



COXHEATH PORPHYRY-EPITHERMAL SYSTEM

CORPORATE PRESENTATION | MAY 2023

Strategic Exploration and Mining in Atlantic Canada

COPPER | GOLD | MOLYBDENUM | RHENIUM | SILVER | COBALT | PYROPHYLLITE

This presentation is an introduction to **Nova Copper Inc.** (“Nova Copper” or “the Company”) and the Nova Copper Project Portfolio, including the Coxheath Cu-Au-Mo Deposit (“the Deposit”), and is intended for sophisticated and qualified readers only. The contents of this technical presentation are not to be relied upon for investment purposes.

CORE VALUES & SUSTAINABILITY

Nova Copper is a privately held junior mining company focused on responsible exploration and development of precious and critical minerals in Atlantic Canada. The Company commits to continuously exceed ESG targets and initiatives set for the mining industry.

ENVIRONMENTAL



- ✓ Low impact exploration and mining:
 - Near surface mineral deposits with significant room for growth
 - Existing access roads
 - Modern pole and three-phase hydropower lines on location
 - 15 km to rail and deep-sea ports and existing commodity terminals
- ✓ Critical mineral by-products of cobalt and molybdenum available from mining the project's copper

SOCIAL



- ✓ Safe and stable mining jurisdiction
- ✓ Ongoing engagement with local first nations, communities and suppliers
- ✓ Supportive, progressive stakeholders familiar with exploration and mining
- ✓ Local, eager workforce
- ✓ Commitment to human rights; diversity, equity, and inclusion
- ✓ Existing community mining operations and infrastructure

GOVERNANCE



- ✓ Corporate transparency
- ✓ Relevant professional association memberships
- ✓ Planned policies and accountability committees for:
 - Compliance
 - Diversity, Equity and Inclusion
 - Environmental Practices
 - Health and Safety
 - Sustainability (e.g., MAC-TSM)

PROJECT PORTFOLIO

Nova Copper has 100% control and ownership of four strategic developments related to an intact porphyry-epithermal system spread out over a contiguous 30 square-kilometre property near mining-friendly Sydney, Nova Scotia. Development boundaries are based on geochemical signatures and current stage of exploration. The portfolio includes the **Coxheath Cu-Au-Mo Porphyry Deposit** as well as the historic Coxheath Copper Mine, hosting multi-percent copper values in spectacular veins of tourmaline, bornite, and chalcopyrite.

SYDNEY COPPER | Early to Mid-Stage

Main porphyry copper-gold-molybdenum deposit and driver for the rest of the system, with robust **drill-ready targets for expansion** and **abundant blue-sky**

COXHEATH COPPER | Mid to Advanced Stage

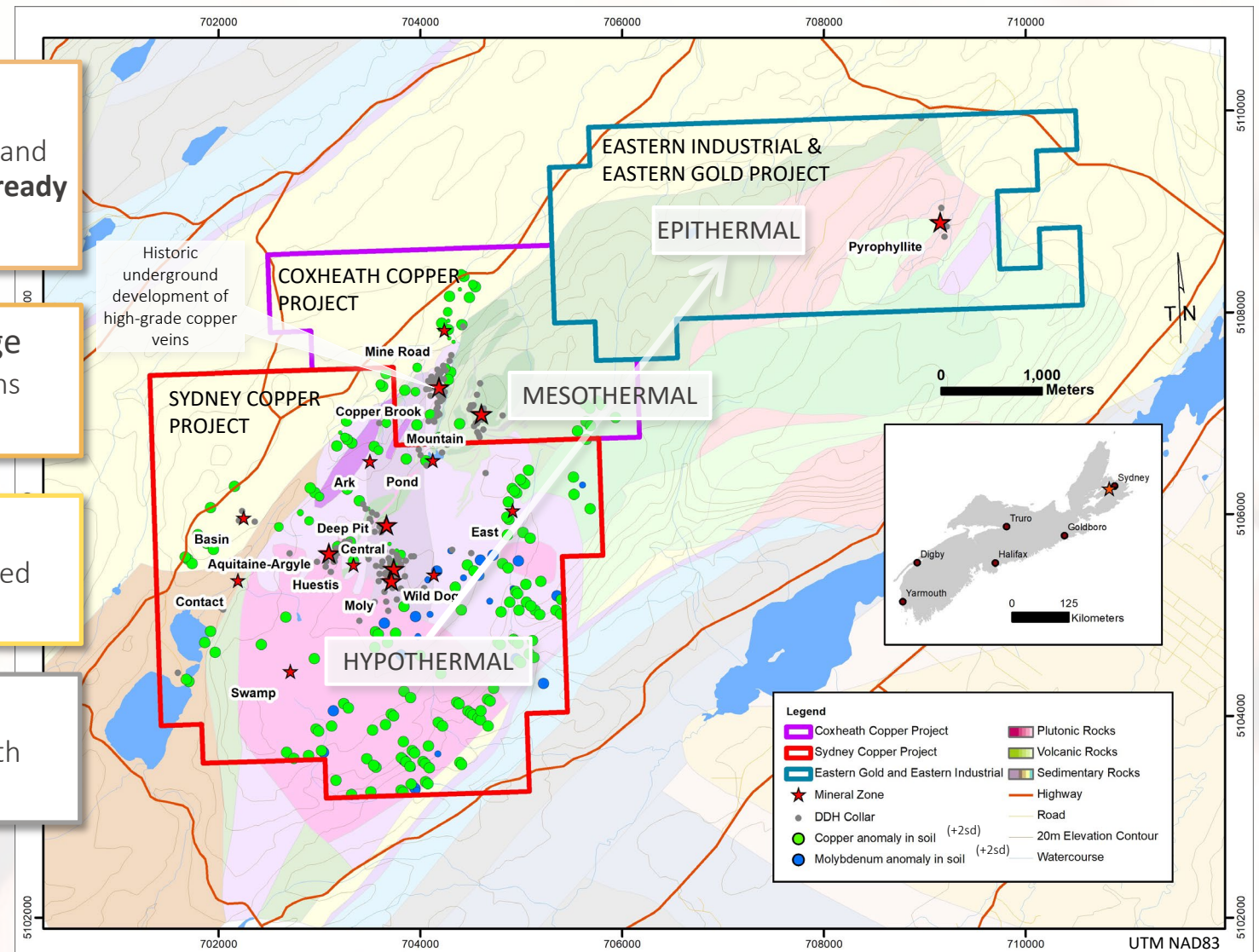
High-grade copper (\pm silver, cobalt) in parallel veins and breccia, fit for **near-term small-scale mining**

EASTERN GOLD | Early Stage/Grassroots

Unexplored targets for epithermal gold and related high-sulphidation critical metal mineralization

EASTERN INDUSTRIAL | Mid- to Advanced Stage

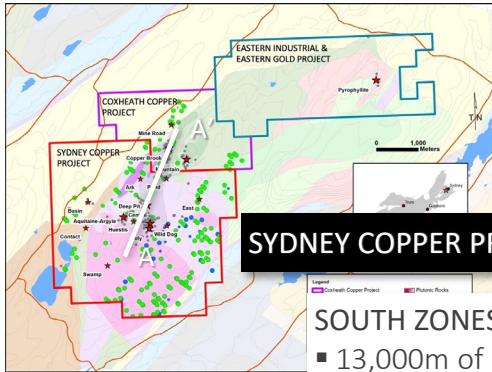
Massive high-quality pyrophyllite deposit at surface with potential for **near-term industrial quarry/mine**



STRATEGIC DEVELOPMENTS AT VARIOUS STAGES OF THE MINING LIFE CYCLE

PRESERVED PORPHYRY-EPITHERMAL SYSTEM

COPPER BROOK FAULT CORRIDOR CONCEPTUAL DEPOSIT MODEL | SECTION LOOKING NNW



SYDNEY COPPER PROJECT

SOUTH ZONES AREA:

- 13,000m of drilling (shallow avg depth of <150m)
- No intense alteration intercepted to date
- Long intercepts of Cu-Au-Mo ± Re, Ag, including
 - 154m of 0.56% CuEq¹ in MM-25 (Central)
- Weak propylitic and phyllic alteration
- Multiple untested targets at depth

BASIN ZONE:

- Redbed copper 1km WNW

KLONDIKE ROAD:

- Untested other than 1930s shallow drilling and trenching (no assays)
- High-grade Cu and porphyritic monzonite reported at surface
- Multiple coincident geophysical and geochemical anomaly targets

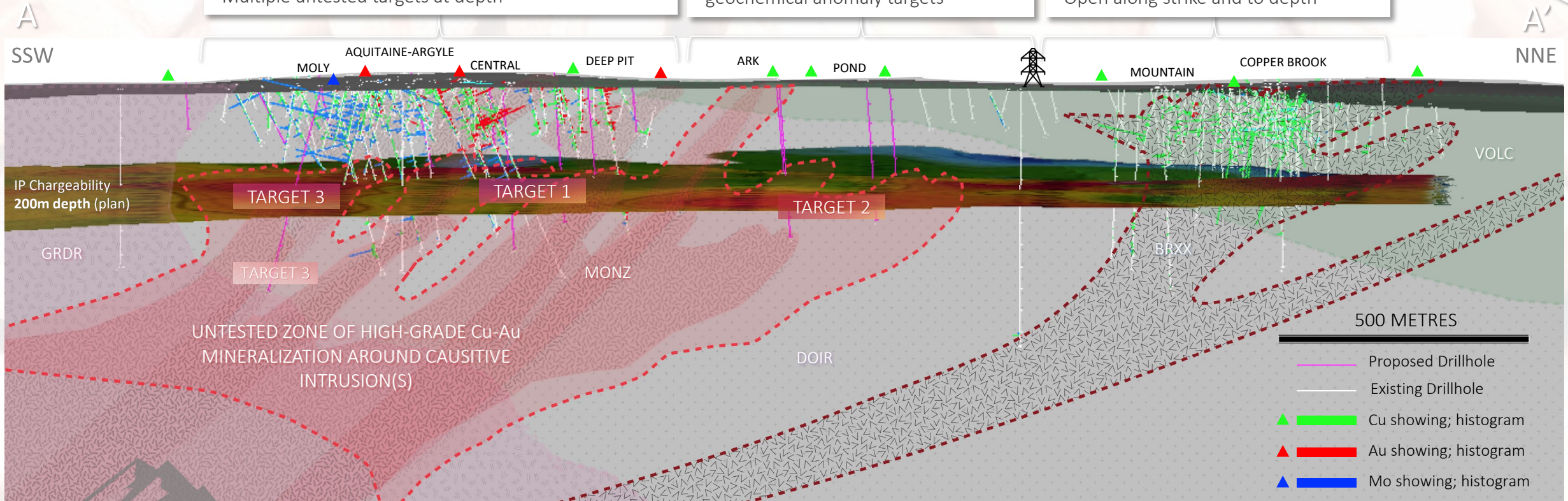
COXHEATH COPPER PROJECT

MINE ZONES AREA:

- 15,000m of drilling (shallow avg depth of <150m)
- Multi percent Cu (±Ag-Co) veins and tourmaline breccia, including
 - underground samples to 16.5% Cu
- Open along strike and to depth

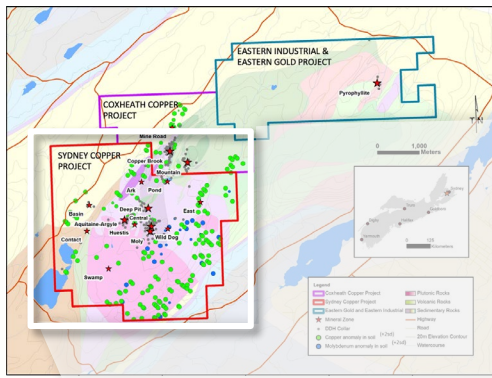
EPITHERMAL ZONES:

- Massive Pyrophyllite Deposit 4km ENE



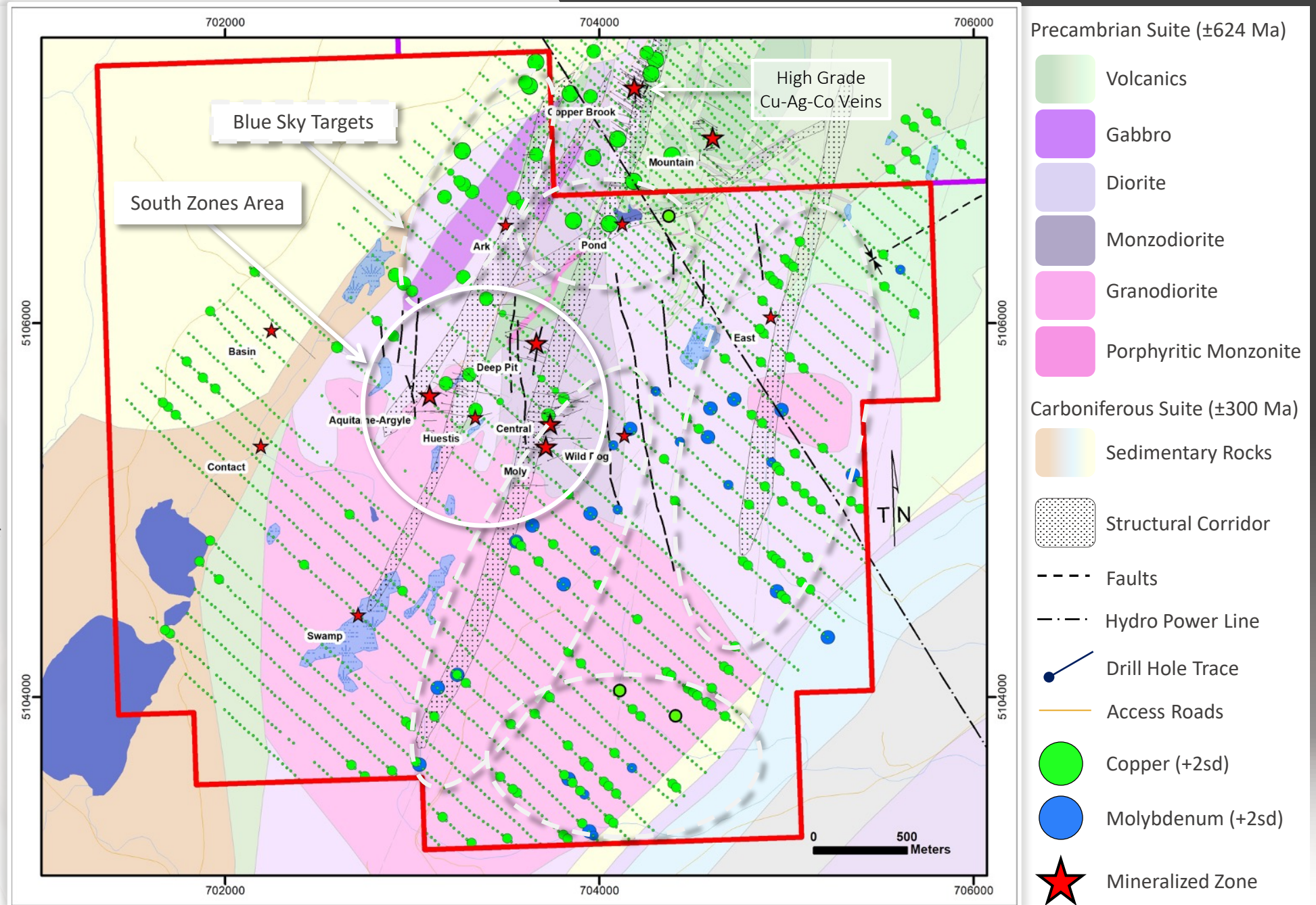
¹ Copper Equivalent (CuEq) calculated using \$4/lb copper, \$1,800/oz gold, \$22/oz silver, \$30/lb molybdenum, and \$727/lb rhenium

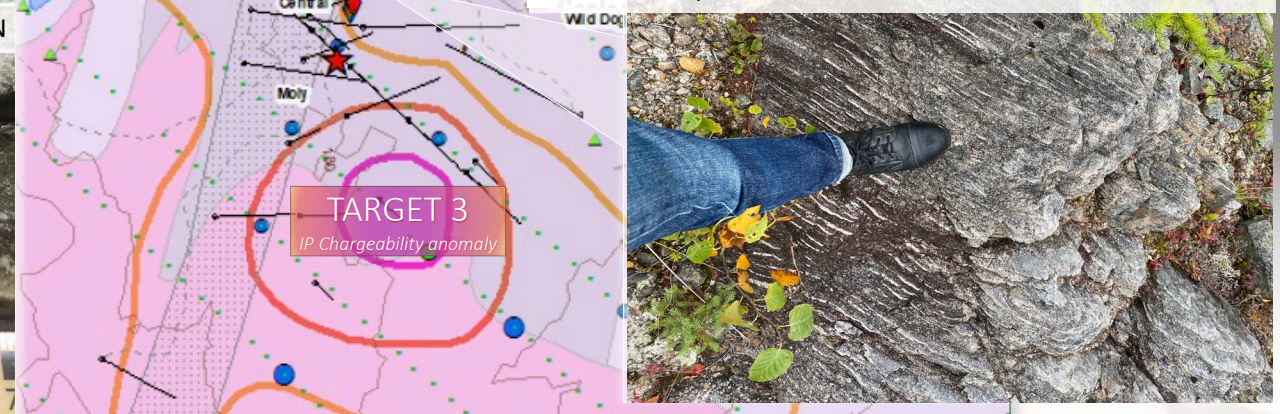
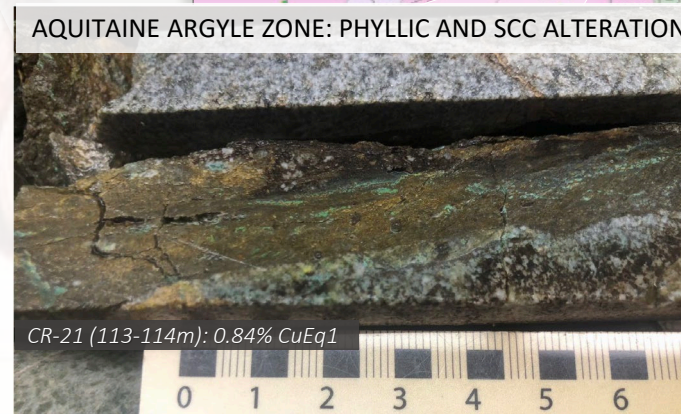
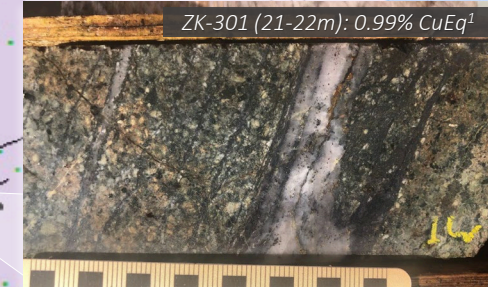
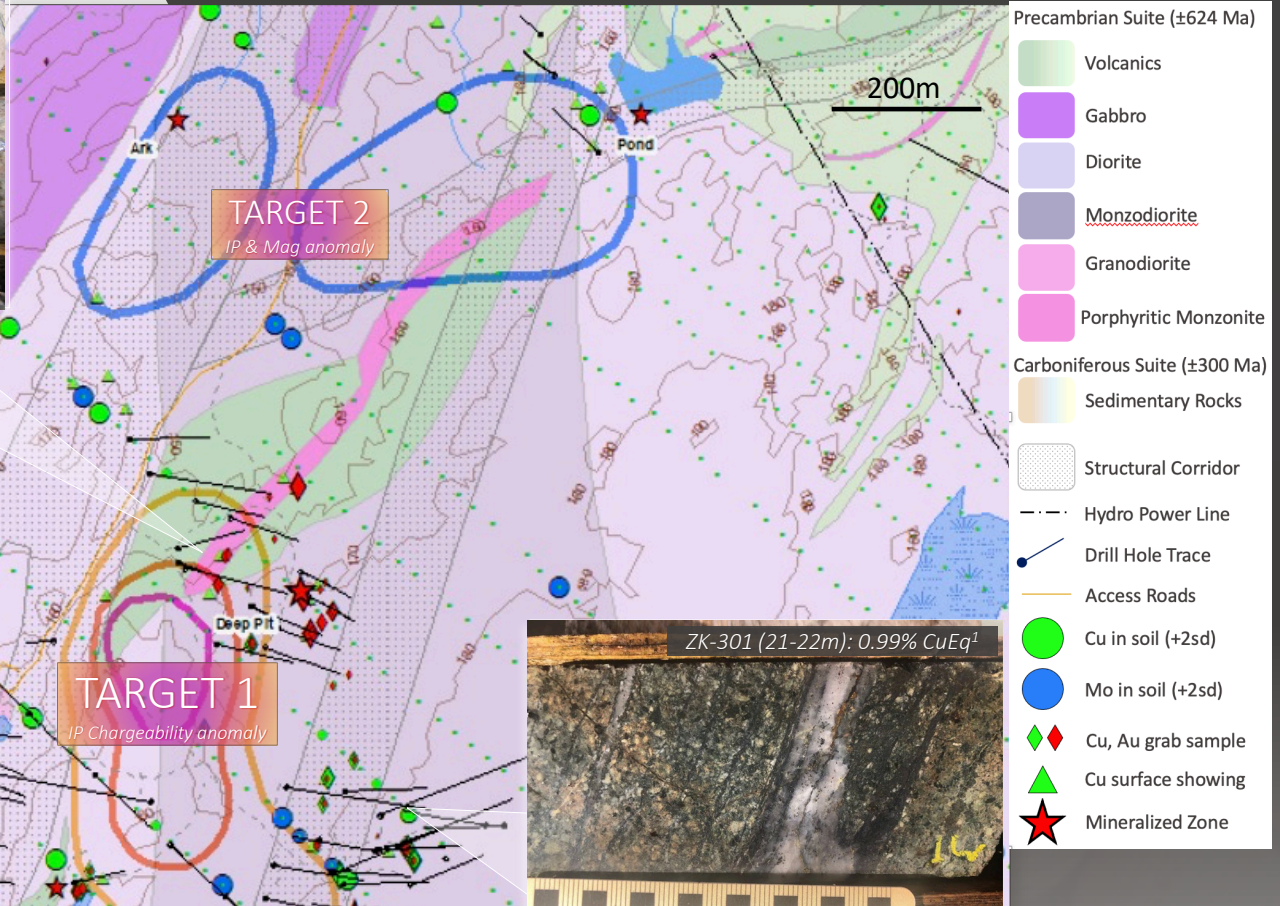
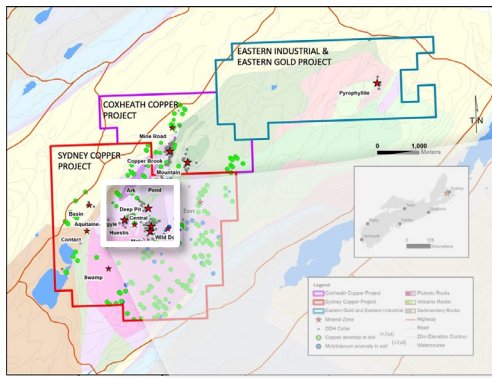
SYDNEY COPPER PROJECT



HIGHLIGHTS:

- ✓ 15km² road accessible property
- ✓ 13,000m of drilling
- ✓ Multiple geochemical and geophysical surveys
- ✓ On trend with high-grade Cu-Ag-Co veins of Copper Brook
- ✓ South Zones Area identified as potential porphyry centre
- ✓ Abundant Blue Sky Targets





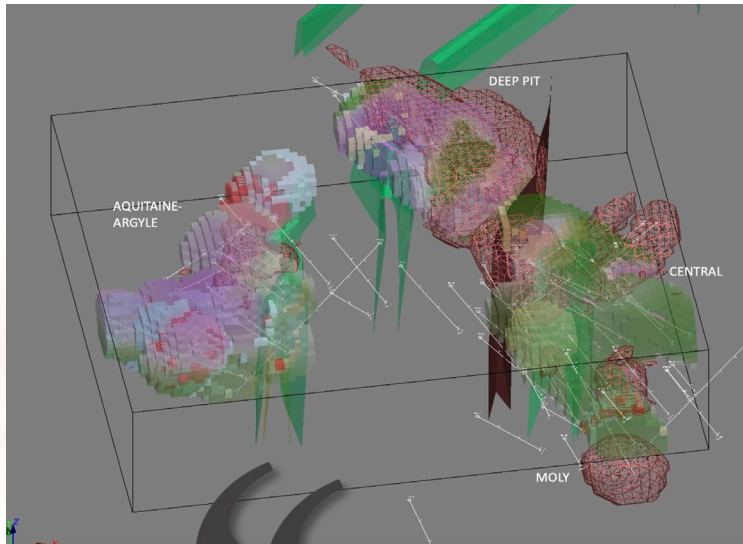
SOUTH ZONES AREA:

- ✓ Parallel structures linking multiple phases of mineralization
- ✓ Higher temperature porphyry alteration
- ✓ Long Cu-Au-Mo drill intercepts at shallow levels
- ✓ Metal zonation of Cu+Au and Cu+Mo (±Re, Ag)
- ✓ Mineralization open laterally and to depth
- ✓ Robust targets around untested geophysical anomalies



SOUTH ZONES AREA | HIGH-GRADE PORPHYRY CENTRE YET TO BE DISCOVERED

¹ Copper Equivalent (CuEq) calculated using \$4/lb copper, \$1,800/oz gold, \$22/oz silver, \$30/lb molybdenum, and \$727/lb rhenium



Phase I exploration aims to identify a high-grade porphyry centre responsible for mineralization in the South Zones Area, while Phase II will connect and expand known zones laterally and to depth, culminating in an inaugural mineral resource estimate.

– Harry Cabrita, President & CEO
Nova Copper

Digitization of historical data [COMPLETED]

- ✓ Comprehensive compilation and verification of >100 years of data
- ✓ Inaugural use of 3D modelling software to identify new opportunities

2021

Historical Core Re-Log and Infill Assay Program [COMPLETED]

- ✓ >3,700m of new geological, magnetic and spectral data
- ✓ >2,200m of new geochemical data (*notably missing Au, Re, Cu, Mo, Ag*)
- ✓ Identification of robust and untested porphyry-centre targets

2022

Phase I – South Zones Area Exploration [CALLING FOR PARTICIPATION]

- Diamond drilling of newly identified porphyry Cu-Au-Mo targets
- Trenching to further extend high grade sheeted veins at surface
- Technical Report and Resource Drilling Recommendations

Q2'23

Phase II – South Zones Area Exploration and Definition

- Infill and exploratory drilling focused on growing the resource
- New Discoveries - Blue-sky drilling outside of the South Zones Area

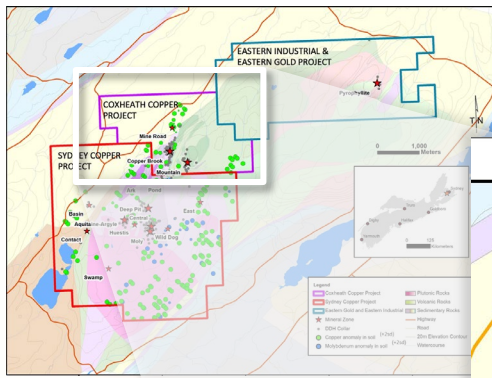
Q4'23

South Zones Area NI 43-101 Technical Report & MRE

- Inaugural Mineral Resource Estimate for the Coxheath Cu-Au-Mo (\pm Ag, Re) Deposit and Conceptual Economic Assessment

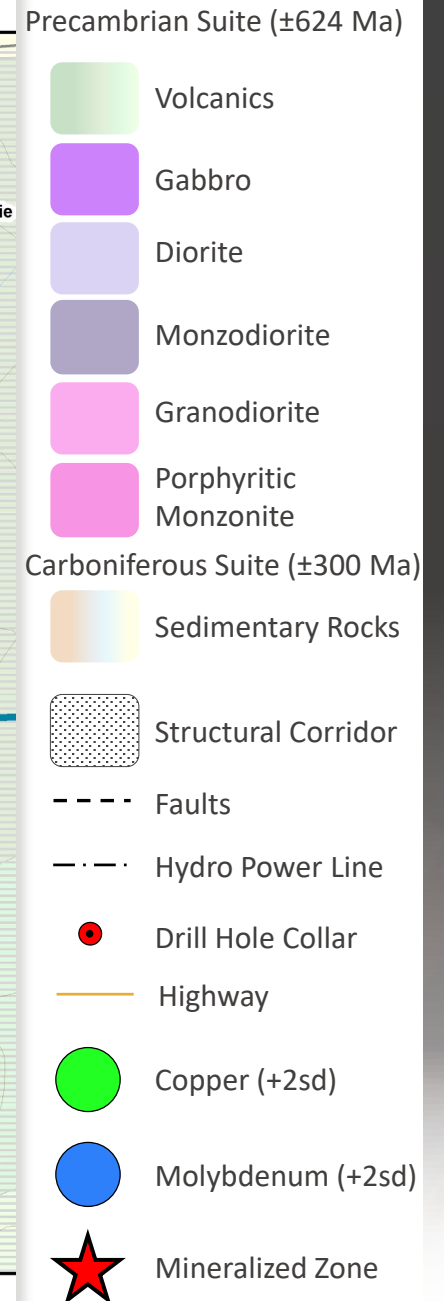
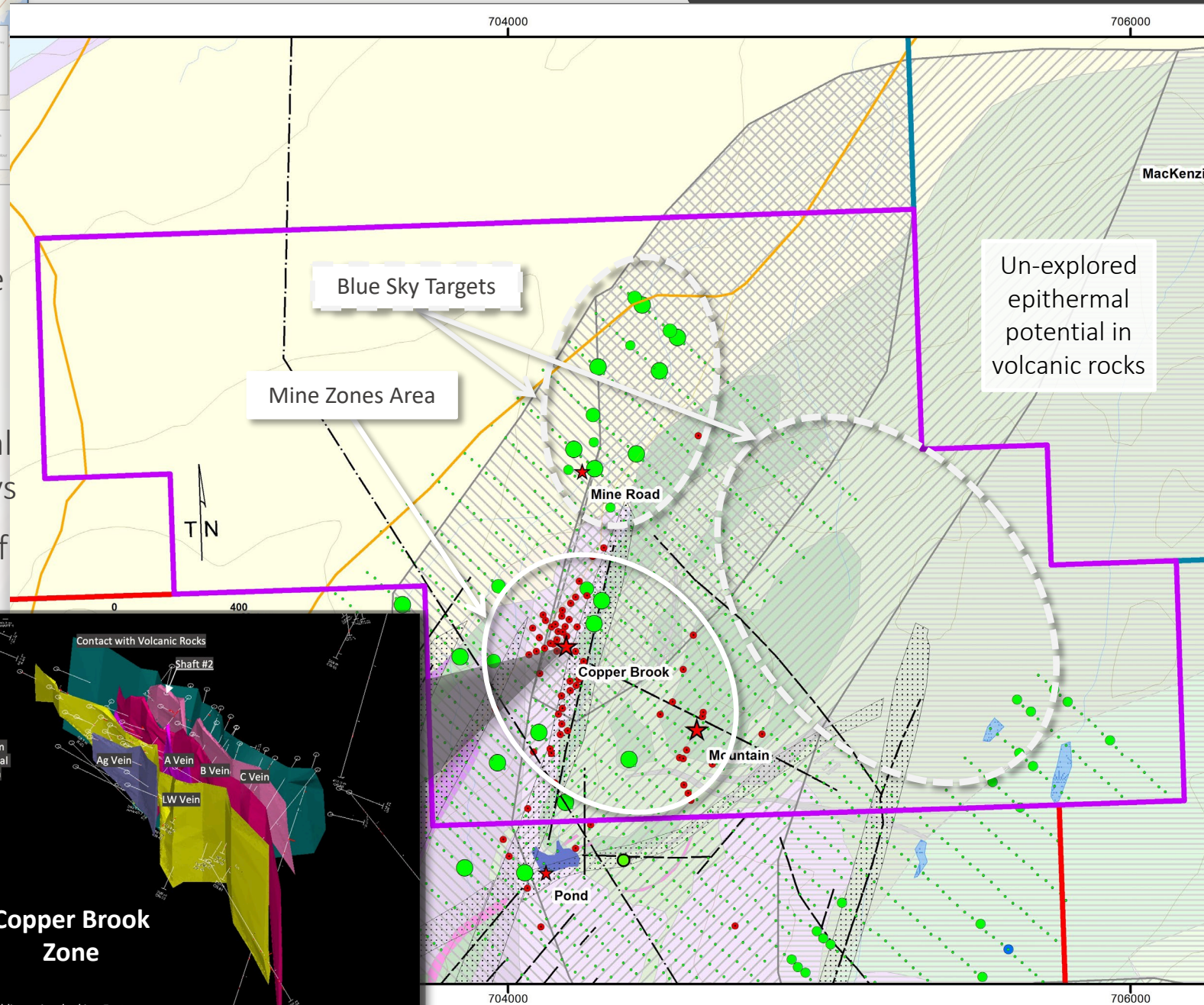
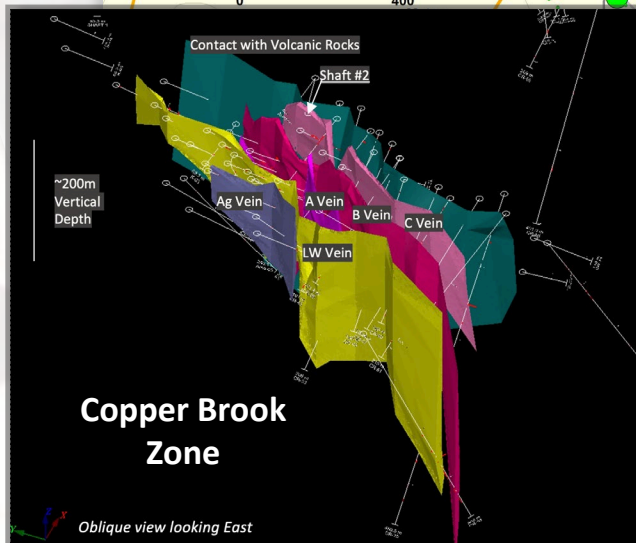
Q2'24

COXHEATH COPPER PROJECT

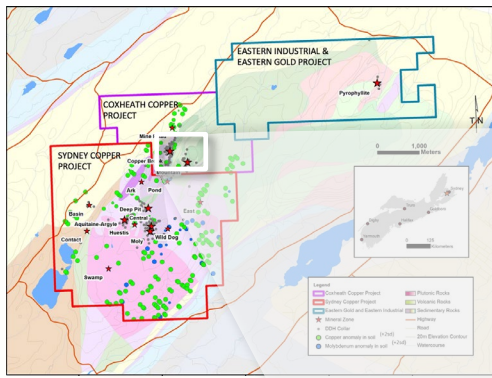


HIGHLIGHTS:

- ✓ 5km² road accessible property
- ✓ 15,000m of drilling
- ✓ Multiple geochemical & geophysical surveys
- ✓ 500m strike length of metre-scale high-grade veins
- ✓ Open to depth and along strike
- ✓ Abundant blue-sky targets in unexplored volcanic rocks

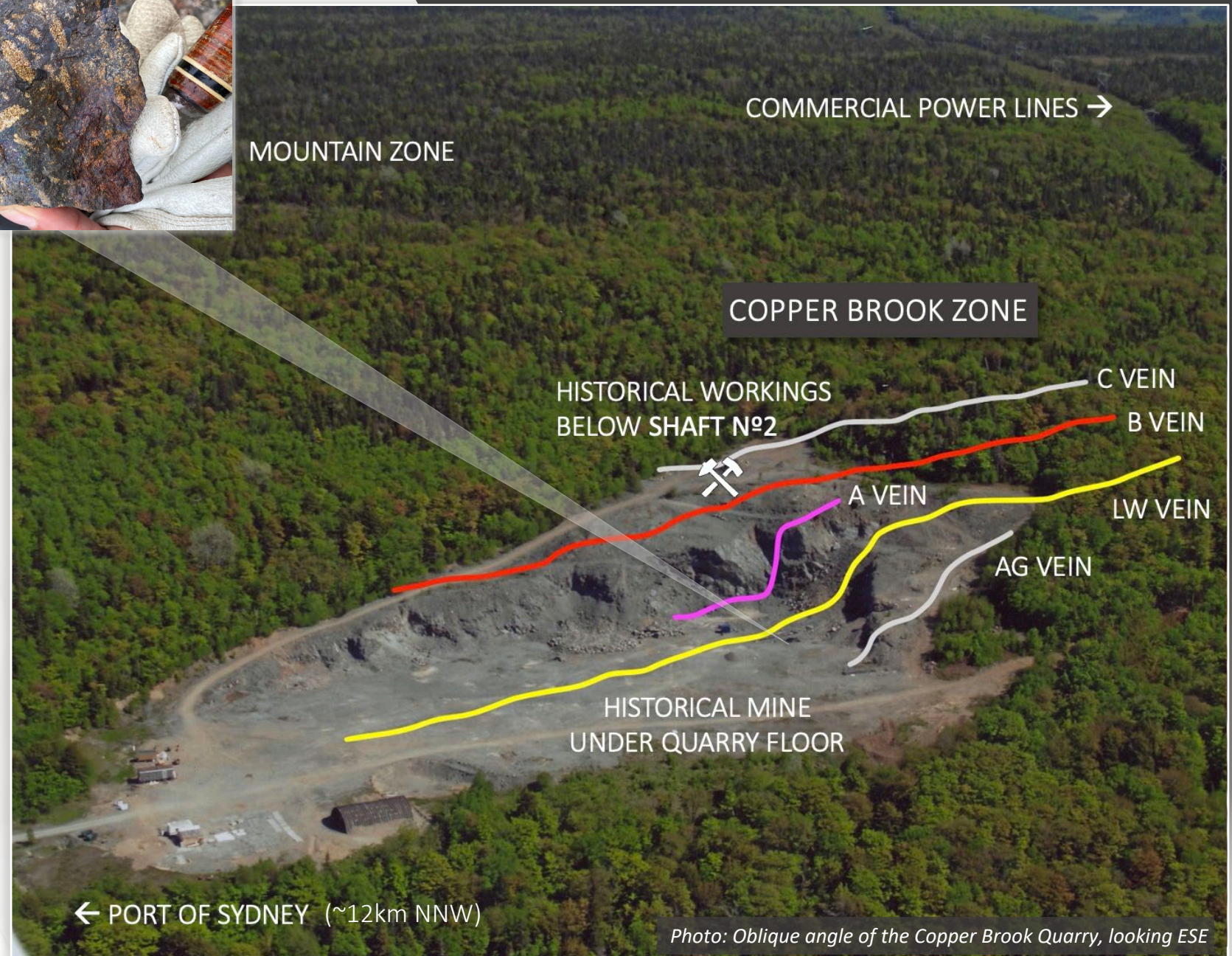


PARALLEL HIGH-GRADE Cu-Ag-Co (\pm Au) VEINS OPEN ALONG STRIKE AND TO DEPTH



COPPER BROOK ZONE:

- ✓ Extensive analysis on tailing characteristics
- ✓ Pre-optimization bench-scale metallurgical study achieved 30.19% copper concentration with 92.69% copper recovery (2007)
- ✓ Cobalt associated with the majority of sulphide concentrates
- ✓ Meets and exceeds copper import specifications for Chinese and European Union zone markets
- ✓ Historical estimate of 220,000 tonnes at 2.2% Cu² (not including accessory metals or drilling after 2007)





World Class Copper Ore Specimen from the Coxheath Copper Project first displayed in 1901

Digitization of historical data [COMPLETE]

- ✓ Comprehensive compilation and verification of >100 years of data
- ✓ Use of 3D modelling software to identify new opportunities

2022

Permitting and Engineering [IN PROGRESS]

- Finalization of land agreements and extraction permits
- Mining engineering and geotechnical evaluation

Q2'23

10,000 tonne Bulk Sample

- Confirm surface model and grades for small-scale mining
- Updated metallurgical and processing data

Q3'23

Exploration Program

- Surface trenching and soil sampling
- Diamond drilling to expand and update resource

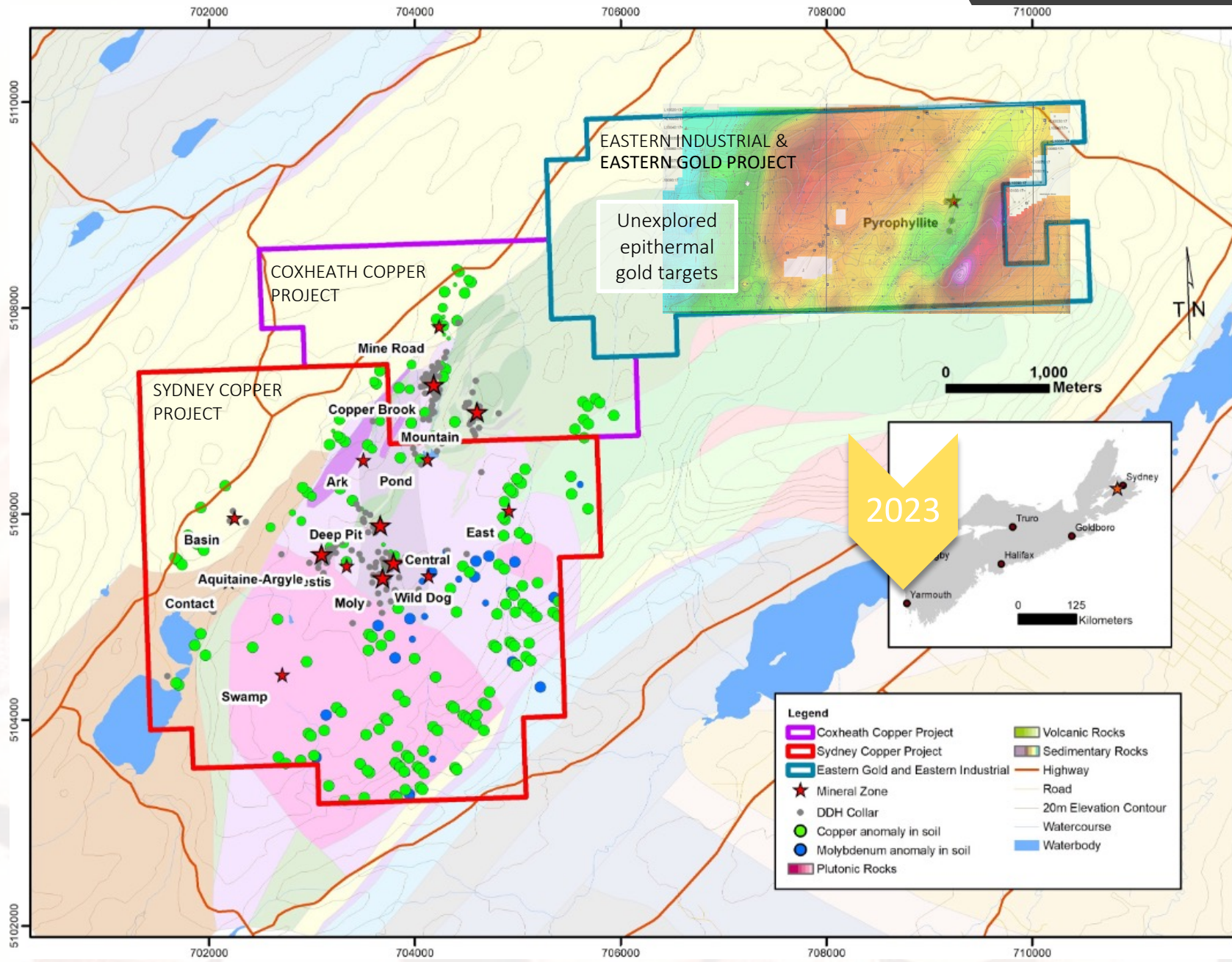
Q4'23

Small Scale Mine Production

- Phase I – 60,000 tonnes at 2.2% Cu² (± Ag, Co)
- Phase II – 160,000 tonnes at 2.2% Cu² (± Ag, Co)

2025
+

EASTERN GOLD PROJECT



Linked Epithermal Deposit |

Vast area of gold and base metal targets at the **Eastern Gold Project**:

- 10km² road accessible property
- Genetic link to porphyry copper system to the southwest
- Pyrite occurrences noted at surface
- High sulphidation alteration
- Airborne EM geophysics show areas of intense magnetic lows
- Unexplored terrain dominates the Project area

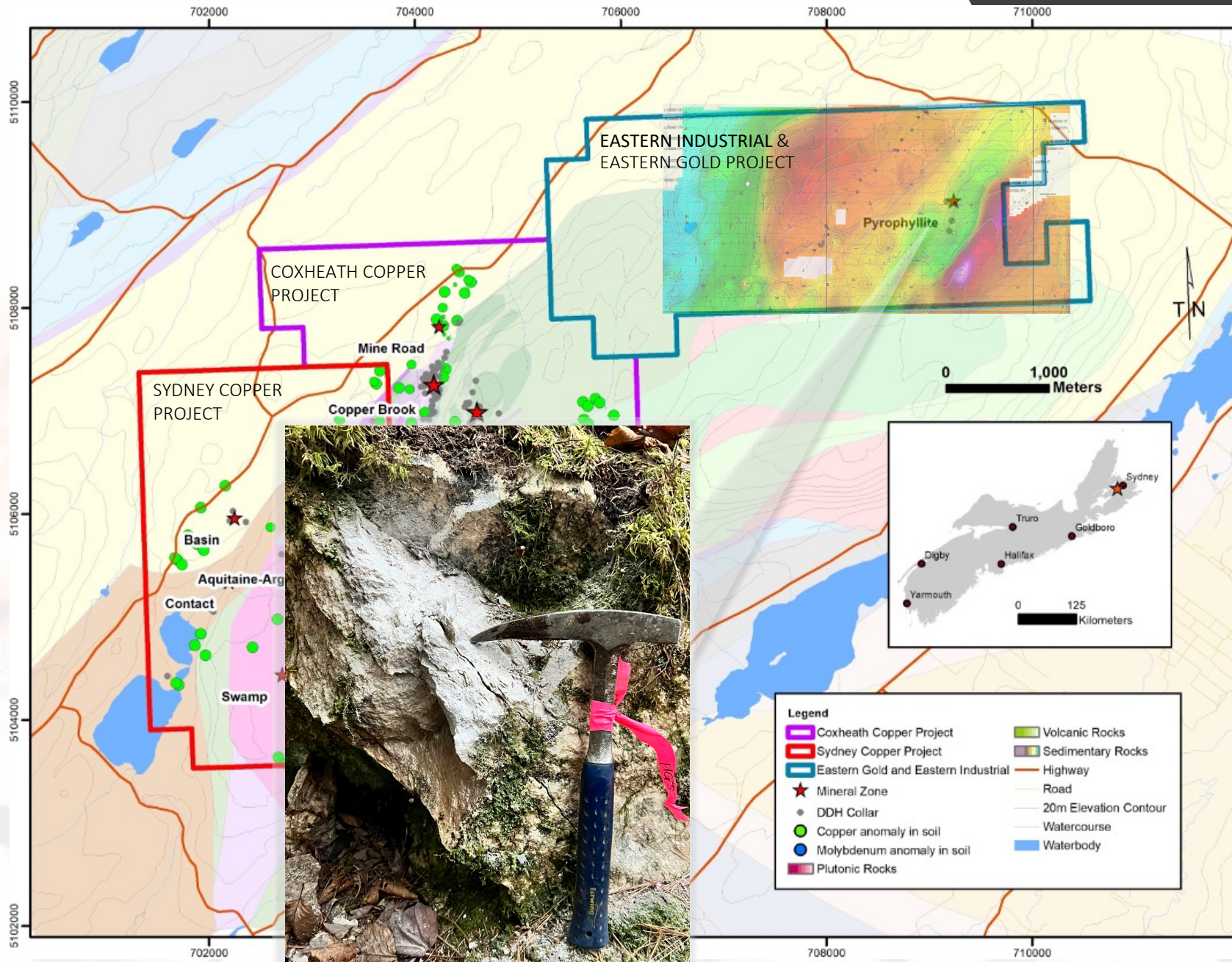
✓ Compilation and digitization of historical data

- Grassroots exploration program to determine mineral potential

2022

2023

EASTERN INDUSTRIAL PROJECT



Industrial Pyrophyllite |

Near-term mining opportunity at the Eastern Industrial Project:

- Massive epithermal aluminum-silicate clay deposit at surface
- High quality material suitable for various industrial applications
- Large footprint of historical occurrences and co-incident chargeability low, indicating room for major expansion
- Historic trenching and quarrying

✓ Compilation and digitization of historical data

2021

✓ Quantify and test pyrophyllite for industrial market application

2022

▪ Industrial mine/quarry permitting and production (JV)

2023 +

PORTFOLIO PRODUCTION ROADMAP

CLAIM ACQUISITION AND CONSOLIDATION
 COMMUNITY RELATIONS AND LAND ACQUISITION
 LEADERSHIP AND ADVISORY DEVELOPMENT



2018 - 2021

2022

2023

2024

2025+

Sydney Copper
 Porphyry Cu-Mo-Au (+/- Re, Ag)



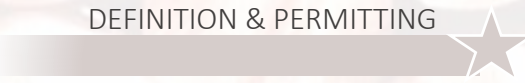
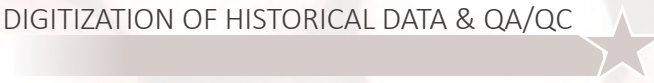
Coxheath Copper
 High Grade Cu-Ag-Co Veins



Eastern Gold
 Epithermal Au



Eastern Industrial
 Pyrophyllite



RESPONSIBLE DEVELOPMENT OF CANADA'S CRITICAL MINERALS

THE NOVA COPPER ADVANTAGE

“*The Nova Copper Project Portfolio displays all features typical of large-tonnage porphyry copper systems, but is underexplored outside of the historically mined deposits. The property contains widespread mineralization boasting high-grade copper and cobalt in the Copper Brook Zone; anomalous gold, molybdenum, and rhenium along with copper in the South Zones Area; and untapped epithermal gold prospects to the northeast. Conceptual resource estimates are set to expand substantially with additional drilling around known zones, where a significant discovery is imminent.*

– Jesse Halle, VP Exploration
Nova Copper

LOCATION

- ✓ Temperate maritime climate amenable to **year-round operations**
- ✓ Low-cost drilling and exploration
- ✓ Existing extraction permits and a long history of mines and quarries in the area

INFRASTRUCTURE

- ✓ **Paved, government-maintained roads access the property**
- ✓ New three-phase hydro power lines cross the property
- ✓ Rail and three deep-sea cargo ports with commodity terminals less than 15 kilometres away

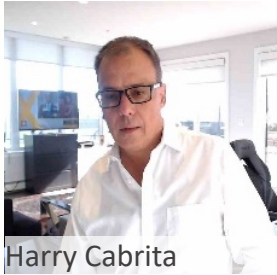
ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG)

- ✓ Safe and stable mining jurisdiction [Nova Scotia, Canada]
- ✓ **Supportive, progressive stakeholders familiar with exploration and mining**
- ✓ Commitment to sustainable mining initiatives with a focus on positive social impact
- ✓ Net Zero Carbon opportunity with less Capex per pound of copper to be produced
- ✓ Responsible, experienced Management with proven success

ASSETS

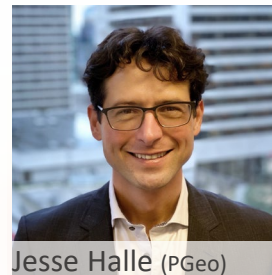
- ✓ **Large precious and critical mineral portfolio of an intact porphyry-epithermal system:**
 - Porphyry Cu-Au-Mo ±Re Deposit with robust targets for expansion and ample blue-sky
 - Mesothermal Cu-Ag-Co veins, open to depth and fit for near term small-scale mining
 - Vast area of unexplored epithermal gold and base metal opportunity
 - High quality pyrophyllite deposit, potential for near term industrial quarry
- ✓ 100% owned and controlled by Nova Copper
- ✓ Newly compiled and digitized data from over 100 years of exploration
- ✓ Recent re-log and infill assay program successfully identified new porphyry targets in the South Zones Area supported by syn-mineral dykes, retrograde alteration and stockwork veining that were not characterized or tested in previous drill campaigns

LEADERSHIP & ADVISORY TEAM



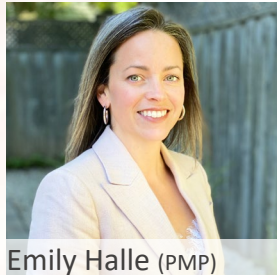
Harry Cabrita
PRESIDENT & CEO

Veteran crude oil and mining resource executive, explorer, and industrialist with over 25 years at the helm of companies and projects spanning four continents, typically in jurisdictions with operational complexities. Harry is an innovative and energetic senior leader who brings vast experience and skill in managing business operations, creating value, and driving results across all functions. He is experienced in building teams and aligning them around a common goal to drive long term value into projects and the communities in which they exist.



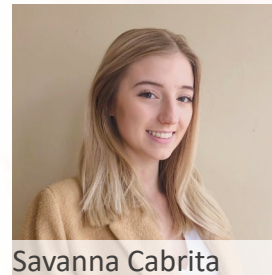
Jesse Halle (PGeo)
VP EXPLORATION

Over 25 years of experience in exploration management including technical senior/officer roles for junior mining companies as well as President and co-founder of Halle Geological Services Ltd. Jesse holds a B.Sc in Environmental Science from the University of Toronto and a B.Sc in Geology from Lakehead University. He has since worked on numerous base and precious metal deposits in Canada and Alaska, helping advance multiple porphyry copper-gold projects in Yukon and BC, including the Casino deposit and the Copper Mountain mine.



Emily Halle (PMP)
VP OPERATIONS

Geologist and Managing Director at Halle Geological Services Ltd with over a decade of successful exploration and program management experience focused on porphyry copper-gold systems in BC and Yukon, as well as mining and exploration projects in Africa, Alaska, and Eastern Canada, including operations management in industrial mining and processing. Emily holds a B.Comm and a B.Sc in Geology from Saint Mary's University, is a certified Project Management Professional, and a Fellow for the Society of Economic Geologists.



Savanna Cabrita
SUSTAINABILITY & ESG

Recent graduate of Dalhousie University earning a B.Sc Major in Environmental Science with Co-op, Minor in Business, and an Environmental Impact Assessment certificate. Savanna has a strong interest in sustainable mining and critical materials and has completed additional professional internships with the Halifax Regional Municipality, the Canadian Federal Government (SDTC) and Net Zero Atlantic (formally OERA). Her recent work involved researching sustainable development, green finance and public outreach.



Dr. Tony Barresi (PGeo)
TECHNICAL ADVISOR

Geoscientist with over 15 years of exploration experience conducting successful grassroots and brownfield programs specializing in porphyry, epithermal gold and volcanogenic massive sulfide deposits. Dr. Barresi obtained his B.Sc from Saint Mary's University and Ph.D from Dalhousie University and is involved in various exploration companies at the executive level including Director at ArcWest Exploration, past President and Director of QuestEx Gold and Copper Exploration, and Technical Advisor at Triumph Gold (past President and Director).

“*Nova Copper is building a diverse and adaptive team of industry experts, community leaders, and rising talent with over one hundred combined years of global experience in successful natural resource exploration, extraction, management and logistics.*”

– Harry Cabrita, President & CEO Nova Copper



hc@novacopper.ca | +1 (902) 880-7888