

METALS FOR THE CLEAN AIR REVOLUTION



THUNDER BAY NORTH CRITICAL MINERALS PROJECT

PRELIMINARY ECONOMIC ASSESSMENT & PATH FORWARD

NOVEMBER 2022

TSXV AIR OTCQB CLRMF FRA CKU | [CLEANAIRMETALS.CA](https://www.cleanairmetals.ca)

FORWARD LOOKING STATEMENTS

Information set forth in this presentation may contain forward-looking statements. Forward-looking statements are statements that relate to future, not past events. In this context, forward-looking statements often address a company's expected future business and financial performance, and often contain words such as "anticipate", "believe", "plan", "estimate", "expect", and "intend", statements that an action or event "may", "might", "could", "should", or "will" be taken or occur, or other similar expressions. By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or other future events, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others, risks associated with project development; the need for additional financing; operational risks associated with mining and mineral processing; fluctuations in commodity prices; title matters; environmental liability claims and insurance; reliance on key personnel; the absence of dividends; competition; dilution; the volatility of our common share price and volume; and tax consequences to U.S. Shareholders. Forward-looking statements are made based on management's beliefs, estimates and opinions on the date that statements are made and the Company undertakes no obligation to update forward-looking statements if these beliefs, estimates and opinions or other circumstances should change. Investors are cautioned against attributing undue certainty to forward-looking statements.

Abraham Drost, P.Geo. a Qualified Person under NI 43-101, has reviewed and approved dissemination of the technical content herein.



JIM GALLAGHER, P.ENG EXECUTIVE CHAIR



Most recently the CEO of North American Palladium (TSX:PDL), which operated the Lac Des Iles mine, at the sale to Impala Platinum Holdings (JSE:IMP) in December 2019 for approximately \$1 Billion.

ABRAHAM DROST, P.GEO CEO/DIRECTOR



Most recently CEO and Director of Carlisle Goldfields Ltd. (CGJ:TSX) at the sale to Alamos Gold (AGI:TSX). Former Chairman of Premier Gold Mines USA Inc. and the former CEO and founding Director of Premier Royalty Inc. (NSR:TSX) at the sale to Sandstorm Gold (SSL:TSX).

MIKE GARBUTT, P.ENG CHIEF OPERATING OFFICER



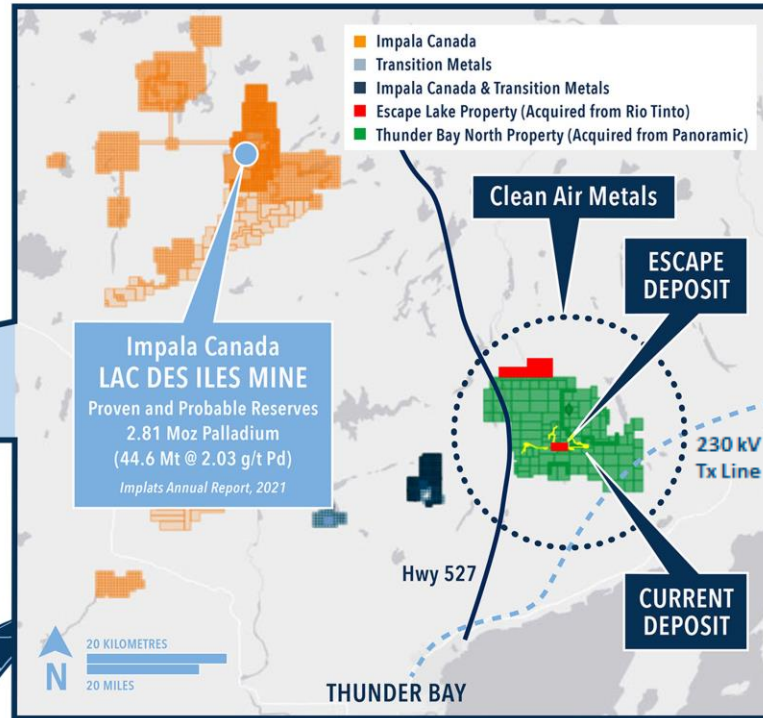
Most recently Deputy General Manager of IAMGOLD (XTSE:IMG) at the Côté Gold Project and General Manager, Sudbury at KGHM International.

Pt:Pd Ratio 1:1 geologically, lending perfect optionality on price trend

CLEAN AIR
METALS INC



THUNDER BAY NORTH PROJECT LOCATION WHERE INFRASTRUCTURE MEETS GRADE



- 40 km North of Thunder Bay
- 65 km S of Lac des Iles Mine
- Paved provincial Hwy thru NW corner of claims
- 230 KVA tx line through SE corner of claims
- Natural Gas 20 km north

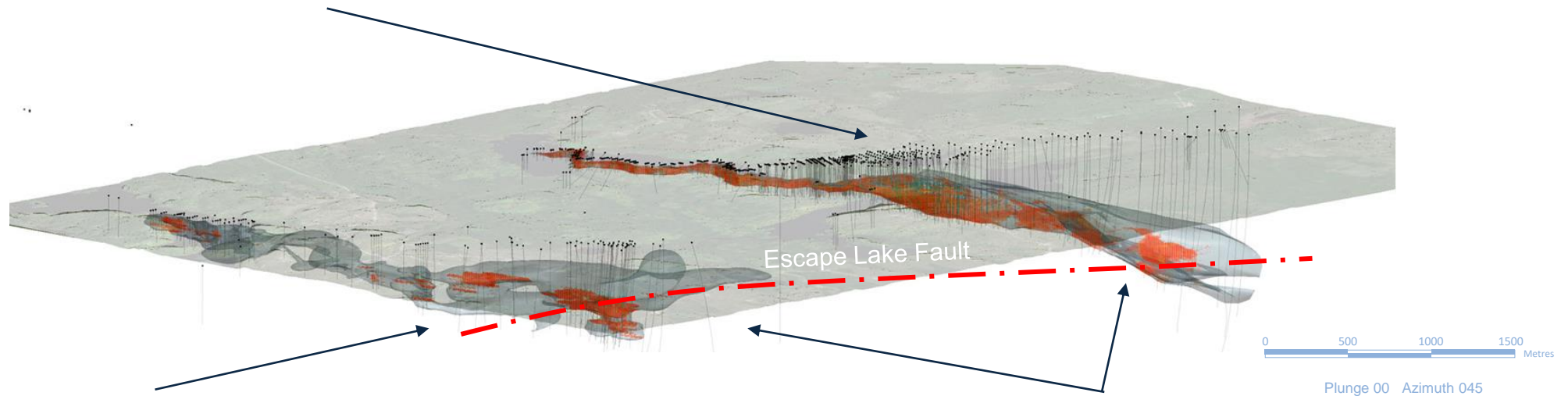
Favorable Mining Jurisdiction + proximity to major mining centre + key infrastructure on doorstep = **Low Risk**



THUNDER BAY NORTH MAGMA CONDUIT SYSTEM, ONTARIO, CANADA (>22 MT I&I MINERAL RESOURCES INSITU)

Current Deposit

- Indicated Resource of 10,388,964 tonnes at 8.32 PtEq (g/t) containing 2,780,251 ounces PtEq
- Inferred Resource of 5,274,798 tonnes at 3.83 tdEq (g/t) containing 650,277 ounces PtEq



Escape Deposit & High Grade Zone (Open)

- Indicated Resource of 4,164,360 tonnes at 7.61 PtEq (g/t) containing 1,018,330 ounces PtEq
- Inferred Resource of 2,802,798 tonnes at 4.52 PtEq (g/t) containing 407,369 ounces PtEq

Feeder Zone

- **Massive sulphide drill targets**

*Drill-Indicated lithological shells

N.B. Payable metal production over a 10-year mine is expected to be 629 k oz Platinum, 618 k oz Palladium, 111 m pounds Copper, 57 m pounds Nickel, 38 k oz Gold, 850 k oz Silver, or 2,386 k oz PtEq (from equivalent NSR's) (Jan-2022 PEA)



PEA SUMMARY A SOLID FOUNDATION

Highlights

- 10 year mine life with strong project economics
- Processing rate of 3,600 tpd
- LOM Average Operating Cash Cost (per tonne) is \$86.61
- Total initial capital cost is \$367.2 million
- Total capital costs is \$536.4 million
- **Initial payback period (pre-tax) of 2.4 years**
- **Pre-tax NPV 5% of \$425.0 million and IRR of 31.1%**
- **After-tax NPV 5% of \$293.0 million and IRR of 25.2%**
- **Averaging 4.49g/t 4E PGE / 10.04g/t PtEq insitu at Lower Current and Bridge Zones (first 3.7 years of mining at Current Deposit on 4,835,410 tonnes)**

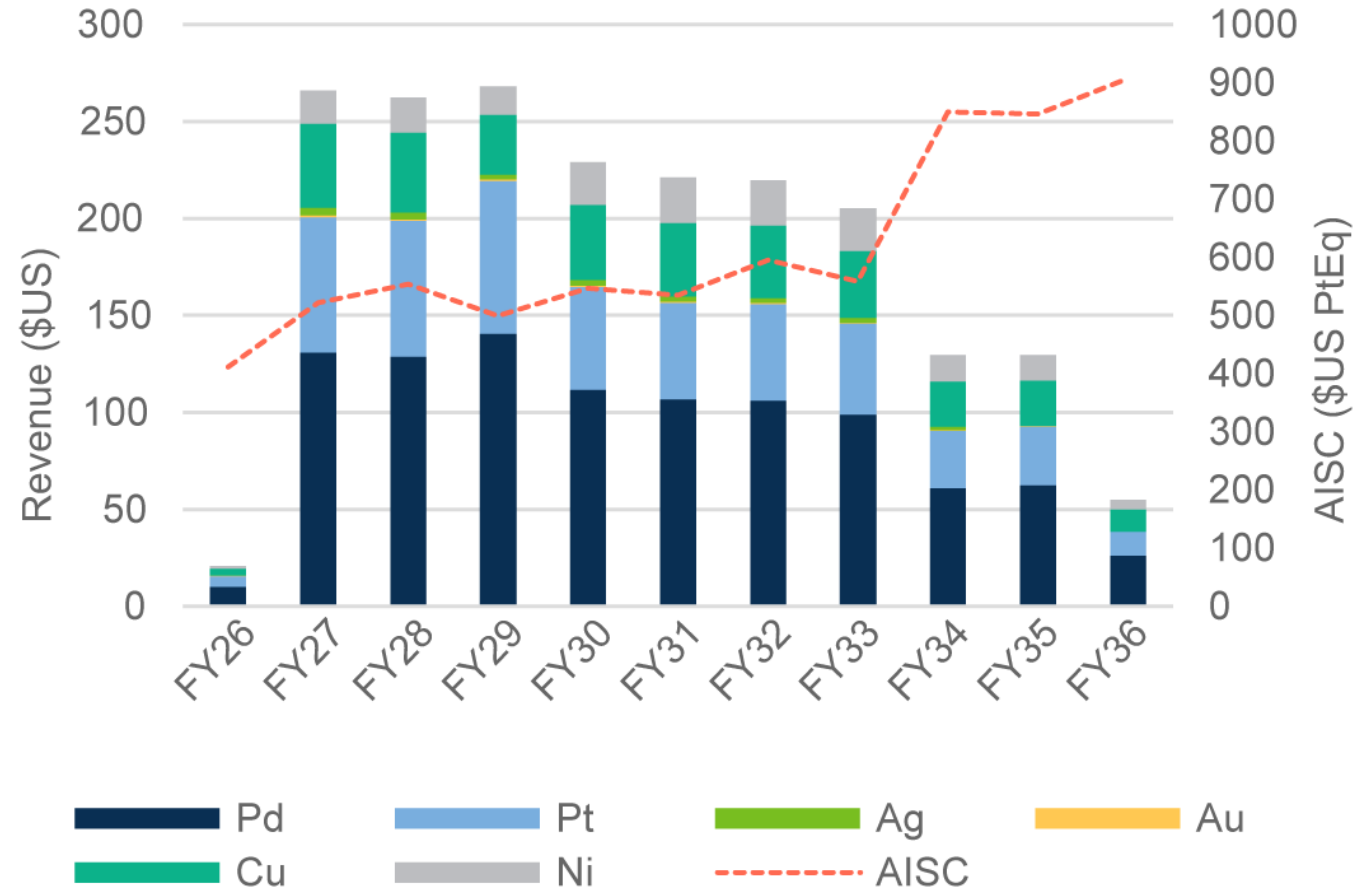
| Production Profile | |
|---|----------------------|
| Life of Mine | 10 Years |
| Total Milled Tonnage (kt) | 12,284 |
| Processing Rate | 3,600 tpd/ 1.296Mtpa |
| Operating Costs (\$/t) | |
| Mining Cost (per tonne) | 47.37 |
| Processing Cost (per tonne) | 25.03 |
| G&A Costs (per tonne) | 6.87 |
| Royalties (per tonne) | 2.63 |
| Transportation to Smelter (per tonne) | 4.71 |
| LOM Average Operating Cash Cost (per tonne) | 86.61 |
| Capital Costs (CA\$ million) | |
| Pre-Contingency Initial Capital | 265.8 |
| Initial Capital Contingency | 60.2 |
| Total Initial Capital | 367.2 |
| Total Ongoing Capital (including closure) | 169.2 |
| Total Capital Costs | 536.4 |
| Valuation | |
| Exchange Rate (CA\$/US\$) | 1.3 |
| NPV (5%, Pre-Tax) | 425.0 |
| IRR (Pre-Tax) | 31.1% |
| Payback Period (Pre-Tax) | 2.4 Years |
| NPV (5%, After-Tax) | 293.0 |
| IRR (After-Tax) | 25.2% |
| Payback Period (After-Tax) | 2.6 Years |

*PEA Filed January 12, 2022



MINE PRODUCTION PROFILE PLATINUM EQUIVALENT AISC

Thunder Bay North Project **Platinum equivalent revenue vs AISC**



+90% of revenue from 3 highly recoverable Critical elements Palladium, Platinum and Copper



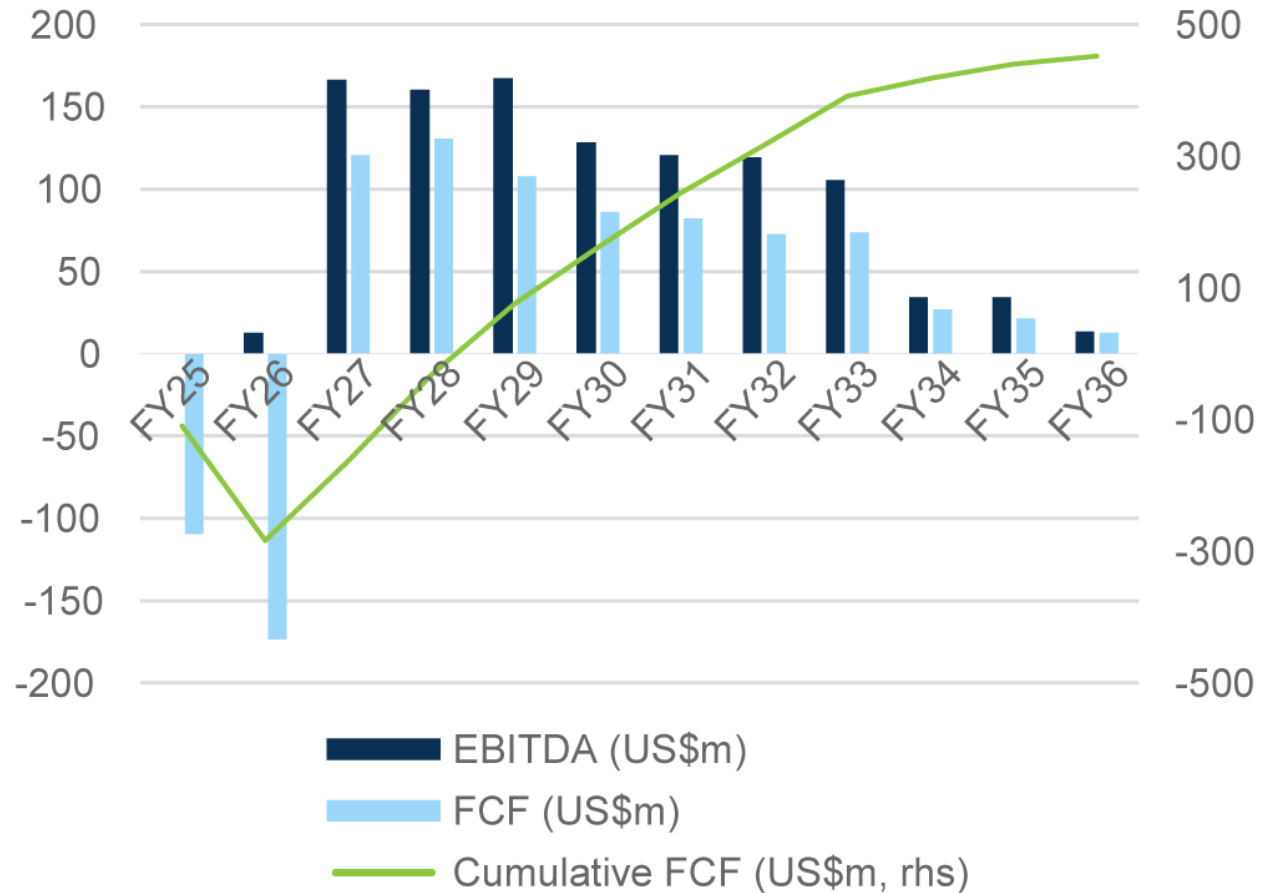
TBN PROJECT FCF AND EBITDA

Thunder Bay North Project FCF and EBITDA of operations offers a post-tax 2.6-year payback

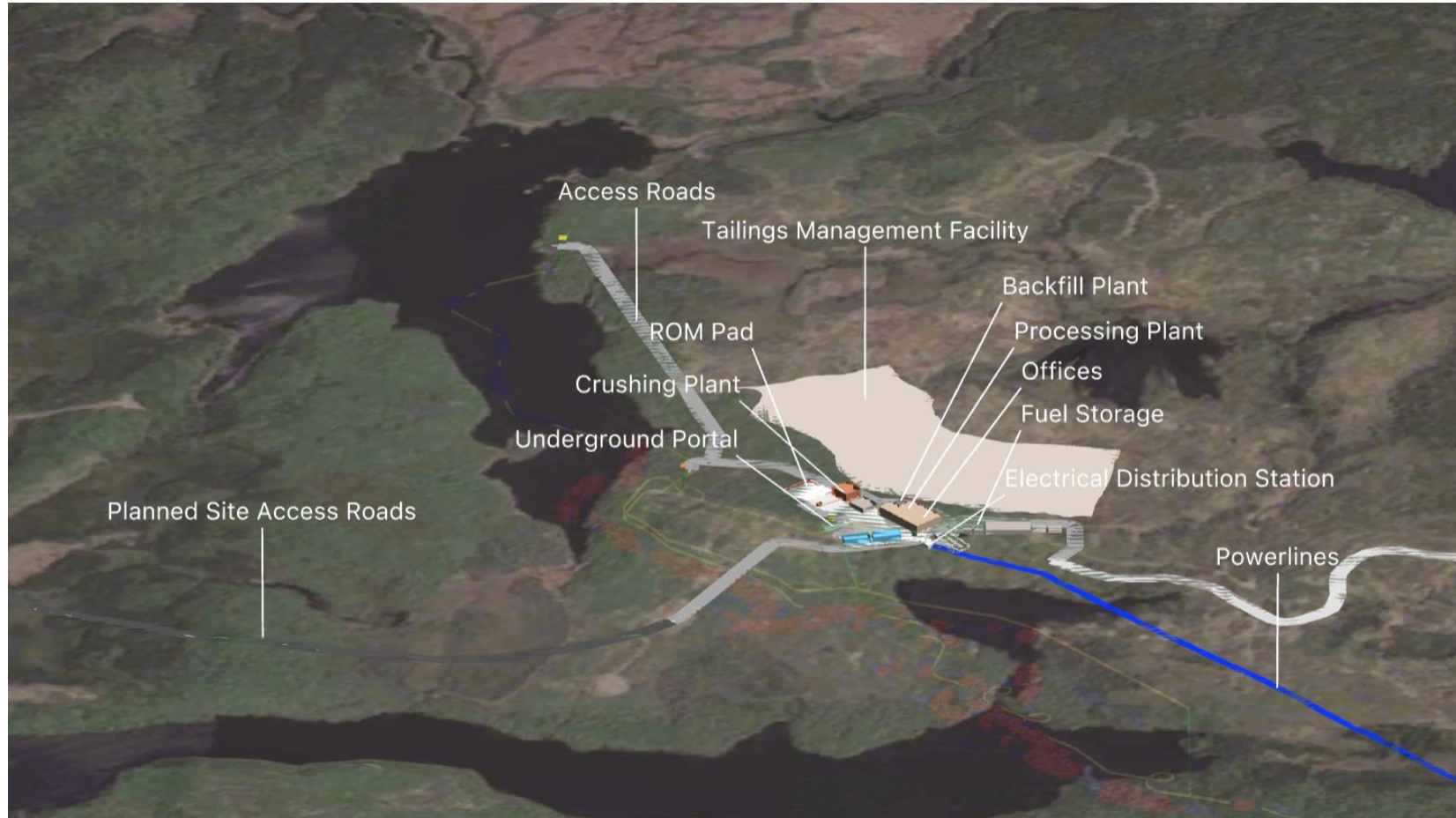
Total Revenue
C\$ 2,244.8 million

Total Pre-Tax FCF
C\$ 651.6 million

Payback Period (Pre-Tax)
2.4 Years



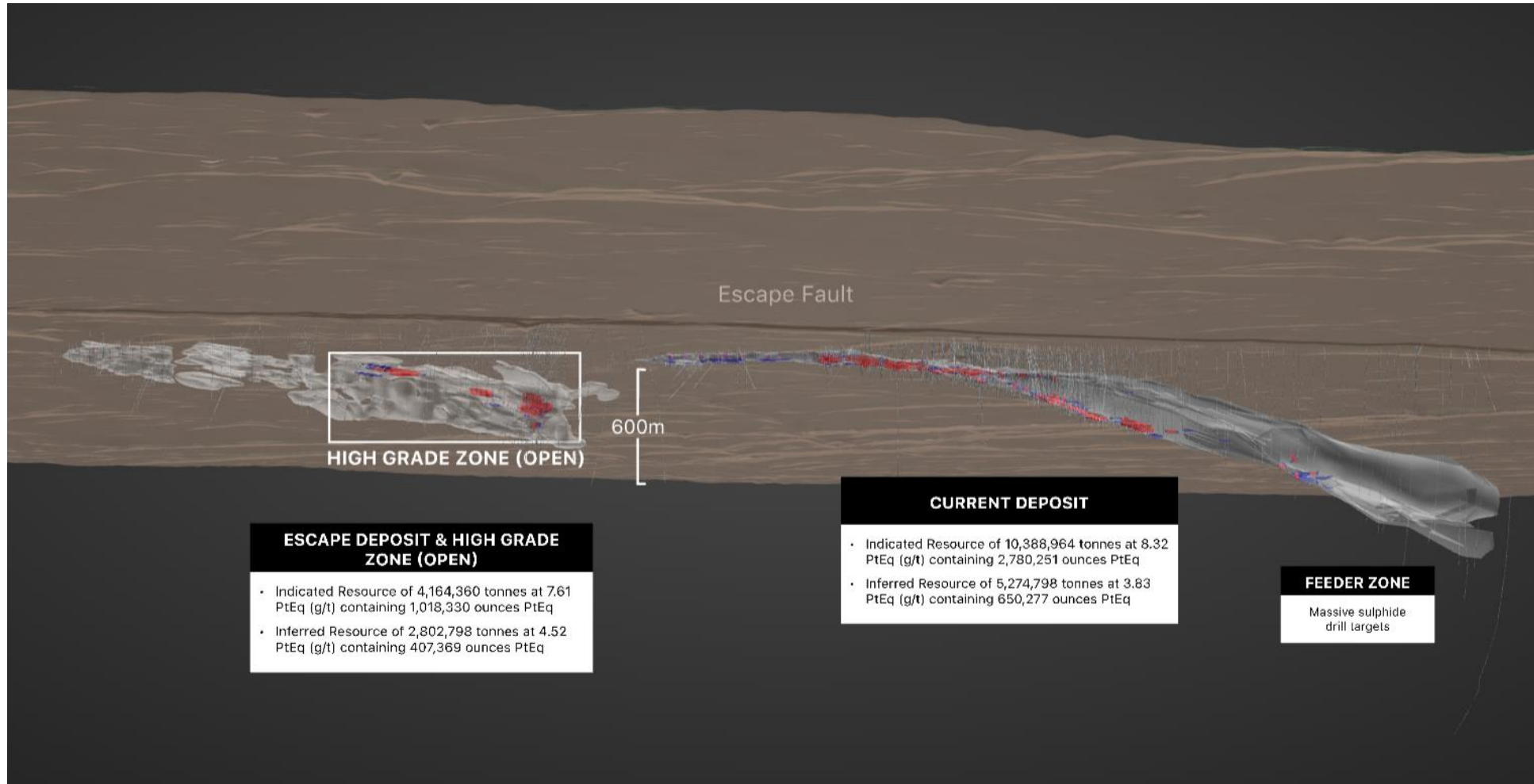
SURFACE INFRASTRUCTURE SITE MAP



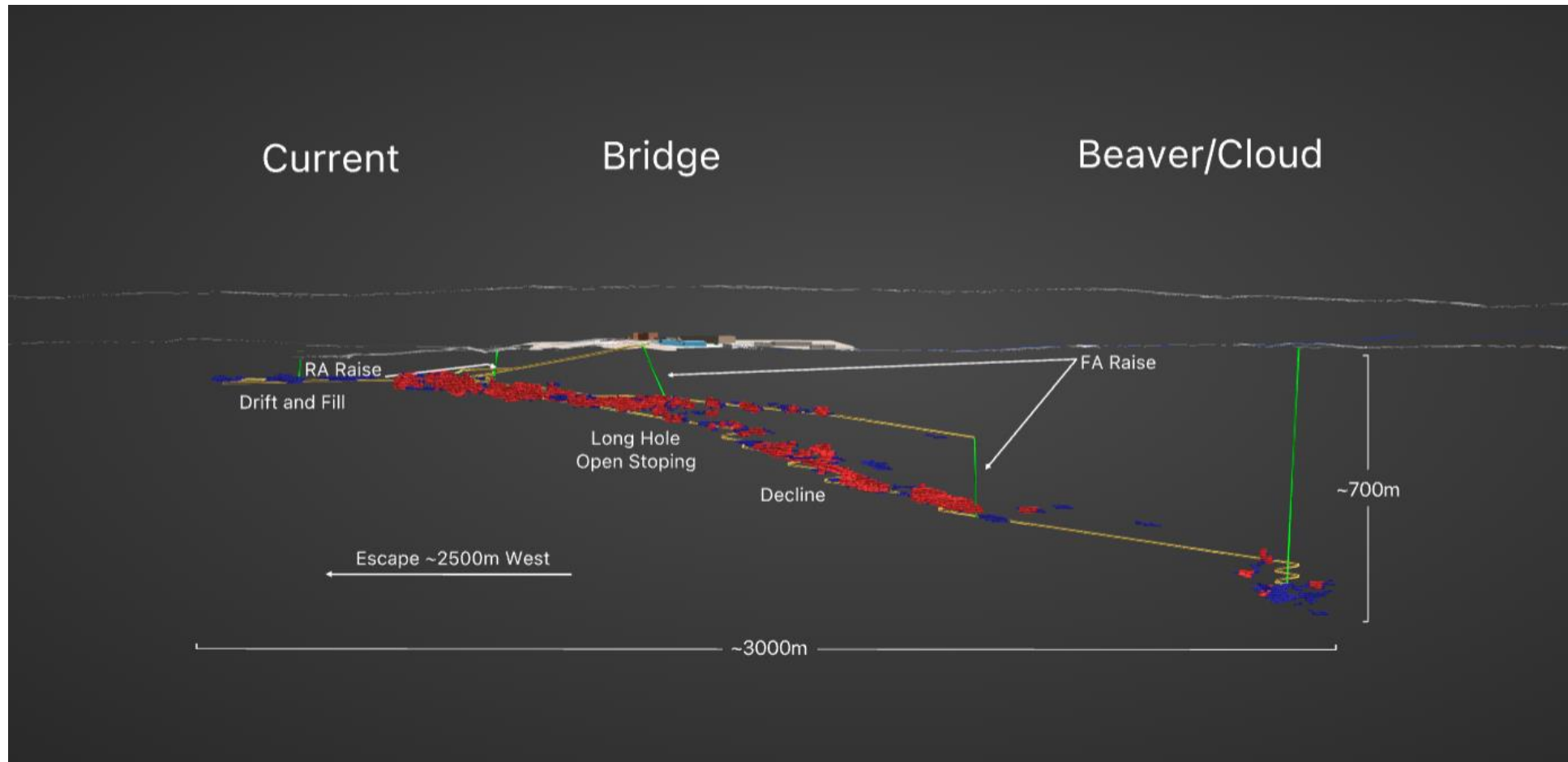
See Full 3D Vrfy Presentation Link – [\(Click Here\)](#)



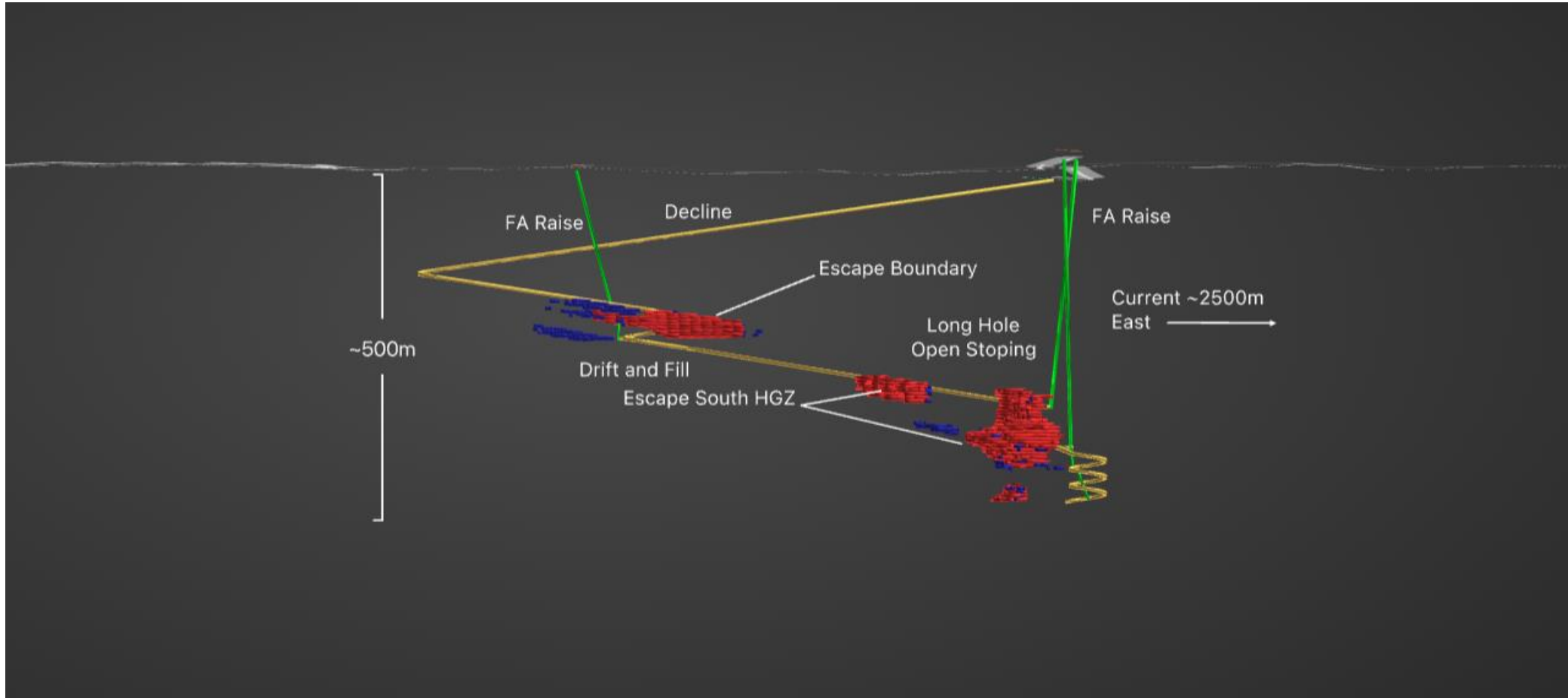
CURRENT & ESCAPE DEPOSIT RESOURCE



CURRENT DEPOSIT UNDERGROUND



ESCAPE DEPOSIT UNDERGROUND



ESCAPE & CURRENT DEPOSIT UNDERGROUND



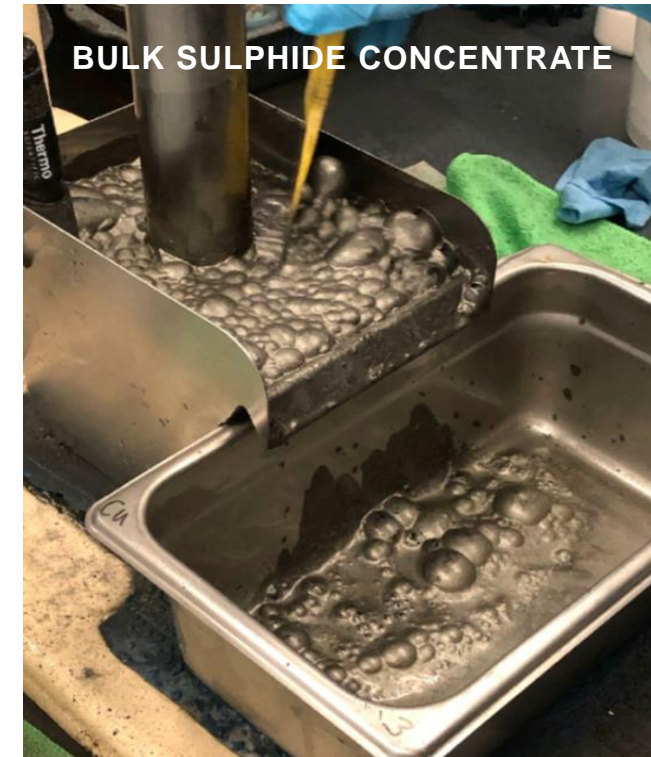
METALLURGY RESULTS BLUE COAST RESEARCH

Mineralogy

- Pt, Pd, Au and Rh are very fine grained but are associated with the sulphide minerals and therefore float well at a medium fine grind.
- Cu primarily in chalcopyrite.
- Ni primarily in sulphide form in pentlandite.
- Gangue silicates primarily serpentine with chlorite, amphibole, mica and feldspar. Potential for carbon capture in tails.

Test Work

- 2 distinct rounds of testing on low and high grade bulk samples from the Current zone plus a third quick validation test on Escape zone.
- Flowsheet Options included a single bulk con as well as a split Cu and Sulphide con. Split con is the base case for the PEA as it results in better smelter payables.
- Primary grind of a P80 @ 65 microns with sequential floating of Cu minerals followed by Ni or bulk sulphide flotation.
- Additional grinding of Cu rougher con to P80 of 25 microns achieves a Cu con of ~25% Cu. Ni con of up to 11% can be achieved but hurts overall Ni and PGE recoveries.



Significant upside potential exists in optimization between, mill recoveries, concentrate grades (and tonnages) and smelter payable terms.



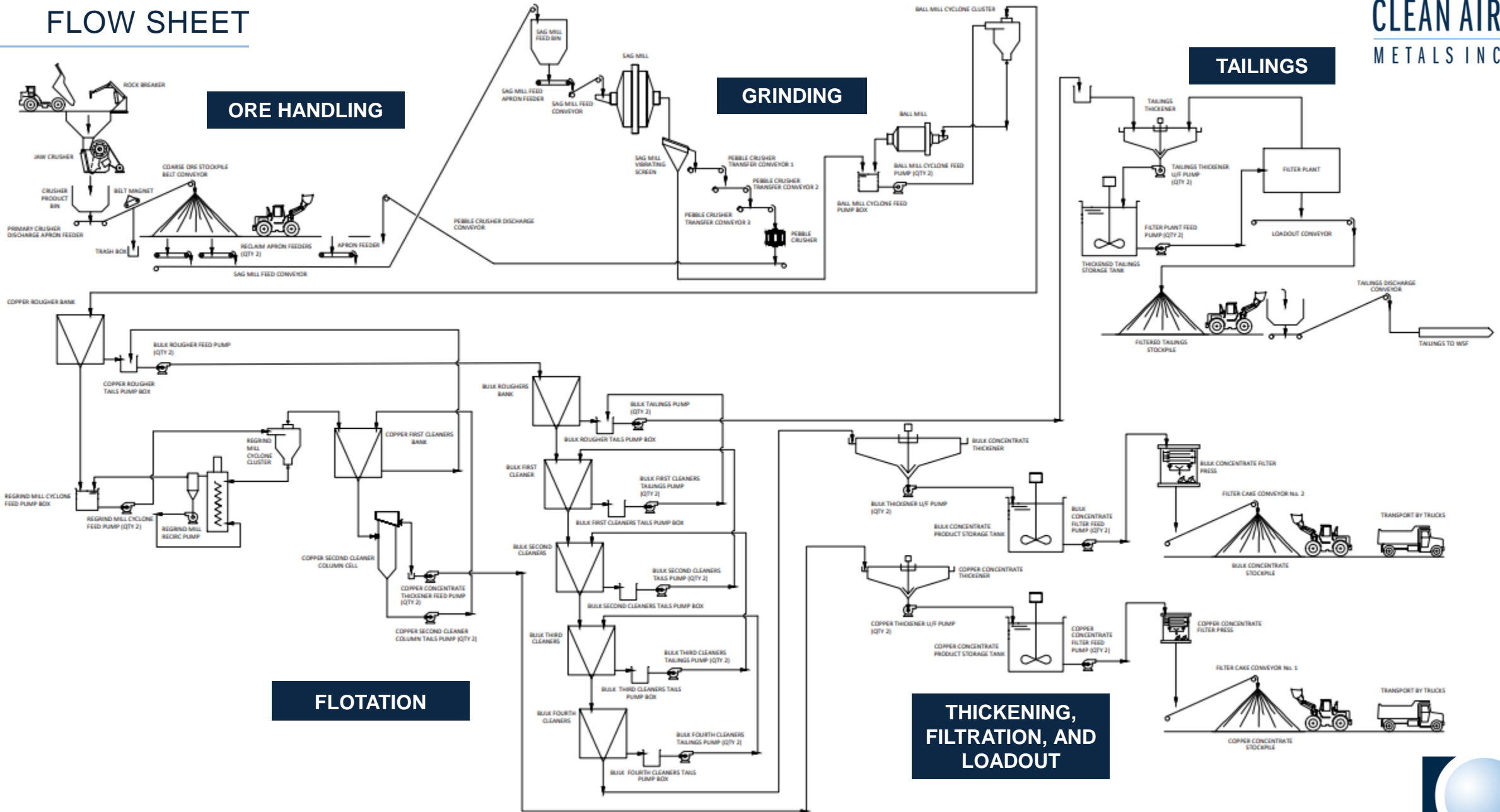
PEA BASE CASE RECOVERIES

| Average Mill Feed | Cu | Ni | Pt | Pd | Rh | Au | Ag | Co | S | | | | | | | | |
|---------------------------------|--------|-------|------|--------|--------|--------|--------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | % | % | g/t | g/t | g/t | g/t | g/t | % | % | | | | | | | | |
| | 0.41 | 0.215 | 1.62 | 1.59 | 0.042 | 0.098 | 2.20 | 0.015 | 1.73 | | | | | | | | |
| Split Concentrate Option | Grade | | | | | | | | | Recovery | | | | | | | |
| | Mass % | Cu % | Ni % | Pt g/t | Pd g/t | Rh g/t | Au g/t | Ag g/t | Co % | Cu % | Ni % | Pt % | Pd % | Rh % | Au % | Ag % | Co % |
| Cu Concentrate | 1.47 | 23.3 | 0.9 | 17.7 | 35.1 | 0.5 | 3.3 | 59.5 | 0.07 | 83.1 | 6.1 | 16.0 | 32.4 | 10.0 | 50.0 | 40.0 | 6.5 |
| Bulk Concentrate | 3.31 | 1.5 | 3.0 | 32.2 | 26.0 | 0.5 | 0.89 | 18.2 | 0.21 | 12.4 | 46.2 | 65.9 | 54.1 | 27.3 | 30.0 | 27.7 | 44.8 |
| PEA Base Case Recoveries | | | | | | | | | | 95.5 | 52.1 | 81.9 | 86.5 | 37.3 | 80.0 | 67.7 | 51.3 |

- Total mined metal production over a 10-year mine life based on the present resource base is expected to be 629 k oz Platinum, 618 k oz Palladium, 111 M pounds Copper, 57 M pounds Nickel, 38 k oz Gold, 850 k oz Silver, or 2,386 k oz PtEq insitu.



FLOW SHEET



PRE-FEASIBILITY METALLURGICAL TESTING AND PROCESS PLANT DESIGN

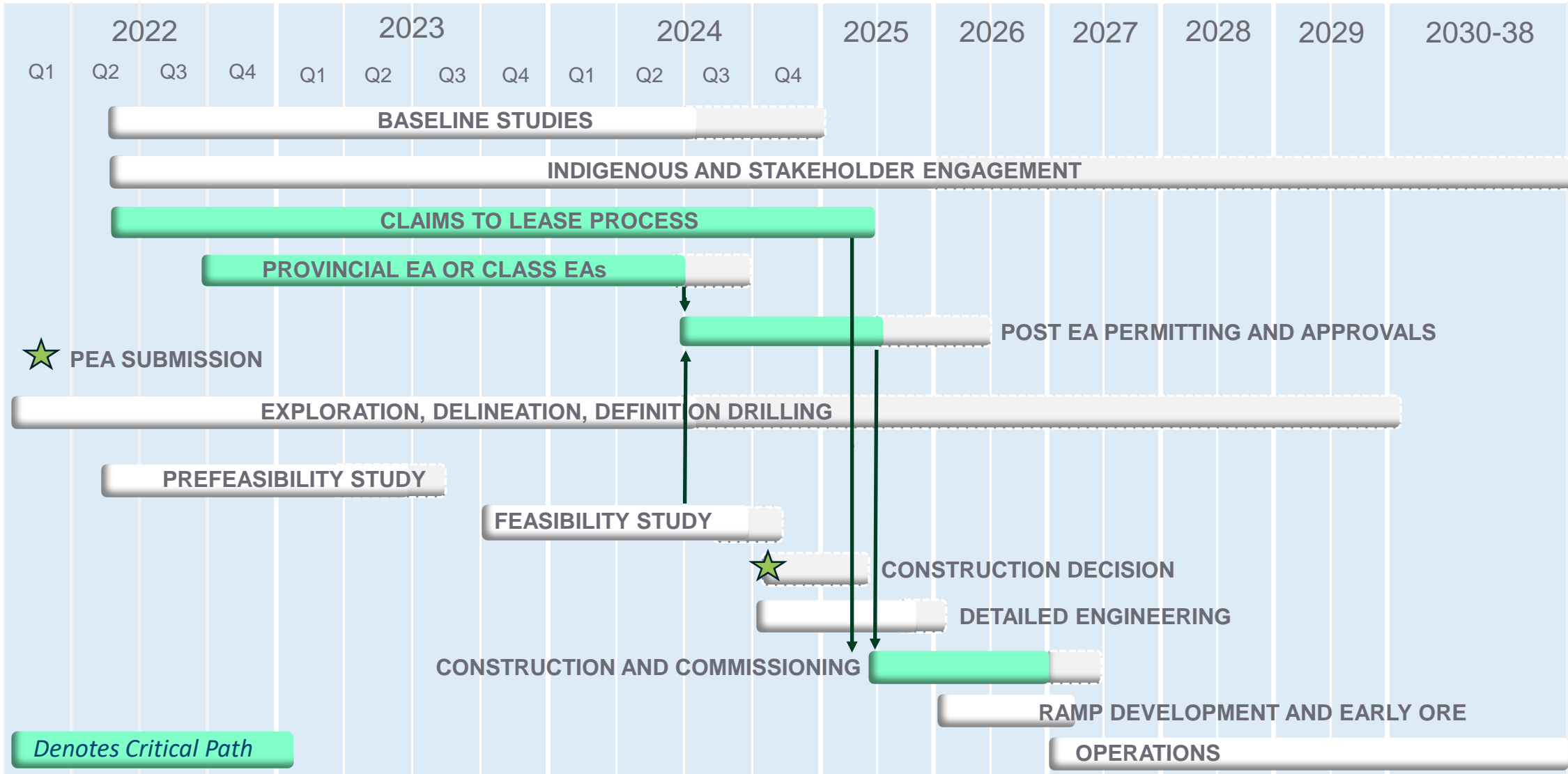
Phase 1 - Q2/Q3 2022

- PFS level test program development, metallurgical testing and determination of the design basis
- Assess options for process optimization to improve the project business case.
- Assess the potential for hydrometallurgy.
- Selection of the go-forward option.

Phase 2 - Q4 2022 – Q2 2023

- PFS level design and estimate on the go-forward option from Phase 1 focused on:
 - Safe-by-design
 - Capital efficiency
 - De-risking construction.
 - Operability and maintainability
 - Environmental and Social considerations

CONCEPTUAL TIMELINE



TECHNICAL PATH FORWARD 2022-2023

The Goal: Unlock the significant additional potential of this mineral system through further exploration and optimization of the technical plan delivering an enhanced PFS in 2023.

Project Optimization

- Add tonnage with upgrade drilling on the Current deposit and further definition of the Escape conduit. Additional scale can result in capital efficiencies, lower operating cost and longer life.
- Additional geo-technical studies and mitigation strategies to allow mining of several hundred thousand tonnes of high-grade resource under the lake.
- Further optimization of the mill recoveries, concentrate grade and smelter terms potentially making Cobalt and Rhodium payables and improving the payables on Nickel.
- Investigate through third party researchers the ability of Thunder Bay North tailings to sequester CO2.
- Complete a trade-off study on the all-electric mine taking advantage of our green electricity supply.
- Investigate potential toll milling with regional concentrators during construction.



HYDROGEN ECONOMY DRIVER FOR PGE DEMAND

“Automobiles only account for 10% of global CO2 loadings.
To achieve *Net Zero*, coal and natural gas must be replaced. The only way to achieve this is Hydrogen.”

Why do we need **HYDROGEN**?

Hydrogen has the highest energy content by weight of any chemical fuel – three times higher than gasoline – and it’s a critical feedstock for the chemical industry, including oil refining and fertilizer production. It also powers fuel cells with little or no emissions. Advances in hydrogen technology could spur innovation in everything from steel manufacturing and ironmaking to energy storage and transportation by light-duty and heavy-duty vehicles, trains, planes and boats.



*Source: H2@Scale: <https://www.energy.gov/eere/fuelcells/h2scale>

- PGE anodes and cathodes are critical to high efficiency electrolysis of water to produce Green Hydrogen.
- PGE’s (primarily platinum) are the key element in Fuel Cell membranes.



THUNDER BAY NORTH PROJECT

DESIGNED TO BE A SIGNIFICANT CONTRIBUTOR OF GREEN ENERGY AND ZERO EMISSION METALS

METALS INVENTORY

Pt – Critical to the hydrogen economy

Pd – Cleaning of automotive and industrial emissions, primarily Nitrous Oxides which are 300 times more harmful than CO²

Cu – A key EV and grid infrastructure metal

Ni – A key EV battery metal input

Au – byproduct value add

Ag – byproduct value add

Rhodium and Cobalt are potential payables with future process optimization

HOW WE PLAN TO PRODUCE IT

Striving for Carbon Neutrality

- 100% renewable grid supply based on hydro, wind and solar
- Maximize electrification of underground equipment
- Tree planting on surrounding harvested areas
- Investigating carbon capture with mine tails

ESG Leadership

- Inclusion of aboriginal communities in meaningful business opportunities with an equity stake in the company
- A diverse Board of Directors
- Minimal site footprint
- Full ESG reporting in process



DEMONSTRATING SOCIAL RESPONSIBILITY

AIR NEWS December 15th, 2020

**Clean Air Metals
Announces Release
of Equity, Diversity
and Inclusion Policy**

See Full Press Release at cleanairmetals.ca

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AIR NEWS January 11th, 2021
April 14th, 2022

**Clean Air Metals and
First Nation Partners Agree
to Cooperate on Exploration
and Development at the
Thunder Bay North Project**

See Full Press Release at cleanairmetals.ca

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AIR NEWS November 8th, 2021

**Clean Air Metals Announces
the Appointment of
Mr. Shannin Metatawabin
to the Board of Directors**

See Full Press Release at cleanairmetals.ca

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SIGNING OF THE EXPLORATION AGREEMENT



CAPITAL STRUCTURE

Sept 30, 2022

| Shares Issued | 222,679,394 |
|---------------------------------|---------------|
| Warrants (\$0.25/sh.) Feb 22/24 | 55,410,400 |
| Warrants (\$0.55/sh.) Feb 22/23 | 6,372,550 |
| Cash | \$1.5 million |

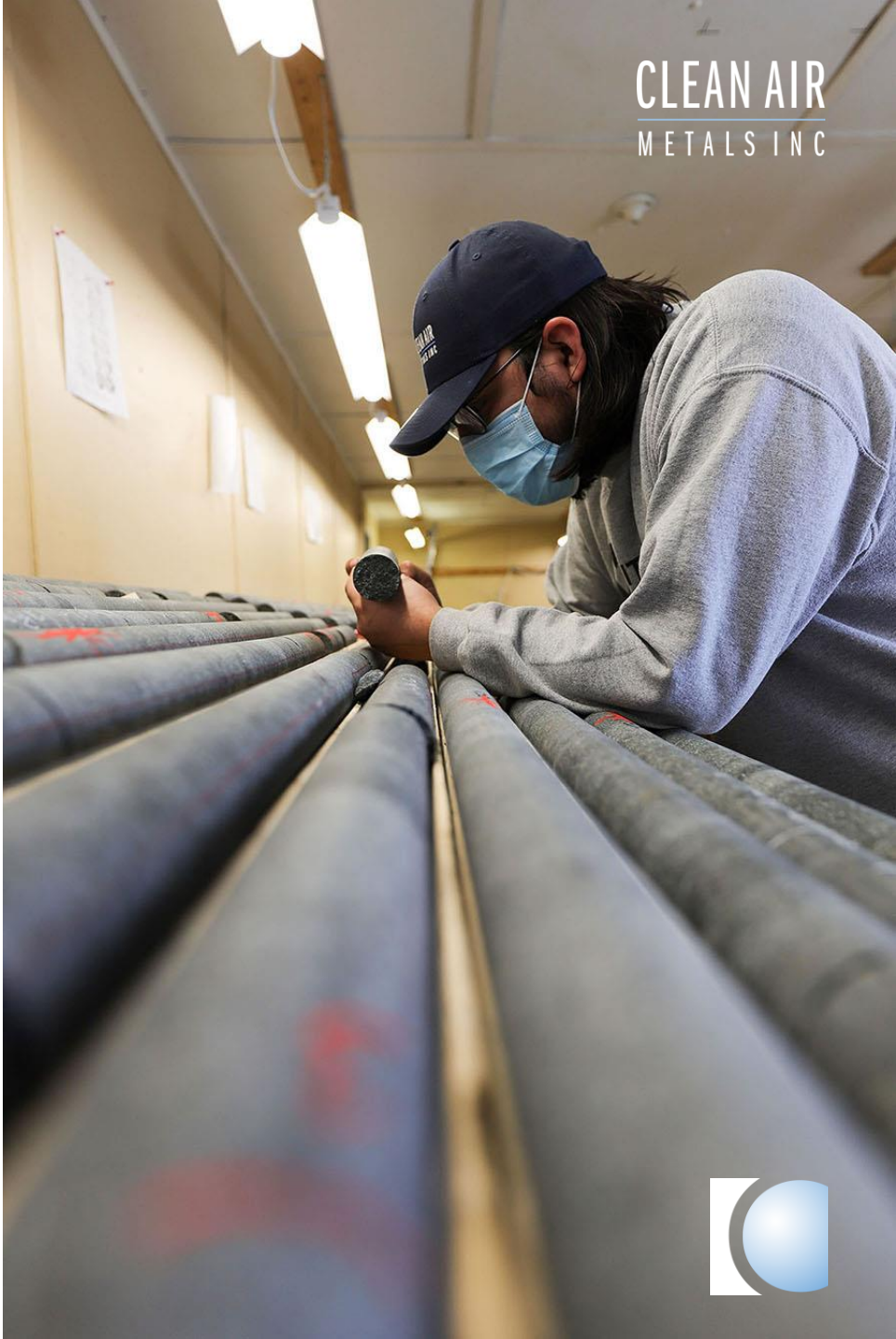
Management – **5%**

Benton Resources (BEX: TSXV) – **11%**

Institutional – **40% ~**

Clean Air Metals Inc. is well positioned to fund its 2022-23 development program which includes:

1. Escape Deposit: Bulk sample metallurgy; Infill/step-out drilling; commence PFS
2. Current Deposit: Bulk sample metallurgy; Infill drilling; commence PFS
3. Massive Sulphides: targeting potential massive sulphide geophysical anomalies



PGE MARKET PEER COMPS INSITU RESOURCE COMPARISON

| Company | Flagship Asset | Category | Tonnes | Pt (g/t) | Pd (g/t) | Au (g/t) | Ag (g/t) | Rh (g/t) | Co (%) | Cu (%) | Ni (%) | 4E | 3E | PtEq (g/t) | PdEq (g/t) |
|------------------------------|--------------------------|----------------------|-------------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|----------|-------------|-------------|
| New Age Metals | River Valley | Measured & Indicated | 99,255,200 | 0.20 | 0.52 | 0.03 | - | 0.01 | 0.01 | 0.06 | 0.02 | 0.76 | - | - | 0.90 |
| | | Inferred | 52,306,000 | 0.31 | 0.31 | 0.04 | - | 0.01 | 0.00 | 0.04 | 0.02 | 0.67 | - | - | 0.63 |
| Nickel Creek Platinum | Nickel Shaw | Measured & Indicated | 323,400,000 | 0.25 | 0.26 | 0.05 | - | - | 0.02 | 0.16 | 0.26 | - | - | - | - |
| | | Inferred | 108,100,000 | 0.26 | 0.28 | 0.04 | - | - | 0.02 | 0.15 | 0.29 | - | - | - | - |
| Clean Air Metals Inc. | Thunder Bay North | Indicated | 14,553,324 | 1.58 | 1.54 | 0.10 | 2.30 | 0.05 | 0.017 | 0.42 | 0.23 | 3.27 | - | 8.12 | 3.55 |
| | | Inferred | 8,077,595 | 0.67 | 0.69 | 0.07 | 1.07 | 0.01 | 0.014 | 0.33 | 0.15 | 1.43 | - | 4.07 | 1.78 |
| Eastern Platinum | Crocodile River | No Resource | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Group Ten Metals | Stillwater West | No Resource | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Palladium One | Läntinen Koillismaa | Indicated | 10,985,000 | 0.27 | 0.81 | 0.09 | - | - | - | 0.15 | 0.09 | - | - | 1.80 | - |
| | | Inferred | 10,875,000 | 0.20 | 0.64 | 0.08 | - | - | - | 0.13 | 0.08 | - | - | 1.50 | - |
| Generation Mining | Marathon | Measured & Indicated | 179,248,000 | 0.18 | 0.56 | 0.07 | 1.60 | - | - | 0.20 | - | - | - | - | 1.24 |
| | | Inferred | 688,000 | 0.12 | 0.37 | 0.05 | 1.40 | - | - | 0.19 | - | - | - | - | 0.95 |
| Platinum Group Metals | Waterberg | Measured & Indicated | 242,437,860 | 0.98 | 2.13 | 0.22 | - | 0.05 | - | 0.10 | 0.18 | 3.38 | - | - | - |
| | | Inferred | 66,666,549 | 0.96 | 1.92 | 0.34 | - | 0.04 | - | 0.11 | 0.15 | 3.26 | - | - | - |
| Talon Metals Corp. | Tamarack | Indicated | 3,926,000 | 0.41 | 0.26 | 0.20 | - | - | 0.05 | 1.02 | 1.91 | - | - | - | - |
| | | Inferred | 7,163,000 | 0.26 | 0.16 | 0.14 | - | - | 0.03 | 0.68 | 1.11 | - | - | - | - |
| Chalice Gold Mines | Julimar | Indicated | 150,000,000 | 0.17 | 0.74 | 0.03 | - | - | 0.016 | 0.10 | 0.17 | - | 0.94 | - | 1.60 |
| | | Inferred | 180,000,000 | 0.15 | 0.76 | 0.03 | - | - | 0.016 | 0.09 | 0.16 | - | 0.94 | - | 1.60 |

Note: All data has been sourced from company websites and publicly available technical reports.



EXECUTIVE MANAGEMENT & BOARD



Dean Chambers, P.Eng. ICD.D Independent Director

Mr. Chambers is a professional engineer and financial executive with over 35 years of business, technical and financial experience. In 2017, Mr. Chambers retired as Executive Vice President and Chief Financial Officer at Sherritt International Corporation, a major international resource company. Mr. Chambers' career as a senior executive in the mining and chemical industries also includes progressive positions with The Dow Chemical Company, Falconbridge Limited and Dynatec Corporation. Most recently, Mr. Chambers served four years on the Board of Directors and chaired the Audit Committee of North American Palladium Ltd. leading up to its successful sale to Impala Platinum in 2019. Mr. Chambers holds the ICD.D designation from the Institute of Corporate Directors. Mr. Chambers also serves on the Industrial Advisory Committee for the Engineering and Management program at McMaster University.



MaryAnn Crichton, P.Eng. MBA Independent Director

Ms. Crichton is a Professional Engineer and senior executive with over 30 years of international business experience in financing; project development; environmental, social and governance (“ESG”)/Corporate Social Responsibility (“CSR”) and strategy. Ms. Crichton holds B.Sc. (Chemical Engineering) from the University of Alberta and an MBA from the Ivey Business School at Western University. She spent most of her career as Global Director of Management Consulting for Hatch Ltd. (“Hatch”), a global engineering, advisory and construction firm working in the mining, metals, and infrastructure and energy industries. Prior to joining Hatch, she worked in private equity and the resource and chemical industries. In 2017 and again in 2020, Ms. Crichton was elected to the Board of the Prospectors and Developers Association of Canada (“PDAC”) and is currently a member of both their Governance and Nominations Committee and CSR/Diversity and Inclusion Working Group. In 2018, she was elected to serve as PDAC’s representative on the Board of Mining Matters.



EXECUTIVE MANAGEMENT & BOARD (...CONTINUED)



Ewan Downie Independent Director

Now CEO of the new i80 Gold, Mr. Downie was most recently President and CEO of Premier Gold Mines Limited since its inception in 2006. He has been working in the mineral exploration and mining industry for more than 25 years and was the founder of Premier's predecessor, Wolfden Resources Inc. His is a storied career. Awards include the 2003 Bill Dennis Prospector of the Year Award from the Prospectors and Developers Association of Canada. He has participated in several gold and base metal discoveries and also sits on the Board of new Wolfden Resources Corp. and Premier Gold.



Shannin Metatawabin Independent Director

Mr. Metatawabin is currently the CEO of the National Aboriginal Capital Corporations Association (NACCA) which is an umbrella organization for a network of 59 Aboriginal Financial Institutions (AFIs) across Canada. Over the last 30 years the AFI network has provided nearly \$3 billion to support economic development and the unique and specific needs of 50,000 small and medium size loans to First Nation, Metis and Inuit across Canada. Mr. Metatawabin is Cree / Inninow from Fort Albany (Pethtabek) First Nation of the Mushkegowuk Cree Nation. He holds a Bachelor of Arts in Political Science from Carleton University and an Aboriginal Economic Development Certificate from the University of Waterloo. He previously served as the Manager of Aboriginal Affairs and Sustainability with De Beers Canada and as the Executive Director of the Ontario First Nations Technical Services Corporation.



EXECUTIVE MANAGEMENT & BOARD (...CONTINUED)



Abraham Drost, P.Geo. CEO & Director

Mr. Drost is a former President and Director of Sabina Gold and Silver (SBB:TSX), former President and Director of Sandspring Resources Inc. (SSP:TSXV) and former CEO, Director of Source Exploration Corp. (SOP:TSXV) now Mexican Gold Corp. Mr. Drost is a former Chairman of Premier Gold Mines USA Inc. and the former CEO and founding Director of Premier Royalty Inc. (NSR:TSX), prior to the sale to Sandstorm Gold. He was a former CEO and then Director of Mega Precious Metals Inc. (MGP:TSXV) at the sale to Yamana. Mr. Drost was most recently CEO and Director of Carlisle Goldfields Ltd. (CGJ:TSX) at the sale to Alamos (AGI:TSX). Previously, Mr. Drost was Regional Land Use Geologist with the Ontario Government.



Jim Gallagher, P.Eng. Executive Chairman

Mr. Gallagher is a Professional Mining Engineer with over 35 years of experience in mine operations, projects and executive management. He was most recently CEO of North American Palladium where he lead an operational turn-around which culminated in the sale of the company to Impala Platinum of South Africa late in 2019. Previously Mr Gallagher was Global Director of Mining for Hatch leading a large mine design and EPCM team on numerous projects around the world. He also spent over 20 years with Falconbridge in a number of engineering, project and operational management roles. Mr Gallagher has been a board member of Harte Gold, Continental Gold and the Ontario Mining association.



Mike Garbutt, P.Eng. Chief Operating Officer

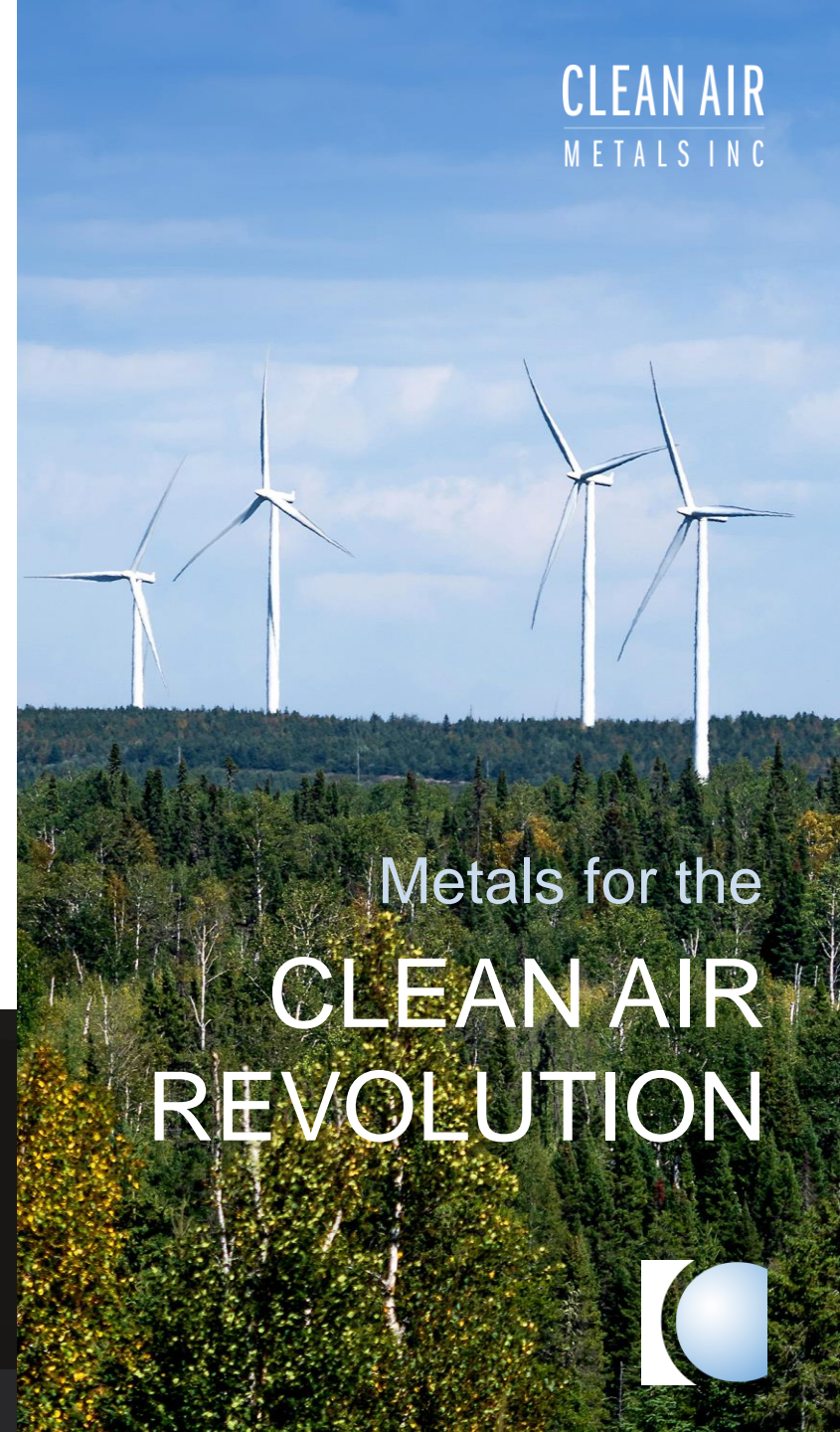
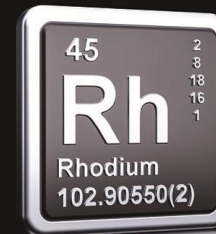
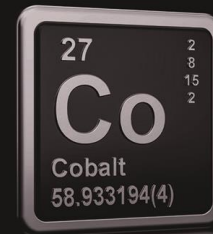
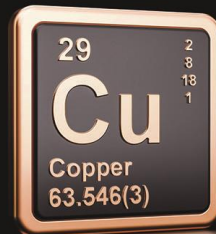
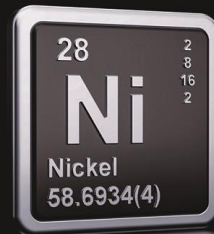
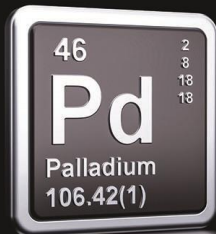
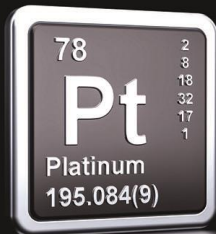
Mr. Garbutt is a Professional Mining Engineer with a 25 year career in mine operations, projects and engineering. He was most recently the Deputy General Manager with IAMGOLD at the Côté Gold Project with a primary focus on operational readiness of the asset. Prior to this Mr Garbutt was a Senior Principal and Mining Sector Leader with Stantec Consulting, supporting major mining companies in the execution of a wide range of capital projects and studies across the globe. He was also the General Manager of Sudbury Operations for KGHM and held senior technical and operating roles during a 14 year career with Glencore. Mr. Garbutt holds an MBA from Laurentian University and serves on the board of the Ontario Mining Association and select non-profit organizations.



INVESTMENT HIGHLIGHTS – THUNDER BAY NORTH PROJECT

Mid-Continent Rift PGE-Nickel-Copper District with Operating Mines

- Jan '22 PEA features a 10 year ramp-access underground mine plan on both Current and Escape Deposits; 3600tpd (1.3 mtpy)
- Pre/Post Tax NPV C\$425/\$293m; Pre/Post-Tax IRR 31/25% on initial capex of C\$367m
- ESG: Health and Safety paramount. Environmental baseline studies in progress
- Social License to Operate under Agreement with 3 Proximate First Nation Communities (Fort William First Nation; Red Rock Indian Band; Biinjitiwaabik Zaaging Anishinaabek)



Metals for the
**CLEAN AIR
REVOLUTION**





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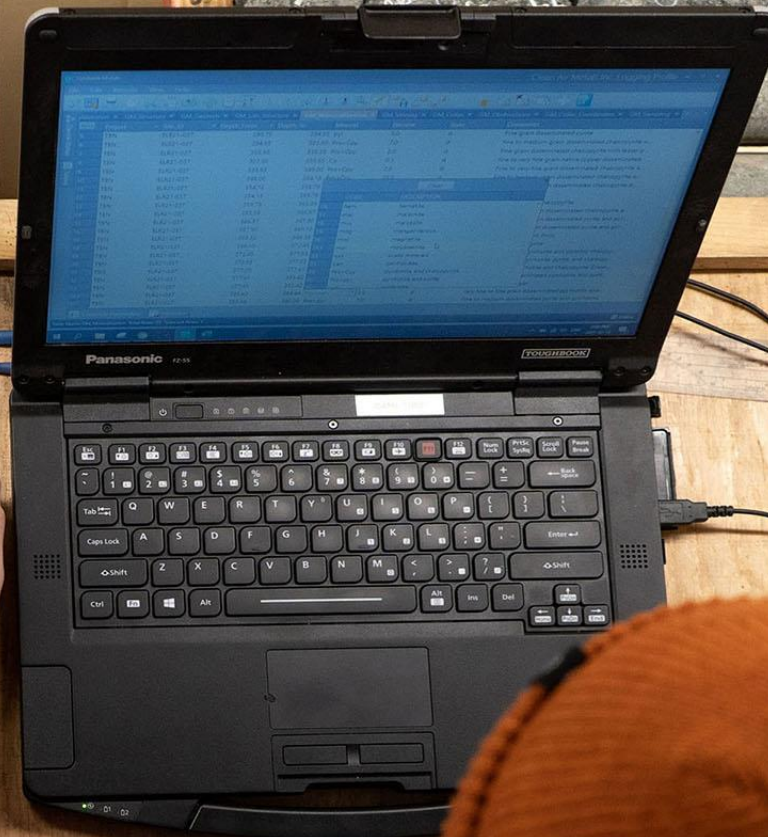
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TSXV AIR OTCQB CLRMF FRA CKU

CLEANAIRMETALS.CA

MINING APPENDIX



PEA INSITU RESOURCE UPDATE

Thunder Bay North Project Grade Profile (at US\$93/tonne for Current & US\$100/tonne for Escape Cutoff)

| Category | Area | Tonnes | Grade | | | | | | | | | | |
|---------------------------------|-------------------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|
| | | | Pd (g/t) | Pt (g/t) | Au (g/t) | Ag (g/t) | Cu (%) | Ni (%) | Co (g/t) | Rh (g/t) | PtEq (g/t) | PdEq (g/t) | 4PGE (g/t) |
| Indicated - Current Deposit | Upper Current | 1,123,518 | 1.54 | 1.67 | 0.10 | 2.29 | 0.41 | 0.21 | 155.30 | 0.07 | 8.19 | 3.58 | 3.37 |
| | Lower Current | 1,574,152 | 2.38 | 2.56 | 0.13 | 2.99 | 0.52 | 0.23 | 159.05 | 0.05 | 11.49 | 5.03 | 5.12 |
| | Bridge | 3,261,258 | 1.90 | 2.14 | 0.11 | 2.77 | 0.47 | 0.20 | 148.33 | 0.05 | 9.37 | 4.10 | 4.20 |
| | Beaver | 3,592,490 | 1.39 | 1.54 | 0.06 | 1.61 | 0.27 | 0.22 | 147.57 | 0.03 | 6.90 | 3.02 | 3.03 |
| | Cloud | 837,545 | 0.83 | 0.88 | 0.05 | 1.28 | 0.21 | 0.15 | 147.87 | 0.04 | 4.58 | 2.00 | 1.80 |
| Indicated - Escape Deposit | Steepledge North | 124,611 | 0.84 | 0.73 | 0.06 | 1.30 | 0.29 | 0.18 | 157.85 | 0.01 | 4.63 | 2.03 | 1.65 |
| | Steepledge South | 42,812 | 1.05 | 0.89 | 0.05 | 1.15 | 0.28 | 0.17 | 142.66 | 0.00 | 5.02 | 2.20 | 2.00 |
| | Escape South | 3,996,938 | 1.22 | 0.95 | 0.13 | 2.52 | 0.53 | 0.29 | 211.89 | 0.06 | 7.73 | 3.38 | 2.36 |
| | <i>Comprised of:</i> | | | | | | | | | | | | |
| | <i>Escape South Perimeter</i> | 1,672,990 | 0.62 | 0.51 | 0.08 | 1.47 | 0.37 | 0.21 | 176.82 | 0.04 | 4.69 | 2.05 | 1.25 |
| | <i>Escape South HGZ</i> | 2,323,948 | 1.67 | 1.28 | 0.16 | 3.31 | 0.66 | 0.34 | 238.05 | 0.08 | 9.99 | 4.37 | 3.18 |
| TOTAL INDICATED RESOURCE | | 14,553,324 | 1.54 | 1.58 | 0.10 | 2.30 | 0.42 | 0.23 | 167.33 | 0.05 | 8.12 | 3.55 | 3.27 |
| Inferred - Current Deposit | Beaver | 505,794 | 0.84 | 0.88 | 0.06 | 1.66 | 0.27 | 0.20 | 151.67 | 0.02 | 4.72 | 2.06 | 1.80 |
| | 437-SE | 4,769,004 | 0.60 | 0.63 | 0.07 | 0.98 | 0.33 | 0.13 | 114.94 | 0.01 | 3.74 | 1.64 | 1.31 |
| Inferred - Escape Deposit | Steepledge North | 97,464 | 0.59 | 0.50 | 0.05 | 0.58 | 0.27 | 0.21 | 149.59 | 0.00 | 3.74 | 1.64 | 1.15 |
| | Steepledge South | 1,990,612 | 0.90 | 0.78 | 0.07 | 1.18 | 0.33 | 0.17 | 177.16 | 0.00 | 4.74 | 2.07 | 1.75 |
| | Escape South | 714,722 | 0.61 | 0.49 | 0.08 | 0.97 | 0.36 | 0.19 | 177.20 | 0.00 | 4.03 | 1.76 | 1.19 |
| | <i>Comprised of:</i> | | | | | | | | | | | | |
| | <i>Escape South Perimeter</i> | 649,938 | 0.62 | 0.50 | 0.08 | 0.92 | 0.35 | 0.19 | 176.30 | 0.00 | 4.03 | 1.76 | 1.20 |
| | <i>Escape South HGZ</i> | 64,784 | 0.53 | 0.40 | 0.09 | 1.43 | 0.36 | 0.20 | 186.07 | 0.01 | 4.01 | 1.75 | 1.03 |
| TOTAL INFERRED RESOURCE | | 8,077,595 | 0.69 | 0.67 | 0.07 | 1.07 | 0.33 | 0.15 | 138.50 | 0.01 | 4.07 | 1.78 | 1.43 |

Filed January 12, 2022



OPERATING & CAPITAL COSTS

Total Capital Cost Estimates

| Category | Units | Ongoing & | | Total |
|--|------------|--------------|--------------|--------------|
| | | Initial | Closure | |
| Underground Capital Development | \$M | \$15 | \$62 | \$77 |
| Underground Major Infrastructure | \$M | \$2 | \$12 | \$14 |
| Underground Mobile Fleet | \$M | \$27 | \$22 | \$49 |
| Processing Plant / Concentrate Loadout | \$M | \$154 | \$0 | \$154 |
| Waste Storage Facility | \$M | \$12 | \$10 | \$22 |
| Other Surface Site Infrastructure | \$M | \$36 | \$7 | \$43 |
| Offsite Infrastructure | \$M | \$9 | \$1 | \$9 |
| Pre-Production G&A | \$M | \$11 | \$0 | \$11 |
| Sustaining Capital | \$M | \$0 | \$46 | \$46 |
| Mine Closure | \$M | \$0 | \$30 | \$30 |
| Salvage | \$M | \$0 | (\$30) | (\$30) |
| EPCM | \$M | \$41 | \$0 | \$41 |
| Contingency | \$M | \$60 | \$10 | \$70 |
| Total | \$M | \$367 | \$169 | \$536 |

Total Operating Cost Estimates

| Category | Life of Mine | Life of Mine Average |
|----------------------------------|----------------|------------------------|
| | \$M | \$/t (Total Mill Feed) |
| Underground Mine Operating Costs | \$577 | \$47.37 |
| Processing Plant & WSF | \$305 | \$25.03 |
| G&A Costs | \$84 | \$6.87 |
| Royalties | \$33 | \$2.63 |
| Transportation to Smelter | \$58 | \$4.71 |
| Total | \$1,057 | \$86.61 |



SMELTER PAYABLES OFF-TAKE TERMS

- Engaged with 5 potential smelters (all under an NDA) both domestically and abroad as well as reference numbers from CRU.
- Concentrate specifications from two phases of met testing were provided to all parties and based on multiple discussions with these potential providers...
 - There is a market for 100% of the concentrate.
 - A split Cu con and a bulk sulphide high grade PGE con appears to be the most saleable product with the best overall terms.
 - It is likely that the concentrate could be sold both domestically and overseas.
- Based on those discussions the following terms are deemed to be potential terms that could be achieved

| Metal | Copper Concentrate | | Bulk Sulphide Concentrate | |
|-----------|--------------------|------------------|---------------------------|-----------------|
| | Payable % | Deductions | Payable % | Deductions |
| Platinum | 90 | 1.5 g/t | 90 | 1.5 g/t |
| Palladium | 90 | 2 g/t | 90 | 2 g/t |
| Copper | 96.6 | 1 unit deduction | 40 | Must be > 3% |
| Nickel | 0 | 0 | 65 | 0 |
| Gold | 98 | 1g/t | 98 | 1g/t |
| Silver | 98 | 30g/t | 92 | 30 g/t |
| Rhodium | 0 | 0 | 0 | Must be > 1 g/t |
| Cobalt | 0 | 0 | 0 | Must be > 0.3% |

Note: Additional treatment charges apply, please see detailed report.



COMMODITY SUMMARY

CRU 2-Year Trailing Average (US\$)

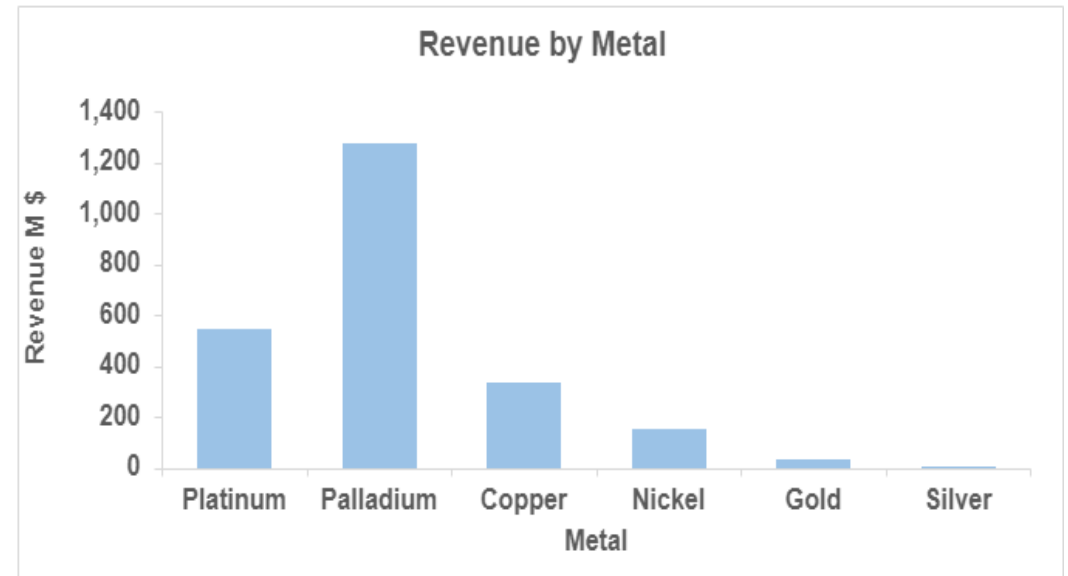
| Commodity | Price |
|----------------|----------|
| Platinum (oz) | 969.00 |
| Palladium (oz) | 2214.00 |
| Gold (oz) | 1723.00 |
| Silver (oz) | 21.60 |
| Rhodium (oz) | 13626.00 |
| Cobalt (tonne) | 38801.36 |
| Copper (lb) | 3.09 |
| Nickel (lb) | 6.86 |

Note: 2 year price deck as of Aug, 2021.



Smelter Revenue – Metal (CA\$ million)

| Metal | Revenue |
|--------------|-----------------|
| Platinum | 543.80 |
| Palladium | 1,278.11 |
| Copper | 336.77 |
| Nickel | 153.03 |
| Gold | 29.71 |
| Silver | 4.50 |
| Total | 2,345.92 |



IRR SENSITIVITY ANALYSIS COMMODITY PRICE & COSTS

| Sensitivity Item | Pre-Tax IRR Sensitivity (%) | | | | | | | | | |
|---|-----------------------------|------|------|------|-------------|------|------|------|------|--|
| | -20% | -15% | -10% | -5% | 0% | 5% | 10% | 15% | 20% | |
| Revenue Pt | 26.9 | 28.0 | 29.0 | 30.1 | 31.1 | 32.1 | 33.1 | 34.2 | 35.2 | |
| Revenue Pd | 21.1 | 23.8 | 26.3 | 28.7 | 31.1 | 33.4 | 35.7 | 37.9 | 40.0 | |
| Revenue Au | 30.9 | 30.9 | 31.0 | 31.1 | 31.1 | 31.2 | 31.2 | 31.3 | 31.3 | |
| Revenue Ag | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | |
| Revenue Cu | 28.7 | 29.3 | 29.9 | 30.5 | 31.1 | 31.7 | 32.3 | 32.9 | 33.4 | |
| Revenue Ni | 30.1 | 30.4 | 30.6 | 30.9 | 31.1 | 31.3 | 31.6 | 31.8 | 32.1 | |
| Initial Capital | 40.9 | 38.1 | 35.6 | 33.2 | 31.1 | 29.1 | 27.3 | 25.7 | 24.1 | |
| Ongoing Capital | 32.6 | 32.2 | 31.8 | 31.5 | 31.1 | 30.7 | 30.4 | 30.0 | 29.6 | |
| Underground Operating Costs | 34.6 | 33.7 | 32.9 | 32.0 | 31.1 | 30.2 | 29.3 | 28.3 | 27.4 | |
| Processing Plant / WSF Operating Costs | 33.0 | 32.5 | 32.0 | 31.6 | 31.1 | 30.6 | 30.1 | 29.7 | 29.2 | |
| Other Operating (G&A, Royalties, Transport) | 32.3 | 32.0 | 31.7 | 31.4 | 31.1 | 30.8 | 30.5 | 30.2 | 29.9 | |

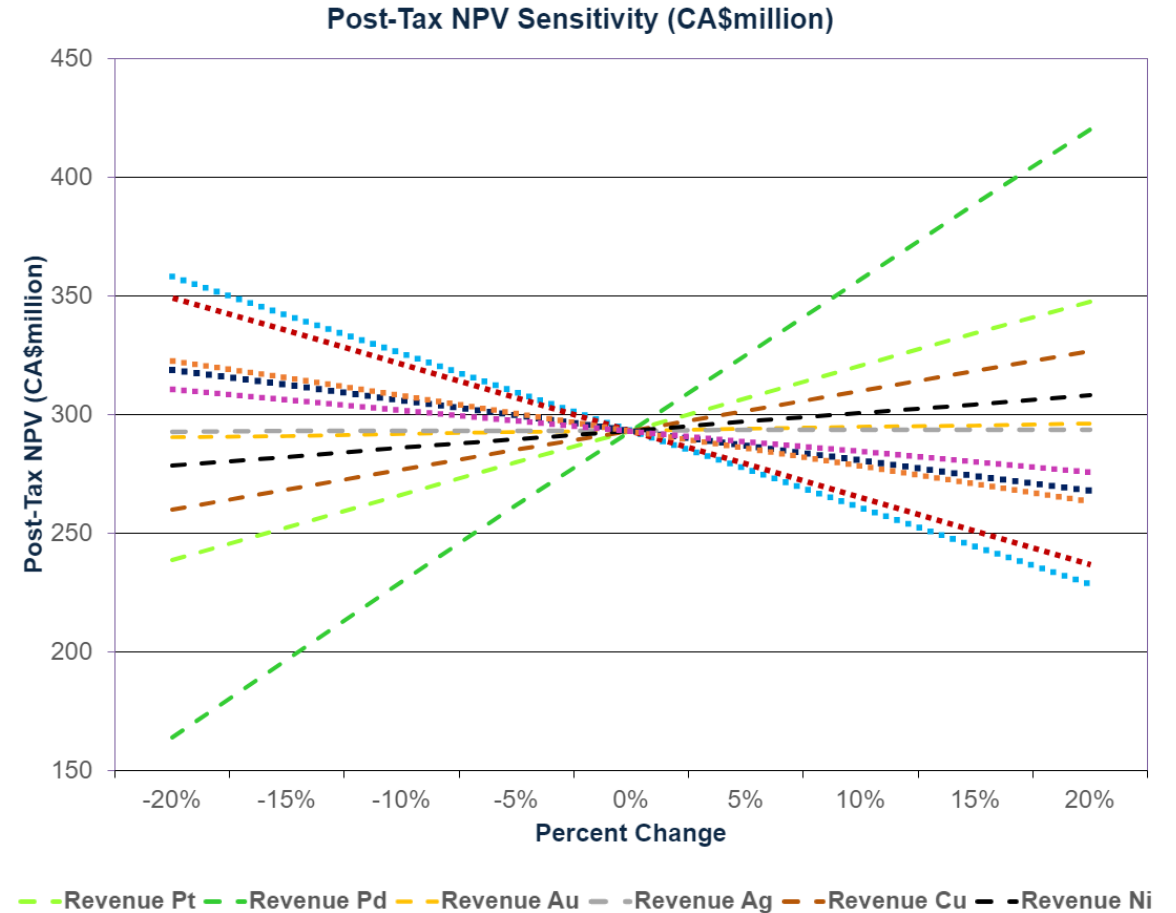
| Sensitivity Item | Post-Tax IRR Sensitivity (%) | | | | | | | | | |
|---|------------------------------|------|------|------|-------------|------|------|------|------|--|
| | -20% | -15% | -10% | -5% | 0% | 5% | 10% | 15% | 20% | |
| Revenue Pt | 21.9 | 22.7 | 23.5 | 24.4 | 25.2 | 26.0 | 26.8 | 27.5 | 28.3 | |
| Revenue Pd | 17.2 | 19.3 | 21.4 | 23.3 | 25.2 | 27.0 | 28.7 | 30.5 | 32.2 | |
| Revenue Au | 25.0 | 25.0 | 25.1 | 25.1 | 25.2 | 25.2 | 25.2 | 25.3 | 25.3 | |
| Revenue Ag | 25.1 | 25.1 | 25.1 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | |
| Revenue Cu | 23.3 | 23.8 | 24.2 | 24.7 | 25.2 | 25.6 | 26.1 | 26.5 | 27.0 | |
| Revenue Ni | 24.4 | 24.6 | 24.8 | 25.0 | 25.2 | 25.4 | 25.6 | 25.7 | 25.9 | |
| Initial Capital | 34.4 | 31.8 | 29.4 | 27.2 | 25.2 | 23.3 | 21.6 | 20.0 | 18.6 | |
| Ongoing Capital | 26.8 | 26.4 | 26.0 | 25.6 | 25.2 | 24.8 | 24.3 | 23.9 | 23.5 | |
| Underground Operating Costs | 28.0 | 27.3 | 26.6 | 25.9 | 25.2 | 24.4 | 23.7 | 23.0 | 22.2 | |
| Processing Plant / WSF Operating Costs | 26.7 | 26.3 | 25.9 | 25.5 | 25.2 | 24.8 | 24.4 | 24.0 | 23.6 | |
| Other Operating (G&A, Royalties, Transport) | 26.1 | 25.9 | 25.7 | 25.4 | 25.2 | 24.9 | 24.7 | 24.4 | 24.2 | |



POST TAX SENSITIVITY ANALYSIS

| Post-Tax NPV Sensitivity (CA\$million) | | | | | | | | | |
|--|-------|-------|-------|-------|-------|--------------|-------|-------|-------|
| Sensitivity Item | -20% | -15% | -10% | -5% | 0% | 5% | 10% | 15% | 20% |
| Revenue Pt | 238.4 | 252.3 | 265.8 | 279.4 | 293.0 | 306.6 | 320.2 | 333.8 | 347.4 |
| Revenue Pd | 163.9 | 196.3 | 229.1 | 261.3 | 293.0 | 324.7 | 356.5 | 388.2 | 419.8 |
| Revenue Au | 290.0 | 290.8 | 291.5 | 292.2 | 293.0 | 293.7 | 294.5 | 295.2 | 295.9 |
| Revenue Ag | 292.5 | 292.6 | 292.8 | 292.9 | 293.0 | 293.1 | 293.2 | 293.3 | 293.4 |
| Revenue Cu | 259.7 | 268.1 | 276.4 | 284.7 | 293.0 | 301.3 | 309.6 | 317.9 | 326.3 |
| Revenue Ni | 278.2 | 281.9 | 285.6 | 289.3 | 293.0 | 296.7 | 300.4 | 304.1 | 307.8 |

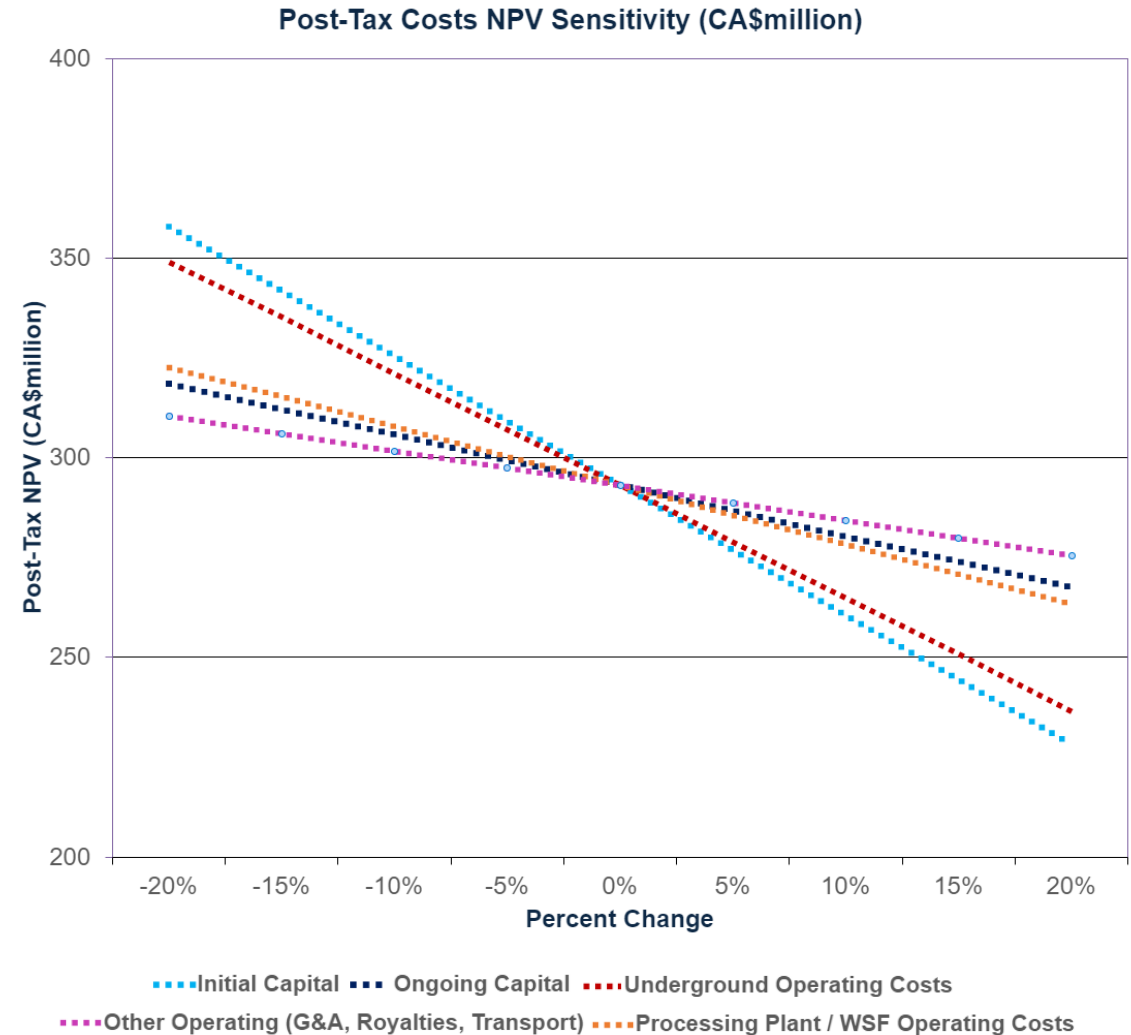
| Discount Rate | Post-Tax NPV |
|---------------|---------------|
| (%) | (CA\$million) |
| 0% | 467 |
| 3% | 354 |
| 5% | 293 |
| 7% | 241 |
| 12% | 140 |



POST TAX SENSITIVITY ANALYSIS

| Post-Tax NPV Sensitivity (CA\$million) | | | | | | | | | |
|--|-------|-------|-------|-------|-------|--------------|-------|-------|-------|
| Sensitivity Item | -20% | -15% | -10% | -5% | 0% | 5% | 10% | 15% | 20% |
| Initial Capital | 357.8 | 341.6 | 325.4 | 309.2 | 293.0 | 276.8 | 260.6 | 244.4 | 228.2 |
| Ongoing Capital | 318.4 | 312.1 | 305.7 | 299.4 | 293.0 | 286.6 | 280.3 | 273.9 | 267.5 |
| Underground Operating | 348.9 | 335.2 | 321.1 | 307.0 | 293.0 | 278.9 | 264.9 | 250.8 | 236.5 |
| Process Plant/WSF/WMT Operating | 322.6 | 315.2 | 307.8 | 300.4 | 293.0 | 285.6 | 278.2 | 270.8 | 263.4 |
| Other Operating (G&A, Royalties, Trans.) | 310.5 | 306.1 | 301.7 | 297.4 | 293.0 | 288.6 | 284.2 | 279.9 | 275.5 |

| Discount Rate | Post-Tax NPV |
|---------------|---------------|
| (%) | (CA\$million) |
| 0% | 467 |
| 3% | 354 |
| 5% | 293 |
| 7% | 241 |
| 12% | 140 |



MINING SUMMARY

| Parameter | Value |
|--|---------------------------------|
| Long-hole Open Stoping Size | |
| Length (Maximum) | 20m |
| Height (Maximum) | 25m |
| Width (Range) | 5m to 15m |
| Drift and Fill Stoping Dimensions | |
| Height | 5m |
| Width | 5m |
| Development Drift Dimensions | |
| Ramp | 5m (height) x 5m (width) |
| Cross-cut | 4.5m (height) x 5m (width) |
| Mining Dilution & Recovery | |
| | UG Mining Dilution (9.6%) |
| | UG Mining Recovery (95%) |
| Resources Used for MSO Generation and UG Design | Measured + Indicated + Inferred |



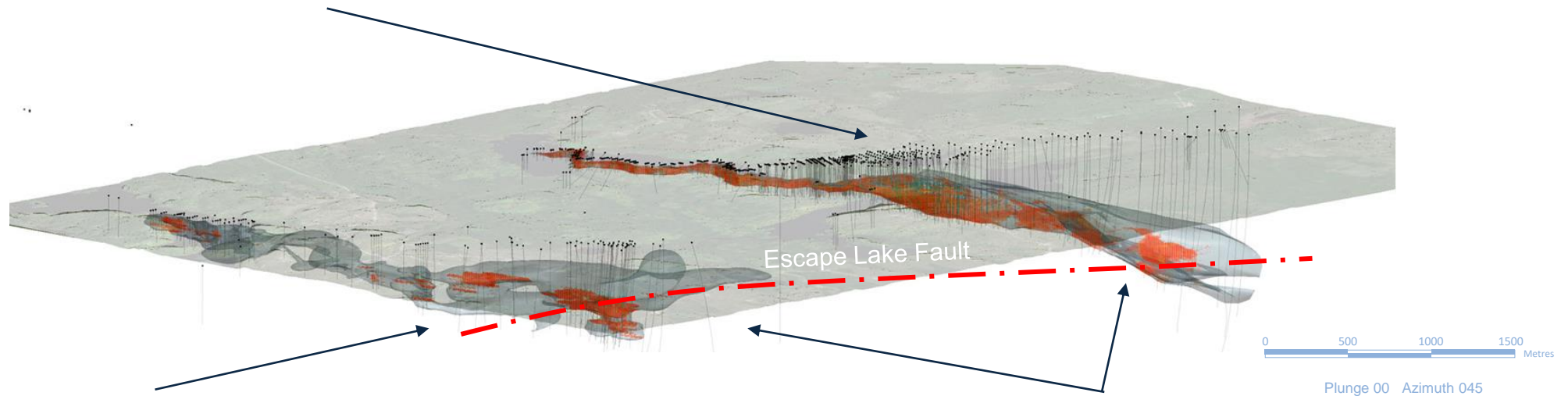
EXPLORATION APPENDIX



THUNDER BAY NORTH MAGMA CONDUIT SYSTEM, ONTARIO, CANADA (>22 MT I&I MINERAL RESOURCES INSITU)

Current Deposit

- Indicated Resource of 10,388,964 tonnes at 8.32 PtEq (g/t) containing 2,780,251 ounces PtEq
- Inferred Resource of 5,274,798 tonnes at 3.83 tdEq (g/t) containing 650,277 ounces PtEq



Escape Deposit & High Grade Zone (Open)

- Indicated Resource of 4,164,360 tonnes at 7.61 PtEq (g/t) containing 1,018,330 ounces PtEq
- Inferred Resource of 2,802,798 tonnes at 4.52 PtEq (g/t) containing 407,369 ounces PtEq

Feeder Zone

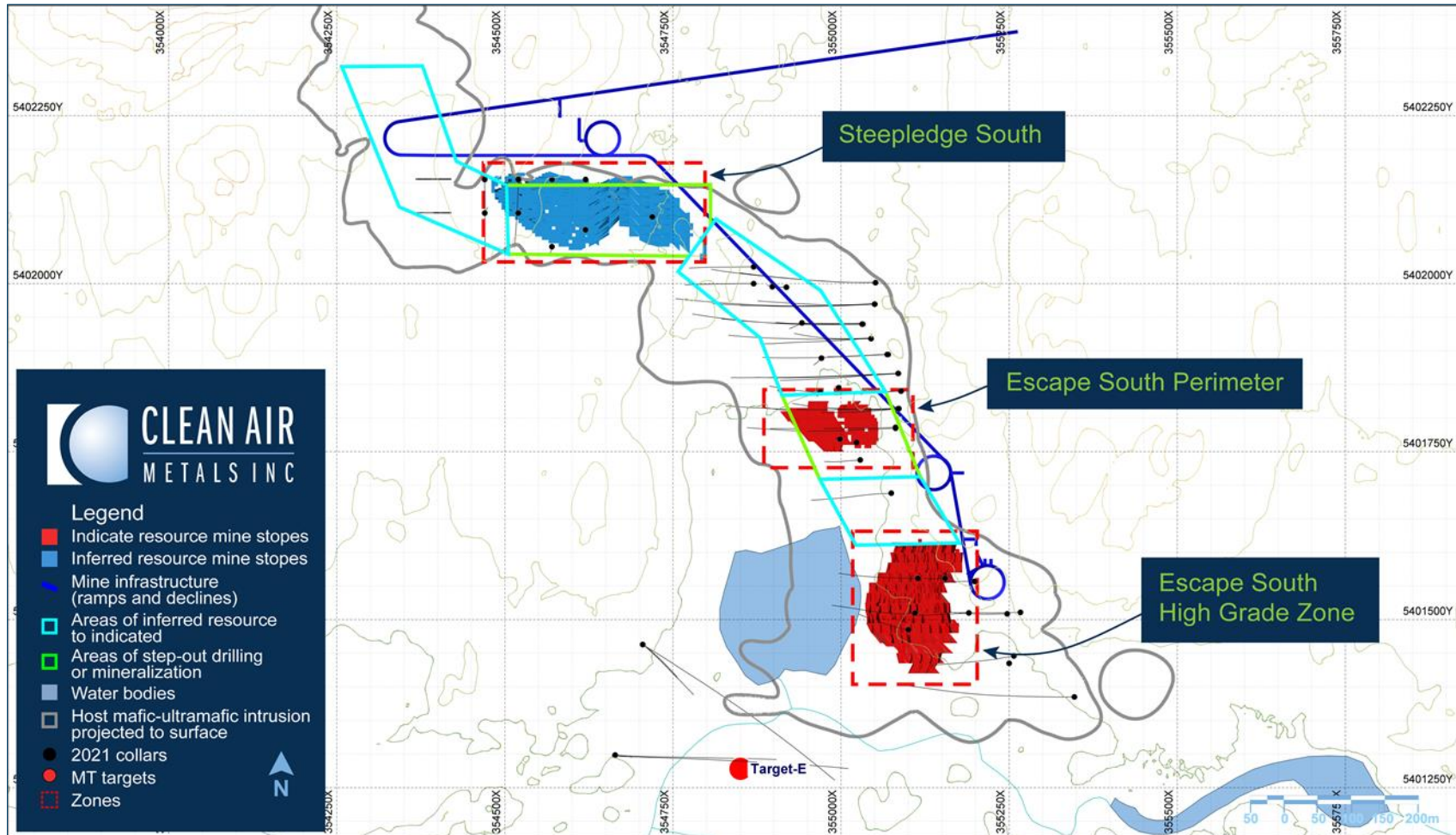
- **Massive sulphide drill targets**

*Drill-Indicated lithological shells










N.B. Payable metal production over a 10-year mine is expected to be 629 k oz Platinum, 618 k oz Palladium, 111 m pounds Copper, 57 m pounds Nickel, 38 k oz Gold, 850 k oz Silver, or 2,386 k oz PtEq (from equivalent NSR's) (Jan-2022 PEA)








ESCAPE DEPOSIT INDICATED & INFERRED MINEABLE INVENTORY



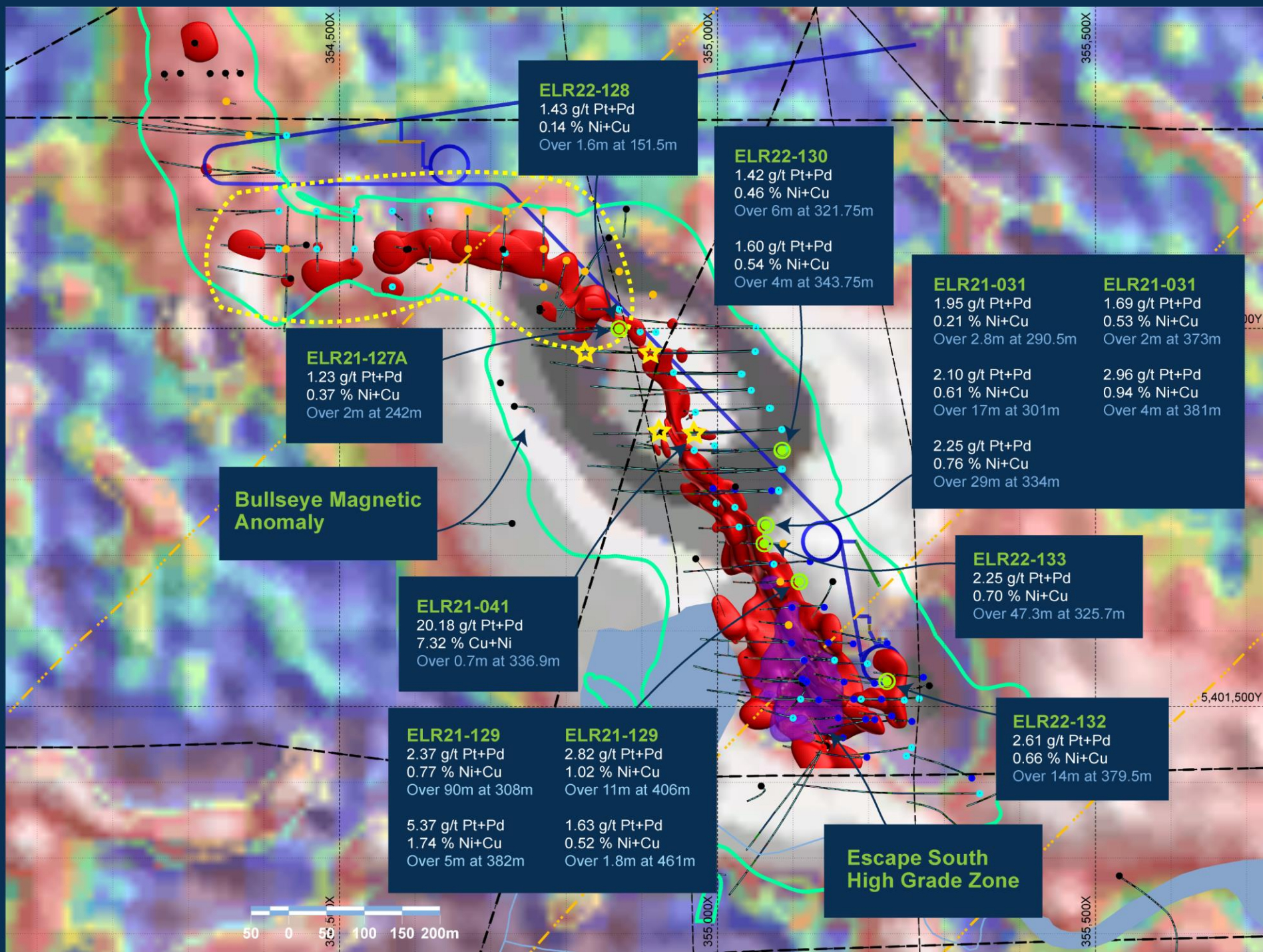
Legend

-  Drillhole trace
-  Faults
-  Projection of mineralized zone >1 g/t Pt+Pd (2021/22)
-  Projection of high grade zone >5 g/t Pt+Pd
-  Water Bodies
-  Host mafic-ultramafic intrusion surface projection
-  Massive sulfide veinlets
-  Escape North
-  Proposed Underground Development

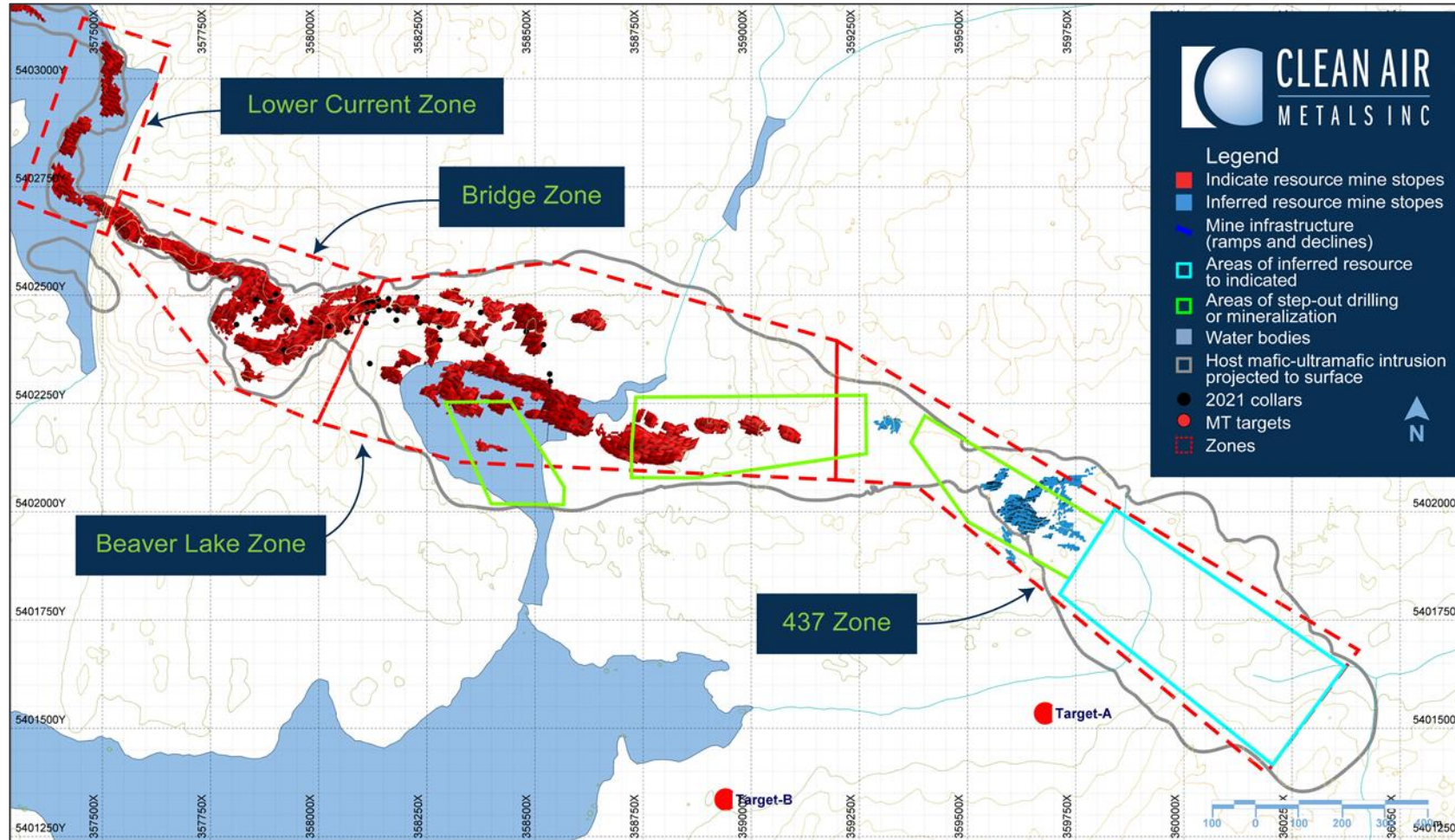
Collars

-  Reported Drillholes
-  2020
-  2022
-  2021
-  Other


Mine development infrastructure as proposed in PEA Technical Report filed January 12, 2022

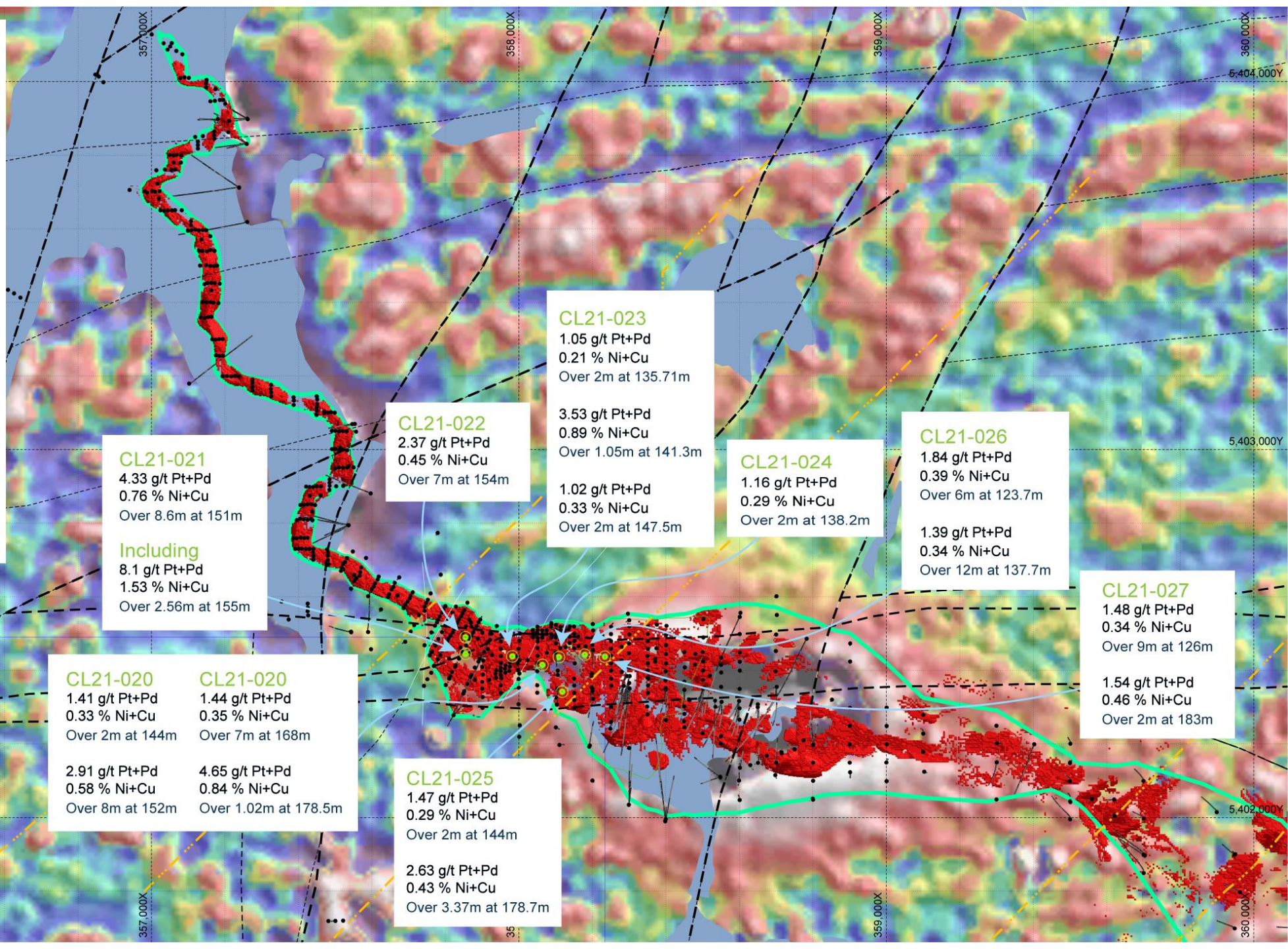


CURRENT DEPOSIT INDICATED & INFERRED MINEABLE INVENTORY



Legend

-  2021 Collars
-  Collars
-  Drillhole trace
-  Faults
-  MT Survey Lines
-  Projection of mineralized zone >2.65 g/t PtEq
-  Water Bodies
-  Host mafic-ultramafic intrusion projected to surface



CL21-021
4.33 g/t Pt+Pd
0.76 % Ni+Cu
Over 8.6m at 151m

Including
8.1 g/t Pt+Pd
1.53 % Ni+Cu
Over 2.56m at 155m

CL21-020
1.41 g/t Pt+Pd
0.33 % Ni+Cu
Over 2m at 144m

2.91 g/t Pt+Pd
0.58 % Ni+Cu
Over 8m at 152m

CL21-020
1.44 g/t Pt+Pd
0.35 % Ni+Cu
Over 7m at 168m

4.65 g/t Pt+Pd
0.84 % Ni+Cu
Over 1.02m at 178.5m

CL21-022
2.37 g/t Pt+Pd
0.45 % Ni+Cu
Over 7m at 154m

3.53 g/t Pt+Pd
0.89 % Ni+Cu
Over 1.05m at 141.3m

1.02 g/t Pt+Pd
0.33 % Ni+Cu
Over 2m at 147.5m

CL21-025
1.47 g/t Pt+Pd
0.29 % Ni+Cu
Over 2m at 144m

2.63 g/t Pt+Pd
0.43 % Ni+Cu
Over 3.37m at 178.7m

CL21-023
1.05 g/t Pt+Pd
0.21 % Ni+Cu
Over 2m at 135.71m

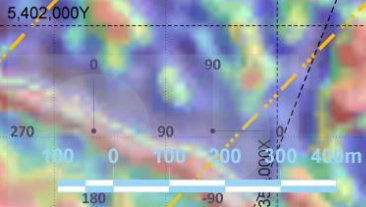
CL21-024
1.16 g/t Pt+Pd
0.29 % Ni+Cu
Over 2m at 138.2m

CL21-026
1.84 g/t Pt+Pd
0.39 % Ni+Cu
Over 6m at 123.7m

1.39 g/t Pt+Pd
0.34 % Ni+Cu
Over 12m at 137.7m

CL21-027
1.48 g/t Pt+Pd
0.34 % Ni+Cu
Over 9m at 126m

1.54 g/t Pt+Pd
0.46 % Ni+Cu
Over 2m at 183m

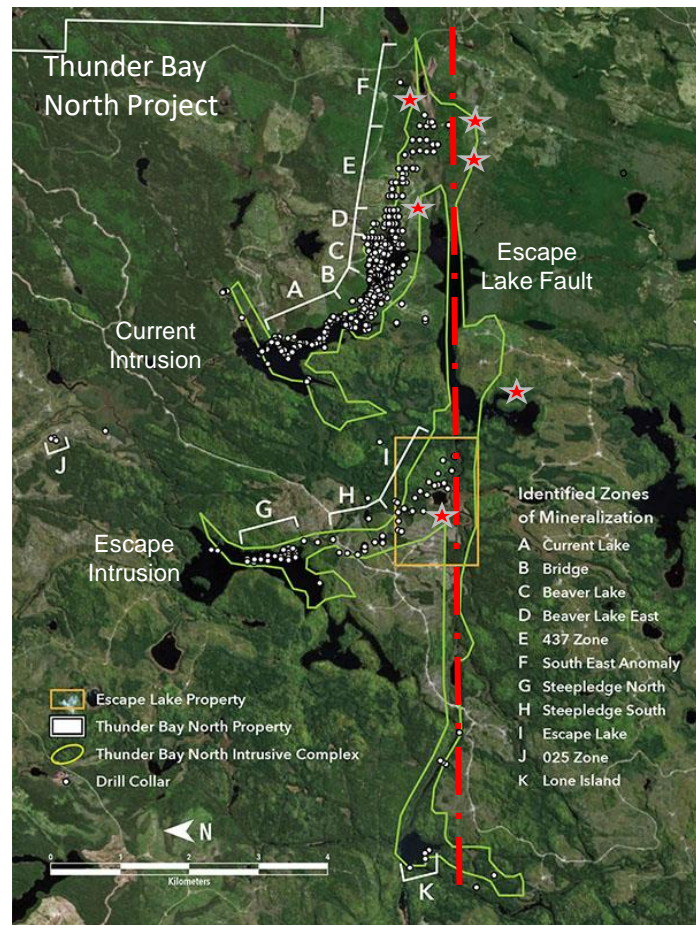


GREENFIELDS EXPLORATION TARGETING MASSIVE SULPHIDES

SIMILAR TO
NORIL'SK DEPOSIT

TBN INTRUSIVE
COMPLEX,
ESCAPE LAKE
FAULT

COMPARISON
WITH TALNAKH
FAULT AT NORIL'SK

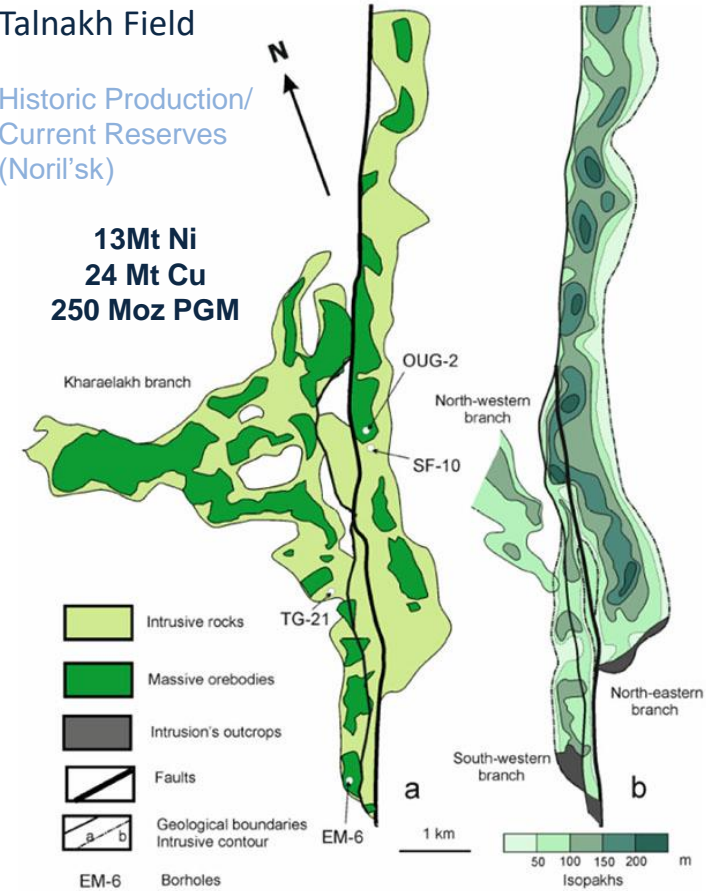


Note: Slide rotated 90 deg west

Talnakh Field

Historic Production/
Current Reserves
(Noril'sk)

13Mt Ni
24 Mt Cu
250 Moz PGM



World-Class Talnakh PGE-Cu-Ni Deposit: New Data on the Structure and Unique Mineralization of the South-Western Branch - Minerals, 2018, 8, 124

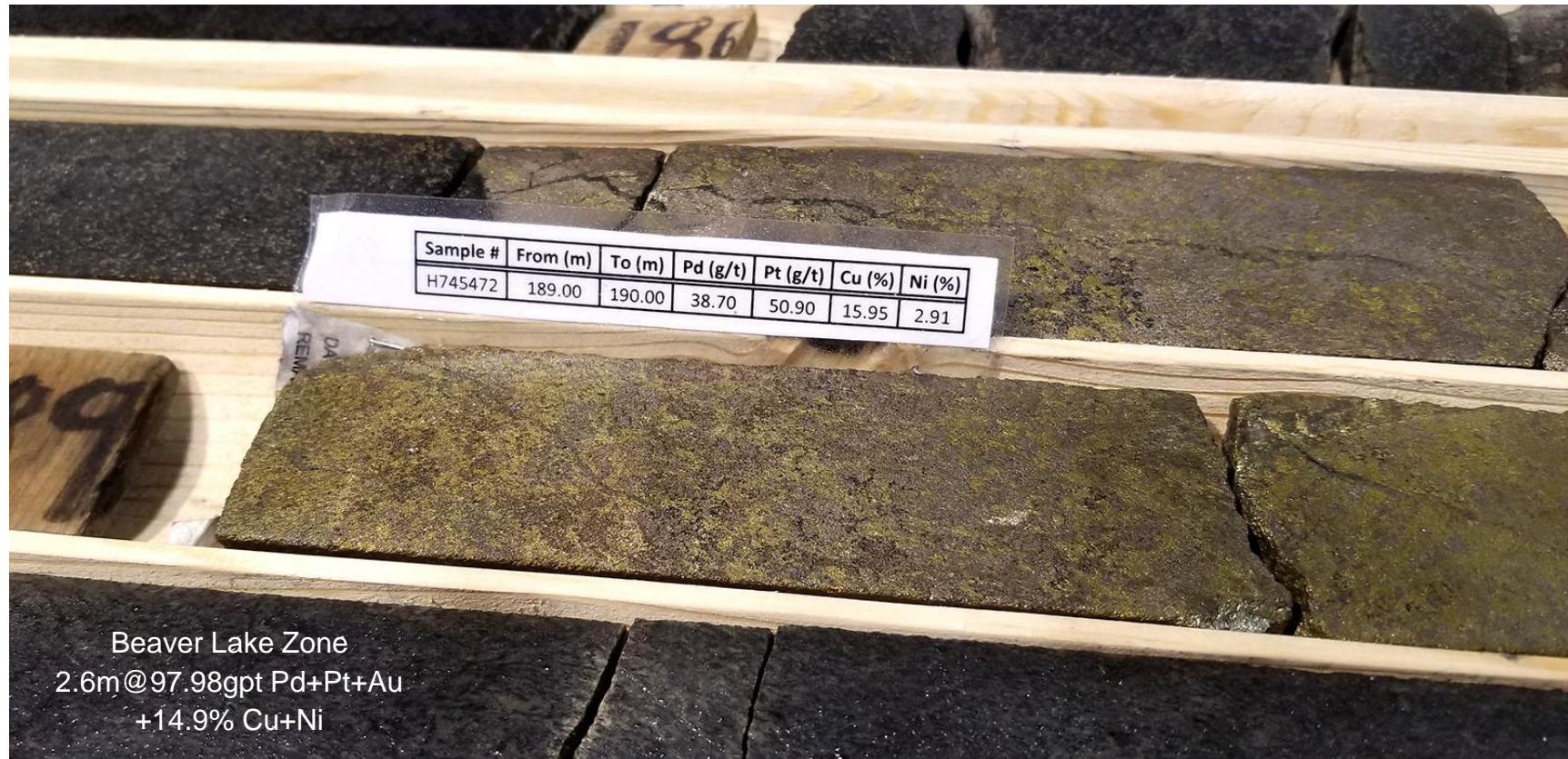


GREENFIELDS EXPLORATION TARGETING MASSIVE SULPHIDES

SIMILAR TO
NORILSK DEPOSIT

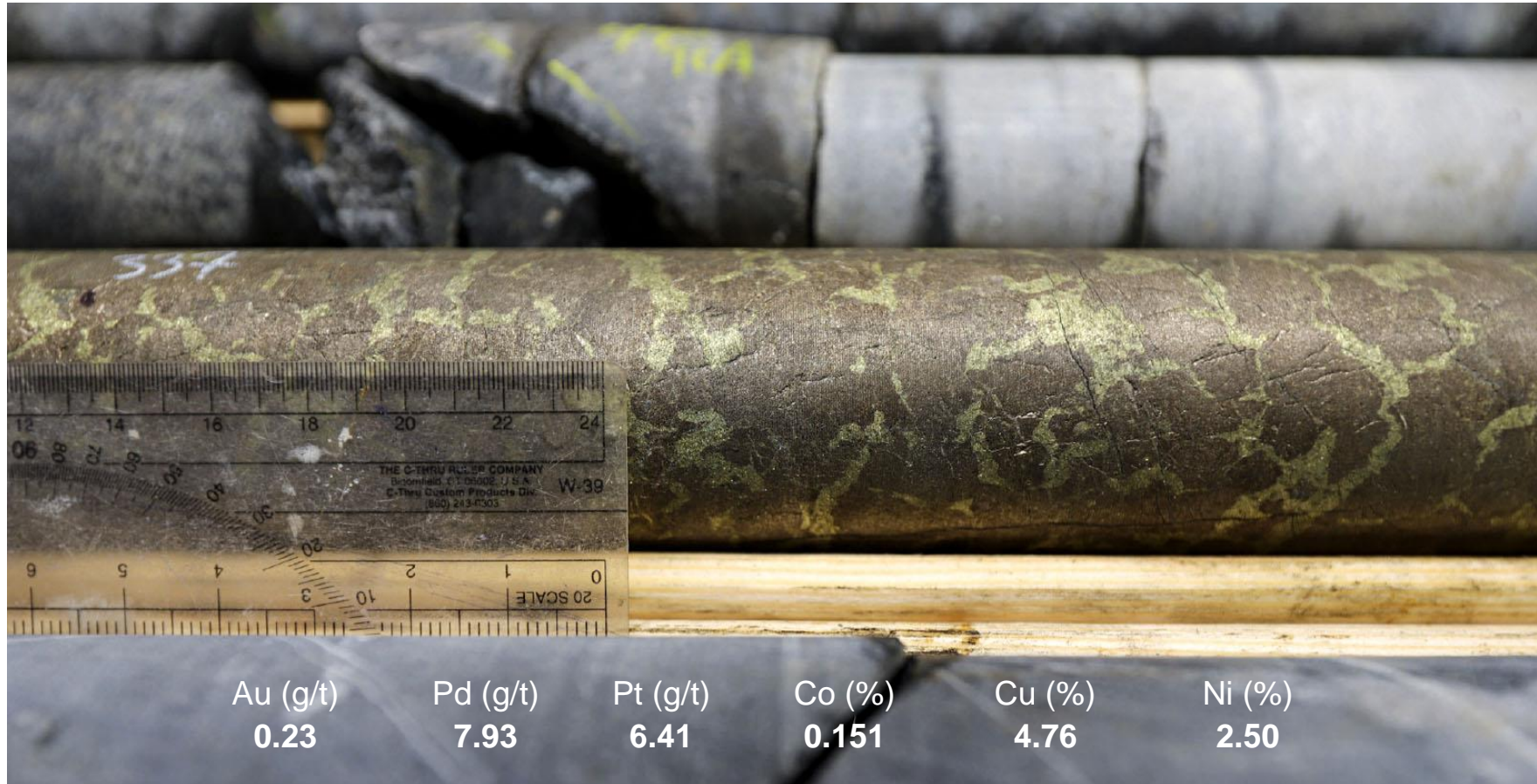
EXPLORATION
VECTOR

MASSIVE
SULPHIDES
IN THE CURRENT
DEPOSIT



GREENFIELDS EXPLORATION TARGETING MASSIVE SULPHIDES – NORIL'SK MODEL

MASSIVE
SULPHIDES
IN ESCAPE
DEPOSIT
(HOLE
ELR21-041)



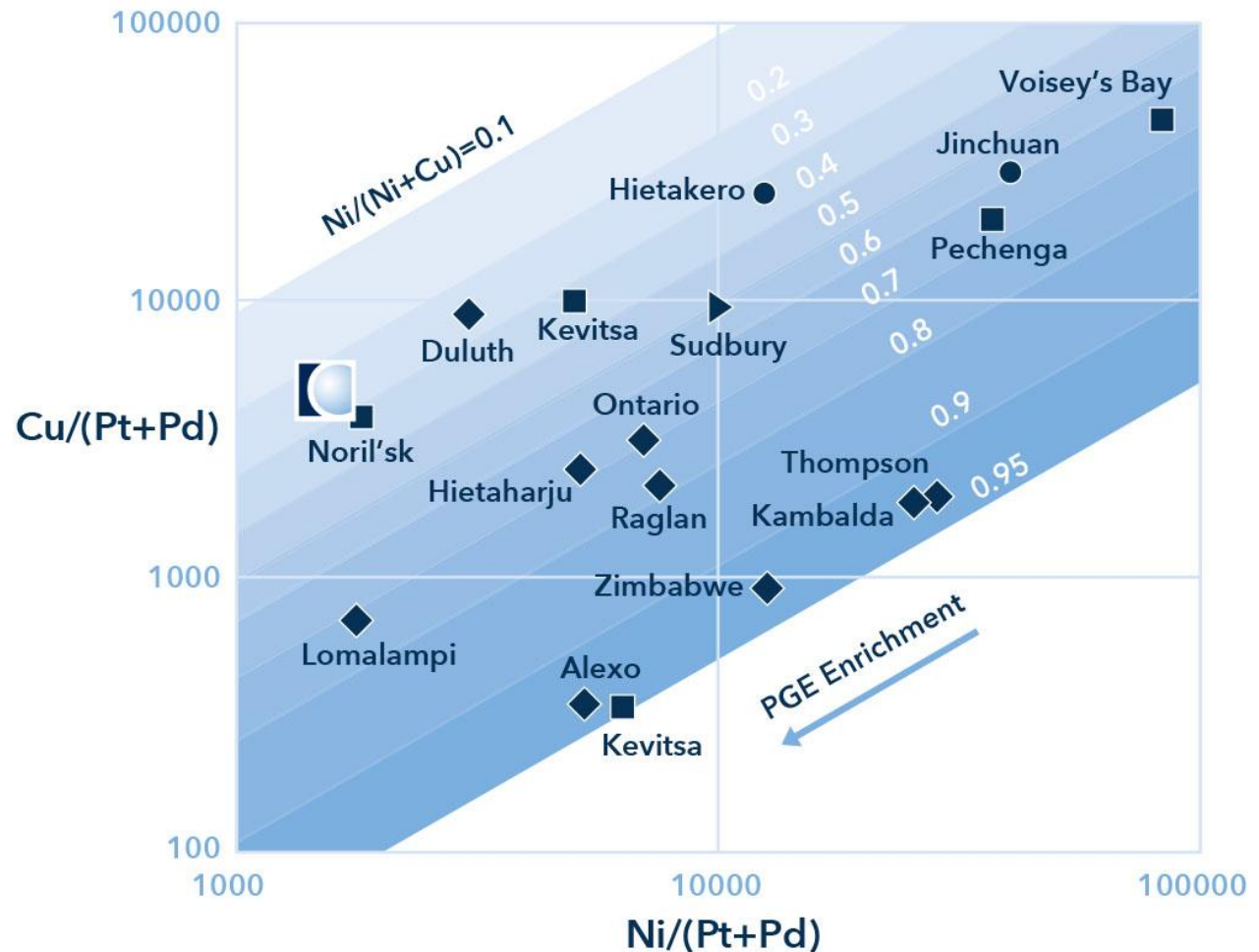
SIMILAR TO
NORIL'SK
HEAD GRADE



GREENFIELDS EXPLORATION TARGETING MASSIVE SULPHIDES – NORILSK MODEL

MASSIVE SULPHIDES
IN THE ESCAPE DEPOSIT (“”)

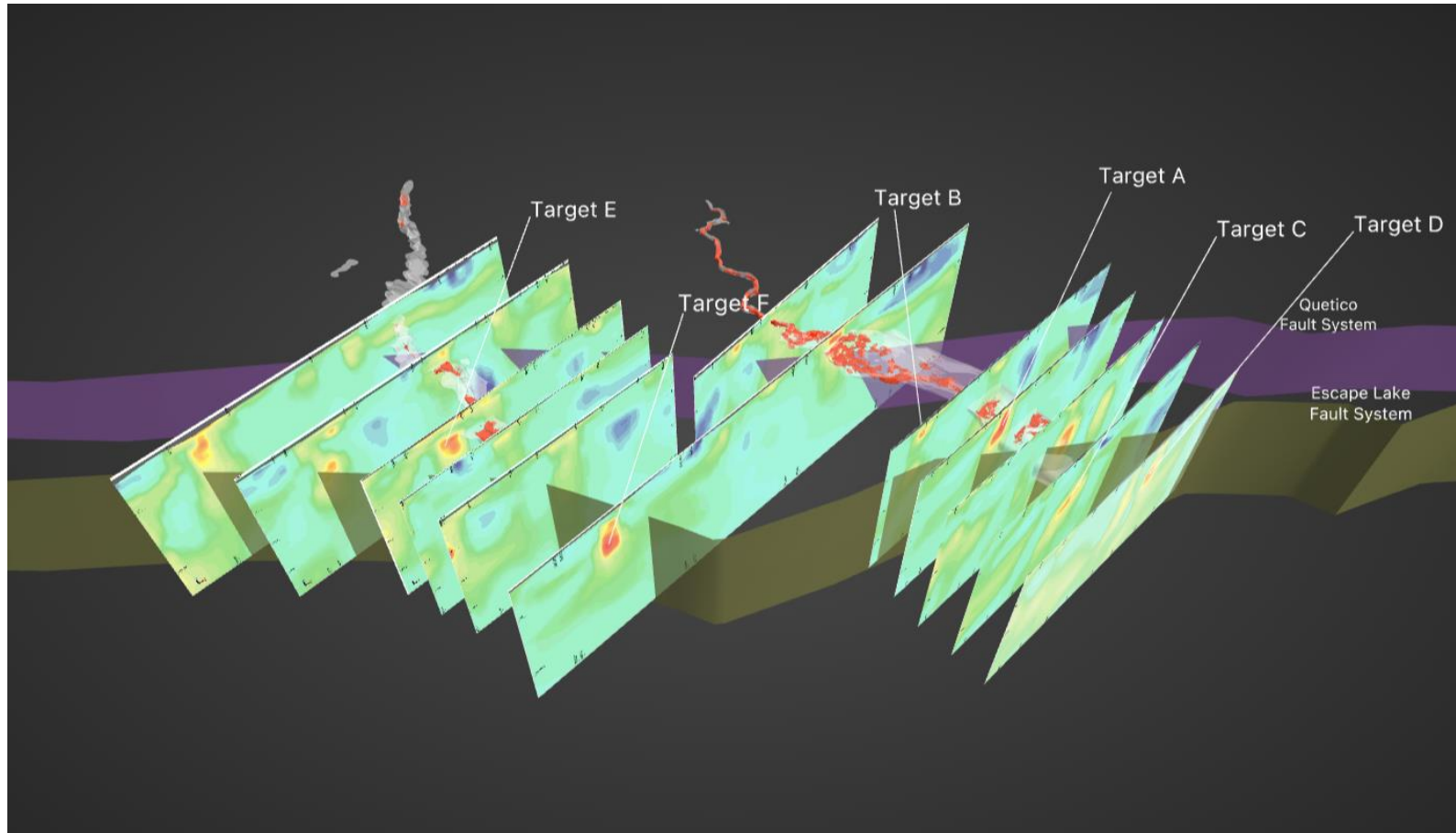
WORLD CLASS NI-CU
DEPOSIT ASSOCIATIONS



Konnunaho, J.P., Hanski, E.J., Karinen, T.K., Lahaye, Y., and Makkonen, H.V., 2018. The petrology and genesis of the Paleoproterozoic mafic intrusion-hosted Co-Cu-Ni deposit at Hietakero, NW Finnish Lapland. Bulletin of the Geological Society of Finland, v. 90, pp. 109–136



MT GEOPHYSICAL DATA TARGETING MAGMA CONDUITS AND MASSIVE SULPHIDES



See Full 3D Vrifly Presentation Link – [\(Click Here\)](#)



GENERAL APPENDIX



OPERATIONS EXPLORATION MANAGEMENT

Geoff Heggie, Ph.D. P.Geo VP Exploration

Dr. Geoff Heggie is a Professional Geoscientist (Ontario) and obtained his PhD from University of Western Australia. An expert on Mid-Continent Rift geology, Geoff has been exploring for Ni-Cu-PGE deposits in NW Ontario for the past 15 years, most recently with Noront Resources Ltd. where systematic integration of geology and geophysics by the Noront team was typified by the discovery of the McFaulds No. 8 VMS lenses of the Nikka deposit during Geoff's tenure.

Bruce Mackie, P.Geo Senior Project Advisor

Mr. Bruce W. Mackie, P. Geo., a senior Exploration Geologist with 38 years of progressive experience in all phases of exploration program management, including as VP of North American Palladium Inc., from concept, acquisition, budgeting, evaluation and ore reserve definition.

Dawn Evans-Lamswood, MSc, P.Geo Senior Geological Advisor

Ms. Dawn Evans-Lamswood's career spans two decades of exploration experience exploring the Voisey's Bay district after joining the Archean Resources drilling team in 1995, immediately following the discovery of the Ovoid Zone. Her career continued in the area with Inco and its successor company Vale Inco and Dawn was part of the Reid-Brook Deposit discovery team. Most recently Exploration Manager, Brown Field Exploration for Vale North Atlantic, Ms. Evans-Lamswood has co-authored numerous publications on the Voisey's Bay deposit and district.

Derek Wilton, PhD, P.Geo Senior Geological Advisor

Dr. Derek Wilton is Honorary Research Professor (from 1995) in the Department of Earth Sciences, Memorial University. Most of his research has been conducted in Labrador, from Cape Chidley to the Straits to Labrador West. He has authored or co-authored over 40 papers in referenced journals, 30 books, 45 referenced government papers, over 180 published abstracts, and in excess of 225 contract reports for industry government and aboriginal groups. In 2013, he received the inaugural "Geoscientist of the Year" award from the NL section of the Canadian Institute of Mining and Metallurgy (CIM). He was elected an International Fellow of the Explorers Club in 2010, and elected as Fellow of the Royal Canadian Geographical Society in 2013. His research was recognized by Royal Canadian Geographical Society as one of "Seven Amazing Projects in 2018".



ENGINEERING SERVICES PROVIDER

NORDMIN GROUP OF COMPANIES ENGINEERING · CONSTRUCTION · OPERATION

Clean Air Metals Inc. recently engaged Nordmin Engineering Ltd. as the Technical Services Provider for the Thunder Bay North Project. Nordmin will provide the following items within its scope of work:

Work Package 1 ("WP1") Resource validation

- Validate and approve the existing geological model and historic estimate on the Current Lake Deposit.
- Supervise and approve the development of a preliminary geological model of the Escape Lake Project in cooperation with the Database Geologist and VP Project Manager.
- Supervise and approve the development of the drilling database and preliminary resource model for the Escape Lake Project in cooperation with Clean Air Metals' Database Geologist.
- Develop a global resource estimate for the Thunder Bay North Project.

Work Package 2 ("WP2") Early Tradeoff Studies

The WP2 early trade-off studies for the Current Lake Deposit will be conceptual in nature, at an order of magnitude that is comparable to a scoping/PEA level of study. The principal parameters for a conceptual study are mostly assumed and/or factored. Accordingly, the level of accuracy is $\pm 35\%$. Nordmin will incorporate risk, peer and environmental reviews, following the ESG principles, into each of the following mining trade-off studies:

- Underground Ramp Access
- UG Mining Method
- UG Geotechnical Review
- Metallurgical/Preliminary Flow Sheet Design
- Tailings Management Option Analysis and Initial Design
- Electric Vehicle Study
- Surface Works and Infrastructure Study
- Simplified, pre-tax cashflow analysis to be included in applicable trade-off studies.



PEA INSITU RESOURCE UPDATE

Thunder Bay North Project Grade Profile (at US\$93/tonne for Current & US\$100/tonne for Escape Cutoff)

| Category | Tonnes | Grade | | | | | | | | | | |
|---------------------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|
| | | Pd (g/t) | Pt (g/t) | Au (g/t) | Ag (g/t) | Cu (%) | Ni (%) | Co (g/t) | Rh (g/t) | PtEq (g/t) | PdEq (g/t) | 4PGE (g/t) |
| Indicated - Current Deposit | 10,388,964 | 1.67 | 1.84 | 0.09 | 2.23 | 0.38 | 0.21 | 150.41 | 0.05 | 8.32 | 3.64 | 3.65 |
| Indicated - Escape Deposit | 4,164,360 | 1.20 | 0.94 | 0.12 | 2.47 | 0.52 | 0.28 | 209.56 | 0.06 | 7.61 | 3.33 | 2.33 |
| TOTAL INDICATED RESOURCE | 14,553,324 | 1.54 | 1.58 | 0.10 | 2.30 | 0.42 | 0.23 | 167.33 | 0.05 | 8.12 | 3.55 | 3.27 |
| Inferred - Current Deposit | 5,274,798 | 0.62 | 0.65 | 0.07 | 1.05 | 0.32 | 0.14 | 118.46 | 0.01 | 3.83 | 1.68 | 1.35 |
| Inferred - Escape Deposit | 2,802,798 | 0.81 | 0.70 | 0.07 | 1.10 | 0.34 | 0.17 | 176.21 | 0.00 | 4.52 | 1.98 | 1.59 |
| TOTAL INFERRED RESOURCE | 8,077,595 | 0.69 | 0.67 | 0.07 | 1.07 | 0.33 | 0.15 | 138.50 | 0.01 | 4.07 | 1.78 | 1.43 |

Thunder Bay North Project Grade Profile (at US\$93/tonne for Current & US\$100/tonne for Escape Cutoff)

| Category | Tonnes | Metal | | | | | | | | | | |
|---------------------------------|-------------------|----------------|----------------|---------------|------------------|---------------|---------------|--------------|---------------|------------------|------------------|------------------|
| | | Pd (Oz) | Pt (Oz) | Au (Oz) | Ag (Oz) | Cu (Tonnes) | Ni (Tonnes) | Co (Tonnes) | Rh (Oz) | PtEq (Oz) | PdEq (Oz) | 4PGE (Oz) |
| Indicated - Current Deposit | 10,388,964 | 558,288 | 615,331 | 30,860 | 744,401 | 39,385 | 21,405 | 1,563 | 15,248 | 2,780,251 | 1,216,830 | 1,219,727 |
| Indicated - Escape Deposit | 4,164,360 | 161,229 | 126,095 | 16,462 | 330,980 | 21,742 | 11,726 | 873 | 8,264 | 1,018,330 | 445,692 | 312,050 |
| TOTAL INDICATED RESOURCE | 14,553,324 | 719,518 | 741,426 | 47,322 | 1,075,381 | 61,126 | 33,131 | 2,435 | 23,511 | 3,798,581 | 1,662,522 | 1,531,777 |
| Inferred - Current Deposit | 5,274,798 | 105,882 | 110,695 | 11,106 | 177,307 | 16,914 | 7,124 | 625 | 1,654 | 650,277 | 284,606 | 229,337 |
| Inferred - Escape Deposit | 2,802,798 | 73,248 | 63,134 | 6,403 | 99,395 | 9,414 | 4,885 | 494 | 70 | 407,369 | 178,293 | 142,855 |
| TOTAL INFERRED RESOURCE | 8,077,595 | 179,130 | 173,829 | 17,508 | 276,702 | 26,329 | 12,009 | 1,119 | 1,724 | 1,057,646 | 462,899 | 372,191 |



PEA INSITU RESOURCE UPDATE

Thunder Bay North Project Grade Profile (at US\$93/tonne for Current & US\$100/tonne for Escape Cutoff)

| Category | Area | Tonnes | Grade | | | | | | | | | | |
|---------------------------------|------------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------|-------------|-------------|-------------|
| | | | Pd (g/t) | Pt (g/t) | Au (g/t) | Ag (g/t) | Cu (%) | Ni (%) | Co (g/t) | Rh (g/t) | PtEq (g/t) | PdEq (g/t) | 4PGE (g/t) |
| Indicated - Current Deposit | Upper Current | 1,123,518 | 1.54 | 1.67 | 0.10 | 2.29 | 0.41 | 0.21 | 155.30 | 0.07 | 8.19 | 3.58 | 3.37 |
| | Lower Current | 1,574,152 | 2.38 | 2.56 | 0.13 | 2.99 | 0.52 | 0.23 | 159.05 | 0.05 | 11.49 | 5.03 | 5.12 |
| | Bridge | 3,261,258 | 1.90 | 2.14 | 0.11 | 2.77 | 0.47 | 0.20 | 148.33 | 0.05 | 9.37 | 4.10 | 4.20 |
| | Beaver | 3,592,490 | 1.39 | 1.54 | 0.06 | 1.61 | 0.27 | 0.22 | 147.57 | 0.03 | 6.90 | 3.02 | 3.03 |
| | Cloud | 837,545 | 0.83 | 0.88 | 0.05 | 1.28 | 0.21 | 0.15 | 147.87 | 0.04 | 4.58 | 2.00 | 1.80 |
| Indicated - Escape Deposit | Steepledge North | 124,611 | 0.84 | 0.73 | 0.06 | 1.30 | 0.29 | 0.18 | 157.85 | 0.01 | 4.63 | 2.03 | 1.65 |
| | Steepledge South | 42,812 | 1.05 | 0.89 | 0.05 | 1.15 | 0.28 | 0.17 | 142.66 | 0.00 | 5.02 | 2.20 | 2.00 |
| | Escape South | 3,996,938 | 1.22 | 0.95 | 0.13 | 2.52 | 0.53 | 0.29 | 211.89 | 0.06 | 7.73 | 3.38 | 2.36 |
| | <i>Comprised of:</i> | | | | | | | | | | | | |
| | Escape South Perimeter | 1,672,990 | 0.62 | 0.51 | 0.08 | 1.47 | 0.37 | 0.21 | 176.82 | 0.04 | 4.69 | 2.05 | 1.25 |
| | Escape South HGZ | 2,323,948 | 1.67 | 1.28 | 0.16 | 3.31 | 0.66 | 0.34 | 238.05 | 0.08 | 9.99 | 4.37 | 3.18 |
| TOTAL INDICATED RESOURCE | | 14,553,324 | 1.54 | 1.58 | 0.10 | 2.30 | 0.42 | 0.23 | 167.33 | 0.05 | 8.12 | 3.55 | 3.27 |
| Inferred - Current Deposit | Beaver | 505,794 | 0.84 | 0.88 | 0.06 | 1.66 | 0.27 | 0.20 | 151.67 | 0.02 | 4.72 | 2.06 | 1.80 |
| | 437-SE | 4,769,004 | 0.60 | 0.63 | 0.07 | 0.98 | 0.33 | 0.13 | 114.94 | 0.01 | 3.74 | 1.64 | 1.31 |
| Inferred - Escape Deposit | Steepledge North | 97,464 | 0.59 | 0.50 | 0.05 | 0.58 | 0.27 | 0.21 | 149.59 | 0.00 | 3.74 | 1.64 | 1.15 |
| | Steepledge South | 1,990,612 | 0.90 | 0.78 | 0.07 | 1.18 | 0.33 | 0.17 | 177.16 | 0.00 | 4.74 | 2.07 | 1.75 |
| | Escape South | 714,722 | 0.61 | 0.49 | 0.08 | 0.97 | 0.36 | 0.19 | 177.20 | 0.00 | 4.03 | 1.76 | 1.19 |
| <i>Comprised of:</i> | | | | | | | | | | | | | |
| | Escape South Perimeter | 649,938 | 0.62 | 0.50 | 0.08 | 0.92 | 0.35 | 0.19 | 176.30 | 0.00 | 4.03 | 1.76 | 1.20 |
| | Escape South HGZ | 64,784 | 0.53 | 0.40 | 0.09 | 1.43 | 0.36 | 0.20 | 186.07 | 0.01 | 4.01 | 1.75 | 1.03 |
| TOTAL INFERRED RESOURCE | | 8,077,595 | 0.69 | 0.67 | 0.07 | 1.07 | 0.33 | 0.15 | 138.50 | 0.01 | 4.07 | 1.78 | 1.43 |



PEA INSITU RESOURCE UPDATE

Thunder Bay North Project Grade Profile (at US\$93/tonne for Current & US\$100/tonne for Escape Cutoff)

| Category | Area | Tonnes | Metal | | | | | | | | | | |
|---------------------------------|------------------------|-------------------|----------------|----------------|---------------|------------------|---------------|---------------|--------------|---------------|------------------|------------------|------------------|
| | | | Pd (oz) | Pt (oz) | Au (oz) | Ag (oz) | Cu (Tonnes) | Ni (Tonnes) | Co (Tonnes) | Rh (oz) | PtEq (oz) | PdEq (oz) | 4PGE (oz) |
| Indicated - Current Deposit | Upper Current | 1,123,518 | 55,607 | 60,222 | 3,568 | 82,691 | 4,628 | 2,309 | 174 | 2,420 | 295,814 | 129,469 | 121,817 |
| | Lower Current | 1,574,152 | 120,255 | 129,778 | 6,507 | 151,304 | 8,107 | 3,627 | 250 | 2,715 | 581,322 | 254,427 | 259,255 |
| | Bridge | 3,261,258 | 199,559 | 224,187 | 11,958 | 290,047 | 15,358 | 6,412 | 484 | 4,880 | 982,764 | 430,126 | 440,584 |
| | Beaver | 3,592,490 | 160,524 | 177,526 | 7,401 | 185,975 | 9,574 | 7,834 | 530 | 4,033 | 797,121 | 348,875 | 349,484 |
| | Cloud | 837,545 | 22,344 | 23,618 | 1,426 | 34,385 | 1,718 | 1,223 | 124 | 1,200 | 123,229 | 53,933 | 48,588 |
| Indicated - Escape Deposit | Steepledge North | 124,611 | 3,379 | 2,931 | 250 | 5,200 | 359 | 218 | 20 | 45 | 18,560 | 8,123 | 6,604 |
| | Steepledge South | 42,812 | 1,448 | 1,223 | 75 | 1,581 | 119 | 72 | 6 | 0 | 6,913 | 3,026 | 2,746 |
| | Escape South | 3,996,938 | 156,402 | 121,942 | 16,136 | 324,200 | 21,263 | 11,435 | 847 | 8,219 | 992,858 | 434,543 | 302,700 |
| | Comprised of: | | | | | | | | | | | | |
| | Escape South Perimeter | 1,672,990 | 31,966 | 26,451 | 4,382 | 76,875 | 6,027 | 3,425 | 294 | 2,129 | 246,577 | 107,919 | 67,090 |
| | Escape South HGZ | 2,323,948 | 124,437 | 95,491 | 11,754 | 247,325 | 15,236 | 8,010 | 553 | 6,090 | 746,281 | 326,624 | 237,772 |
| TOTAL INDICATED RESOURCE | | 14,553,324 | 719,518 | 741,426 | 47,322 | 1,075,381 | 61,126 | 33,131 | 2,435 | 23,511 | 3,798,581 | 1,662,522 | 1,531,777 |
| Inferred - Current Deposit | Beaver | 505,794 | 13,618 | 14,268 | 995 | 27,012 | 1,369 | 1,035 | 77 | 329 | 76,677 | 33,559 | 29,211 |
| | 437-SE | 4,769,004 | 92,264 | 96,427 | 10,111 | 150,294 | 15,545 | 6,089 | 548 | 1,324 | 573,599 | 251,047 | 200,126 |
| Inferred - Escape Deposit | Steepledge North | 97,464 | 1,846 | 1,578 | 169 | 1,805 | 260 | 204 | 15 | 0 | 11,730 | 5,134 | 3,594 |
| | Steepledge South | 1,990,612 | 57,381 | 50,208 | 4,410 | 75,364 | 6,613 | 3,308 | 353 | 0 | 303,144 | 132,677 | 111,999 |
| | Escape South | 714,722 | 14,020 | 11,348 | 1,824 | 22,227 | 2,541 | 1,373 | 127 | 70 | 92,496 | 40,482 | 27,262 |
| | Comprised of: | | | | | | | | | | | | |
| | Escape South Perimeter | 649,938 | 12,913 | 10,507 | 1,647 | 19,252 | 2,306 | 1,242 | 115 | 41 | 84,146 | 36,828 | 25,115 |
| | Escape South HGZ | 64,784 | 1,108 | 841 | 177 | 2,975 | 235 | 131 | 12 | 29 | 8,350 | 3,655 | 2,155 |
| TOTAL INFERRED RESOURCE | | 8,077,595 | 179,130 | 173,829 | 17,508 | 276,702 | 26,329 | 12,009 | 1,119 | 1,724 | 1,057,646 | 462,899 | 372,191 |

