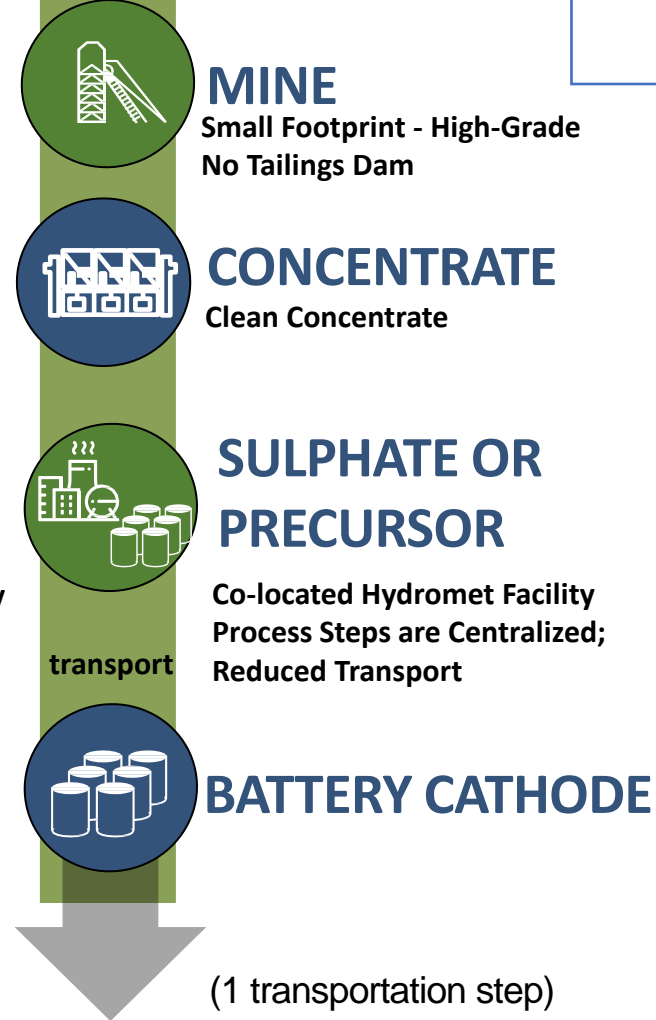
### GREEN NICKEL™ – FROM MINE TO THE FINAL BATTERY

#### Talon's Proposed Nickel Supply Chain Options for Batteries

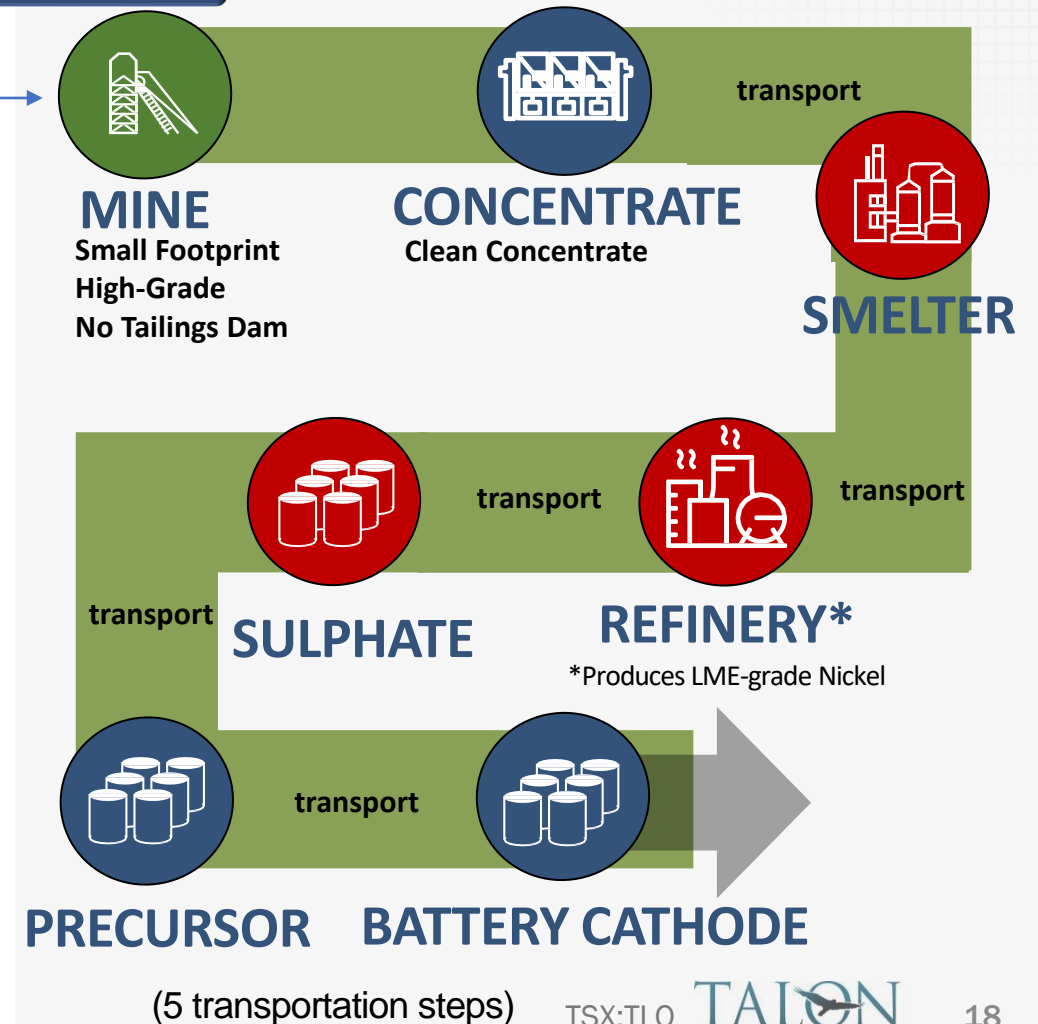
##### Nickel Powder Scenario



##### Nickel Sulphate Scenario



##### Nickel Concentrate Scenario



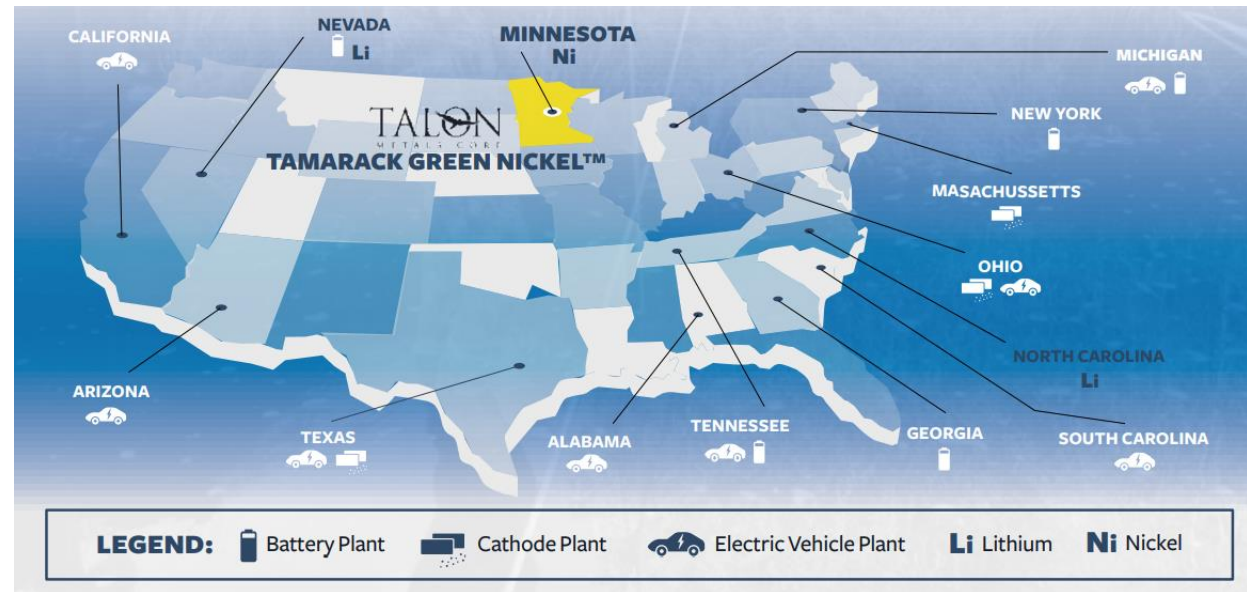
#### Current Nickel Supply Chain for Batteries

## (2) COMPLETE A PRE-FEASIBILITY STUDY: WHAT IS GREEN NICKEL™?



- ✓ HIGH GRADE = SMALL FOOTPRINT
- ✓ NICKEL FROM MINE TO BATTERY IN THE USA
- ✓ NO TAILINGS DAM
- ✓ GREEN ENERGY FOR AN ELECTRIC MINE FLEET
- ✓ CARBON CAPTURE AND STORAGE
- ✓ COMMUNITY DEVELOPMENT:  
SUPPORTING SUSTAINABLE GROWTH BEFORE, DURING, & POST-MINE CLOSURE

*“Tesla will give you a giant contract for a long period of time if you mine nickel efficiently and in an environmentally sensitive way”* -Elon Musk (July 23, 2020)  
(Co-founder and CEO of Tesla)



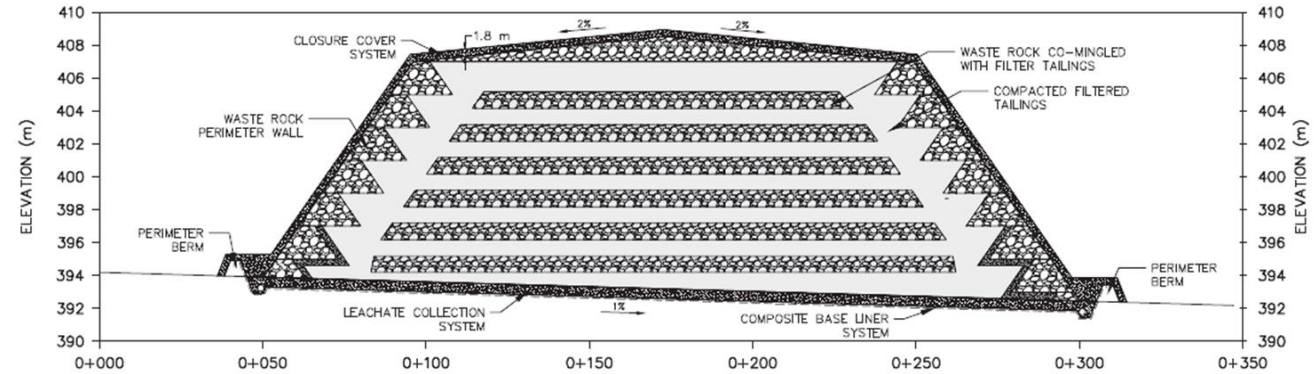
## (2) COMPLETE A PRE-FEASIBILITY STUDY

### GREEN NICKEL™ – DON'T BUILD TAILINGS DAMS



### Precedent of a Filtered Tailings Facility, Greens Creek, Alaska

Independent Expert Engineering Investigation and Review Panel, Report on Mount Polley Tailings Storage Facility Breach, “Where do we go from here: Best Available Technologies (BAT) for closure”, Figure 9.1.1, January 30, 2015



CROSS SECTION OF A CONCEPTUAL CO-DISPOSED FILTERED TAILINGS FACILITY (CFTF)

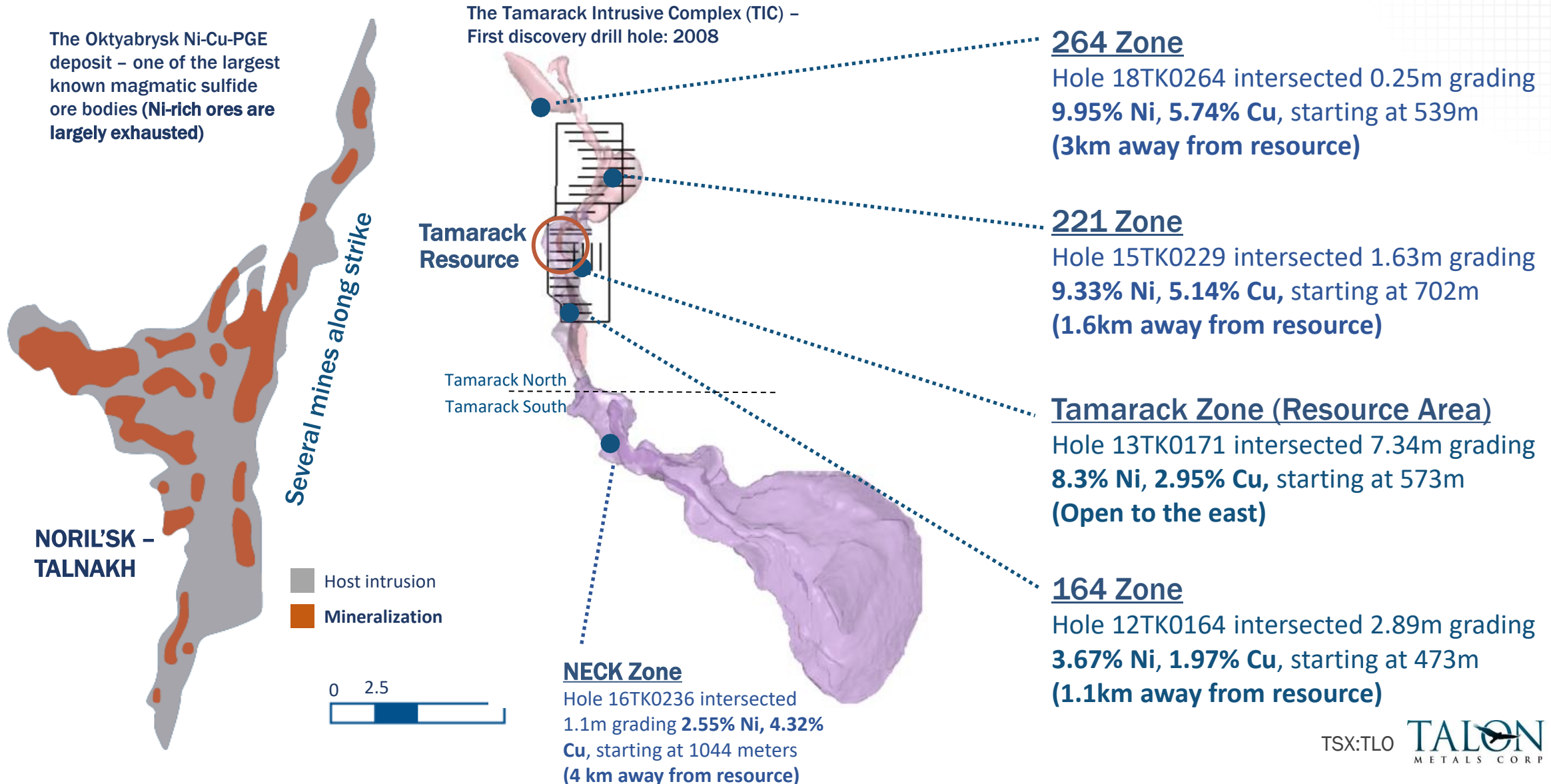
### At the high-grade Tamarack Nickel Project:

- No tailings dam
- Tailings will be cemented underground
- Remaining (low grade sulphur) tailings will be stored in an Encapsulated Co-Disposed Filtered Tailings Facility (CFTF)



# (3) EXPLORE THE REMAINING 16.5 KM OF THE TAMARACK INTRUSIVE COMPLEX

## SIGNIFICANT UPSIDE POTENTIAL OUTSIDE OF THE RESOURCE AREA



# UPCOMING CATALYSTS

## 2021

- ➔ 25,000 – 30,000 meter drilling program throughout 2021
- ➔ Expand the resource up-dip and to the north, with the goal of reducing timeline to production
- ➔ Possible extensions of the high-grade Massive Sulphide Unit within the Tamarack Project's current resource area to the south, east and north
- ➔ Convert more of the resource to the indicated category
- ➔ Additional geophysics to cost-effectively identify targets to unlock further potential of the 18 km TIC trend
- ➔ Further flowsheet development and test work to potentially produce refined nickel powders or nickel sulphates, with the goal of establishing a Made in USA Green Nickel™ supply chain
- ➔ Potential listing on a major U.S. stock exchange



"At the Tamarack Project, located in Minnesota, USA, we believe that nickel should be produced in an environmentally friendly and socially responsible way. It means that from mine to battery, every step is carefully controlled."

*"With Green Nickel, we want people to feel good about the end product, so when you purchase an electric vehicle, you know that you are truly doing your part to protect our environment."*

*- Joni Torgerson, CMWPIT, Senior Environmental Scientist,  
Talon Metals Corp., Tamarack, MN*

# CAPITAL STRUCTURE

**Shares issued** 685.2M

**Warrants outstanding** 42.6M  
@ avg. exercise price of C\$0.58

**Options outstanding** 86.0M  
@ avg. exercise price of C\$0.28

**Fully diluted** 813.8M

**Share price** C\$0.52

**Exchange symbol** TLO.TSX

**Market capitalization** C\$356M / US\$288M

**Cash** C\$37.4M / US\$30.2M

(As at June 30, 2021)

## Major shareholders

**Resource Capital Funds** 39.0%

**Rio Tinto** 4.4%

**Management and directors** 3.8%





# ANNEX 1

## RESULTS OF PRELIMINARY ECONOMIC ASSESSMENT (PEA)

Please see the technical report entitled “NI 43-101 Technical Report Preliminary Economic Assessment (PEA) #3 of the Tamarack North Project – Tamarack, Minnesota” with an effective date of January 8, 2021 for further information. Copies are available on the Company’s website ([www.talonmetals.com](http://www.talonmetals.com)) or on SEDAR at ([www.sedar.com](http://www.sedar.com))

# FEBRUARY 2021 PEA

NPV INCREASE OF 96% FROM PREVIOUS PEA (AND MORE ROOM TO GROW)



All amounts in United States dollars	March 2020 PEA <sup>(4)</sup>	February 2021 PEA		
		NICKEL SULPHATE SCENARIO <sup>(1)</sup>	NICKEL POWDER SCENARIO <sup>(2)</sup>	NICKEL CONCENTRATE SCENARIO <sup>(3)</sup>
After-Tax NPV <sup>(5), (6)</sup>	US\$291 million	US\$569 million	US\$567 million	US\$520 million
After-Tax IRR <sup>(5)</sup>	36.0%	31.9%	48.3%	45.6%
Initial CAPEX and Working Capital	US\$219 million	US\$553 million	US\$316 million	US\$316 million
Payback Period (after-tax)	2.3 years	2.1 years	1.5 years	1.6 years
Mine Life / Milling Rate	8 years / 2000 tpd	9 years / 3600 tpd	9 years / 3600 tpd	9 years / 3600 tpd
C1 cost <sup>(7)</sup> (net of by-product revenue)	\$2.67/lb of LME Nickel	\$1.02/lb of Ni in Ni Sulphate	\$0.08/lb of Ni in Ni Concentrate <sup>(8)</sup>	\$2.05/lb of LME Nickel
AISC <sup>(7)</sup> (net of by-product revenue)	\$3.57/lb of LME Nickel	\$2.31/lb of Ni in Ni Sulphate	\$1.07/lb of Ni in Ni Concentrate <sup>(8)</sup>	\$3.01/lb of LME Nickel

(1) Nickel sulphates produced at site for the EV market

(2) Nickel concentrates produced at site and thereafter used to produce refined nickel powder by a third party for the EV market

(3) Nickel concentrates produced at site and sold to a smelter, which produces LME grade nickel primarily for the stainless steel market

(4) See the technical report entitled "NI 43-101 Technical Report Updated Preliminary Economic Assessment (PEA) of the Tamarack North Project – Tamarack, Minnesota" with an effective date of March 12, 2020 (the "March 2020 PEA"). The March 2020 PEA is available under the Company's issuer profile on SEDAR ([www.sedar.com](http://www.sedar.com)) or on the Company's website ([www.talonmetals.com](http://www.talonmetals.com)). The March 2020 PEA was based on a nickel concentrate scenario.

(5) Metal prices of \$8.00/lb Ni, \$3.00/lb Cu, \$25.00/lb Co, \$1,000/oz Pt, \$1,000/oz Pd and \$1,300/oz Au. The same metal prices have been used in both the March 2020 PEA and the February 2021 PEA.

(6) Discount rate of 7%

(7) C1 cost includes value of metal claimed by smelter (metal units, treatment charges and refining charges), insurance, losses and transportation costs, less the value of by-products such as copper and cobalt. C1 cost is not an IFRS (International Financial Reporting Standards) measure and, although it is calculated according to accepted industry practice, the C1 cost may not be directly comparable to calculations carried out by other companies.

(8) Nickel Powder Scenario C1 cost and AISC excludes nickel concentrate smelting and refining since the nickel concentrate is not smelted nor refined but sold as a concentrate.

(9) All-in sustaining cost is C1 cost plus royalties, sustaining CAPEX and closure costs.

# FEBRUARY 2021 PEA vs. MARCH 2020 PEA

WORLD CLASS IRR DRIVEN BY HIGH-GRADE DEPOSIT AND LOW CAPITAL INTENSITY

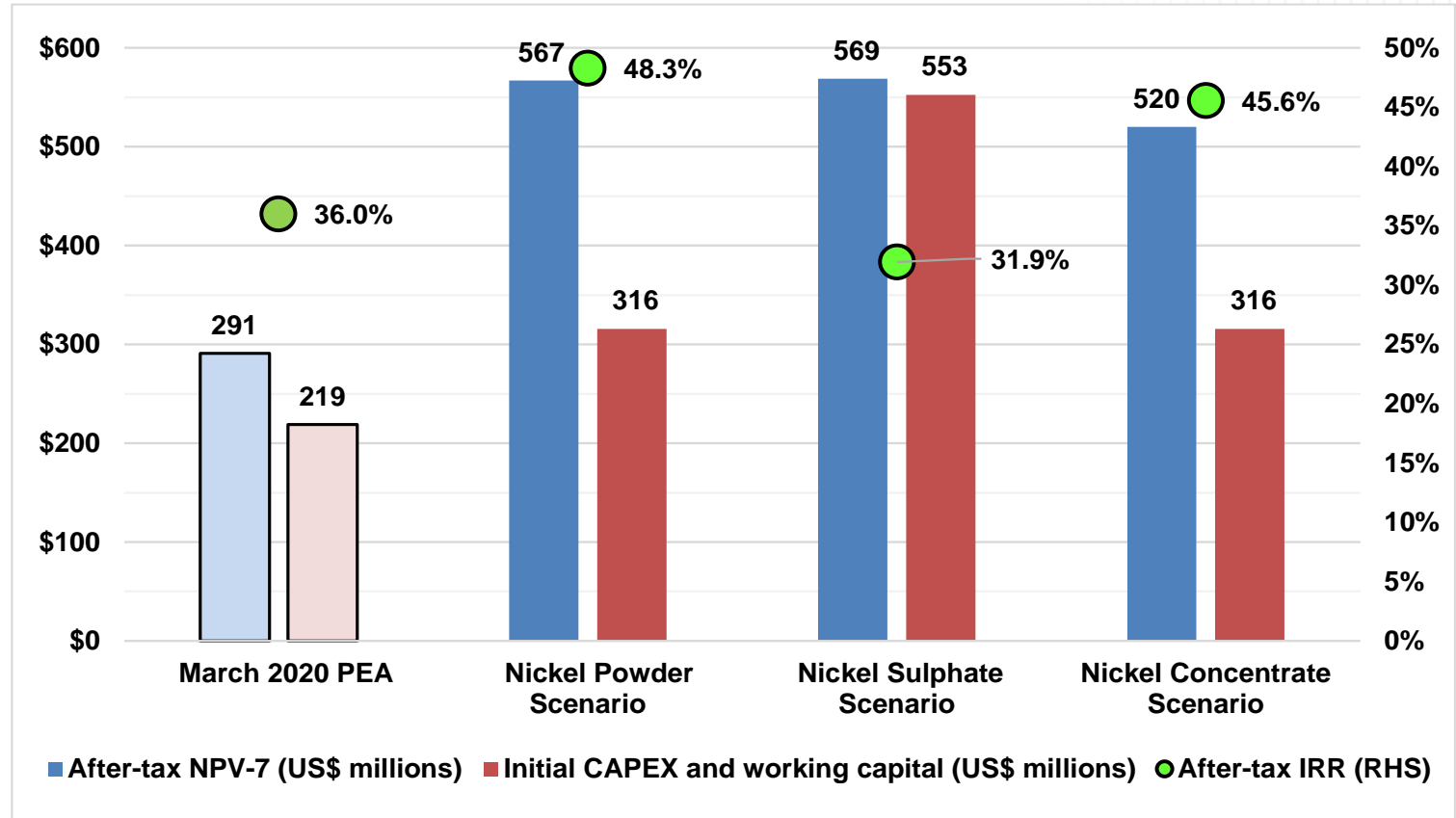


## WORLD CLASS IRR DRIVEN BY:

- ✓ High Grades
- ✓ Good Recoveries
- ✓ Shallow Mineral Deposit
- ✓ Mining Method: Primarily bulk mining with some selective mining in high-grade areas
- ✓ Clean Concentrate
- ✓ Improving Payabilities
- ✓ Regional Infrastructure
- ✓ Low Capital Intensity; Modest CAPEX

## FURTHER ROOM TO GROW

- Significant Exploration Upside (7 Targets)
- Additional Optimization/Trade-off Studies



All amounts in US dollars

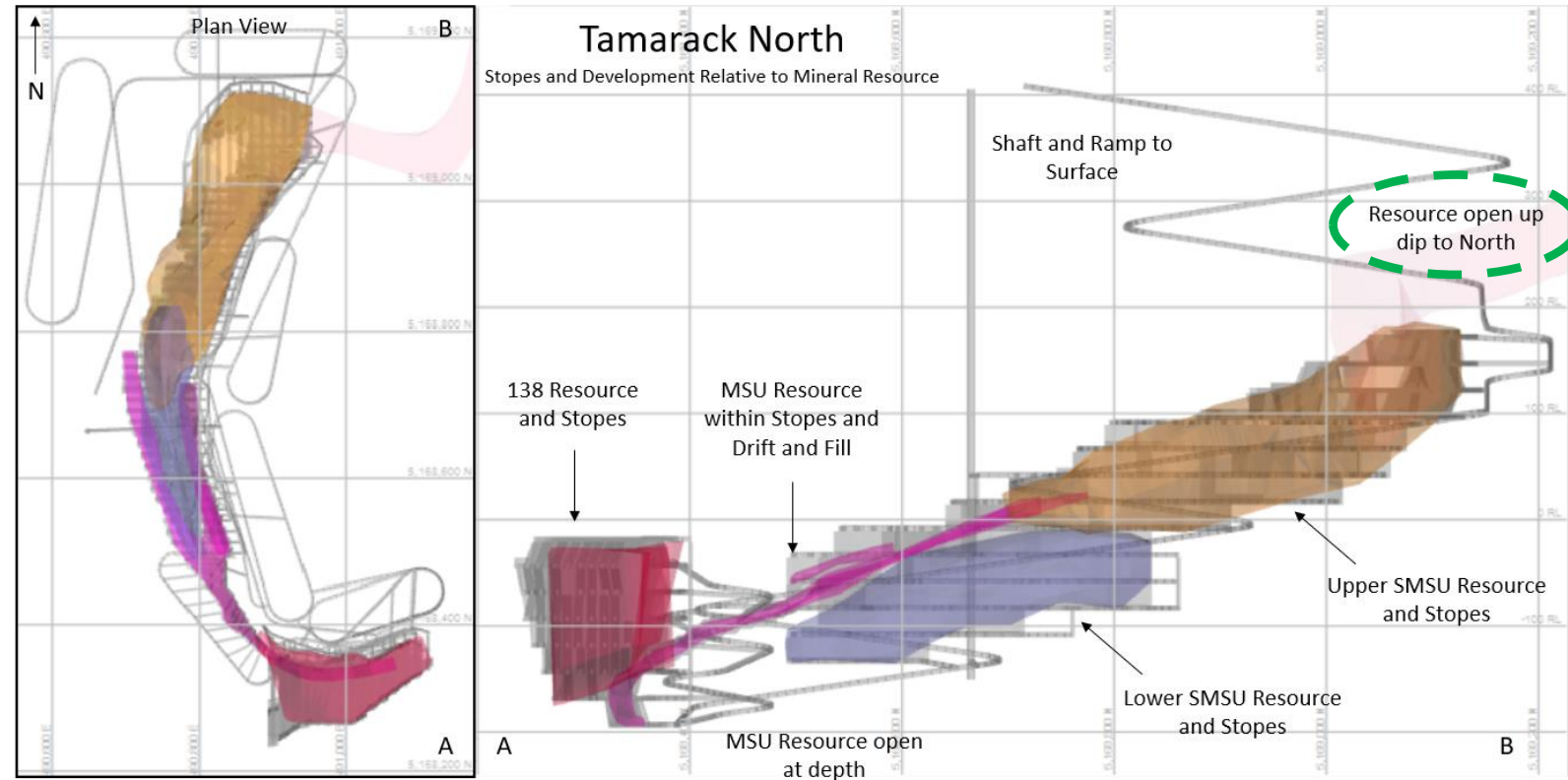


# FEBRUARY 2021 PEA MINE PLAN

## SHALLOW UNDERGROUND MINE AMENABLE TO BULK MINING METHODS

### EFFICIENT MINE DUE TO:

- ✓ Decline ramp access from surface
- ✓ Long-hole stoping/drift and fill
- ✓ 9 year mine life (excluding construction)
- ✓ First ore within 2 years from start of construction
- ✓ 10.8 Mt mined at 1.34% Ni (1.85% NiEq)
- ✓ 3,600 t/d mill feed
- ✓ Cemented paste backfill utilizing all high sulphur tailings generated
- ✓ Co-disposed Filtered Tailings Facility (CFTF)
  - Studying the potential for sequestering CO<sub>2</sub> within the CFTF.



# MINE TECHNOLOGY

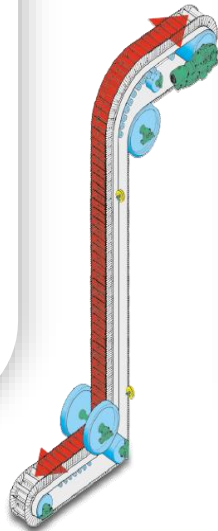
## IMPLEMENT BEST AVAILABLE TECHNOLOGIES

- ✓ Expand mineable resource
- ✓ Accelerate time to production
- ✓ Significantly reduce CAPEX and OPEX
- ✓ Minimize environmental impacts

### Vertical Conveying



- Very low CAPEX (\$5.6M Supply + Installation)
- Low OPEX and maintenance
- High throughput
- Applicable at shallow depths



### Full Battery/Electric Fleet



- Expected to be the standard when Tamarack is in Production
- Socially acceptable
- Eliminates diesel particulates underground

### Blast-less Mining



- Production rates nearly 2x that of traditional drill/blast
- Eliminates underground blasting by 50%
- Improves ground stability and vent efficiency

# FEBRUARY 2021 PEA – ADDITIONAL METRICS

## LOW CAPITAL INTENSITY, HIGH METAL RECOVERIES AND ROBUST ECONOMICS

All amounts in United States dollars	March 2020 PEA	February 2021 PEA		
		NICKEL SULPHATE SCENARIO	NICKEL POWDER SCENARIO	NICKEL CONCENTRATE SCENARIO
Mine Plan Tonnage	4.9 million	10.8 million	10.8 million	10.8 million
Mill Treatment Capacity	2,000 tpd	3,600 tpd	3,600 tpd	3,600 tpd
NiEq Grade of Mill Feed <sup>(1)</sup>	2.82%	1.85%	1.85%	1.85%
Ni Grade of Mill feed	2.10%	1.34%	1.34%	1.34%
Cu Grade of Mill feed	1.06%	0.76%	0.76%	0.76%
Ni Tonnes in situ	103,000	144,000	144,000	144,000
Initial CAPEX	\$219 million	\$553 million	\$316 million	\$316 million
Total CAPEX including Sustaining CAPEX	\$259 million	\$646 million	\$395 million	\$395 million
Capital Intensity <sup>(2)</sup>	\$21,000	\$40,000	\$23,000	\$23,000
Ni Recovery	83.4%	78.0%	82.1%	82.1%
Total Cu Recovery	94.4%	84.5%	86.9%	86.9%
Production Life of Mine (Average years 1 – 5 in brackets)				
• Ni tonnes	86,000 tonnes (12,900 tpa)	112,000 tonnes (15,600 tpa)	118,000 tonnes (16,500 tpa)	118,000 tonnes (16,500 tpa)
• Cu tonnes	48,900 tonnes (7,300 tpa)	68,600 tonnes (9,000 tpa)	70,700 tonnes (9,200 tpa)	70,700 tonnes (9,200 tpa)
Revenue Split Ni/Cu/Other <sup>(3)</sup>	77%/19%/4%	79%/15%/6%	76%/20%/4%	74%/20%/6%
Ni Concentrate Grades	13.30% Ni, 1.13% Cu	n/a	10.57% Ni, 0.95% Cu	10.57% Ni, 0.95% Cu
Cu Concentrate Grades	27.60% Cu, 2.91 g/t Au	26.45% Cu 4.3 g/t Au	27.04% Cu, 5.02 g/t Au	27.04% Cu, 5.02 g/t Au
Ni Sulphate Premium <sup>(4)</sup>	n/a	\$1.25/lb of Ni	n/a	n/a
EBITDA Margin	60%	64%	68%	64%
Pre-tax Cash Flow or EBIT Margin	43%	41%	50%	46%

(1) NiEq grade based on base case metal prices of \$8.00/lb Ni, \$3.00/lb Cu, \$25.00/lb Co, \$1,000/oz Pt, \$1,000/oz Pd and \$1,300/oz Au using the following formula:  

$$\text{NiEq\%} = \text{Ni\%} + \text{Cu\%} \times \$3.00/\$8.00 + \text{Co\%} \times \$25.00/\$8.00 + \text{Pt [g/t]}/31.103 \times \$1,000/\$8.00/22.04 + \text{Pd [g/t]}/31.103 \times \$1,000/\$8.00/22.04 + \text{Au [g/t]}/31.103 \times \$1,300/\$8.00/22.04$$
 No adjustments were made for recoveries or payabilities.

(2) Calculated as total CAPEX divided by average annual NiEq production during years 2 through 8.

(3) Other includes Pt, Pd, Au and Co

(4) Relative to LME Nickel price



# FEBRUARY 2021 PEA: CAPEX AND OPEX

## INITIAL CAPEX IS READILY FINANCEABLE



CAPEX						
US\$ millions	Nickel Sulphate Scenario			Nickel Powder Scenario or Nickel Concentrate Scenario		
Area	Initial Cost (US\$M)	Sustaining Cost (US\$M)	Total Cost (US\$M)	Initial Cost (US\$M)	Sustaining Cost (US\$M)	Total Cost (US\$M)
Mine	\$130.15	\$70.32	\$200.47	\$130.15	\$70.32	\$200.47
Process and Surface Facilities	\$390.56	\$50.41	\$440.97	\$167.51	\$22.01	\$189.51
Closure Costs other than CFTF	-	\$10.00	\$10.00	-	\$10.00	\$10.00
Salvage Value of Mill	-	(\$5.00)	(\$5.00)	-	(\$5.00)	(\$5.00)
Sub Total	\$520.71	\$125.73	\$646.44	\$297.66	\$97.33	\$394.99
Working Capital	\$31.90	(\$31.90)	-	\$18.15	(\$18.15)	-
<b>Total CAPEX</b>	<b>\$552.61</b>	<b>\$93.83</b>	<b>\$646.44</b>	<b>\$315.80</b>	<b>\$79.18</b>	<b>\$394.99</b>

Cost Category	OPEX (US\$/t of mill feed)		
	Ni Sulphate Scenario	Ni Powder Scenario	Ni Concentrate Scenario
Mining	\$27.49	\$27.49	\$27.49
Processing (milling/concentrating)	\$14.25	\$14.25	\$14.25
Hydrometallurgical Refining	\$26.68	-	-
Product Handling, Transportation, Losses, and Insurance	\$2.22	\$1.90	\$10.29
Co-disposed Filtered Tailings Facility (CFTF)	\$0.75	\$0.75	\$0.75
General & Administrative	\$4.60	\$3.76	\$3.76
<b>Total OPEX</b>	<b>\$75.99</b>	<b>\$48.15</b>	<b>\$56.54</b>

	March 2020 PEA	February 2021 PEA
Primary Access	Shaft	Decline
Primary Development Method	Drill / Blast	Road Header
Longhole Stope Sizes	7.5m W x 15m H x 15m L	15m W x 25m H x 30m L
Drift and Fill Size	3.0m W x 3.0m H	6.5m W x 5.0m H
Ore Handling	Hoisting (Skips)	Vertical Conveyor
Main Infrastructure	Underground	Surface

All amounts in US dollars

# TAMARACK IS ECONOMIC EVEN AT LOW METAL PRICES

At low metal prices of \$6.75 Ni/\$2.75 Cu, after-tax IRR ranges from 25.1% to 39.3%



All amounts in United States dollars	Discount Rate	NICKEL SULPHATE SCENARIO			NICKEL POWDER SCENARIO			NICKEL CONCENTRATE SCENARIO		
		Metal Price Case			Metal Price Case			Metal Price Case		
		Low	Base	Incentive*	Low	Base	Incentive*	Low	Base	Incentive*
After-tax NPV (US\$ Millions)	7%	\$387M	\$569M	\$769M	\$415M	\$567M	\$744M	\$369M	\$520M	\$695M
	8%	\$351M	\$524M	\$714M	\$386M	\$530M	\$698M	\$342M	\$485M	\$651M
	10%	\$286M	\$443M	\$615M	\$333M	\$463M	\$616M	\$293M	\$423M	\$573M
After-tax IRR		25.1%	31.9%	38.6%	39.3%	48.3%	57.7%	36.4%	45.6%	55.1%
Payback from start of production - pre-tax		2.2 years	1.8 years	1.6 years	1.6 years	1.4 years	1.2 years	1.7 years	1.4 years	1.2 years
Payback from start of production - after-tax		2.4 years	2.1 years	1.8 years	1.8 years	1.5 years	1.3 years	1.9 years	1.6 years	1.4 years

All amounts in US dollars

	Unit	Low	Base case	Incentive pricing*
Ni	US\$/lb	\$6.75	\$8.00	\$9.50
Cu	US\$/lb	\$2.75	\$3.00	\$3.50
Co	US\$/lb	\$15.00	\$25.00	\$30.00
Pt	US\$/lb	\$1,000	\$1,000	\$1,000
Pd	US\$/lb	\$1,000	\$1,000	\$1,000
Au	US\$/lb	\$1,300	\$1,300	\$1,300

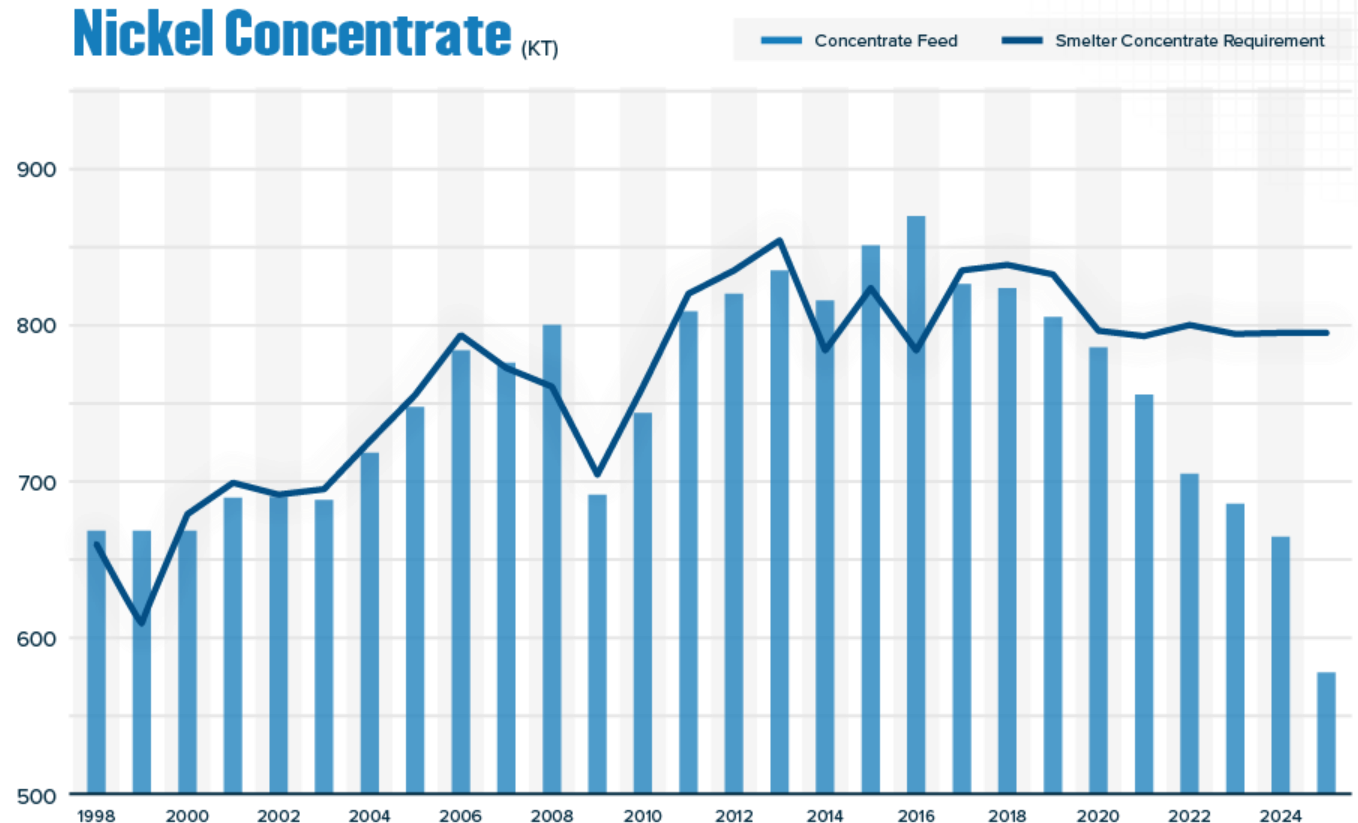
\*Incentive price is an estimated price believed to be required to incentivize new mines to be constructed. Selected incentive price based on research, however may be higher or lower dependent on numerous factors such as: inflation, future volume of demand for nickel, required return on capital and cost profile (both CAPEX and OPEX) of new projects that potentially could be constructed to meet a supply shortfall among other factors. Incentive price represents a possible price during periods of nickel demand growth such as due to the projected growth in the EV market.

# **ANNEX 2:**

# **STAINLESS STEEL DEMAND FOR NICKEL CONCENTRATES**

# STAINLESS STEEL NEEDS CLEAN SULPHIDE CONCENTRATES *MAYBE EVEN MORE THAN EV*

- ✓ EV or no EV, the demand for nickel concentrates is expected to rapidly exceed supply
- ✓ More so for clean nickel concentrates with low deleterious elements
- ✓ “Payabilites” of Ni from the stainless steel supply chain are therefore expected to increase...without EV



Wood Mackenzie, The future of nickel production – Page 19, February 2015

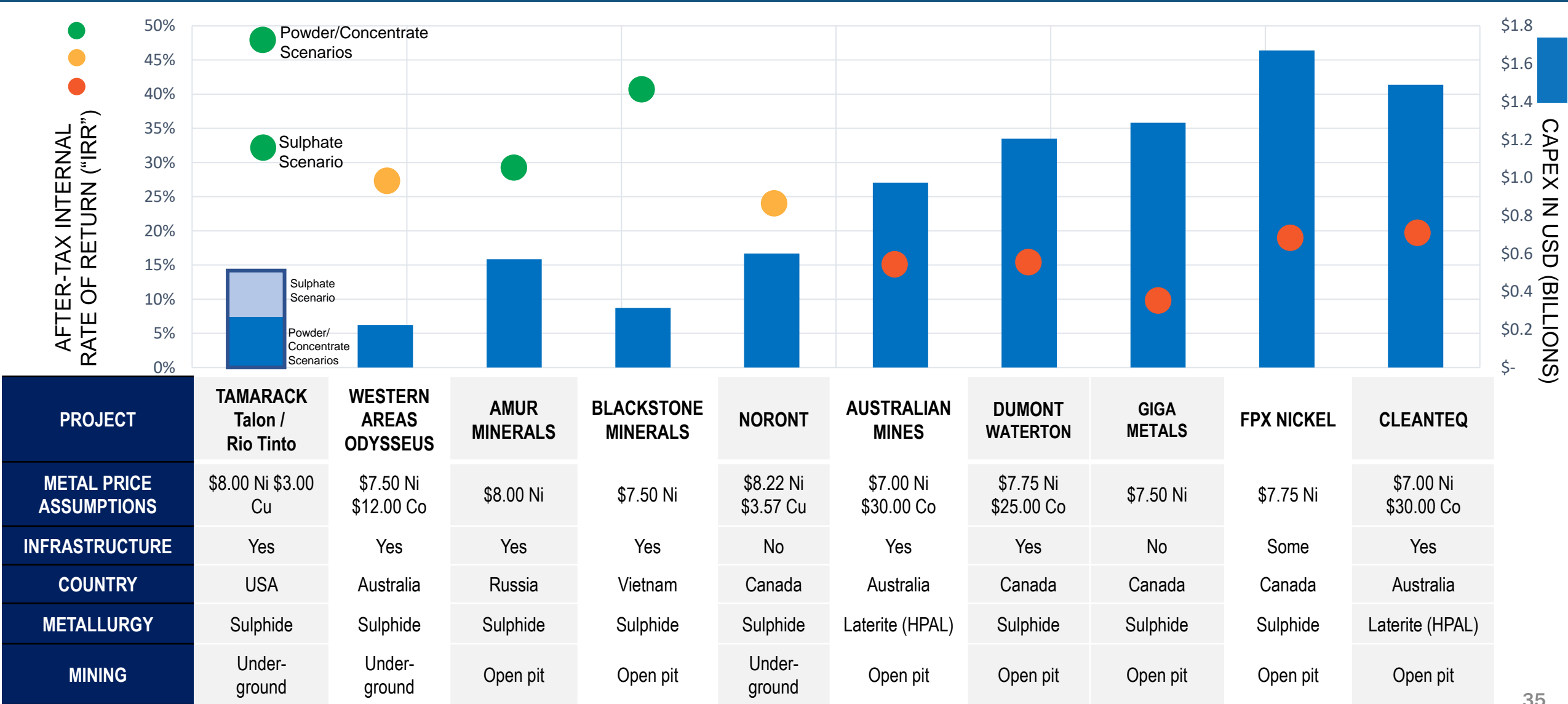


# **ANNEX 3:**

# **BENCHMARKING AND PUBLIC COMPANY COMPARABLES**

# UNDEVELOPED CLASS 1 NICKEL PROJECTS (PUBLICLY TRADED)

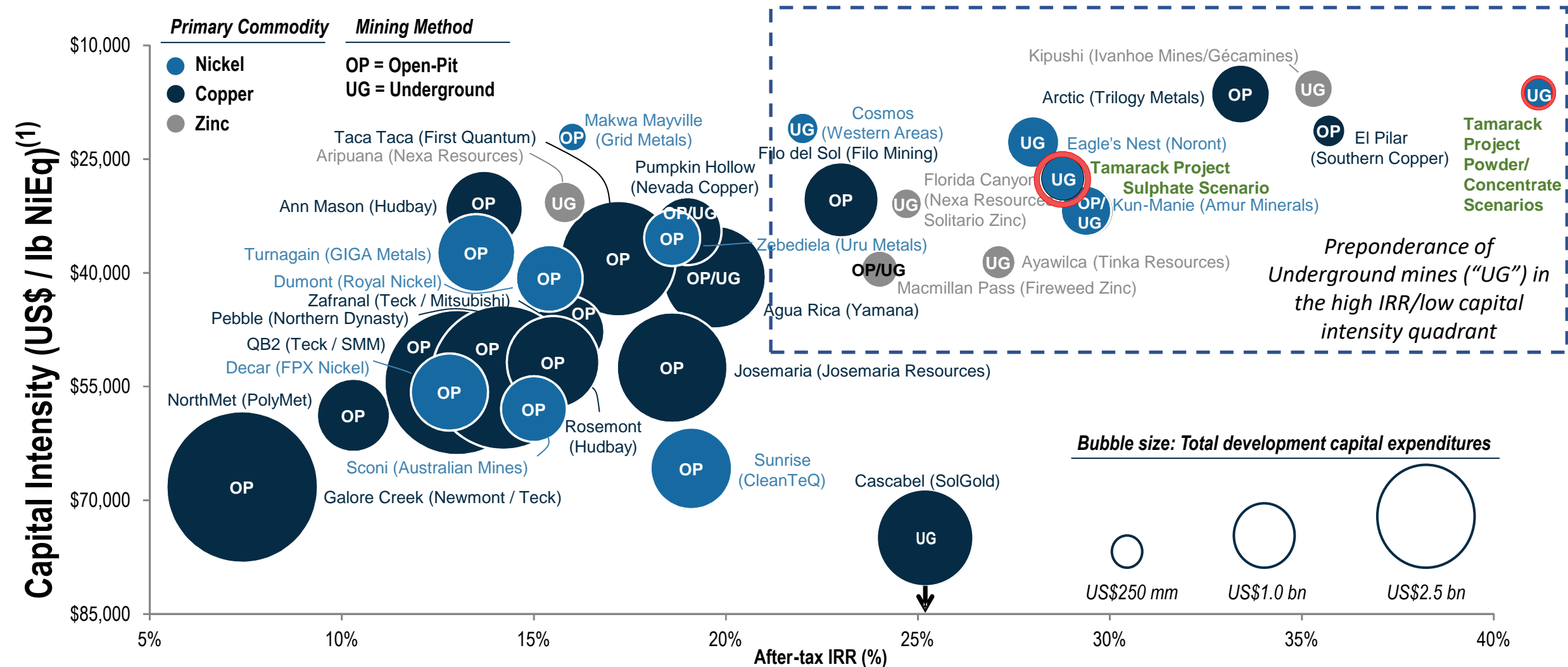
## AFTER-TAX IRR AND CAPEX COMPARISON



Source: Company reports and Talon research. Disclaimer: Talon endeavours to update data when new reports are published, however, figures may not be completely up to date.

# BASE METAL ASSET BENCHMARKING

## AFTER-TAX IRR, CAPITAL INTENSITY AND CAPEX COMPARISON



Source: BMO Capital Markets, company reports, SNL  
Note: Nickel equivalent calculated using long-term consensus commodity prices of US\$7.50/lb Ni, US\$3.00/lb Cu, US\$20.00/lb Co, US\$1,188/oz Pd, US\$1,090/oz Pt, US\$1.09/lb Zn, US\$9.00/lb Mo, US\$0.93/lb Pb, US\$1,500/oz Au and US\$18.00/oz Ag.  
1. Calculated as total development and sustaining capital expenditures divided by annual NiEq production.

## CONTACT INFORMATION

**Talon Metals Corp.**  
**Sean Werger, President**  
swerger@talonmetals.com  
B: (416) 361-9636 ext.102

www.talonmetals.com  
<https://www.linkedin.com/company/talon-metals-corp>

*Visit our new interactive website!*

