



# NI 43-101 Technical Report

## Zuun Mod Molybdenum-Copper Project, Mongolia

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## Basis of Report

This report has been prepared by SLR Advisory Asia Limited (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Erdene Resource Development Corp. (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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## Appendices

### Appendix A Important Information About this Document



## Acronyms and Abbreviations

Abbreviation	Description
Company	means ERD - Erdene Resource Development. "ERD" or "the Client".
concentrate	a powdery product containing higher concentrations of minerals resulting from initial processing of mined ore to remove some waste materials; a concentrate is a semi-finished product, which would still be subject to further processing, such as smelting, to effect recovery of metal
contained metal	refers to the amount of pure metal equivalent estimated to be contained in the material based on the metal grade of the material.
DEM	digital elevation model
element	Chemical symbols used in this report. Mo – Molybdenum; Cu - Copper, Re - Rhenium, S - Sulfur
exploration	activity to identify the location, volume and quality of a mineral occurrence
Exploration Target/Results	includes data and information generated by exploration programmes that may be of use to investors. The reporting of such information is common in the early stages of exploration and is usually based on limited surface chip sampling, geochemical and geophysical surveys. Discussion of target size and type must be expressed so that it cannot be misrepresented as an estimate of Mineral Resources or Ore Reserves.
exploration right	the licensed right to identify the location, volume and quality of a mineral occurrence
flotation	is a separation method for to the recovery of minerals using reagents to create a froth that collects target minerals
gangue	is a mining term for waste rock
grade	any physical or chemical measurement of the concentration of the material of interest in samples or product. The units of measurement should be stated when figures are reported
grind	means to crush, pulverize, or reduce to powder by friction, especially by rubbing between two hard surfaces
Grdi	Granodiorite
In situ	means rock or mineralization in place in the ground
In Situ Quantities	estimates of total in ground tonnes and grade which meet the requirements of the PRC Code or other international codes for reserves however do not meet either NI 43-101 or Joint Ore Reserves Committee's recommendations
IDW	Inverse Distance Weighting grade interpolation method
Measured Mineral Resource	is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.
Indicated Mineral Resource	is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
Inferred Mineral Resource	is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, however not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
ITR	stands for Independent Technical Review
ITRR	stands for Independent Technical Review Report
Km	stands for kilometre
Kt	stands for thousand tonnes



Abbreviation	Description
Lb	stands for pound, a unit of weight equal to 453.592 grams or 1 tonne equals 2,204.64 lb
m	stands for metre
M	stands for million
metallurgy	Physical and/or chemical separation of constituents of interest from a larger mass of material. Methods employed to prepare a final marketable product from material as mined. Examples include screening, flotation, magnetic separation, leaching, washing, roasting etc.
mine production	is the total raw production from any particular mine
Mineable Quantities	Estimates of in ground tonnes and grades which are recoverable by mining
Mineral Reserves	is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.
mineral right	for purposes of this Projects, mineral right includes exploration right, mining right, and leasehold exploration or mining right
mineralization	any single mineral or combination of minerals occurring in a mass, or deposit, of economic interest. The term is intended to cover all forms in which mineralization might occur, whether by class of deposit, mode of occurrence, genesis or composition
mining rights	means the rights to mine mineral resources and obtain mineral products in areas where mining activities are licensed
NRT	North racetrack zone
RPM	refers to RPMGlobal Asia Limited
mRL	means meters above sea level
Mt	stands for million tonnes
Mtpa	means million tonnes per annum
Mlbs	stands for million pounds
NI 43-101	National Instrument 43-101
NN	Neareast neighbour grade interpolation method.
OC	open cut mining which is mining from a pit open to surface and usually carried out by stripping of overburden materials
Ore	is the portion of a reserve from which a metal or valuable mineral can be extracted profitably under current or immediately foreseeable economic conditions
ore processing	is the process through which physical or chemical properties, such as density, surface reactivity, magnetism and colour, are utilized to separate and capture the useful components of ore, which are then concentrated or purified by means of flotation, magnetic selection, electric selection, physical selection, chemical selection, reselection, and combined methods
ore selection	the process used during mining to separate valuable ore from waste material or barren rock residue
ore t	stands for ore tonne
OK	Ordinary Kriging grade interpolation method
preliminary feasibility study	is a comprehensive study of the viability of a mineral Project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve.
primary mineral deposits	are mineral deposits formed directly from magmas or hydrothermal processes
Probable Mineral Reserve	is the economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical,



Abbreviation	Description
	economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.
Project	means a deposit which is in the pre-operating phase of development and, subject to capital investment, feasibility investigations, statutory and management approvals and business considerations, may be commissioned as a mine
Proven Mineral Reserve	is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.
QMZ	Quartz Monzonite
raw ore	is ore that has been mined and crushed in an in-pit crusher, however has not been processed further
recovery	The percentage of material of initial interest that is extracted during mining and/or processing. A measure of mining or processing efficiency
regolith	is a geological term for a cover of soil and rock fragments overlying bedrock
reserves	the [economically] mineable part of a Measured and/or Indicated Mineral Resource, including diluting materials and allowances for losses which may occur when the material is mined
resources	a concentration or occurrence of a material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity such that there are reasonable Projects for eventual economic extraction
Resources	Resources which have been estimated in accordance with the recommendations of the guidelines provided in the JORC or NI 43-101 Standards of Disclosure for Mineral Projects.
RL	means Reduced Level, an elevation above sea level
RMB	stands for Chinese Renminbi Currency Unit;
RMB/t	stands for Chinese Renminbi per material tonne
ROM	stands for run-of-mine, being material as mined before beneficiation
secondary mineral deposits	are mineral deposits formed or modified as a result of weathering or erosion of primary mineral deposits
shaft	a vertical excavation from the surface to provide access to the underground mine workings
sq.km	square Kilometre
t	stands for tonne
t/bcm	stands for tonnes per bank cubic m (i.e. tonnes in situ) a unit of density
tonnage	An expression of the amount of material of interest irrespective of the units of measurement (which should be stated when figures are reported)
tonne	refers to metric tonne
tpa	stands for tonnes per annum
tpd	stands for tonnes per day
UG	underground mining which is an opening in the earth accessed via shafts, declines or adits below the land surface to extract minerals
upgrade ratio	is a processing factor meaning ROM Grade% / Product Grade %
USD	stands for United States dollars
\$	refers to United States dollar currency Unit
SLR	SLR Advisory Asia Limited
SRT	South Trace Track Zone
Stockwork	Stockwork zone.
South Corridor	Main Mineral Resource area of Zuun Mod Project
Bd	bulk density t/m <sup>3</sup>



# 1. Summary

## 1.1 Executive Summary

SLR Advisory Asia Limited (SLR) (previously RPMGlobal Asia Limited) has been engaged by Erdene Resource Development Corp. (ERD or the Client) to complete a NI 43-101 Technical Report (hereafter referred to as the Report) of the Zuun Mod Molybdenum-Copper Project located in Bayankhongor province, Mongolia. RPM's Global Mining Advisory business was acquired by SLR Consulting Australia Pty Ltd effective 2<sup>nd</sup> April 2025. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects.

Erdene owns interest in three mining licenses and an exploration license including that hosting the Zuun Mod deposit, in a region known as the Khundii Minerals District. Five deposits have been identified within the district: Bayan Khundii, Altan Nar, Dark Horse, Zuun Mod and Ulaan. The Bayan Khundii mine is an open pit gold mine that commenced production in 2025 and uses a conventional drill, blast load and haul method. It comprises an open pit mine with a CIP (carbon-in-pulp) processing facility which produces gold in dore.

The Zuun Mod project is an undeveloped deposit with no existing infrastructure and comprises a major Mineral Resource consisting of a single zone of mineralisation defined with broad spaced diamond drilling from surface to a depth of 850 m. It is located 35 km east of the Bayan Khundii gold mine.

SLR prepared this Technical report for the purpose of the Report's filing on SEDAR+ in accordance with the requirements of 'Canadian National Instrument 43-101' ("NI 43-101") of the Canadian Securities Administrators and the Company's reporting obligations as a Reporting Issuer in Canada. The Report is an update of the NI 43-101 Technical Report for the Zuun Mod mineral resource prepared in June 2011.

The Zuun Mod Project is located within a single Mongolian mining license, MV-016836, named Khuvyn Khar. Erdene, through its wholly owned subsidiary, Anian Resources LLC, holds a 100% interest in the Khuvyn Khar mineral mining license subject to a 1.5% net smelter revenue (NSR) royalty held by Versamet Royalties Corporation ("Versamet"). Versamet is entitled to receive, after return of Invested Capital, a 1.5% NSR royalty on product sales from Zuun Mod. However, Erdene has the right to "buy-down" the NSR royalty for Zuun Mod, at any time beginning two years after the commencement of commercial production at Zuun Mod.

The type and styles of alteration and mineralisation within the Project are consistent with many characteristics documented from other porphyry-type deposits. Porphyry-type mineralisation is usually accompanied by a prograde alteration assemblage characterised by potassium feldspar, secondary biotite and magnetite, referred to as "potassic alteration". Another common alteration type is identified by a retrograde hydrothermal mineral assemblage of quartz-pyrite-sericite (QSP) or "phyllitic" alteration. This type of alteration often occurs marginal to the zones of highest-grade mineralisation and, in some deposits, plays host to the highest grades. Both alteration types are ubiquitous within Mo-Cu-Re mineralised zones within the Project.

SLR was required to prepare a Mineral Resource estimate for ERD for the Project using data available as at 1<sup>st</sup> of August 2025. The Mineral Resource estimate was commissioned to incorporate data from re-interpretation of an anisotropic trend identified during re-logging historical holes and 12 additional oriented core holes drilled since the previous estimate was completed in June 2011. All recent holes were targeted to identify orientation and trends of higher grade mineralisation and drilled in infill fashion to the previously defined mineralisation.

The Mineral Resource estimate only examines the mineralisation occurring at South Corridor. Potential mineralised zones were identified outside the current modelling area however they are in an early stage of exploration with broad drill spacing and are therefore not included in this estimate.

Zuun Mod mineralisation is hosted in a 3,700 m long and 1,150 m wide zone and mineralisation sub-crops in all zones, with cover limited to a surficial veneer of unconsolidated sands typically 0.2 to 4 m thick.



As of 1<sup>st</sup> of September 2025, the Zuun Mod Mo-Cu Project Mineral Resources are estimated as follows: Open pit Measured Mineral Resource are estimated to total 45.8 million dry metric tonnes (Mt) grading 0.057% Mo and 0.062% Cu containing 57.7-million-pound (Mlbs) Mo and 62.2-million-pound (Mlbs) Cu, Indicated Mineral Resource are estimated to total 225.3 Mt grading 0.056% Mo and 0.065% Cu containing 275.9 Mlbs Mo and 322.0 Mlbs Cu and Inferred Mineral Resource are estimated to total approximately 269.1 Mt grading 0.051% Mo and 0.059% Cu containing approximately 300.0 Mlbs Mo and 350.7 Mlbs Cu.

## 1.2 Technical Summary

### 1.2.1 Property Description and Location

The Project is located in Shinjist soum (sub-province) of Bayankhongor Province, Mongolia. The Property is located approximately 950 km southwest of Ulaanbaatar, Mongolia and 215 km north of the Chinese border and can be accessed all year round by dirt roads. The project is centred at 99° 14' 40"E and 43° 59' 20"N (lat/long WGS 84) or 519,600 mE and 4,870,670 mN (UTM Zone 47 N).

### 1.2.2 Land Tenure

The Project is located within a single mining license MV-016836 named Khuvyn Khar and encompasses an area of 6,041.03 hectares (Ha) or 60.41 square kilometres.

The Mineral Resources Authority of Mongolia, on behalf of the Mongolian Government, granted Mining License MV-016836 (Khuvyn Khar) to Anian Resource on the 5th of May 2011 and the mining licenses are valid for 30 years from the grant date and eligible for two additional 20-year extensions based on certain criteria being met. The Project was acquired from Gallant Minerals Limited in 2005 and is subject to a net smelter returns royalty of 1.5%, currently held by Versamet, subject to a buy-down provision.

### 1.2.3 Existing Infrastructure

Erdene owns interests in several mining and exploration licenses near Zuun Mod, in a region referred to as the Khundii Minerals District. Five deposits hosting mineral resources have been identified within the district: Bayan Khundii, Altan Nar, Dark Horse, Zuun Mod and Ulaan.

The region is one of the least densely populated areas in Mongolia, with limited infrastructure, however, the nearby, Bayan Khundii open pit gold mine entered production in September 2025. This mine, 35 km west of the Zuun Mod deposit, has rapidly developing infrastructure including a permanent power line sourced from China, upgraded access roads, water wells, CIP processing Plant and dedicated camp for housing. Additionally, a company developing a coking coal mine, located 65 kilometres northwest of Zuun Mod, is currently constructing a coal transport road to the China border passing within 50 kilometres to the east of Zuun Mod.

The Zuun Mod property is an undeveloped deposit with no existing infrastructure. The broader area has limited use as open range grazing by nomadic herders. The township of Shinejinst is located approximately 60 km to the north with a full range of services such as small markets, commercial bank, post office, town hospital, local governance building, elementary school and 35 kV power line.

Exploration and mining activities can be conducted year round, only requiring proper water run-off mitigation strategies.

### 1.2.4 History

Reconnaissance sampling of tenements in early 2000 generated several significant geochemical anomalies of Cu and Mo coinciding with broad alteration zones, and follow-up prospecting and drilling led to discovery of the Zuun Mod prospect. The licence was held by Gallant Minerals LLC which was acquired by Erdene in 2005.

Extensive exploration of the Project was completed by Erdene since 2005. The exploration methods used include geological mapping, surface soil and rock chip geochemical sampling, trenching, ground magnetic and IP geophysical surveys and drilling.



In 2007, Erdene commenced a systematic resource delineation program designed to define Mineral Resources compliant with NI 43-101 for the South Corridor area, which culminated in the Technical Report dated June 2009. A total of 29 holes (ZMD 18 to 46) were drilled as part of stage 1 of this program, while an additional 35 drill holes (ZMD 47 to 81) were completed in December 2007. Phase III drilling was completed in October 2008 and consisted of an additional 28 drill holes (ZMD 82 to 109).

Between 2009 and 2010, Erdene completed several infill drill holes in addition to extending two existing holes to define mineralisation at depth. During 2010 a total of five infill and three exploration holes were completed while eight holes were deepened.

In 2011 and 2015 limited drilling programs (total of 8 holes) were completed in the northern Khuvyn Khar copper prospect.

In 2023, ERD completed 12 oriented core holes at Zuun Mod mining license of which 5 holes were drilled at the main Zuun Mod deposit area while the remaining 7 holes were drilled to test the broader prospect areas.

### 1.2.5 Geological Setting, Mineralisation and Deposit Types

The Zuun Mod property lies within the Trans Altai (Edren) terrane, dominated in this area by a Devonian to Carboniferous Island arc volcano plutonic assemblage bounded to the north by coeval marine sedimentary units possibly deposited in a back-arc basin.

The majority of exploration has concentrated on the NE trending South Corridor area which extends over 3.6 km and contains three target areas identified by Erdene. These include the Stockwork and Racetrack zones, located S to N along the NE trending South Corridor.

- **North Racetrack Zone:** The granodiorite in the north-eastern half of the NRT zone is frequently cut by dykes ranging from massive quartz to dacite porphyry. Alteration and mineralisation at depth in the NRT zone are predominantly contained within stockwork and sheeted quartz veins hosted within phyllic and potassic altered granodiorite.
- **South Racetrack Zone:** The SRT zone is predominantly underlain by quartz monzonite that is overlain to the NW by andesite and in contact with syenite to the south. Both the andesite and syenite units are mineralised, although they typically contain lower concentrations of Mo. Intersections of mineralisation at depth are predominantly contained within stockwork and sheeted quartz veins hosted within potassic altered quartz monzonite and lesser syenite.
- **Stockwork Zone:** The Stock work zone is predominantly underlain by quartz monzonite with a number of holes intersecting significant units of granodiorite, particularly in the upper portions of the holes. Mo and Cu mineralisation occurs within quartz stockwork veins and as replacements of mafic minerals in intensely altered quartz monzonite and granodiorite.

Mo mineralisation within the Project occurs predominantly as molybdenite ( $\text{MoS}_2$ ) contained within and proximal to stockwork and sheeted quartz veins. Proximal to the veins, molybdenite can occur as fine to coarse grains disseminated within a matrix of a pervasive potassic or phyllic altered quartz monzonite, monzo-granite or granodiorite. Mo mineralised quartz veins are typically characterised by a well-defined potassic alteration halo (or selvage) which may extend up to several centimetres from the vein wall. Where stockwork and sheeted quartz vein densities are high, the potassic vein selvages coalesce to produce pervasive potassic-altered rock. The molybdenite mineralisation is commonly accompanied by chalcopyrite and occasionally pyrite.

Chalcopyrite ( $\text{CuFeS}_2$ ) is the predominant Cu mineral and occurs as fine to coarse-grained disseminations that generally overprint and partly replace mafic minerals within the intrusions, particularly in secondary magnetite and biotite. In addition, chalcopyrite occurs as medium to coarse-grained blebs emplaced along quartz vein selvages, as thin veinlet infill with pyrite, and as coarse-grained infill within angular-shaped open spaces and vughs (within massive quartz veins).

Rhenium commonly occurs within porphyry systems in molybdenite as a substitute for Mo. Limited assaying has been completed for Re, with grades ranging between 0.25 ppm to 10.85 ppm at the Zuun Mod deposit.



Mineralisation and alteration assemblages are interpreted to be indicative of a Mo-Cu Porphyry system.

### 1.2.6 Exploration and Sampling

All drilling at Zuun Mod has been carried out using conventional wireline diamond drilling techniques recovering PQ to NQ size core, with generally excellent recovery (98%). Core sizes varied from NQ size which was used during the pre-Erdene drilling and HQ core size utilized by Erdene for the majority of the drilling. The drilling completed by Erdene was predominantly HQ diameter core, reducing to NQ where necessary due to ground conditions.

Drilling has been carried out on an E-W grid with hole spacing ranging from 50 m to 200 m but typically averaging 100 m. All data provided was from surface diamond drilling and surface trenching conducted between 2003 and 2023, with a total of 155 diamond holes for 53,273 m and 14 trenches for 1,604 m included. A subset of 113 holes for 41,250 m was used in the Mineral Resource.

With the exception of two Gallant holes (KKMD-06 and -11) and one Erdene hole ZMD-02, all pre-2023 holes were drilled vertically. Thirty-seven out of 155 holes have single downhole survey measurements, while the remaining holes have more than two downhole survey measurements. Holes drilled in 2023 were drilled toward the north with dip angles of 60 to 85 degrees. Holes were surveyed at 50 to 100 m intervals. There are no drilling, sampling, or recovery factors that would materially impact the accuracy and reliability of the results.

Due to the dissemination of Mo grades throughout the porphyry complex, the entire drill hole was sampled at continuous 2 m intervals, regardless of lithological and mineralogical variations except for barren dykes. The minimum sample size was 0.6 m, although very few samples were less than or more than 2 m in length.

All samples were halved core cut with a core saw, and the core was dispatched to laboratories for sample preparation. All cutting, bagging and sample dispatches were completed by the local exploration teams under the direction of a senior geologist from the Company. The remaining half was stored in appropriately marked core boxes.

The sample preparation for all programs was completed at SGS in Ulaanbaatar. Analytical processing was completed at a variety of laboratories.

The quality control measures for the progressive exploration programs included;

- WMC (Gallant Mineral LLC) - Data quality was monitored by insertion of blanks, standards and duplicates.
- WMC (Gallant Mineral LLC) - Diamond drill core duplicates were taken from the other half of the core,
- Erdene Exploration - Standard and blank samples were inserted randomly into each batch.
- Erdene Exploration & Delineation – A laboratory duplicate was prepared for every 10th core sample and stored for possible check assaying at an outside independent laboratory.
- Erdene Delineation - insertion of one blank and one Mo analytical standard per 20 sample batch.
- Erdene Exploration & Delineation - Standard and blank analyses were monitored by Erdene and if laboratory analysis varied from the determined assay value by more than 15% then the entire batch was re-analysed.

Core handling and sampling procedures, quality assurance/quality control (QA/QC) protocols, sample preparation and analysis, and security measures were all carried out to industry standards and are considered adequate to support estimation of mineral resources under the guidelines of NI 43-101.

### 1.2.7 Mineral Resource Estimate

The drilling at the Project extends to a vertical depth of approximately 850 m and the mineralisation was modelled from surface to that depth. The Mineral Resource estimate is defined by a comprehensive pattern of surface diamond drilling completed between 2003 and 2023. A total of 113 diamond drill holes were used to define the Mineral Resource.



The block model was created and estimated in Surpac using Ordinary Kriging (OK) grade interpolation. The mineralisation was constrained by Mineral Resource outlines based on envelopes prepared using a 0.01% Mo cut-off.

A 0.2 to 4 m veneers of sand and alluvium overlies bedrock which displays a shallow weathering profile that accounts for less than 1% of mineralisation.

Samples were composited to 2 m based on an analysis of lengths from constraining wireframes. Statistical analysis indicates that elements are positively skewed with low coefficient of variation, and it was determined that high grade cuts were not warranted for any domain or element.

The block dimension used in the model were 25 m NS by 25 m EW by 25 m vertical with sub-cells of 6.25 m by 12.5 m by 6.25 m. This was selected as the optimal block size as a result of Kriging neighbourhood analysis ("KNA").

An average density of 2.60 t/m<sup>3</sup> were assigned to all mineralisation due to the small number of density samples and low degree of variation in density data.

The Mineral Resource was classified as Measured, Indicated and Inferred Mineral Resource based on data quality, sample spacing, and domain continuity. The Measured Mineral Resource was defined for the upper portion of the Zuun Mod deposit. In these areas of the model, the continuity of grade and geology was demonstrated to be excellent and infill drilling had been completed, giving a drill hole spacing of approximately 100 m by 50 m with at least 4 drill intersections. This spacing is equivalent to approximately 40 to 65 % of the total sill of the maximum variogram range for Mo assays. The Measured Mineral Resource was extrapolated 25 m past the last drill intersection. The Indicated Mineral Resource was confined within areas of close-spaced diamond drilling of 100 m by 100 m or less. In these areas, domains were informed by a reasonable number of drill holes, the distribution of estimated element grades was relatively predictable and not overly erratic, and there was reasonable confidence in the trend of the domain, which was defined by at least 4 drill intersections. 100 m spacing is equivalent to approximately 50% of total sill of the modelled major direction variogram range of 780 m. The Indicated Mineral Resource was extrapolated up to 50 m past the last drill intersection. The Inferred Mineral Resources were classified within a 200 m buffer zone of each drill hole or for the remaining modelled mineralisation. The deposit has a low to moderate nugget factor (18 to 28%), yet estimated grades show greater variance locally, and grades become erratic and less predictable. In addition, kriging efficiency drops, and kriging variance increases in the estimate due to drilling being vertical, with similar estimation search directions resulting in significant grade extrapolation rather than interpolation. For this reason, a 200 m buffer zone was used to classify the Inferred Mineral Resource, even though the variogram range up to 780 m could be interpreted.

Kriging quality parameters were considered in the Mineral Resource classification. As with many porphyry deposits, kriging variance is moderate, and slope of regression is high as a result of uniform grade distribution. Some high kriging variance and low kriging efficiency noted in close spaced drilling areas are due to drill orientation, however quality parameters are much better in the Measured and Indicated portion of the deposit.

The Mineral Resource tonnages and grades were estimated on a dry in-situ basis. The resource model is undiluted, so appropriate dilution needs to be incorporated in any evaluation of the deposit.

The Mineral Resource estimates have been prepared according to the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) 2014 Definition Standards for Mineral Resources and Mineral Reserves dated 10 May 2014 (CIM 2014 Standards) as incorporated with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). Mineral Resource estimates were also prepared using the guidance outlined in CIM Estimation of Mineral Resources and Mineral Reserves (MRMR) Best Practice Guidelines 2019 (CIM (2019) MRMR Best Practice Guidelines).

SLR has independently estimated the Mineral Resources contained within the Project, based on the data collected by ERD as of August 2025. The Mineral Resource Estimate and underlying data comply with guidelines provided in the CIM Definition Standards under NI 43-101, therefore SLR considers it suitable for public reporting. The Mineral Resources were completed by Mr. Oyunbat Bat-Ochir (Qualified Person).



The Mineral Resources, as shown in **Table 1-1** are shown on 100% equity basis.

The result of the Mineral Resource estimate by SLR for Zuun Mod is tabulated in the statement of Mineral Resources in **Table 1-1**. Mineral Resources are constrained by the MV-016836 mining license boundary and by wireframes constructed at a 0.01 % Mo cut-off and reported above a Mo cut-off grade of 0.035% Mo, and within a US\$ 22/lb Mo and US\$4.95/lb Cu optimised conceptual pit.

**Table 1-1 Zuun Mod Mineral Resource Estimate Summary – 1<sup>st</sup> September 2025**

Classification	Tonnes	Mo	Cu	MoEq	Mo	Cu	MoEq
	Mt	%	%	%	Mlbs	Mlbs	Mlbs
Measured	45.8	0.057	0.062	0.074	57.7	62.2	74.8
Indicated	225.3	0.056	0.065	0.073	275.9	322.0	364.4
<b>Measured+Indicated</b>	<b>271.1</b>	<b>0.056</b>	<b>0.064</b>	<b>0.073</b>	<b>333.5</b>	<b>384.2</b>	<b>439.2</b>
Inferred	269.1	0.051	0.059	0.070	300.0	350.7	416.3

Note:

1. CIM Definition Standards for Mineral Resource (2014) is used for reporting of Mineral Resource.
2. The Statement of Estimates of Mineral Resources has been compiled by Mr. Oyunbat Bat-Ochir who is a full-time employee of SLR and a Member of the Australian Institute of Geoscientists. Mr. Bat-Ochir has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
3. All Mineral Resources figures reported in the table above represent estimates at 1st September 2025. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
4. Mineral Resources are reported on a dry in-situ basis.
5. The Mineral Resource has been constrained by mining license MV-016836 and reported above Molybdenum (Mo) cut-off grade of 0.035% within a revenue factor optimized pit shell derived using a price of US\$22/lb Mo and US\$4.95/lb Cu. Cut-off parameters were selected based on an SLR internal cut-off calculator, assuming an open cut mining method with 3% ore loss and 4% dilution, a Mo price of US\$15.4/lb, an open mining cost of US \$2.18 per tonne and a processing cost of US \$6.85 per tonne milled and processing recovery of 83% for Mo and 81% for Cu with flotation processing to produce Mo and Cu concentrates. The conceptual optimised pit shell was constructed using a Mo price of US\$22/lb Mo and US\$4.95/lb Cu.
6. Mo Equivalence (MoEq) calculated using: The formula used for Mo equivalent grade is:  $MoEq\% = Mo\% + Cu\% * 0.27504$  and assumes 83% Mo and 81% Cu metallurgical recoveries.
7. tonne = 2204.64 lbs.
8. Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability.

The QP is not aware of any environmental, permitting, legal, title, taxation socioeconomic, marketing, political, fiscal, or other relevant factors, that could materially affect the Mineral Resource Estimate, however there are some areas that could affect the Mineral Resource estimates including the following:

- Interpretation of high-grade anisotropy orientation
- Lithological interpretation on a local scale, including dykes; the barren ring dyke geometry at depth which is currently interpreted as unmineralized waste; and modelling and discrimination of different intrusive phases,
- Commodity pricing
- Metal recovery assumptions

No Mineral Reserves are defined for the Property.

### 1.3 Recommendations

SLR considers there to be potential to significantly improve upon the database available for estimation of Mineral Resource at Zuun Mod and to improve geological understanding of the controls on the



mineralisation, particularly at South racetrack, Ring dyke and North racetrack zones. In this respect, the following recommendations are provided:

- The shallower parts of the zones are more densely drilled compared to deeper parts of the system, where the continuity and extent of mineralisation may be different than assumed. Additional oriented core drilling is required to assist in understanding the geometry of the mineralisation at depth. SLR recommends using optimised pits to plan the drilling programs, as the deeper part of the zones may not necessarily enhance the project's economics.
- Downhole surveys need to be monitored on an on-going basis. Logging and visual observation of drill core indicate that magnetite alteration is present at the deposit and it is essential that a non-magnetic (gyroscopic) instrument be used with the capability to accurately measure vertical as well as angled holes.
- Accurately locate the collars for all resource drill holes after ZMD-109. Collar locations should be marked with drill hole numbers and surveyed upon completion of holes for any future drilling.
- Continue to use blank samples to monitor sample contamination. It is also recommended that a set of pulp duplicates be regularly sent to an umpire laboratory.
- Use water immersion methods to determine the density of the mineralised and un-mineralised core from current and future drilling programs.
- The change in estimation parameters resulted in an increase in tonnage and grade, with a significant increase in the Inferred portion of the Mineral Resource. Therefore, infill drilling is recommended to increase Resource confidence.
- Update the Mineral Resource estimate on the improved knowledge gained from the planned drilling program, geological investigation and core re-logging.
- Complete additional metallurgical test work to further define the processing characteristics of the material particularly a low grade material.
- Complete a marketing study to confirm the saleability of the product and likely price forecasts.
- Complete a Preliminary Economic Assessment to understand economic viability of the Project.

The budget to complete the recommendation is shown in **Table 1-2**. The work plan is estimated to occur over the remainder of 2025.

**Table 1-2 Budget of Recommendations**

Work	Cost (US\$)
Collar survey	15,000
Umpire check assaying	10,000
Density measurements	2,000
Infill drilling (2,000 m)	250,000
Metallurgical test work	20,000
Preliminary Economic assessment	100,000

## 1.4 Risks

The comprehensive and high-quality drilling at the Project has mitigated many of the risks typically associated with Mineral Resource estimation of porphyry deposits. However, further improvements in the quality control and interpretation of the data would further reduce the risk in the estimate.

The discussion of risks should be considered within the context that 49% of the Resources are of Measured and Indicated status and hence of higher confidence. An alternative estimation approach completed by SLR in 2025 based on additional drilling and a re-logging exercise resulted in no material change to Measured and Indicated Mineral Resources, therefore the impact of the risks is unlikely to result in a material change to the overall Resource estimate. The risk is more for reconciliation on minor, localised areas.



Higher-grade mineralisation at Zuun Mod appears to be controlled by a complex network of cross-cutting trends, as indicated by the recent drilling program and re-logging of historical holes by ERD. The intricate cross-cutting nature of these structures and their scale relative to the spacing of the drill hole data mean that it is very difficult to produce variable anisotropic functions that are able to effectively represent and honour all orientations and a number of zones throughout the deposit could be interpreted in different orientations, as definitive geological control is not available. Interpreted variogram parameters were used to guide the search direction in this area. This is especially relevant to Inferred Mineral Resources, which are subject to a higher degree of geological uncertainty.

Zuun Mod drillholes are predominantly drilled vertically with only the 2023 drilling data being oriented. Recent drilling along with re-logging of historical holes by ERD indicates that there could be two major trends (sub-vertical and sub-horizontal) in higher grade mineralisation. SLR completed variogram analysis to see whether these geological/mineralisation features can be replicated in directional analysis. The longest continuity direction for Mo is interpreted to be in the 80° NE direction. There is also a clear vertical trend observed in the downdip direction. This suggests that the current vertical drilling orientation is not well suited for Zuun Mod mineralisation; oriented drilling is recommended for any future drilling.

There are many barren narrow dykes which are generally hard to model, and these were not modelled as the smallest sub-block size used in the estimate is 12.5 x 6.25 x 6.25. The risk of dyke complexity is more likely for reconciliation on minor, localised areas.

An average density of 2.60 t/m<sup>3</sup> was assigned to all mineralisation due to the small number of density samples and low degree of variation in density data. Any variation in these values might occur due to limited sample data and may affect the calculated tonnage of Mineral Resource. SLR does not expect any material impact on a global basis, but the lack of recognition of variability will impact short-term scheduling and reconciliation of metal content.

The Mineral Resource estimates are sensitive to molybdenum and copper price, metal recovery and various cost assumptions. Any change in cost assumption, metallurgical recovery, or market conditions may materially impact the tonnage, grade and classification of reported Mineral Resources and this may necessitate revision to the reporting cut-off grades in the future.

SLR notes that all mining activities must be undertaken within the boundary of the granted mining licence. Zuun Mod mineralisation is bounded by the mining license boundary (MV-016836); no license constraint was applied to the pit optimisation study and inability to acquire additional ground to the south could materially impact the reported Mineral Resource.

## 1.5 Opportunities

All existing work and current interpretation indicate that there is good potential to increase the currently defined Mineral Resources with mineralisation open to the north and south and also down dip, which requires further drilling to investigate. In addition, mineralisation extends NW and is undefined by drill holes beneath the andesite unit.

Additional drilling with oriented core will confirm the recent re-interpretation of the orientation of the mineralized veins at Zuun Mod. Current widely spaced vertical drill holes may under-represent the frequency of the near-vertical mineralized vein system. If the sub-vertical veins are indeed under-represented in the drilling, then any associated mineralization may be under-represented in the resource model.

The Zuun Mod- Khuvyn Khar (ZM-KK) porphyry system has similar magmatic and metallogenic ages as the porphyry Cu-Au deposits of the Almalyk District within the CAO B located to the west of Mongolia and has excellent potential for discovery of additional mineralization. The Mo-Cu deposits at Zuun Mod represent Mo-rich zones in a Cu-Mo porphyry system which has excellent potential for discovery of additional Cu-Mo (Au) mineralization in the 4.5 by 5.5 km multi-stage porphyry complex.

Recent re-evaluation of previous drilling, coupled with detailed geological mapping, geophysical and geochemical studies has defined seven new high priority exploration targets in the KK zone of the ZM-KK porphyry complex. Furthermore, the large license shows potential for additional discovery of high-grade Cu-Ag mineralization, based on the results of historical exploration outside the defined Mineral Resource.



## 2. Introduction

### 2.1 Purpose of the Report

SLR Advisory Asia Limited (SLR) (previously RPMGlobal Asia Limited) has been engaged by Erdene Resource Development Corp. (ERD or the Client) to complete a NI 43-101 Technical Report (hereafter referred to as the "Report") of Zuun Mod Molybdenum-Copper Project ("Project" or "Relevant Asset") for the purpose of the Report's filing on SEDAR in accordance with the requirements of Canadian National Instrument 43-101 (NI 43-101) of the Canadian Securities Administrators and the Company's reporting obligation as a Reporting issuer in Canada. This Technical Report conforms to NI 43-101 Standards of Disclosure for Mineral Projects. This is an update of the NI 43-101 Technical report on the Zuun Mod mineral resource estimate prepared in June 2011.

The Zuun Mod Project is located within a single Mongolian mining license MV-016836 named Khuvyn Khar. Erdene, through its wholly owned subsidiary, Anian Resources LLC, holds a 100% interest in the Khuvyn Khar mineral mining license subject to a 1.5% net smelter revenue (NSR) royalty held by Versamet Royalties Corporation (Versamet). Versamet is entitled to receive, after return of Invested Capital, a 1.5% NSR royalty on product sales from Zuun Mod. However, Erdene has the right to "buy-down" the NSR royalty for Zuun Mod, at any time beginning two years after the commencement of commercial production at Zuun Mod.

Since the last estimate, ERD has re-logged some of the historical holes located throughout the main deposit area and completed five additional oriented core holes within the area of the reported mineral resource which resulted in a re-interpretation of the orientation of the mineralization in the Zuun Mod molybdenum copper deposit and is the basis of the updated Mineral Resource estimate stated in this report.

The Mineral Resource estimate was prepared using data available as at August 2025 and examines the main Zuun Mod deposit area located along South Corridor. Potential mineralised zones were identified outside the current modelling area however they are in an early stage of exploration with broad drill spacing, and are therefore not included in this estimate.

### 2.2 Terms of Reference and Issuer for Whom the Technical Report is Prepared

SLR prepared this technical report for the Zuun Mod Molybdenum-Copper Project, Mongolia according to NI 43-101 and Form 43-101F1, to provide an update on the Zuun Mod Project. The Zuun Mod Molybdenum-Copper Project, Mongolia is owned by Erdene Resource Development Corp. (ERD). Erdene Resource Development Corp. is listed on the Toronto Stock Exchange under the code "ERD" and is the issuer of this Technical Report.

The report provides an update on the Zuun Mod Molybdenum-Copper Project and will be lodged with SEDAR+ in accordance with TSX requirements.

References in this report to Erdene Resource Development Corp. include its subsidiaries and associates, as the context requires.

SLR is engaged by ERD to prepare a NI 43-101 Technical Report for the Zuun Mod Molybdenum-Copper Project in Mongolia.

The following terms of reference are used in the Technical Report:

- Erdene (ERD), the Company and the Client refer to Erdene Resource Development Corporation.
- MMC refers to Minarco-MineConsult and its representatives.
- SLR refers to SLR Advisory Asia Limited and its representatives.
- Project refers to the Zuun Mod molybdenum-copper deposit located in southwestern Mongolia.
- CIM Definition Standards for Mineral Resources and Mineral Reserves, Prepared by the CIM Standing Committee on Reserve Definitions, Adopted by CIM Council on May 10, 2014



- Molybdenum and Copper grades are described in terms of percentage (%) by mass while Rhenium grades are described in terms of parts per million (ppm) with tonnage stated in dry metric tonnes.

## 2.3 Sources of Information

This Technical Report was prepared by SLR. Information for the Report was based on published material as well as the data, professional opinions and unpublished material obtained from work completed by Erdene Resource Development Corp., and materials provided by, and discussions with, third-party contractors and consultants retained by ERD.

Reports and documents listed in **Section 27** were also used to support preparation of the report. Additional information was sought from ERD personnel where required to support preparation of this report.

The QP's reviewed the available project data and incorporated the results thereof with appropriate comments and adjustments as needed in the preparation of this Report. Standard industry review procedures were used throughout in the preparation of this Report. The QPs used their experience to determine whether the information from previous reports was suitable for inclusion and adjusted information as required. This Report includes technical information which required subsequent calculations to derive subtotals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. The QP's do not consider any such errors to be material.

The Key files supplied to SLR included:

- ZM\_Drill\_Collar\_2023.csv – 2023 drilling collar
- ZM\_Survey\_2023.csv – 2023 drilling survey
- ZMD\_DrillSampleDatabase\_2023.csv – assay data for 2023 drilling
- Magnetic susceptibility data ZMD-131 to 139
- ZMD\_MultiE\_assay\_to\_ZMD-142\_v2.csv – master assay database
- Collar.csv – master drill collar table
- Survey.csv – master survey table
- zm-topotr1.dtm – topography
- zuun\_mod\_resource\_for\_est\_20110330.dtm
- weathering\_zuun\_mod200208.dtm

## 2.4 Qualified Persons and Inspection of the Property

The Project site was visited by Mr. Oyunbat Bat-Ochir, Senior Resource Geologist and Mr. Rodney Graham, Executive Consultant Geology of SLR Consulting from 15<sup>th</sup> to 18<sup>th</sup> May 2025 which addressed the following elements:

- Meeting and discussions with key geological and management personnel for Project overview;
- Inspection of project areas including surface exposures, site layout;
- Review of selected drill core and verification of logging and sampling procedures and clarification of geological and mineralogical features of the deposits.

Mr. Oyunbat Bat-Ochir is a Qualified Person under National Instrument 43-101 and accepts responsibility for preparation of the Mineral Resource Estimate and who has overall responsibility for the preparation of this Technical Report.

Other Project participants included:

- Anthony Antulov, Principal Mining Engineer, (Brisbane);
- Andrew James Haigh Newell, Principal Processing Consultant (Brisbane);



- Rodney Graham, Executive Consultant Geology (Mongolia);
- Meg Byass, Geology Manager APAC Advisory (Perth);

## 2.5 Currency and Measurements

All references to measurement units use the System International (SI, or metric) for measurement.

Units used in the Report are metric (m) units unless otherwise noted. Monetary units are in United States dollars (US\$) unless otherwise stated. The Mongolian currency is the togrog (₮, MNT)

Geodetic Universal Transverse Mercator (UTM) coordinates are stated in metres east and north of the UTM zone 47N datum. Project grid coordinates correspond to the UTM coordinates.

Geographic coordinates stated in degrees, minutes and seconds of longitude and latitude are relative to the World Geodetic System (WGS) 1984 datum. Elevations are stated in metres above Baltic Sea mean sea level. Reduced level (RL) is reported in metres above the Project height datum (m RL) at an elevation of 0 metres above mean sea level.

Azimuths are reported in decimal degrees clockwise from grid north while drill hole dips are reported in decimal degrees down from horizontal. Negative dips indicate a down-hole.

Dates are abbreviated in the form day/month/year.

## 2.6 List of Abbreviations

**Table 2-1** sets out the abbreviations used in this report.

**Table 2-1 Table of Abbreviations**

Abbreviation	Unit or Term
Mo	Molybdenum
Cu	Copper
Re	Rhenium
ppm	Parts per million
%	Percent
MoEq	Molybdenum equivalent grade
dmt	dry metric tonnes
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
km <sup>2</sup>	square kilometers
Kt	kilo tonnes
L	liter
Lb	pound
lbs	pounds
M	meter(s)
m <sup>3</sup>	cubic meter
M+I	Measured and Indicated (with respect to Resources)
Mt	million tonnes
S	Sulfur
SLR	SLR Advisory Asia Limited
tpd	metric tons per day



Abbreviation	Unit or Term
US\$	US dollars
Mtpa	means million tonnes per annum
NI 43-101	National Instrument 43-101
NN	Nearest neighbour grade interpolation method.
OK	Ordinary Kriging grade interpolation method
bd	bulk density



### 3. Reliance on Other Experts

This report has been prepared by SLR for ERD. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to SLR at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by ERD and other third-party sources.

Oyunbat Bat-Ochir (QP) has not independently reviewed ownership of the project area, nor any underlying property agreements, mineral tenure, surface rights or royalties. The QP and SLR has fully relied upon, and disclaims responsibility for, information provided by ERD and derived from internal expertise retained by ERD for this information. This information is used in Section 4 - Property Description and Location.

SLR relied on “Zuun Mod Market Studies and Contracts (S&D)-JULY 2025.pdf” for the preparation of Section 14.12.1 - Reasonable Prospect for Eventual Economic Extraction of the report. Section 14.12.1 information is also used in support of the Mineral Resource Estimate in Section 14 – Mineral Resource Estimates.

Andrew Newell (QP) is responsible for Sections 13 - Mineral Processing and Metallurgical Testing of the Technical report.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.

The authors believe the information used to prepare the report and formulate its conclusions and recommendations is valid and appropriate considering the operational nature of the Project and the purpose for which the report is prepared. The authors, by virtue of their technical review of the Project's exploration potential, affirm that the work programme and recommendations presented in the Report are in accordance with NI 43-101 and CIM technical standards.



## 4. Property Description and Location

### 4.1 Summary

The Zuun Mod property is approximately 950 km by road southwest of capital of Mongolia, Ulaanbaatar (refer to **Figure 4-1**).

Erdene holds interests in several mining and an exploration license property near Zuun Mod, in an area known as the Khundii Minerals District. Five deposits hosting mineral resources have been identified within the district: Bayan Khundii, Altan Nar, Dark Horse, Zuun Mod (refer to **Figure 4-2**) and Ulaan. The Bayan Khundii gold mine is an open pit mine that commenced production in 2025 and uses a conventional drill, blast load and haul method. It comprises an open pit mine with a CIP processing facility which produces gold in dore.

The Zuun Mod property is an undeveloped deposit with no existing infrastructure, located 35 km east of Bayan Khundii gold mine which has associated infrastructures that support mining operations at the deposit. Zuun Mod deposit is located 300 km to the south of provincial capital of Bayankhongor and 60 km to the south of Shinejinst soum and 215 km to the north of Chinese border. There are regular two-way local flights to Bayan Khundii project site from Ulaanbaatar.

The Project is centred at 99° 14' 40"E and 43° 59' 20"N (lat/long WGS 84) or 519,600 mE and 4,870,670 mN (UTM Zone 47 N) and license details are shown in **Table 4-1**.

**Table 4-1 License Details for the Project**

Mine/Project	Zuun Mod Project
Name of Certificates	Khuvyn Khar Mining License
Certificate No	MV-016836
License Holder	Anian Resources
Location	Shinejinst soum of Bayankhongor province, Mongolia
License area	6041.03 Ha
Valid to	26/05/2041
issue Date	26/05/2011
Issuer	Mineral Resource Authority of Mongolia
Annual Renewal Fee for 2026	21,750 MNT per hectare

### 4.2 Royalties and Agreements

Erdene, through its wholly owned subsidiary, Anian Resource LLC, holds a 100% interest in the Khuvyn Khar mining license. The License is subject to a 1.5% net smelter revenue (NSR) royalty held by Versamet Royalties Corporation (Versamet). Versamet is entitled to receive, after return of Invested Capital, a 1.5% NSR royalty on product sales from Zuun Mod. However, Erdene has the right to "buy-down" the NSR royalty for Zuun Mod, at any time beginning two years after the commencement of commercial production at Zuun Mod, as shown in **Table 4-2**.

**Table 4-2 Conditions on Royalty Reduction Option**

Annual NSR during first 2 years	Royalty reduced to	Payment required*
Less than US\$75,000,000	0.50%	US\$3,000,000
US\$75,000,000 to \$100,000,000	0.50%	US\$4,500,000
US\$100,000,000 to \$150,000,000	0.50%	US\$6,000,000
Greater than \$150,000,000	No reduction possible, maintain 1.5% NSR royalty	



Note: \* Payment is free and clear of all set-off, deduction or withholding, NSR means Net Smelter Revenue

## 4.2 Land Tenure

The surface rights at Zuun Mod are held by the government, which is common in Mongolia, however there are provisions under the Minerals Law to allow for mineral rights holders, either under an Exploration or Mining License, to access surface rights. Erdene currently holds a valid land use permit for the Khuvyn Khar mining license area, granted under Decree No. A/20 issued by the Shinejinst Soum Governor on March 22, 2023. The permit remains valid until March 22, 2028.

Individual Mining License coordinates are registered with the Office of Geological and Mining Cadastre (OGMC) in Ulaanbaatar and incorporated into the official cartographic register maintained by the OGMC, which records the boundaries of all areas subject to Mining and Exploration Licenses in Mongolia. License boundaries are map based, however, as required for mining licenses, the corner points of the Khuvyn Khar mining license are marked on the ground with survey pegs.

The Mineral Resources Authority of Mongolia, on behalf of the Mongolian Government, granted Mining License MV-016836 (Khuvyn Khar) to Anian Resource on the 5<sup>th</sup> of May 2011 and the mining licenses are valid for 30 years from the grant date. The Khuvyn Khar mining license encompasses an area of 6,041.03 hectares (Ha) or 60.41 square kilometres. The license is shown on the MRAM Cadastral website as valid as of 1<sup>st</sup> September 2025 (<https://cmcs.mrpam.gov.mn>) and will remain valid until 2041, assuming all statutory obligations are met. There is a provision under the Mongolian Minerals Law to extend mining licenses for two additional 20-year terms, provided statutory obligations are met.

The official coordinates are provided in **Table 4-3** and the location of the licenses and Project is shown in **Figure 4-2**.

**Table 4-3 Zuun Mod Project: License Coordinates**

License	Points	Longitude			Latitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
MV-016836	1	99	11	11.44	43	57	9.04
	2	99	11	11.44	43	57	54.71
	3	99	12	0.56	43	57	54.71
	4	99	12	0.56	43	58	27.39
	5	99	14	40	43	58	27.39
	6	99	14	40	43	59	20.09
	7	99	15	50.1	43	59	20.09
	8	99	15	50.1	44	1	20
	9	99	8	24.48	44	1	20
	10	99	8	24.48	43	57	9.04

Khuvyn Khar mining licence is duly registered and considered in good standing with no liens or encumbrances registered against the property. There are no indications of any potential issue that could result in the termination, revocation or suspension of the property, nor are there any existing mining operations in the area which may limit Anian Resource's ability to conduct mining activities.



**LEGEND**

- ★ National Capital
- Provincial Capital
- Town, Village
- ✈ Major Airport
- International Boundary
- Provincial Boundary
- Main Road
- Railroad

**CLIENT**



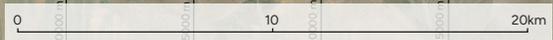
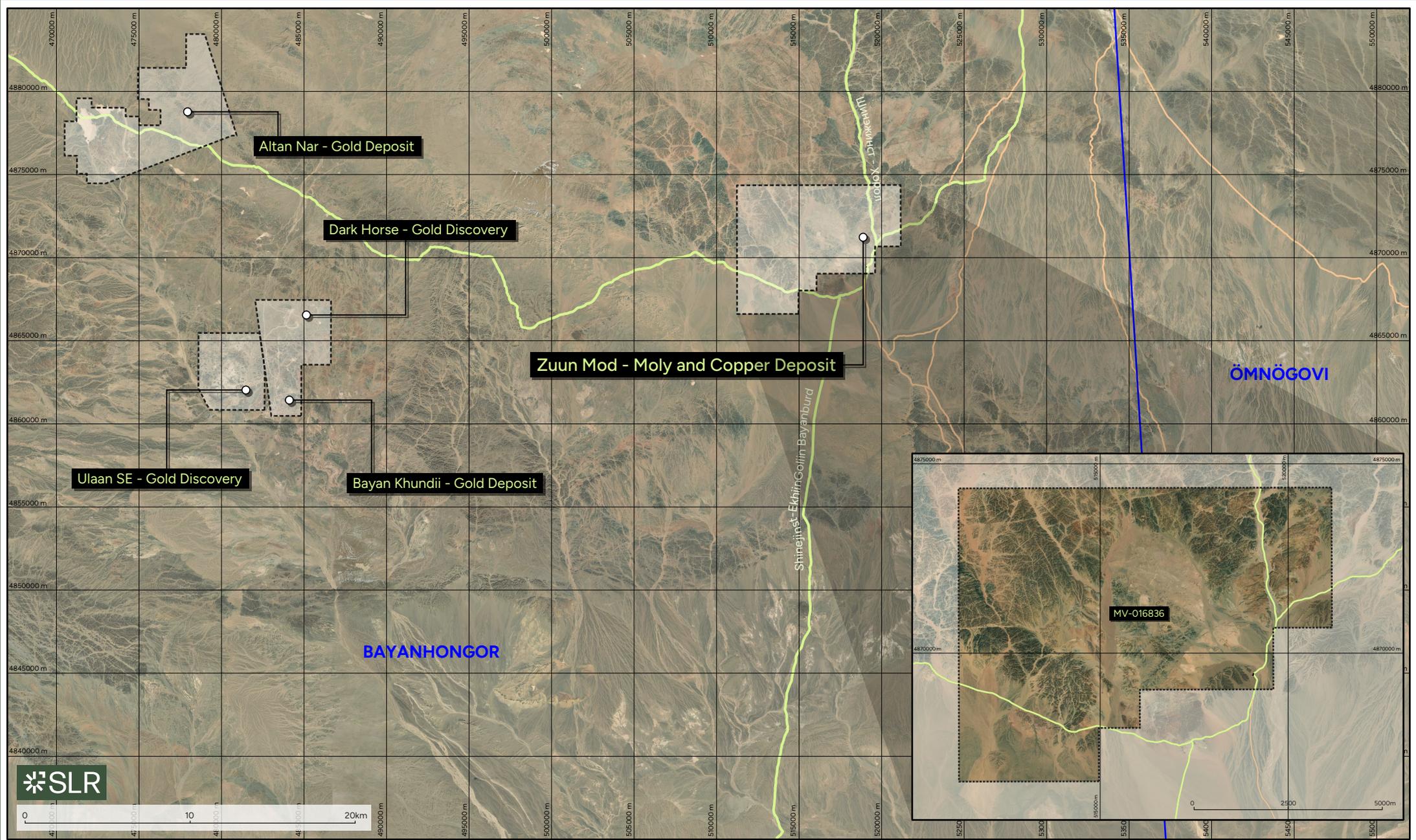
**PROJECT**

NAME: Zuun Mod - Technical Report

DRAWING: GENERAL LOCATION MAP

FIGURE No. 4-1	PROJECT No. ADV-HK-00161	DATE September 2025
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**LEGEND**

- Tenement Boundary
- Road
- Track
- Provincial Boundary



The content contained within this document may be based on third party data. SLR Consulting Australia Pty Ltd does not guarantee third party data.

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**CLIENT**



**PROJECT**

NAME		Zuun Mod - Technical Report	
DRAWING			
		TENEMENT LOCATION MAP	
FIGURE No.	PROJECT No.	DATE	
4-2	ADV-HK-00161	September 2025	



### 4.3 Permits

Regulatory licences and authorisations required for future phases of development of the Project include:

- Annual exploration work plans
- Annual mining plans
- Annual ESMPs
- Resource reporting in line with the Mongolian Resource Code (MRC)
- Mining and processing feasibility study approval at 5-year intervals in line with the MRC
- Environmental and Social Impact Assessment (ESIA) approval at 5-year intervals in line with MRC standards
- Mine commencement approval/act
- Land titles and agreements
- Water Statement from the Water Authority of Mongolia
- Water supply agreements and abstraction licences for mining operation, processing plant and associated facilities
- Other regulatory and administrative permits and licences, such as:
  - Construction permits for all infrastructure hazardous substance/chemical storage and use, including explosives
  - Construction and operation permit for a tailings storage facility (TSF).

### 4.4 Environmental Liabilities

Mineral exploration, evaluation and mining activities in Mongolia are regulated under the Minerals Law of Mongolia (MLM), most recently amended April 2024. Articles 38 and 39 of the MLM require all exploration and mining companies to maintain environmental protection plans, conduct environmental impact assessments and monitor impact of activities on the environment. The MLM requires an ESIA to be approved by the Environmental Commission before the mine construction and be regularly updated every 5 years. Environmental social management plans to be developed and approved by the Ministry of Environment on an annual basis based on the annual work programs.

SLR notes that an environmental baseline study by Ecotrade, a licensed Mongolian environmental company, was carried out in March 2009 as part of the Project's Mining Licence approval process.

The required Detailed Environmental Impact Assessment (DEIA) for the project was submitted in December of 2011 and subsequently approved by the Ministry of Environment.

The overall summary of the potential project development scenario, used as the basis for the 2011 Detailed Environmental Impact Assessment Report, is as follows:

- Zuun Mod is expected to be mined by open pit and produce molybdenum (50%) and copper (23%) concentrates for export to China. Flotation method with high water recycling efficiency was suggested.
- Project expected to create significant jobs and support local economy.
- ~ 20 million m<sup>3</sup> (90% recycled) water required for the processing and water will be sourced from Tsakhildag groundwater wells (20–30 km NE of Zuun Mod).
- Power will be supplied initially via 175 km line from China; later from local coal-based station near Khotgor mine
- Concentrates will be transported via truck to Shivee Khuren border (Seke port in China)
- Camp will be built on site 3.4 km from the open pit mine with internal gravel and bituminous road network.



- Within buffer zone (27.75 km<sup>2</sup>) of Great Gobi Strictly Protected Area “A” — no direct impact expected.
- Other protected zones (Ikh Bogd, Gobi Gurvansaikhan, Eej Khairkhan, Burkhan Buudai) located 13 - 240 km away.
- Key risk includes landscape loss, groundwater depletion, dust emissions, soil erosion, vegetation and habitat disturbance, social conflicts, and occupational safety concerns.

The Key Environmental finds are summarised in **Table 4-4**.

**Table 4-4 Key Environmental Finds**

Environmental Aspect	Key Findings	Impact Level	Mitigation / Management
<b>Landscape &amp; Geology</b>	Significant alteration due to open-pit mining	Major	Rehabilitation & stabilization in closure plan
<b>Air Quality</b>	Dust emissions from mining & transport	Moderate	Apply dust suppressants
<b>Groundwater</b>	Limited reserves; risk of depletion/pollution	Moderate–Major	Regular monitoring & control measures
<b>Surface Water</b>	No rivers; minor spring systems	Moderate	Minimize contamination; monitor quality
<b>Soil</b>	Fragile desert soils prone to erosion	Moderate	Topsoil conservation & rehabilitation
<b>Vegetation</b>	94 species; 12 endangered, 7 rare	Moderate	Protection & monitoring programs
<b>Fauna</b>	33 species; Argali, Mongolian Ground Jay present	Moderate	Habitat protection & monitoring
<b>Waste Management</b>	Solid, liquid, gaseous wastes from processing	Moderate	High water recycling, waste treatment
<b>Noise &amp; Vibration</b>	Low baseline; localized increase expected	Minor	Equipment maintenance, noise barriers
<b>Cultural Heritage</b>	2 sites outside mine zone	Low	Avoidance & protection
<b>Socio-Economic</b>	Dust, traffic, safety, herder conflicts possible	Moderate	Community engagement & safety programs

DEIA report recommendation as follows:

- Implement annual Environmental and Social Management Plans.
- Maintain continuous environmental monitoring for air, water, soil, and biodiversity.
- Conduct progressive land rehabilitation and ensure safe mine closure.
- Strengthen community engagement, occupational safety, and grievance mechanisms.
- Fully comply with Mongolian environmental and mining legislation.

SLR notes that all mining activities must be undertaken within the boundary of the granted mining licence.

SLR is not aware of any environmental liabilities on the property. ERD has all the required permits to conduct the proposed work on the property. SLR is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the property.



## 5. Accessibility, Climate, Local Resources, Infrastructure and Physiography

### 5.1 Accessibility

The property is located in southwestern Mongolia, Bayankhongor Province, 215 km north of the border with China.

The Project is accessible on sealed roads from Ulaanbaatar to Bayanhongor (8 hours), followed by 300 km of unsealed regional gravel roads from Bayankhongor to Shiinjinst (5 hours), then another 1.5 hours to the site. The Project is located 30 km east of the Altan Nar (Altan Nar gold-polymetallic deposit) mining license and 35 km east of Bayan Khundii Gold Mine. A recently commissioned (June 2025) landing strip is located in the north part of the Khundii mining license. A private flying service is available from Ulaanbaatar three times a week and the flight takes approximately 3 hours.

Bayankhongor is the Provincial capital of Bayankhongor Aimag. Bayankhongor city has a population of approximately 30,000, while the Aimag has a population of approximately 84,000 over an area of 116,000 sq.km.

### 5.2 Topography, Elevation and Vegetation

The topography of the Zuun Mod project is characterised by low hills of exposed rock and relatively low-profile undulating hills and wadis and lower plains of unconsolidated and alluvial sediments.

The hills in the Zuun Mod project area generally strike northeast and are typically less than 100 m in elevation relative to the surrounding valleys. There is very little to no soil profile developed, with fresh rock generally occurring from or very near to surface, except in areas covered by Quaternary sediments where depth to bedrock is uncertain. The elevation of the landscape ranges from 1,260 m to 1,420 m above sea level (**Figure 5-1**). Vegetation is sparse and restricted to grasses, saxaul bushes and shrubs.

**Figure 5-1 Topography and site layout (Looking North from Race track zone)**





### 5.3 Climate

The regional climate is characterized by extreme seasonal variations in temperature (-40°C to +40°C) and has an average of 250 sunny days a year. The Project area, much like all of Mongolia, is subject to high wind conditions and can result in extreme wind chill during the winter. Average annual precipitation is less than 100 mm, and most rain falls during the summer months of July and August, producing localized flash flooding. Exploration and mining activities can be conducted all year round, only requiring proper preparation with respect to working in a remote location during extreme cold and hot weather.

### 5.4 Local Resources and Existing Infrastructure

Erdene owns interests in several mining and exploration licenses near Zuun Mod, in a region referred to as the Khundii Minerals District. Five deposits hosting mineral resources have been identified within the district: Bayan Khundii, Altan Nar, Dark Horse, Zuun Mod and Ulaan.

The region is one of the least densely populated areas in Mongolia, with limited infrastructure, however, the nearby, Bayan Khundii open pit gold mine entered production in September 2025. This mine, 35 km west of the Zuun Mod deposit, has rapidly developing infrastructure including a permanent power line sourced from China, upgraded access roads, water wells, CIP processing Plant and dedicated camp for housing. Additionally, a company developing a coking coal mine, located 65 kilometres northwest of Zuun Mod, is currently constructing a coal transport road to the China border passing within 50 kilometres to the east of Zuun Mod.

The Zuun Mod property is an undeveloped deposit with no existing infrastructure. The broader area has limited use as open range grazing by nomadic herders. The township of Shinejinst is located approximately 60 km to the north with a full range of services such as small markets, commercial bank, post office, town hospital, local governance building, elementary school and 35 kV power line.

Exploration and mining activities can be conducted year round, only requiring proper water run-off mitigation strategies.

The Project is located approximately 200 km northwest of the Nariin Sukhait mining complex (Ovoot Tolgoi) from which South Gobi Resources (TSX:SGS), TerraCom Limited (ASX:TER) and MAK all produce (or have in the past) coal and transport product through the Ceke (PRC) / Shivee Khuren (Mongolia) border point. This border crossing includes a paved eight-lane highway and a major automated railcar coal loading facility with three railway terminals where coal trucked can be loaded on train and shipped out over the Jiayuguan–Ceke Railway, Ejin–Hami Railway or Linhe–Ceke Railway. The Mongolian government plans to expand the rail network through the region. Registered deposits and planned infrastructure near Erdene Projects are shown in **Figure 5-2**.



**Figure 5-2 Projects Near Khundii Districts and Planned Infrastructures**



Source: ERD Project update Presentation Q3, 2025



## 6. History

The Mongolian government originally mapped the project at a scale of 1:200,000 and sponsored 1:50K scale mapping in 2014-2019. At the same time, limited prospecting and exploration were also conducted.

### 6.1 Prior Ownership

Harrods Minerals Mongolia Ltd (HMML) explored the region in 1998 for gold (Au) mineralisation; however, the licence was later relinquished.

In March 2002, HMML reacquired the Khuvyn Khar License under an agreement between HMML and WMC (Western Mining Corporation). Upon signing of the HMML-WMC agreement in April 2002, HMML changed their name to Gallant Minerals Mongolia Ltd (Gallant). Gallant acquired the Project to cover two reported porphyry-type Cu–Mo occurrences situated within a large Landsat colour anomaly.

Following an exploration program from 2002 to 2003, WMC returned the Project to Gallant as the Zuun Mod system, interpreted as a porphyry Mo system with Cu, did not fit its corporate target of a porphyry Cu plus Au system. In early 2005, Erdene optioned the Project from Gallant.

Exploration work managed by Gallant - WMC is summarised chronologically in **Table 6-1**.

**Table 6-1 Galant – WMC Exploration During 2002-2003**

Date / Company	Activity	Comments
2002 Gallant - WMC	Discovery	Zuun Mod porphyry system reconnaissance mapping, soil and stream sediment sampling, and rock-chip sampling identified coincident Cu and Mo anomalies over an area exceeding 3 km in diameter.
2002 Gallant - WMC	Soil and rock chip sampling	Anomalous Cu and Mo in soil with maximum values of 0.1% Cu and 0.03% Mo and identified coincident areas of anomalous Cu and Mo in rock with maximum values of 0.2% Cu and 0.1% Mo. No significant Au was indicated.
Late 2002 Gallant - WMC	Geological mapping 50km <sup>2</sup> Soil and rock chip sampling	Additional occurrences of secondary Cu, particularly within the south-central part of the Project, are referred to as Baga Od (Stock work zone). Definition of a general circular pattern about 1 to 1.5 km wide and about 4.5km in diameter that contained anomalous Mo and Cu concentrations.
2002 Gallant - WMC	Ground geophysics IP and Magnetics	Anomalous resistivity generally coincident with areas of QSP alteration and stock work quartz veins. Magnetics defined a general circular feature, the outer limits of which coincide with the outline of the defined Cu-in-rock and Mo-in-rock anomalies.
2003 Gallant - WMC	Diamond drilling	13 hole, widely spaced (500m to ~1km) totalling 3,141.6 m. Drilling identified two areas of porphyry-type Cu-Mo mineralisation within the north-central (North Corridor – holes KKMD-04, 05, 13) and south-central (Stock work zone – holes KKMD-03, 09) parts of the Zuun Mod prospect.

### 6.2 Exploration and Development History

In 2007, Erdene commenced a systematic resource delineation program designed to define Mineral Resources compliant with CIM standards for the South Corridor Deposit, which culminated in the Technical Report dated June 2009. A total of 29 holes (ZMD 18 to 46) were drilled as part of stage 1 of this program, while an additional 35 drill holes (ZMD 47 to 81) were completed in December 2007. Phase III drilling was completed in October 2008 and consisted of an additional 28 drill holes (ZMD 82 to 109).



Between 2009 and 2010, Erdene completed several infill drill holes in addition to extending two existing holes to define mineralisation at depth. During 2010 a total of five infill and three exploration holes were completed while eight holes were deepened.

In 2011, Erdene drilled six exploration holes (ZMD-123 to -128) in the northern portion of the license (Khuvyn Khar prospect) targeting copper mineralization and following up on hole ZMD-121 that returned 34 metres of 1.3% Cu, 9 g/t Ag in late 2010.

In 2015, Erdene signed an agreement with Tian Poh Resources Limited granted them a period of exclusivity to exercise an option to acquire an interest in the Zuun Mod mining license. Tian Poh agreed to complete a 1,000 m drill program in Q3 2015 focused on copper exploration in the Khuvyn Khar prospect. Tian Poh drilled two holes (ZMD-129 and 130) and while both holes intersected anomalous copper mineralization, Tian Poh elected to not exercise its option to acquire an interest in the Project.

In 2023, ERD completed 12 oriented core holes at Zuun Mod mining license of which 5 holes were drilled at main Zuun Mod deposit area while remaining 7 holes were drilled test broader prospect areas.

### 6.3 Historical Resource Estimates

Several previous estimates have been completed for Zuun Mod deposit. Documentation for one prior estimate was reviewed by SLR, related to the 2011 Model by MMC. That estimate is summarised in **Table 6-2**.

**Table 6-2 2011 MMC Estimate Summary**

Classification	Tonnes	Mo	Cu	Mo	Cu
	Mt	%	%	Mlbs	Mlbs
Measured	40.0	0.056	0.064	49.5	57
Indicated	178.0	0.057	0.07	224	273.7
<b>Measured+ Indicated</b>	<b>218.0</b>	<b>0.057</b>	<b>0.069</b>	<b>273.5</b>	<b>330.7</b>
Inferred	168.0	0.052	0.065	191.8	240.5

MMC wireframes were interpreted using 100 ppm Mo cut-off for low grade and 400 ppm Mo cut-off for high grade domains. An average bulk density of 2.6 t/m<sup>3</sup> was applied to all mineralisation. The estimate was carried out using OK algorithm. The mineral resource estimate was reported at a 400 ppm Mo cut-off.

### 6.4 Past Production

No mining has occurred at the Project.



## 7. Geological Setting and Mineralisation

### 7.1 Regional Geology

The landmass of Mongolia is a mosaic of tectonic terranes recording the complex development of this portion of the Central Asian Orogenic Belt (“CAOB”) from Archaean through Palaeozoic time (Badarch, et al., 2002; Rippington, et al., 2013; Nockleberg, 2010). Numerous interpretations of the tectonostratigraphic development of the CAOB have been published, though all are limited by a paucity of structural and geochronological data (Rippington, et al., 2013; Lamb and Badarch, 2001). The terrane definitions most commonly used in Mongolia are those described in Badarch, Cunningham, and Windley’s 2002 article in the *Journal of Asian Earth Sciences*, which lists 44 terranes. According to that scheme the Zuun Mod property lies within the Edren terrane, dominated in this area by a Devonian to Carboniferous island arc volcanoplutonic assemblage bounded to the north by coeval marine sedimentary units possibly deposited in a back-arc basin (**Figure 7-1**).

As presented in Nockleberg 2010, the Zuun Mod property lies within the Ordovician through Carboniferous South Mongolian-Khingian tectonic collage, a major island arc and tectonically-linked subduction zone terrane interpreted to have formed offboard from the North Asian craton and previously-accreted terranes, and accreted in Late Carboniferous or Early Permian time (**Figure 7-2**).

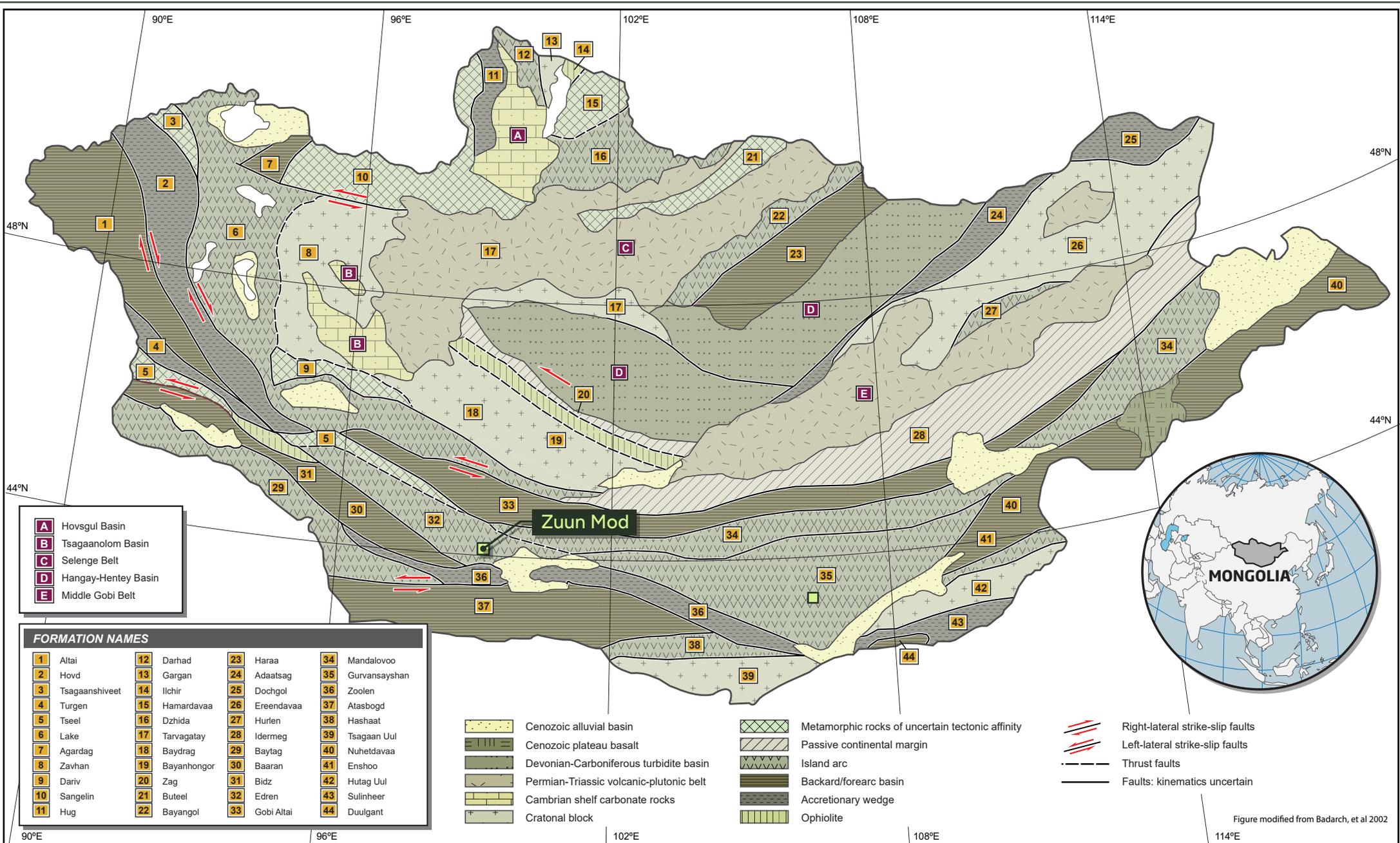
A recently published Economic Geology article by ERD geologists and consultants (MacDonald et al., 2024), describes the emerging Khundii Metallogenic Province located in the southeastern end of the Trans Altai terrane (previously refer to as the Edren terrane), The paper outlines a series of epithermal gold discoveries and includes reference to the Zuun Mod Mo-Cu porphyry deposit located within the Province. Based on recent 1:50K mapping sponsored by the Mongolian government, the Trans Altai Terrane was subdivided into five subterrane and the Khundii metallogenic province is entirely underlain by rocks of two of these subterrane, the Khuviinkhar and Davkharkhar island-arc subterrane with the Zuun Mod, Bayan Khundii and Altan Nar deposits all hosted within the Davkharkhar subterrane which is comprises of volcanogenic units of the Carboniferous Ulziitkhar Formation. The Ulziitkhar Formation (Lhundev et al., 2019) has been subdivided into three conformable members, including:

- A 1,200 m-thick lower member comprised of tuffaceous rocks (ash, lapilli, block and ash tuffs) and volcanoclastic sedimentary rocks. This member hosts the Bayan Khundii gold deposit
- An 800 m-thick middle member, comprised mostly of basalt and andesite flows and tuffaceous rocks, hosts the Khar Mori gold and Altan Arrow Au-Ag prospects, north of Bayan Khundii. A U-Pb date on zircon from an andesite unit returned an early Carboniferous (Visean) age of  $337 \pm 7$  Ma (Lhundev et al., 2019).
- A 1,150 m-thick upper member of mostly andesite and dacite flows and volcanic breccia hosts the Altan Nar Au-polymetallic deposit.

Outcrop patterns for the three members of the Ulziitkhar Formation (Lhundev et al., 2019; Togtokh et al., 2019; Tumurchudur et al., 2020) show a complex pattern of local folding and widespread block faulting, which has juxtaposed rocks from each of the three members.

Rocks of the Ulziitkhar Formation were intruded by multiple plutons and stocks of the early Carboniferous Bayan Airag intrusive complex, ranging in composition from diorite, granodiorite and monzonite to granite, quartz syenite, syenite and alkali leucogranite. A U-Pb age determination on zircon from monzonite returned an early Carboniferous (Visean) age of  $335.3 \pm 3.9$  Ma (Lhundev et al., 2019) The Ulziitkhar Formation was also intruded by the late Carboniferous to early Permian Baga Ovoot intrusive complex (Lhundev et al., 2019), ranging from an early phase of quartz monzonite, a main phase of leucogranite, granite, and minor quartz syenite, and a late phase of leucogranite porphyry. A granodiorite phase of the Baga Ovoot complex hosts the Zuun Mod Mo-Cu deposit and returned zircon U-Pb ages of  $301.2 \pm 4.2$  Ma (Altankhuyag et al., 2012).





- A** Hovsgul Basin
- B** Tsagaanolom Basin
- C** Selenge Belt
- D** Hangay-Hentey Basin
- E** Middle Gobi Belt

FORMATION NAMES			
1	Altai	12	Darhad
2	Hovd	13	Gargan
3	Tsagaanshivheet	14	Ilchir
4	Turgen	15	Hamardavaa
5	Tseel	16	Dzhida
6	Lake	17	Tarvagatay
7	Agardag	18	Baydrag
8	Zavhan	19	Bayanhongor
9	Dariv	20	Zag
10	Sangelin	21	Buteel
11	Hug	22	Bayangol
23	Haraa	24	Adaatsag
25	Dochgol	26	Ereendavaa
27	Hurlen	28	Idermeg
29	Baytag	30	Baaran
31	Bidz	32	Edren
33	Gobi Altai	34	Mandalovoo
35	Gurvansayshan	36	Zoolen
37	Atasbogd	38	Hashaat
39	Tsagaan Uul	40	Nuhetdavaa
41	Enshoo	42	Hutag Uul
43	Sulinheer	44	Duulgant

- Cenozoic alluvial basin
- Cenozoic plateau basalt
- Devonian-Carboniferous turbidite basin
- Permian-Triassic volcanic-plutonic belt
- Cambrian shelf carbonate rocks
- Cratonic block
- Metamorphic rocks of uncertain tectonic affinity
- Passive continental margin
- Island arc
- Backarc/forearc basin
- Accretionary wedge
- Ophiolite

- Right-lateral strike-slip faults
- Left-lateral strike-slip faults
- Thrust faults
- Faults: kinematics uncertain



Figure modified from Badarch, et al 2002

**LEGEND**



**CLIENT**



**PROJECT**

NAME Zuun Mod - Technical Report		
DRAWING TERRANE MAP		
FIGURE No. 7-2	PROJECT No. ADV-HK-00161	DATE September 2025

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## 7.2 Local Geology

The Zuun Mod Mo-Cu porphyry deposit is located in the Davkharkhar subzone of the Trans Altai terrane in Southwest Mongolia. Davkharkhar subzone is comprised by volcanogenic units of the lower Carboniferous Ulziitkhar formation; this was intruded by lower Carboniferous granitoids of the Bayan Airag Intrusive Complex and intruded by upper Carboniferous-lower Permian granitoids of the Baga Ovoot intrusive complex. The deposit area is unconformably overlapping by thick sediments of the lower Cretaceous sedimentary formations and Paleogene sediments to the south.

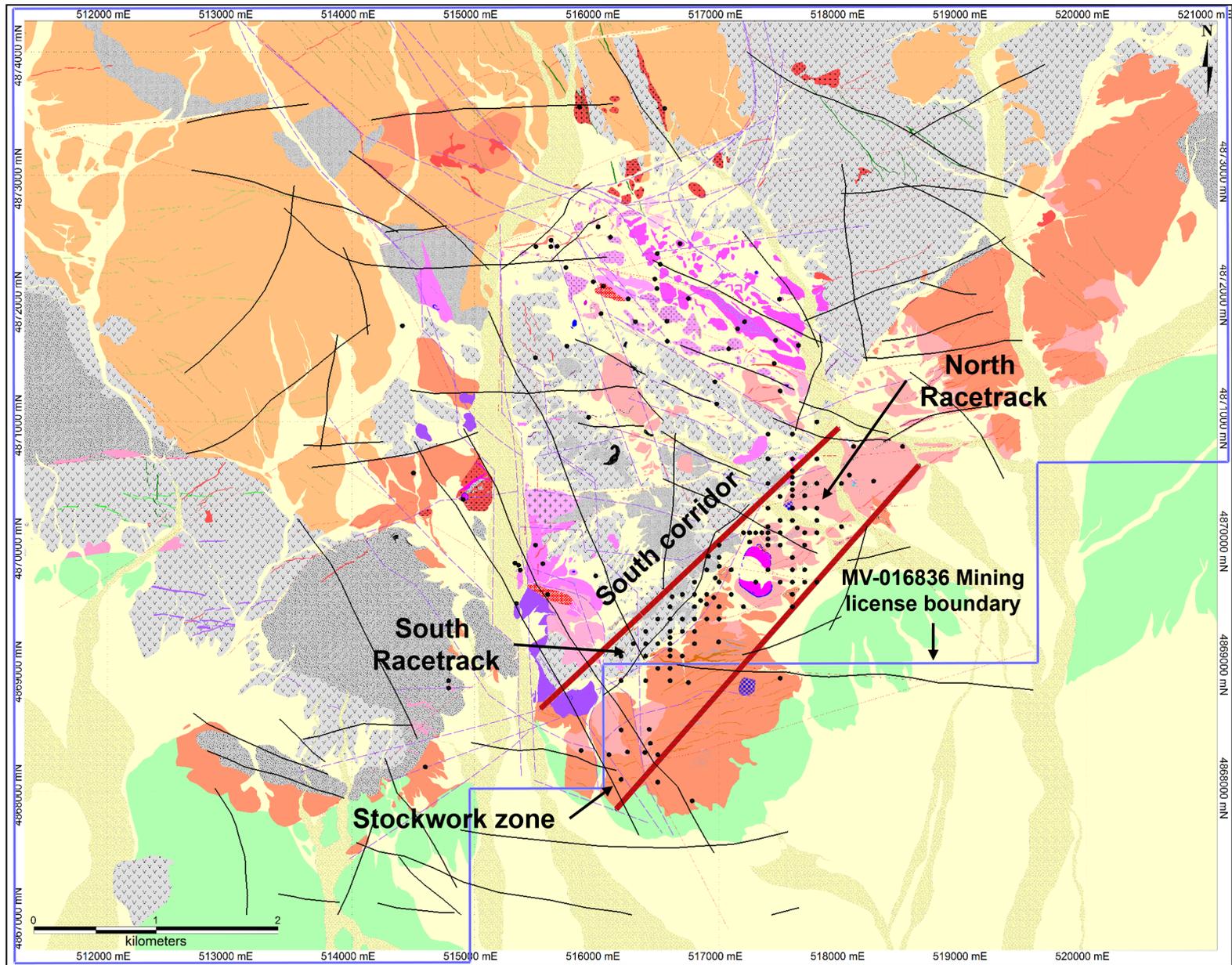
The geological formation and intrusive complexes of the Project area have been changed after 1:50 000 scale state geological mapping conducted in 2014-2019 (Tomurchudur et al., 2020). Lower Carboniferous Khuviinkhar formation has been changed to Ulziitkhar, lower Carboniferous Bayanbulag intrusive complex has been changed to Bayan Airag intrusive complex within Davkharkhar sub zone. But the granitoids near the Zuun Mod area have been distinguished by the new upper Carboniferous-lower Permian Baga Ovoot intrusive complex.

The late Carboniferous-Early Permian Baga Ovoot intrusive complex has 3 phase (Tomurchudur et al., 2020): 1-st phase - gabbrodiorite, quartz diorite; 2-nd phase - quartz monzonite, biotite granodiorite ( $301.8 \pm 2.7$  Ma), biotite granodiorite porphyry, adamellite, biotite hornblende, biotite granite; and 3-rd phase - medium-, medium-coarse grained biotite, biotite bearing granite, leucogranite, and widespread dyke complex of granodiorite, dacite, microgranodiorite, aplite and basalt. The second phase of the complex is widespread in the Zuun Mod deposit area and hosted the main Cu and Mo mineralization.

The Zuun Mod deposit is located in the NE trending, NW dipping Zuun Mod fault zone. By this fault the prospect area is subdivided into two blocks (**Figure 7-3**). Northern block (so-called Khuvyn Khar zone or North Corridor) is sub circular in shape and composed by undifferentiated units of the Ulziitkhar Formation: epidote-chlorite  $\pm$  tourmaline altered basalt, basaltic andesite, andesite, andesitic dacite, dacite, rhyodacite, rhyolite, and their tuffs, intruded by granodiorite to quartz monzonite of the Baga Ovoot intrusive complex. The age of the formation was determined as Tournaisian and Visean (359–330 Ma) based on fossilized flora (Bukhbat et al., 1999; Zobotkin et al., 1988).

The southern block of the Zuun Mod fault zone (so-called South Corridor) hosts the main Mo-Cu mineralization of the Zuun Mod deposit, stretching from SW to NE more than 4.5 km and continued outside of the license area. In the continuation of this fault to the NE ~15 km is located Bayan Mandal Mo-Cu occurrence (Tomurchudur et al., 2020), which has similar geology, alteration and mineralization as the Zuun Mod deposit.

The South Corridor consists of quartz syenite, quartz monzonite, biotite granodiorite, biotite granodiorite porphyry and granite of Baga Ovoot intrusive complex. Drill core observations indicate that the quartz syenite and biotite hornblende quartz monzonite units ( $305.3 \pm 3.6$  Ma, Altankhuyag et al, 2023) were intruded by the biotite granodiorite ( $301.5 \pm 8.9$  Ma, Gallant, 2003, and  $301.8 \pm 2.7$  Ma, Altankhuyag et al, 2023) and biotite granodiorite porphyry and granites.



**LEGEND**

- Qiv alluvium
- Qiii-iv elluvium
- K Cretaceous sediments
- Ulzitkhar Formation
- Rhyolite
- Andesite porphyry
- Andesite
- Bayan Airag Intrusive Complex
- Alkali granite (315.4Ma, K-Ar)
- Syenite, Quartz Syenite (313Ma, U-Pb)
- Fine grained granite
- Baga Ovoot Intrusive Complex
- Quartz Monzonite (306Ma, U-Pb)
- Biotite Granodiorite (301.2Ma, U-Pb; 301.5Ma, K-Ar)
- Quartz-Feldspar porphyry coarse-grained
- Quartz-Feldspar porphyry fine-grained
- Quartz-Feldspar and Biotite-Quartz-Feldspar porphyry phyllic altered, fine to medium-grained
- Hydrothermal Intrusive Breccia
- Dykes
- Pervasive strong silicified fine-grained dyke
- Feldspar porphyry dyke argillic altered
- Brown BQFP dyke
- Mafic dyke E-W trended cut alkali granite
- Mafic dyke NW trended cut alkali granite
- Feldspar porphyry dyke
- Quartz-feldspar porphyry dyke cut monzonite
- Dark BFP dyke
- Racetrack Stock and UST's
- Biotite-Quartz-Feldspar porphyry (RT stock)
- Buck A quartz, pegmatoidal quartz
- Other Ring Quartz dykes and UST's
- Light fine-grained BQFP dyke
- Other
- Hematite Quartz Breccia (HQB)
- Quartz-Tourmaline breccia and alteration
- A type quartz vein and floats
- Pegmatoidal quartz
- Greisen
- Massive magnetite body
- Gravity structure interpretation

**LEGEND**

- License Boundary
- Drill Hole

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<b>CLIENT</b>		<b>PROJECT</b>	
		NAME <b>Zuun Mod - Technical Report</b>	
<b>ERDENE</b> <small>RESOURCE DEVELOPMENT</small>		DRAWING <b>LOCAL GEOLOGY MAP</b>	
FIGURE No. 7-3	PROJECT No. ADV-HK-00161	DATE October 2025	



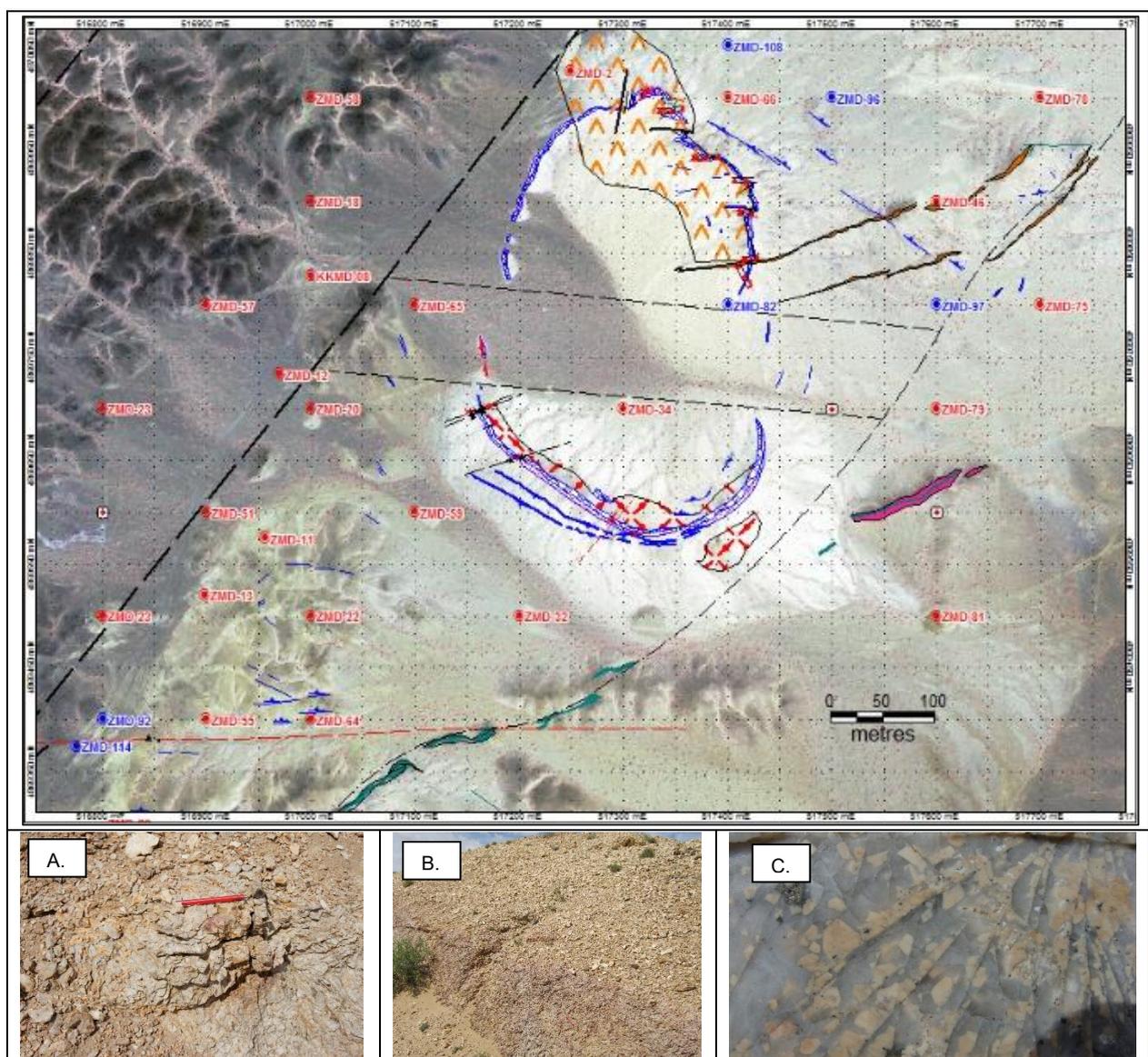
## 7.2.1 Racetrack Porphyry Stock

In the central part of the South corridor is located circular shaped ring dyke stock (Racetrack porphyry stock). The stock is composed by biotite feldspar porphyry and has elongated to the north measures ~400 m by 250 m in shape. Racetrack porphyry composition included quartz and K feldspar that commonly form micrographic textures. The “Ring dyke” forms circular ~ 3-10m elevated ridges of quartz crystals and zones of muscovite-quartz-feldspar segregation aggregates. Sometimes USTs are observed near the outer contact of the porphyry stock (**Figure 7-4**).

There are at least nine USTs and quartz-feldspar segregation outcrops that have been mapped within the license area, some of which have copper oxide showings. Their size ranges from 16m to 60m in diameter and are interpreted to represent the top of intrusive stocks (or fingers).

The Racetrack porphyry stock divides the Zuun Mod Mo-Cu porphyry deposit into a southern portion (South Racetrack) and northern portion (North Racetrack) zones.

**Figure 7-4 Map of the Racetrack porphyry stock**



**Note:** A. View of shuttled quartz crystals of Racetrack Ring Dyke; B. Unique fractured quartz-feldspar segregation zone; C. UST's.



### 7.2.1.1 North Racetrack

The North Racetrack zone is ~ 1.27 km long and 300–600 m wide with mineralized stockwork (dominant) and sheeted quartz veins hosted in granodiorite (**Figure 7-5**). The thickness of sheeted and stockwork quartz veins and veinlets range from 0.1 to 3.0 cm and fills open spaces and fractures. The mineralized veins / veinlets are characterized by quartz ± molybdenite ± chalcopyrite ± pyrite in association with potassic altered selvages composed of K-feldspar, secondary biotite, and magnetite. Disseminated molybdenite, chalcopyrite, and pyrite are also found within the halos of the potassic altered host granodiorite where they replace biotite and/or are intergrown with secondary biotite and magnetite. Rare fractures filled with massive molybdenite and thicknesses up to 0.5 cm have also been observed. The molybdenum mineralization grades from 100 to 2000 ppm Mo with copper contents from 200 to 500 ppm Cu. Potassic and sericitic alterations are observed rimming the quartz veins and veinlets, while granodiorite entirely shows phyllic alteration composed of quartz-sericite-pyrite.

**Figure 7-5 North Racetrack Intrusion**



*Note: A. Light grey, fine- to medium grained biotite granodiorite (BGD); Crystallization 678-727°C; B. Biotite Granodiorite cut by multi-stage quartz vein and quartz-moly veinlets. ZMD-39 (332.5 m); C. Biotite Granodiorite cut by stockwork quartz-moly veinlets. ZMD-70 (328 m)*

### 7.2.1.2 South Racetrack

The South Racetrack zone is hosted within quartz monzonite and granodiorite and forms an up to 1.25 km long and 580 m wide body. Molybdenum mineralization occurs as disseminated molybdenite within the alteration halos of the quartz monzonite and granodiorite replacing primary and secondary magnetite and biotite, as well as stockwork and sheeted quartz veins and veinlets filling open spaces and fractures. Pyrite and chalcopyrite locally replace magnetite and biotite within the host granitoids. Typical molybdenum grades range from 200 to 900 ppm Mo with copper contents is typically between 500 and 1000 ppm Cu. Higher grade of moly and copper mineralization in the Racetrack South zone usually associated with zones of increasing mafic xenoliths within potassic altered quartz monzonite (**Figure 7-6**).



Figure 7-6 South Racetrack Intrusion



Note: A. Potassic altered quartz monzonite: spots of secondary biotite-magnetite and pyrite cut by stockwork quartz-molybdenite, chalcopyrite veinlets. ZMD-28 (159.7-160.0m): 1335 ppm Cu, 1350 ppm Mo. B. Potassic altered quartz monzonite with abundant xenoliths of mafic and felsic rocks: ZMD-28 (194.35-194.8m): 1145 ppm Cu, 1550 ppm Mo. C. Potassic altered quartz monzonite with xenoliths of basalt cut by A type qtz-mt-cpy-bornite-py trace Mo vein fill, and cut by stockwork qtz-mo-cpy-bornite veins: ZMD-51 (381.3-381.7m): 1530 ppm Cu, 940 ppm Mo. D. Quartz monzonite cut by sheeted 0.7cm qtz-cpy-mo veins with K-spar selvage and cut by 0.8 cm grey qtz-cpy-bornite-mo-py weakly min vein, strong K-spar selvage (low angle to core axis), A-vein mt-strong cpy; ZMD-51 (464.65-465.15m): 1570ppm Cu, 710ppm Mo.

### 7.2.1.3 Stockwork

The Stockwork zone occurs in the southern portion of the South Corridor and is an up to 500 m long and 300 m wide and is hosted in quartz monzonite and granodiorite. Molybdenum and copper mineralization occurs as stockwork veins and veinlets, as well as disseminated within the intensely altered granitoids by replacing mafic minerals.

### 7.2.1.4 Age of Mineralization

The geochronological age of the molybdenum mineralization of the Zuun Mod Mo-Cu porphyry deposit has been determined by Re-Os method and shown  $298.2 \pm 0.9$  Ma (Gallant, 2003),  $298.4 \pm 4.9$  Ma and  $295.6 \pm 4.8$  Ma (Altankhuyag et al, 2023).

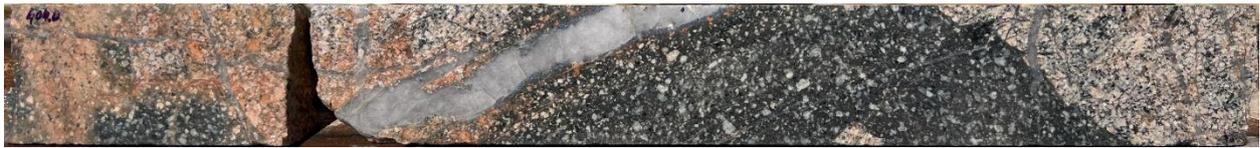
### 7.2.1.5 Dyke complex

The dyke complex of the Baga Ovoot intrusive complex is composed by granodiorite porphyry, microgranodiorite, dark trachy dacite porphyry, dacite porphyry, alkali granite, aplite and basalt. Most of the dykes has not mineralized and interpreted to be post mineralization, except for dark trachy dacite porphyry dykes.

Dark trachy dacite porphyry cut quartz monzonite and biotite granodiorite and are cut by mineralized quartz veins, therefore these dykes are interpreted as pre-mineralization dykes (**Figure 7-7**).



**Figure 7-7 Barren Dykes**



*Note: Dark trachy dacite porphyry dyke (~28cm) cut quartz monzonite, and both cut by stockwork qtz-mo-cpy-py veins and veinlets. ZMD-51, 404.0-404.52m: 1130ppm Cu, 2630ppm Mo. SRT orebody.*

## 7.3 Mineralization

### 7.3.1 Molybdenum

Mo mineralisation within the Project occurs predominantly as molybdenite ( $\text{MoS}_2$ ) contained within and proximal to stockwork and sheeted quartz veins. Proximal to the veins molybdenite can occur as fine to coarse grains disseminated within a matrix of a pervasive potassic or phyllic altered quartz monzonite, monzo-granite or granodiorite. Mo mineralised quartz veins are typically characterised by a well-defined potassic alteration halo (or selvage) which may extend up to several centimetres from the vein wall (**Figure 7-8**). Where stockwork and sheeted quartz vein densities are high, the potassic vein selvages coalesce to produce pervasive potassic-altered rock. The molybdenite mineralisation is commonly accompanied by chalcopyrite and occasionally pyrite.

Molybdenite within quartz stockwork and sheeted quartz vein zones generally occurs as fine to coarse clots and thin bands along vein contacts or as narrow bands within laminated quartz veins parallel to vein margins (**Figure 7-8**). Individual quartz veins range from <0.5 cm (most common) to <3 cm (rare), however the amount of molybdenite is not dependent upon vein thickness. The best mineralised zones are characterised by a dense matrix of quartz stockwork or sheeted quartz veins and pervasive potassic alteration manifested as K-feldspar, secondary biotite and magnetite. In these areas, disseminated molybdenite often appears to have replaced biotite or is intergrown with secondary biotite and magnetite.

The North Racetrack mineralisation is dominated by irregular stockwork with molybdenite occurring on the vein margins or within the K feldspar altered halos surrounding the veins. The South Racetrack area is dominated by sheeted veins spaced 5-30 cm apart. These veins show consistent orientation and dip steeply to the north-west. Away from the veins within the alteration halo, abundant disseminated fine-grained mineralisation can be found.

All the main intrusive rock types within the Project contain highly anomalous, potentially economic concentrations of Mo mineralisation, including the granodiorite, monzonite, and syenite units.

### 7.3.2 Copper

Copper mineralisation within the Project is typically found associated with Mo mineralisation within the South Corridor mineralised zones and averages approximately 680 ppm (0.068%) Cu within zones of  $\geq 0.04\%$  Mo.

Chalcopyrite ( $\text{CuFeS}_2$ ) is the predominant Cu mineral and occurs as fine to coarse-grained disseminations that generally overprint and partly replace mafic minerals within the intrusions, particularly in secondary magnetite ( $\text{Fe}_3\text{O}_4$ ) and biotite ( $\text{K}(\text{Mg},\text{Fe})_3\text{AlSi}_3\text{O}_{10}(\text{F},\text{OH})_2$ ). Chalcopyrite also occurs along with molybdenite, magnetite, and pyrite as densely clustered disseminations that preferentially cluster around the margins of mafic volcanic xenoliths. In addition, chalcopyrite occurs as medium to coarse-grained blebs emplaced along quartz vein selvages, as thin veinlet infill with pyrite, and as coarse-grained infill within angular-shaped open spaces and vughs (within massive quartz veins).

Surface showings of Cu are commonly seen as hydrous Cu carbonates and silicates, namely malachite ( $\text{Cu}_2\text{CO}_3(\text{OH})_2$ ) and chrysocolla ( $(\text{CuAl})_2\text{H}_2\text{Si}_2\text{O}_5(\text{OH})_4 \cdot n\text{H}_2\text{O}$ ), respectively. There is a notable increase in the occurrence of hydrous Cu minerals in the Stock work zone in the Southern Corridor.



### 7.3.3 Rhenium

Rhenium commonly occurs within porphyry systems in molybdenite ( $\text{MoS}_2$ ) as a substitute for Mo. In effect, all the Re is concentrated in the molybdenite. The concentrations of Re within the Mo mineralised zones at Zuun Mod are in the range of 0.15 ppm to 10.85 ppm, about 300 times the abundance of Re in the earth's crust (1ppb). These are significant concentrations of Re and equate to approximately 125 to 150g/t in a 50% molybdenite concentrate.

**Figure 7-8 Mineralisation Observed in drill core**



*Source: MMC 2011 Technical report. Note: Left hand. Hole ZMD-22 at 236 m. Vein hosted molybdenum mineralisation associated with quartz stockwork veins and intense potassic alteration. Right hand. Hole ZMD-20 at 232 m. Disseminated molybdenum mineralisation (replacing mafic minerals) associated with strong potassic alteration.*



## 8. Deposit Types

Early interpretations of the alteration and the Mo-rich mineralization at the Zuun Mod deposit considered the deposit to be a Mo-dominant deposit similar to the Endako or Climax Mo mines in western North America, however, a comparison of the Cu: Mo ratio in ZM with 57 global Mo and Cu-Mo porphyries (Guilbert and Parks, 1975) indicate that none of the studied deposits had overall Cu / (Cu + Mo) from Cu74-Mo16 to Cu5-Mo95. Zuun Mod has Cu / (Cu + Mo) = 54.8 (Cu55-Mo45, using MMC's avg. concentrations – 0.069% Cu, 0.057% Mo). Based on these data, Zuun Mod is either unique with respect to the other 57 of the porphyries studied by Guilbert and Parks (1975) or, more likely, it represents a Mo-rich zone within a porphyry Cu-Mo system.

Using fluid inclusion, mineralogical and geochemical data for the giant Bingham Canyon Cu-Mo-Au deposit in Utah, Seo et al. (2012) concluded that Mo- and Cu-rich fluids were separated during the cooling and crystallization of the porphyry complex. They concluded that early Cu-rich fluids were more oxidized and less acidic than the later-stage Mo-rich fluids. This research provides a mechanism for the separation of Mo and Cu in porphyries and may explain the observed metal ratios and concentrations at ZM. This may also explain why the Mo-content in the high-grade Cu-Ag mineralization in the Khuvyn Khar zone (ZMD-121) has such low Mo content. The potential for discovery of additional Cu-rich porphyry style mineralization elsewhere in the Khuvyn Khar-Zuun Mod complex is interpreted as excellent.

The type and styles of alteration and mineralisation within the Project are consistent with many characteristics documented from other porphyry-type deposits within Mongolia and worldwide. Porphyry-type mineralisation is usually accompanied by a prograde alteration assemblage characterised by potassium feldspar, secondary biotite and magnetite, referred to as “potassic alteration”. Another common alteration type is identified by a retrograde hydrothermal mineral assemblage of quartz-pyrite-sericite (QSP) or “phyllic” alteration. This type of alteration often occurs marginal to the zones of highest-grade mineralisation and, in some deposits, plays host to the highest grades. Both alteration types are ubiquitous within Mo-Cu-Re mineralised zones within the Project.



## 9. Exploration

Erdene has completed exploration work since acquiring the Project in early 2005. Exploration programs have been phased, building on previous exploration results (Gallant/WMC) and expanding from typically wide-spaced initial geochemical, geophysical and diamond drilling programs to more closely spaced programs as results have warranted. Exploration techniques used by Erdene included:

- Surface geological mapping.
- Surface geochemical surveys.
- Geophysical surveys; and
- Surface diamond drilling.

Two main phases of drilling have occurred within the mining license, concluding in 2009 and 2010. Additional exploration drilling on the Khuvyn Khar copper prospect was carried out in 2011 (6 holes) and 2015 (2 holes). In 2023, for the first time, oriented core drilling was carried out over 12 holes, 7 exploration holes and 5 holes within the area of the Zuun Mod molybdenum-copper deposit. The results of the drilling programs are summarised in **Section 10**.

### 9.1 Survey Control

A differential GPS survey grid was established over the exploration area, starting at 200 m spacing and continuing to the current 100m spacing over an area in excess of 70 km<sup>2</sup> that covers the central deposit area as well as the SW, NE and southern extensions of the Zuun Mod porphyry complex. This survey grid was established and expanded to provide control for the various surveys carried out on the Project and to provide topographic (elevation) data. In 2007, the survey included the establishment of four permanent base stations at Zuun Mod.

In late 2008 Best Survey LLC, through Erdene's contractor AMC LLC, established 5 stations based on the Krasovsky coordinate system and produced a topographic map at a scale of 1:2000 over the North and South Racetrack zones. Best Survey LLC also surveyed all drill holes, up to ZMD-109, within the area of the reported 2009 mineral resources at Zuun Mod.

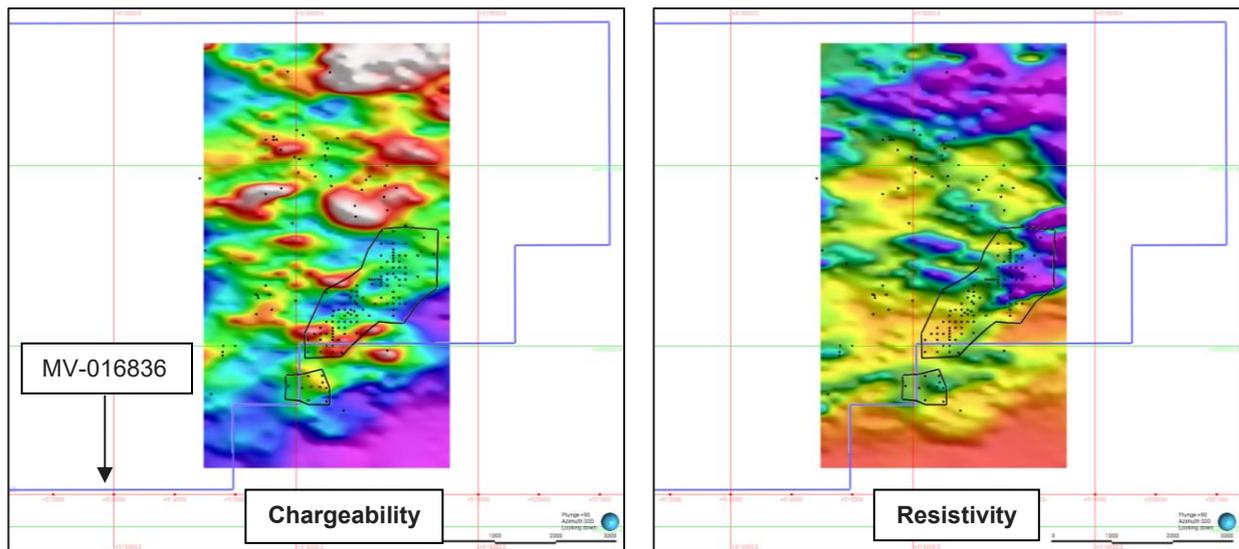
### 9.2 Induced Polarisation (IP) Survey

Using the survey grid to provide control, ground IP gradient and several expanded dipole-dipole surveys have been conducted over the Zuun Mod Project. The gradient geophysics was completed using a VIP 3000 transmitter at 50 m intervals on a line spacing of 250 m over an area of 4 km x 4.7 km. Erdene has conducted three dipole-dipole surveys expanding on the area initially surveyed by Gallant/WMC in 2003. The surveys were completed using a high-power VIP 10,000 transmitter at 200 m intervals for a total of 86.8 line km. In 2008, a pole –dipole survey was completed on 250 m spaced lines for a total of 86 line km over part of the South Corridor and the south and western portions of the Zuun Mod complex. The entire Zuun Mod complex has been IP surveyed on 250 m spaced lines. Chargeability and resistivity maps are shown in **Figure 9-1**.

This geophysical survey improved the ability to resolve lithologic units and anomalies compared to the WMC survey. Broad zones of high chargeability and resistivity were identified and are coincident with alkaline intrusive and granodiorite, respectively, in the South Corridor. Additionally, discreet zones of intense sulphide alteration and associated stockwork quartz veins appear as anomalous zones of chargeability and resistivity. Other chargeability anomalies appear to reflect zones of pyritic alteration within propylitic-altered volcanics and phyllic-altered intrusive rocks.



**Figure 9-1 Induced Polarisation Survey Map (black outline – Zuun Mod mineralisation boundary)**

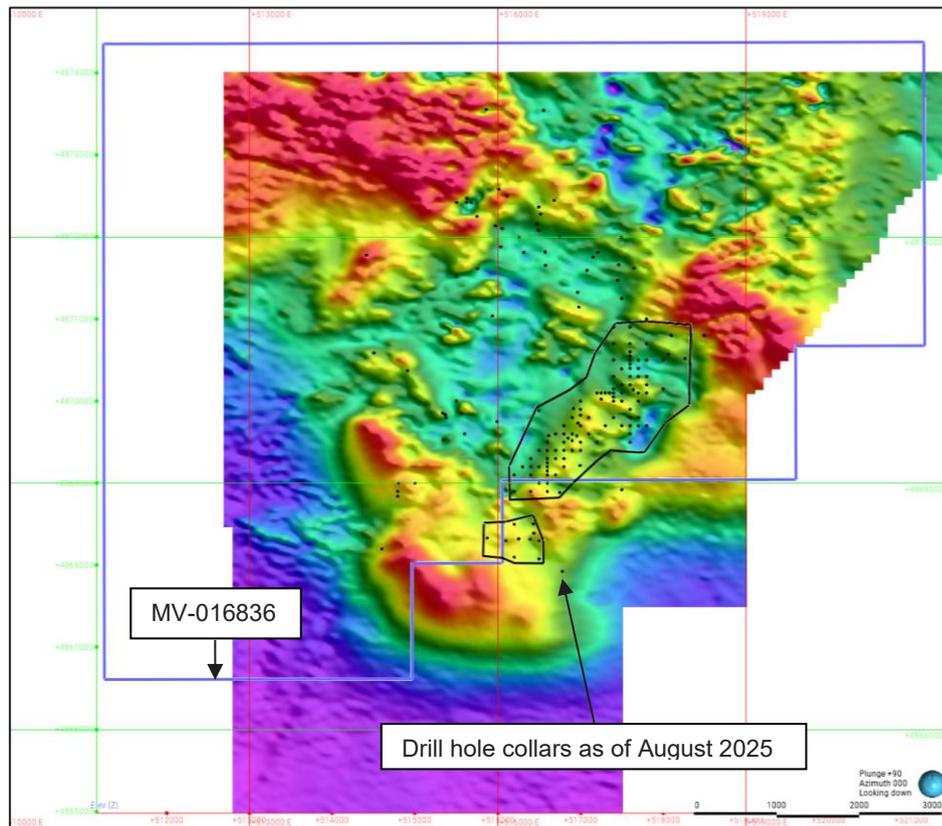


### 9.3 Ground Magnetics

Detailed ground magnetic surveys at 100 m line spacing and 25 m stations have been completed over the entire Zuun Mod porphyry complex, including the area of the South Corridor. Results provided resolution of regional and prospect scale structures and helped to differentiate lithologic units as a function of variable magnetic response. The alkaline units comprising the SRT Zone appear as a northeast trending zone of relatively high magnetic response, in contrast to the relatively lower magnetic response from the NRT Zone that is underlain by granodiorite and more siliceous units. The andesite within the core of the Zuun Mod porphyry complex also appears as a relatively low to moderate magnetic zone (**Figure 9-2**).



**Figure 9-2 Total Magnetic Intensity (TMI) Map (black outline – Zuun Mod mineralisation boundary)**



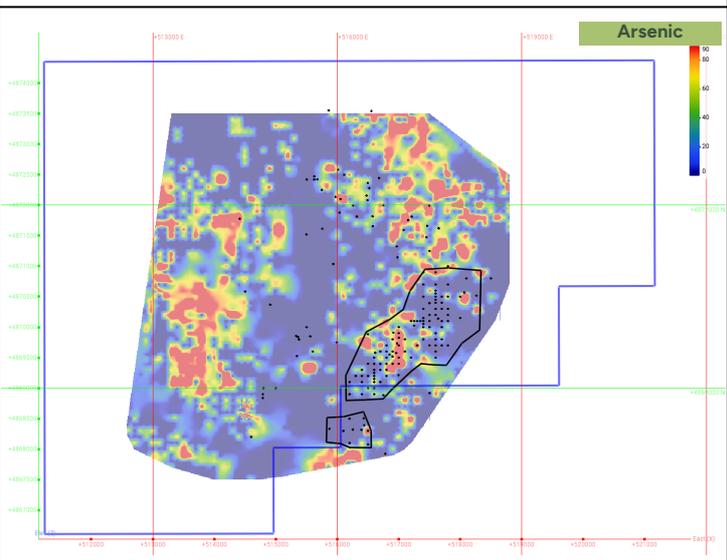
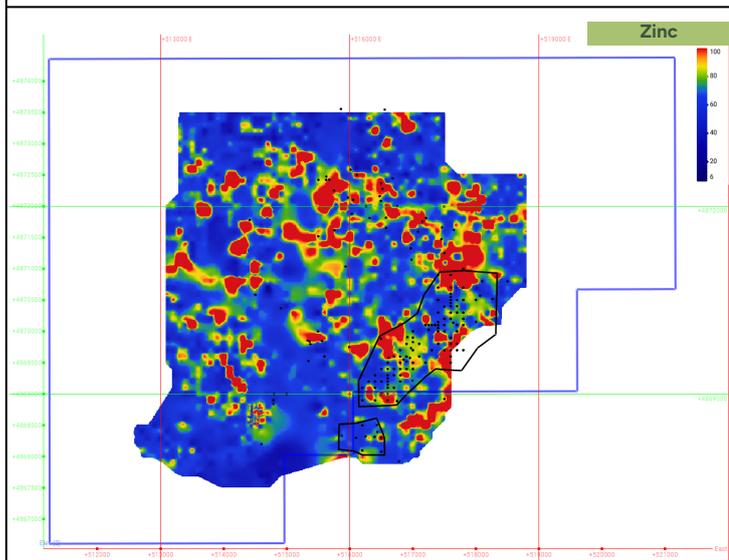
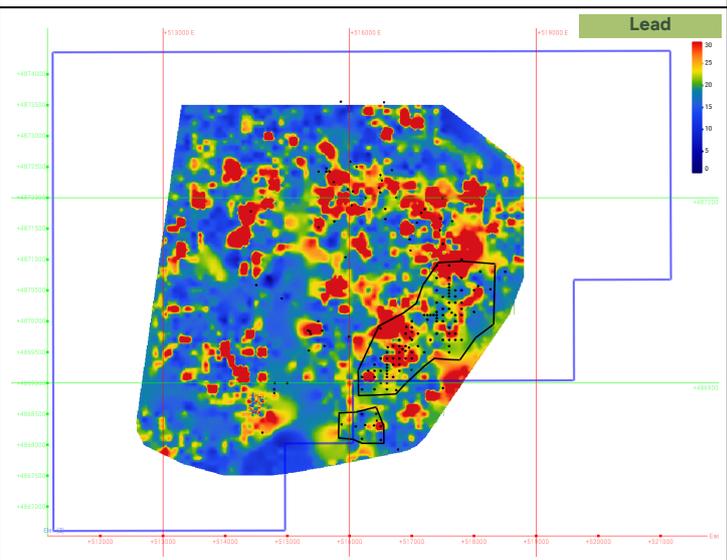
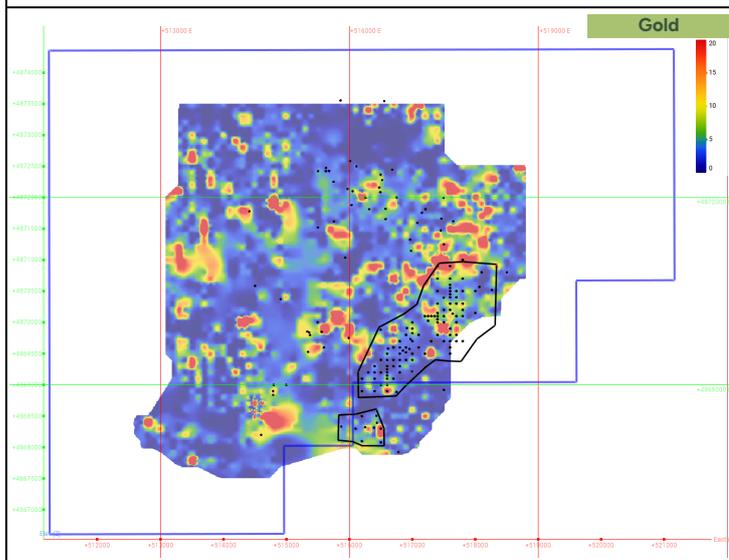
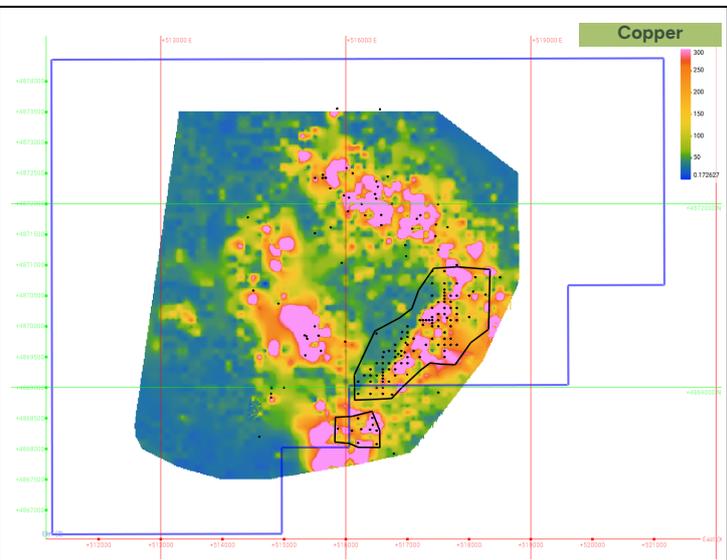
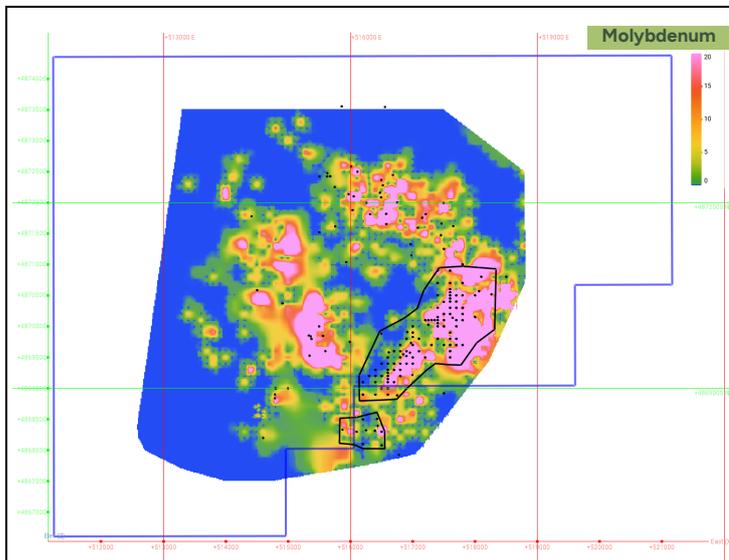
## 9.4 Geochemical Surveys

The rock and soil geochemical surveys carried out by Gallant/WMC in 2002 were the first project-wide systematic surface geochemical surveys completed on the Zuun Mod Project.

Erdene carried out an extensive soil geochemical survey, collecting 2,100 samples at 100 x 100 m spacing over a 6 x 5.5km area in 2007 and 2008 as part of a program designed to improve the interpretation of the characteristics and distribution of mineralisation within the South Corridor and surrounding area. In addition, over 550 rock chip samples were collected on 100 x 200 m grid centres within the entire Zuun Mod porphyry complex. This program identified broad zones of anomalous molybdenum and copper mineralisation in addition to precious metal targets.

Target areas identified include the 3 km long West Corridor target, which lies on the western side of the Zuun Mod porphyry complex. Significant copper, molybdenum and gold in soil anomalies are coincident with a well-defined high induced polarisation and dipole-dipole chargeability anomaly (Figure 9.2). Another significant target, North Corridor, is located in the northern portion of the Zuun Mod porphyry complex, where a strong surface copper geochemical anomaly was identified measuring approximately 1.0 by 1.7 km and averaging 246 ppm copper in soil with values up to 3040 ppm Cu (**Figure 9-3**). Exploration drilling by WMC/Gallant included two holes located on the periphery of the anomaly but angled away from the North Corridor target. The two drill holes included broad copper zones averaging 0.11% to 0.15% Cu over 135 m and 160 m respectively, and included higher grade zones exceeding 0.3% Cu over 10 m. This copper anomaly remains open to the north.

Both the West and North Corridors are prospective areas for the identification of additional mineralised zones within the Zuun Mod porphyry complex.



**LEGEND**

-  License Boundary
-  Mineralisation Boundary
-  Drill Hole



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**CLIENT**



**PROJECT**

NAME  
Zuun Mod - Technical Report

DRAWING  
GEOCHEMICAL SURVEY RESULTS

FIGURE No. 9-3	PROJECT No. ADV-HK-00161	DATE October 2025
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## 9.5 Exploration Potential

Drilling has yet to define the full extent of the mineralisation at Zuun Mod, which remains open. There is good potential to increase the Mineral Resources, as mineralisation is open to the north, south, and down dip, requiring further drilling to explore these possibilities. Additionally, mineralisation extends northwest and is not yet defined by drill holes beneath the andesite unit.

The Zuun Mod- Khuvyn Khar (ZM-KK) porphyry system has similar magmatic and metallogenic ages as the porphyry Cu-Au deposits of the Almalyk District within the CAO B located to the west of Mongolia and has excellent potential for discovery of additional mineralization.

The Mo-Cu deposits at Zuun Mod represent Mo-rich zones in a Cu-Mo porphyry system which has excellent potential for discovery of additional Cu-Mo (Au) mineralization in the 4.5 by 5.5 km multi-stage porphyry complex.

Recent re-evaluation of previous drilling, coupled with detailed geological mapping, geophysical and geochemical studies has defined seven new high priority exploration targets in the KK zone of the ZM-KK porphyry complex. Furthermore, the large license shows potential for additional discovery of high-grade Cu-Ag mineralization, based on the results of historical exploration outside the defined Mineral Resource.



## 10. DRILLING

### 10.1 Drilling Summary and Method

Details of the drilling at Zuun Mod were sourced from a spreadsheet provided to SLR by ERD and from the technical report completed in 2011.

Following the Project acquisition in 2005, Erdene carried out a wide spaced exploration drilling program to test geochemical and geophysical anomalies and extend the interpretation from the initial 13 exploration holes drilled by Gallant/WMC in 2003. This program resulted in the identification of several zones of significant Mo mineralisation.

In 2007, Erdene commenced a systematic resource delineation program which culminated in a NI 43-101 compliant Mineral Resource for the South Corridor area, as noted in the Technical Report dated June 2009. Stage I drilling comprised 200 m spaced grid drilling in the areas of the Racetrack and Stock work mineralised zones, with a total of 29 holes (ZMD 18 to 46) drilled as part of this program. As a result of the encouraging results, Erdene proceeded with Stage II drilling comprising 100 m spaced drilling within the defined mineralised zones to increase the confidence level of the Resource and to define the extent and continuity of the mineralised zone. The Stage II program consisted of an additional 35 drill holes (ZMD 47 to 81) and was completed in December 2007. It was decided to carry out a further round of drilling, Stage III, to further define and infill the higher-grade portions of the resource in the South and North Racetrack areas. Stage III was completed in October 2008 and consisted of an additional 28 drill holes (ZMD 82 to 109).

In 2009-2010, Erdene completed several infill holes and extended existing holes to define mineralisation at depth. In 2009, two holes were deepened, and no additional holes were completed. In 2010, Erdene completed five infill and three exploration holes, while eight holes were deepened.

In 2023, Erdene carried out oriented core drilling at Zuun Mod, with twelve holes drilled totalling 4,095 m. Erdene also re-logged some of the higher-grade historical holes to understand the geometry and orientation of mineralisation.

All data provided was from surface diamond drilling and surface trenching conducted between 2003 and 2023, with a total of 155 diamond holes for 53,273 m and 14 trenches for 1,604 m included. A subset of 113 holes for 41,250 m was used in the Mineral Resource. A summary of the drilling data in the database is shown in **Table 10-1**.

**Table 10-1 Summary of Drilling at Zuun Mod**

Type	Year	Number of Holes	Total Length (m)
DD	2003	14	3,718
	2005	15	4,682
	2007	64	23,248
	2008	33	10,047
	2010	9	3,880
	2011	6	2,603
	2015	2	1,000
	2023	12	4,095
<b>Total DD</b>		<b>155</b>	<b>53,273</b>
TR	NA	14	1,604
<b>Total</b>		<b>169</b>	<b>54,877</b>

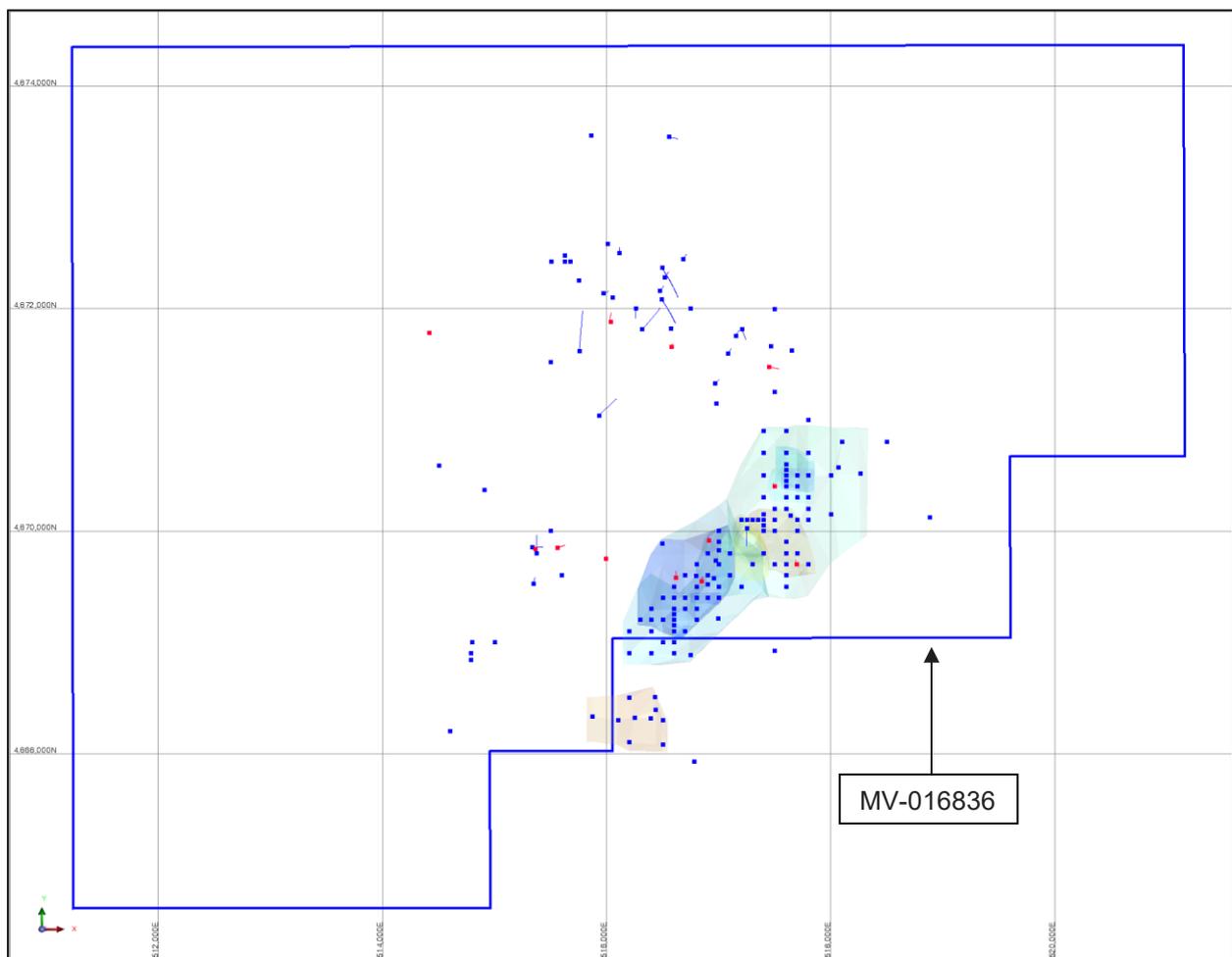


The extent and spacing of drilling is shown in **Figure 10-1**.

All drill holes in the Project have been drilled from surface using diamond core, however the KKMD series holes were pre-collared to depths of 25 to 70 m using the reverse circulation (RC) drilling method. Core sizes varied from NQ size which was used during the pre-Erdene drilling and HQ core size utilized by Erdene for the majority of the drilling. The drilling completed by Erdene was predominantly HQ diameter core, reducing to NQ where necessary due to ground conditions.

Drilling has been carried out on an E-W grid with hole spacing ranging from 50 m to 200 m but typically averaging 100 m.

**Figure 10-1 Plan View of Drilling at Zuun Mod (Holes drilled in 2023 using oriented core shown in Red)**



## 10.2 Drill Hole Collar Location

All collars were in national grid coordinates (WGS84 datum). Accurate survey data was available for all holes up to ZMD-109, within the area of the reported Zuun Mod mineral resource. Coordinates for all other holes were determined by handheld GPS. SLR recommends that all collars within the area of the reported resources should be accurately located prior to any additional resource update for the project.

## 10.3 Down-Hole Surveys

With the exception of three KKMD holes (-05, -11 and -13) and ZMD-02, all pre-2023 holes were drilled vertically. Thirty-seven out of 155 holes have single survey measurements, while the remaining holes have



more than two downhole survey measurements. Holes drilled in 2023 were drilled toward the north with dip angles of 60 to 85 degrees. Holes were surveyed at 50 to 100 m intervals.

The current downhole survey method is susceptible to interference by magnetic minerals. Potassic alteration (magnetite-biotite) is commonly observed in the drill core which could possibly affect survey azimuth readings. SLR investigated whether there are erroneous azimuth measurements due to the magnetic interference, with differences between adjacent downhole azimuth readings plotted against the corresponding difference in magnetic susceptibility measurements. Analysis does not show a strong correlation between large azimuth deviation and large changes in magnetic susceptibility measurements, and any changes between adjacent azimuth measurements are modest. More analysis needs to be carried out to understand the effect of rock magnetism on survey azimuth readings.

## **10.4 Geological Logging and Core Recovery**

Drillholes are logged in detail using paper logs before being coded and entered into an electronic database.

All holes were logged for lithology, photographed and a rock quality description (RQD) was determined. At the completion of the drill hole, the collar pipe was cemented in place to preserve the stability of the hole.

Erdene's geological logging of drill core included recording lithology, alteration type/intensity, mineralisation type, veining, and other descriptions.

An oriented core system was used (Reflex Act3 instrument) for 2023 drilling, allowing geologists to measure and record the true orientation of veins, bedding and structural features, including faults and joints.

The overall core recovery is generally excellent (97%) with some low recoveries noted in zones of eluvium or colluvium, generally confined to the first few meters of the drill holes.



## 11. Sample Preparation, Analyses and Security

Information on the sampling methodology was sourced from MMC, 2011 and supported by observations of historic drill core made by SLR during the site visit in 2025.

Drilling was typically carried out using HQ and NQ size cores. Due to the dissemination of Mo grades throughout the porphyry complex, the entire drill hole was sampled at continuous 2 m intervals, regardless of lithological and mineralogical variations except for barren dykes. The minimum sample size was 0.6 m, although very few samples were less than or more than 2 m in length.

All samples were half cored using a core saw with drill cuttings, and the core was dispatched to laboratories for sample preparation. All cutting, bagging and sample dispatches were completed by the local exploration teams under the direction of a senior geologist from the Company. The remaining half was stored in appropriately marked core boxes (**Figure 11-1**). SLR observed the remaining half core to be well organised and carefully aligned, suggesting that care was taken during the sampling process.

The sample preparation for all programs was completed at SGS in Ulaanbaatar. Analytical processing was completed at a variety of laboratories, as shown in **Table 11-1**. Details of the sample preparation and analytical processing are given below.

**Table 11-1 Sample Preparation and Analysis Summary**

Phase	Sample Prep	Forward	Analysis	Elements
WMC (KKMD Series)	SGS Ulaanbaatar	Pulp	ALS Vancouver	Mo, Cu, Re, Au + 31 Elements
ZMD 1 to 17	SGS Ulaanbaatar		SGS Ulaanbaatar	Mo, Cu
ZMD 18 to 72	SGS Ulaanbaatar	Pulp	Chemex Vancouver	Mo, Cu, Re + 45 Elements
ZMD 73 to 81	SGS Ulaanbaatar	Pulp	Intertek China	Mo, Cu, Re + 33 Elements
ZMD 82 to 113	SGS Ulaanbaatar	Pulp	Chemex China	Mo, Cu
ZMD 115 to 128	SGS Ulaanbaatar	Pulp	SGS Ulaanbaatar	Mo, Cu
ZMD 129 to 130	SGS Ulaanbaatar	Pulp	SGS Ulaanbaatar	Mo, Cu, Au + 31 Elements
ZMD 131 to 142	SGS Ulaanbaatar	Pulp	SGS Ulaanbaatar	Mo, Cu, Re + 57 Elements

**Figure 11-1 Zuun Mod Half Remaining Core After Sampling (ZMD-131 6 m at 0.067% Mo and 0.098% Cu from 268 m)**





MMC previously reviewed the accreditation details of the relevant laboratories and considered them to be reasonable and of international standards.

### **WMC DRILLING (2003)**

All samples for the KKMD series holes were submitted to SGS (formerly Analabs) in Ulaanbaatar for sample preparation, and pulps were forwarded to ALS Chemex in Vancouver for analysis.

All pulps were analysed for Au by 30g Fire Assay with an Atomic Absorption (AA) finish, and for multi-element by aqua regia digestion with an ICP-ES finish. A select suite of samples (KKMD-03 samples) were also analysed for Re and Mo by 4-acid digestion with an ICP-ES finish. Comparison of Mo analysis using 4-acid digestion to Mo using a standard aqua regia digestion indicates that Mo results by aqua regia are low by about 10%.

Data quality was monitored by inserting blanks, standards, and duplicates. Duplicates from RC chips from the top of the holes were taken at the drill site using the reject material from the splitter. Diamond drill core duplicates were taken as quarter core from the other half of the core, with the interval designated by the supervising geologist.

### **ERDENE DRILLING (POST 2005-2010)**

For the ZMD Holes 1 to 17, the core was washed after cutting and prior to sampling. Samples were submitted in batches of 30 samples, with each batch containing a prepared Mo or Cu standard, and an analytical blank comprised of silica sand.

The standard and blank samples were inserted randomly into each batch. Alternating high (750 ppm) and low (350 ppm) Mo standards were inserted at site into each sample batch. Additionally, a laboratory duplicate was prepared for every 10<sup>th</sup> core sample and stored for possible check assaying at an outside independent laboratory. Samples were bagged and submitted directly to SGS in Ulaanbaatar for sample preparation, in which all samples were crushed, and a 1.5kg split was recovered. Each sample was assayed for Cu and Mo. Mo was assayed using a 4-acid digestion with determination of Mo by AA. Cu was determined using a 3-acid extraction followed by AAS.

For ZMD Holes 18 to 109, Erdene applied the same protocol used in the exploration drilling phase. However, only the high Mo standards (no Cu standards) were included in the sample batches, and samples were sent to SGS Laboratories in Ulaanbaatar for sample preparation only.

In addition, drill core samples were submitted to the SGS laboratory in batches of 20 that included the insertion of one blank and one Mo analytical standard. Again, a laboratory duplicate was prepared for every 10<sup>th</sup> core sample and stored for possible check assaying at an outside independent laboratory. Samples were jaw crushed to 85% passing 3.35 mm, with a split taken using a rotary device ( $\leq 500$ g) which was then pulverised to 90% passing 75 $\mu$ m. A 50 g sample was prepared and placed in a sample pouch and packaged for shipping.

For ZMD Holes 18 to 72, pulps were sent from SGS Ulaanbaatar to ALS Chemex in Vancouver for multi-element (48) analysis, including Mo, Cu and Re (Rhenium). At Chemex, received pulps were digested using a 4-acid leach process and then analysed using their ICP-MS and ICP-AES ultra-trace level analytical method. All samples were analysed using ICP-AES (Inductively Coupled Plasma – Atomic Emissions Spectroscopy) and those with high concentrations of Bi, Hg, Mo, Ag or W were analysed using conventional ICP-AES analysis.

For ZMD Holes 73 to 81, pulps were sent from SGS Ulaanbaatar to Intertek Testing Services Laboratory in Beijing, China for multi-element (36) analysis including Mo, Cu and Re. Pulps were digested using a 4-acid leach and analysed using ICP-MS techniques.

For ZMD Holes 82 to 113, pulps were sent from SGS Ulaanbaatar to Chemex in China (Guangzhou) for Cu and Mo analysis only. At Chemex China, received pulps were digested using a 4-acid leach process and then analysed using their ICP-AES (Inductively Coupled Plasma – Atomic Emissions Spectroscopy)



analytical method with a lower detection limit of 1 ppm for Mo and Cu. Those samples with high concentrations of Cu or Mo were analysed using conventional ICP-AES analysis.

For ZMD holes 115 to 122 Erdene applied the same protocol used in the exploration drilling phase. However, only the high and low Mo standards were included (no Cu standards) in the sample batches and samples were sent to SGS Laboratories in Ulaanbaatar for sample preparation and analysis. At SGS, samples were digested using a 4-acid leach process and then analysed using their AAS (Atomic Absorbance Spectrophotometry) with a lower detection limit of 10 ppm for Mo and Cu.

For ZMD holes 123 to 128 Erdene applied the same protocol used in the exploration drilling phase. A low Mo/low Cu standard was used along with a high Cu standard in alternate sample batches and samples were sent to SGS Laboratories in Ulaanbaatar for sample preparation and analysis. At SGS, samples were digested using a 4-acid leach process and then analysed using their AAS (Atomic Absorbance Spectrophotometry) with a lower detection limit of 10 ppm for Mo and Cu.

For the 2015 drilling carried out by Tian Poh, ZMD holes 129 and 130 were sampled using the same protocol used by Erdene in the exploration drilling phase. A low Au / low Cu standard was used along with a high Au / high Cu standard in alternate sample batches and samples were sent to SGS Laboratories in Ulaanbaatar for sample preparation and analysis. At SGS, all samples were fire assayed for Au and analysed using 4-acid digest ICP analysis for a 33-element suite

For the 2023 drilling campaign (ZMD 131 to 142), all sample preparation was undertaken by the SGS Laboratory in Ulaanbaatar. Samples were weighed and dried, then jaw crushed to 90% passing 3.35 mm. A riffle splitter was used in preparation of a 600 g sub-sample which was pulverised to 90% passing 75 microns. All samples were analysed using 4-acid digest ICP analysis for a 57-element suite.

SLR considers that the sampling and assaying methods and approach are reasonable for this style of mineralisation. The samples are representative, and there is no indication of bias introduced during sampling. The SGS laboratory is accredited/certified to ISO 9001 and is independent of ERD, and any relationship is commercial in nature.

## 11.1 Quality Control Data

The quality control measures for the progressive exploration programs included;

- WMC (Gallant Minerals LLC) - Data quality was monitored by insertion of blanks, standards and duplicates.
- WMC (Gallant Minerals LLC) - Diamond drill core duplicates were taken from the other half of the core,
- Erdene Exploration - Standard and blank samples were inserted randomly into each batch.
- Erdene Exploration & Delineation – A laboratory duplicate was prepared for every 10<sup>th</sup> core sample and stored for possible check assaying at an outside independent laboratory.
- Erdene Delineation - insertion of one blank and one Mo analytical standard per 20 sample batch.
- Erdene Exploration & Delineation - Standard and blank analyses were monitored by Erdene and if laboratory analysis varied from the determined assay value by more than 15% then the entire batch was re-analysed.

### 11.1.1 2007 to 2010 and 2023 Drilling

QAQC protocols involved the use of external check assaying, certified reference material and blanks. The following data is for drilling from within the Zuun Mod molybdenum-copper reported mineral resource area. Drilling in 2011 and 2015 was carried out in the Khuvyn Khar copper prospect area. While similar QAQC protocols were used during these drilling campaigns, the results are not relevant to the reporting of the Zuun Mod mineral resources.



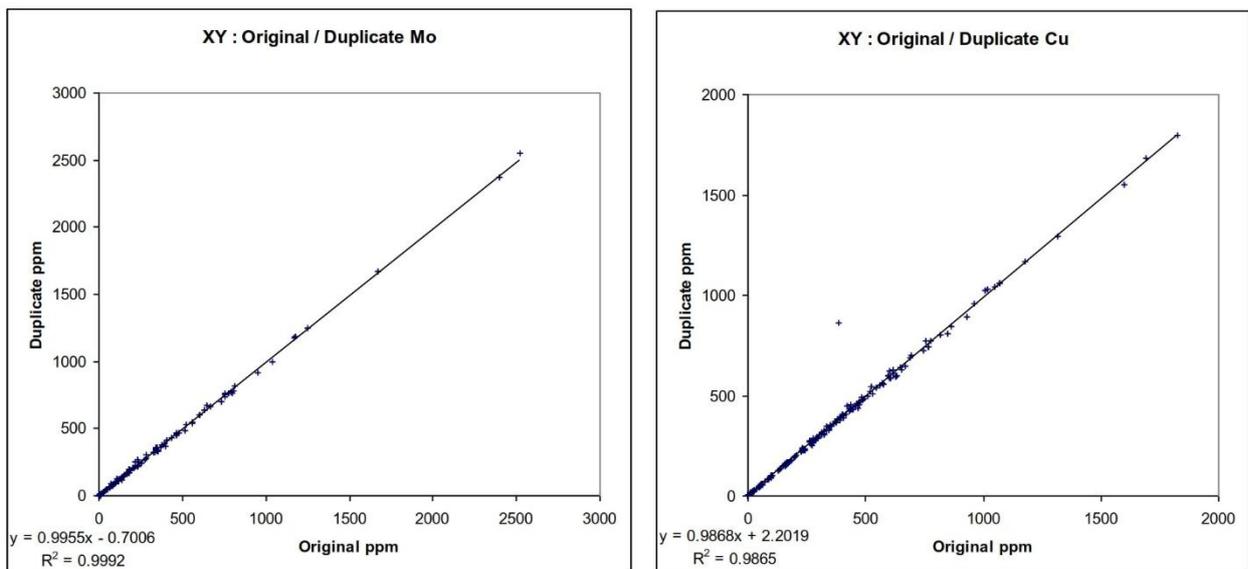
### 11.1.1.1 External Check Analysis

External check analysis was conducted on the samples from 2007 to 2008 (134 samples) and 2009 to 2010 (57 samples) drilling programs.

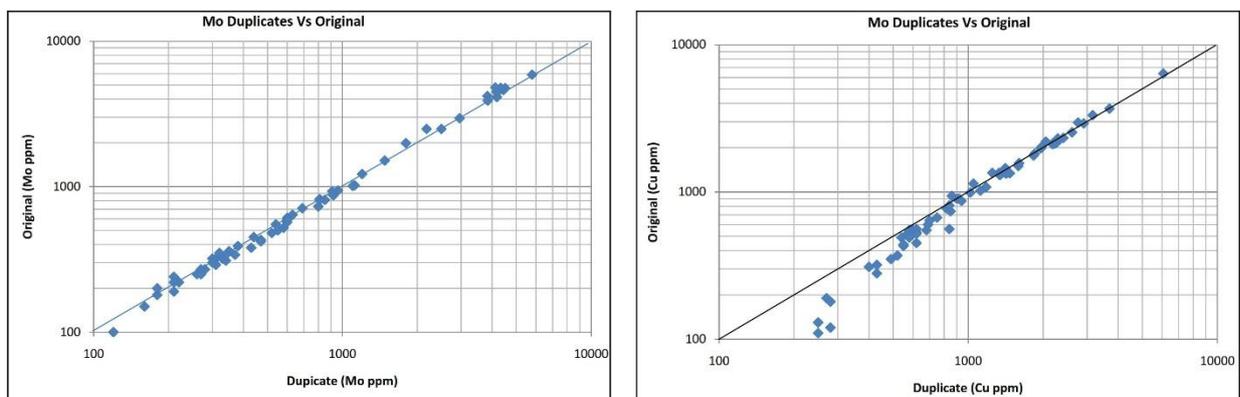
For the 2009 to 2010 drilling program, the external duplicate assays were completed at Analabs. Analysis of assay data indicates a potential low bias for the primary Cu grade for the low grade samples. The magnitude of potential bias increases as the grade decreases, however the majority of duplicate samples are above 500ppm Cu, which tend to show good correlation (**Figure 11-3**). Given the cut off grades used to report the Mineral Resource and the low number of samples below 500 ppm Cu, SLR considers the potential bias to be immaterial to the current resource, however should be investigated in further drilling programs.

Analysis of the external check analysis plot indicates that the rest of the assays were aligned on the x=y line, and no bias was observed (**Figure 11-2**). This suggests that the pulps are homogenous, indicating good repeatability of primary pulverised samples, and confirms the quality and precision of the sample preparation and analysis by the primary laboratory.

**Figure 11-2 External Check Analysis 2007 to 2008**



**Figure 11-3 External Check Analysis 2009 to 2010**





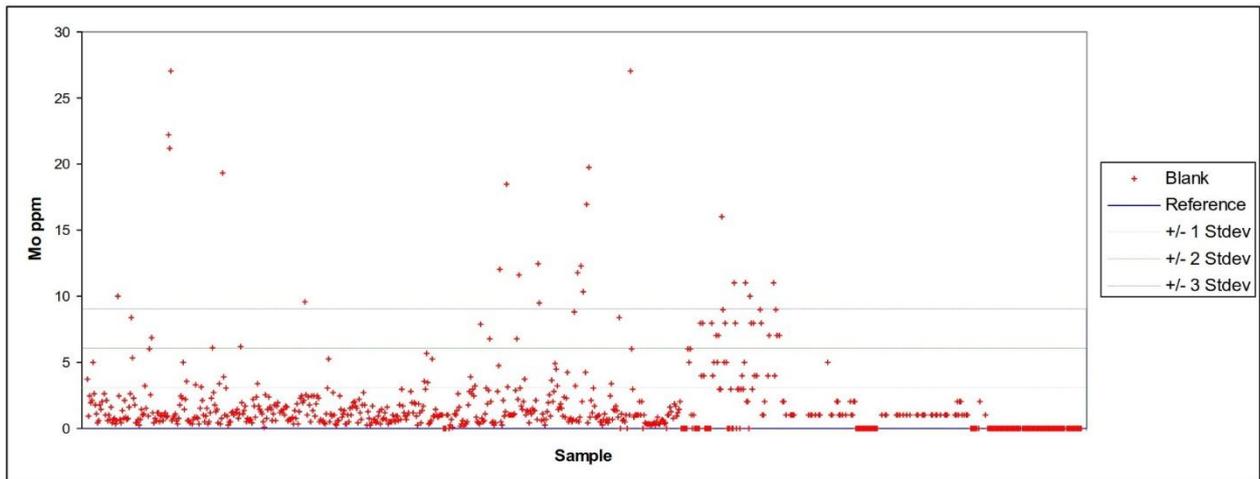
### 11.1.1.2 Blanks

Results for blank data indicate acceptable quality in sample preparation at the laboratories. Of the 761 blanks analysed, the maximum value detected was 27 ppm of Mo, while forty-six samples exceeded two standard deviations of which 22 which exceeded three standard deviations, as shown in **Figure 11-4**.

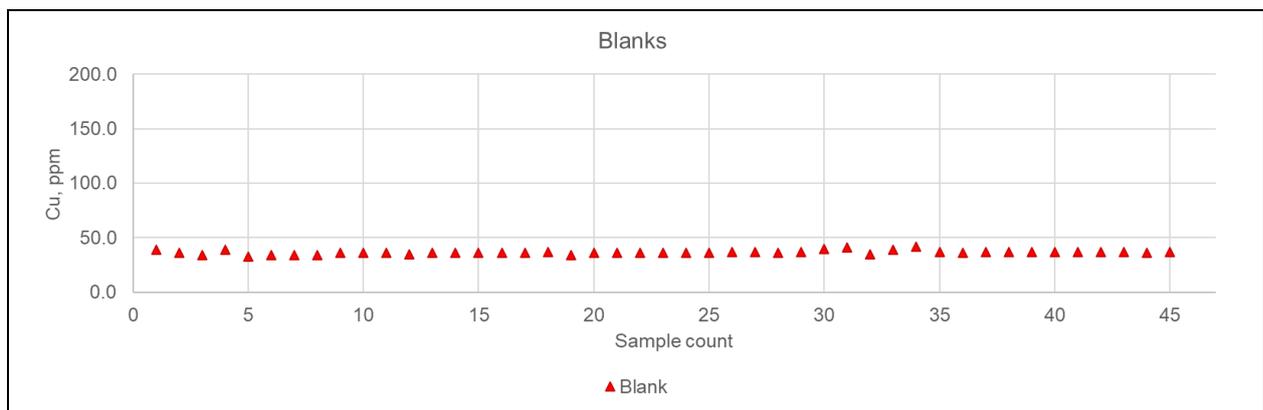
SLR believes contamination during sample preparation was likely the cause of elevated Mo values. However, the low frequency of blank failures (3%) and trace level concentrations suggest that sample contamination is not a concern.

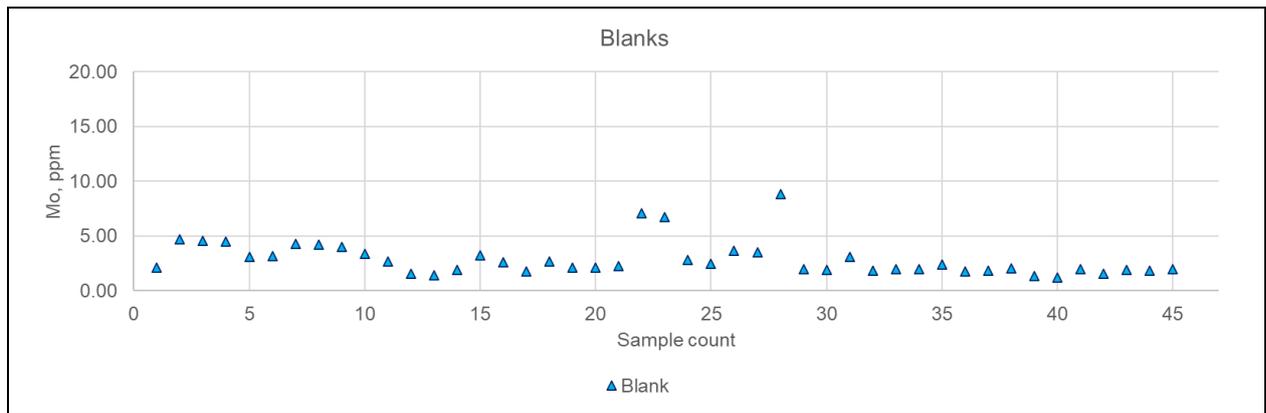
Certified blank c26d was used in 2023 drilling. Blanks were inserted at a rate of 1:30 or a total of 45 samples used. All blanks returned at trace level values (**Figure 11-5**) which suggests good sample preparation procedures at the original laboratory.

**Figure 11-4 Blanks 2007-2008**



**Figure 11-5 Certified Blanks 2023**





### 11.1.1.3 Certified Reference Material

Two standards were used (OC-43 and OC-48) during the Erdene drilling campaigns.

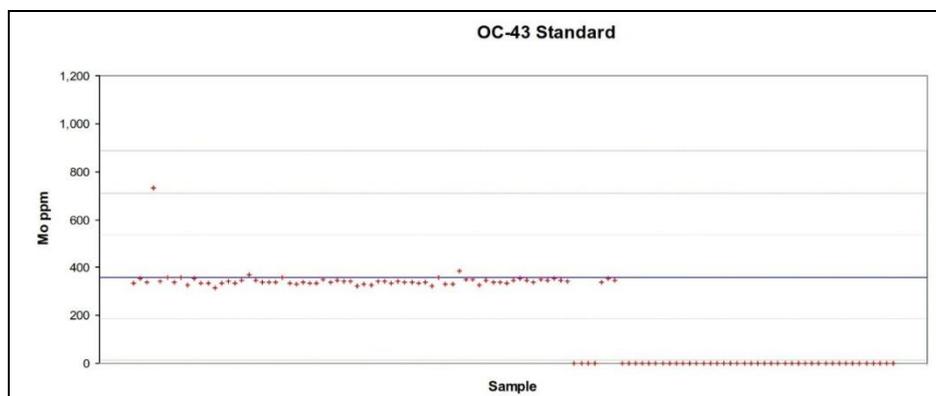
For the 2007-2008 campaign, the low-grade standards (OC-43) have, on average, slightly lower grade than the expected grade, while the high-grade standards (OC-48) have a mean grade similar to the expected value. There appears to be some misallocations of standard names; however these are immaterial to the global resource and as a result are disregarded for the purpose of the review.

The results of standards for the 2009-2010 campaign shows very similar trends to the previous campaign, with the low-grade samples showing a slight decrease in grade while the high-grade standard showing a good correlation. Interpretation of these results indicates that no bias is occurring and there is potentially a problem with the expected grade of the low-grade samples.

For the 2023 drilling program, a single type of commercial standards was inserted which was certified by OREAS Pty Ltd. Standards were inserted at a rate of approximately 1:30.

The results of the standards for 2007-2008 and 2009-2010 campaigns are presented in **Figure 11-6** and **Figure 11-6** respectively, while standard control charts for 2023 drilling are displayed in **Figure 11-8**.

**Figure 11-6 Analysis of Standards used in 2007 to 2008**



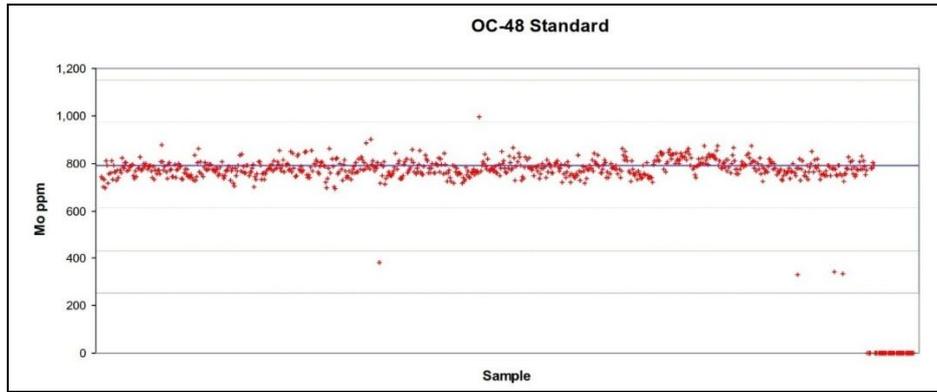


Figure 11-7 Analysis of Standards used in 2009 to 2010

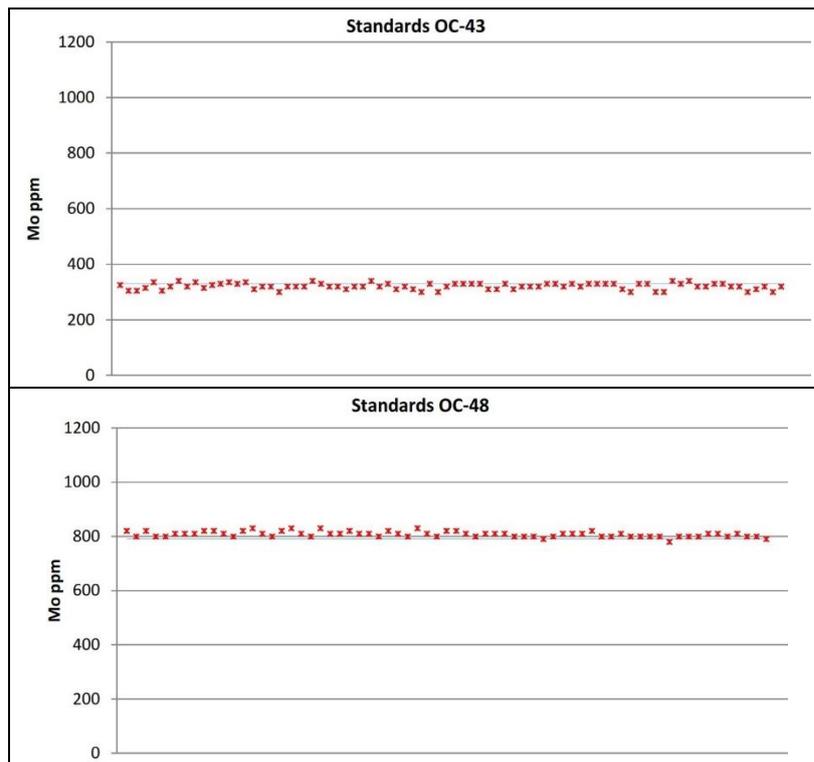
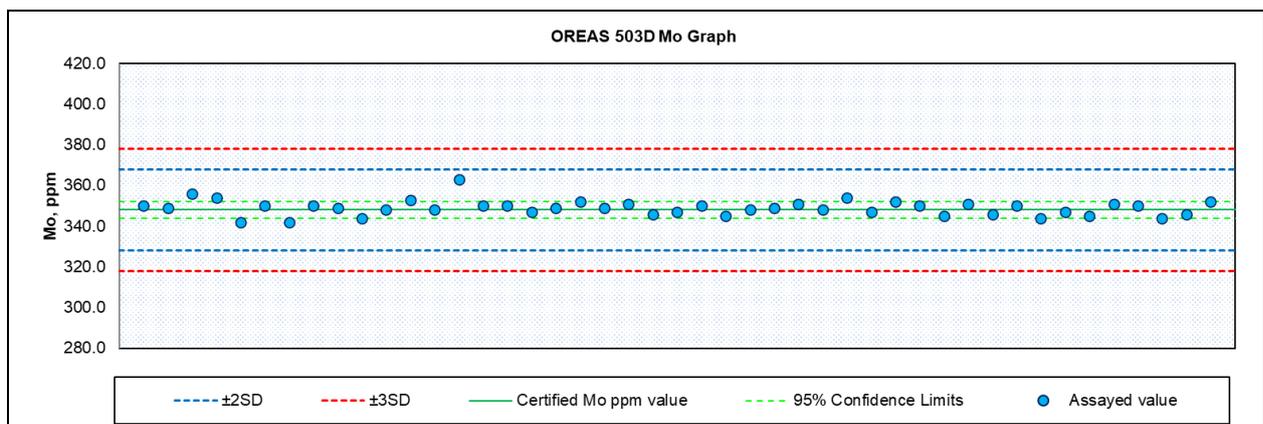
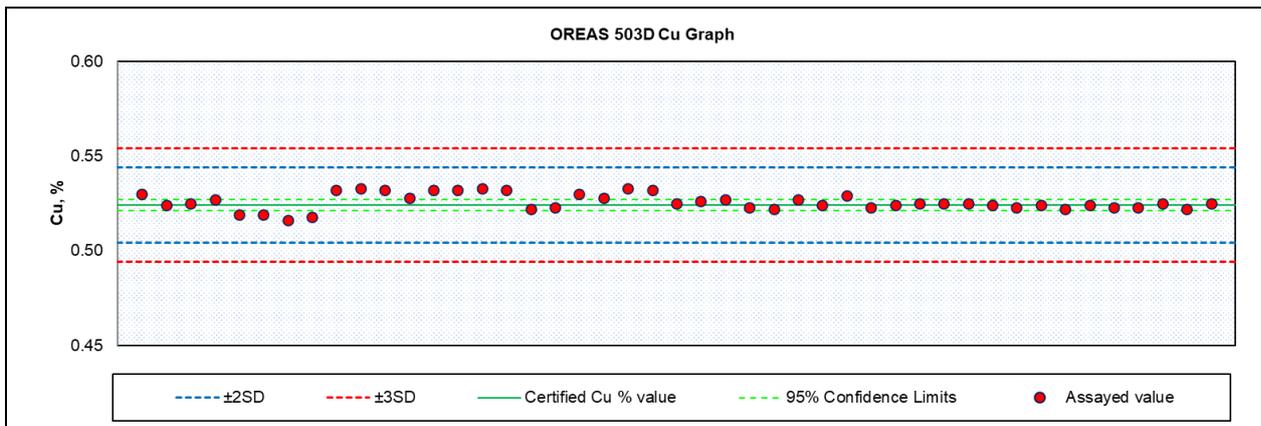


Figure 11-8 Analysis of Standards used in 2023

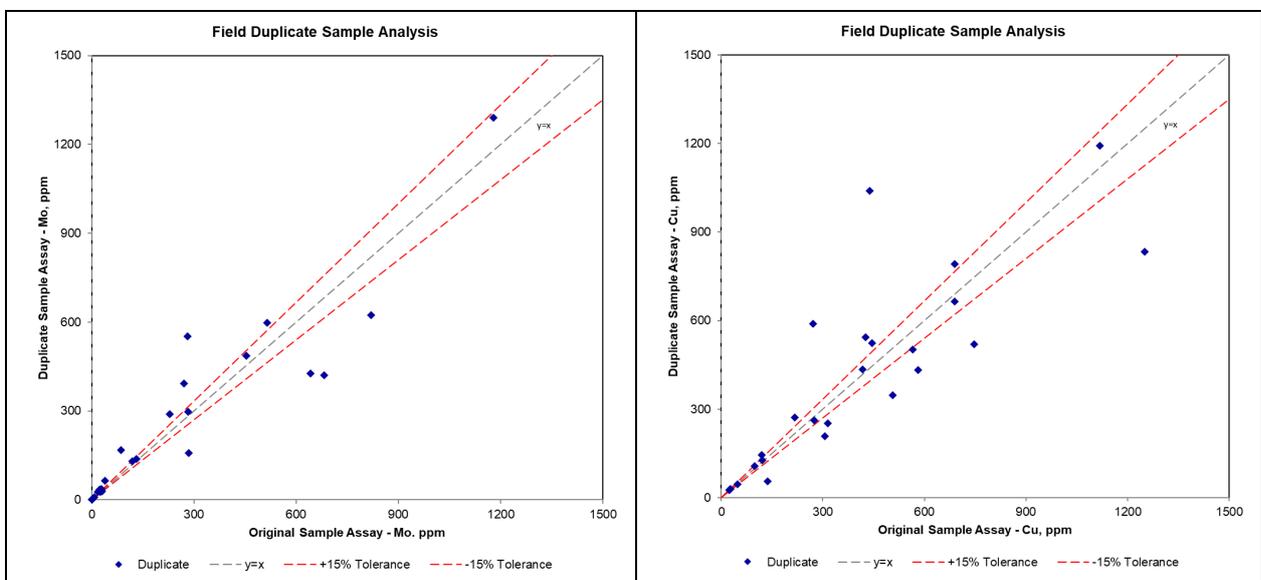




#### 11.1.1.4 Field Duplicates

Duplicate samples from the 2023 drilling programs were prepared by collecting quarter core for a primary assay followed by second quarter core as a field duplicate. A total of 24 duplicate samples were analysed with their results presented in **Figure 11-9**.

**Figure 11-9 Field Duplicate Analysis from 2023 Drilling**



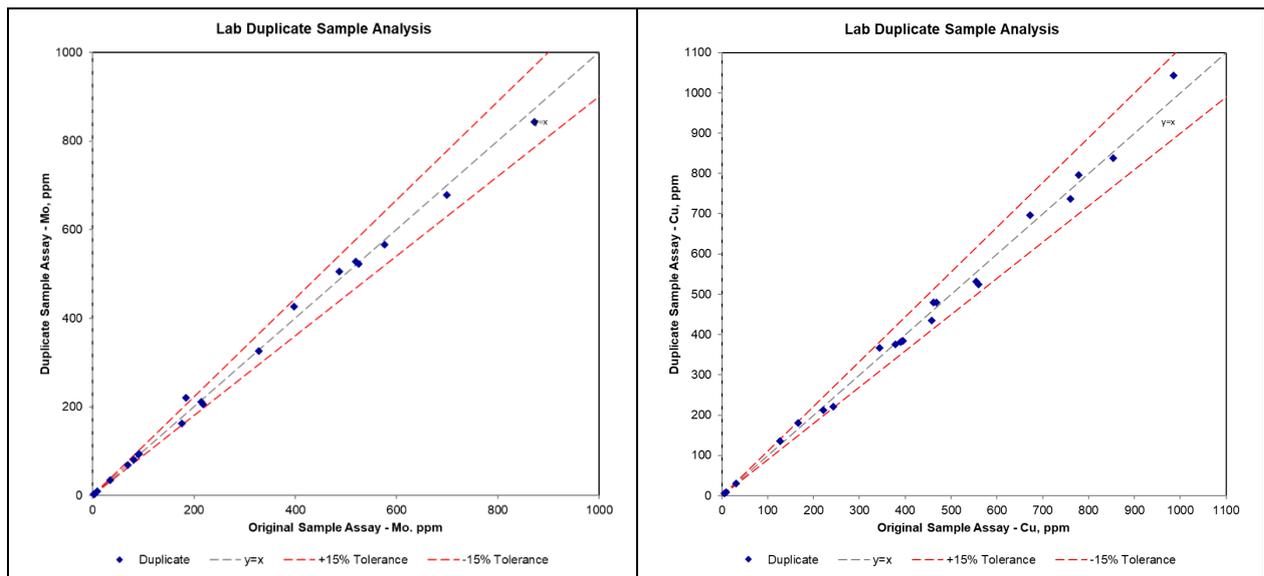
An analysis of these results exhibited a moderate degree of scatter at all grade ranges with negligible bias relative to the original assays. The degree of scatter reflects a moderate nugget interpreted in variograms.

#### 11.1.1.5 Pulp Duplicates

A total of 21 pulp duplicates were analysed for 2023 drilling at Zuun Mod. Pulp duplicates were prepared from pulp core samples and inserted at a rate of 1:60. Results are shown graphically in **Figure 11-10**.



Figure 11-10 Pulp Duplicate Analysis 2023



Results were generally excellent, with good correlation between original assays vs pulp duplicates. No bias is observed in the data which indicates good repeatability of primary pulverized samples and confirms the quality and precision of the sample preparation and analysis by the SGS laboratory.

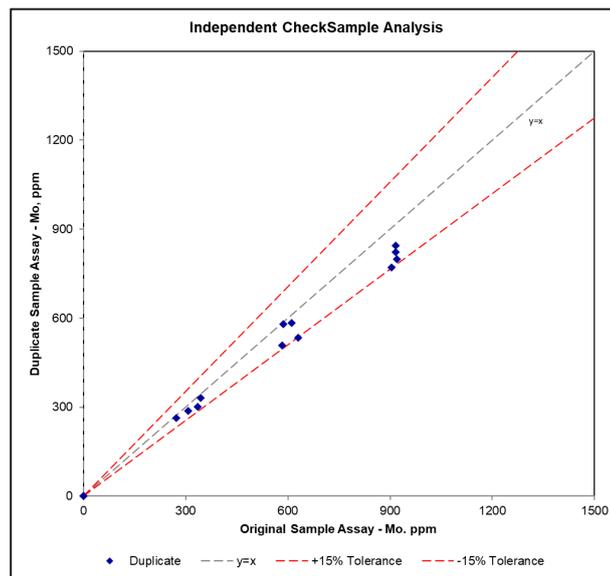
#### 11.1.1.6 Independent Check Analysis

As part of the 2011 estimate, MMC independently checked sample assays by using previously prepared pulp samples and resubmitting them as check assays. A range of Mo assay values was selected independently by MMC from borehole intervals to review potential variance over a range of grades. These samples were independently selected and requested by MMC to be dispatched and assayed at SGS - CSTC Tianjin China. Results of the duplicate analyses indicate good correlation (of the same order) over the range of grades (**Figure 11-11**).

Results show that all results are within a 15% tolerance line with slight high positive bias in the original assays based on limited check assays. More analysis is needed to understand whether potential bias is evident in the assay data. For future drilling programs, SLR recommends that ERD maintain a rigorous QAQC protocol that regularly includes umpire analysis.



**Figure 11-11 Independent Check Assaying**



#### 11.1.1.7 QA/QC Conclusion

Drill core was delivered directly from the drill site to the Zuun Mod exploration camp at the end of every shift. All logging and sampling was done on site and individual samples were stored in large sealed bags before being shipped directly to SGS laboratory in Ulaanbaatar. The samples were transported by Erdene's logistical contractor, Monrud Co. Ltd.

Sample pulps prepared by SGS for analysis by Chemex and Intertek were shipped directly from the SGS laboratory via a secure courier company. The SGS and Chemex laboratories have 24 hour security staff. All client sample submittals are given unique laboratory numbers to avoid the identification of the client. A quality control management system that meets the requirements of ISO 17025/ISO 9000 is used by the laboratories. The laboratories participate in various internal and external proficiency programs to ensure that a high standard of analytical precision and accuracy is maintained.

Protocols have been in place and, as presented, QAQC data confirms the general adequacy of sampling and assaying procedures employed. SLR considers the QAQC sample protocols followed by WMC and Erdene to be reliable.

Overall, the QA/QC data does not indicate any systematic bias and supports the use of the assay data in the Mineral Resource estimate for Zuun Mod deposit.

For future drilling programs, SLR recommends that ERD maintain a rigorous QAQC protocol that regularly includes umpire analysis.



## 12. Data Verification

Extensive database verification was carried out by MMC for the 2011 Mineral Resource estimate. At that time minor omissions and errors were identified, and these were rectified at the time.

MMC visited the project on numerous occasions, beginning in 2008. The latest site visit was completed in 2025 by SLR Executive Consultant Rodney Graham and Oyunbat Bat-Ochir, qualified person (QP).

Formal validation of a number of drill holes was carried out by SLR during the site visit in 2025. A series of holes was selected by ERD including holes from most recent 2023 and earlier drilling programs (ZMD-94, ZMD-24, ZMD-131, ZMD-23, ZMD-39, ZMD-34, ZMD-96). Original assays and geological logs were compared against the drill core.

The data was found to be well maintained, and core was well organised, and the requested core was located and laid out without issue. The core was in good condition, although core markers were often illegible due to deterioration in storage. Re-logged drill core boxes were replaced with plastic boxes (**Figure 12-1**).

**Figure 12-1 Core Storage and Re-logged Holes**



Collars were cases with PVC or drill rods with cement pedestals showing the hole number after drilling is finished. Collars were variably preserved, with some being labelled and others having been vandalised or destroyed by ground activities.

During the site visit to the Project area, a large number of drill hole collars were identified at the surface. SLR located 15 of the collars using a handheld GPS to verify the spatial location of the holes. All holes were found to be within 10 m which SLR considers is within the accuracy limits of the handheld GPS. Therefore, the collar locations were verified, and a listing of the holes is shown in **Table 12-1**.

SLR reviewed drilling, logging and sampling procedures during the site visit to the Project. ERD supplied SLR with digital Excel files with collar, survey, lithology, RQD and sampling data. In addition, original assay certificates from the laboratories were supplied, particularly for the 2023 drilling. SLR checked all grades and orientation against the original assay certificates and found only minor inconsistencies in the provided data, which were subsequently corrected in the digital database. The inconsistencies included mislabelled intervals of assays, and absent assay intervals for extended deeper holes.

SLR also reviewed QAQC procedures carried out by ERD and reviewed all technical data including geophysical and geochemical data, re-interpreted mineralisation anisotropy based on re-logged historical drill holes and orientated core drilling carried out in 2023. SLR is satisfied that procedures carried out by ERD conform to generally accepted industry standards and that the data used in this report is reliable.



**Table 12-1 Drill Hole Collar Verification Summary**

In Supplied Database				Difference between database vs GPS		
Hole_Id	Easting (m)	Northing (m)	RL (m)	Easting	Northing	Elevation
ZMD-131	516,845.0	4,869,549.0	1,352	-1	-5	-1
ZMD-132	516,618.0	4,869,582.0	1,352	0	-3	-5
ZMD-133	517,694.0	4,869,701.0	1,328	-8	-6	2
ZMD-134	517,495.0	4,870,398.0	1,332	-1	-1	-6
ZMD-135	516,912.0	4,869,914.0	1,353	-10	9	6
ZMD-142	517,451	4,871,473	1,347	-6	-3	-13
ZMD-103	517,600	4,870,200	1,333	0	2	6
ZMD-106	517,500	4,870,100	1,338	1	2	6
ZMD-73	516,700	4,869,600	1,356	0	3	3
ZMD-25	516,800	4,869,500	1,353	0	2	5
KKMD14	516,996	4,869,215	1,355	0	4	6
ZMD-94	516,600	4,869,150	1,351	-1	0	7
ZMD-28	516,600	4,869,100	1,353	-2	3	5
ZMD-05	516,430	4,868,505	1,340	-1	2	6
KKMD-03	516,393	4,868,317	1,329	0	2	5

Overall, the on-site checks provided confidence in the data supplied for Mineral Resource estimation.

SLR notes that diamond holes collar (after ZMD-109) with only planned or GPS-located coordinates in the 2011 estimate remained unsurveyed in the 2025 estimate. It is recommended that accurate surveys of all holes be undertaken.

## 12.1 Database Validation

SLR conducted a review of the geological digital data supplied by ERD for the Project to ensure no material issues could be found and there was no cause to consider that the data was not accurate. SLR completed systematic data validation steps after receiving the database. The database checks undertaken found:

- Downhole sampling intervals were consistent with no overlapping sample intervals
- Sample tables were checked to ensure there were no duplicate sample records
- There were no missing or incomplete collar survey coordinates
- There were no negative downhole sample ranges or grades
- Assay values were within expected bounds.

No material issues were found with the database.

## 12.2 Assessment of Database

The database review conducted by SLR shows that ERD has supplied a digital database that is largely supported by verified certified assay certificates, interpreted mineralisation domains. The database used in the 2011 MRE was cross checked against the most recent (2025) ERD-supplied database. Minor errors, including mainly sample interval mismatches, were noted, which were rectified by ERD. Overall, no significant difference was noted between the two datasets.

Based on the data supplied, SLR considers that the analytical data has sufficient accuracy to enable a Mineral Resource Estimate for the Project.



### 13. Mineral Processing and Metallurgical Testing

Initial metallurgical studies have been carried out on Zuun Mod drill core samples by AMMTEC Limited of Perth, Australia, including flotation and comminution test work. These preliminary studies showed that the mineralisation at Zuun Mod is amenable to standard processing techniques, recoveries of molybdenum and copper are expected to be 85% and 82%, respectively, and marketable concentrates for molybdenum (>50% Mo) and copper (>25% Cu) can be produced.

Erdene proposes a conventional processing flowsheet to recover and separate copper and molybdenite concentrates. Two samples, ZM-GD (Granodiorite) and ZM-QS (Quartz Syenite), were blended into a composite for testing. No additional test work has been conducted, but a similar flowsheet would be expected.

The flowsheet would consist of primary crushing, SAG milling, two Ball mills, bulk rougher flotation, concentrate regrind, three stages of cleaning, copper-molybdenite separation stage (third cleaner concentrate), eight molybdenum cleaning stages, dewatering (thickening and filtration) for both concentrates and thickening of the rougher flotation tailings

Test work on a sample assaying 0.058% Cu found a recovery of 72% to a 22% Cu concentrate, with the potential for 80% copper recovery to a 25% Cu concentrate.

It was estimated that a 0.058% Mo sample would produce a 52% Mo concentrate at 85-87% recovery.

Additional flotation test work is recommended to:

- Optimise and confirm the flotation recoveries for both copper and molybdenum at a range of feed grades
- Based on this data, develop the feed grade-recovery relationship, allowing the development of a more accurate (and potentially larger) resource estimate.

For feed grades less than the historical test work feed grades, assuming similar mineralogy:

- Copper recoveries would range between 75% and 80% (0.04-0.06% Cu)
- Molybdenum recoveries would range between 78% and 85% (0.03-0.06% Mo)

Test work sample details are shown in **Table 13-1**.

**Table 13-1 Test Work Sample Summary**

Sample Details	Mass (kg)	Assay (ppm)				
		Mo	Cu	Re	Ag	S
ZM-GD	40.8	725	456	0.4	<2	8,100
ZM-QS	46.3	646	615	0.2	<2	11,700
ZM-GD/QM Composite	55.02 (39.98/15.04)	580	580	0.8	0.5	6,200



## 14. Mineral Resource Estimate

### 14.1 Mineral Resource Statement

The Mineral Resource estimates have been prepared according to the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) 2014 Definition Standards for Mineral Resources and Mineral Reserves dated 10 May 2014 (CIM 2014 Standards) as incorporated with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). Mineral Resource estimates were also prepared using the guidance outlined in CIM Estimation of Mineral Resources and Mineral Reserves (MRMR) Best Practice Guidelines 2019 (CIM (2019) MRMR Best Practice Guidelines).

SLR has independently estimated the Mineral Resources contained within the Project, based on the data collected by ERD as at August 2025. The Mineral Resource Estimate and underlying data comply with guidelines provided in the CIM Definition Standards under NI 43-101, therefore SLR considers it suitable for public reporting. The Mineral Resources were completed by Mr. Oyunbat Bat-Ochir (Qualified Person).

The Mineral Resources, as shown in **Table 14-1** are shown on a 100% equity basis.

The result of the Mineral Resource estimate by SLR for Zuun Mod is tabulated in the statement of Mineral Resources in **Table 14-1**. Mineral Resources are constrained by the MV-016836 mining license boundary and by a wireframe constructed at a 0.01 % Mo cut-off and reported above a Mo cut-off grade of 0.035% Mo, and within a US\$22/lb Mo and US\$4.95/lb Cu optimised conceptual pit.

**Table 14-1 Zuun Mod Mineral Resource Estimate Summary – 1<sup>st</sup> September 2025**

Classification	Tonnes	Mo	Cu	MoEq	Mo	Cu	MoEq
	Mt	%	%	%	Mlbs	Mlbs	Mlbs
Measured	45.8	0.057	0.062	0.074	57.7	62.2	74.8
Indicated	225.3	0.056	0.065	0.073	275.9	322.0	364.4
<b>Measured+Indicated</b>	<b>271.1</b>	<b>0.056</b>	<b>0.064</b>	<b>0.073</b>	<b>333.5</b>	<b>384.2</b>	<b>439.2</b>
Inferred	269.1	0.051	0.059	0.070	300.0	350.7	416.3

**Note:**

1. CIM Definition Standards for Mineral Resource (2014) is used for reporting of Mineral Resource.
2. The Statement of Estimates of Mineral Resources has been compiled by Mr Oyunbat Bat-Ochir who is a full-time employee of SLR and a Member of the Australian Institute of Geoscientists. Mr Bat-Ochir has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
3. All Mineral Resources figures reported in the table above represent estimates at 1<sup>st</sup> September 2025. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
4. Mineral Resources are reported on a dry in-situ basis.
5. The Mineral Resource has been constrained by mining license MV-016836 and reported above Molybdenum (Mo) cut-off grade of 0.035% within a revenue factor optimised pit shell derived using a price of US\$22/lb Mo and US\$4.95/lb Cu. Cut-off parameters were selected based on an SLR internal cut-off calculator, assuming an open cut mining method with 3% ore loss and 4% dilution, a Mo price of US\$15.4/lb, an open mining cost of US \$2.18 per tonne and a processing cost of US \$6.85 per tonne milled and processing recovery of 83% for Mo and 81% for Cu with flotation processing to produce Mo and Cu concentrates. The conceptual optimised pit shell was constructed using a Mo price of US\$22/lb Mo and US\$4.95/lb Cu.
6. Mo Equivalence (MoEq) calculated using: The formula used for Mo equivalent grade is:  $MoEq\% = Mo\% + Cu\% * 0.27504$  and assumes 83% Mo and 81% Cu metallurgical recoveries.
7. 1 tonne = 2204.64 lbs.
8. Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability.

The QP is not aware of any environmental, permitting, legal, title, taxation socioeconomic, marketing, political, fiscal, or other relevant factors, that could materially affect the Mineral Resource Estimate, however there are some areas that could affect the Mineral Resource estimates including the following:



- Interpretation of high-grade anisotropy orientation
- Lithological interpretation on a local scale, including dykes; barren ring dyke geometry at depth, which is currently interpreted as unmineralized waste; and modelling and discrimination of different intrusive phases,
- Commodity pricing
- Metal recovery assumptions

## 14.2 Resource Database

All available data as of 1<sup>st</sup> of August 2025 was incorporated into the estimate. ERD provided SLR with the input collar, survey, assay and lithology data (comma delimited text files) as follows:

- ZM\_Drill\_Collar\_2023.csv – 2023 drilling collar
- ZM\_Survey\_2023.csv – 2023 drilling survey
- ZMD\_DrillSampleDatabase\_2023.csv – assay data for 2023 drilling
- Magnetic susceptibility data ZMD-131 to 139
- ZMD\_MultiE\_assay\_to\_ZMD-142\_v2.csv – master assay database
- Collar.csv – master drill collar table
- Survey.csv – master survey table
- zm-topotr1.dtm – topography
- zuun\_mod\_resource\_for\_est\_20110330.dtm
- weathering\_zuun\_mod200208.dtm

The supplied drilling spreadsheets were compiled by SLR into the Access database 'zuunmod\_dhdb\_apr2025.mdb' and contains drilling data up to ZMD-142 which were drilled between 2003 to 2023 and included tabulated information for collar, survey, assay, lithology, recovery and density.

The primary data source for the Zuun Mod Mineral Resource is surface diamond drilling as summarised in **Table 14-2**. Of the 155 holes completed at the Project, 113 holes were included in the estimate stated in this report.

**Table 14-2 Summary of Data used in Zuun Mod Resource**

In Supplied database				In Mineral Resource		
Type	Year	Number of Holes	Total Length (m)	Number of Holes	Total Length (m)	Intersection meters
DD	2003	14	3,718	6	2,094	1,526
	2005	15	4,682	9	3,336	2,937
	2007	64	23,248	62	22,847	19,298
	2008	33	10,047	25	7,695	6,475
	2010	9	3,880	6	2,802	2,420
	2011	6	2,603	-	-	-
	2015	2	1,000	-	-	-
	2023	12	4,095	5	2,476	1,835
<b>Total DD</b>		<b>155</b>	<b>53,273</b>	<b>113</b>	<b>41,250</b>	<b>-</b>
TR	NA	14	1,604	-	-	-
<b>Total</b>		<b>169</b>	<b>54,877</b>	<b>113</b>	<b>41,250</b>	<b>-</b>



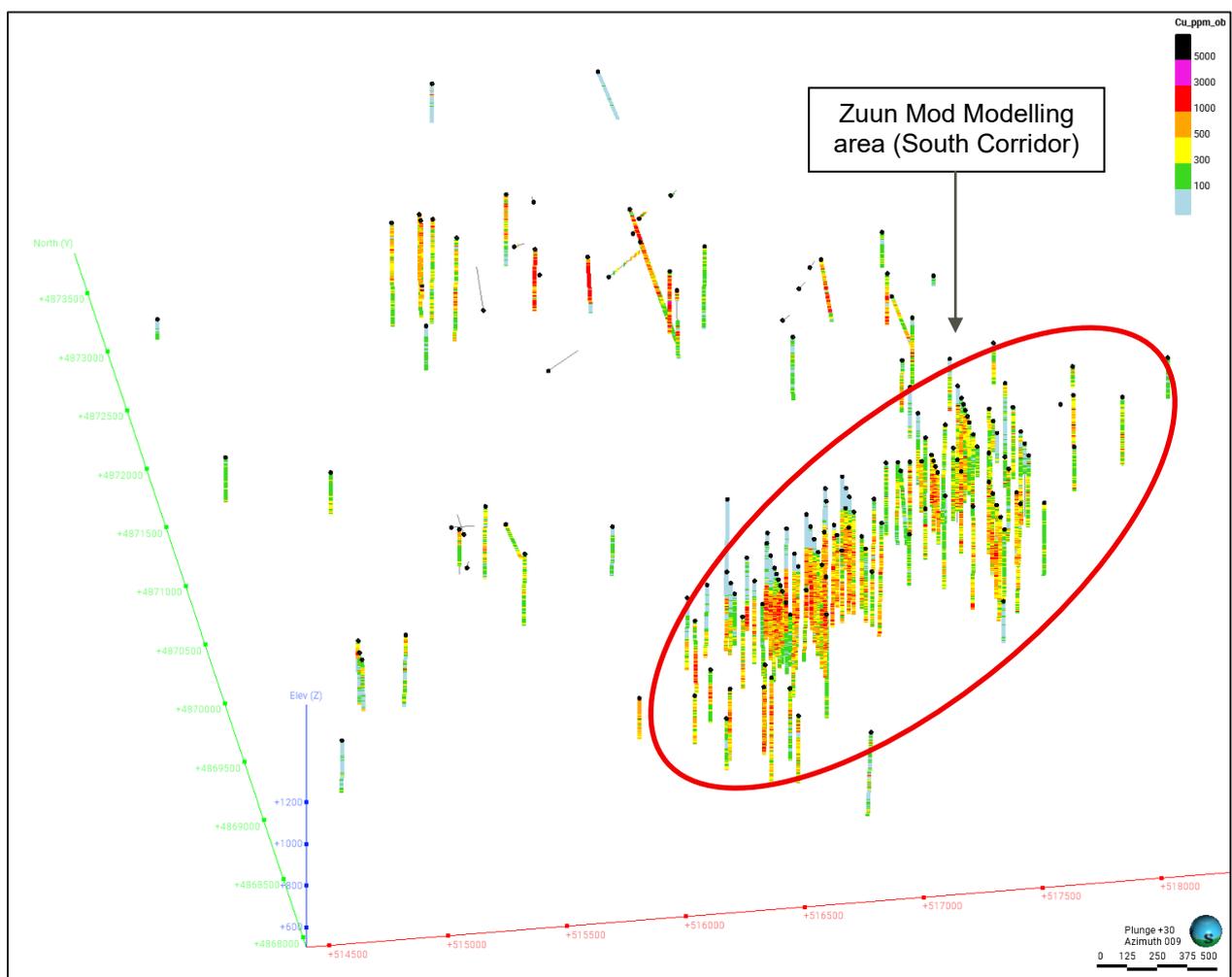
The estimate was completed for Mo, Cu and Re elements, and a summary of the assay data is shown in **Table 14-3**.

**Table 14-3 Zuun Mod Mineral Resource Input Data**

Types	Count	Min	Max	Missing samples
Hole id	155			0
Mo ppm	26,247	0.22	17,750.0	26
Cu ppm	26,253	0.50	40,900.0	20
Re ppm	12,858	0.00	10.9	13,415

The **Figure 14-1** demonstrates a plan view of the drillhole data within the modelling area. Potential mineralised zones were identified outside the current modelling area however they are in an early stage of exploration with broad drill spacing, therefore no modelling was completed in these areas.

**Figure 14-1 Oblique View Showing Input Drillhole Data and Model Limits for Zuun Mod Estimate**



### 14.3 Geological Interpretation

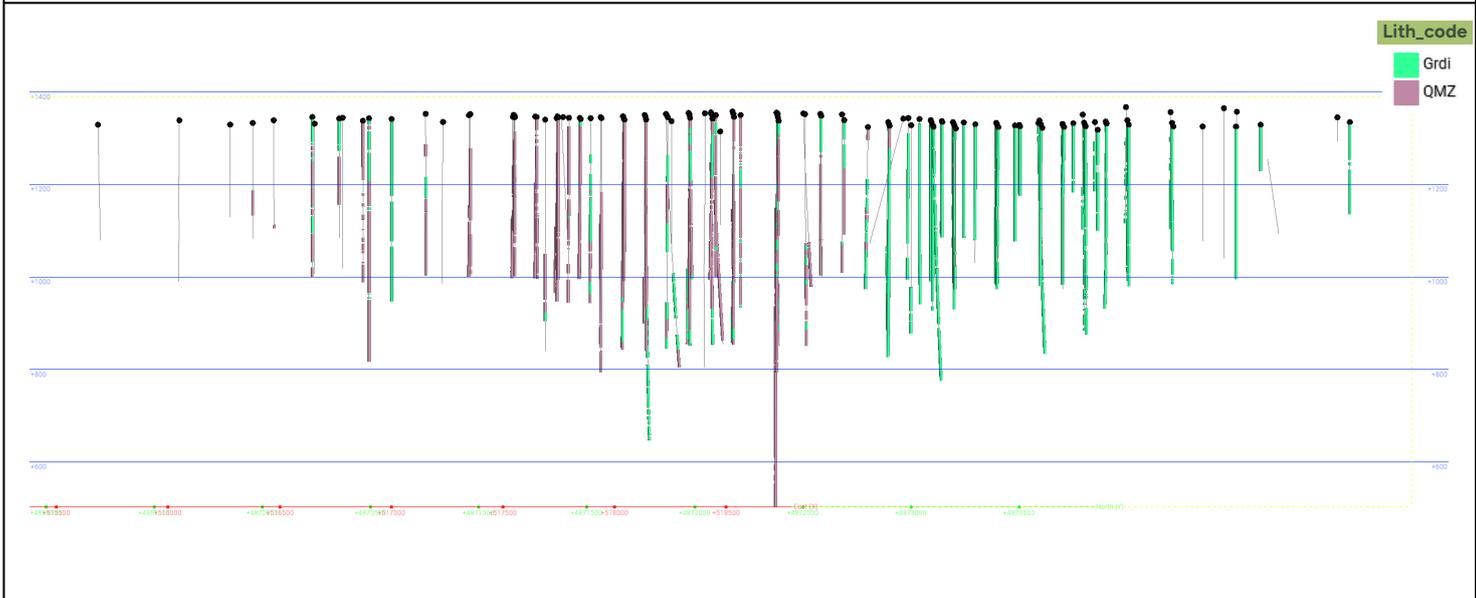
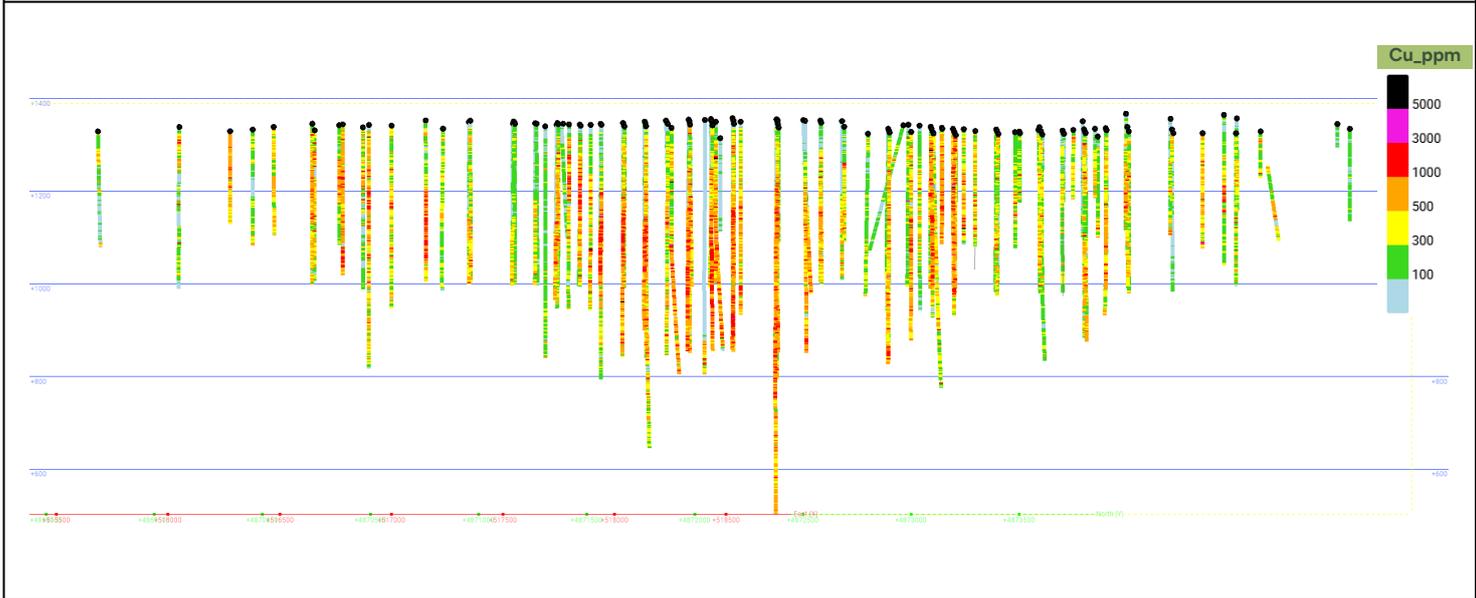
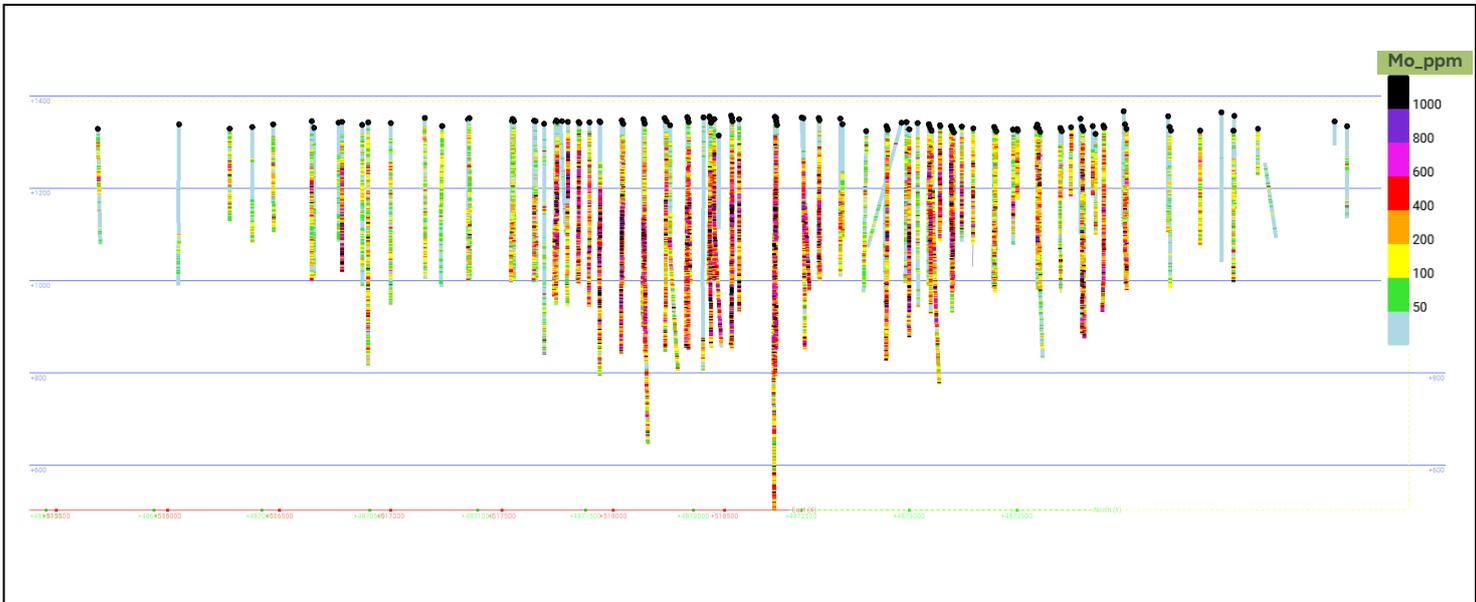
The Zuun Mod deposit is considered to be porphyry style Mo-Cu mineralisation mainly hosted within quartz monzonite (South racetrack zone) and granodiorite intrusions (North racetrack zone).



The geological modelling at Zuun Mod is based on geological logging and geochemical information from drill holes. The data density and regularity are considered adequate for the definition of geological boundaries and lithological and mineralisation units.

Mineralisation occurs as veins, vein stockworks and disseminations within biotite-magnetite (potassic) altered quartz monzonite (QMZ) and granodiorite (Grdi) intrusions (**Figure 14-2**). The correlation between Mo and Cu is weak (0.21) on a sample-by-sample basis; however, Mo mineralisation domains tend to capture all the Cu mineralisation at the deposit, and therefore, no independent wireframe was constructed for Cu. The correlation between Mo and Re is strong (0.83), and limited assay data is available for Re; therefore, a regression equation was used to estimate Re using Mo mineralisation wireframes.

Metal zonation is shown for Mo, Cu and Lithology in **Figure 14-2**.



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- Drill Hole

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Zuun Mod - Technical Report

DRAWING  
METAL ZONATION AT ZUUN MOD – LOOKING NE

FIGURE No.  
14-2

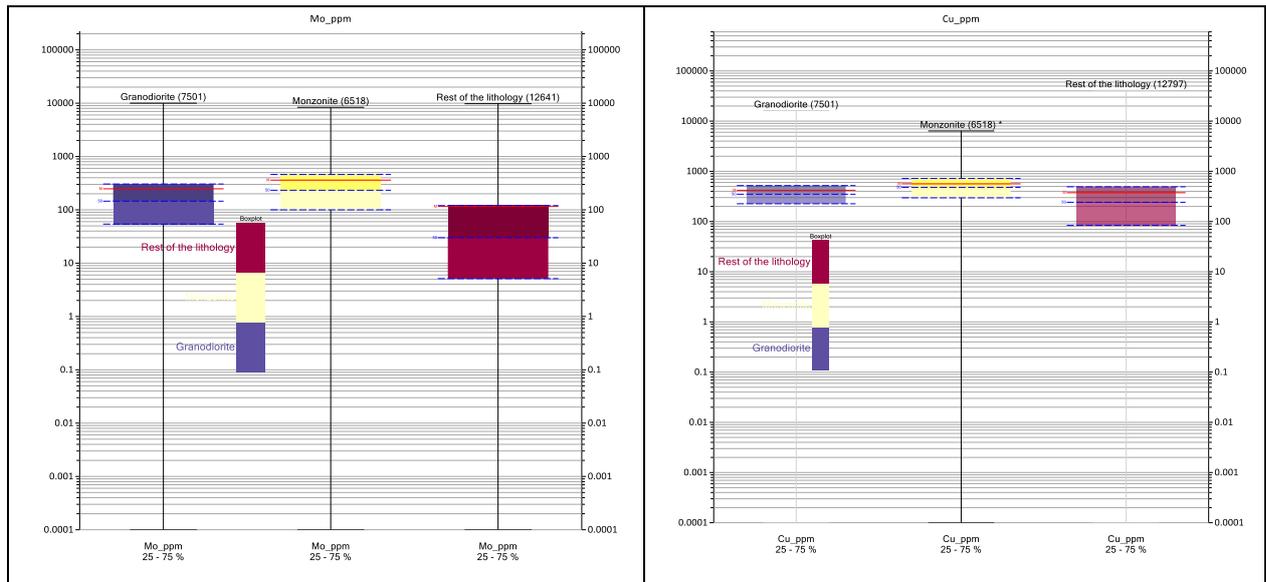
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Assay grade comparison by the main lithological units is shown in **Figure 14-3**.

**Figure 14-3 Box and Whisker Plots – Mo and Cu assays by Main Lithology**



**Figure 14-4 Typical Lithology, Alteration and Mineralisation at Zuun Mod**



*Note: (Left) Hole ZMD-94 at 153.6 m strongly potassic altered monzonite with disseminated molybdenite and chalcopyrite crosscut by quartz vein with Mo vein selvages (assayed 2m at 0.19% Mo and 0.19 % Cu). (Right) Hole ZMD39 at 94 m potassic altered granodiorite with trace molybdenite crosscut by quartz stockwork veining with disseminated pyrite (assayed 2 m @ 0.03% Mo and 0.04% Cu).*

### 14.3.1 Preparation of Wireframes

#### 14.3.1.1 Mineralisation Modelling

MMC prepared the initial interpretation in 2011, and since then, only five new infill holes have been drilled within the main part of the Zuun Mod deposit. Overall, they match reasonably well with modelled mineralisation, and SLR used MMC's wireframes as the basis for this estimate.

In MMC's model, mineralisation domains were interpreted based on a 100 ppm Mo cut-off for the low-grade domain and a 400 ppm Mo cut-off for the high-grade domain. All models were interpreted in sectional view in Surpac software.

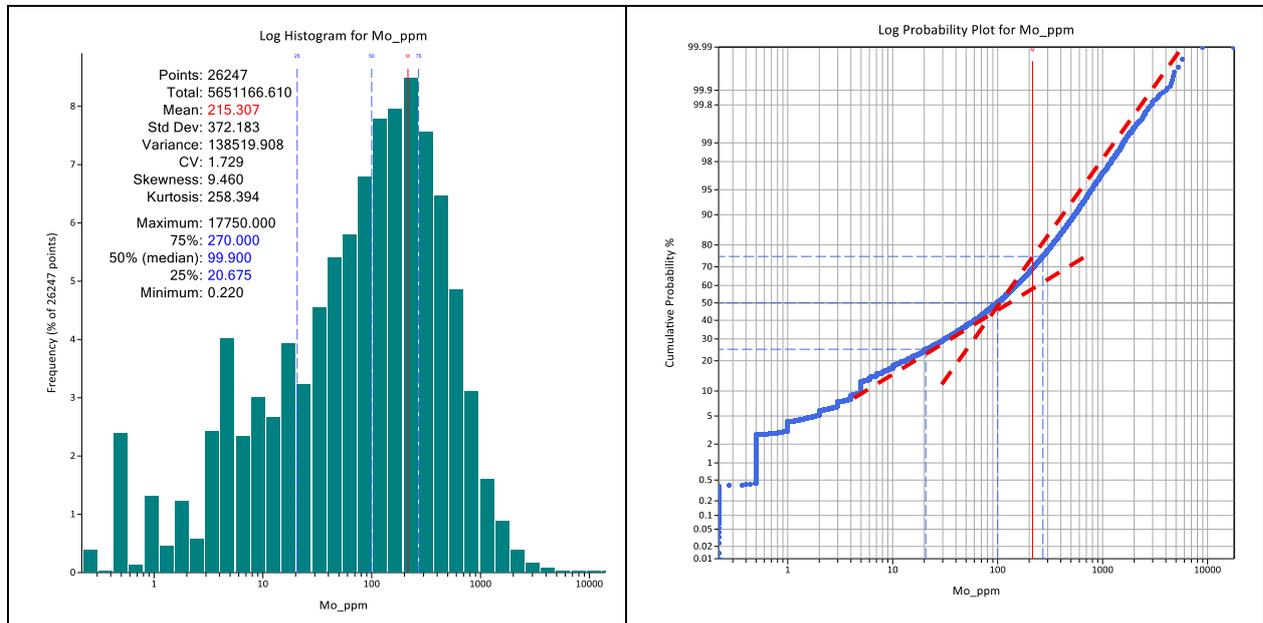
Higher-grade mineralisation at Zuun Mod appears to be controlled by a complex network of cross-cutting trends, as indicated by the recent drilling program, along with re-logging of historical holes by ERD. The intricate cross-cutting nature of these structures and their scale relative to the spacing of the drill hole data



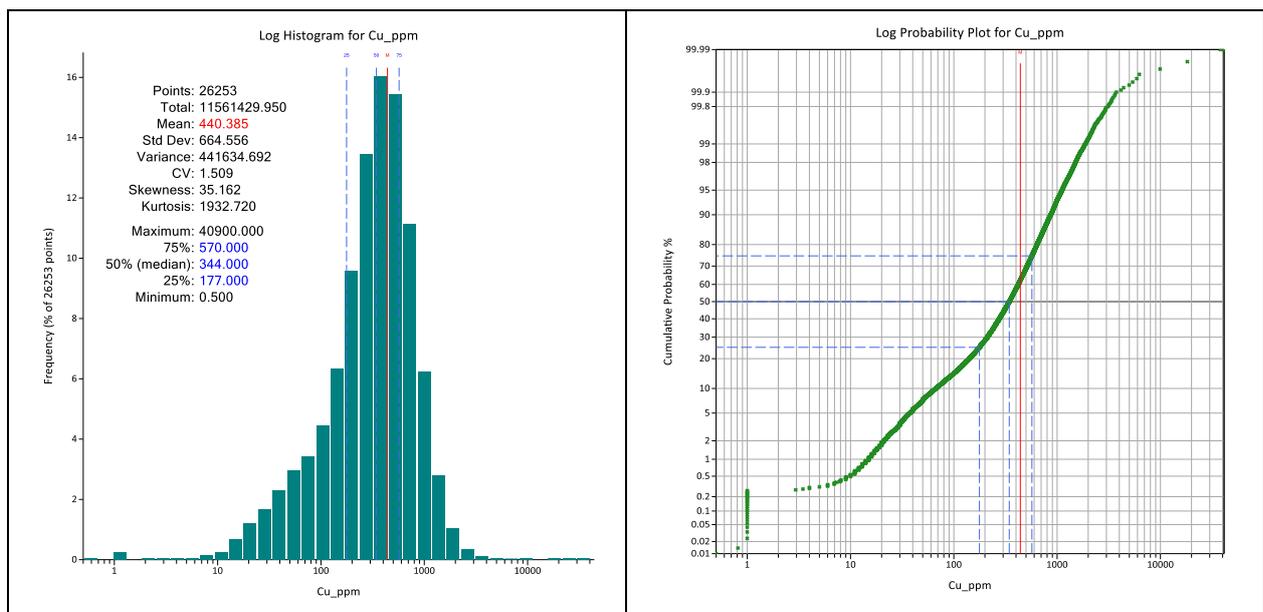
mean that it is very difficult to produce variable anisotropic functions that are able to effectively represent and honour all orientations. However, two potential major trends (sub-vertical and sub-horizontal) seem to be observed in the dataset in higher-grade mineralisation.

To understand the grade distribution within the global population, SLR assessed the data for natural grade cut-offs, and population histograms and probability plots were prepared. Clear natural cut-offs were observed in the data (**Figure 14-5**).

**Figure 14-5 Log Histogram and Log Probability Plots for all Mo assays**



**Figure 14-6 Log Histogram and Log Probability Plots for all Cu assays**

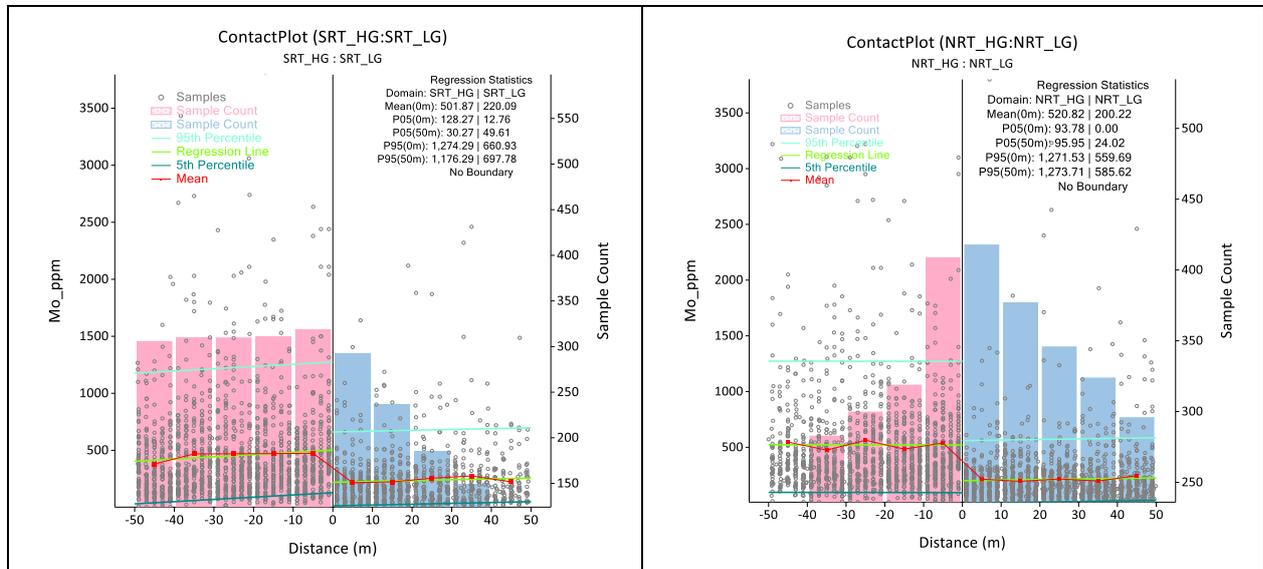


SLR notes that separate high-grade domains were interpreted in the 2011 estimate. Contact analysis was completed to understand whether separate high-grade wireframing was required for the Zuun Mod estimate. SLR extracted the composite data per 100 ppm Mo cut-off and 400 ppm Mo cut-off domains, then separated them into South racetrack (SRT) and North racetrack (NRT) zones. Overall results indicate that there is a



gradual change between high- and low-grade Moly domains. In addition, recent oriented core drilling and the re-logging program indicate that there is vertical high- and low-graded mineralisation. For this reason, both SLR and ERD agree that a flat tabular geometry of high-grade domains does not represent Zuun Mod mineralisation. A log probability plot of all assays also does not indicate clearly separate high-grade domains. Therefore, only the interpreted low-grade domains (>100 ppm Mo cut-off) were used for the 2025 estimate.

**Figure 14-7 Contact Analysis between 100 ppm vs 400 ppm Mo grade Domains**



Grade cut-offs were based on interrogation of histogram and probability plots for raw assay data. Typically, with log normal distribution, statistical cut-off grade is reasonably well defined.

A total of six discrete zones were interpreted (*zuun\_mod\_resource\_for\_est\_20250507.dtm*) for Zuun Mod mineralisation. Modelled wireframes were exported and validated in Surpac 2025 and set as solids. Wireframes are extrapolated to half the drill spacing where mineralisation was terminated against the unmineralized hole. The resultant mineralisation domains are consisted with a NE strike continuity of 3,700 m and a width of 1,150 m, and extending to depths of 450 m to 850 m. These wireframes were used to select the sample data for grade estimation and to constrain the block model for estimation purposes.

The geological domain description is summarised in **Table 14-4**.

**Table 14-4 Mineralisation Domain Summary**

Domain	Description
1	South Domain Object 1 (stand-alone quartz monzonite pod at the south end of the deposit)
3	South Racetrack (mineralisation hosted mainly in quartz monzonite, South Racetrack zone)
4	North Racetrack (mineralisation hosted in granodiorite which makes up most of the North Racetrack area)
5	Late stage dacite porphyry intrusive in the central part of the deposit near the ring dyke and contact
6	Ring dyke, massive barren buck quartz. Not included in the estimation plans.
7	Granodiorite Intrusives South (quartz monzonite),

The extent of the interpreted domains and drilling is shown in **Figure 14-8** and **Figure 14-9**. The mineralised domains have been depicted in different colours to distinguish individual lodes. The colouring has no other significance and is an artifact of the software utilised. Representative sections of the deposits are shown in **Figure 14-10**.



Figure 14-8 Zuun Mod Resource Wireframes - Plan View

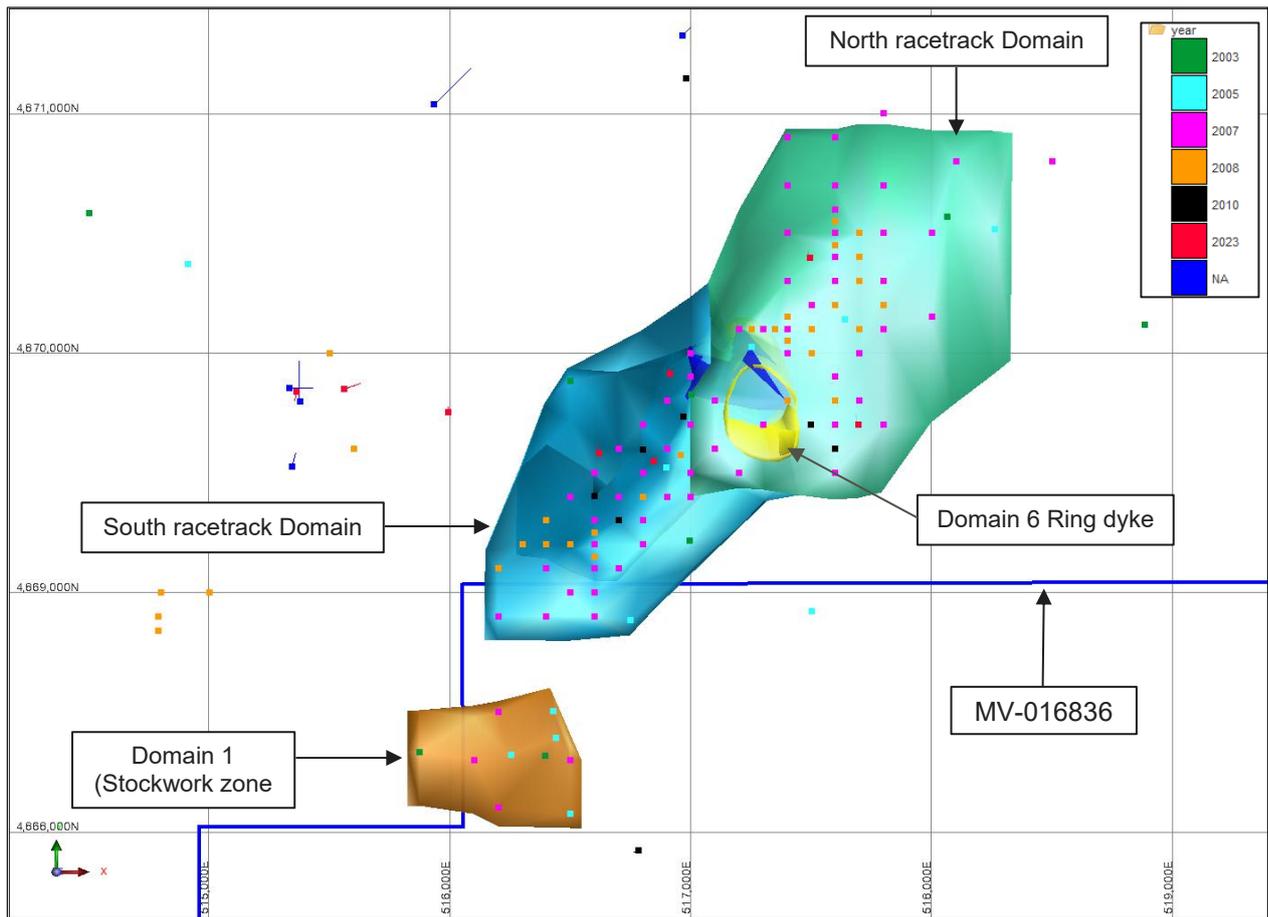
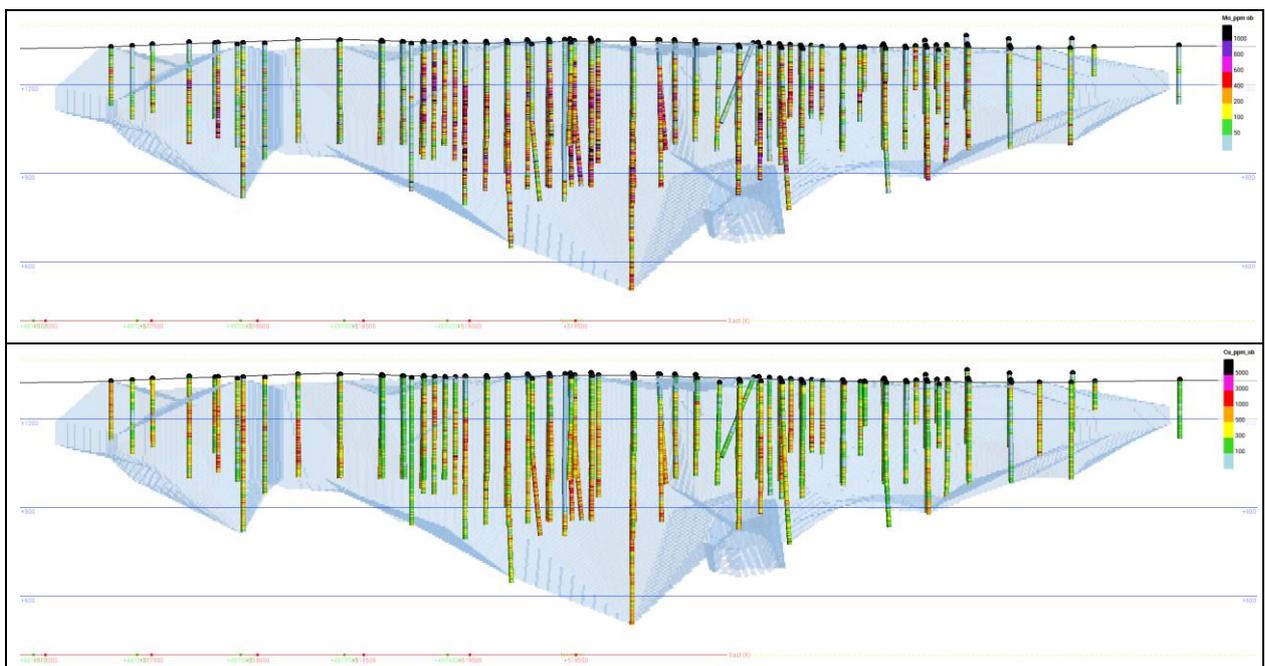
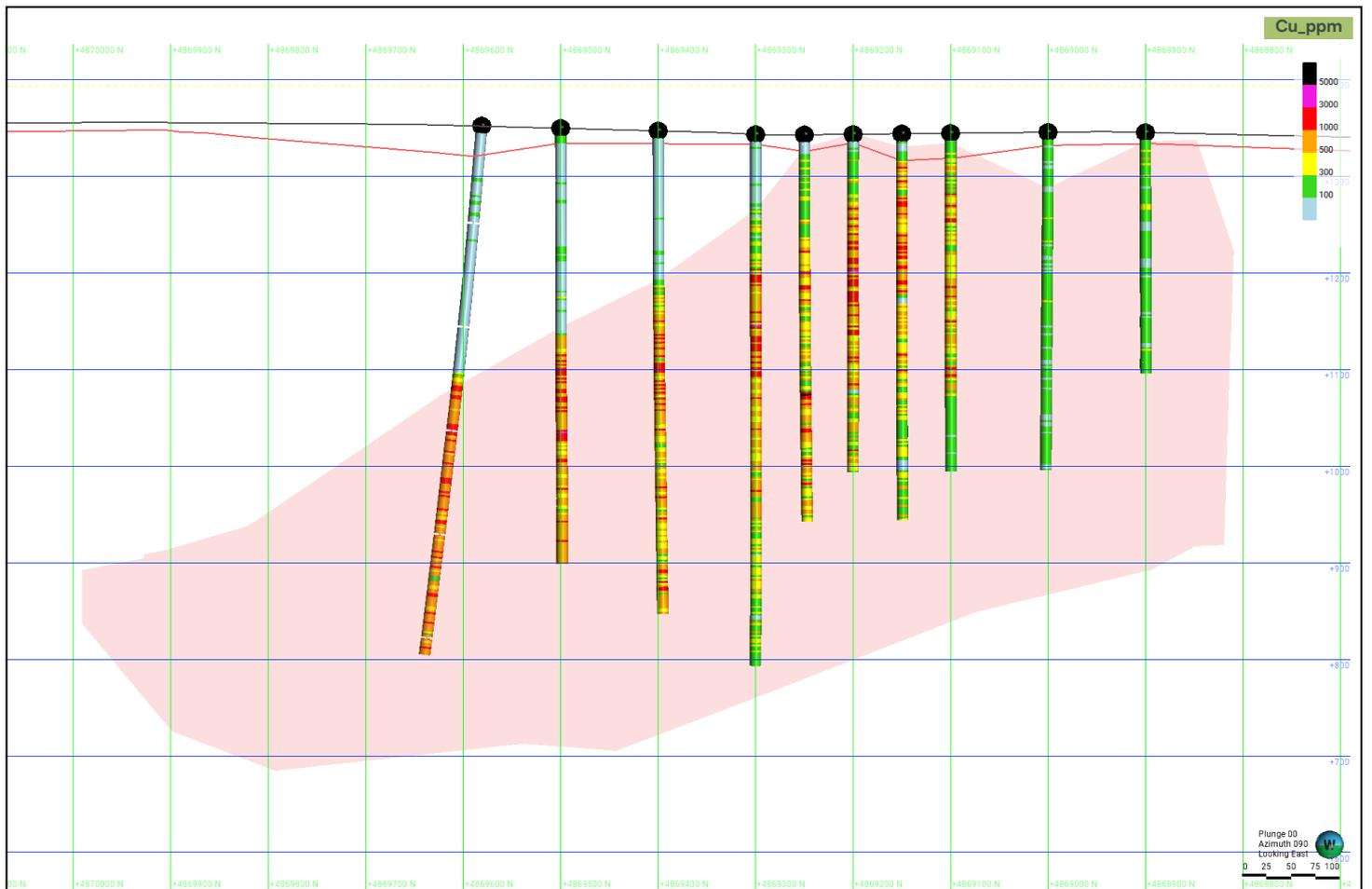
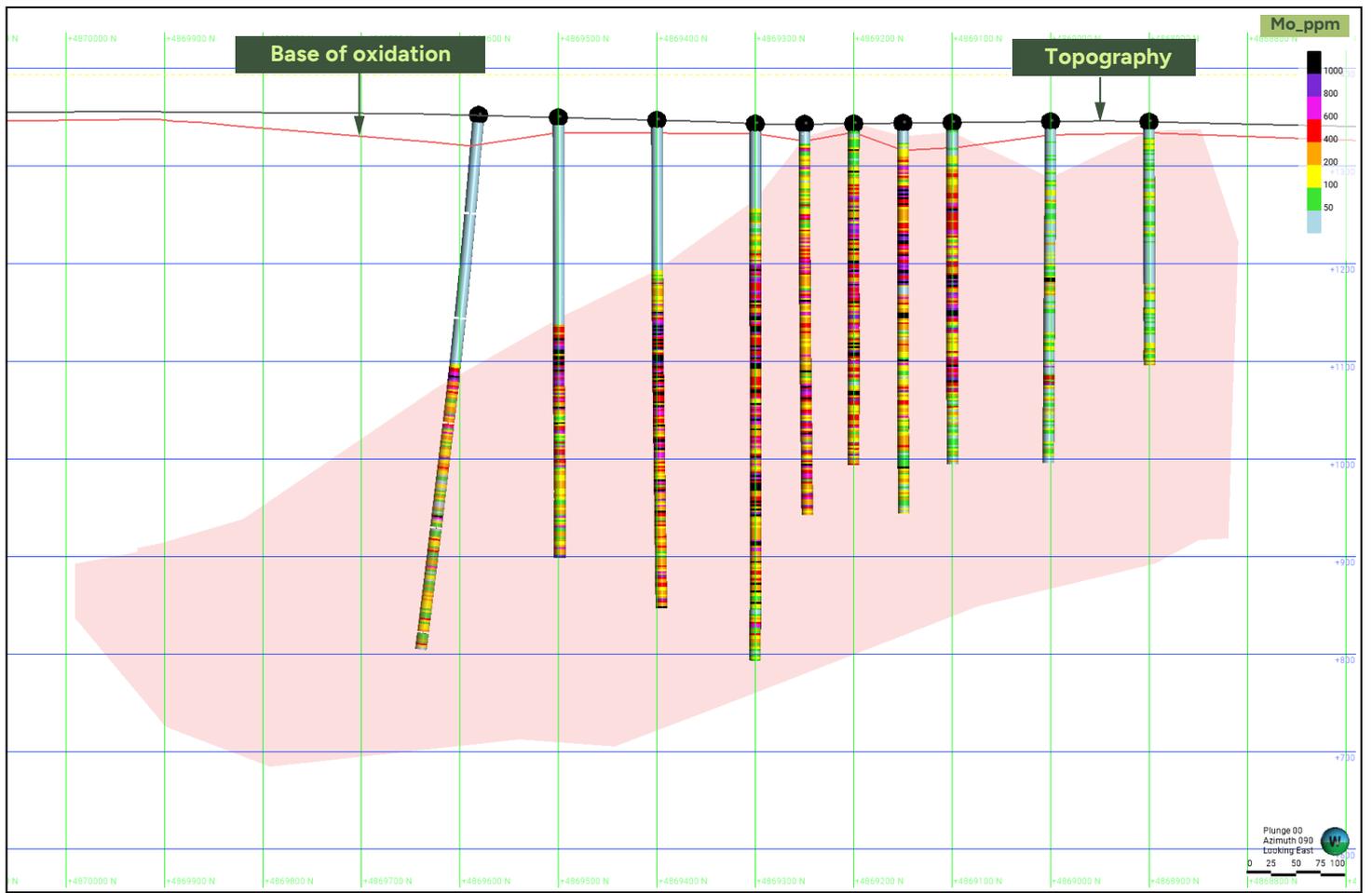


Figure 14-9 Zuun Mod Resource Wireframes – Long Section View





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Zuun Mod - Technical Report

DRAWING  
ZUUN MOD RESOURCE WIREFRAMES – TYPICAL SECTIONS

FIGURE No.  
14-10

PROJECT No.  
ADV-HK-00161

DATE  
October 2025



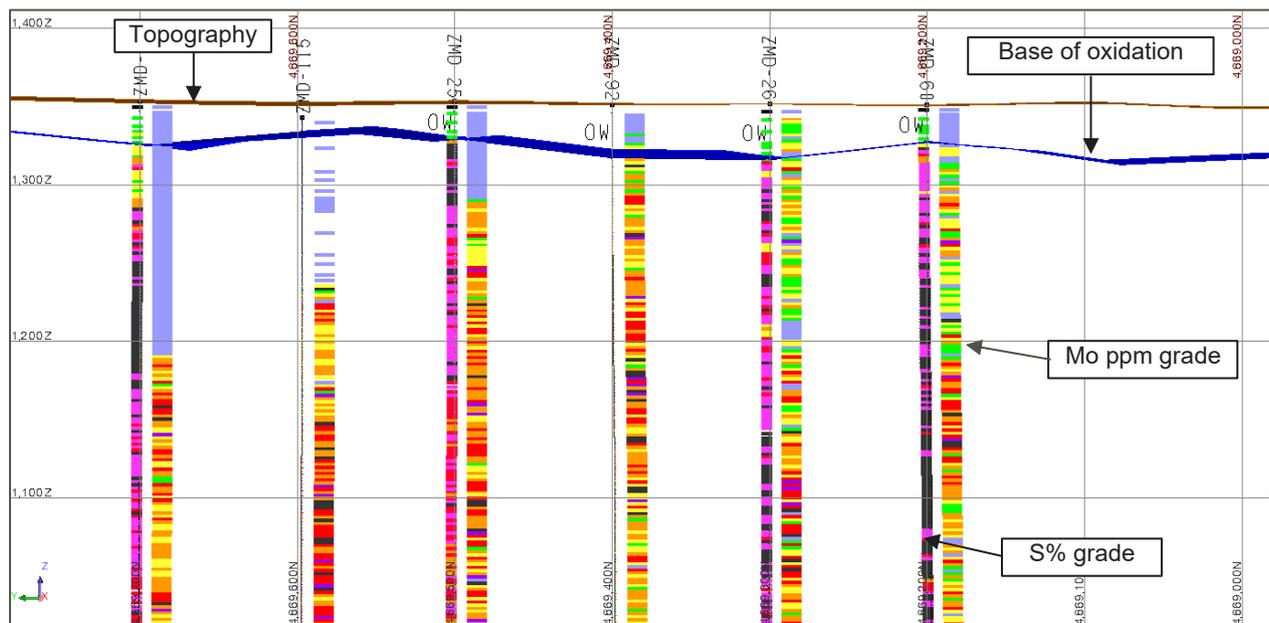
### 14.3.2 Topography

The mineralisation and weathering domains models were constructed below a topographic digital elevation model (DEM) wireframe provided by ERD. SLR included all collar coordinates into the current DEM surfaces prior to use for modelling.

### 14.3.3 Weathering Surfaces

Weathering profiles were interpreted based on a combination of Sulphur assays and geological logging. They generally correlate reasonably well, and the base of oxidation surface was adjusted to match recorded weathering states where there is no S assay data (**Figure 14-11**). Visual observation of drill core during site visit shows that the majority of the mineralisation is in fresh rock and based on the current interpretation of weathering surfaces it is reported that >99.8% of mineralisation is in fresh rock.

**Figure 14-11 Showing Weathering Interpretations and Sulphur assays**



## 14.4 Compositing and Statistics

Mo mineralised wireframes (“domains”) were used to code the assay database to allow identification of the resource intersections. It is necessary for the estimation process that all samples are assumed to be of equal weighting and should therefore be of equal length. A review of the sample lengths was subsequently completed to determine the optimal composite length. A histogram of the sample lengths for samples within mineralisation is shown in **Figure 14-12**.

The most prevalent sample lengths inside the mineralised wireframes was 2 m (99% of all samples), thus 2 m compositing was utilised.

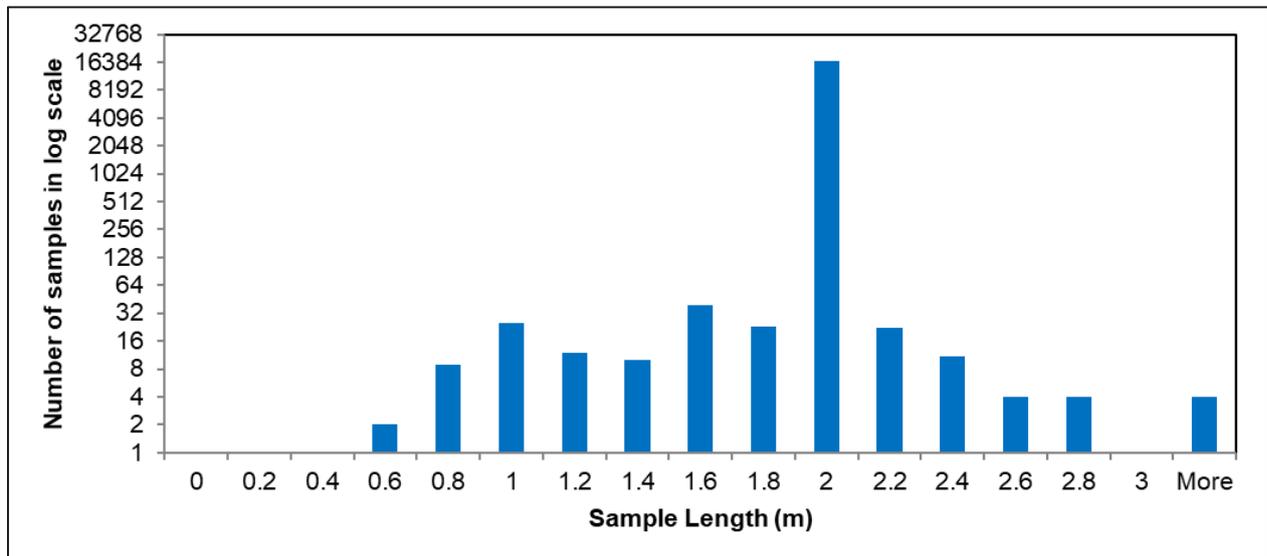
Composites were checked visually for spatial correlation with the wireframed mineralised objects.

Individual composite files were created for each domain in the wireframe models. The composite data was imported into Supervisor™ version 9.1 software for analysis. Summary statistics for Mo, Cu and Re are shown in **Table 14-5** to **Table 14-7**. Log histogram and log probability plots of the combined composite assay for Mo, Cu and Re are shown in **Figure 14-13**.

For all domains, the composite samples of Mo, Cu and Re in the mineralised wireframes show a typical log normal distribution with low to moderate variability, as can be expected in porphyry deposits with a minimal number of exceptionally high grades. SLR interprets these statistics to be representative of the style and grade of mineralisation observed within the deposit.



**Figure 14-12 Sample Length Inside Wireframes**



**Table 14-5 Summary Statistics for 2 m Composites – Mo ppm**

Zone	South Racetrack	North Racetrack	Stockwork	5 (ring dyke core)	6 (ring dyke)	7
Samples	8,093	7,175	1,400	369	20	190
Minimum	0.22	0.31	0.50	0.50	0.50	3.00
Maximum	8,370.00	17,548.78	3,864.54	1,235.00	260.00	2,380.00
Mean	371.30	265.46	195.60	61.38	41.70	299.91
St Dev	415.10	440.93	288.94	126.36	69.23	320.44
Coef Var	1.12	1.66	1.48	2.06	1.66	1.07
Variance	172,306	194,420	83,485	15,968	4,793	102,682
Percentiles						
10%	53.81	25.84	26.51	1.06	0.50	51.00
20%	100.00	57.39	43.89	2.86	1.02	103.00
30%	150.00	90.00	60.93	6.55	2.65	140.50
40%	200.00	123.57	79.20	11.08	8.07	169.00
50%	256.30	161.00	104.42	14.95	12.85	203.00
60%	325.67	210.00	135.85	22.83	15.56	251.00
70%	417.66	274.96	186.12	32.85	20.51	342.00
80%	550.00	370.00	271.07	63.43	70.00	409.00
90%	787.91	560.55	453.62	198.26	83.00	617.00
95%	1,084.30	804.78	666.14	294.87	207.00	802.50
97.50%	1,419.40	1,138.52	940.16	419.09	233.50	1,108.75
99%	1,965.35	1,701.25	1,285.26	582.46	249.40	1,720.50

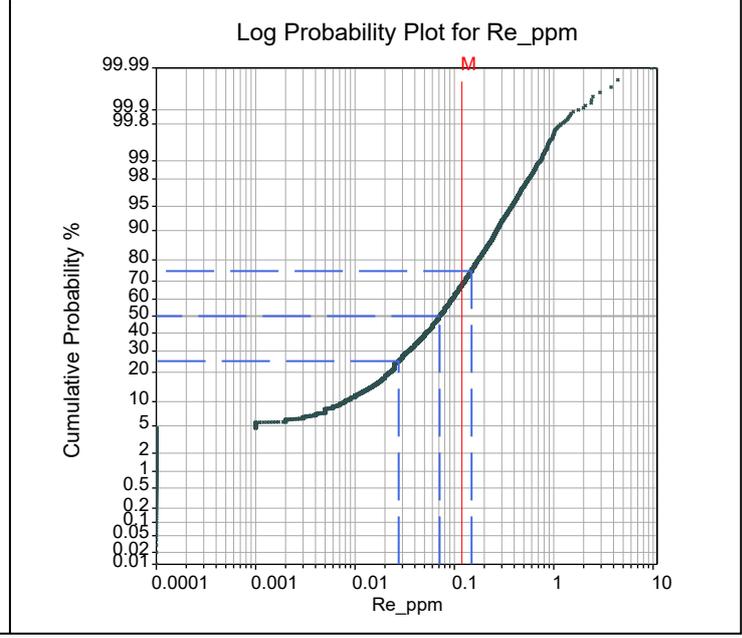
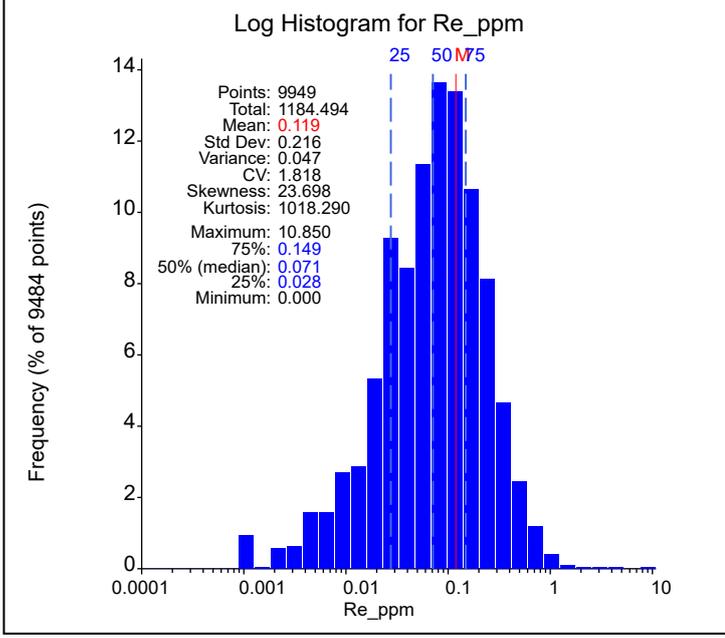
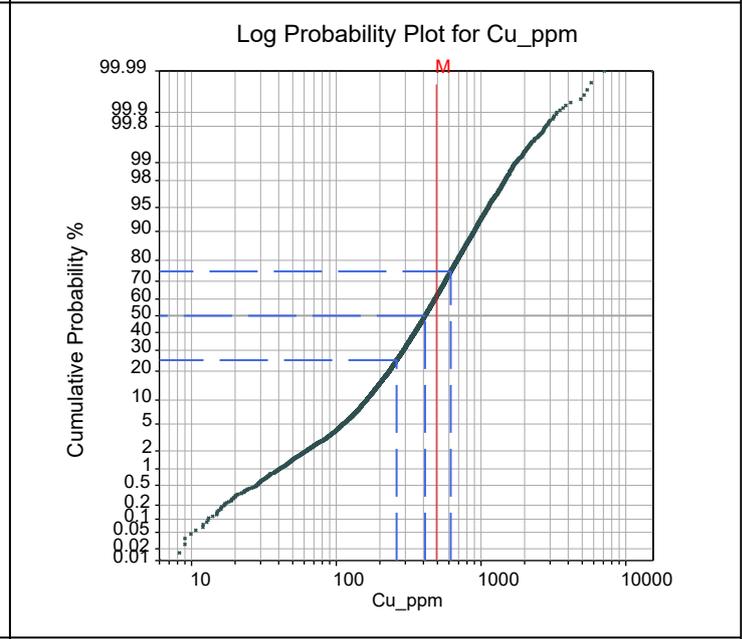
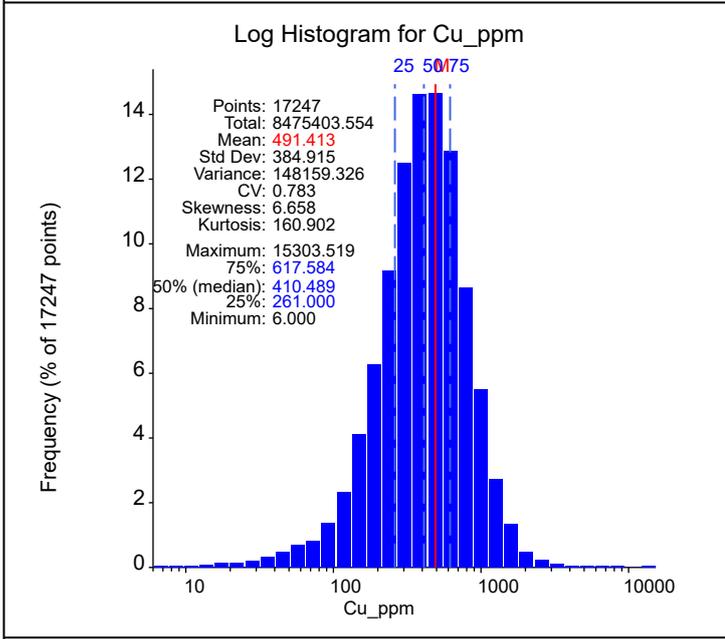
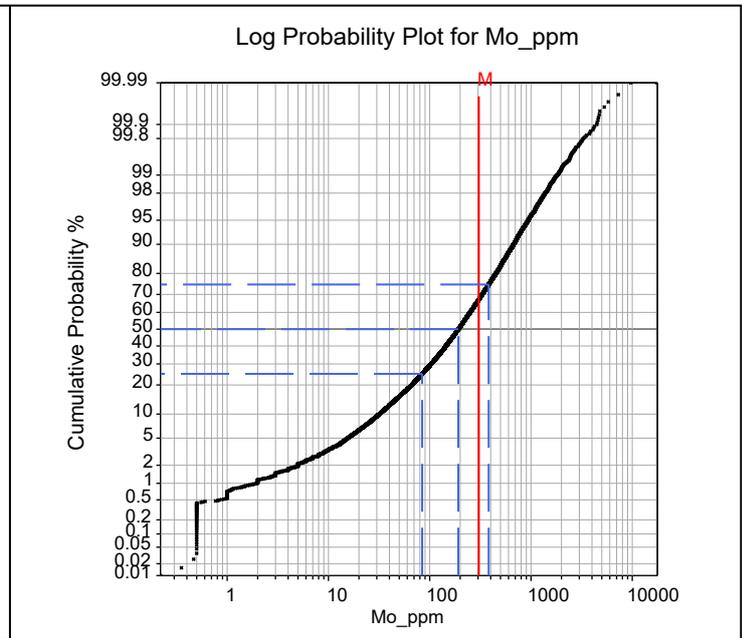
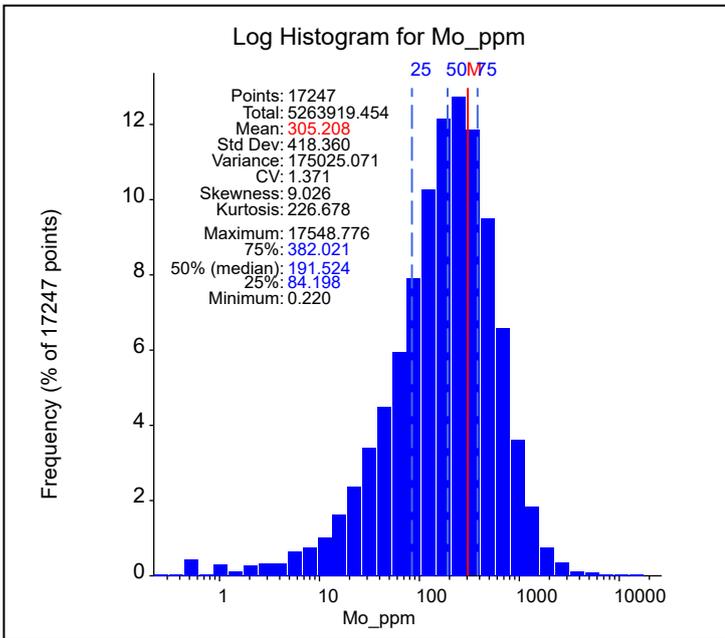


**Table 14-6 Summary Statistics for 2 m Composites – Cu ppm**

Zone	South Racetrack	North Racetrack	Stockwork	5 (ring dyke core)	6 (ring dyke)	7
Samples	8,093	7,175	1,400	369	20	190
Minimum	8.73	6.00	32.21	12.00	24.50	10.00
Maximum	6370.00	15303.52	3646.71	1182.21	431.00	1020.00
Mean	564.28	423.98	530.34	180.40	206.54	281.25
St Dev	390.62	383.03	305.63	141.39	121.63	176.70
Coef Var	0.69	0.90	0.58	0.78	0.59	0.63
Variance	152,581	146,713	93,411	19,990	14,793	31,223
Percentiles						
10%	190.97	148.00	210.17	27.64	24.80	90.00
20%	276.00	210.00	289.11	59.07	90.38	129.50
30%	345.00	257.54	352.59	106.00	123.99	175.00
40%	411.00	304.46	416.15	139.08	137.86	219.00
50%	481.22	354.09	478.49	161.29	168.00	245.00
60%	559.75	410.00	550.97	181.88	236.00	292.00
70%	651.00	476.60	631.05	218.86	266.06	325.00
80%	784.51	569.63	729.60	271.53	306.00	371.00
90%	1002.27	736.00	913.51	331.99	368.41	505.00
95%	1260.07	941.15	1087.34	399.12	430.00	629.57
97.50%	1524.67	1165.10	1230.38	464.33	430.50	764.50
99%	1925.35	1567.10	1426.58	613.12	430.80	824.44

**Table 14-7 Summary Statistics for 2 m Composites – Re ppm**

Zone	South Racetrack	North Racetrack	Stockwork	5 (ring dyke core)	6 (ring dyke)	7
Samples	4617	4473	663	96	5	95
Minimum	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	4.42	10.85	1.77	0.37	0.01	0.87
Mean	0.13	0.11	0.10	0.03	0.00	0.12
St Dev	0.16	0.27	0.17	0.05	0.00	0.14
Coef Var	1.26	2.34	1.67	1.75	1.00	1.13
Variance	0.03	0.07	0.03	0.00	0.00	0.02
Percentiles						
10%	0.01	0.01	0.00	0.00	0.00	0.03
20%	0.03	0.02	0.01	0.00	0.00	0.04
30%	0.04	0.03	0.02	0.00	0.00	0.05
40%	0.06	0.05	0.03	0.00	0.00	0.06
50%	0.08	0.07	0.05	0.00	0.00	0.07
60%	0.11	0.09	0.07	0.01	0.00	0.09
70%	0.14	0.12	0.10	0.03	0.00	0.12
80%	0.19	0.16	0.16	0.07	0.00	0.16
90%	0.28	0.25	0.27	0.08	0.00	0.28
95%	0.40	0.35	0.39	0.11	0.00	0.34
97.50%	0.52	0.49	0.50	0.17	0.01	0.35
99%	0.71	0.73	0.89	0.18	0.01	0.77



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**PROJECT**

NAME: Zuun Mod - Technical Report  
 DRAWING: LOG HISTOGRAM AND LOG PROBABILITY PLOT FOR MO, CU AND RE  
 FIGURE No. 14-13  
 PROJECT No. ADV-HK-00161  
 DATE: October 2025



### 14.4.1 High Grade Cuts

High-grade capping is typically undertaken to reduce the impact on the interpolation of sample grades that are considered to be outside the normal observed sample distribution, and that cannot be separately domained and interpolated independently. Statistical analysis indicates that elements are positively skewed with low coefficient of variation. Application of top cuts is not considered necessary for any of the elements prior to estimation.

### 14.4.2 Correlation Analysis

Mo and Cu are currently considered to be of economic interest. A poor correlation is observed between Mo and Cu. Correlation matrices for the elements are shown in **Table 14-8**.

**Table 14-8 Correlation Matrix for Mineralisation Domains**

	Mo ppm	Cu ppm	Re ppm
Mo ppm	1		
Cu ppm	0.38	1	
Re ppm	0.82	0.27	1

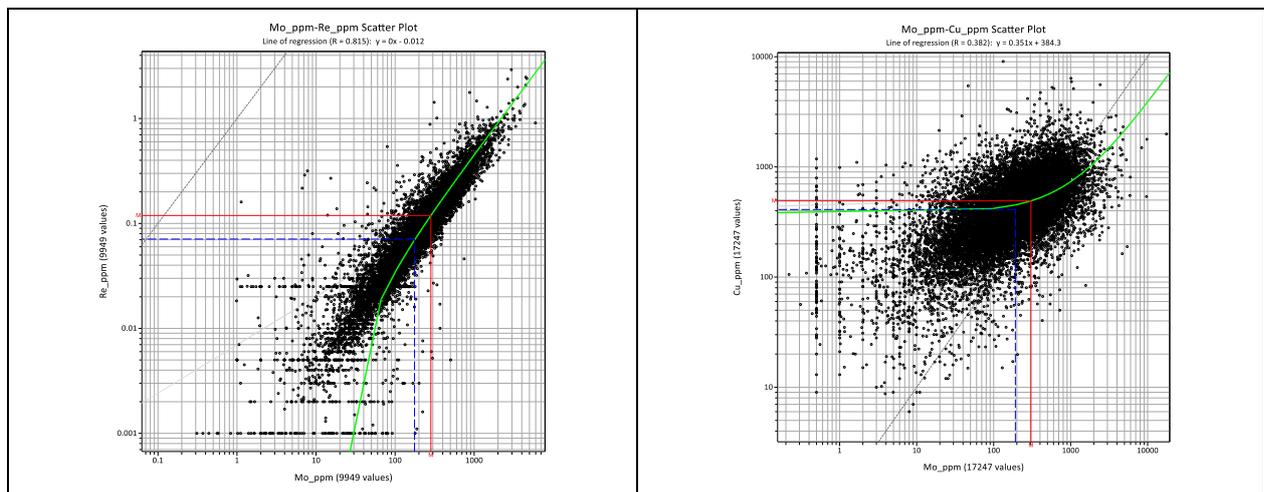
The strong positive correlation between Mo and Re is expected because Re replaces Mo in the main Mo-bearing mineral, molybdenite. Since not all samples were tested for Re, a regression analysis was conducted to populate the block estimates and ensure maximum confidence. The regression equation is shown in **Table 14-9**.

**Table 14-9 Linear Regression Parameters for Re**

Domain	Object	Regression
Stockwork	1	Mo ppm * 0.0005 + 0.021
South Racetrack	3	Mo ppm * 0.0004 + 0.0044
North Racetrack	4	Mo ppm * 0.0004 + 0.0161
Late stage dacite porphyry near ring dyke	5	Mo ppm * 0.0003 + 0.0051
Ring bucky barren quartz dyke	6	Mo ppm * 0.0003 + 0.0051
Granodiorite in South Racetrack	7	Mo ppm * 0.0004 + 0.0057

A scatter plot for all elements is shown in **Figure 14-14**.

**Figure 14-14 Scatter Plots for Mo, Cu and Re**





## 14.5 Trend Analysis

### 14.5.1 Variography

Mineralisation continuity was examined via variography. Variography examines the spatial relationship between composites and seeks to identify the directions of mineralisation continuity and quantify the ranges of grade continuity. Variography was also used to determine the random variability or 'nugget variance' of the deposit. The results provide the basis for determining appropriate kriging parameters for resource estimation.

The general methodology applied for the geostatistical study is outlined as follows:

- Down hole variograms generated at 2 m lag distances to model the nugget effect.
- Variogram search plunge direction investigated through the use of continuity fan analysis (aligned to the general strike and dip of each domain) and through visual assessment in Leapfrog with indicator approach where grade evaluated into the estimation domain wireframes and viewed in long section.
- Major, semi-major and minor axis experimental variograms were generated, with the major axis aligned to the principal direction of continuity and anisotropy; the semi-major axis direction aligned perpendicular and the minor axis aligned into the plane (across strike).
- Lag distances of around 50 to 200 m were employed for major and semi-major variograms, with shorter lag distances of around 5 to 20 m used for the minor axis variograms. The angular tolerance was also adjusted for each variogram to assist in capturing sufficient sample pairs to enable reasonable variograms to be modelled.
- Variogram model fitting to the experimental directional variograms to obtain the nugget, sill values and ranges.

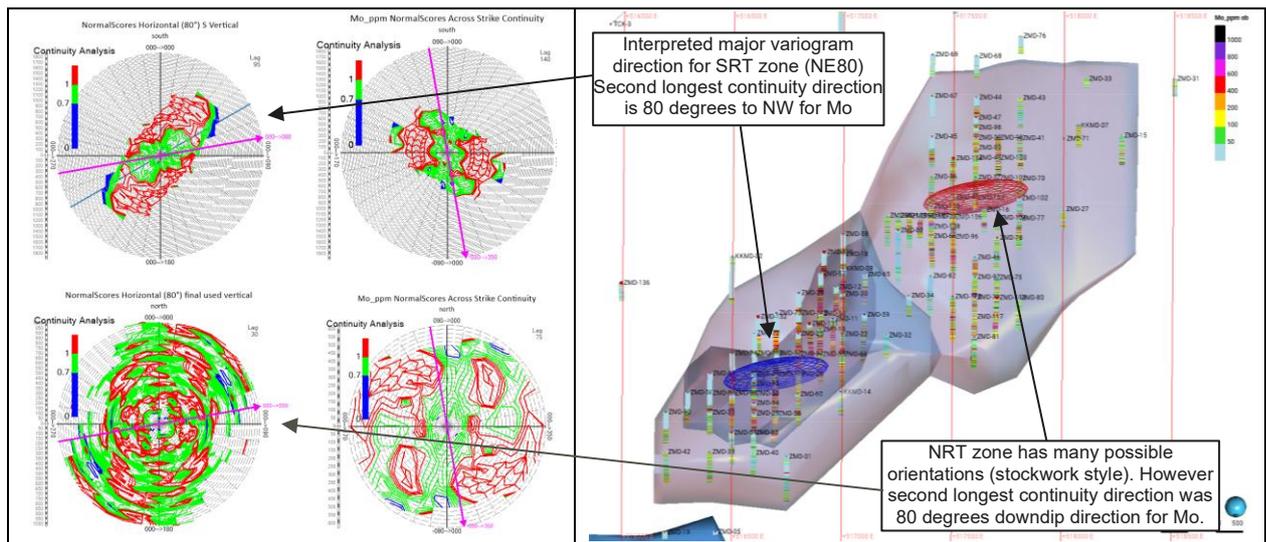
Directional continuity analysis was completed for all domains and grade variables separately. The 2 m composite (assay) data were examined using variograms that were calculated and modelled using Snowden Supervisor software. All attributes were transformed to normal scores distributions and the spherical variogram models were back-transformed to normal statistical space for use in the grade interpolation process. Normalised variograms were calculated so that the sum of the variance (total sill value) is equal to one and the structures were ratios or proportions of the sill. A two-structured, nested spherical model was found to model the experimental variogram reasonably well. The down hole variogram provides the best estimate of the true nugget values for each of the elements, which range from 15-28%.

The recent drilling program along with the re-logging of historical holes by ERD indicates that there could potentially be two major trends (sub-vertical and sub-horizontal) in higher grade mineralisation. SLR completed variogram analysis to see whether these geological/mineralisation features can be replicated in directional analysis. The longest continuity direction for Mo is interpreted to be in the 080 NE direction (**Figure 14-15**). A clear vertical trend is also observed in the downdip direction. This suggests that the existing vertical drilling orientation is not well suited for Zuun Mod mineralisation. Angled and oriented drilling is recommended for future drilling.

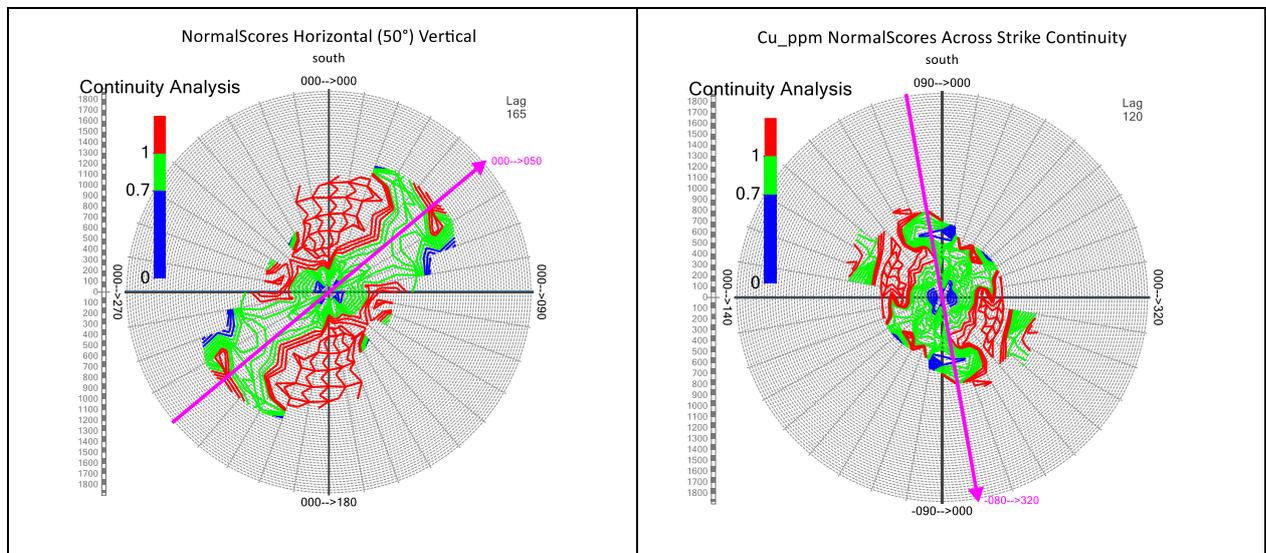
For the zones that were modelled, the variogram models are robust, there being a number of experimental points at the chosen lag informing the model within the range of the variogram. For all zones, the full variogram ranges are in excess of the general drill hole spacing, with the first variogram structures for the main zones having longer ranges.



**Figure 14-15 Observed dominant Trend for Mo**



**Figure 14-16 Observed dominant Trend for Cu**



Directional analysis indicates that mineralisation at Zuun Mod appears to be controlled by a complex network of cross-cutting trends. The intricate cross-cutting nature of these structures and their scale relative to the spacing of the drillhole data mean that it is very difficult to produce variable anisotropic functions that can effectively represent and honour all orientations. For this reason, it was decided to combine mineralisation zones into perceived dominant vertical and horizontal anisotropic trends, while zones were split into South racetrack and North racetrack zones based on the dominant lithological control on these areas.

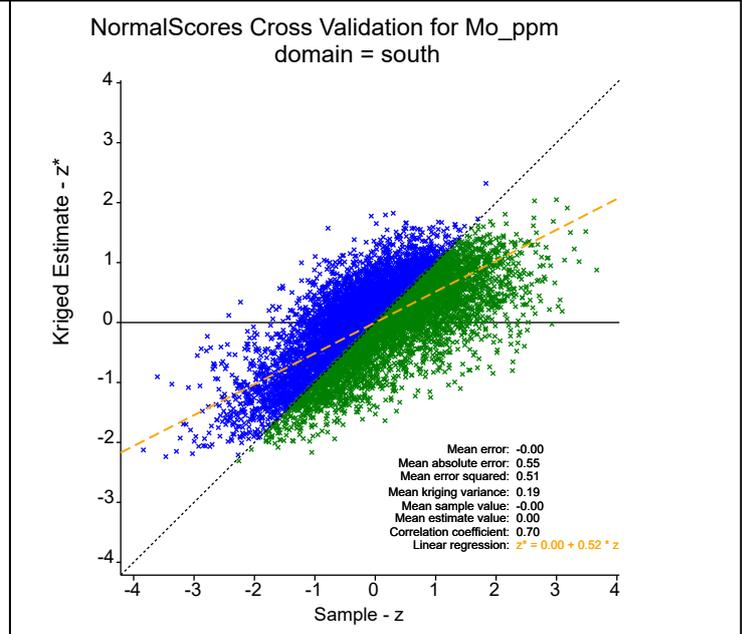
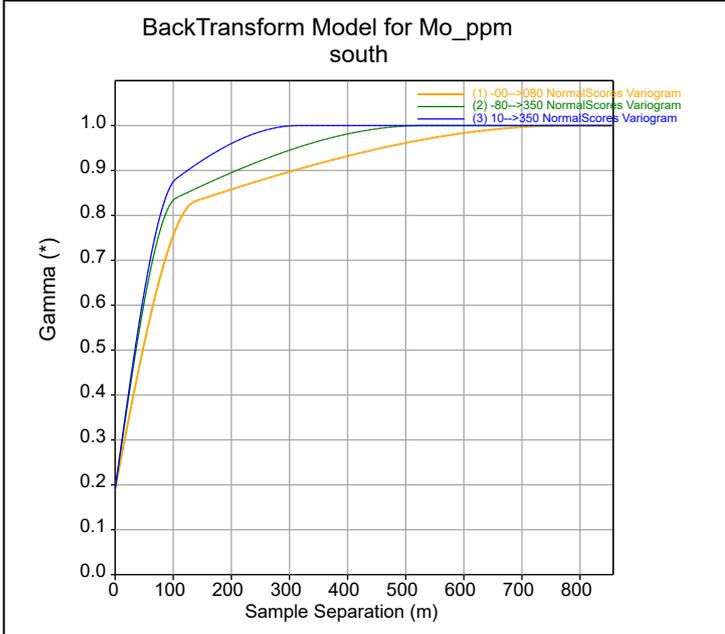
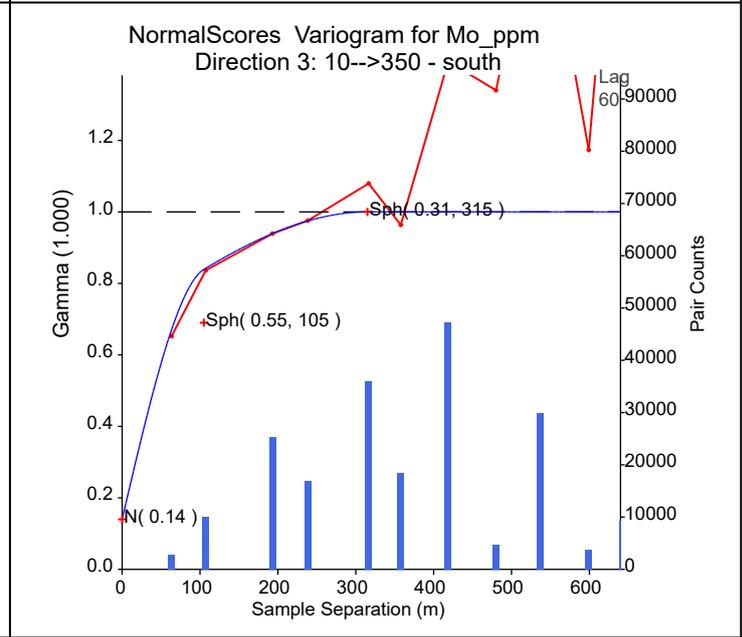
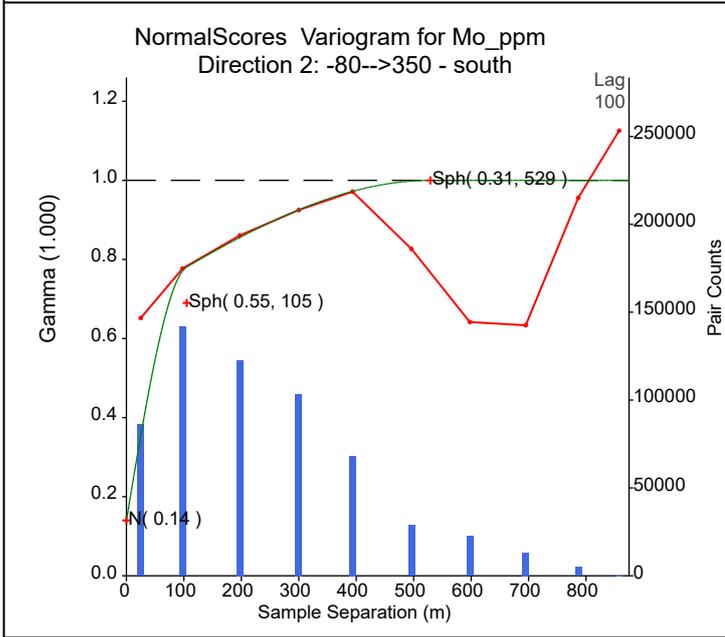
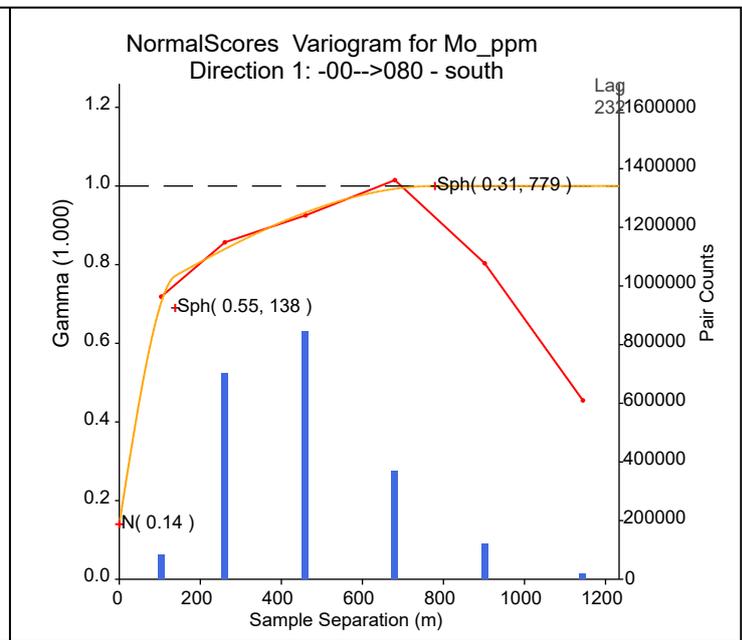
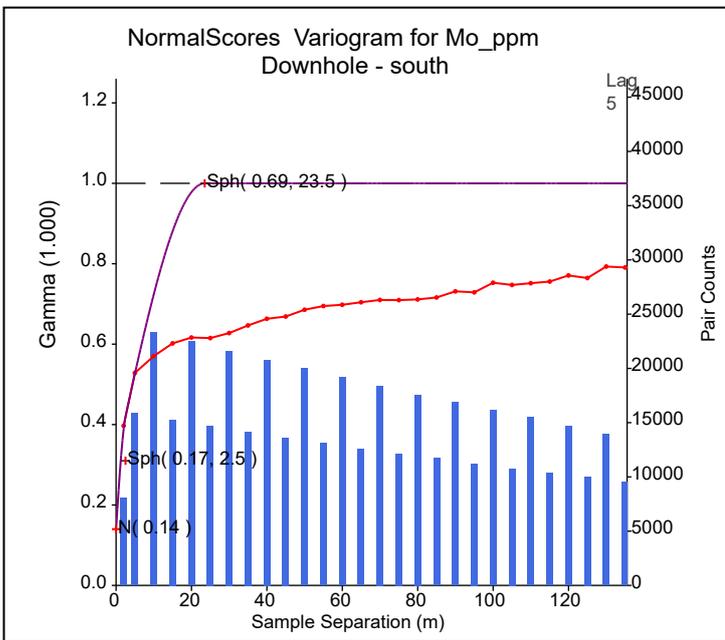
### 14.5.2 Kriging Parameters

The Mo and Cu grades were interpolated into a Surpac block model using ordinary kriging (“OK”), based on the nugget, sill values, and ranges determined from the variogram models. The ranges obtained from these variogram models guided the search ellipse parameters used in the Mineral Resource estimate. These search ellipse parameters varied and were orientated to align with the strike and plunge of their respective domains. The back-transformed kriging parameters are summarised in **Table 14-10**. The directional variogram for Mo and Cu is shown from **Figure 14-17** to **Figure 14-20**.



**Table 14-10 Kriging Parameters**

Domain	Trend	Element	Major Direction	Co	C1	A1	Semi	Minor	C2	A2	Semi	Minor
SRT (obj3)	Vertical	Mo	00-->80	0.19	0.58	138	1.31	1.31	0.23	779	1.47	2.47
		Cu	-00-->050	0.15	0.42	120	1.50	1.50	0.44	780	1.81	1.86
	Horizontal	Mo	00-->80	0.19	0.46	120	1.15	5.71	0.35	468	1.07	1.20
		Cu	-00-->050	0.15	0.23	80	1.02	14.55	0.63	409	1.08	8.43
NRT (obj4)	Vertical	Mo	-00-->080	0.28	0.52	172	5.73	5.93	0.20	527	1.49	1.51
		Cu	-00-->080	0.20	0.53	111	2.55	2.58	0.27	532	1.09	1.98
	Horizontal	Mo	-00-->080	0.28	0.51	156	1.04	19.50	0.21	535	1.13	2.88
		Cu	-00-->080	0.20	0.48	100	1.56	8.00	0.33	589	1.24	2.58
Stockwork (obj1)	-	Mo	-00-->080	0.14	0.53	239	7.34	7.45	0.33	566	2.28	2.29
	-	Cu	-00-->080	0.09	0.52	162	5.06	5.14	0.38	528	2.44	2.79

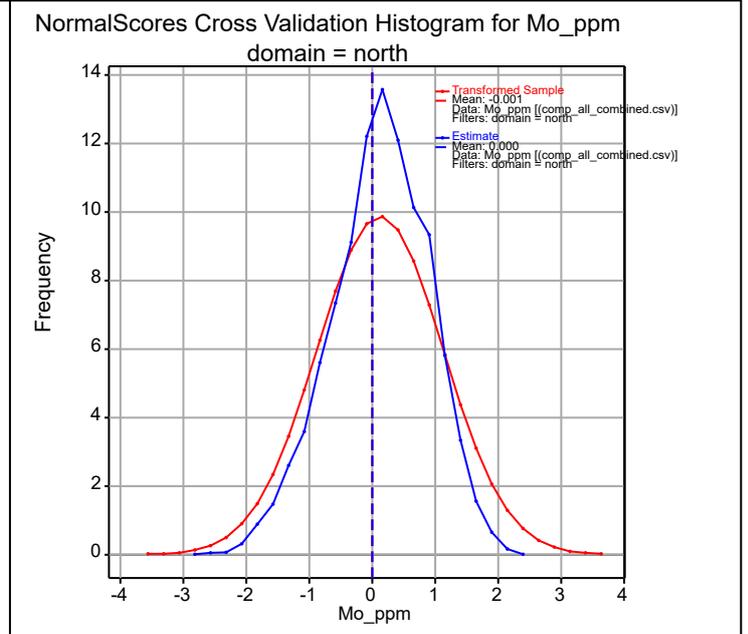
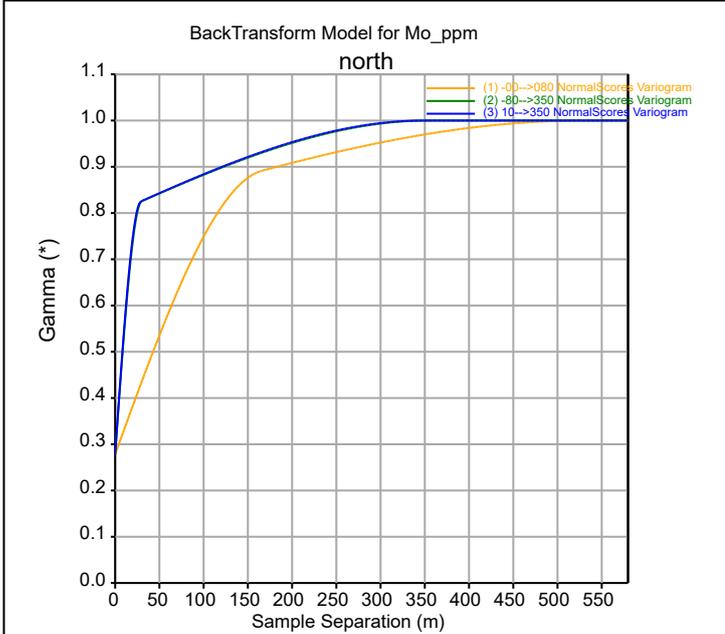
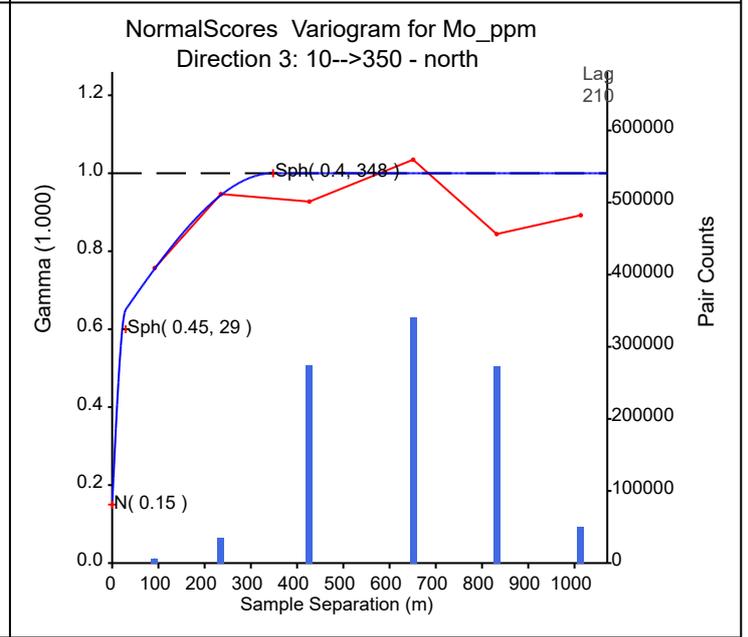
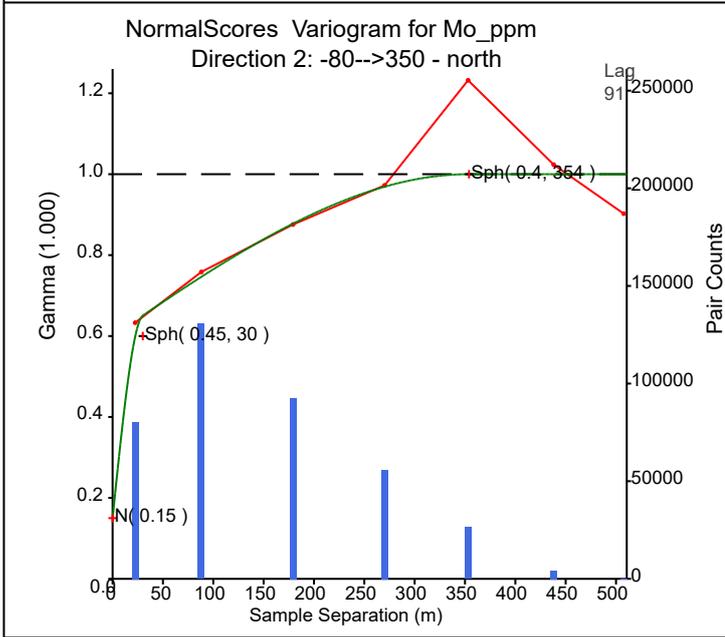
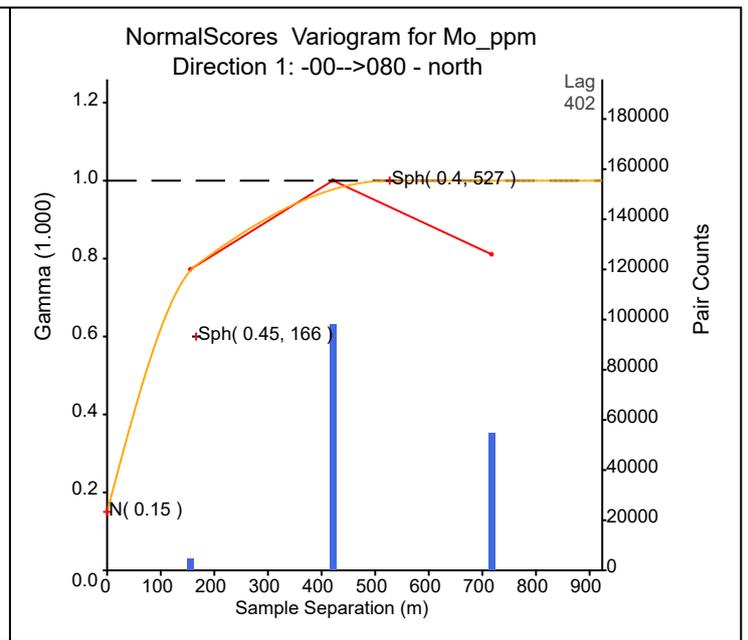
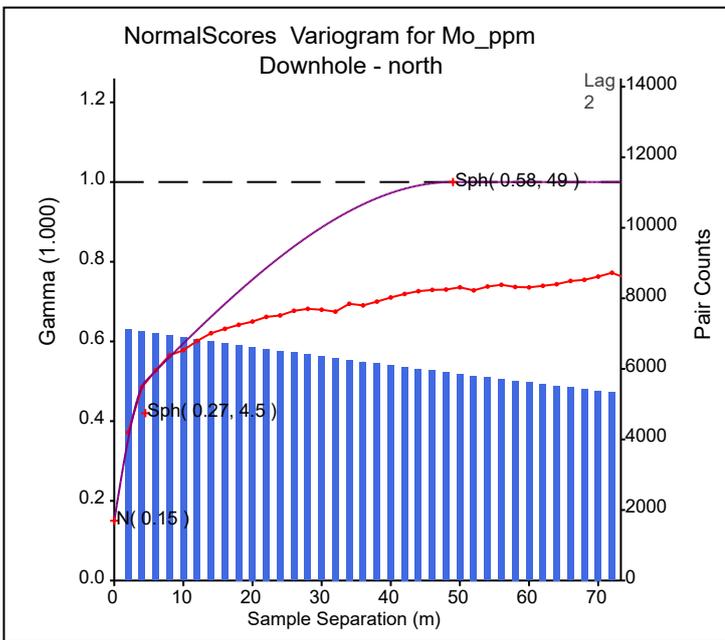


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<p>(1) -00--&gt;080 NormalScores Variogram</p> <p>(2) -80--&gt;350 NormalScores Variogram</p> <p>(3) 10--&gt;350 NormalScores Variogram</p>

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PROJECT		
NAME Zuun Mod - Technical Report		
DRAWING VARIOGRAM MODEL - SOUTH RACETRACK VERTICAL TREND - MO		
FIGURE No. 14-17	PROJECT No. ADV-HK-00161	DATE October 2025

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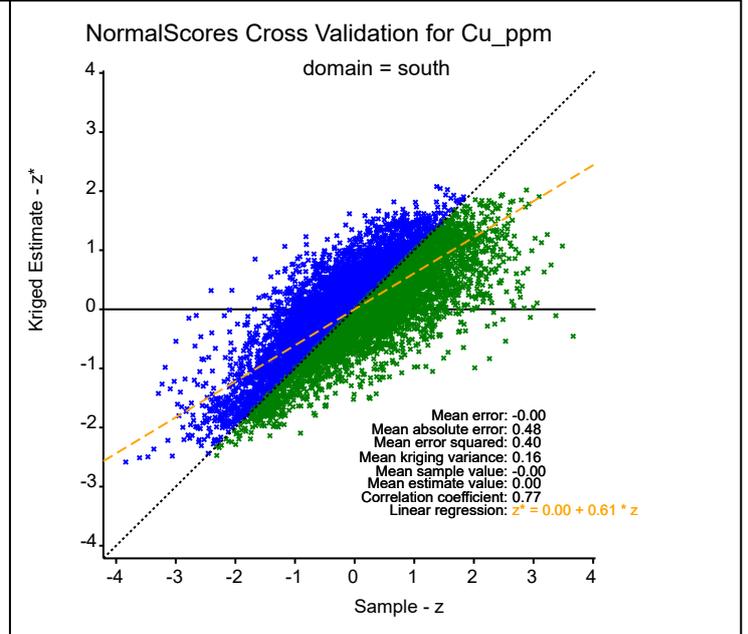
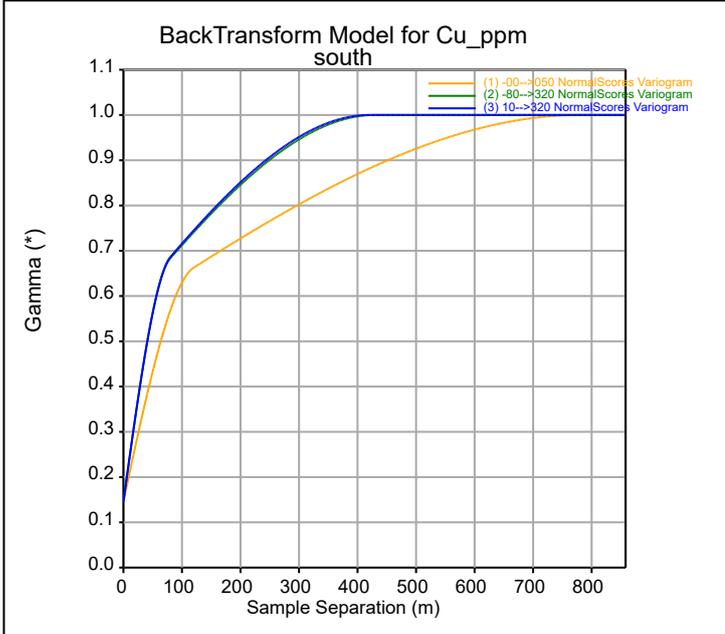
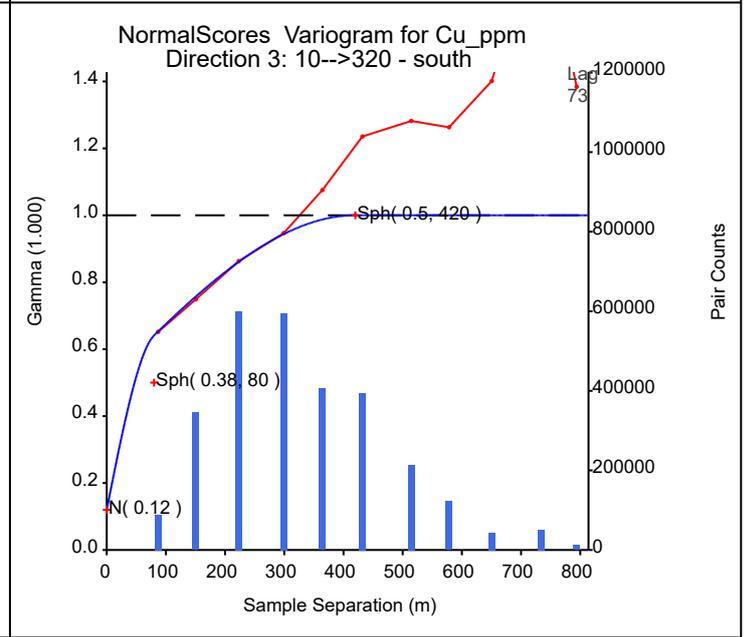
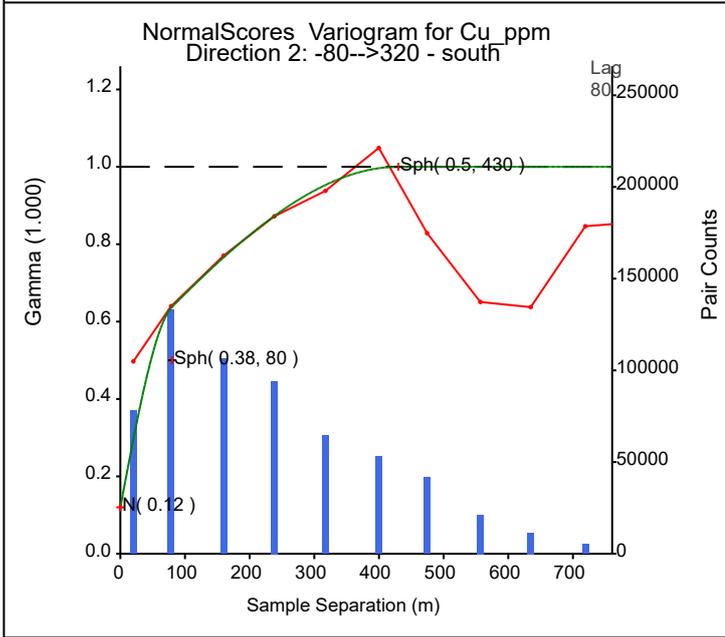
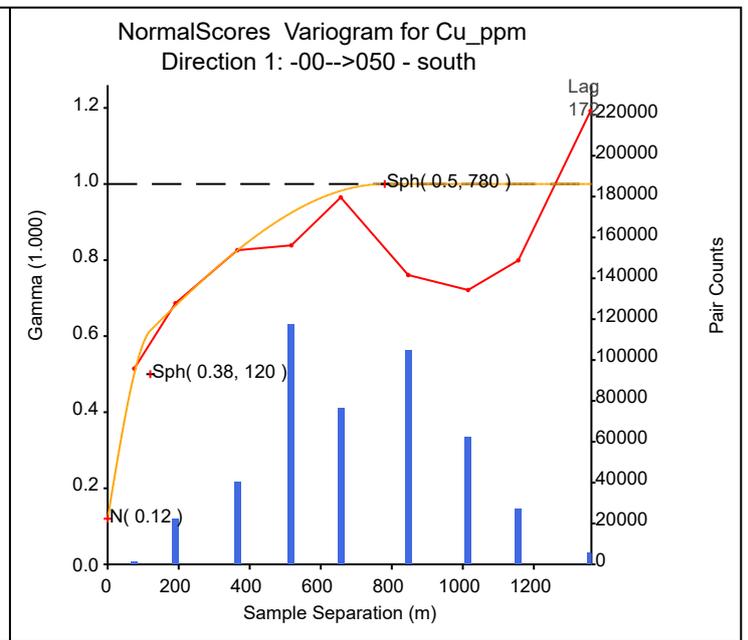
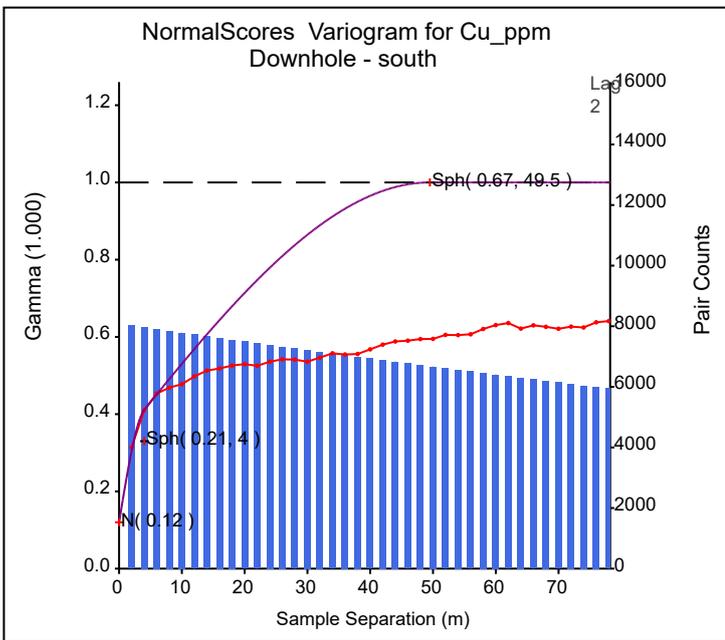
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DRAWING	VARIOGRAM MODEL - NORTH RACETRACK VERTICAL TREND - MO	
FIGURE No.	PROJECT No.	DATE
14-18	ADV-HK-00161	October 2025



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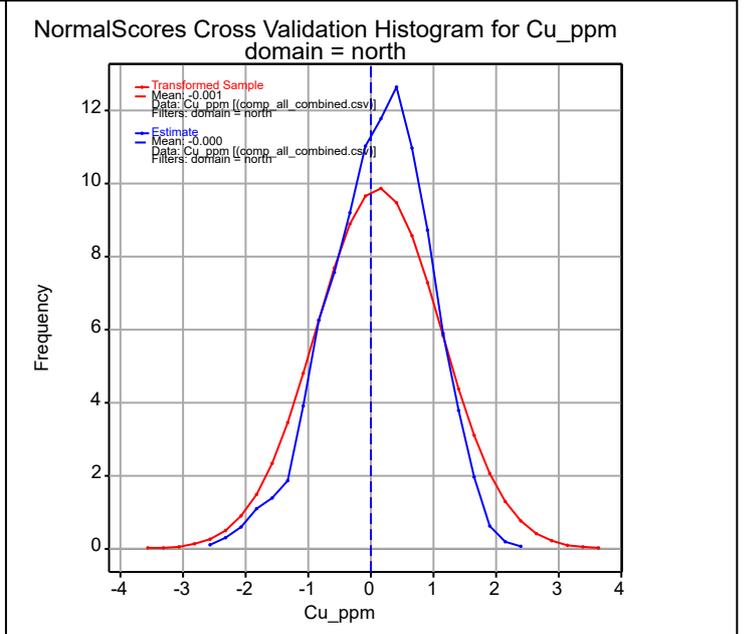
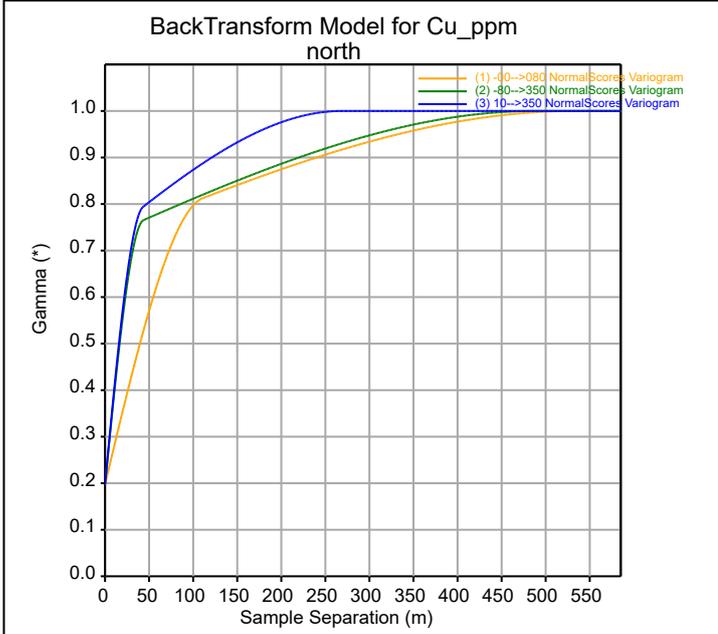
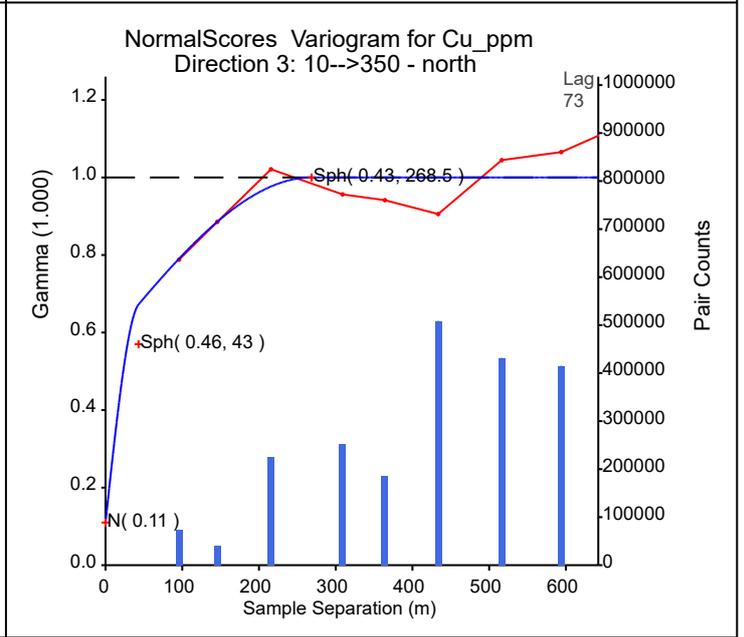
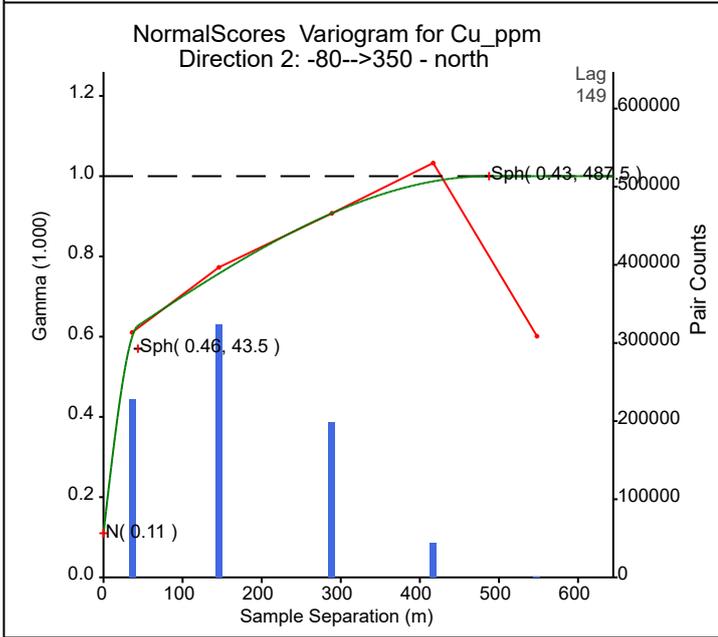
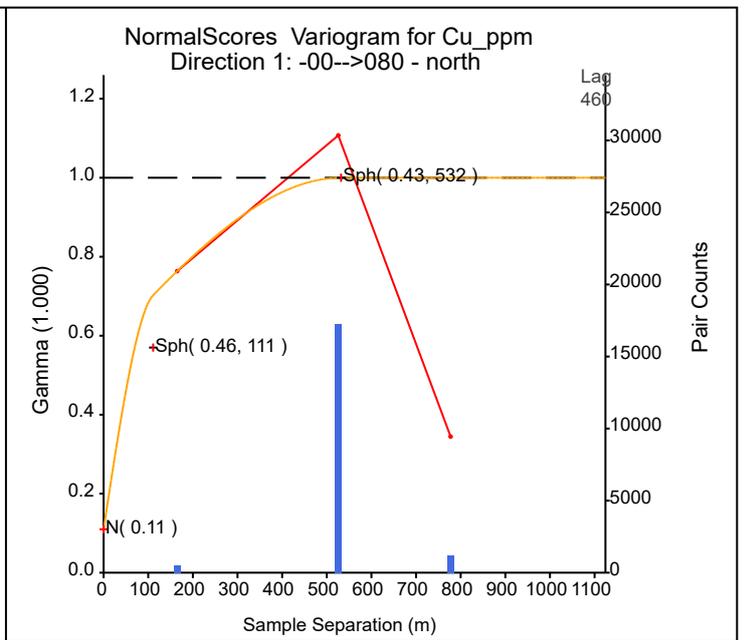
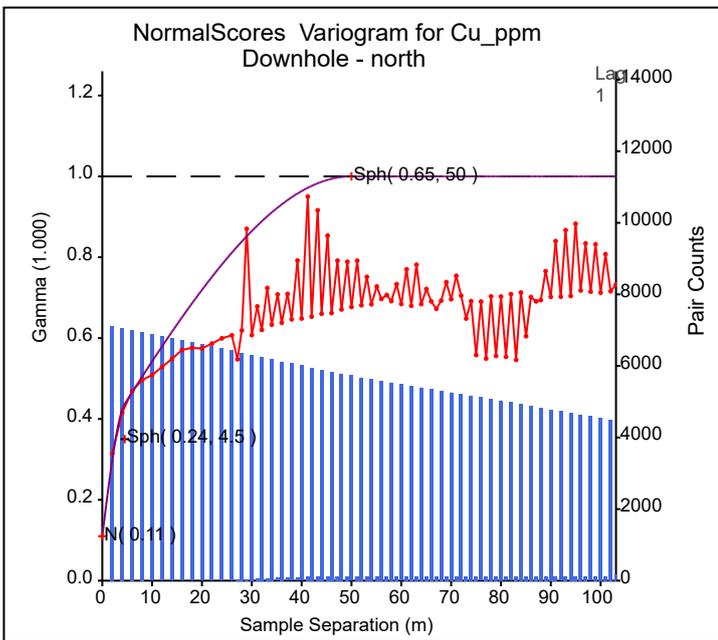
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FIGURE No. 14-20	PROJECT No. ADV-HK-00161	DATE: October 2025



## 14.6 Block Models

A Surpac block model was created to encompass the full extent of the deposit. The block dimensions used in the model were 25 m NS by 25 m EW by 25 m vertical with sub-cells of 6.25 m by 12.5 m by 6.25 m. The parent block size was selected on the basis of kriging neighbourhood analysis (discussed in **Section 14.7**) while dimensions in other directions were selected to appropriately reflect the geometry and volume of the estimation domains. The block model is not rotated. The sub-blocks are sufficiently small to allow the application of selective mining constraints to the model and consequently, partial percentage estimation was not warranted. Block model parameters are listed in **Table 14-11**.

**Table 14-11 Zuun Mod Block Model Parameters**

Model Name	zuunmod_ok_june2025.mdl		
	Y	X	Z
Minimum Coordinates	4867000	515500	400
Maximum Coordinates	4871500	519000	1400
Block Size (sub-blocks)	25 (6.25)	25 (12.5)	25 (6.25)
Rotations			
Attributes:	Description		
Mo_ppm	Kriged Mo ppm grade - Reportable		
Mo_ppm_id	IDW estimated Mo ppm grade		
Mo_ppm_nn	NN estimated Mo ppm grade		
Cu_ppm	Kriged Cu ppm grade - Reportable		
Cu_ppm_id	IDW estimated Cu ppm grade		
Cu_ppm_nn	NN estimated Cu ppm grade		
Re_ppm	Re_ppm grade calculated from Mo vs Re regression		
bd	Density t/m3		
class	Mea-measured, Ind-Indicated, Inf - Inferred and unclassified		
license	in or out		
ave_dis	average distance to sample		
bvar	block variance		
ke	kriging efficiency		
kvar	kriging variance		
min_dis	minimum distance to samples		
num_sam	number of informing samples		
pass	estimation pass		
pod	domain wireframe number		
type	ore - mineralisation, waste - waste		
weathering	ox - oxide, fr - fresh, air - above topography		

## 14.7 Kriging Neighbourhood Analysis

Ordinary kriging (OK) was chosen as the preferred methodology for interpolating/estimating grades into the block model.

Kriging neighbourhood analysis (KNA) was conducted to minimise the conditional bias that occurs during grade estimation as a result of estimating block grades from point data. Conditional bias typically presents as overestimation of low-grade blocks and underestimation of high-grade blocks due to the use of non-optimal estimation parameters and can be minimised by optimising parameters such as:

- Block size



- Size of sample search neighbourhood
- Number of informing samples
- Block discretisation

The KNA exercise focused on defining optimum search ellipse dimensions and maximum sample number restrictions, based on the comparison of the slope of regression (SR). SR is a measure of conditional bias; that is, the tendency for higher grades to be under-estimated and lower grades to be over-estimated. The SR estimates the SR equation between the estimated and theoretical true block grades. A 1:1 relationship between true and estimated block grades would produce a slope of 1, signifying the estimated high grades and estimated low grades correspond accurately to the respective true high and low grades. The flatter the slope (and therefore over-estimation of low grades and under-estimation of high grades), the lower the slope of regression.

The degree of conditional bias present in a model can be quantified by computing the theoretical regression slope and kriging efficiency (KE) of estimation at multiple test locations within the region of estimation. These locations are selected to represent portions of the deposit with excellent, moderate and poor drill (sample) coverage. The largest domain object 3 (South racetrack) at Zuun Mod was selected for KNA. Estimation parameters were selected on the basis of the best-informed blocks which showed the maximum KE and best slope of regression. Surpac™ and Excel software was used for the analysis.

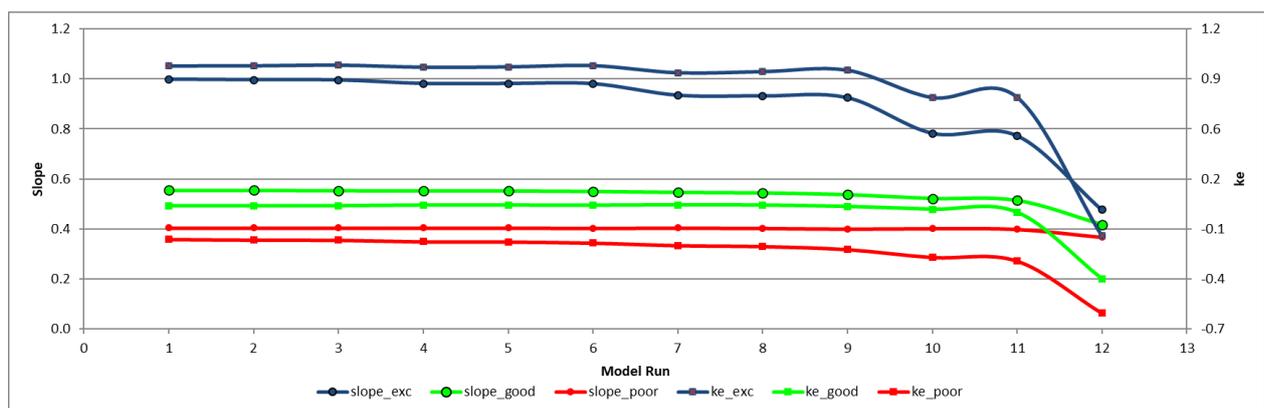
### 14.7.1 Block Size

To test the optimal block size for existing drilling at Zuun Mod, KNA was conducted for Domain 3. A range of block sizes were assessed for regression slope and kriging efficiency and summarised in **Table 14-12** and graphically shown in **Figure 14-21** below.

**Table 14-12 Block Size Assessed**

Iteration		1	2	3	4	5	6	7	8	9	10	11	12
Y		5	10	10	25	25	25	50	50	50	100	100	200
X		5	10	10	25	25	25	50	50	50	100	100	200
Z		5	5	10	5	10	25	10	25	50	25	50	50
Vertical	slope	1.00	1.00	1.00	0.98	0.98	0.98	0.93	0.93	0.92	0.78	0.77	0.48
	ke	<b>0.97</b>	<b>0.97</b>	<b>0.97</b>	<b>0.96</b>	<b>0.96</b>	<b>0.97</b>	<b>0.92</b>	<b>0.93</b>	<b>0.94</b>	<b>0.77</b>	<b>0.77</b>	<b>-0.11</b>
	Mo_ppm	700	725	745	760	767	792	748	751	732	666	647	535
Horizontal	slope	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.96	0.95	0.91	0.81
	ke	<b>0.90</b>	<b>0.91</b>	<b>0.93</b>	<b>0.91</b>	<b>0.94</b>	<b>0.95</b>	<b>0.94</b>	<b>0.96</b>	<b>0.94</b>	<b>0.95</b>	<b>0.92</b>	<b>0.83</b>
	Mo_ppm	453	458	546	480	547	853	558	764	750	691	738	704

**Figure 14-21 Block Size Analysis Chart**



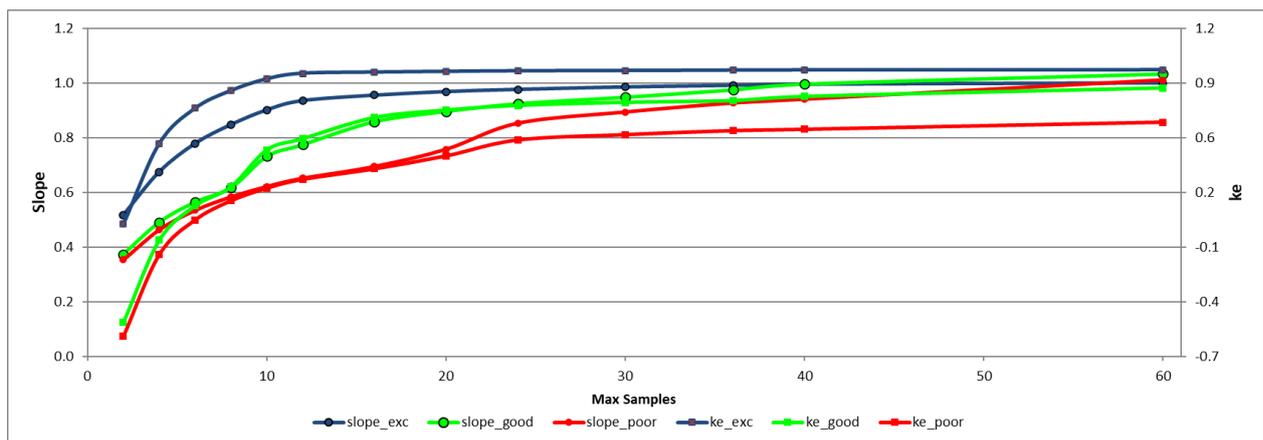


Results from the chart above indicate that slope of regression and kriging efficiency begin to decline after run 6, which was a block size of 25 m by 25 m by 25 m. The estimation quality declines as block size increases. Smaller block sizes also displayed good estimation quality, however they are considered to be too small relative to the drill hole spacing. It can be noted that KE and Slope are far better in the horizontal trend than the vertical trend which suggests that the current drilling orientation is not well suited for Zuun Mod mineralisation.

### 14.7.2 Number of Informing Samples

To test the optimal number of samples to be used in the kriging estimations, blocks within Zuun Mod Domain 3 were assessed. Regression slope and kriging efficiency declined at less than 10 samples and no improvement was measured at greater than 24 samples, so these values were selected as minimum and maximum samples in the estimate. Results are shown in **Figure 14-22**.

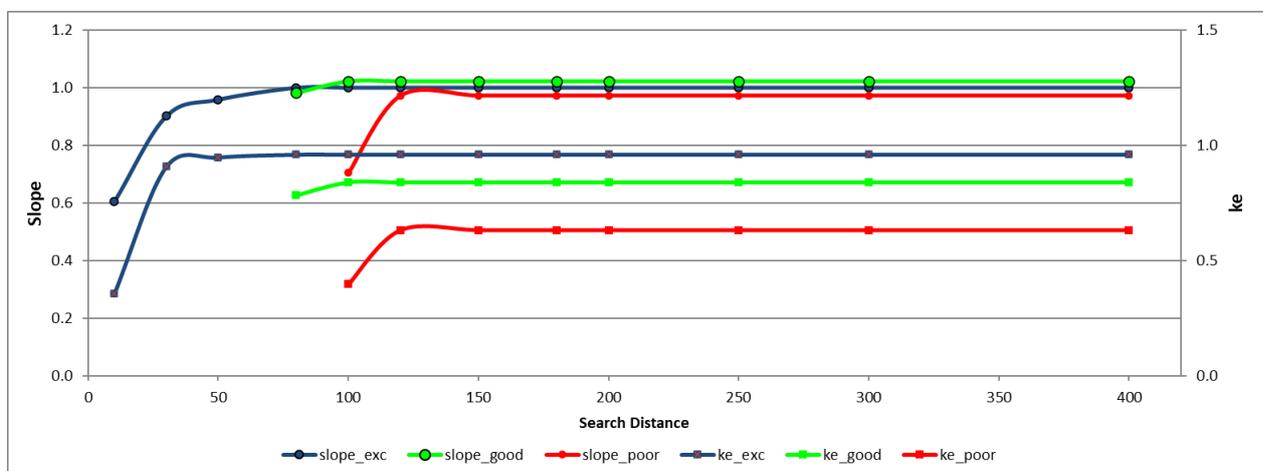
**Figure 14-22 Number of Samples Analysis Chart**



### 14.7.3 Search Distance

To test the optimal search distance, blocks within Zuun Mod Domain 3 were assessed using the minimum and maximum samples determined in step 2. A range of search radii were assessed for regression slope and kriging efficiency and are summarised in **Figure 14-23**.

**Figure 14-23 Search Range Analysis Chart**



Typically, the larger the search ellipsoid, the greater the slope of regression, although improvements in slope of regression will normally flatten out beyond certain search distance. In the case of Zuun Mod, slope and kriging efficiency increase at 120 m and the main part of the deposit was drilled at 100 m. Consequently, the search range of 120 m was selected for the first pass for all domains.



SLR also reviewed the maximum sample per hole and block discretisation and no significant variation occurs at any chosen parameters.

## 14.8 Search Strategy and Grade Interpolation Parameters

Mo and Cu grades were interpolated into the block model using the Ordinary Kriging (“OK”) estimation technique on the basis that coefficients of variation are generally low to moderate within the deposit. The wireframes were used as a hard boundary for the grade estimation of each domain. OK was selected as it allows the measured spatial variation to be included in the estimate and results in a degree of smoothing which is appropriate for the nature of the mineralisation. In addition to the OK estimate, nearest neighbour and inverse distance estimates were run to validate the OK results.

Various search directions were applied to the estimation depending on the interpreted variogram orientation.

The parameters for each ellipse were based on kriging parameters and were consistent with the interpreted geology. Differences between the kriging parameters and the search ellipse may occur in order to honour both the continuity analysis and the mineralisation geometry. Search neighbourhood parameters were derived from the KNA analysis discussed in **Section 14.7**.

Up to three interpolation passes for each vertical and horizontal trend were used for the interpolation. 2 m composite data for Mo and Cu were used to estimate grades into a sub-cell of 6.25 m Y by 12.5 m X by 6.25 m Z to preserve localised vertical and horizontal high-grade trends. A maximum of 6 samples per hole was accepted for the Zuun Mod deposit. More than 80% of the blocks were filled in the first two passes. The kriging parameters are listed in **Table 14-13**.

**Table 14-13 Interpolation Parameters**

Parameter	Pass 1	Pass 2	Pass 3	Pass 4	Pass 5	Pass 6
Search Type	Ellipsoid					
Bearing	80	80	80	80	80	80
Dip	80	10	80	10	80	10
Plunge	0	0	0	0	0	0
Major-Semi Major Ratio	1.00	1.00	1.10	1.00	1.10	1.00
Mjor-Minor Ration	8.00	5.00	8.00	5.00	6.00	4.00
Search Radius	120	120	240	240	1000	1000
Minimum Samples	4	10	4	10	2	2
Maximum Samples	10	24	10	24	10	10
Max. Sam. Per Hole	6					
Block Discretisation	4 X by 4 Y by 3 Z					
Percentage Blocks Filled	26%	21%	21%	21%	12%	<1%

## 14.9 Bulk Density

A total of 69 density measurements from five drill holes (ZMD-23, ZMD-24, ZMD-29, ZMD-39 and ZMD-56) were determined at SGS laboratory using the water immersion technique with proper wax coating. Density data has low variance. A minimum of 2.53 t/m<sup>3</sup> and a maximum of 2.72 t/m<sup>3</sup> density was determined with an average value of 2.61 t/m<sup>3</sup>.

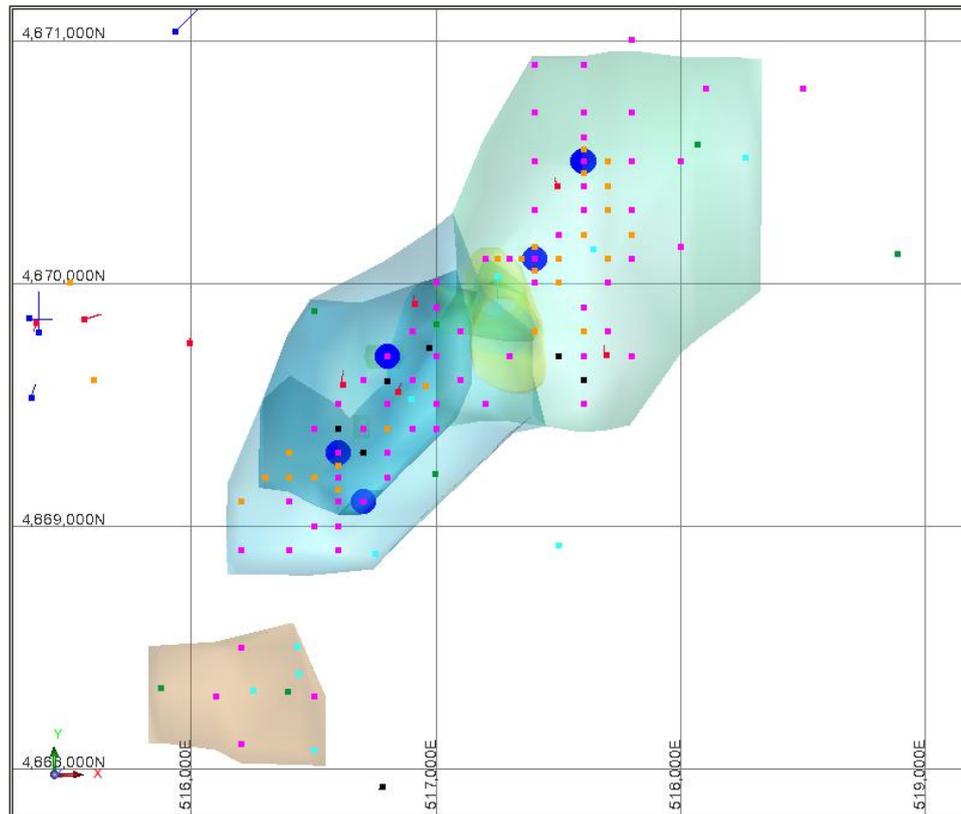
No correlation was observed between any of the elements and density data. SLR assigned an overall average value of 2.60 t/m<sup>3</sup> for all mineralisation.

The same values were used in the previous 2011 estimate. SLR does not expect any material impact on a global basis, but the lack of recognition of variability will impact short-term scheduling and reconciliation of



metal content. SLR recommends that ERD collect additional density determinations from any future drilling program. The location of the density sample data is shown in **Figure 14-24**.

**Figure 14-24 Density Data Location (Blue)**



## 14.10 Estimation Quality and Model Validation

### 14.10.1 Estimation Quality

The quality of the kriging estimate can be assessed using the kriging variance “KV”, slope of regression “SR”, and kriging efficiency (KE) parameters calculated during the kriging estimation.

The moderate KV suggests that the estimated block has reasonable sample coverage, however KV generally increased due to both drilling and estimation search direction being parallel with each other, which is clearly indicated by a lower KV in the Indicated portion than in the Measured portion. The increase in KV in Inferred MRE suggests that estimated blocks have limited sample coverage (**Table 14-14**).

**Table 14-14 Zuun Mod Kriging Variance and Slope of Regression Summary**

Class	Measured			Indicated			Inferred		
	KE	SR	KV	KE	SR	KV	KE	SR	KV
Zuun Mod	0.21	0.63	0.52	0.03	0.57	0.49	-0.19	0.41	0.63

SR is reasonably high, suggesting that estimated high and estimated low grades correspond accurately to the respective true high and low grades, indicative of a reasonable quality estimate.

KE is a bit worrisome in the Measured Resource, which indicates a grade population shift in the Measured portion of the deposit. KE in the Inferred Mineral Resource is negative, indicating a poor estimate, which is expected.



SLR notes that lower KE in Measured and Indicated resources indicates high internal grade variability within the domains despite efforts to differentiate between zones of differing mineralisation style and trends in the estimation domaining process. Further internal complexity within the domains cannot be properly represented by the model based on the current data spacing or orientation of the current drilling at the deposit.

### 14.10.2 Model Validation

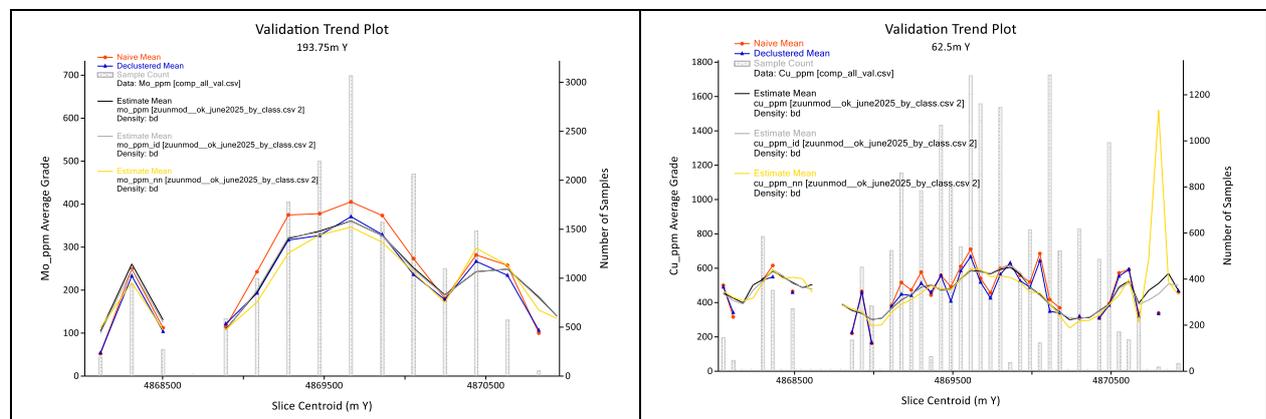
SLR validated the resource by comparing composite mean grades against block mean grades for each mineralisation/wireframe (**Table 14-15**). From validation, composite grades appear higher than block model grades. After careful inspection of the block model, the difference was due to data clustering, where higher-grade zones seem more densely drilled as there appear to be more samples in the shallower part of the deposit.

**Table 14-15 Zuun Mod Validation by Mineralisation Domains**

Domain	Resource Volume	Block Model						Composites			Difference
		OK		IDW		NN		Number of Comps	Mo ppm	Cu ppm	BM vs Comps % Cu
		Mo ppm	Cu ppm	Mo ppm	Cu ppm	Mo ppm	Cu ppm				
1	91,063,965	185	505	177	499	161	499	1,400	196	530	-6%
3 (SRT)	456,027,832	316	516	316	518	290	497	8,093	371	564	-18%
4 (NRT)	414,431,641	232	412	230	405	242	426	7,175	265	424	-14%
5 (Ring dyke core)	26,355,469	46	180	42	180	37	168	369	61	180	-35%
6 (Ring dyke)	7,645,020	40	194	65	230	15	266	20	42	207	-3%
7	2,364,258	289	275	304	274	316	266	190	300	281	-4%
<b>Total</b>	<b>997,888,184</b>	<b>260</b>	<b>460</b>	<b>258</b>	<b>458</b>	<b>249</b>	<b>457</b>	<b>17,247</b>	<b>300</b>	<b>489</b>	<b>-16%</b>

SLR applied the data de-clustering approach to the composite data to understand the effect of data clustering in the validation plots. The validation plot for de-clustered composite data and block model Mo and Cu for all mineralisation zones is shown in **Figure 14-25**.

**Figure 14-25 Validation Plot Mo and Cu Domains for All Zones – De-clustered Composite Grade**



SLR's de-clustering on the composite data shows the effect of the data clustering. Better correlation can be seen when comparing estimated grades on de-clustered data.

To check that the interpolation of the block model correctly honoured the drilling data, validation was carried out by comparing the interpolated blocks to the sample composite data by northing, easting and by elevation ("swath plots"). Due to variable extrapolation distances utilised in the interpretation of mineralisation

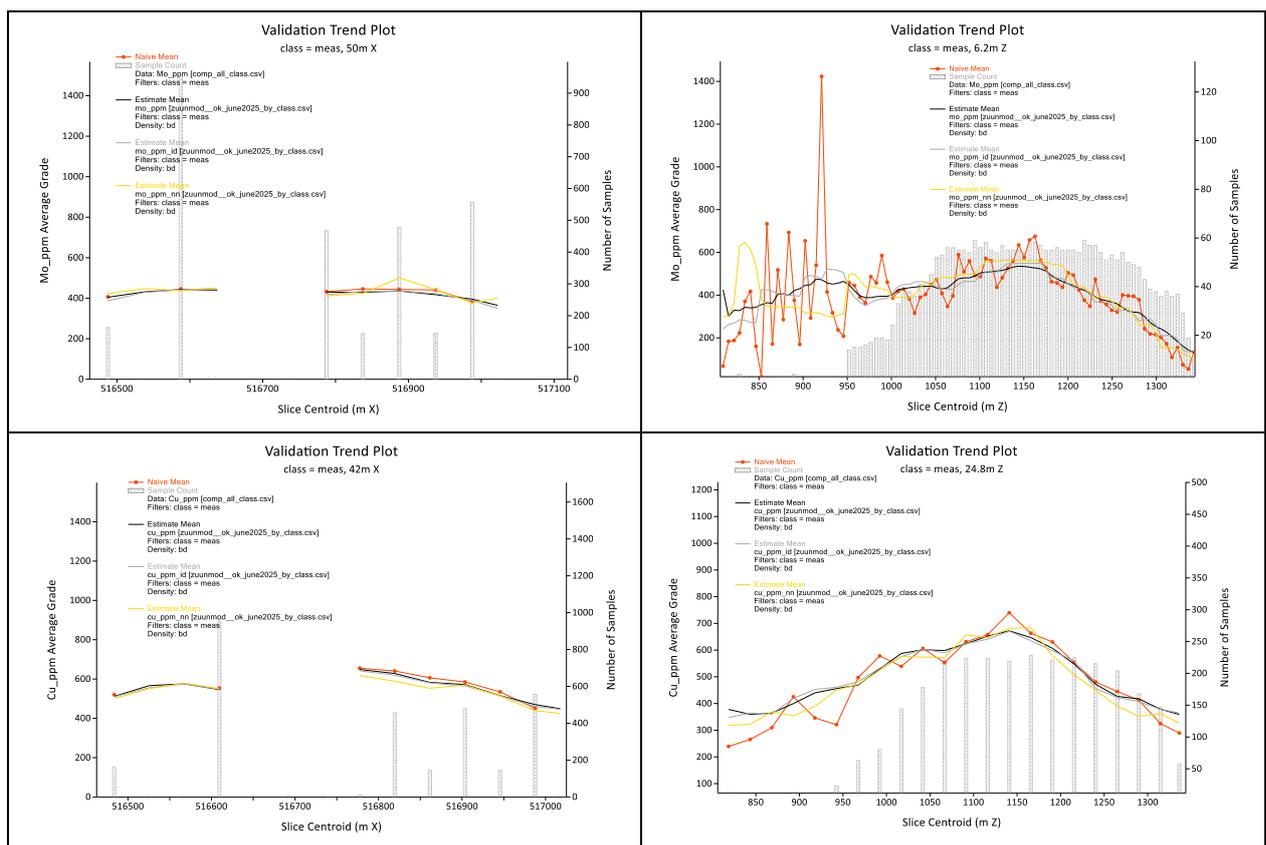


domains, SLR validated the resource by comparing composite mean grades against the block mean grades per Mineral Resource classification (refer to **Figure 14-26** and **Figure 14-27**).

The trends show that the composite data is honoured by the block model.

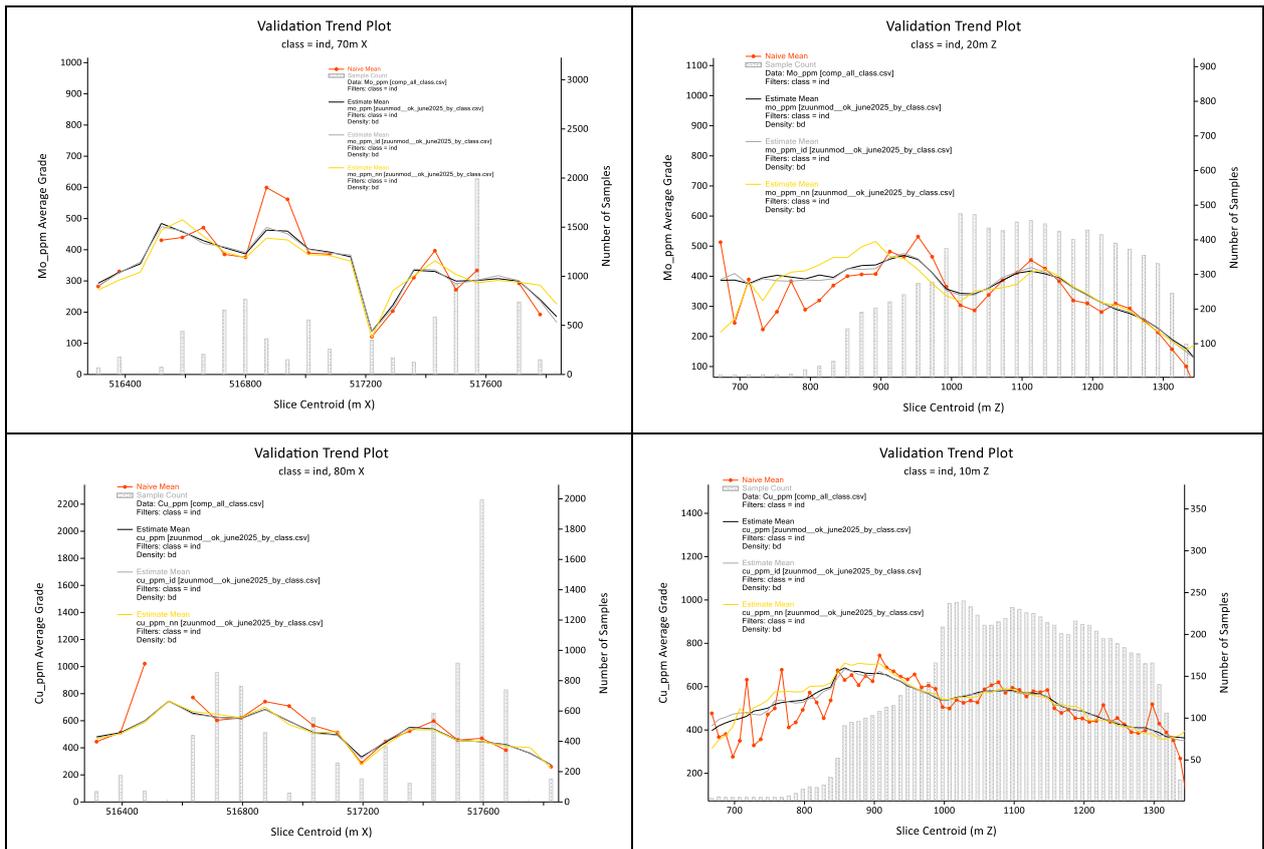
SLR notes that estimating mineralisation in both vertical and horizontal trends generally increases the mean grade at cut-off grade, resulting in unintended distortion of the tonnage profile by the transfer of the tonnage of material above cut-off grade. In the case of Zuun Mod this was not the case as the composite histogram shows a higher degree of statistical spread whereas the block estimate plot shows a narrower spread. However, ratios of both high and low grades are evenly represented in the model with similar global populations. SLR consider it is typical and expected that an estimate will be smoothed as compared to the composites given the ordinary kriging method and style of mineralisation. Importantly, the model reflects the underlying statistical distribution of the composites and has not materially changed the grade ranges (**Figure 14-28**).

**Figure 14-26 Mo and Cu grade validation by Measured Resource classification**

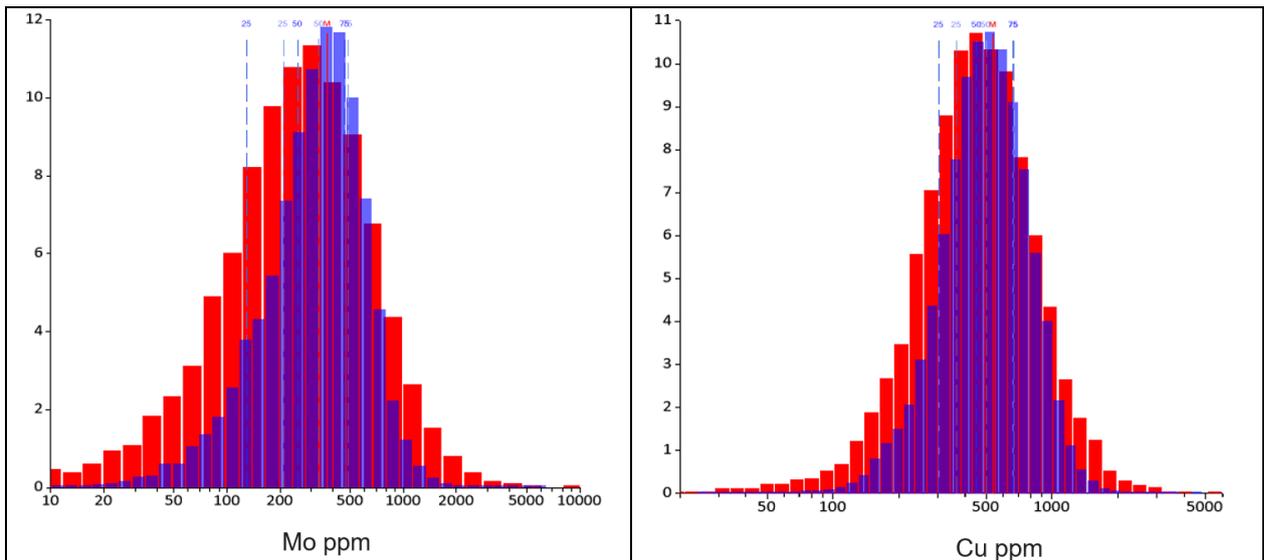




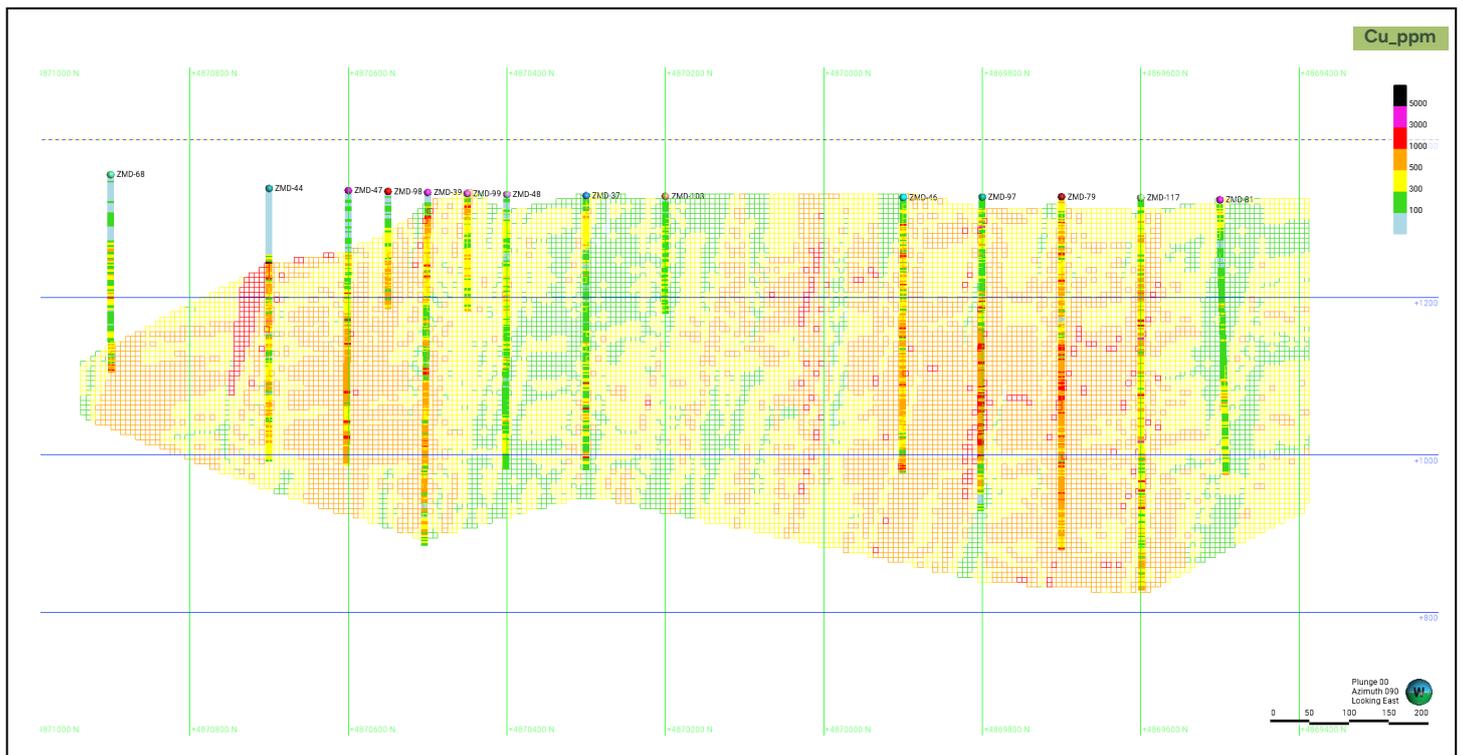
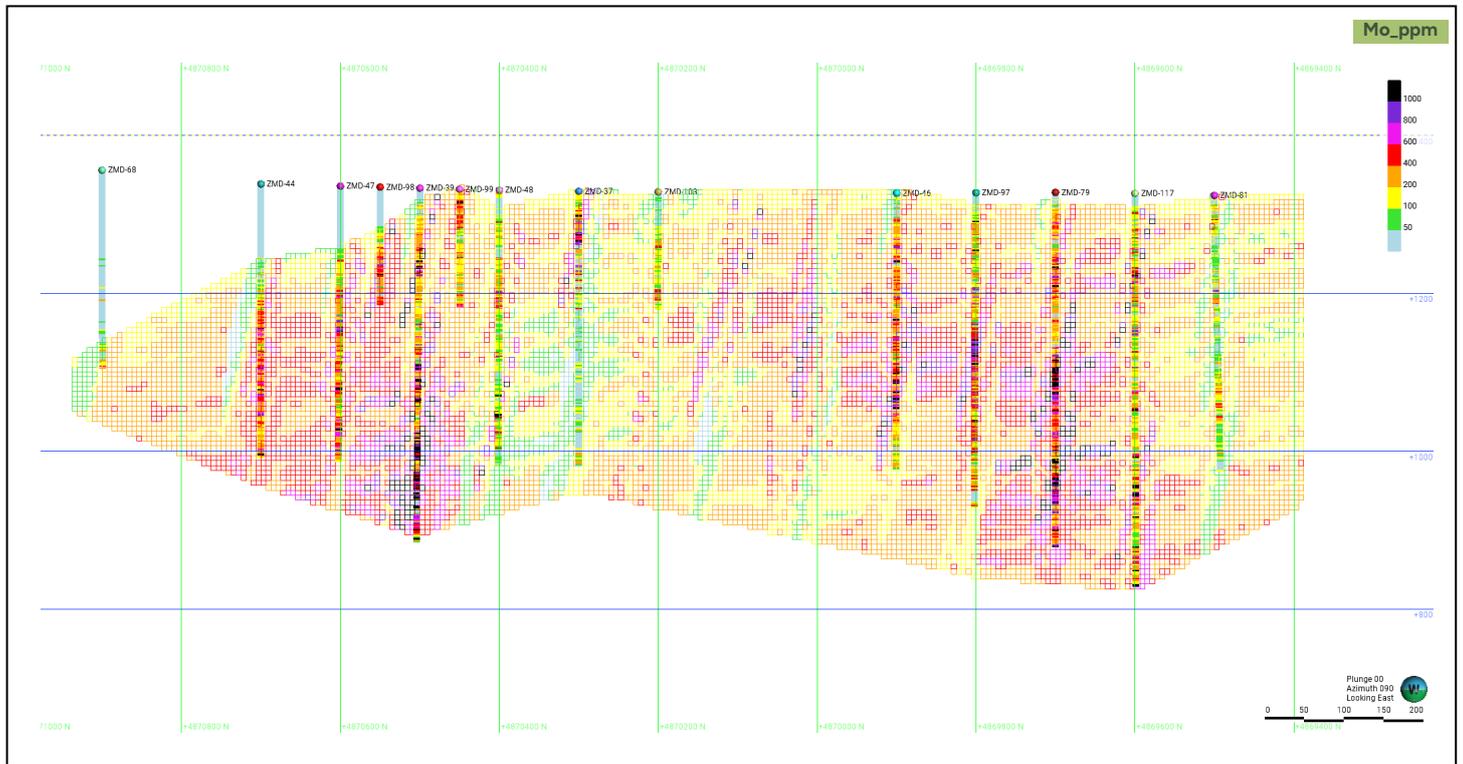
**Figure 14-27 Mo and Cu grade validation by Indicated Resource classification**



**Figure 14-28 Statistical Distribution Analysis – Measured + Indicated Mo and Cu Estimate (Red – Composite, Blue – Block Model Histogram)**



A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling. Overall, the assessment indicated that the trend of the modelled grade was consistent with the drill hole grades (**Figure 14-29**).



**LEGEND**

- Drill Hole

The content contained within this document may be based on third party data. SLR Consulting Australia Pty Ltd does not guarantee third party data.

**CLIENT**



**PROJECT**

NAME  
Zuun Mod - Technical Report

DRAWING  
MODEL AND DRILLING COLOURED BY MO AND CU GRADE (LONG SECTION VIEW LOOKING NE)

FIGURE No.  
14-29

PROJECT No.  
ADV-HK-00161

DATE  
October 2025



## 14.11 Classification

Block model quantities and grade estimates for the Zuun Mod deposit were classified in accordance with the CIM Standards. Mineral Resource classification considers both the confidence in the geological continuity of the mineralised structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria aim to integrate all of the above to delineate areas with a similar resource classification.

The Measured Mineral Resource was defined for the upper portion of the Zuun Mod deposit. In these areas of the model, the continuity of grade and geology was demonstrated to be excellent and infill drilling had been completed, giving a drill hole spacing of approximately 100 m by 50 m with at least 4 drill intersections. This spacing is equivalent to approximately 40 to 65 % of the total sill of the maximum variogram range for Mo assays. The Measured Mineral Resource was extrapolated 25 m past the last drill intersection.

The Indicated Mineral Resource was confined within areas of close-spaced diamond drilling of 100 m by 100 m or less. In these areas, domains were informed by a reasonable number of drill holes, the distribution of estimated element grades was relatively predictable and not overly erratic, and there was reasonable confidence in the trend of the domain, which was defined by at least 4 drill intersections. 100 m spacing is equivalent to approximately 50% of total sill of the modelled major direction variogram range of 780 m. The Indicated Mineral Resource was extrapolated up to 50 m past the last drill intersection.

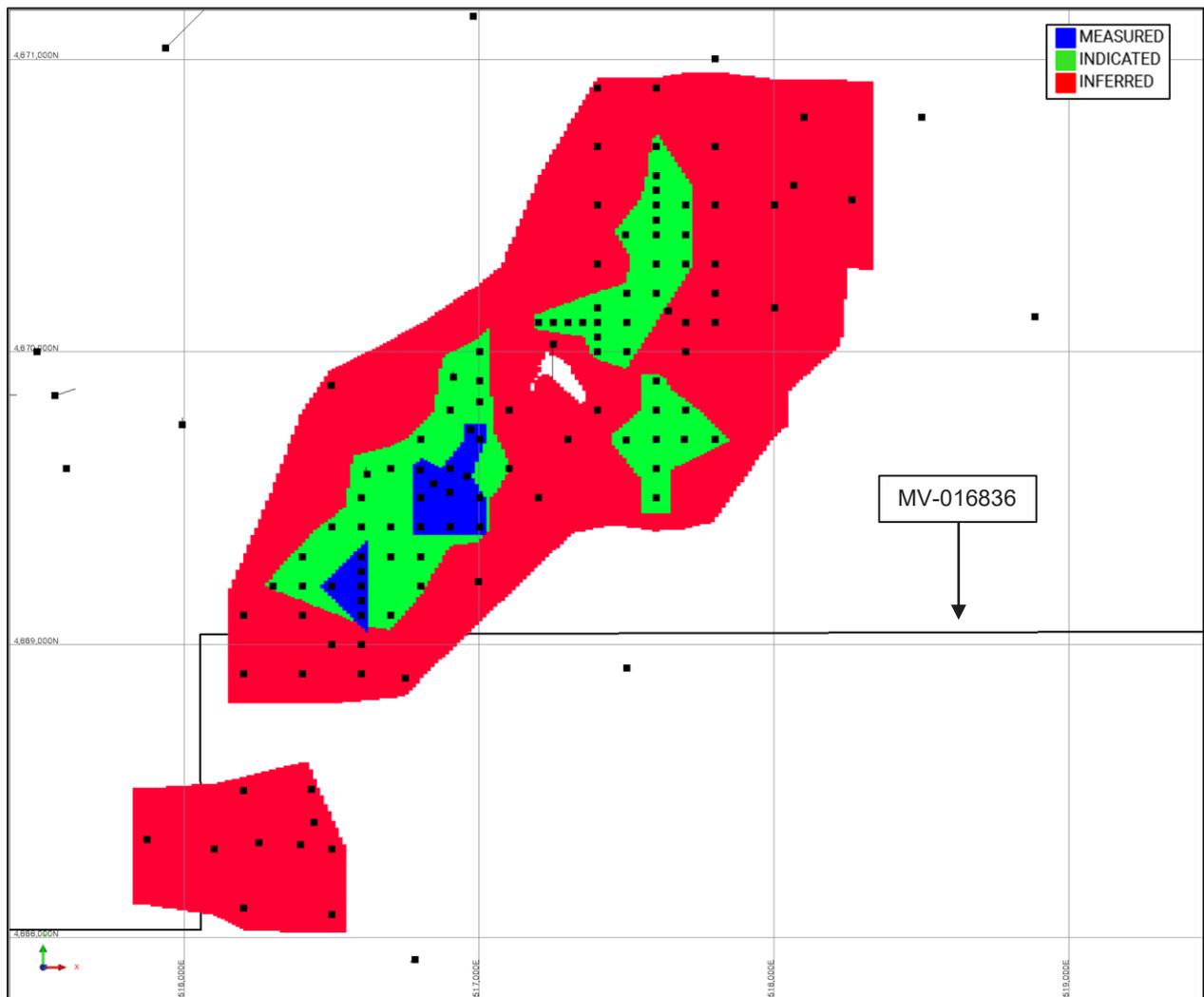
The Inferred Mineral Resources were classified within a 200 m buffer zone of each drill hole or for the remaining modelled mineralisation. The deposit has a low to moderate nugget factor (18 to 28%), yet estimated grades show greater variance locally, and grades become erratic and less predictable. In addition, kriging efficiency drops, and kriging variance increases in the estimate due to drilling being vertical, with similar estimation search directions resulting in significant grade extrapolation rather than interpolation. For this reason, a 200 m buffer zone was used to classify the Inferred Mineral Resource, even though the variogram range up to 780 m could be interpreted.

SLR has completed internal audits, which verified the technical inputs, methodology, parameters, and estimates' results. The mineralisation geometry and continuity have been adequately interpreted to reflect the applied level of Measured, Indicated, and Inferred Mineral Resources.

The distribution of the resource categories for Zuun Mod deposit is shown in **Figure 14-30**.



Figure 14-30 Mineral Resource Classification – Zuun Mod





## 14.12 Mineral Resource Reporting

The Mineral Resource estimates have been prepared according to the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) 2014 Definition Standards for Mineral Resources and Mineral Reserves dated 10 May 2014 (CIM 2014 Standards) as incorporated with National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). Mineral Resource estimates were also prepared using the guidance outlined in CIM Estimation of Mineral Resources and Mineral Reserves (MRMR) Best Practice Guidelines 2019 (CIM (2019) MRMR Best Practice Guidelines).

SLR has independently estimated the Mineral Resources contained within the Project, based on the data collected by ERD as of August 2025. The Mineral Resource Estimate and underlying data comply with guidelines provided in the CIM Definition Standards under NI 43-101, therefore SLR considers it suitable for public reporting. The Mineral Resources were completed by Mr. Oyunbat Bat-Ochir (Qualified Person).

The Mineral Resources, as shown in **Table 14-16** are shown on 100% equity basis.

The result of the Mineral Resource estimate by SLR for Zuun Mod is tabulated in the statement of Mineral Resources in **Table 14-16**. Mineral Resources are constrained by the MV-016836 mining license boundary and by wireframes constructed at a 0.01 % Mo cut-off and reported above a Mo cut-off grade of 0.035% Mo, and within a US\$ 22/lb Mo and US\$4.95/lb Cu optimised conceptual pit.

**Table 14-16 Zuun Mod Mineral Resource Estimate Summary – 1<sup>st</sup> September 2025**

Classification	Tonnes	Mo	Cu	MoEq	Mo	Cu	MoEq
	Mt	%	%	%	Mlbs	Mlbs	Mlbs
Measured	45.8	0.057	0.062	0.074	57.7	62.2	74.8
Indicated	225.3	0.056	0.065	0.073	275.9	322.0	364.4
<b>Measured+Indicated</b>	<b>271.1</b>	<b>0.056</b>	<b>0.064</b>	<b>0.073</b>	<b>333.5</b>	<b>384.2</b>	<b>439.2</b>
Inferred	269.1	0.051	0.059	0.070	300.0	350.7	416.3

Note:

1. CIM Definition Standards for Mineral Resource (2014) is used for reporting of Mineral Resource.
2. The Statement of Estimates of Mineral Resources has been compiled by Mr. Oyunbat Bat-Ochir who is a full-time employee of SLR and a Member of the Australian Institute of Geoscientists. Mr. Bat-Ochir has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that he has undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
3. All Mineral Resources figures reported in the table above represent estimates at 1<sup>st</sup> September 2025. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
4. Mineral Resources are reported on a dry in-situ basis.
5. The Mineral Resource has been constrained by mining license MV-016836 and reported above Molybdenum (Mo) cut-off grade of 0.035% within a revenue factor optimized pit shell derived using a price of US\$22/lb Mo and US\$4.95/lb Cu. Cut-off parameters were selected based on an SLR internal cut-off calculator, assuming an open cut mining method with 3% ore loss and 4% dilution, a Mo price of US\$15.4/lb, an open mining cost of US \$2.18 per tonne and a processing cost of US \$6.85 per tonne milled and processing recovery of 83% for Mo and 81% for Cu with flotation processing to produce Mo and Cu concentrates. The conceptual optimised pit shell was constructed using a Mo price of US\$22/lb Mo and US\$4.95/lb Cu.
6. Mo Equivalence (MoEq) calculated using: The formula used for Mo equivalent grade is:  $MoEq\% = Mo\% + Cu\% * 0.27504$  and assumes 83% Mo and 81% Cu metallurgical recoveries.
7. 1 tonne = 2204.64 lbs.
8. Mineral Resources referred to above, have not been subject to detailed economic analysis and therefore, have not been demonstrated to have actual economic viability.

The QP is not aware of any environmental, permitting, legal, title, taxation socioeconomic, marketing, political, fiscal, or other relevant factors, that could materially affect the Mineral Resource Estimate, however there are some areas that could affect the Mineral Resource estimates including the following:

- Interpretation of high-grade anisotropy orientation



- Lithological interpretation on a local scale, including dykes; the barren ring dyke geometry at depth which is currently interpreted as unmineralized waste; and modelling and discrimination of different intrusive phases,
- Commodity pricing
- Metal recovery assumptions

The Mineral Resource Estimate for Zuun Mod at various Mo cut-off grade is presented in **Table 14-17**. SLR recommends using 0.035% Mo as a reporting cut-off based on mining / processing cost parameters for the Project.

**Table 14-17 Mineral Resource Estimate reported at a Variety of Mo cut-off Grades**

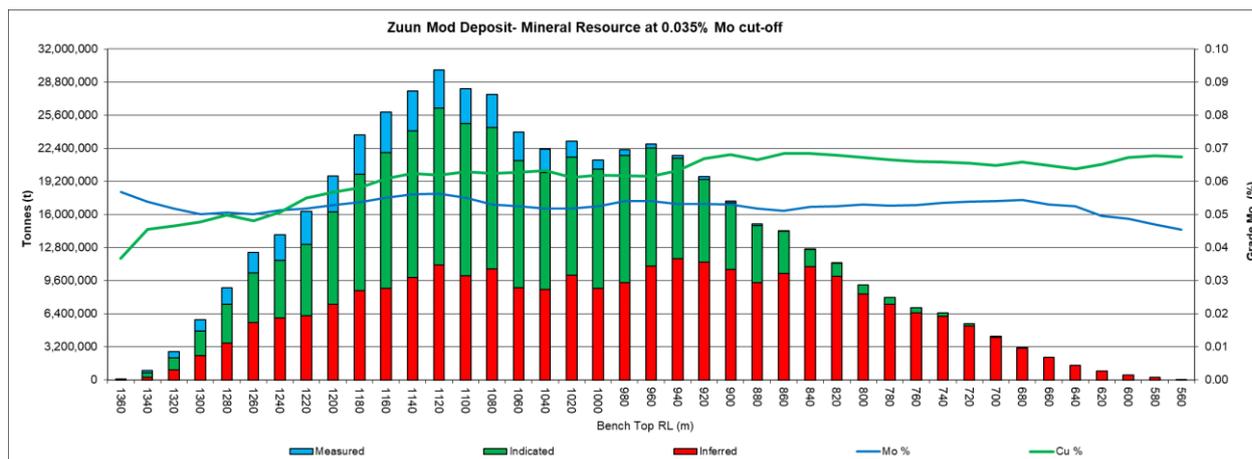
Cut-off Grade Mo %	Classification	Tonnes Mt	Mo %	Cu %	MoEq %	Mo Mlbs	Cu Mlbs	MoEq Mlbs
0.025	Measured	60.8	0.050	0.059	0.067	67.7	79.5	89.6
	Indicated	324.3	0.048	0.062	0.065	341.2	440.7	462.4
	<b>Measured+Indicated</b>	<b>385.1</b>	<b>0.048</b>	<b>0.061</b>	<b>0.065</b>	<b>408.9</b>	<b>520.2</b>	<b>552.0</b>
	Inferred	469.0	0.042	0.055	0.061	430.3	572.2	625.8
0.03	Measured	53.6	0.054	0.060	0.070	63.3	71.5	83.0
	Indicated	274.1	0.051	0.063	0.069	310.8	382.3	415.9
	<b>Measured+Indicated</b>	<b>327.7</b>	<b>0.052</b>	<b>0.063</b>	<b>0.069</b>	<b>374.1</b>	<b>453.8</b>	<b>498.9</b>
	Inferred	355.0	0.046	0.057	0.065	361.5	450.0	511.7
0.035	Measured	45.8	0.057	0.062	0.074	57.7	62.2	74.8
	Indicated	225.3	0.056	0.065	0.073	275.9	322.0	364.4
	<b>Measured+Indicated</b>	<b>271.1</b>	<b>0.056</b>	<b>0.064</b>	<b>0.073</b>	<b>333.5</b>	<b>384.2</b>	<b>439.2</b>
	Inferred	269.1	0.051	0.059	0.070	300.0	350.7	416.3
0.04	Measured	38.0	0.061	0.063	0.079	51.2	52.8	65.7
	Indicated	181.0	0.060	0.066	0.078	239.3	263.8	311.8
	<b>Measured+Indicated</b>	<b>219.0</b>	<b>0.060</b>	<b>0.066</b>	<b>0.078</b>	<b>290.5</b>	<b>316.6</b>	<b>377.6</b>
	Inferred	200.6	0.055	0.061	0.075	243.5	268.2	332.2
0.045	Measured	30.8	0.066	0.064	0.083	44.5	43.4	56.5
	Indicated	141.8	0.065	0.067	0.083	202.6	210.2	260.4
	<b>Measured+Indicated</b>	<b>172.6</b>	<b>0.065</b>	<b>0.067</b>	<b>0.083</b>	<b>247.1</b>	<b>253.7</b>	<b>316.8</b>
	Inferred	148.7	0.059	0.062	0.080	194.9	202.5	262.6

See notes for **Table 14-16**.

To show the tonnage and grade distribution by depth, a bench breakdown has been prepared using 20 m bench height, shown in **Figure 14-31**.



**Figure 14-31 Zuun Mod Tonnage and Grade – 20 m Bench (Mo, Cu and MoEq)**



### 14.12.1 Reasonable Prospect for Eventual Economic Extraction

The CIM Definition Standard requires a reported Mineral Resource to display reasonable prospects for eventual economic extraction. As such, for the reporting of the Mineral Resource, SLR has prepared a cut-off grade calculation which derived a break-even grade of 0.035% Mo for all mineralisation within mining license MV-016836, as well as a Whittle optimised shell to define the limit of mineralisation that could be mined by a conceptual open pit.

The cost and processing parameters used in the cut-off grade estimate were based on ERD’s Inputs and SLR has relied upon the assumption and data provided by the Company for the calculation of the cut-off grade. Parameters are set out in **Table 14-18**.

**Table 14-18 Parameters used in Whittle Optimisation**

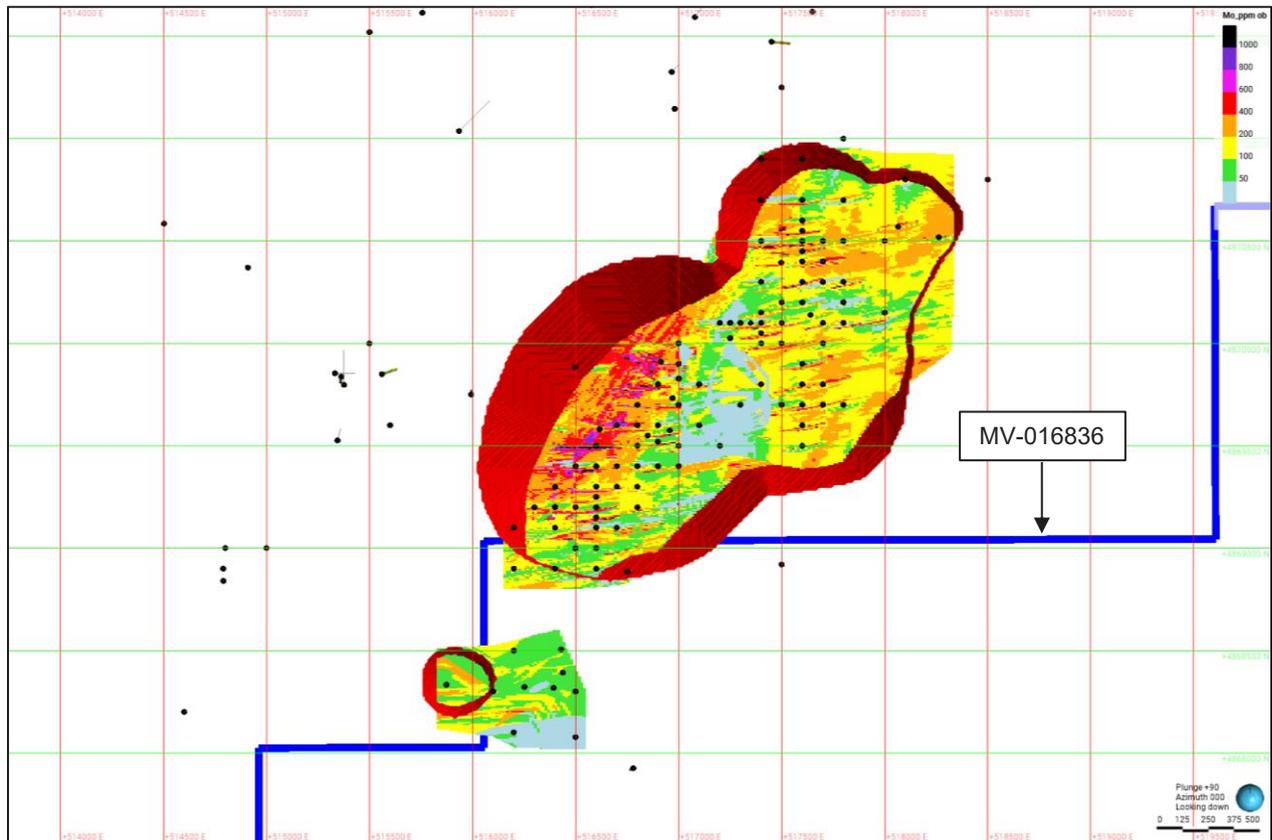
Description	Units	Mo	Cu
Incr. Ore Mining Cost	USD/t ore	2.31 (\$/ROM t/m vert of 0.004)	
Pit slope angle	degree	50	50
Processing Cost (incl. overhead, G&A)	USD/t ore	6.85	6.85
Site + Head Office - General and Administration	USD/t ore	0	0
Other costs (inc. sustaining capital, dewatering, water management and environmental)	USD/t ore	0	0
Royalty	%	5	5
Dilution	%	4	4
Ore loss	%	3	3
Payability factor	%	100	100
Treatment Cost	\$/lb	0.6	0.1
Concentrate Transport Cost	\$/wmt	94.2	103.6
Processing Recovery (at cut-off grade)	%	83	81
Metal Price	USD/lb	22	4.5

For reporting the Mineral Resource, a potential pit shell was generated using Whittle optimisation software. Mining and processing parameters including pit slope angles and metallurgical recovery and all operating costs were based on values supplied by ERD. The molybdenum price used in the cut-off grade calculation was US\$15.4/lb while estimation of the resource pit shell used US\$22/lb for Mo and US\$4.95/lb Cu. SLR notes Zuun Mod mineralisation is bounded by the mining license boundary (MV-016836); no license

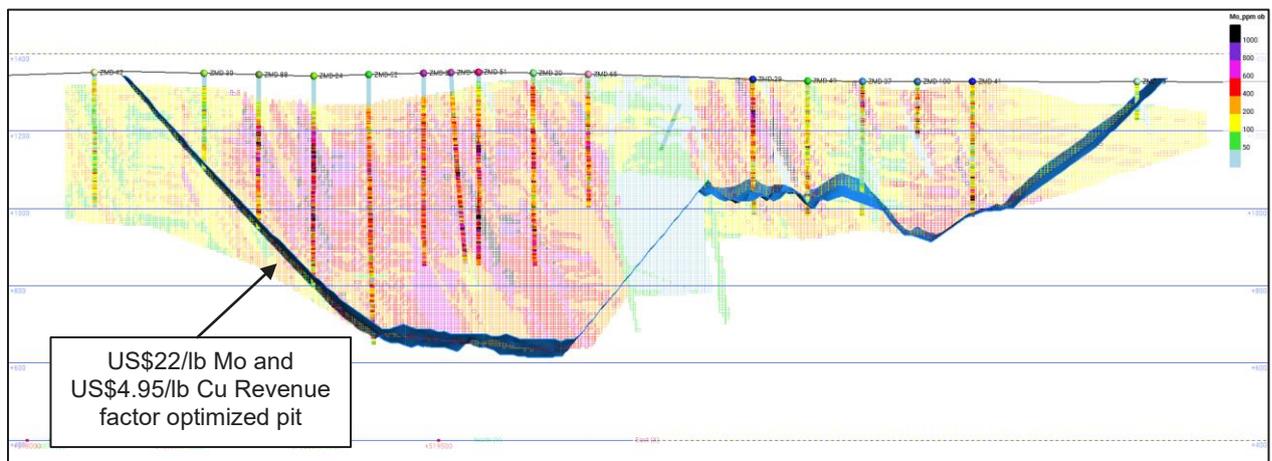


constraint was applied to the pit optimisation study. The resulting shell is shown in **Figure 14-32** while long section is shown in **Figure 14-33**.

**Figure 14-32 Zuun Mod Model Showing US\$22/lb Mo and US\$4.95/lb Cu Pit Shell (red outline) – Plan View**



**Figure 14-33 Zuun Mod Model – Long section View**



### 14.13 Comparison to Previous Mineral Resource Estimates

The project's maiden Mineral resource estimate was completed in 2008 and updated in 2011 by MMC (Minarco Mine consult).

SLR completed a review of the MMC 2011 Model prior to undertaking this most recent independent Mineral Resource. SLR overall summarised that the Mineral Resource Estimate was reasonable from a global

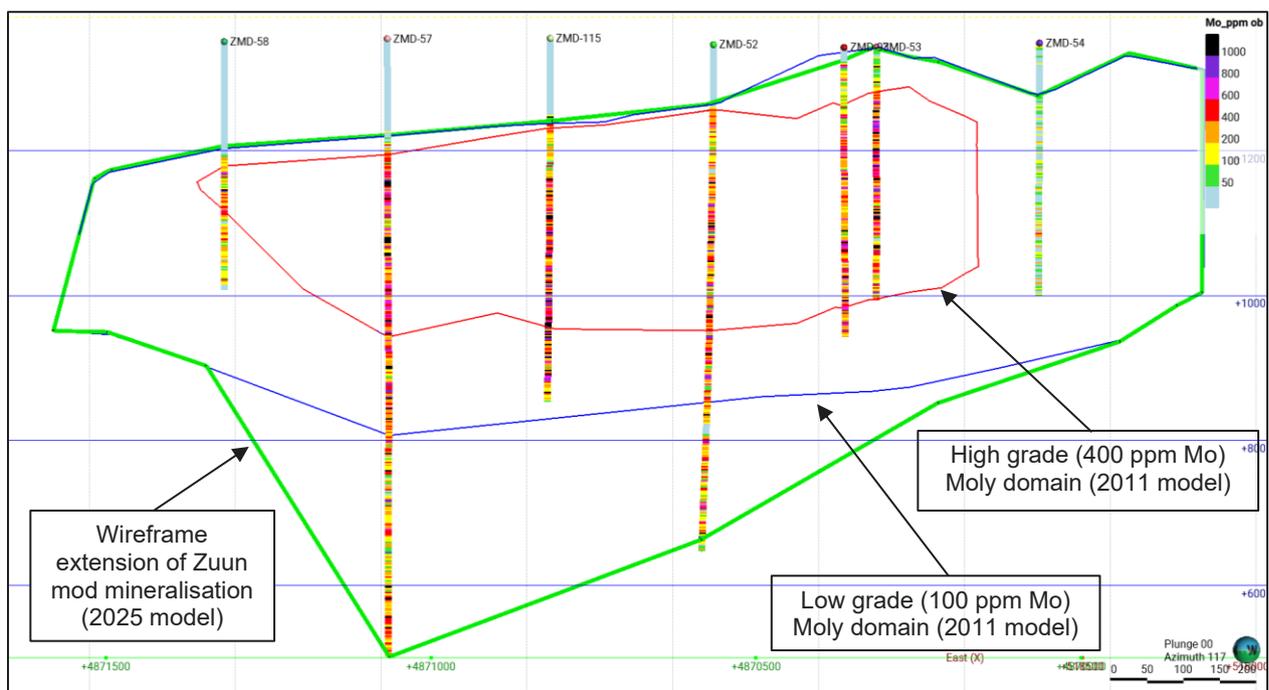


perspective. The principal change from the 2011 MMC estimate is delineation of deeper deposit mineralisation and re-interpretation of search anisotropy based on re-logging of historical holes and additional new oriented core drilling carried out in 2023. The September 2025 SLR Mineral Resource Estimate therefore presents a significant update to the 2011 estimate. The notable changes are as follows:

- SLR used MMC's 2011 100 ppm Mo cut-off mineralisation domains in 2025 estimate with no separate high grade wireframing. Log probability plots do not indicate separate higher-grade populations in the deposit which is further supported by contact analysis completed by SLR which clearly shows that the boundary between high (>400 ppm Mo cut-off) and low (>100 ppm Mo cut-off) grades are soft and gradual.
- Complete change of estimation variography and search parameters based on the recent drilling program along with the re-logging exercise of historical holes by ERD, which indicates that there could potentially be two major trends (sub-vertical and sub-horizontal) in higher grade mineralisation. SLR completed variogram analysis to see whether these geological/mineralisation features can be replicated in directional analysis. The longest continuity direction for Mo is interpreted to be in the 80 NE direction. There is also a clear vertical trend observed in the downdip direction. This suggests that the existing vertical drilling orientation is not well suited for Zuun Mod mineralisation.
- Reporting 2025 Mineral Resource Statement using optimised pit shells which were not considered for the reporting of 2011 Mineral Resource.
- Change in metal price assumptions in the derivation of the reporting of Mo cut-off grade.

A comparison of mineralisation domains between 2011 and 2025 estimates is shown in **Figure 14-34**.

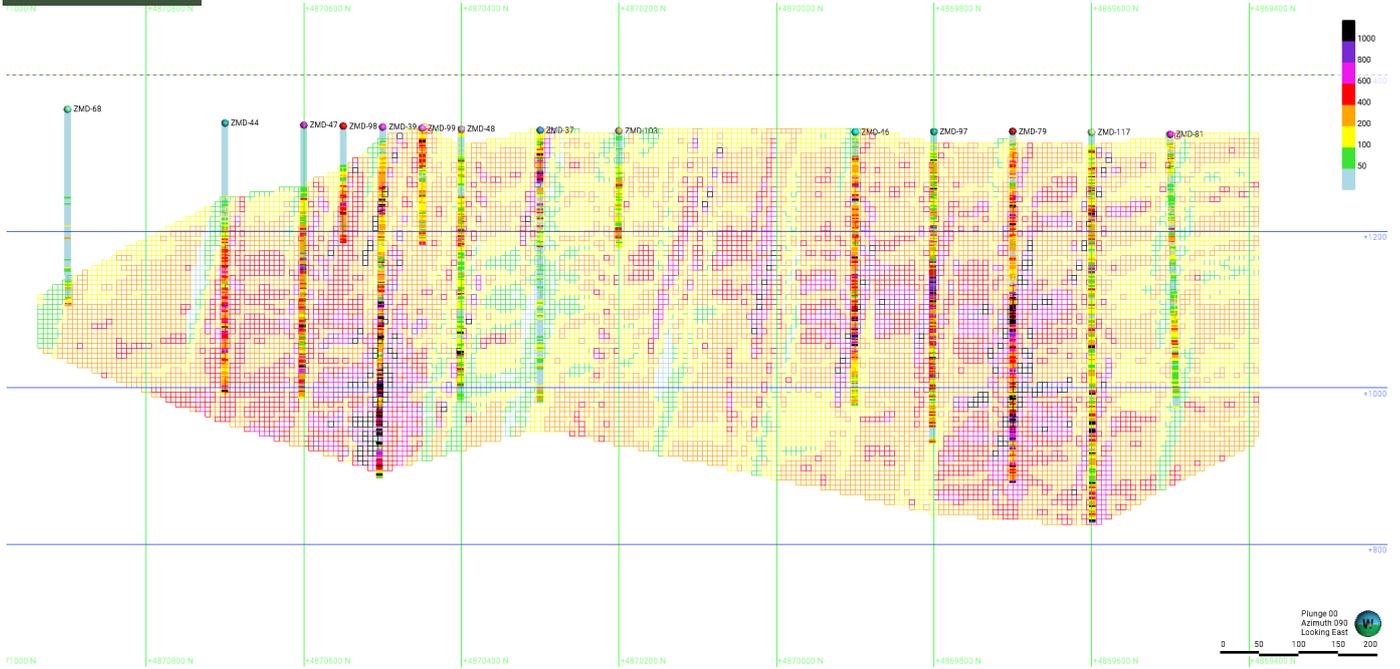
**Figure 14-34 Mineralisation Domains Comparison**



Estimated block grade comparison is shown in **Figure 14-35** and **Figure 14-36**.

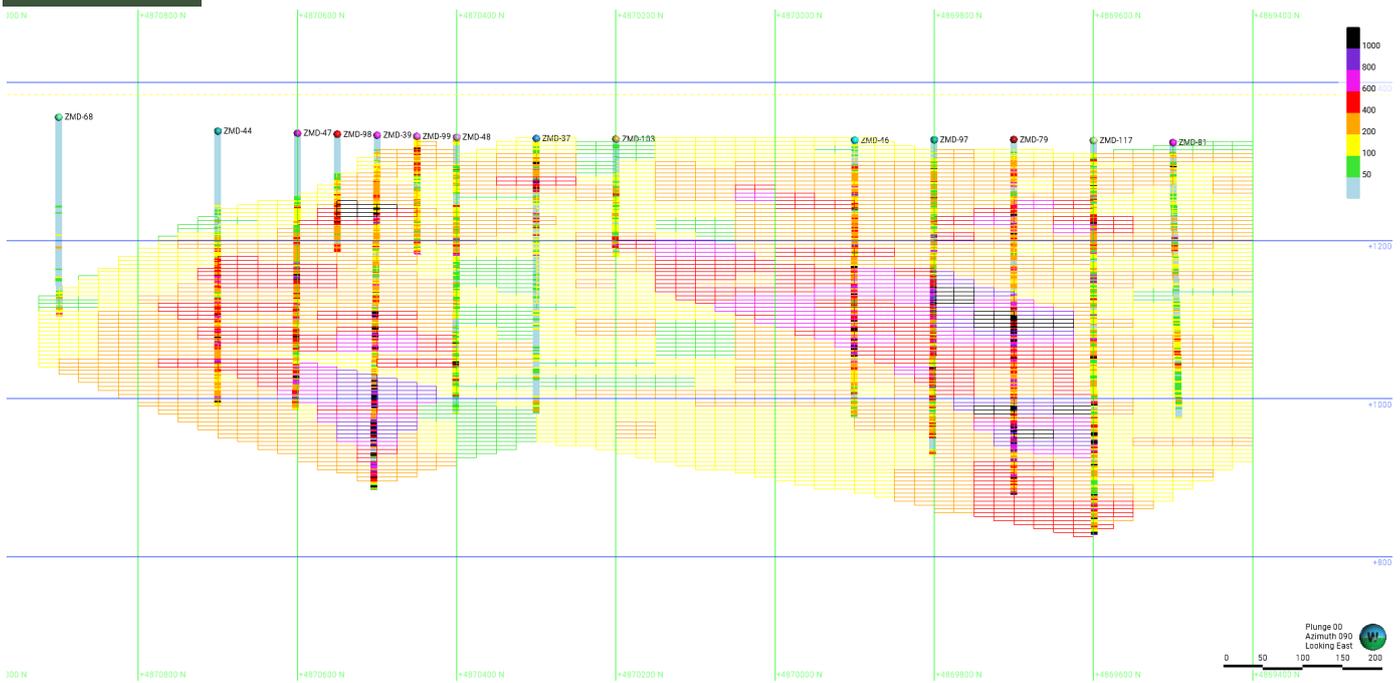
### 2025 Model

Mo\_ppm



### 2011 Model

Mo\_ppm



#### LEGEND

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#### CLIENT



#### PROJECT

NAME  
Zuun Mod - Technical Report

DRAWING  
SHOWING COMPARISON OF 2025  
AND 2011 BLOCK ESTIMATES - MO PPM GRADE

FIGURE No.  
14-35

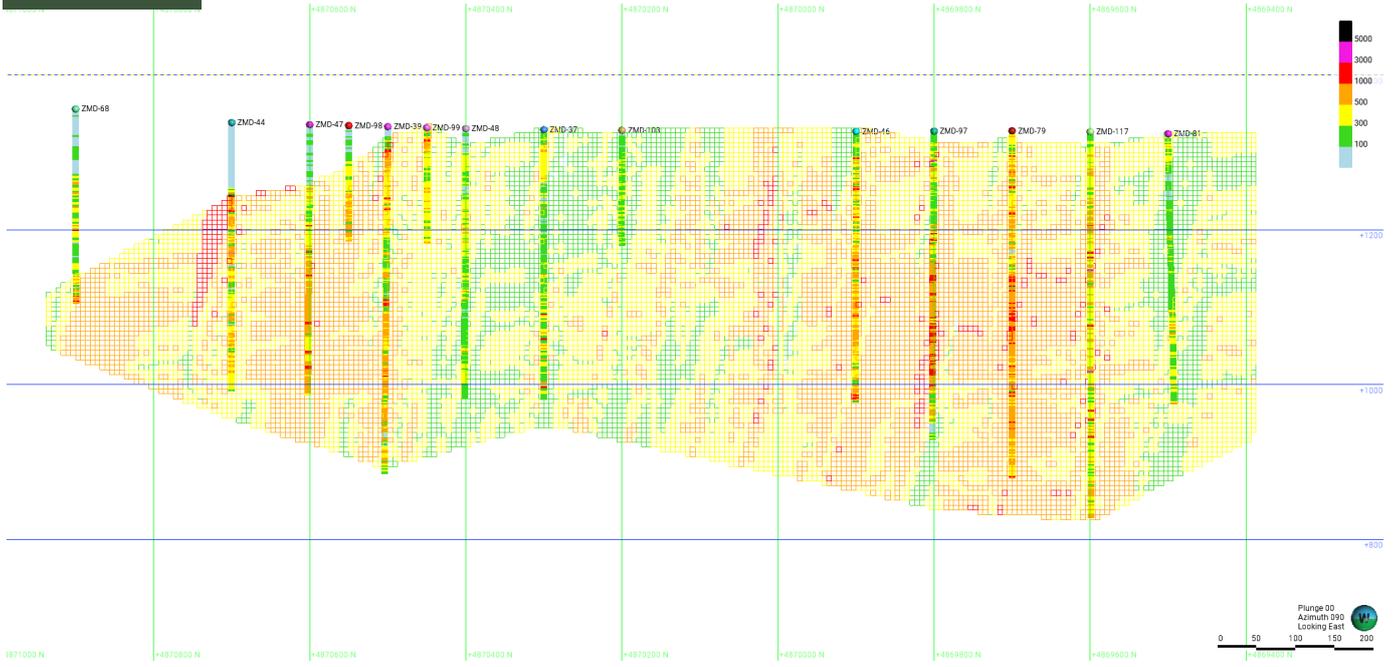
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ADV-HK-00161

DATE  
October 2025

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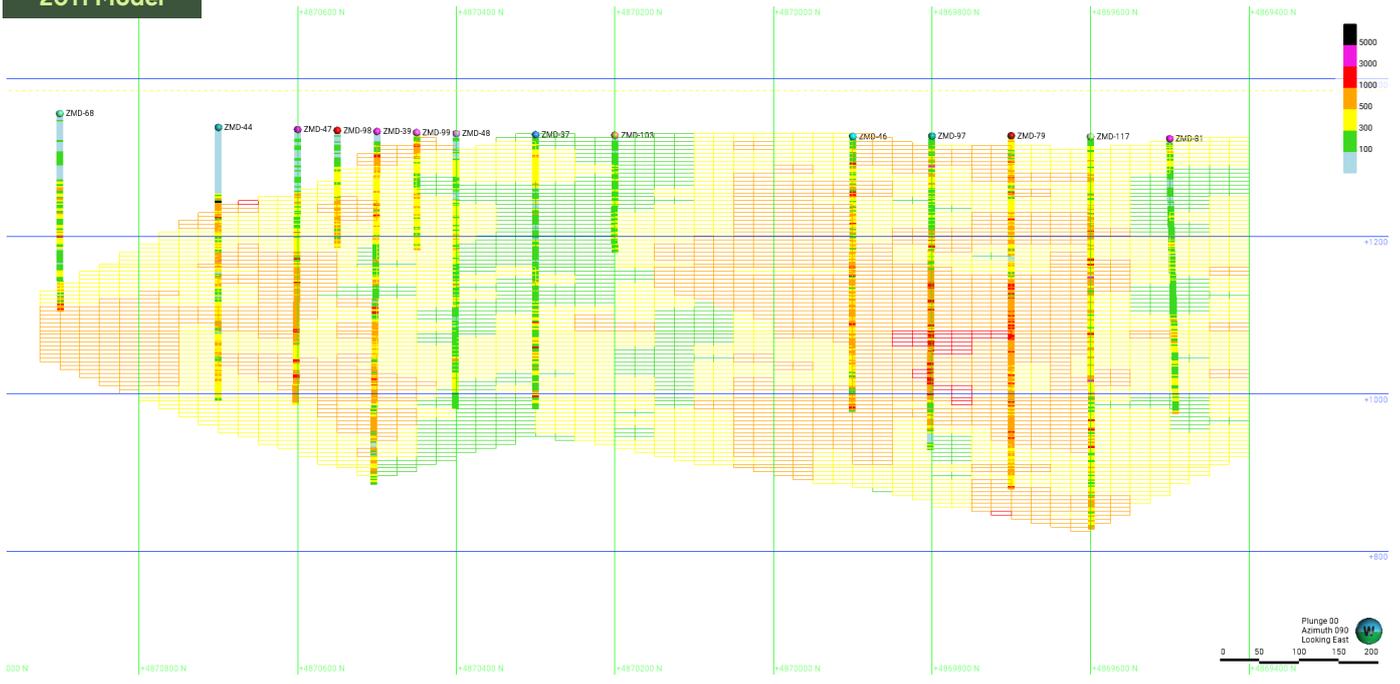
Cu\_ppm

### 2025 Model



Cu\_ppm

### 2011 Model



#### LEGEND

#### CLIENT



#### PROJECT

NAME  
Zuun Mod - Technical Report

DRAWING  
SHOWING COMPARISON OF 2025  
AND 2011 BLOCK ESTIMATES – CU PPM GRADE

FIGURE No.  
14-36

PROJECT No.  
ADV-HK-00161

DATE  
October 2025



The grade tonnage table for the 2025 SLR estimate for all mineralisation is shown in **Table 14-19** while the 2011 estimate is shown in **Table 14-20**.

The grade tonnage table for the 2025 SLR estimate for Measured+Indicated is shown in **Table 14-21** while the 2011 estimate for Measured+Indicated is shown in **Table 14-22**.

**Table 14-19 Grade Tonnage Table – 2025 SLR Estimate (All Mineralisation)**

Cut-off Grade Mo ppm	Cumulative Resource					
	Tonnes t	Mo g/t	Cu g/t	Re g/t	Mo pound	Cu pound
0	2,142,102,759	286	478	0.13	1,351,882,458	2,255,505,897
50	2,084,497,388	293	483	0.13	1,347,608,119	2,221,581,081
100	1,922,888,550	311	496	0.14	1,319,955,856	2,101,800,137
150	1,628,172,388	345	517	0.15	1,237,741,441	1,854,403,197
200	1,303,771,802	387	542	0.16	1,113,239,903	1,558,242,753
250	1,026,716,309	431	565	0.18	976,216,360	1,278,507,248
300	788,870,508	479	589	0.20	832,690,052	1,024,302,587
350	605,696,777	525	609	0.22	701,514,062	812,944,874
400	463,660,132	572	625	0.24	584,328,235	639,257,298
450	350,664,331	619	638	0.25	478,682,356	493,347,506
500	253,513,696	674	651	0.28	376,682,618	363,768,655
550	192,042,310	722	660	0.30	305,821,039	279,323,249
600	142,502,686	774	666	0.32	243,116,268	209,237,772
650	103,088,306	830	672	0.34	188,742,761	152,613,579
700	69,947,607	905	684	0.37	139,553,475	105,437,764
750	51,518,140	970	694	0.40	110,149,102	78,820,989
800	38,464,014	1,037	705	0.42	87,899,602	59,746,895
850	29,102,881	1,105	713	0.45	70,905,627	45,758,912
900	22,963,477	1,167	719	0.47	59,086,637	36,420,690
950	18,488,501	1,226	728	0.50	49,981,617	29,685,038
1,000	14,462,964	1,296	738	0.53	41,331,090	23,525,923
1,100	9,232,788	1,438	758	0.58	29,276,924	15,420,019
1,200	6,083,301	1,590	782	0.65	21,324,052	10,489,292
1,300	4,276,831	1,736	807	0.70	16,370,686	7,607,432
1,400	3,136,890	1,877	833	0.76	12,983,618	5,763,405
1,500	2,353,638	2,021	863	0.82	10,484,553	4,478,956
2,000	799,780	2,679	983	1.08	4,723,896	1,734,032



**Table 14-20 Grade Tonnage Table – 2011 Estimate (All Mineralisation)**

Cut-off Grade Mo ppm	Cumulative Resource					
	Tonnes t	Mo g/t	Cu g/t	Re g/t	Mo pound	Cu pound
0	1,988,536,250	256	456	0.11	1,122,043,945	2,001,229,684
50	1,941,439,063	261	462	0.11	1,118,568,858	1,978,443,293
100	1,753,787,656	281	481	0.12	1,085,340,012	1,858,759,513
150	1,394,074,844	321	518	0.13	985,539,886	1,592,675,612
200	1,025,780,625	374	563	0.16	845,014,762	1,272,604,983
250	767,601,406	424	598	0.18	718,292,439	1,011,430,667
300	601,695,938	466	629	0.20	618,226,534	834,937,160
350	465,326,875	508	652	0.21	520,669,615	668,811,580
400	356,273,125	548	673	0.23	430,661,226	528,357,317
450	265,411,250	591	691	0.25	345,661,591	404,170,163
500	192,367,500	635	708	0.27	269,289,085	300,164,955
550	132,185,625	686	729	0.29	199,983,571	212,570,873
600	89,106,875	741	754	0.32	145,533,949	148,161,288
650	64,163,125	787	779	0.34	111,328,927	110,157,747
700	42,380,000	845	795	0.37	78,903,458	74,244,282
750	28,892,500	900	834	0.39	57,317,242	53,142,431
800	20,125,625	955	862	0.42	42,379,860	38,262,606
850	14,690,000	1,004	879	0.44	32,507,695	28,456,643
900	10,976,875	1,048	896	0.45	25,353,589	21,673,811
950	8,571,875	1,083	906	0.47	20,462,469	17,127,070
1,000	5,801,250	1,136	917	0.49	14,523,921	11,724,124
1,100	2,640,625	1,248	969	0.53	7,265,017	5,642,385
1,200	1,616,875	1,312	990	0.56	4,676,148	3,527,226
1,300	755,625	1,388	1,025	0.59	2,311,462	1,707,648
1,400	300,625	1,489	1,037	0.61	986,904	687,060
1,500	130,000	1,542	1,139	0.62	441,947	326,340



**Table 14-21 Grade Tonnage Table – 2025 SLR Estimate (Measured+Indicated)**

Cut-off Grade Mo ppm	Cumulative Resource					
	Tonnes t	Mo g/t	Cu g/t	Re g/t	Mo pound	Cu pound
0	590,635,962	371	540	0.16	483,570,852	703,328,244
50	579,667,187	378	545	0.16	482,746,761	696,901,357
100	549,855,322	394	558	0.17	477,669,377	675,963,970
150	503,040,625	419	575	0.18	464,656,455	638,064,792
200	452,575,146	446	592	0.19	445,135,028	590,798,505
250	393,434,741	479	609	0.20	415,787,436	528,403,821
300	333,609,326	516	625	0.21	379,513,963	459,887,511
350	274,845,654	557	641	0.23	337,419,233	388,201,491
<b>400</b>	<b>221,376,831</b>	<b>601</b>	<b>654</b>	<b>0.25</b>	<b>293,258,765</b>	<b>319,107,423</b>
450	173,987,598	649	665	0.27	248,920,982	255,184,764
500	134,484,912	700	676	0.29	207,570,372	200,370,432
550	103,849,951	752	684	0.31	172,193,022	156,687,705
600	79,135,767	808	692	0.33	140,925,688	120,730,056
650	60,126,343	866	698	0.35	114,769,599	92,544,985
700	44,903,784	931	708	0.38	92,154,369	70,114,733
750	34,274,268	995	718	0.41	75,191,666	54,239,567
800	26,308,398	1,062	727	0.43	61,609,490	42,188,955
850	20,402,905	1,131	736	0.46	50,891,970	33,087,865
900	16,410,278	1,194	741	0.49	43,206,138	26,801,191
950	13,468,848	1,253	748	0.51	37,215,920	22,214,057
1,000	10,790,283	1,322	755	0.54	31,457,544	17,971,093
1,100	7,112,744	1,465	774	0.59	22,975,157	12,139,105
1,200	4,777,026	1,621	802	0.66	17,075,975	8,447,260
1,300	3,450,415	1,766	828	0.72	13,434,631	6,298,393
1,400	2,559,253	1,912	853	0.77	10,790,317	4,814,501
1,500	1,911,841	2,070	887	0.84	8,723,960	3,737,630
2,000	707,104	2,726	1,011	1.10	4,250,122	1,575,848



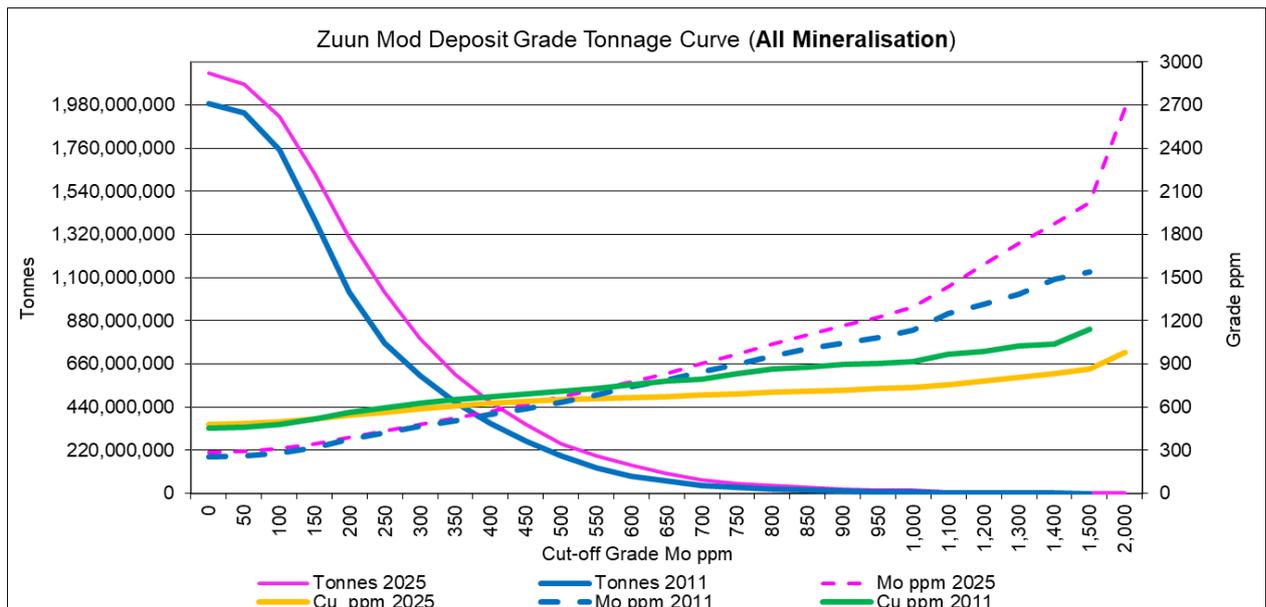
**Table 14-22 Grade Tonnage Table – 2011 Estimate (Measured+Indicated)**

Cut-off Grade Mo ppm	Cumulative Resource					
	Tonnes t	Mo g/t	Cu g/t	Re g/t	Mo pound	Cu pound
0	529,537,031	373	543	0.15	435,080,570	633,858,691
50	526,604,375	375	544	0.16	434,821,923	632,123,283
100	503,360,000	388	556	0.16	430,737,071	617,471,011
150	457,176,250	414	578	0.17	417,772,318	582,842,916
200	404,332,656	446	603	0.19	397,428,129	537,221,823
250	358,639,375	474	624	0.20	374,898,300	493,362,998
300	314,510,625	502	644	0.21	348,084,848	446,599,510
350	265,037,500	535	665	0.22	312,513,525	388,447,945
<b>400</b>	<b>217,823,125</b>	<b>570</b>	<b>688</b>	<b>0.24</b>	<b>273,566,451</b>	<b>330,627,111</b>
450	171,023,125	609	709	0.26	229,758,557	267,505,797
500	130,203,125	651	726	0.27	186,985,216	208,533,775
550	95,306,250	698	741	0.30	146,684,168	155,771,032
600	66,381,250	752	767	0.32	110,073,639	112,227,348
650	48,433,125	800	790	0.34	85,415,529	84,321,989
700	33,556,250	856	812	0.37	63,313,846	60,106,106
750	23,733,125	910	847	0.39	47,610,647	44,300,482
800	17,062,500	963	872	0.42	36,233,225	32,818,310
850	12,601,875	1,013	890	0.44	28,133,761	24,731,166
900	9,563,125	1,057	902	0.46	22,278,633	19,022,059
950	7,596,875	1,091	916	0.47	18,277,438	15,340,164
1,000	5,427,500	1,140	922	0.49	13,635,065	11,026,665
1,100	2,591,875	1,247	975	0.52	7,123,182	5,570,606
1,200	1,568,125	1,312	1,000	0.56	4,534,314	3,455,447
1,300	723,125	1,390	1,043	0.58	2,215,274	1,662,664
1,400	300,625	1,489	1,037	0.61	986,904	687,060
1,500	130,000	1,542	1,139	0.62	441,947	326,340

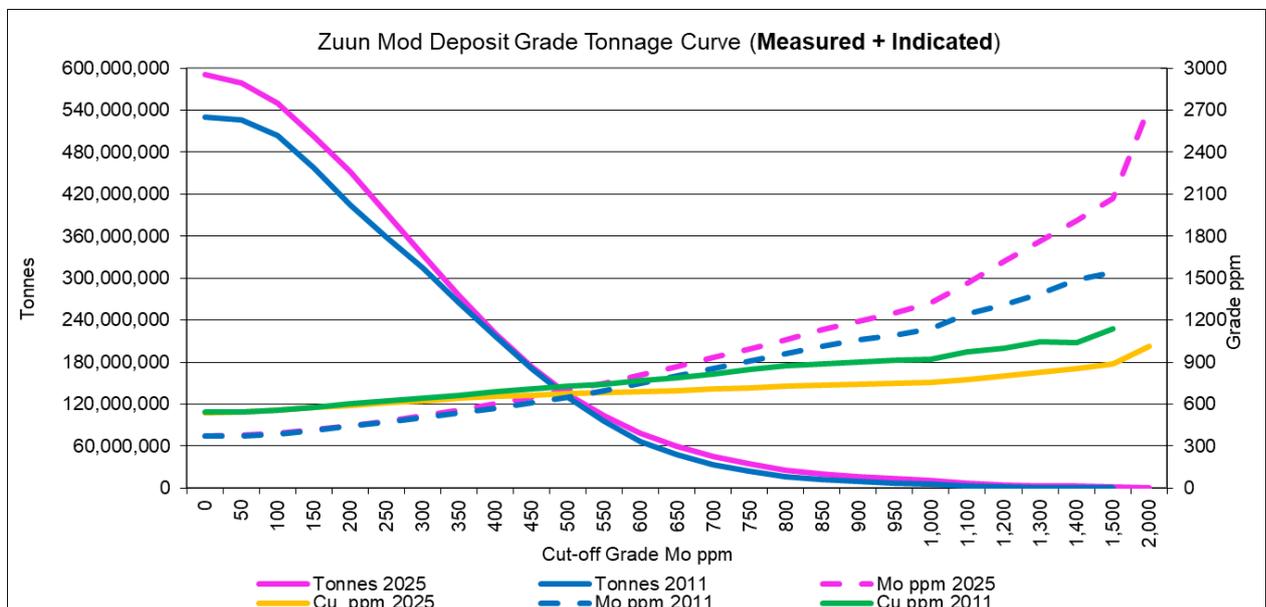
The grade tonnage table comparison between 2011 and 2025 estimates is shown in **Figure 14-37** and **Figure 14-38**.



**Figure 14-37 Grade Tonnage Curve for 2011 and 2025 Estimates – All Mineralisation**



**Figure 14-38 Grade Tonnage Curve for 2011 and 2025 Estimates – Measured + Indicated**



### 14.13.1 Dilution and Ore Losses

The block model is undiluted with no ore loss factors applied. Appropriate dilution and ore loss factors must be applied for Mineral Reserve estimation. Dilution and ore loss was applied to the COG calculation.

### 14.13.2 Other Information

SLR is not aware of any other factors, including environmental, permitting, legal, title, taxation, socio-economic, marketing and political or other relevant factors, which could materially affect the Mineral Resource.



## 15. Mineral Reserve Estimate

Not included in this NI43-101 Report because of the early stage of the Project investigation.



## 16. Mining Method

Not included in this NI43-101 Report because of the early stage of the Project investigation.



## 17. Recovery Methods

Not included in this NI43-101 Report because of the early stage of the Project investigation.



## 18. Infrastructure

Not included in this NI43-101 Report because of the early stage of the Project investigation.



## 19. Market Studies and Contracts

Not included in this NI43-101 Report because of the early stage of the Project investigation.



## **20. Environmental Studies, Permitting, and Social or Community Impact**

Not included in this NI43-101 Report because of the early stage of the Project investigation.



## 21. Capital and Operating Costs

Not included in this NI43-101 Report because of the early stage of the Project investigation.



## 22. Economic Analysis

Not included in this NI43-101 Report because of the early stage of the Project investigation.



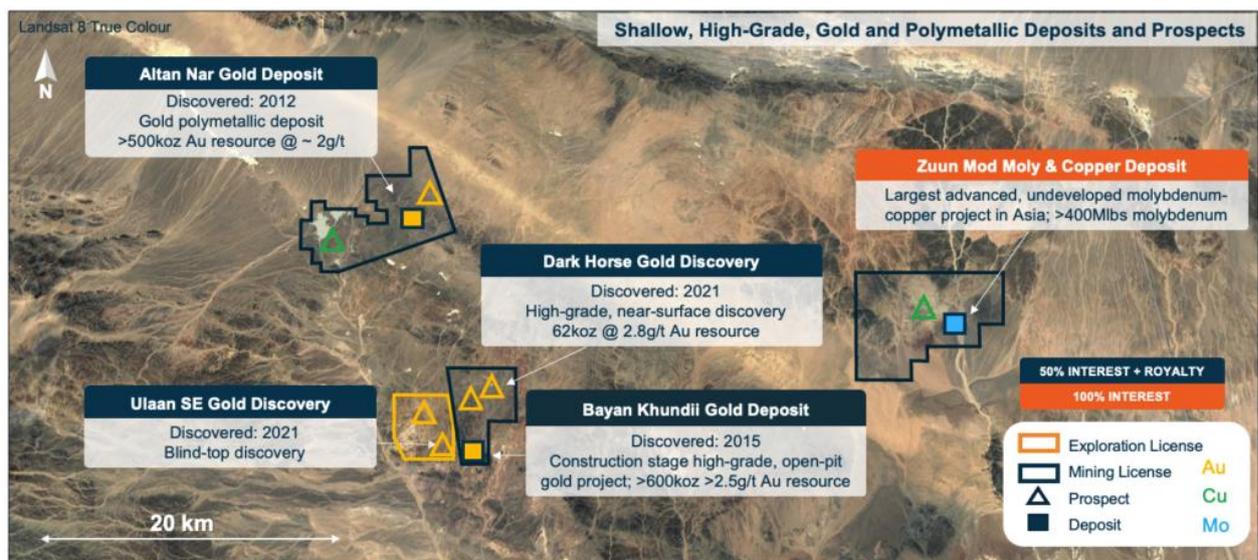
## 23. Adjacent Properties

Over the past decade, Erdene has emerged as the premier explorer in southwestern Mongolia with multiple greenfield discoveries. To date, exploration of the highest priority targets has resulted in establishing three separate gold resources within the area now known as the Khundii Minerals District (**Figure 23-1**). These include the greenfield discoveries of:

- Bayan Khundii (BK) Au-Ag deposit (MV-021444 mining license)
- Altan Nar Au-polymetallic deposit (MV-021547 mining license)
- Dark Horse Au deposit (same MV-021444 mining license)
- Ulaan SE Gold discovery (XV-016057 exploration license)

Zuun mod deposit (MV-016836) is located 35 km east of Bayan khundii gold deposit.

**Figure 23-1 Erdene owned Project locations**



Source: Erdene.com



## 24. Other Relevant Data and Information

### 24.1 Risks

The comprehensive and high-quality drilling at the Project has mitigated many of the risks typically associated with Mineral Resource estimation of porphyry deposits. However, further improvements in the quality control and interpretation of the data would further reduce the risk in the estimate.

The discussion of risks should be considered within the context that 49% of the Resources are of Measured and Indicated status and hence of higher confidence. An alternative estimation approach completed by SLR in 2025 based on additional drilling and a re-logging exercise resulted in no material change to Measured and Indicated Mineral Resources, therefore the impact of the risks is unlikely to result in a material change to the overall Resource estimate. The risk is more for reconciliation on minor, localised areas.

Higher-grade mineralisation at Zuun Mod appears to be controlled by a complex network of cross-cutting trends, as indicated by the recent drilling program and re-logging of historical holes by ERD. The intricate cross-cutting nature of these structures and their scale relative to the spacing of the drill hole data mean that it is very difficult to produce variable anisotropic functions that are able to effectively represent and honour all orientations and a number of zones throughout the deposit could be interpreted in different orientations, as definitive geological control is not available. Interpreted variogram parameters were used to guide the search direction in this area. This is especially relevant to Inferred Mineral Resources, which are subject to a higher degree of geological uncertainty.

Zuun Mod drillholes are predominantly drilled vertically with only the 2023 drilling data being oriented. Recent drilling program along with re-logging historical holes by ERD indicates that there could be two major trends (sub-vertical and sub-horizontal) in higher grade mineralisation. SLR completed variogram analysis to see whether these geological/mineralisation features can be replicated in directional analysis. The longest continuity direction for Mo is interpreted to be in the 80° NE direction. There is also a clear vertical trend observed in the downdip direction. This suggests that the current vertical drilling orientation is not well suited for Zuun Mod mineralisation; oriented, angled hole drilling is recommended for any future drilling.

There are many barren narrow dykes which are generally hard to model, and these were not modelled as the smallest sub-block size used in the estimate is 12.5 x 6.25 x 6.25. The risk of dyke complexity is more likely for reconciliation on minor, localised areas.

An average density of 2.60 t/m<sup>3</sup> was assigned to all mineralisation due to the small number of density samples and low degree of variation in density data. Any variation in these values might occur due to limited sample data and may affect the calculated tonnage of Mineral Resource. SLR does not expect any material impact on a global basis, but the lack of recognition of variability will impact short-term scheduling and reconciliation of metal content.

The Mineral Resource estimates are sensitive to molybdenum and copper price, metal recovery and various cost assumptions. Any change in cost assumption, metallurgical recovery, or market conditions may materially impact the tonnage, grade and classification of reported Mineral Resources and this may necessitate revision to the reporting cut-off grades in the future.

SLR notes that all mining activities must be undertaken within the boundary of the granted mining licence. Zuun Mod mineralisation is bounded by the mining license boundary (MV-016836); no license constraint was applied to the pit optimisation study and inability to acquire additional ground to the south could materially impact the reported Mineral Resource.

### 24.2 Opportunities

All existing work and current interpretation indicate that there is good potential to increase the currently defined Mineral Resources with mineralisation open to the north and south and also down dip, which requires further drilling to investigate. In addition, mineralisation extends NW and is undefined by drill holes beneath the andesite unit.



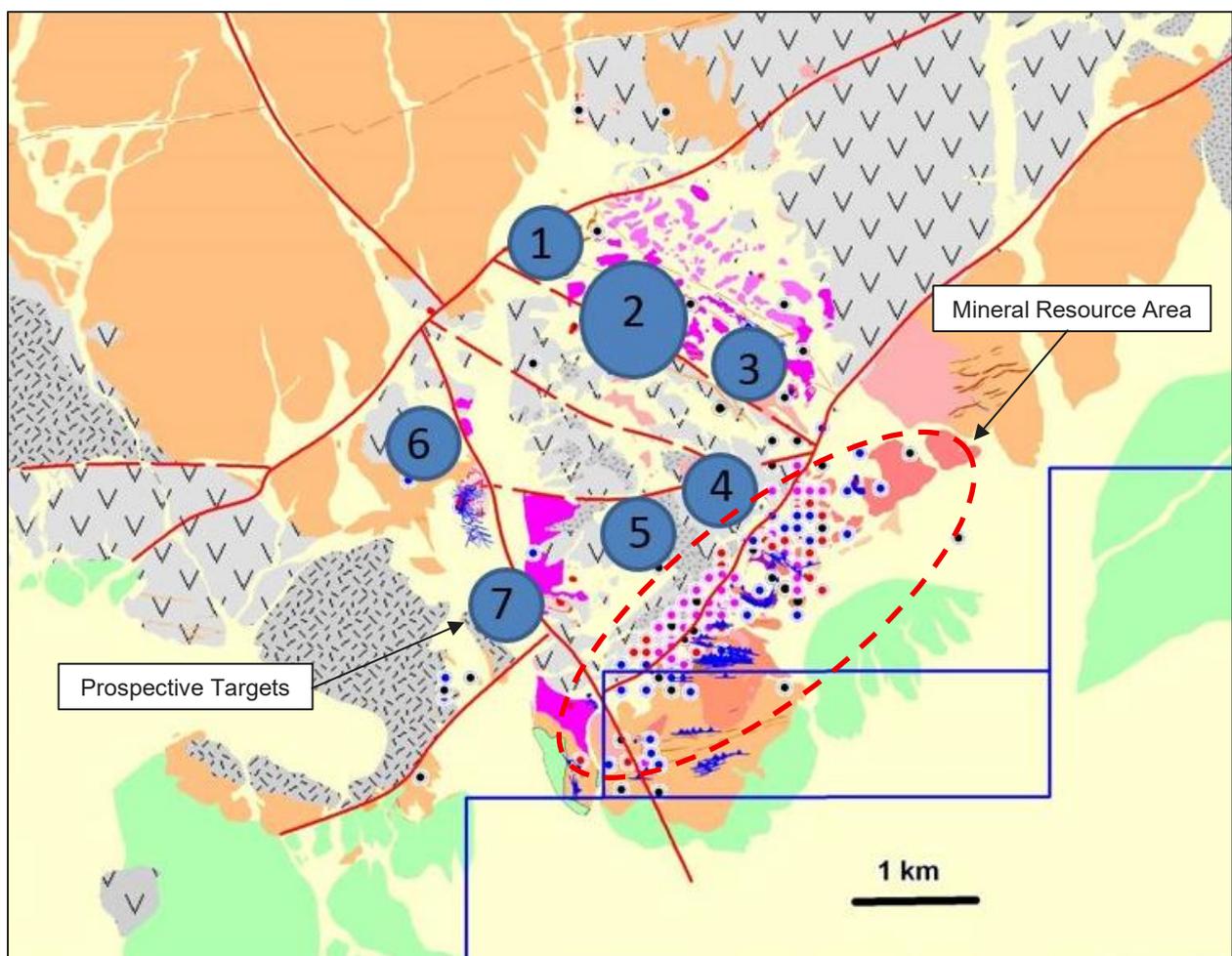
Additional drilling with oriented core will confirm the recent re-interpretation of the orientation of the mineralized veins at Zuun Mod. Current widely spaced vertical drill holes may under-represent the frequency of the near-vertical mineralized vein system. If the sub-vertical veins are indeed under-represented in the drilling then any associated mineralization may be under-represented in the resource model.

The Zuun Mod- Khuvyn Khar (ZM-KK) porphyry system has similar magmatic and metallogenic ages as the porphyry Cu-Au deposits of the Almayk District within the CAOBS located to the west of Mongolia and has excellent potential for discovery of additional mineralization.

The Mo-Cu deposits at Zuun Mod represent Mo-rich zones in a Cu-Mo porphyry system which has excellent potential for discovery of additional Cu-Mo (Au) mineralization in the 4.5 by 5.5 km multi-stage porphyry complex.

Commencing in 2013, a comprehensive core re-logging and detailed surface mapping program has been carried out with detailed petrological, geochemical studies and a review of detailed ground geophysical survey data. The results from this work identified seven highly prospective exploration targets as shown in **Figure 24-1**. Target #2 was the focus of drilling by Tian Poh, as discussed later in the report, with intersection of Cu-anomalism associated with a zone of hydrothermal intrusive breccias (HIB) (e.g. 8 m @ 0.13% Cu). The remaining six targets have largely not been drill-tested and remain highly prospective.

**Figure 24-1** Geology map of the ZM-KK porphyry complex showing the location of 7 high-priority exploration targets in the KK zone.





### 24.3 Other Relevant Information

In the opinion of the Author, all relevant and material information is provided in this NI 43-101 Technical Report.



## 25. Interpretation and Conclusions

The aim of the study presented herein was to produce an updated Mineral Resource Estimate for the Erdene Zuun Mod Project. In generating the updated Mineral Resource for the Zuun Mod Project presented herein, and effective as of 1<sup>st</sup> of September 2025, SLR has completed a full re-interpretation of search anisotropy and re-estimation of the Zuun Mod Project, based on the present understanding of the controls on the mineralisation discussed throughout this document.

The Zuun Mod Mineral Resource represents a bulk tonnage low grade Mo-Cu porphyry deposit. Although discovered two decades ago, no modern mining has occurred at the Project. The economic potential of the deposit is currently being assessed with a Preliminary Economic assessment commenced in 2025.

The nature, extent and results of the sample preparation, security and analytical procedures, the quality control procedures employed, and quality assurance actions undertaken by ERD were undertaken in line with Industry Standards and guidelines and provide adequate confidence in the drill hole data collection and processing steps to support their use in the Mineral Resource estimation process.

Sample security procedures were aligned with industry standards when the samples were collected. Current sample collection and storage practices and facilities are consistent with accepted industry standards. Database verification, including collar positions, downhole survey, and geological logging, was confirmed to be accurate with no systematic errors or bias.

The data verification conducted by the QP is sufficient to conclude that the drill hole database is reasonably free of errors and suitable to support Mineral Resource estimation.

The deposits have been drilled with high quality diamond holes on a close spaced and regular pattern. The geology and mineralisation are well understood and various programs of QAQC, while not comprehensive, have verified the reliability of the assay data for use in Mineral Resource estimation. This has allowed the estimate to be classified as Measured, Indicated and Inferred Mineral Resource.

The Mineral Resource model has not had mining modifying factors applied, so appropriate factors need to be incorporated in any mine planning evaluation of the deposit.

In producing the updated Mineral Resource Estimate presented herein, SLR has:

- Generated a series of anisotropic trends that dictate SLR's understanding of the structural control on the Zuun Mod mineralisation, based upon observations of continuity of downhole assay intersections, re-logging of historical holes, oriented core drilling data and discussion with the ERD technical team;
- SLR used MMC's 2011 model built at a 100 ppm Mo cut-off as a basis for updating the Mineral Resource. After review of log probability plots and contact analysis between high and low grade domains it was decided not to use high grade wireframing for the estimate.
- Modelled weathering and geological wireframes to clip or sub-domain the estimation domains;
- Undertaken statistical and geostatistical analysis of the assay data obtained during various surface diamond drilling campaigns, and completely changed the estimation variography and search parameters based on the recent drilling program along with re-logging of historical holes by ERD which indicates that there could potentially be two major trends (sub-vertical and sub-horizontal) in higher grade mineralisation, which were supported by directional analysis;
- Interpolated the above data into 3D block models, coded and sub-blocked by the mineralisation and weathering wireframes;
- Assigned average density values to mineralisation and waste domains;
- Classified in accordance with the CIM Definition Standards (2014) and in accordance with the requirements of NI 43-101.
- Completed Whittle pit optimisation on the estimated block model, based on reasonable, but optimistic, economic and mining assumptions to evaluate the proportions of the block model that have "reasonable prospects for economic extractions" by open pit mining.



- Produced the Mineral Resource based on the updated estimated block model, inside a US\$ 22/lb Mo and US\$4.95/lb Cu revenue factor optimised pit and reported above a break-even molybdenum cut-off grade of 0.035% Mo for all mineralisation.
- The statement has been classified in accordance with CIM Definition Standards (2014) and in accordance with the requirements of NI 43-101 by Qualified Person, Mr Oyunbat Bat-Ochir (AIG, QP).

Areas of uncertainty that could materially affect the Mineral Resource estimates include the following: interpretation of high-grade anisotropy orientation, lithological interpretation on a local scale, including dykes; the barren ring dyke geometry at depth which is currently interpreted as unmineralized waste; and modelling and discrimination of different intrusive phases, commodity pricing and metal recovery assumptions.



## 26. Recommendations

SLR considers there to be potential to significantly improve upon the database available for estimation of Mineral Resource at Zuun Mod and to improve geological understanding of the controls on the mineralisation, particularly at South racetrack, Ring dyke and North racetrack zones. In this respect, the following recommendations are provided:

- The shallower parts of the zones are more densely drilled compared to deeper parts of the system, where the continuity and extent of mineralisation may be different than assumed. Additional oriented core drilling is required to assist in understanding the geometry of the mineralisation at depth. SLR recommends using optimised pits to plan the drilling programs, as the deeper part of the zones may not necessarily enhance the project's economics.
- Downhole surveys need to be monitored on an on-going basis. Logging and visual observation of drill core indicate that magnetite alteration is present at the deposit and it is essential that a non-magnetic (gyroscopic) instrument be used with the capability to accurately measure vertical as well as angled holes.
- Accurately locate the collars for all resource drill holes after ZMD-109. Collar locations should be marked with drill hole numbers and surveyed upon completion of holes for any future drilling.
- Continue to use blank samples to monitor sample contamination. It is also recommended that a set of pulp duplicates be regularly sent to an umpire laboratory.
- Use water immersion methods to determine the density of the mineralised and un-mineralised core from current and future drilling programs.
- The change in estimation parameters resulted in an increase in tonnage and grade, with a significant increase in the Inferred portion of the Mineral Resource. Therefore, infill drilling is recommended to increase Resource confidence.
- Update the Mineral Resource estimate on the improved knowledge gained from the planned drilling program, geological investigation and core re-logging.
- Complete additional metallurgical test work to further define the processing characteristics of the material particularly a low-grade material.
- Complete a marketing study to confirm the saleability of the product and likely price forecasts.
- Complete a Preliminary Economic Assessment to understand economic viability of the Project.

The budget to complete the recommendation is shown in **Table 26-1**. The work plan is estimated to occur over the remainder of 2025.

**Table 26-1 Budget of Recommendations**

Work	Cost (US\$)
Collar survey	15,000
Umpire check assaying	10,000
Density measurements	2,000
Infill drilling (2,000 m)	250,000
Metallurgical test work	20,000
Preliminary Economic assessment	100,000



## 27. References

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## 28. Certificate Of Qualified Persons

### 28.1 Oyunbat Bat-Ochir

As a qualified person and co-author of the report titled “NI 43-101 Technical Report for the “NI 43-101 Technical Report for the “Zuun Mod Molybdenum-Copper Project, Mongolia” (Technical Report) dated September 2025, to which this certificate applies, I, Oyunbat Bat-Ochir do hereby certify that:

1. I, Oyunbat Bat-Ochir, am the Senior Resource Geologist for SLR, Mining Advisory – APAC. My business address is 13<sup>th</sup> Floor, Central Park, Chinggis Avenue, Ulaanbaatar, Mongolia, 15413.
2. I graduated with a Bachelor of Geology from National University of Mongolia.
3. I am registered member of the Australian Institute of Geoscientist (“AIG”)
4. I have been continuously and actively engaged in the assessment and development of mineral Projects, and I have worked as a resource geologist in the mining industry for a total of 15 years since my graduation.
5. I have read the definition of “qualified person” set out in the National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and confirm that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a “qualified person” for the purposes of NI 43-101.
6. My most recent personal inspection of the Zuun Mod Molybdenum and Copper project was on 15<sup>th</sup> to 18<sup>th</sup> May 2025.
7. I am responsible for the preparation or the responsible for reviewing, coordinating and final editing of all portions of the “NI 43-101 Technical Report for the Zuun Mod Molybdenum-Copper Project, Mongolia (Technical Report) dated September 2025.
8. I am independent of Erdene Resource Development Corporation applying all the tests in item 1.5 of NI 43-101.
9. I have had no prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101 and the items of the Technical Report under my responsibility have been prepared in compliance with NI 43-101.
11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Sincerely,

**Oyunbat Bat-Ochir (QP)**

Senior Resource Geologist, Mining Advisory – APAC



## 28.2 Dr. Andrew James Haigh Newell

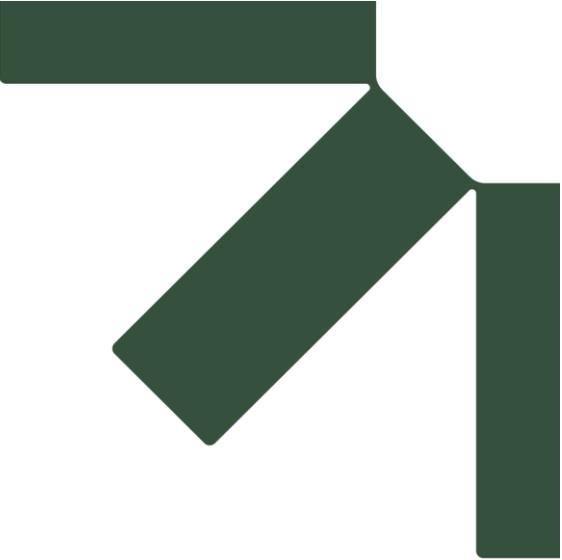
As a qualified person and co-author of the report titled “NI 43-101 Technical Report for the “Zuun Mod Molybdenum-Copper Project, Mongolia” (Technical Report) dated September 2025, to which this certificate applies, I, Andrew Newell do hereby certify that:

1. I, Andrew Newell., am the Manager, Metallurgy and Process Engineering for SLR, Mining Advisory – APAC. My business address is Level 16, 175 Eagle Street, Brisbane, Queensland, Australia, 4000.
2. I graduated with a BE(Met) and MEngSci from the University of Melbourne, Victoria, Australia and a PhD from the University of Cape Town, RSA.
3. I am a Fellow and Chartered Professional of the AusIMM (Metallurgy) in good standing with the Australian Institute of Engineers (CP), CIM and SME, as well as RPEQ and IntPE (Aus).
4. I have worked as a metallurgical engineer and project manager in the mining industry for more than 40 years since my graduation.
5. I have read the definition of “qualified person” set out in the National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and confirm that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a “qualified person” for the purposes of NI 43-101.
6. I have not made a personal inspection of the Zuun Mod Molybdenum and Copper project site.
7. I am responsible for Sections 13 of the “NI 43-101 Technical Report for the “Zuun Mod Molybdenum-Copper Project, Mongolia” (Technical Report) dated September 2025,
8. I am independent of Erdene Resource Development Corporation, applying all the tests in item 1.5 of NI 43-101.
9. I have had prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101 and the items of the Technical Report under my responsibility have been prepared in compliance with NI 43-101.
11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Sincerely,

### **Dr. Andrew James Haigh Newell (QP)**

Manager, Metallurgy and Process Engineering – Mining Advisory – APAC  
FAusIMM, CP(Met), MIEAust, CP(Eng), RPEQ, NER, APEC, IntPE (Aus)



# Appendix A    Important Information About this Document

## **NI 43-101 Technical Report**

SLR Project No.: ADV-HK-161

November, 2025

Revision: Final



## IMPORTANT INFORMATION ABOUT THIS DOCUMENT

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*SLR provides advisory services to the mining and finance sectors. Within its core expertise, it provides independent technical reviews, resource evaluation, mining engineering, environmental assessments and mine valuation services to the resources and financial services industries.*

*SLR has independently assessed the subject of the report (the Project) by reviewing pertinent data, which may include Resources, Reserves, existing approvals, licences and permits, manpower requirements and the life of mine plans relating to productivity, production, operating costs and capital expenditures. All opinions, findings and conclusions expressed in this report are those of SLR and specialist advisors.*

*Drafts of this report were provided to the Client, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this report.*

*SLR has been paid and has agreed to be paid, professional fees for the preparation of this report. The remuneration for this report is not dependent upon the findings of this report. SLR does not have any economic or beneficial interest (present or contingent), in the Project, in securities of the companies associated with the Project or the Client.*

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*SLR has created this report using data and information provided by or on behalf of the Client. Unless specifically stated otherwise, SLR has not independently verified that data and information. SLR accepts no liability for the accuracy or completeness of that data and information, even if that data and information have been incorporated into or relied upon in creating this report (or parts of it).*

*The conclusions and opinions contained in this report apply as at the date of the report. Events (including changes to any of the data and information that SLR used in preparing the report) may have occurred since that date which may impact on those conclusions and opinions and make them unreliable. SLR is under no duty to update the report upon the occurrence of any such event, though it reserves the right to do so.*

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*Mining is carried out in an environment where not all events are predictable.*

*Whilst an effective management team can identify the known risks and take measures to manage and mitigate those risks, there is still the possibility for unexpected and unpredictable events to occur. It is not possible therefore to totally remove all risks or state with certainty that an event that may have a material impact on the operation of a mine, will not occur.*

*The ability of any person to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond SLR's control and that SLR cannot anticipate. These factors include but are not limited to, site-specific mining and geological conditions, management and personnel capabilities, availability of funding to properly operate and capitalize the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, unforeseen changes in legislation and new industry developments. Any of these factors may substantially alter the performance of any mining operation.*

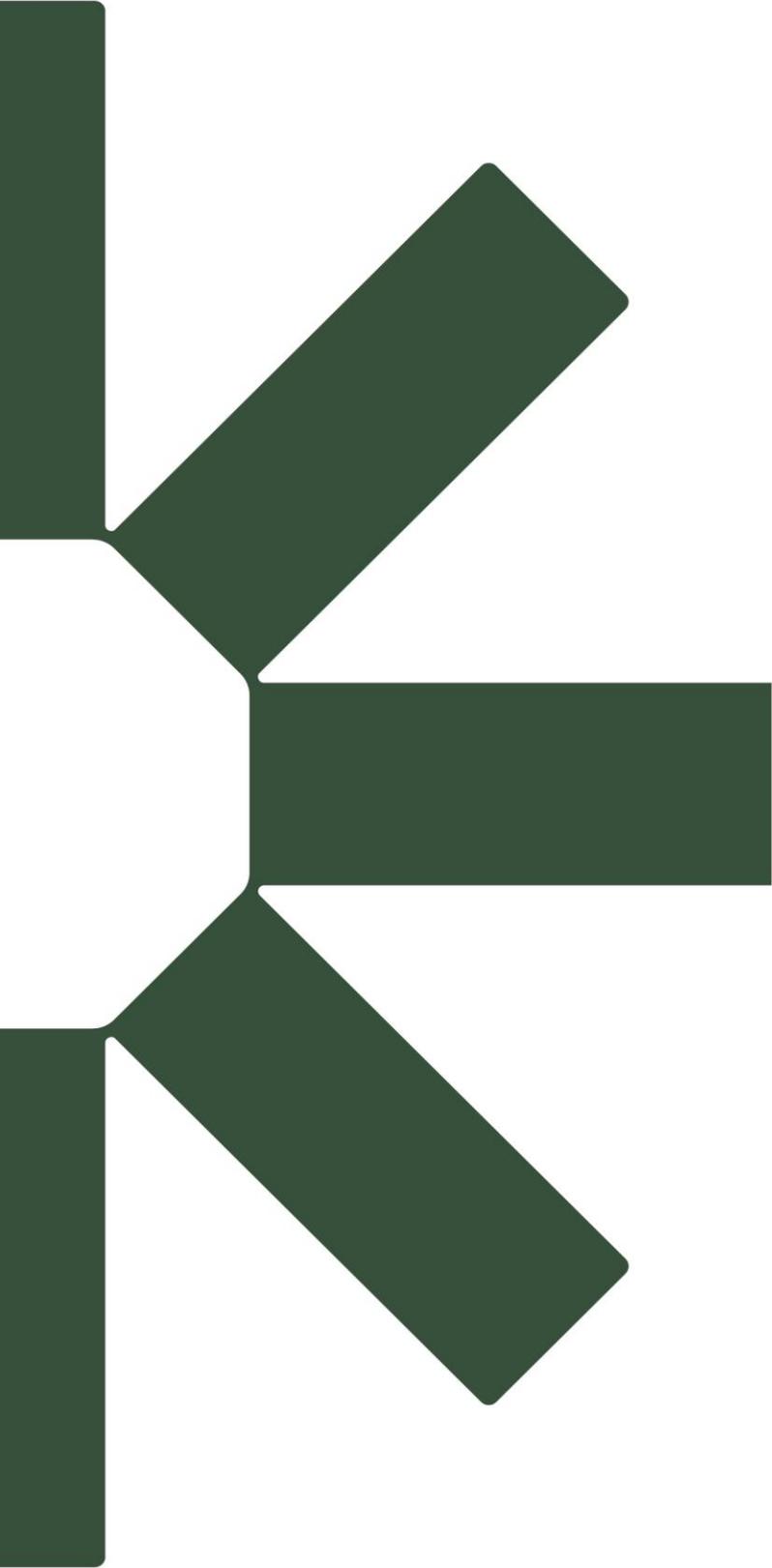
#### **6. Limitations and Exclusions**

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*The work undertaken for this report is required for a technical review of the information, coupled with such inspections as SLR considered appropriate to prepare this report.*

*Unless otherwise stated specifically in writing, the report specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the JORC Code guidelines.*

*SLR has specifically excluded making any comments on the competitive position of the relevant assets compared with other similar and competing producers around the world. SLR strongly advises that any potential investors make their own comprehensive assessment of the competitive position of the relevant assets in the market.*



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