

ERDENE EXPANDS MINERALIZATION AT ZUUN MOD MOLYBDENUM-COPPER PROJECT IN KHUNDII DISTRICT

Press Release
Halifax, Nova Scotia
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Erdene Resource Development Corporation (TSX: ERD | MSE: ERDN) (“Erdene” or the “Company”) is pleased to announce results from a recently completed 12-hole drill program at its 100% owned Zuun Mod molybdenum-copper porphyry project in southwestern Mongolia, located within the Khundii Minerals District, 35 kilometres east of the Bayan Khundii Gold Project (See Figures 1 & 2).

Quotes from the Company

“Recent exploration at the Zuun Mod project, one of Asia’s largest undeveloped molybdenum-copper deposits, demonstrates the potential to significantly increase the scale of resources,” said Peter Akerley, Erdene’s President and CEO. “Results from multiple drill holes along the current resource boundary expanded mineralization and intersections within the core of the deposit exceeded the average block grades in the vicinity. Additionally, the discovery of resource-grade mineralization in an exploration hole 1.7 kilometres north of the deposit further demonstrates the upside to this large molybdenum-copper complex, which remains open in all directions.”

“Mongolia’s location, next to the largest molybdenum consumer, as well as its rapidly improving infrastructure, support the development potential of Zuun Mod,” continued Mr. Akerley. “Additionally, the importance of molybdenum and copper as critical minerals supporting the green transition adds further impetus for development.”

Zuun Mod Drilling Results

The 2023 Zuun Mod exploration program had two main objectives, both of which were accomplished:

1. Confirm continuity of the high-grade deposit core and expand mineralization on the periphery of the deposit defined in the 2011 NI 43-101 Resource Report prepared by RPMGlobal; and
2. Demonstrate potential for large scale expansion of mineralization associated with the Zuun Mod Molybdenum-Copper deposit.

Five holes, totaling 2,476 metres, were drilled to confirm continuity of higher-grade mineralization in the central part of the deposit (ZMD-131) and to expand continuity of Indicated Resources at the periphery of the deposit (ZMD-132 to 135). A further seven holes, totaling 1,619 metres (ZMD-136 to 142) tested targets across the greater Zuun Mod porphyry complex. Highlight intersections from the exploration program are shown in Table 1 below.

Table 1 – Summary of Significant Assay Results

Hole #	From	To	Width ⁽³⁾ (m)	% Cu	% Mo	MoEq% ⁽²⁾
ZMD-131	116	490	374	0.072	0.053	0.063
Incl	246	320	74	0.088	0.080	0.092
Incl	252	280	28	0.121	0.140	0.157
Incl	444	472	28	0.099	0.081	0.095
ZMD-132	260	310	50	0.081	0.040	0.051
Incl	260	282	22	0.088	0.060	0.072
ZMD-133	48	70	22	0.044	0.041	0.047
And	130	150	20	0.038	0.042	0.047
And	222	284	62	0.055	0.043	0.051
And	324	492	168	0.041	0.044	0.050
Incl	366	416	50	0.046	0.061	0.069
Incl	396	416	20	0.053	0.081	0.091
ZMD-134	74	116	42	0.047	0.040	0.047
ZMD-135	190	376.7 ⁽¹⁾	186.7	0.065	0.060	0.069
Incl	254	274	20	0.070	0.085	0.095
Incl	308	328	20	0.080	0.081	0.092
Incl	338	362	24	0.094	0.085	0.098
ZMD-139	240	252	12	0.035	0.067	0.072

(1) End of Hole

(2) MoEq is calculated based on US\$20/lb Mo and US\$3.70/lb Cu. Based on metallurgical tests to date, a Cu recovery factor of 75% was used.

(3) Reported intervals in this release are downhole apparent widths. Continued exploration is required to confirm anisotropy of mineralization and true thicknesses.

Hole ZMD-131 intersected a very wide zone of mineralization, returning 374 metres averaging 0.053% Mo and 0.072% Cu, with multiple zones (28 to 74 metres wide) averaging greater than 0.080% Mo, including a 28-metre interval (252 to 280 metres) averaging 0.140% Mo and 0.121% Cu. Considering the strong continuity of molybdenum mineralization in the high-grade core, the Company is studying the potential of higher density drill spacing to refine the block modelling of higher grade zones. The attached map and sections show the continuity of higher grade molybdenum mineralization around ZMD-131 (see Sections A & B – Figures 3 & 4).

All four holes on the periphery of Zuun Mod's Indicated Resources (ZMD-132 to 135), intersected resource-grade mineralization (>0.04% Mo) ranging in thickness from 40 to 187 metres. Highlights include ZMD-135, located along the north-western edge of the deposit, which intersected 187 metres of 0.06% Mo, including multiple intervals, between 20 and 24 metres in width, grading greater than 0.08% Mo. Hole ZMD-133 which was mineralized throughout most of its 551 metre length, starting less than 50 metres from surface (46 to 551 metres, 505 metres averaging 0.032% Mo), included a two metre interval exceeding 0.2% molybdenum.

In addition, an exploration hole, ZMD-139, located 1.7 kilometres north of the main molybdenum orebody (currently defined by ZMD-135), intersected a significant interval of molybdenum mineralization, (12 metres of 0.067% Mo) hosted by porphyritic granodiorite, typical of the Zuun Mod porphyry complex. No drilling has been carried out between the Zuun Mod deposit and this hole, opening up a large area of potential expansion. Geophysical resistivity data suggests a potential for continuity between these two areas (see Section C – Figure 5).

Several of the exploration holes (ZMD-140 to 142) within the northern Zuun Mod porphyry complex returned anomalous copper mineralization (greater than 0.05% Cu). ZMD-140, drilled in an open area south of a previous copper discovery, returned three, two-metre intervals exceeding 0.2% copper, and ended at 244 metres depth in copper mineralization (greater than 0.1% Cu). The northern portion of the Zuun Mod porphyry complex hosts a large area of disseminated copper mineralization within several kilometres of phyllic and potassic altered quartz monzonite and granodiorite intrusives. Multiple copper mineralized zones have been previously intersected in wide-spaced drilling, including 34 metres of 1.3% copper and 9.24 g/t silver from 308 to 342 metres (hole ZMD-121). This zone remains untested at depth and to the southwest, where it trends under andesite cover. The copper mineralized intervals are characterized by hydrothermally altered intrusive breccias with potassic altered and mineralized fragments suggesting a deeper source of the mineralization (see section D – Figure 6).

Approximately one kilometre west of the main deposit area, three holes (ZMD-136 to 138) in a 600 metre east-west target area, returned anomalous molybdenum, copper and silver. ZMD-137 returned increasing molybdenum over the final 40 metres (greater than 0.01% Mo) and a silver zone higher in the hole (4 metres of 38.6 g/t Ag, starting 62 metres downhole). Hole ZMD-138 returned anomalous molybdenum and copper, including 2 metres of 0.068% Mo at 144 metres depth, and near surface copper mineralization (0.2% Cu at 4 metres downhole).

About the Zuun Mod Molybdenum-Copper Project

The Zuun Mod Molybdenum-Copper Project is located in Bayankhongor Province, Mongolia, 180 kilometres northwest of a major mining district and the border with China, the world's largest copper and molybdenum consumer and steel producer. The 100% owned 6,041-hectare mining license, underpinning the Project, was issued in 2011 and is valid for up to an additional 60 years. The Project is located approximately 35 kilometres east of Erdene's Bayan Khundii Gold Project.

Erdene undertook a multi-year exploration program outlining the Zuun Mod molybdenum-copper deposit, within a large porphyry complex and also identified multiple copper and molybdenum prospects, within the outer rim of the 16-kilometre circumference porphyry complex.

In 2011, Minarco-MineConsult (now RPMGlobal) prepared an NI 43-101 resource estimate for a three-kilometre portion of the porphyry system, hosting the Zuun Mod Mo-Cu deposit. Table 2 provides a breakdown of the reported mineral resource estimate at a recommended cut-off grade ("cog") of 0.04% Mo.

Table 2. Zuun Mod Project Mineral Resource Estimate, June 2011

Resource Category	Quantity Mt	Cu %	Contained Cu Metal Mlbs	Mo %	Contained Mo Metal Mlbs
Measured	40	0.064	57.0	0.056	49.5
Indicated	178	0.070	273.7	0.057	224.0
M&I	218	0.069	330.7	0.057	273.5
Inferred	138	0.065	197.7	0.052	157.7

Source: NI 43-101 Technical Report, Zuun Mod Porphyry Molybdenum-Copper Project, Minarco-MineConsult, June 2011

Infrastructure Developments in Southwestern Mongolia

The Government of Mongolia (“GoM”) is actively implementing its New Recovery Policy through stimulation of FDI and increased trade. As part of these initiatives, the GoM is looking to improve infrastructure at the ports of Shivee Khuren, Gashuunsukhait, and Bichigt. On May 27, construction commenced at the Shivee Khuren-Ceke rail crossing, located in Gurvan Tes Soum of Umnugovi province, adjacent the Chinese port of Ceke which is scheduled to be completed in late 2023. This project represents the first installation of standard gauge track in the Country. This border crossing is approximately 180 km from Erdene’s Zuun Mod project. In the future, Mongolia Western vertical railway network is envisioned to connect Shinejinst Soum to the Shivee Khuren port bringing rail to within 30 km of Zuun Mod.

The GoM has also announced plans to build a hydro power plant in Erdeneburen Soum in Khovd Province in cooperation with Chinese investors. This project would support economic development in western Mongolia and provide a potential source of renewable electricity for Zuun Mod.

On June 27, 2023, Mongolia and the United States signed a Memorandum of Understanding (“MOU”) to advance the supply chain of critical minerals in the Indo-Pacific region. Under the terms of this MOU, the United States has pledged to develop the Mongolian critical minerals sector, including, by encouraging private sector investment.

About Molybdenum

Molybdenum is a critical component in high strength, anti-corrosion alloys used in stainless steel, super alloys and as a component of many technologies associated with the green energy transition as well as oil and gas pipelines and aerospace. Molybdenum is lightweight, robust, and extremely resilient to high temperatures and corrosion while enhancing strength, hardenability, weldability and temperature strength.

Global molybdenum production was 578 million pounds in 2022, while global usage rose 3% to 631 million pounds from 614 million pounds the previous year. Although molybdenum output was largely stable for the past 5 years, production cuts at major mines, delays in commissioning new projects and degrading resource quality in long life molybdenum assets has led to shortages and a severe increase in the molybdenum price, reaching all time highs in early 2023. Should the current level of growth be maintained an additional 50M lbs of shortfall is projected over the next three years. Regional consumption (China, Japan and Korea) exceeds 50% of the global supply and although

China is the world's largest producer, increasing production by 12% in 2022, it has been unable to meet demand with a shortfall of approximately 20M lbs in 2022. (IMOA 03/04/23)

In addition, molybdenum is seeing strong demand from both the renewables and traditional energy sector as its used in multiple clean energy generation and storage technologies. The World Bank report "Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition" named molybdenum as one of the six cross-cutting critical minerals needed in all future green technologies (2020), while the International Energy Agency also named molybdenum in 2021 as a critical mineral for the green energy transition.

About Erdene

Erdene Resource Development Corp. is a Canada-based resource company focused on the acquisition, exploration, and development of precious and base metals in underexplored and highly prospective Mongolia. The Company has interests in three mining licenses and an exploration license in Southwest Mongolia, where exploration success has led to the discovery and definition of the Khundii Minerals District. Erdene Resource Development Corp. is listed on the Toronto and the Mongolian stock exchanges. Further information is available at www.erdene.com. Important information may be disseminated exclusively via the website; investors should consult the site to access this information.

Qualified Person

Peter Dalton, P.Geo. (Nova Scotia), Senior Geologist for Erdene, is the Qualified Person as that term is defined in National Instrument 43-101 and has reviewed and approved the technical information contained in this news release. All samples have been assayed at SGS Laboratory in Ulaanbaatar, Mongolia. In addition to internal checks by SGS Laboratory, the Company incorporates a QA/QC sample protocol utilizing prepared standards and blanks. All samples undergo combined multi-element ICP-OES (Inductively coupled plasma optical emission spectroscopy) and ICP-MS (Inductively coupled plasma mass spectrometry) analysis for 60 elements.

Erdene's drill core sampling protocol consisted of collection of samples over 2 metre intervals over the entire length of the drill hole, excluding minor post-mineral lithologies and dykes. Sample intervals were based on meterage, not geological controls, or mineralization. All drill core was cut in half with a diamond saw, with half of the core placed in sample bags and the remaining half securely retained in core boxes at Erdene's Bayan Khundii exploration camp. All samples were organized into batches of 30 including a commercially prepared standard, blank and either a field duplicate, consisting of two quarter-core intervals, or a laboratory duplicate. Sample batches were periodically shipped directly to SGS in Ulaanbaatar via Erdene's logistical contractor, Monrud Co. Ltd.

Reported intervals are apparent thicknesses, i.e., downhole widths. The current Zuun Mod drill holes (reported in this release) are all dipping at 85 degrees. Additional study is required to confirm true widths. Reported grades for intervals are weighted averages based on length of sampling intervals. No top cut has been applied.

Forward-Looking Statements

Certain information regarding Erdene contained herein may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements may include estimates, plans, expectations, opinions, forecasts, projections, guidance or other statements that are not statements of fact. Although Erdene believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to have been correct. Erdene cautions that actual performance will be affected by a number of factors, most of which are beyond its control, and that future events and results may vary substantially from what Erdene currently foresees. Factors that could cause actual results to differ materially from those in forward-looking statements include the ability to obtain required third party approvals, market prices, exploitation and exploration results, continued availability of capital and financing and general economic, market or business conditions. The forward-looking statements are expressly qualified in their entirety by this cautionary statement. The information contained herein is stated as of the current date and is subject to change after that date. The Company does not assume the obligation to revise or update these forward-looking statements, except as may be required under applicable securities laws.

NO REGULATORY AUTHORITY HAS APPROVED OR DISAPPROVED THE CONTENTS OF THIS RELEASE

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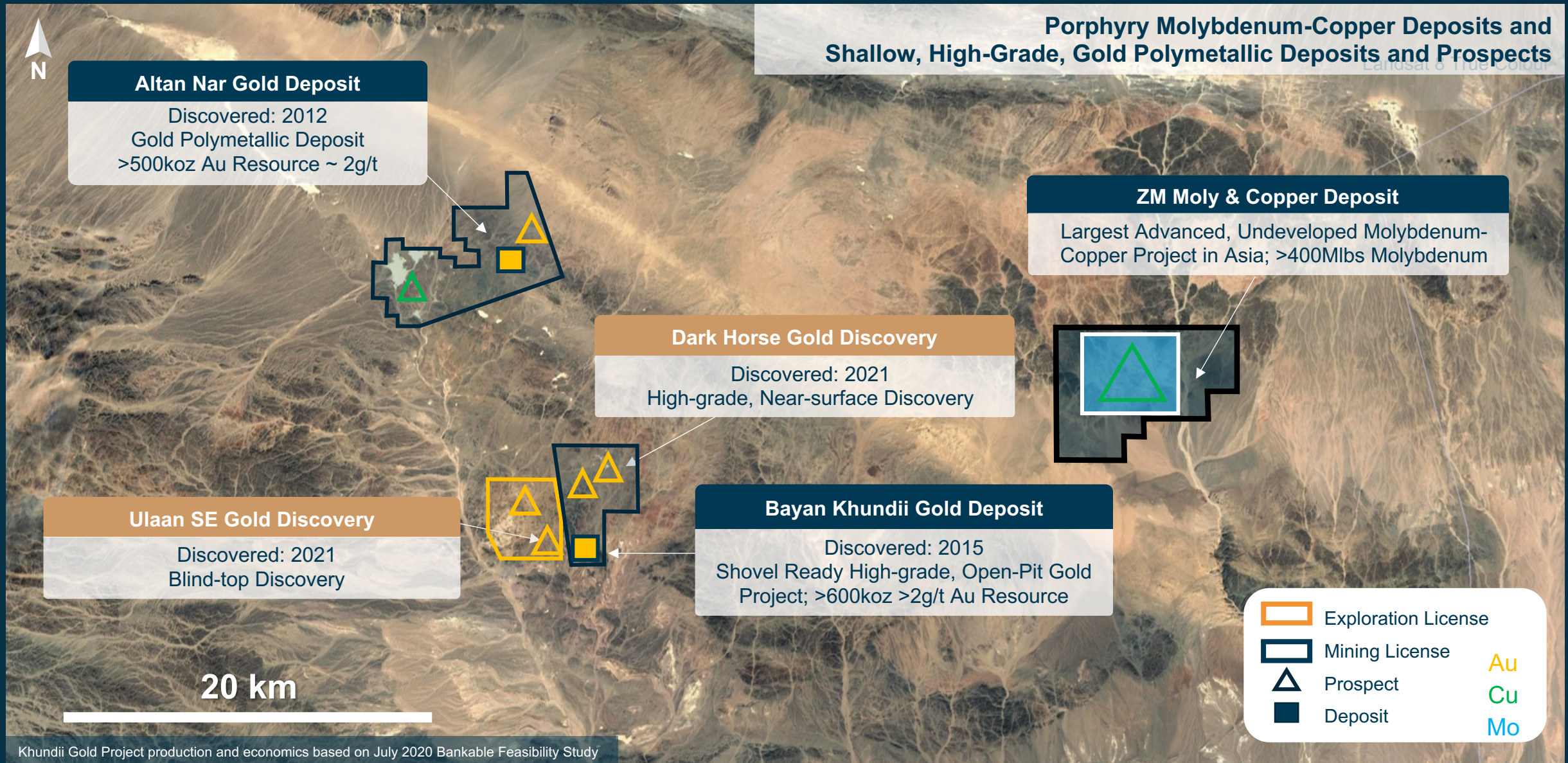
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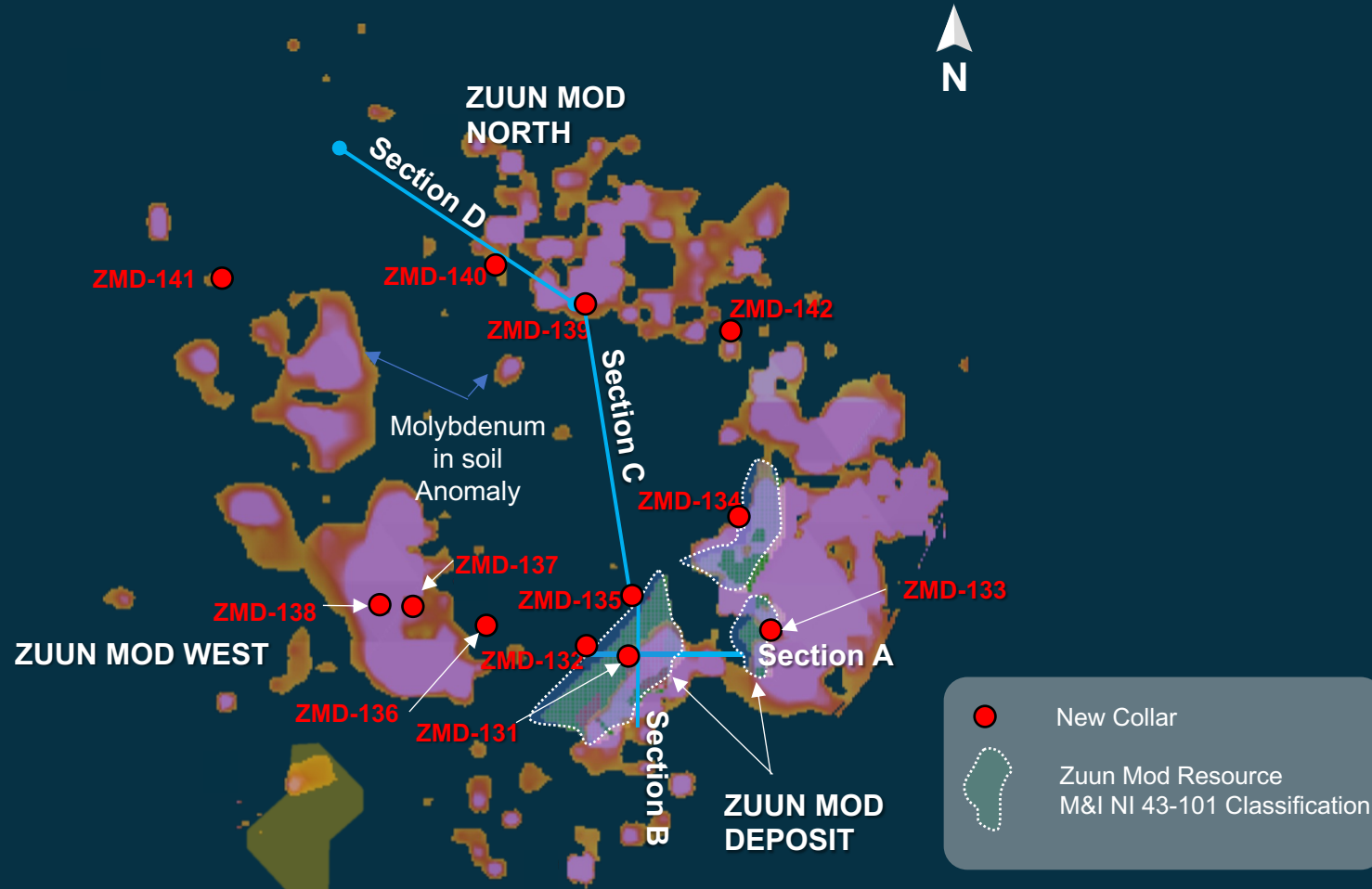
THE KHUNDII MINERALS DISTRICT – MOLYBDENUM-COPPER PROJECT

Molybdenum Copper Deposit, Four Gold Discoveries, and Multiple High-Priority Targets



ZUUN MOD PORPHYRY MO-CU PROJECT PLAN MAP

Molybdenum Soil Anomaly & Q2 2023 Drill Plan Map



ZMD-131: 277.6m
(0.83% Mo & 0.15% Cu(2m))

ZMD-131: 338.8m
(0.10% Mo & 0.06% Cu(2m))



43-101 Resource Estimate Cutoff 0.04% Mo

Ordinary Kriging Estimate Zuun Mod

NI 43-101 Classification	Tonnage Mt	Mo %	Mo lbs (000's)	Cu %	Cu lbs (000's)	Re PPM	Re lbs (000's)
Measured	40	0.056	49,500	0.064	57,000	0.225	20
Indicated	178	0.057	224,000	0.070	273,700	0.242	95
Total M&I	218	0.057	273,500	0.069	330,700	0.239	115

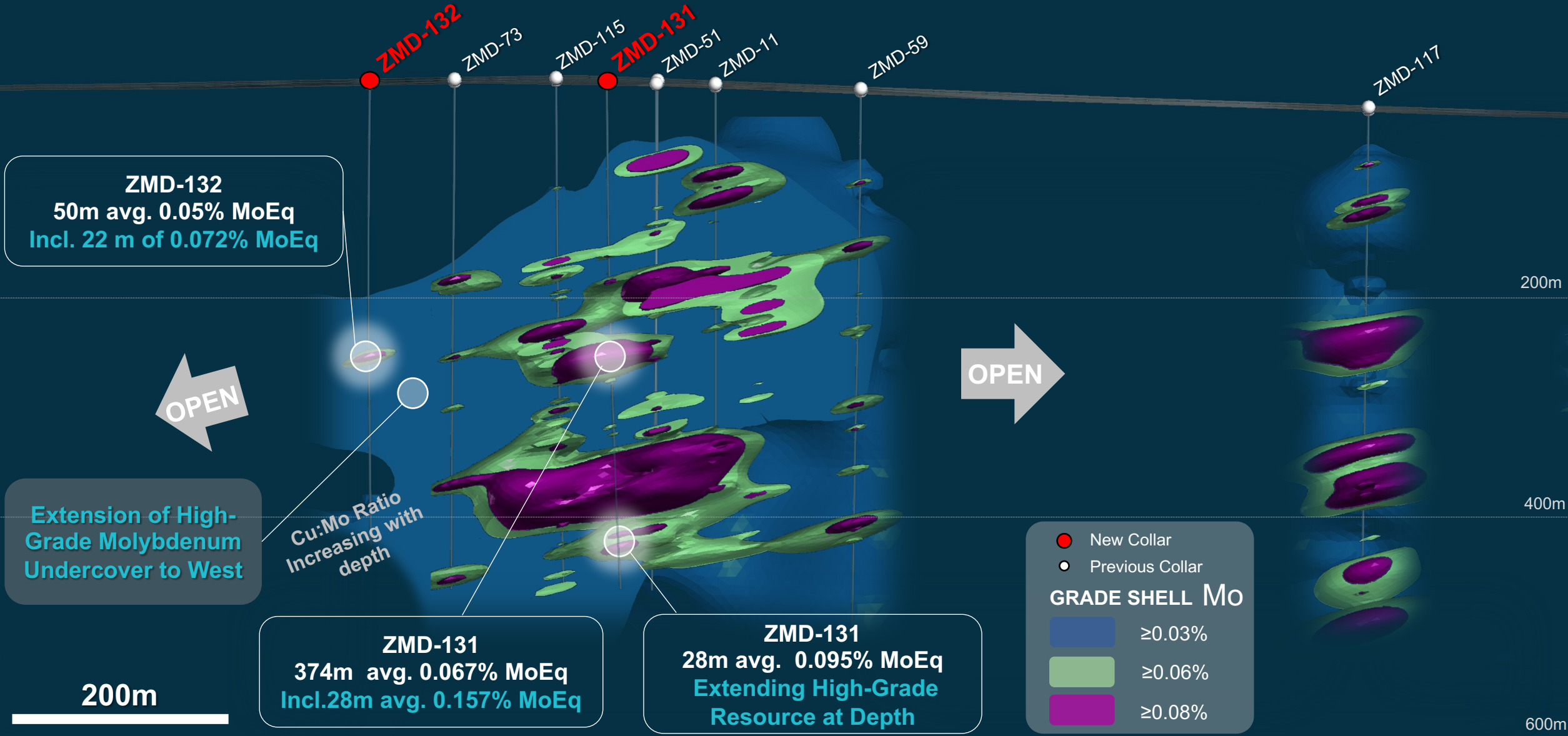
1 km

1cm

1cm

MOLYBDENUM RESOURCE CONTINUITY & EXPANSION UNDERCOVER

Zuun Mod Section A – Looking North



ZMD-132
50m avg. 0.05% MoEq
Incl. 22 m of 0.072% MoEq

Extension of High-Grade Molybdenum Undercover to West

ZMD-131
374m avg. 0.067% MoEq
Incl. 28m avg. 0.157% MoEq

ZMD-131
28m avg. 0.095% MoEq
Extending High-Grade Resource at Depth

- New Collar
- Previous Collar

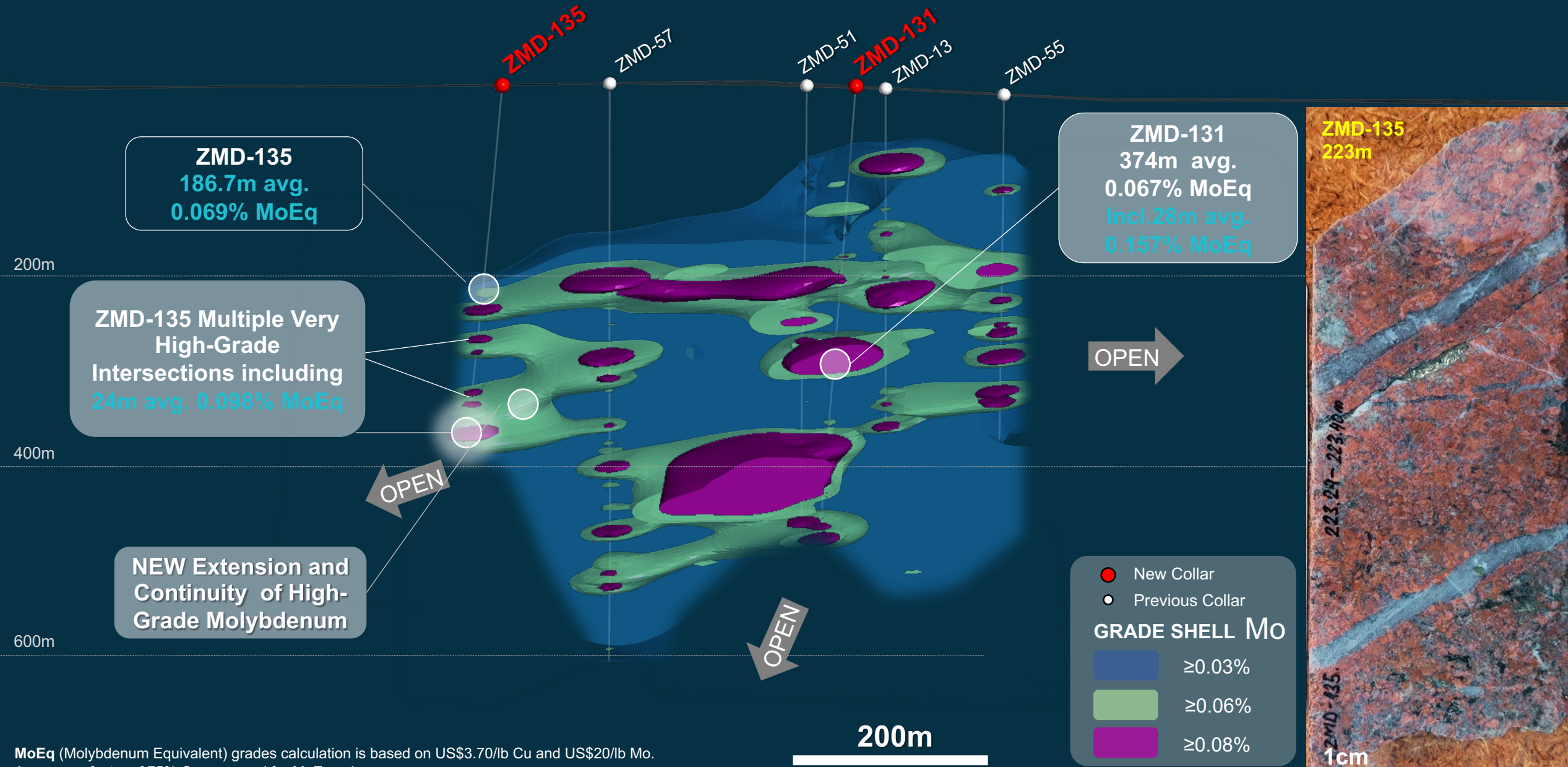
GRADE SHELL MO

- ≥0.03%
- ≥0.06%
- ≥0.08%

MoEq (Molybdenum Equivalent) grades calculation is based on US\$3.70/lb Cu and US\$20/lb Mo. A recovery factor of 75% Cu was used for MoEq values.

STEP-OUT EXTENSION AND CONTINUITY OF HIGH-GRADE MOLYBDENUM

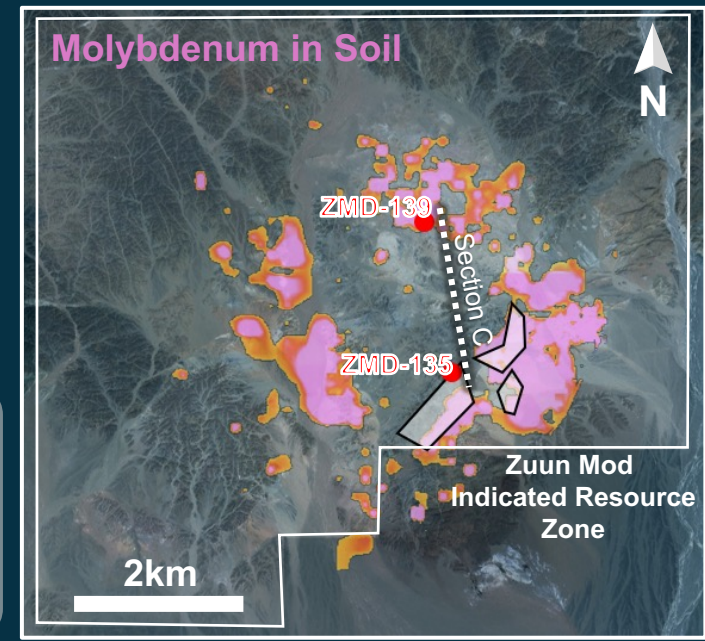
Zuun Mod Section B – Looking East



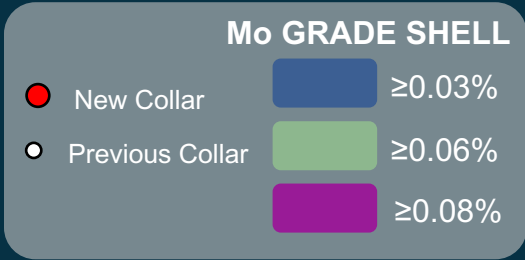
MoEq (Molybdenum Equivalent) grades calculation is based on US\$3.70/lb Cu and US\$20/lb Mo. A recovery factor of 75% Cu was used for MoEq values.

INTERSECTION OF PORPHYRITIC GRANODIORITE HOSTING RESOURCE-GRADE MOLYBDENUM 1.7KM FROM CURRENT ZUUN MOD RESOURCE

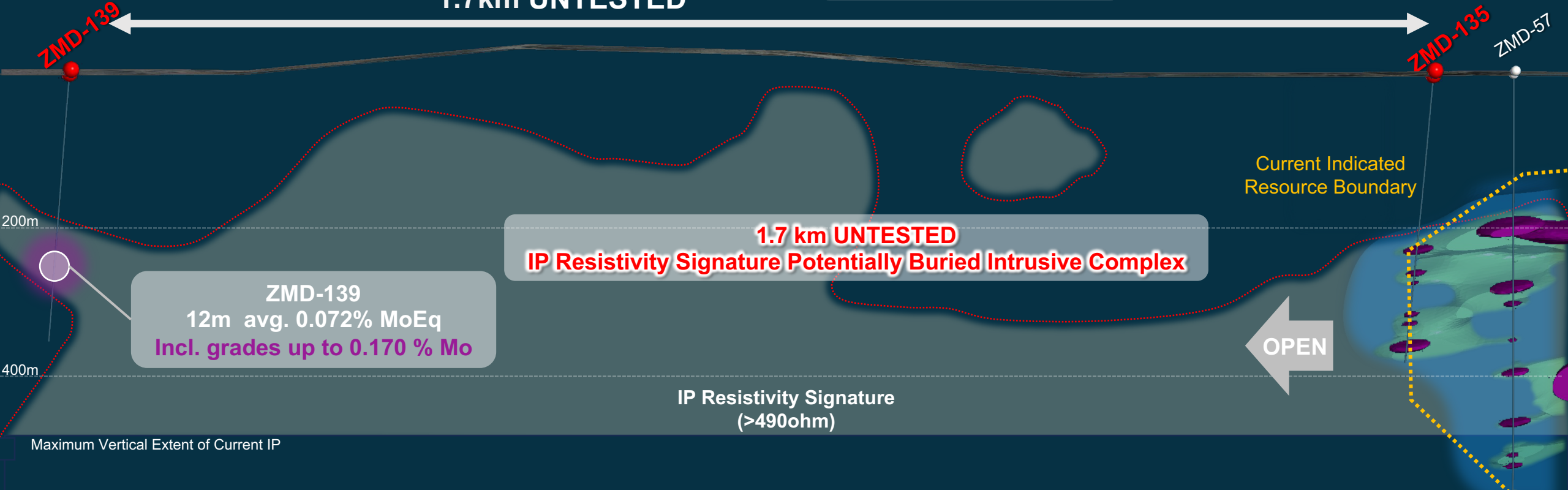
Zuun Mod Section C – Looking Northeast



ZMD-139
NEW Blind Top
Molybdenum Discovery



1.7km UNTESTED



ZMD-139
 12m avg. 0.072% MoEq
 Incl. grades up to 0.170 % Mo

1.7 km UNTESTED
IP Resistivity Signature Potentially Buried Intrusive Complex

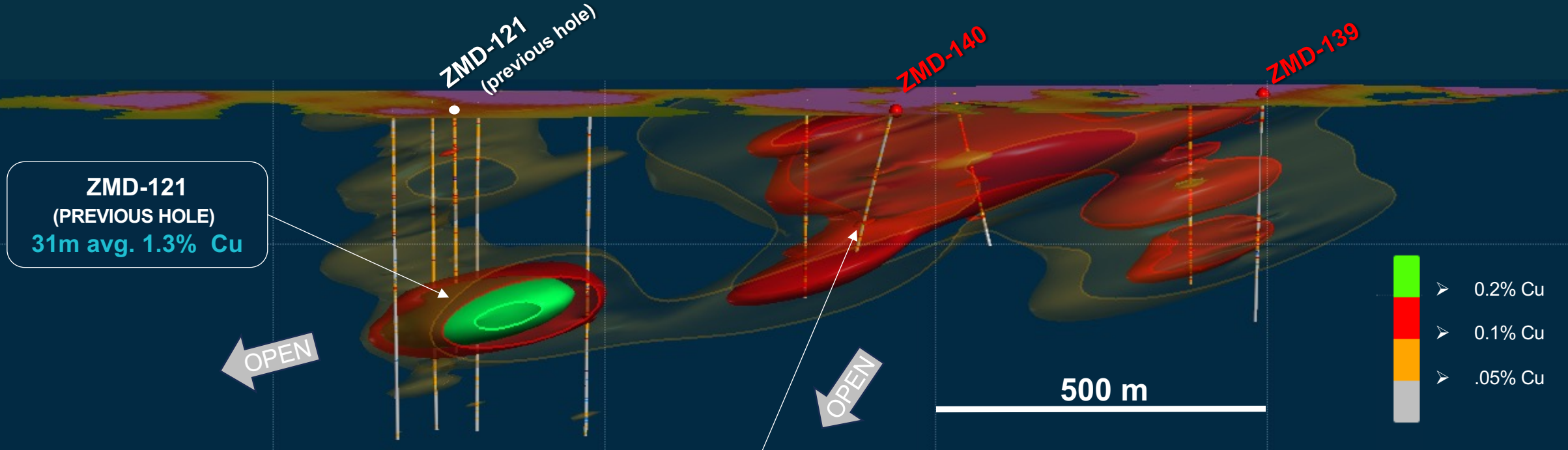
OPEN

IP Resistivity Signature
 (>490ohm)

Maximum Vertical Extent of Current IP

NORTHERN ZUUN MOD COPPER ZONE – POTENTIAL EXPANSION OPPORTUNITIES

Zuun Mod North Section D – Looking North



ZMD-121
(PREVIOUS HOLE)
31m avg. 1.3% Cu

OPEN

OPEN

500 m

0.2% Cu
0.1% Cu
0.05% Cu

ZMD-140: Targeted untested southern portion of copper zone in northern ZM; Hydrothermal breccia's with strongly silicified granodiorite fragments with quartz pyrite veins and anomalous copper exceeding 0.2% copper over 4 metres.

