Erdene Resource Development Corp.

Zuun Mod
Porphyry Molybdenum-Copper Project

South-Western Mongolia

Final

Technical Report

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Project No. ADV-MN-00026

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I, Philippe, am working as a General Manager-China, Minarco-Mine Consult, of Room 2101, Tower A, Ping An International Financial Centre No. 3 Xinyuan South Road, Chaoyang District Beijing 100027, China. This certificate applies to the Technical Report on the Resource Estimate for the Zuun Mod Project, Mongolia, prepared for Erdene Resource Development Corp, dated June, 2011 (the "Technical Report"), do hereby certify that:

1. I am a registered member of the Australian Institute of Geoscientists ("AIG").

2. I have been continuously and actively engaged in the assessment, development, and operation of mineral projects since my graduation from university in 2001.

3. I am a Qualified Person for the purposes of the National Instrument 43-101 of the Canadian Securities Administrators ("Ni 43-101").

4. I inspected the Zuun Mod Project in November 2008.

5. I am responsible for the preparation or the supervision and final editing of all portions of the Technical Report.

6. I have had no prior involvement with the properties that are the subject of the Technical Report.

7. 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. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

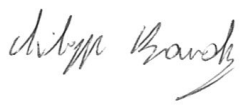
8. I am independent of Erdene. in accordance with the application of Section 1.4 of NI 43-101.

9. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance with that instrument and form.

10. I consent to the filing of the Technical Report with any stock exchange or any other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their website and accessible by the public, of the Technical Report.

A more detailed summary of professional experience is included in Appendix A**.**

Dated at Beijing, China, this June, 2011



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I, Jeremy Lee Clark, am working as a Senior Geologist Minarco-Mine Consult, of Room 2101, Tower A, Ping An International Financial Centre No. 3 Xinyuan South Road, Chaoyang District Beijing 100027, China. This certificate applies to the Technical Report on the Resource Estimate for the Zuun Mod Project, Mongolia, prepared for Erdene Resource Development Corp, dated June, 2011 (the "Technical Report"), do hereby certify that:

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Dated at Beijing, China, this June, 2011

"Jeremy Lee Clark" (QP)

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1 SUMMARY

Runge Asia Limited ("RAL"), trading as Minarco-MineConsult ("MMC"), was requested by Erdene Resource Development Corporation ("Erdene" or the "Company") to complete a Mineral Resource estimate for the Zuun Mod Porphyry Molybdenum-Copper Project (the "Project"). The estimate forms the basis for this Technical Report prepared by MMC for the Project which meets the requirements of Canadian National Instrument 43-101 ("NI 43-101") of the Canadian Securities Administrators. The Qualified Person, as defined by the NI 43-101, responsible for this report is Mr. Philippe Baudry, Operations Manager for MMC.

Scope and Terms of Reference

This Technical Report includes a Mineral Resource estimate for the Project and does not contain any Mineral Reserves estimates or engineering assessments. The process and conclusions of the Mineral resource estimate are summarised in this report.

MMC's technical team (the "Team") consisted of senior international geologists and Mongolian national geologists. Mr Bob Dennis undertook a site visit between 17th and 19th May 2011 to the Project while Mr Philippe Baudry completed a site visit in November 2009 to familiarise themselves with site conditions and review site procedures. During the site visits, the Team had open discussions with the Company personnel on technical aspects relating to the Project. MMC found the personnel to be cooperative and open in facilitating MMC's work.

MMC operates as an independent technical consultant providing resource evaluation, mining engineering and mine valuation services to the resources and financial services industries. This Report was prepared on behalf of MMC by technical specialists, details of whose qualifications and experience are set out in ***Annexure A***.

MMC has been paid, and has agreed to be paid, professional fees for its preparation of this report. However, none of MMC staff or sub-consultants who contributed to this Report has any interest in:

- the Company, securities of the Company or companies associated with the Company; or
- the Relevant Asset;

Drafts of the Report were provided to the Company for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in the report. In addition to work undertaken to generate estimates of Mineral Resources, this Report is primarily based on information provided by the Company, either directly from the Project site and other associated offices or from reports by other organisations which worked on the Project for the Company. The Report is based on information made available to MMC before June, 2011.

The title of this report does not pass onto the client until all consideration has been paid in full.

The data relied upon for the Mineral Resource estimate completed by MMC and contained in this Report, have been compiled primarily by the Company and validated where possible by MMC. It specifically excludes all aspects of legal issues, marketing, commercial and financing matters, insurance, land titles and usage agreements, and any other agreements/contracts that the Company may have entered into.

MMC does not warrant the completeness or accuracy of information provided by the Company which has been used in the preparation of this Report.

In MMC's opinion, the information provided by the Company was reasonable and nothing discovered during the preparation of the report suggested that there was any significant error or misrepresentation in respect of that information.

MMC has independently assessed the Relevant Asset by reviewing historical technical reports, drill hole databases, original sampling data, sampling methodology, engineering studies, future resource development plans, development potential, potential mining issues and metallurgical test work resulting in a Mineral Resource estimate. All opinions, findings and conclusions expressed in the report are those of MMC and its specialist advisors.

Mineral Resources

Table 1 shows the Measured, Indicated and Inferred Mineral Resource estimate for the Zuun Mod Project. These Resources are reported above a cut-off grade of 0.04% Mo. This was done to meet the CIM requirement that all Resources must have a reasonable prospect for economic extraction. Please note that mineral Resources are not mineral Reserves and do not have demonstrated economic viability. The block model inventory at various cut-off grades is reported in ***Table 2***. Although MMC recommends the use of 0.04% Mo as the base case cut off grade, MMC believes

given the style of mineralization geometry of the deposit each cut off grade report in ***Table 2*** has potential for economic extraction.

The entire Mineral Resource is contained within 2 mining licenses, one recently issued and one pending. MMC notes that all of the Measured and Indicated resources and 82.2% of the Inferred resource, at a 0.04% Mo cut off grade are located within the recently issued Zuun Mod Mining License, while 17.8% or 30 Mt is located on a contiguous property south of the Zuun Mod Mining License. An application for a second Mining License for this property is pending awaiting a final decision by the Government of Mongolia on the definition of the boundaries of a water protection area overlapping with the license area. MMC has limited the vertical limit of the report resource to 500 m as a result of the geometry of the mineralisation and potential economic extraction. MMC will review this depth upon completion of the mining studies which are currently underway.

Table 1. Zuun Mod Project – Resource Statement as at June 2011 Reported at Cut Off of 0.04% Mo.

Resource Category	Quantity Mt	Mo %	Contained Mo Metal Mlbs	Cu %	Contained Cu Metal Mlbs
Measured	40	0.056	49.5	0.064	57
Indicated	178	0.057	224	0.07	273.7
M&I	**218**	**0.057**	**273.5**	**0.069**	**330.7**
Inferred	168	0.052	191.8	0.065	240.5

Table 2. Zuun Mod Project – Mineral Resource Estimate

Cut-off Grade Mo%	Resource Category	Quantity Mt	Mo %	Contained Mo Metal Mlbs	Cu %	Contained Cu Metal Mlbs
	Measured	55	0.05	61.1	0.06	73
	Indicated	260	0.05	287	0.065	373.6
0.03%	**M&I**	**315**	**0.05**	**348.1**	**0.064**	**446.6**
	Inferred	335	0.043	318.8	0.061	454.6
	Measured	40	0.056	49.5	0.064	57
	Indicated	178	0.057	224	0.07	273.7
0.04%	**M&I**	**218**	**0.057**	**273.5**	**0.069**	**330.7**
	Inferred	168	0.052	191.8	0.065	240.5
	Measured	25	0.063	34.5	0.068	37.5
	Indicated	105	0.066	152.5	0.074	171
0.05%	**M&I**	**130**	**0.065**	**187**	**0.073**	**208.5**
	Inferred	78	0.06	103.4	0.067	115.5

Resources Estimate Notes:

- *Effective Date: May 2011.*
- *1 tonne = 2204.64 lbs.*
- *Estimates are rounded to appropriate significant figures.*
- *M&I means the sum of Measured and Indicated Resources.*

Project Summary

The Project is located in south-western Mongolia, 180km north of the Chinese border and 215km from the railhead, which is located 20km south of the Nariin Sukhait coal mine. The Project is contained within 2 mining licenses which have a total area of 6,399 Ha.

Exploration work at the Project began in 2002 and 2003 with a joint venture between WMC Resource Project Ltd (WMC) and Gallant Minerals Mongolia Ltd (Gallant). These works identified a porphyry complex which contained significant molybdenum-copper-rhenium (Mo-Cu-Re) mineralization. After acquiring the rights to the Project from Gallant in 2005, Erdene undertook an exploration program that identified key structural features understood to be integral to the concentration of potentially economic Mo, Cu, and Re mineralization.

While exploration to date has identified significant Mo, Cu, and Re mineralization within the license area, the work completed has been primarily focused within the South Corridor, a NE-SW trending structurally controlled zone approximately 3.6 km long by 800 m wide. The remainder of the Zuun Mod porphyry complex has undergone limited exploration consisting of surface surveys and widely spaced drill holes. These programs have identified significant

anomalous mineralization, leading to the interpretation that the Project being considered highly prospective for the additional potentially economic Cu and Mo mineralization. Results from the ongoing surface and sub-surface evaluations of the larger Zuun Mod porphyry complex are expected to generate a number of new drill targets.

While mineralization has been identified throughout the Project, Mineral Resource estimates are reported only for mineral concentrations in the South Corridor area where sufficient data is available to define the geology and mineralization continuity. This area is comprised of three (3) mineralization zones, named Stock work, Racetrack South and Racetrack North, which for the purpose of this Report are collectively called the "South Corridor area". MMC prepared Mineral Resource estimates based on 135 diamond drill holes which have an average depth of 337 m and 2 m length assays of split diamond core.

Data has been reviewed by MMC by visiting a number of sampled locations in the field and evaluating the reported results against the mineralised rock observed. MMC accepts the work completed by Erdene and the previous owners, as meeting acceptable resource evaluation and due diligence standards for international mining ventures under the NI 43-101 Technical Standards.

As discussed in later sections, and to the extent known, MMC believes that the sampling and analysis programs for the exploration activities were generally conducted using standard industry practices, providing generally reasonable results. MMC believes that the resulting data can effectively be used for a Mineral Resource estimate.

The Zuun Mod Project has accumulated an extensive amount of data through exploration, which provide the background for the Mineral Resource estimate and analysis that underpin this report. The recommendations for further development of the Project are primarily concerned with the acquisition of additional data to expand resources and to support preliminary economic assessment and pre-feasibility or feasibility studies.

The drilling completed 2009-2010 (which has resulted in the Mineral Resource update) returned higher average grades for Cu and to a lesser extent Mo. Of particularly note is the area at depth below the south racetrack area. In addition the drilling has resulted in a further refinement of controls of mineralization and confirmation of the classification system utilized.

Potential for increasing of the Mineral Resources are good, with mineralization open to the north and south and also down dip, which requires further drilling to investigate potential. In addition Mineralization extends NW and is undefined by drill holes under the andesite mantle.

Recommendations:

The recommendations provided are based on observations made during the review of the Project and subsequent Mineral Resource estimate.

- Down hole EM should be considered around the high grade Cu intersection recently found in ZMD121 (2010 drilling). From the three nearby lower grade vertical holes the high grade mineralisation appears to be located in a steep structure, which could be missed by vertical holes. If correct, the structure can then be effectively targeted with inclined drill holes. Once it is confirmed that the body is conductive it could be explored laterally by surface EM methods, which will penetrate deeply in the generally resistive rocks.
- There is a relatively unexplored stock work zone sporadically outcropping in the area west of ZMD94 and ZMD95. The outcrop is mostly obscured by transported alluvium in the major north south drainage affecting the area but interesting unmapped stock work and even milled breccias veins. This area needs re-mapping in detail and scout RAB drilling through cover then drilling at depth if mineralization is intersected.
- In-fill drilling is recommended to increase the Mineral Resource confidence categorisation of high grade areas currently defined and further investigate the internal grade variability within the Project. This drilling is estimated to cost approximately USD 830K for the currently defined Resource area.
- Metallurgical Test work- Complete additional metallurgical test work to further define the processing characteristics of the material. USD 20K
- Complete a marketing study to confirm the saleability of the product and likely price forecasts.
- Complete a Preliminary Economic Assessment which will encompass the additional metallurgical test work, marketing study and additional drilling. USD 100K.
- Upon successful outcome of PEA study, complete additional drilling to increase Inferred areas within the proposed pit to Indicated and Measured to enable Reserve estimates to be completed. USD 2.5 M.

2 INTRODUCTION

Runge Asia Limited ("RAL"), trading as Minarco-MineConsult ("MMC"), was requested by Erdene Resource Development Corporation ("Erdene" or the "Company") to complete a Mineral Resource estimate for the Zuun Mod Porphyry Molybdenum-Copper Project (the "Project"). This estimate forms the basis for this Technical Report prepared by MMC for the Project which meets the requirements of Canadian National Instrument 43-101 ("NI 43-101") of the Canadian Securities Administrators. The Qualified Person, as defined by the NI 43-101, responsible for this report is Mr. Philippe Baudry, Operations Manager for MMC.

Erdene, through its wholly owned subsidiary, Anian Resources XXK, holds a 100% interest in the Khuvyn Khar mineral mining license subject to a 1.5% net smelter revenue (NSR) royalty held by Gallant Minerals Ltd (Gallant), from whom the Project was optioned in 2005. Gallant 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.

2.1 TERMS OF REFERENCE

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

- Erdene and the Company refer to Erdene Resource Development Corporation.
- MMC refers to Minarco-MineConsult and its representatives.
- Project refers to the Zuun Mod deposit located in south western Mongolia.
- Molybdenum, Copper and Rhenium grades are described in terms of percentage (%) by mass with tonnage stated in dry metric tonnes.
- Resource definitions are as set forth in the "Canadian Institute of Mining, Metallurgy and Petroleum, CIM Standards on Mineral Resource and Mineral Reserves – Definitions and Guidelines" adopted by CIM Counsel on December 11, 2005.

2.2 SOURCE OF INFORMATION

The primary source documents for this report are:

- AMMTEC, (2008), "Flotation and Comminution Test work on PAH-EG Samples for Erdene Resources Development Corporation Limited", Australian Metallurgical & Mineral Testing Consultants, Report No. A11219, August 2008.
- Knox, R.W., (2008), "Zuun Mod Porphyry Molybdenum-Copper Project Mongolia", Minarco-MineConsult, Independent Technical Report, May 2008.
- Larkin, B.J, (2008), "Geostatistical Study Zuun Mod Molybdenum Deposit Mongolia". GeoCheck Pty Ltd, May 2008.
- Cowan, C and Gillis, M, (2007), "Zuun Mod Exploration Report, Mongolia". Erdene Pty Ltd, internal report, 2007.

2.3 PARTICIPANTS

The Zuun Mod Project was visited by Mr. Philippe Baudry in November, 2008, while Mr. Bob Dennis, Principal Geologist of MMC visited between 17th and 19th May, 2011. The recent visit by Mr. Dennis indicated no mining activates or material change has occurred since the Qualified Person, Mr. Baudry visited in November 2008. As a result MMC regards the site visit by Mr. Baudry to be current. Mr. Jeremy Clark (Qualified Person) prepared this Report who is a Qualified Person under National Instrument 43-101. Mr. Baudry supervised the work of MMC staff and edited all portions of the final report and assumes responsibility for the entire Report..

Other Project participants included:

- Jeremy Clark, Senior Consultant Geologist (Qualified Person), MMC (Beijing),
- Mungunstetseg Sukhochir Consultant geologist, MMC (Mongolia),

Details of the participants' relevant experience are outlined in ***Annexure A***.

2.4 LIMITATIONS AND EXCLUSIONS

This Technical Report has been produced by MMC using information made available to MMC as at the date of this Technical Report and the findings, information and conclusions therein only apply as at this date. MMC has not been

engaged to update its Technical Report in relation to any information that may have been provided or changed subsequent to the date of this Technical Report. MMC only accepts responsibility for the content of this Technical Report in relation to those parts prepared by MMC.

MMC has relied upon other reports, opinions or statements of other qualified persons and other experts, for information concerning relevant issues and factors relevant to this Technical Report. The extent of MMC's reliance and the relevant portions/sections of the Technical Report the subject of this reliance are detailed in **Section 3** below.

The work undertaken for this Technical Report is that required for the preparation of a technical report including reviews of technical information, coupled with such inspections as deemed appropriate by MMC. Inspections were conducted by Mr. Dennis and Mr. Baudry during May, 2011 and 2009 respectively

MMC has also specifically excluded any analysis or opinion of the competitive position of the Project compared with other similar and competing primary molybdenum producers around the world.

2.4.1 Responsibility and Context of this Report

The estimation and reporting of Mineral Resources in this Technical Report complies with the requirements of the Canadian NI 43-101 of the Canadian Securities Administrators. Therefore it is suitable for public reporting.

The information in this Technical Report that relates to Mineral Resources is based on information compiled by Mr Philippe Baudry who is a full time employee of Runge Asia Limited, of which MMC is a trading division, and he is a Member of the Australasian Institute of Geoscientists ("AIG"). Mr Baudry has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration, as well as the work he has undertaken, to qualify as a Qualified Person as defined by NI 43-101

2.4.2 Intellectual Project

All copyright and other intellectual Project rights in this report are owned by and are the Project of MMC.

2.4.3 Mining Factors

The ability of the operator, or any other related business unit, to achieve forward-looking production and economic targets is dependent on numerous factors that are beyond the control of MMC and cannot be fully anticipated by MMC. These factors included site-specific mining and geological conditions, the capabilities of management and employees, availability of funding to properly operate and capitalise the operation, variations in cost elements and market conditions, developing and operating the mine in an efficient manner, etc. Unforeseen changes in legislation and new industry developments could substantially alter the performance of any mining operation.

2.5 CAPABILITY AND INDEPENDENCE

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

All opinions, findings and conclusions expressed in this Technical Report are those of MMC and its specialist advisors as outlined in **Section 1-3.**

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

MMC has been paid, and has agreed to be paid, professional fees based on a fixed fee estimate for its preparation of this Report.

This Technical Report was prepared on behalf of MMC by the signatory to this Technical Report and experiences are set out in ***Annexure A*** to this Technical Report. The specialists who contributed to the findings within this Report have each consented to the matters based on their information in the form and context in which it appears.

3 RELIANCE ON OTHER EXPERTS

All Sections of this report, with the exception of **Section 4**, were prepared using information provided by Erdene and verified by MMC were applicable or based on observations made by MMC during the site visits.

MMC has not conducted land status evaluations, and has relied upon provided by Jayden by the Erdene regarding Project status, legal title, and environmental compliance for the Project. MMC has relied on this information for **Section 4** of this report.

4 PROJECT DESCRIPTION AND LOCATION

The Project is located in Bayankhongor Province, which is approximately 950 km southwest of Ulaanbaatar, Mongolia's capital (**Figure 4-1**). 300 km to the north is the provincial capital of Bayankhongor, while 60 km to the north is the village of Shinejinst. The Project, centred at coordinates 44°00' N : 99°09' E, is approximately 180 km north of the Mongolia-China border. The nearest railhead is located 20 km south of the Nariin Sukhait coal mine, 215 km to the south near the Chinese border.

The Zuun Mod Project consists of a current Mining License referred to as Khuvyn Khar and a pending Mining Licence. The current Mining License (no. MV-016836) has a total area of 6,041 hectares, while the smaller pending Mining Licence has an area of 358 hectares. These are shown graphically in ***Figure 4-2*** and detailed ***Table 4-1***.

Table 4-1 - Exploration License Details

Project Name	Lic.#	Ha.	Date of issue	Current year of issue	Expiry Date	Annual Renewal Fee
Khuvyn Khar	MV-016836	6,041.03	26-May-2011	1st	26-May-2041	US$90,615.45
Khuvyn Khar (2)	Pending	358	n/a	n/a	n/a	US$3,870.00

Note: no annual minimum work commitments

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.

Individual Mining License coordinates are registered with the Office of Geological and Mining Cadaster (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 and are not marked on the ground as survey pegs or boundary trenches.

The Zuun Mod Project is a greenfield site with no previous mine workings. The area of the resource definition drilling, which forms the underlying dataset for this report, is located within the current and pending Mining Licence boundaries, as are the exploration camp and other areas of known mineralization, as illustrated in **Figure 4-2**.

Erdene, through its wholly owned subsidiary, Anian Resources XXK, holds a 100% interest in the Khuvyn Khar mineral Exploration License. The Licence is subject to a 1.5% net smelter revenue (NSR) royalty held by Gallant Minerals Ltd (Gallant), from whom the Project was optioned in 2005. Gallant 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	0.5%	US$3,000,000
US$75,000,000 to $100,000,000	0.5%	US$4,500,000
US$100,000,000 to $150,000,000	0.5%	US$6,000,000
Greater than $US150,000,000	No reduction possible, maintain 1.5% NSR Royalty	

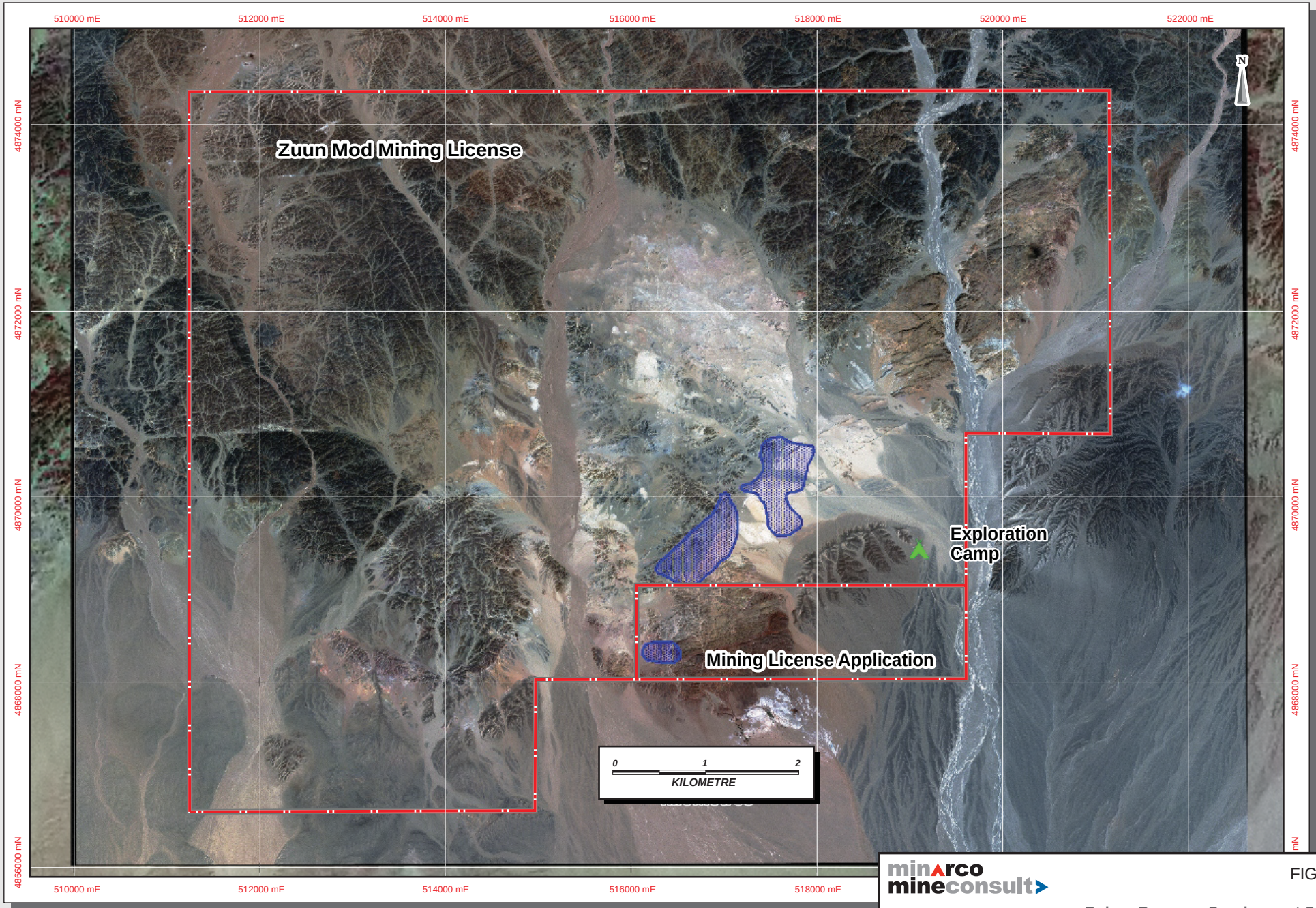
Note: Payment is free and clear of all set-off, deduction or withholding*
NSR means Net Smelter Revenue

Erdene files environmental protection plans annually with the local Soum (county or sub-province district) Governor and posts a bond equal to 50 per cent of the cost of the reclamation plan for work to be carried out during the upcoming year. Erdene completes reclamation of any site disturbance on an ongoing basis and receives Governor approvals annually for work completed to date. To the best of the Erdene's knowledge there are no environmental liabilities to which the Zuun Mod Project is subject.

An environmental baseline study by Ecotrade, a Mongolian environmental company, was carried out in March 2009 as part of Erdene's Licence approval process.

The permits for environmental impact for any additional exploration drilling are valid until the end of 2011.

Figure 4-1- Project location plan



minarco mineconsult

FIGURE 4-2

Erdene Resource Development Corporation

Zuun Mod

Detailed License Location Map

Project No : ADV-MN-00026

5 SITE GEOGRAPHY

The Project can be accessed by plane from Ulaanbaatar to Bayankhongor (the Provincial capital) and then by vehicle 300 km to the south over unmade dirt roads. More often the trip from Ulaanbaatar to the site is made by vehicle which is a two day drive, half over paved highway to Arvaiheer and the remainder over the network of dirt roads which connect communities in rural Mongolia.

The topography of the Project is characterised by low hills of exposed rock and lower plains of scree (rock debris) and silt. There is very little to no soil profile developed, with fresh rock generally occurring from or very near to surface. The elevation of the undulating low hills ranges from 1,400 mRL to 1,300 mRL, with a region of low plain extending southwards from the Project. Vegetation is restricted to sparse grasses, however a few groves of trees are located in the regional of the Project.

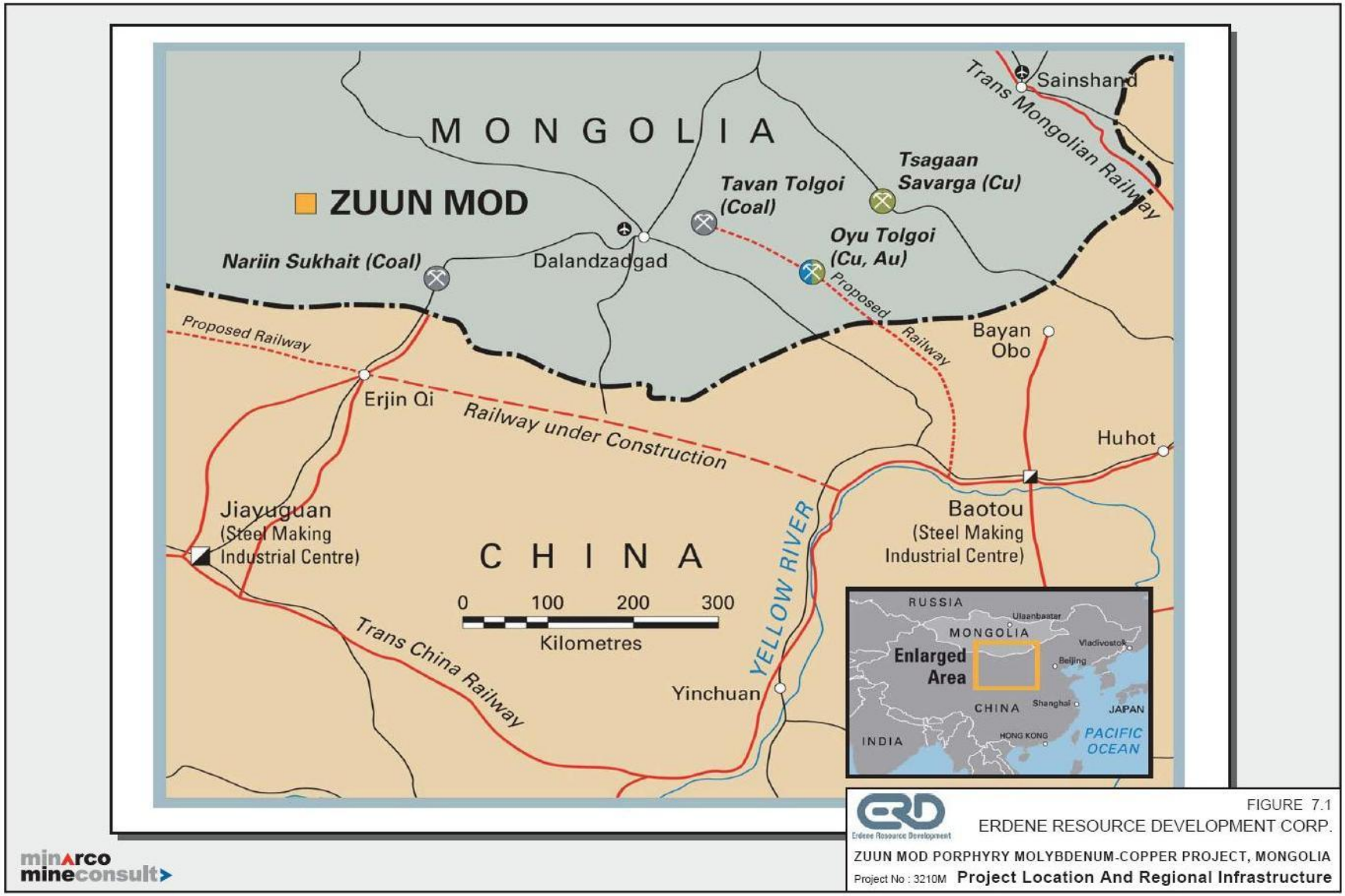
The Mongolian climate is characterized by extreme seasonal variations in temperature (-40°C to +40°C) and has an average of 250 sunny days a year. The country is subject to high wind conditions that alleviate the effects of the summer's heat but can result in extreme wind chill during the winter. Average annual precipitation is less than 100mm, 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.

The Project lies 180 km north of the Mongolia-Chinese border and 215 km from the railhead located 20 km south of the Nariin Sukhait and Ovoot Tolgoi coal deposits. The Chinese recently built this railway to access Mongolia's raw material for their booming steel industry. Jiayuguan, a major steel manufacturing centre, is located 400 km southwest of the railhead. Coking coal from the Nariin Sukhait deposit is currently being trucked 20 km south to the border at Ceke where it is loaded on rail destined for the Chinese market. This is shown in **Figure 5-1**.

In addition to the Nariin Sukhait and Ovoot Tolgoi Projects, there are a number of other coal projects under exploration and development consideration in the vicinity of the Project. These projects have the potential to provide local electrical power generation capability as well as an expanded rail link from the Chinese border to areas north of the Project, significantly expanding on the transportation infrastructure in this area of the South Gobi.

The development of mineral resources within the Project area will require establishing local power, water and transportation infrastructure. However this situation is similar to other major resource developments in southern Mongolia including the world class Oyu Tolgoi Project being developed by Rio Tinto and Ivanhoe.

Figure 5-1 - - Project location and regional infrastructure



6 HISTORY

The Project was originally mapped by the Mongolian Government at a scale of 1:200,000 with a limited amount of prospecting and exploration conducted at the same time. The region was explored by Harrods Minerals Mongolia Ltd (HMML) in 1998 for gold (Au) mineralization, however the licence was later relinquished.

In March 2002, HMML reacquired the Khuvyn Khar License under an agreement between HMML and WMC. 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, being 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, details of which are discussed in ***Section 4***.

Exploration work managed by Gallant - WMC is summarized chronologically in ***Table 6-1***, while the significant intersections from the drilling program are shown in ***Table 6-2.***

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 in excess of 3km 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^2. Soil and rock chip sampling	Additional occurrences of secondary Cu, particularly within the south-central part of the Project referred to as Baga Od (Stock work zone). Definition of a general circular pattern about 1 to 1.5km 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.
February 2003 Gallant - WMC	Diamond drilling	13 hole, widely spaced (500m to ~1km) totalling 3,141.6m. Drilling identified two areas of porphyry-type Cu-Mo mineralization 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.

Table 6-2 - WMC/ Gallant drilling (2003) Significant Intersections

Hole_ID	From (m)	To (m)	Length (m)	Mo %	Cu %
KKMD-03	88	326	238	0.070	
Including	219	311	92	0.102	
KKMD-07	107	145	38	0.042	
Including	125	145	20	0.060	
KKMD-08	88	279	191	0.053	
Including	137	277	140	0.060	
KKMD-09	70	102	32	0.043	
KKMD-04	108	128	20		0.170
KKMD-05	97	231	134		0.110
Including	213	225	12		0.300
KKMD-13	26	198	172		0.150
Including	86	118	32		0.220

Source: 2007 Exploration Report

In 2007, Erdene commenced a systematic resource delineation program designed to define Mineral Resource for the South Corridor Deposit compliant with NI 43-101, 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 a number of infill drill holes in addition to extending existing holes to define mineralization at depth. During 2010 a total of 5 infill and 3 exploration holes were completed while 8 holes were deepened, while 2 drill holes were deepened in 2009.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 GEOLOGIC SETTING

The Project occurs within the Transaltay Island Arc Terrain (**Figure 7-1**) bound by large regional scale faults, namely the Bulgan (north), Servei (south) and Aj Bogd (southwest) faults. The Terrain is one of a number of tectonic terrains that extend across southern Mongolia which were affected by subduction-related magmatism in Devonian through Carboniferous time (**Figure 7-2**). Numerous porphyry Cu systems are known to occur within the south Mongolian island arc terrains including Ivanhoe Mines Oyu Tolgoi Cu-Au deposit to the east and other smaller porphyry Cu-Au-Mo deposits and occurrences in the South Gobi region (e.g. Tsagaan Survarga, Tost, Tsakhir).

The Project occurs along a large-scale structural break as seen on regional RTP magnetic surveys and appears as a moderate to high magnetic along the trace of a major northwest trending regional structure. It is postulated that dextral strike-slip movement along this structure produced a dilatational structure and crustal weakness that was subsequently infilled during the Late Paleozoic to Early Mesozoic by the porphyry complex which hosts the mineralization within the Project.

Within the Zuun Mod porphyry complex, three dominant structure systems are identified; NE-SW, NW-SE, and E-W (**Figure 7-4**). The NE and NW systems are interpreted to be conjugate sets likely reflecting near N-S compression related to arc subduction. The E-W system appears to be later and controlled the emplacement of dykes which resulted in an intense localized superimposed fracture-cleavage. It is apparent from the preferred NE and NW orientation of mineralised intrusives, quartz zones and porphyry-related alteration zones, that mineralised fluids were focused primarily within these structural corridors.

The currently defined South Corridor area mineralization is contained within an area that represents approximately 10 per cent of the Zuun Mod porphyry system.

The N-E trending South Corridor area extends over a distance of 3.6 km and contains three target areas identified by Erdene. These include the Stock work and Racetrack zones, located S to N along the NE trending South Corridor. The Racetrack zone is located in the central portion of the South Corridor and named for a series of massive to vuggy quartz ridges up to 75m in width which collectively form a circular or ring pattern (racetrack), 400m in diameter. Erdene has interpreted this circular structure to be part of a sub-vertical late stage weakly mineralised intrusive that separated the Racetrack zone into two areas, Racetrack North and Racetrack South. The MMC geological model has interpreted this intrusive structure as waste i.e. has a hard boundary with zero grades.

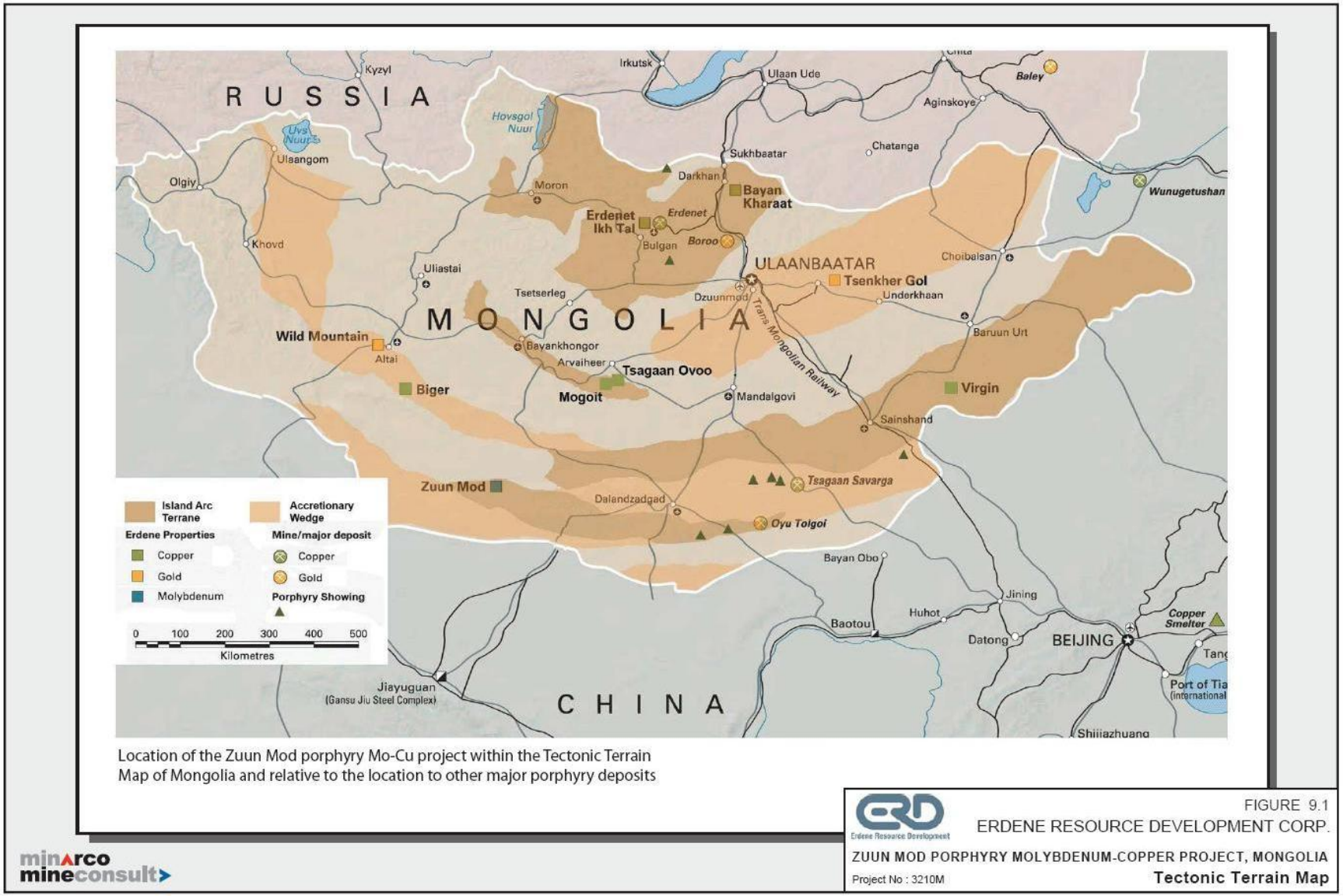
Erdene identified several zones of significant Mo mineralization within the South Corridor (for preliminary evaluation purposes these zones were defined by Erdene as having a minimum of ≥0.04%Mo over ≥50m). These zones included the Racetrack South (RTS) and the Racetrack North (RTN) zones, separated by the quartz ring dyke and the smaller Stock work zone to the southwest. A summary of mineralization characteristics of these zone, based on drilling results up to and including hole ZMD-46, is shown in **Table 7-1**

Table 7-1 – South Corridor Mineralization Characteristics

Zone	Rock Type	Length (km)	Width (m)	Avg Depth (m)	Width	High Grade Interval >0. 1% Mo	*Mineralization*
RTN	Granodiorite	1.1	300-500	266	169	14-36m	*Open at depth, more variability than RTS. Mo associated with phyllic and K alteration and Stock work & sheeted quartz veins. No quartz monzonite*
RTS	Quartz Monzonite	1.1	400	341	227	10-34m	*Open at depth, least variable. Mo associated with K alteration and Stock work & sheeted quartz veins*
Stock work	Granodiorite and Monzonite	0.5	300	300	115	92m	*Most variable, intense quartz stockwork & sheeted vein systems*

Note: Based on exploration to ZMD 46.

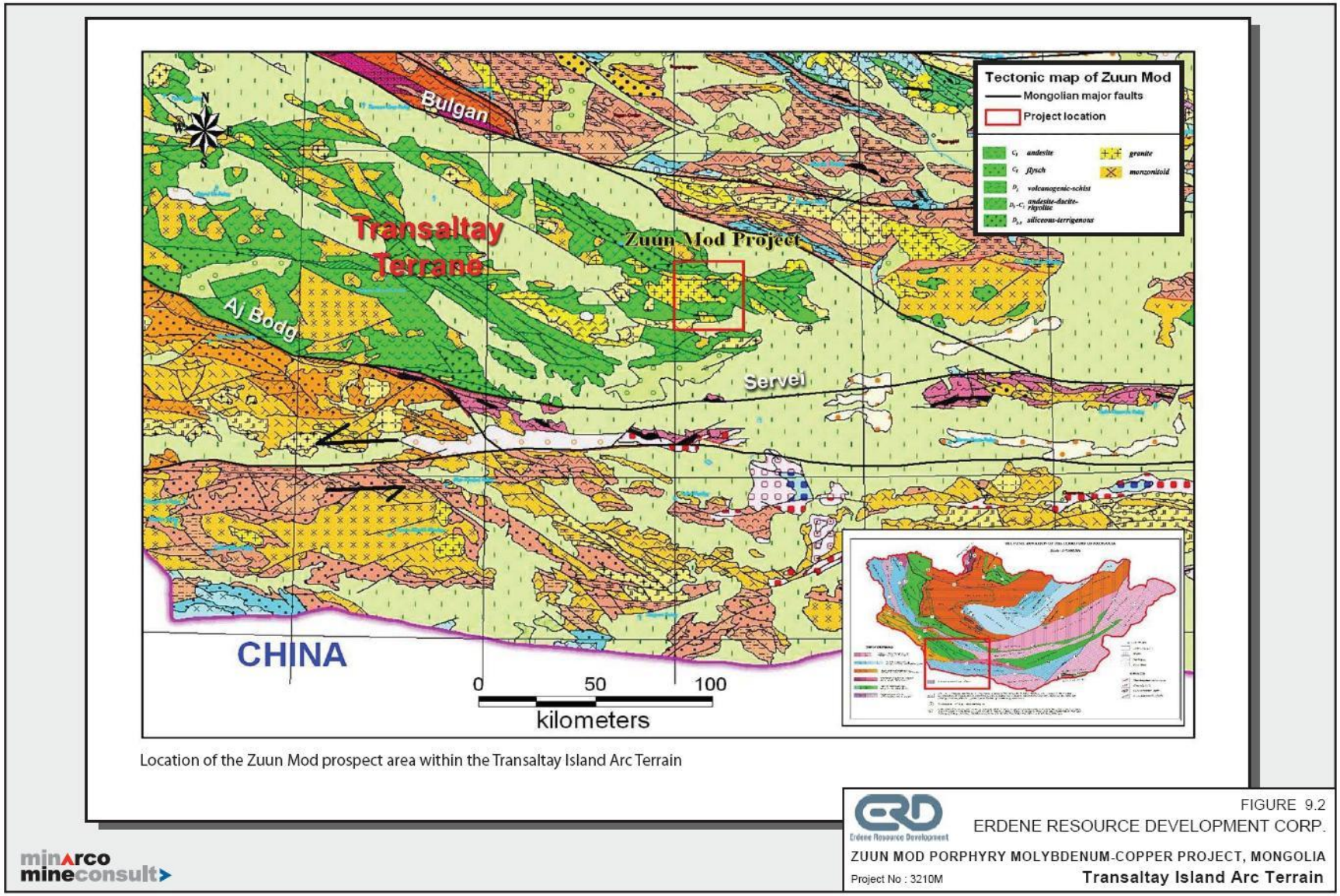
Figure 7-1 Tectonic Terrain Map



Location of the Zuun Mod porphyry Mo-Cu project within the Tectonic Terrain Map of Mongolia and relative to the location to other major porphyry deposits

FIGURE 9.1
ERDENE RESOURCE DEVELOPMENT CORP.
ZUUN MOD PORPHYRY MOLYBDENUM-COPPER PROJECT, MONGOLIA
Project No : 3210M
Tectonic Terrain Map

Figure 7-2– Transaltay Island Arc Terrain



7.2 RACETRACK NORTH ZONE

The granodiorite in the north-eastern half of the RTN zone is frequently cut by dykes ranging from massive quartz to dacite porphyry. Alteration and mineralization at depth in the RTN zone is predominantly contained within stockwork and sheeted quartz veins hosted within phyllic and potassic altered granodiorite. Fine to coarse disseminations of molybdenite also occur within the matrix of strong potassic altered granodiorite. The down hole potassic alteration commonly appears as K-feldspar selvages attendant to quartz ± molybdenite ± chalcopyrite sheeted and stockwork vein sets. The fracture-controlled potassic alteration locally crosscuts earlier pervasive phyllic alteration and likely indicates the influence of multiple intrusive units in the RTN (and likely across the Zuun Mod porphyry complex).

7.3 RACETRACK SOUTH ZONE

The RTS zone is predominately 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 mineralization at depth are predominantly contained within stockwork and sheeted quartz veins hosted within potassic altered quartz monzonite and lesser syenite. Potassic altered rocks are typically dark pink to red in colour, resultant from the replacement of calcic feldspars (i.e. plagioclase) with potassium feldspar. Rocks affected by potassic alteration locally contain disseminated, fine to coarse-grained clots of secondary biotite and occasionally magnetite overgrowths on mafic phenocrysts.

Molybdenite also occurs as fine to coarse grained disseminations that are typically intergrown with mafic phenocrysts in the alkaline units and also within the andesite mantle units that comprise the northern border of the RTS zone. The MMC geological model has interpreted the andesite as waste i.e. with zero grades

7.3.1 Stock work Zone

The Stock work zone is predominately 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 mineralization occurs within quartz stockwork veins and as replacement of mafic minerals in intensely altered quartz monzonite and granodiorite. Quartz-pyrite stockwork veining (+/- molybdenite and chalcopyrite) is widespread, particularly in Gallant/WMC drill hole KKMD-03 which intersected 238m of 0.07% Mo including 92m of 0.1% Mo and 0.09% Cu.

Erdene drilled a number of drill holes in the area of KKMD-03. While some of these holes returned significant Mo and Cu mineralization, none returned the width and grade of mineralization intersected in KKMD-03.

7.4 MINERALIZATION

7.4.1 Molybdenum

Mo mineralization within the Project occurs as predominately molybdenite (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 characterized by a well-defined potassic alteration halo (or selvage) which may extend up to several centimetres from the vein wall (**Figure 7-6**). Where stockwork and sheeted quartz vein densities are high, the potassic vein selvages coalesce to produce pervasive potassic-altered rock. The molybdenite mineralization 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 7-6**). Individual quartz veins range from <0.5cm (most common) to <3cm (rare), however the amount of molybdenite is not dependent upon vein thickness. The best mineralised zones are characterized by a dense matrix of quartz stockwork or sheeted quartz veins and pervasive potassic alteration manifest as K-feldspar and 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 mineralization is dominated by irregular stockwork with molybdenite occurring on the vein margins or within the K feldspar altered halo surrounding the veins. The South Racetrack area is dominated by sheeted veins spaced 5-30cm 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 mineralization can be found.

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

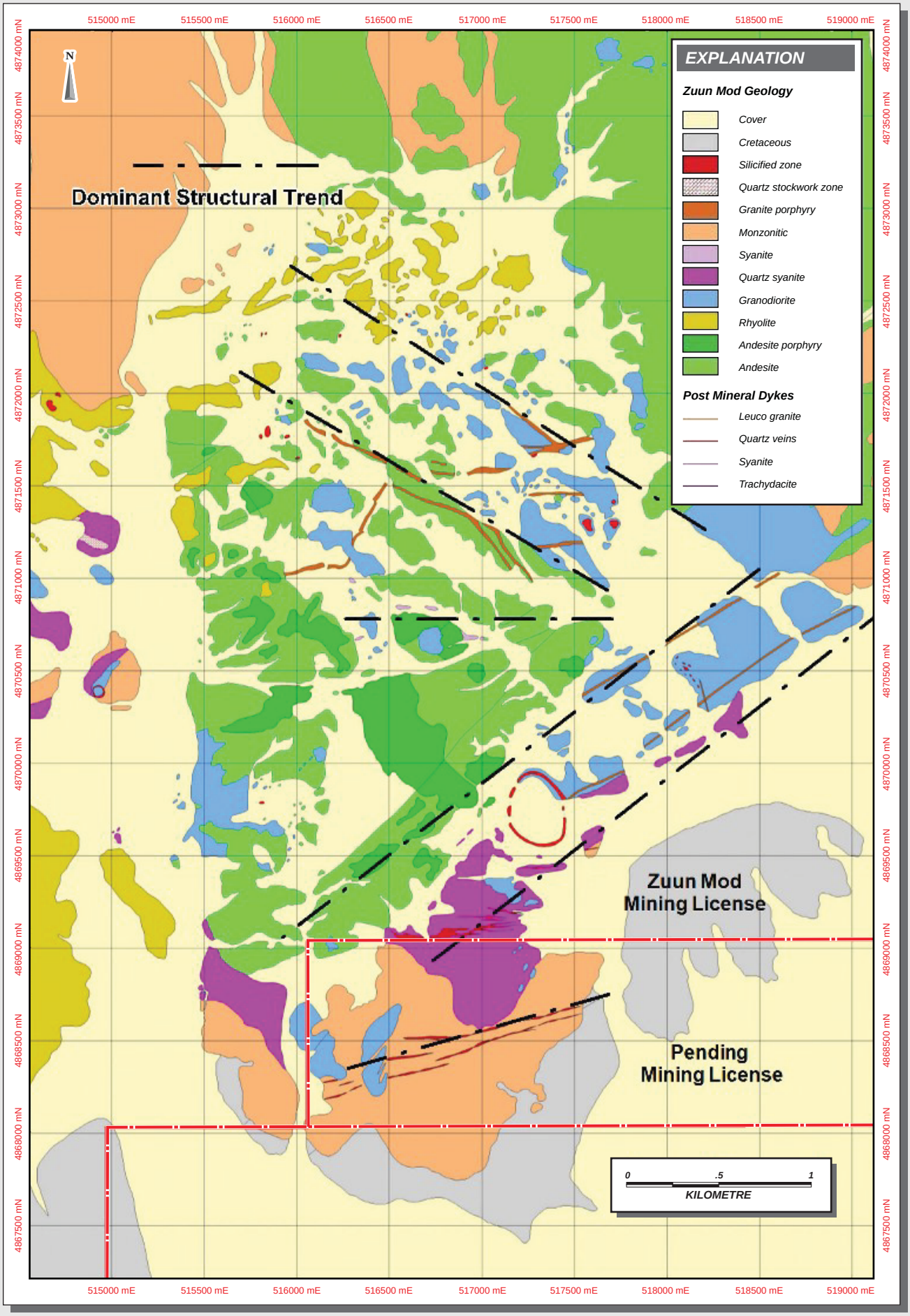


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FIGURE 7-3

Erdene Resource Development Corporation

Zuun Mod

Geology Map

Project No : ADV-MN-00026

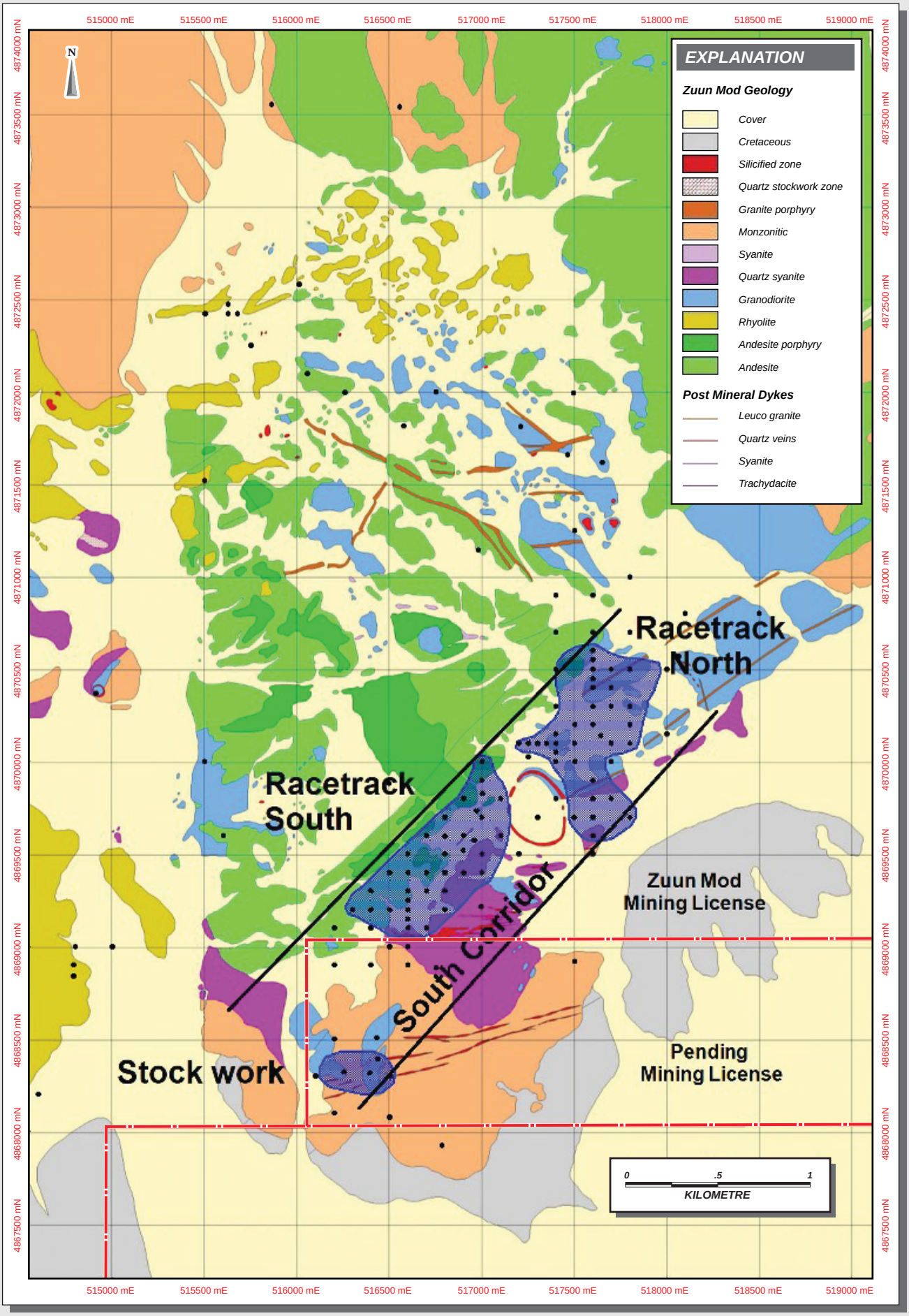

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FIGURE 7-4

Erdene Resource Development Corporation

Zuun Mod

Zuun Mod Mineralization Map

Project No : ADV-MN-00026

7.4.2 Copper

Cu mineralization within the Project is typically found associated with Mo mineralization within the South Corridor mineralised zones and averages approximately 680 ppm (0.068%) Cu within zones of ≥0.04% Mo.

Chalcopyrite ($CuFeS_2$) is the predominant Cu mineral and occurs as fine to coarse grained disseminations that generally overprint and partly replace mafic minerals within the intrusive, particularly secondary magnetite (Fe_3O_4) and biotite ($K(Mg, Fe)_3AlSi_3O_{10}(F, OH)_2$). 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 veinlets infill with pyrite, and as coarse grained infill within angular-shaped open spaces and vughs (within massive quartz veins).

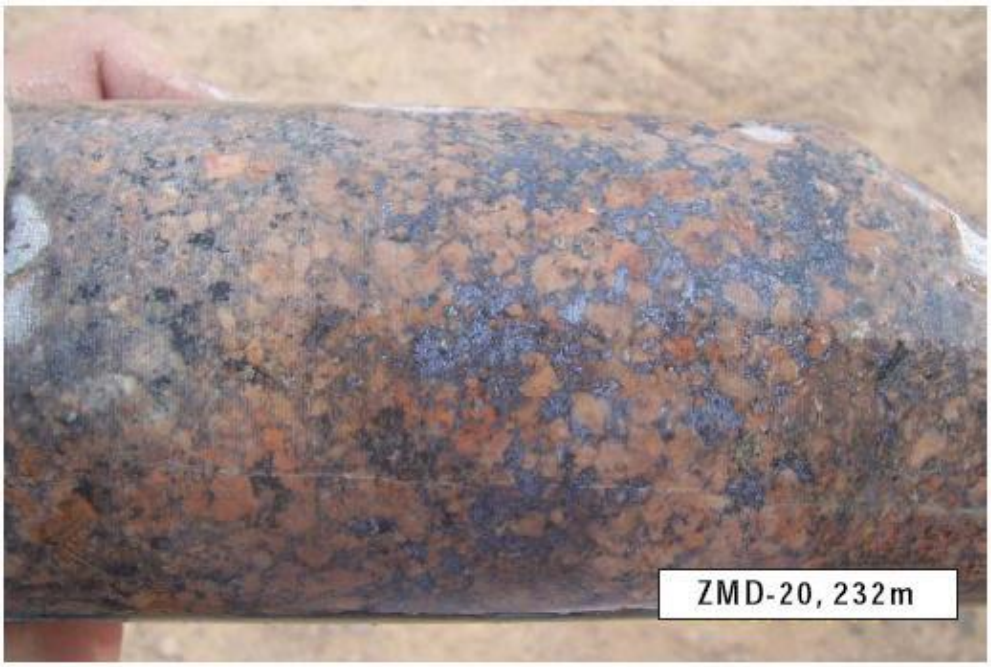
Surface showings of Cu are commonly seen as hydrous Cu carbonates and silicates, namely malachite ($Cu_2CO_3(OH)_2$) and chrysocolla ($(Cu , Al)_2H_2Si_2O_5(OH)_4 \cdot nH_2O$), respectively. There is a notable increase in the occurrence of hydrous Cu minerals in the Stock work zone in the Southern Corridor.

7.4.3 Rhenium

Commonly within porphyry systems Re occurs in molybdenite (MoS_2) as a substitute for Mo. In effect, all of 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 0.29 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 7.6 – Mo Mineralization

Vein hosted molybdenum mineralization associated with quartz stockwork veins and intense potassic alteration



Disseminated molybdenum mineralization (replacing mafic minerals) associated with strong potassic alteration

FIGURE 11.1
ERDENE RESOURCE DEVELOPMENT CORP.
ZUUN MOD PORPHYRY MOLYBDENUM-COPPER PROJECT, MONGOLIA
Project No : 3210M
Molybdenum Mineralisation

8 DEPOSIT TYPES

The style of Mo-Cu mineralization encountered within the Project closely resembles the large, but lower grade porphyry Mo deposits of British Columbia and Southeast Alaska. These are often referred to as British Columbia or BC-Type Mo deposits with the Endako and Quartz Hill deposits as typical examples. They are distinguished from the generally higher grade Climax Type Porphyry Mo systems by the absence of high silica intrusives, association with more batholithic settings, higher associated Cu contents, and lower contents of fluorine and griesen. Petrographic examination of samples from KKMD-03 indicate that fluorite is much more abundant at Zuun Mod than originally thought (up to 5-14% was reported for some thin sections) and as a result leads to the interpretation that the Zuun Mod occurrence represents a transitional style of porphyry Mo deposit.

The type and styles of alteration and mineralization within Project are consistent with many characteristics documented from other porphyry-type deposits within Mongolia and also worldwide. Porphyry type mineralization is usually accompanied by a prograde alteration assemblage characterized 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 mineralization and in some deposits plays host to the highest grades. Both of these alteration types are ubiquitous within Mo-Cu-Re mineralised zones within the Project.

The South Corridor Deposit is of similar size and average grade to other relatively large deposits worldwide. Comparative Mo deposits are shown in **Table 8-1**.

Table 8-1 - Comparative Mo Deposits

Deposit	Cut-off Mo%	Mineral Resource				Ore Reserves	
		Inferred		Indicated and Measured		Probable and Proven	
		Mt	Mo%	Mt	Mo%	Mt	Mo%
Endako – Thompson Creek Metals Company Inc.	0.03	36.3	0.043	331.2	0.051	276	0.051
Spinifex Ridge – Moly Mines Limited	0.05	35.5	0.058	95.5	0.06	450.8	0.048
Ruby Creek – Adanac Moly Corp.	0.03	67.0	0.040	293.7	0.053		
Mount Hope – General Moly	n/a					965.9	0.068

Source: 2007 Exploration Report and MMC estimates 2008 for South Corridor Deposit
Notes: Increasing geological confidence left to right.
Mo% is average grades for each cut-off grade

9 EXPLORATION

Erdene completed exploration works 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 licenses, concluding in 2009 and 2011. The results of the drilling program are summarized in **Section10**.

9.1 SURVEY CONTROL

A differential GPS survey grid was established over the exploration area, starting at 200m spacing and expanding to the current 100m spacing over an area in excess of 70 sq km 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 WMC 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.

9.2 INDUCED POLARISATION (IP)

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 50m intervals on line spacing of 250m over an area of 4km 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 200m intervals for a total of 86.8 line km. In 2008, a pole –dipole survey was completed on 250m 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 250m spaced lines.

This geophysical survey resulted in the improved 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 stock work quartz veins appear, respectively, 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.

9.3 GROUND MAGNETICS

Detailed ground magnetic surveys at 100m line spacing and 25 m stations have been completed over the entire Zuun Mod porphyry complex, including the area of the South Corridor Deposit. Results provided resolution of regional and prospect scale structures and help to differentiate lithologic units as a function of variable magnetic response. The alkaline units comprising the RTS Zone appear as a northeast trending zone of relatively high magnetic response, in contrast to the relatively lower magnetic response from the RTN 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 relative low to moderate magnetic zone.

9.4 GEOCHEMICAL SURVEYS

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

Erdene carried out an extensive soil geochemical survey, 2100 samples at 100 x 100m spacing, over a 6 x 5.5km area in 2007 and 2008 as part of a program designed to improve interpretation of the characteristics and distribution of mineralization within the South Corridor and surrounding area. In addition, over 550 rock chip samples were collected on 100 x 200m grid centres within the entire Zuun Mod porphyry complex. This program identified broad zones of anomalous molybdenum and copper mineralization in addition to precious metal targets.

Target areas identified include the West Corridor target which lies on the western side of the Zuun Mod porphyry complex and is a 3 km long zone. Significant copper, molybdenum and gold in soil anomalies are coincident with a well-defined high induced polarization and dipole-dipole chargeability anomaly (Figure 9.2). Another significant target (North Corridor) in located in the northern portion of the Zuun Mod porphyry complex where a strong surface copper geochemical anomaly was identified measures approximately 1.0 by 1.7 kms and averages 246 ppm copper in soil with values up to 3040 ppm Cu (Figure 9.2). Exploration drilling by WMC/Gallant included two holes located on the periphery and angled away from the North Corridor copper anomaly. The two drill holes included broad copper zones averaged 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 mineralized zones within the Zuun Mod porphyry complex.

10 DRILLING

Following 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 mineralization.

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 progressed 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. Phase III was completed in October 2008 and consisted of an additional 28 drill holes (ZMD 82 to 109).

In 2009-2010 Erdene completed a number infill holes, in addition to extending existing holes to define mineralization at depth. During 2010 Erdene completed a total of 5 infill and 3 exploration holes, while 8 holes were deepened. In 2009 2 holes were deepened with no additional holes completed.

The South Corridor geological model area included 128 of the total 135 boreholes competed within the Project. The modeled area drilling totaled 43,808 m with an average depth of 337 m and a maximum depth of 851 m. A summary of drilling is shown in **Table 10-1,** while the locations are shown graphically in **Figure 10-1.**

Table 10-1 –Drill hole Summary

Area Model (South Corridor)	Drill holes Number	Total (m)	Hole Depth Avg (m)	Max (m)	Angle Holes Number
Pre-Erdene	11	2,533	230	326	2
Erdene to December 2007	77	25,029	325	526	1
Erdene 2008	28	8,629	308	402	0
Erdene 2009-2010	12	7,617*	447	851	0
Model Sub Tot	**128**	**43,808**	**337**	**851**	**3**
Ex Model Sub Tot	7	1,767	252	349	1
Zuun Mod Total	**135**	**45,575**			

*Note: * includes the extension of 10 historical holes*

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 HQ diameter core was utilized useless reduction to NQ was necessary due to ground conditions. With the exception of ZMD-02, all holes were vertical with down-hole surveys were completed for all holes.

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

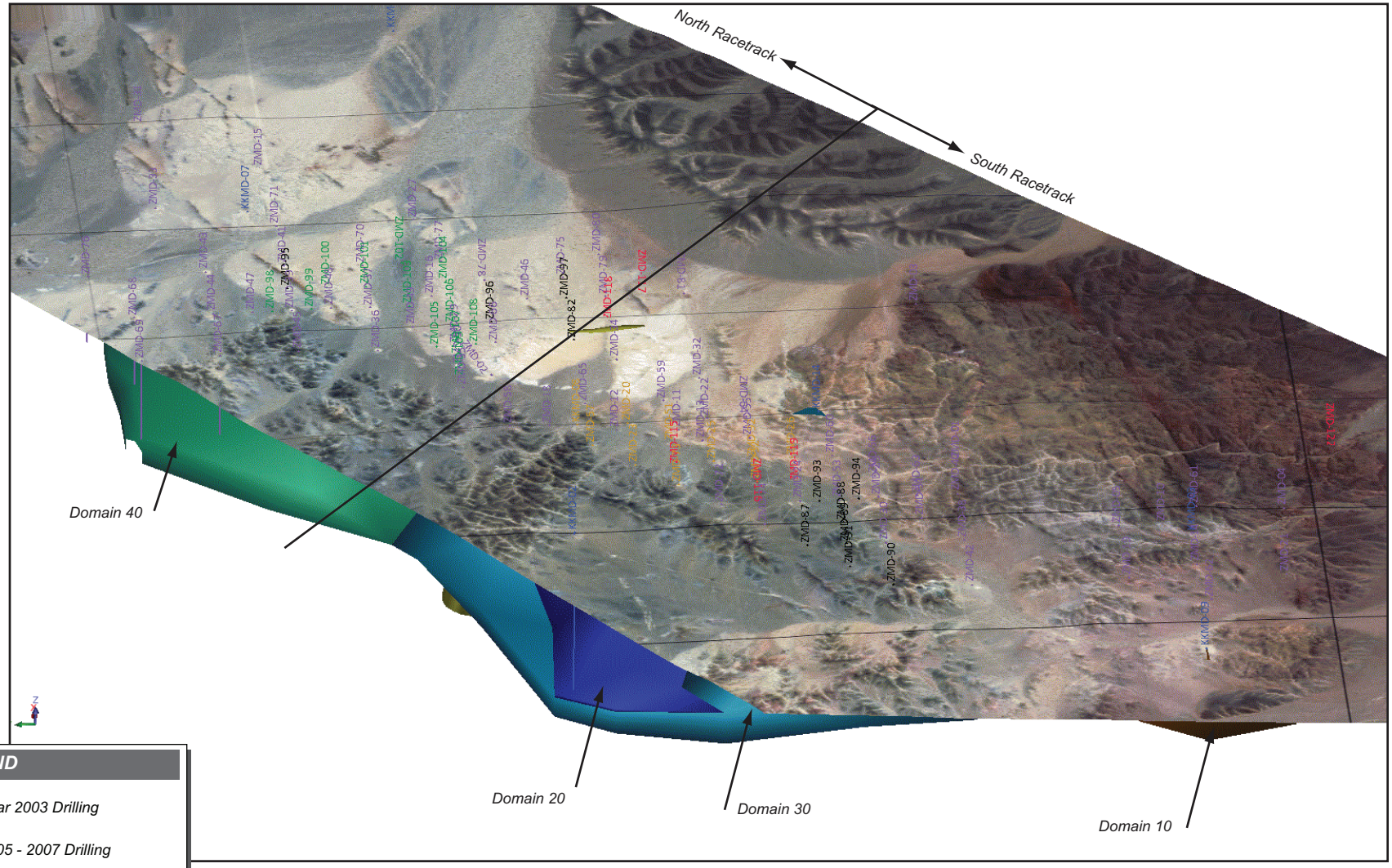


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FIGURE 10-1

Erdene Resource Development Corporation

Zuun Mod

Resource Drilling Generations

Project No : ADV-MN-00026

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

Sampling methods for the progressive exploration drilling programs are shown in **Table 11-1**, while the locations of drill holes are shown graphically in **Figure 10-1**.

Table 11-1 – Drill hole Sampling

Exploration	Drilling Method	Intervals (m)	Photo	RQD	Sample	*Comments*
WMC	RC	2	n/a	n/a	Cuttings split	no selective sampling
WMC	Diamond	2	Yes	Yes	Saw split	no selective sampling
Erdene	Diamond	2	Yes	Yes	Saw split	no selective sampling

The review of drilling, sampling, sample preparation and analytical procedures by MMC indicates standard industry practices were utilized, detailed of which are given below.

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. As a result no selective sampling was undertaken and all samples were 2 m in length.

All samples were half cored using a core saw with drill cuttings and core 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 sample preparation for all programs was completed at SGS in Ulaanbaatar, however analytical processing was completed at a variety of laboratories, as shown in **Table 11-.** Details of the sample preparation and analytical processing are given below.

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

Table 11-2 Sample Preparation and Analysis Summary

Exploration	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 122	SGS Ulaanbaatar	Pulp	SGS Ulaanbaatar	Mo, Cu

11.1 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 (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 insertion of 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 from the other half of the core, with the interval designated by the supervising geologist.

11.2 ERDENE DRILLING (2005-2010)

For the ZMD Holes 1 to 17, all core was washed after cutting 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 (750ppm) and low (350ppm) Mo standards were inserted at site into each sample batch. Additionally, a laboratory duplicate was prepared for every 10th 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

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 were included (no Cu standards) 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 include the insertion of one blank and one Mo analytical standard. Again, a laboratory duplicate was prepared for every 10th core sample and stored for possible check assaying at an outside independent laboratory. Samples were jaw crushed to 85% passing 3.35mm, a split taken using a rotary device (⩽500g) which was then pulverised to 90% passing 75µm. A 50g 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 1ppm 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 10ppm for Mo and Cu.

12 DATA VERIFICATION

12.1 ANALYSIS OF QUALITY CONTROL DATA

As previously noted, the quality control measures for the progressive exploration programs included;

- WMC - Data quality was monitored by insertion of blanks, standards and duplicates.
- WMC - 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.

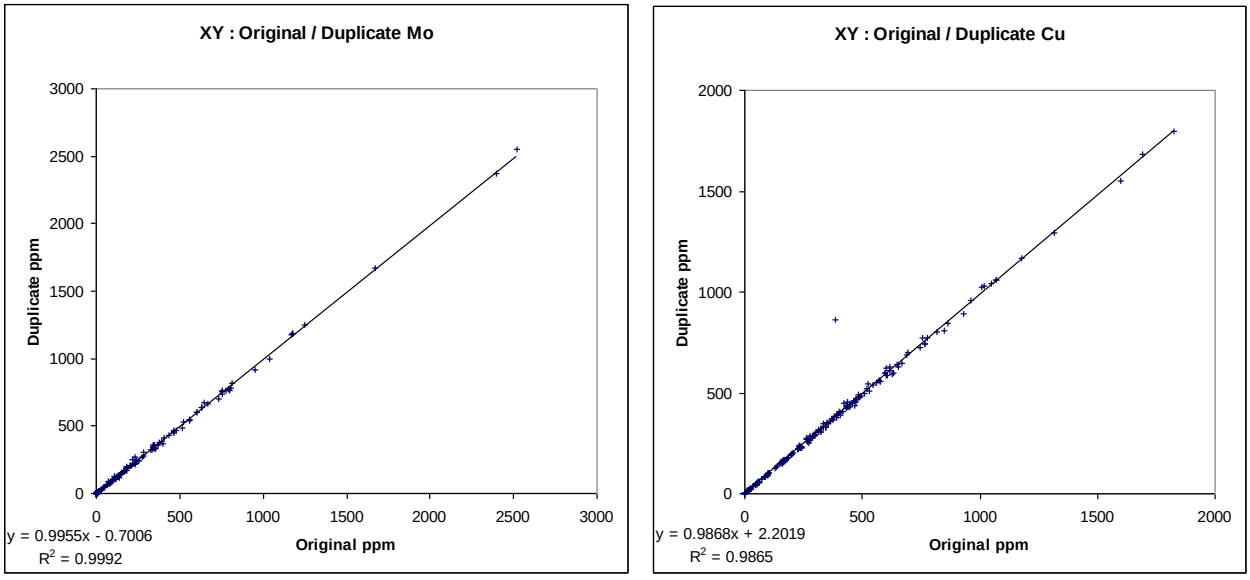
12.1.1 2007-2008 Drilling

External duplicates, Standard Reference material and Blanks were use analysed as part of the routine QAQC program during the drilling completed by Erdene in 2007-2008. These are outlined below.

External Duplicates

All grade divisions indicate excellent repeatability for Mo as seen in the plots for site duplicates in **Figure 11-1**, while Cu duplicates also show very good repeatability. There was only one Cu duplicate analysed which resulted in a significantly higher value than the original.

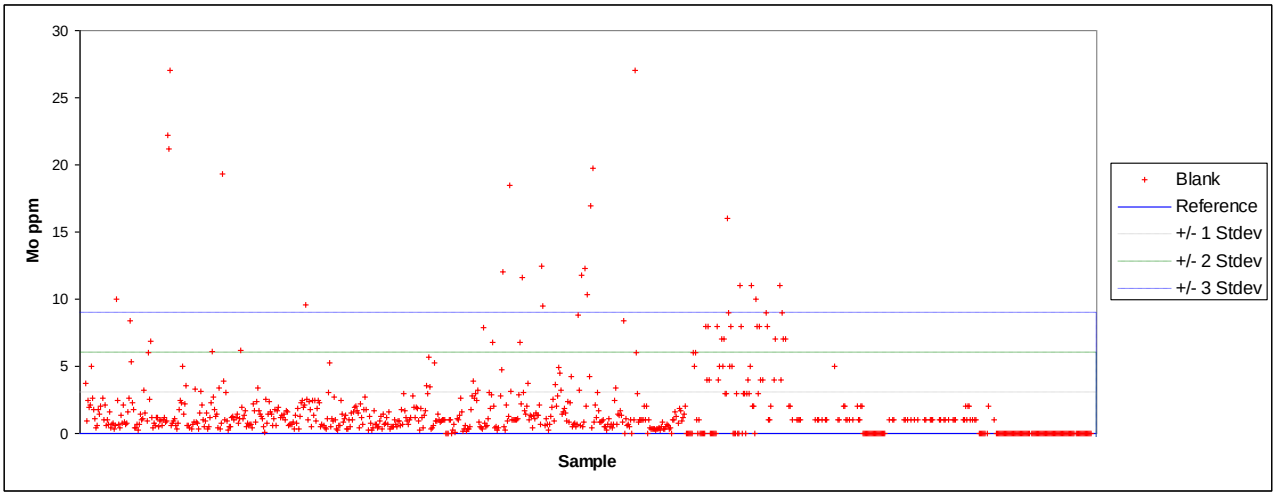
Figure 12-1 - Scatter plots of original samples vs. duplicate samples for Mo (left) and Cu (right)



Blanks

Results for blank data indicate acceptable quality in sample preparation at the laboratories. Of the 761 blanks analysed, the maximum value detected was 27ppm of Mo, while forty-six samples exceeded two standard deviations of which 22 which exceeded three standard deviations, as shown in **Figure 11-2**.

Figure 12-2 - Plot of Blanks



Standard Reference Material

Two standards were used (OC-43 and OC-48) during the Erdene drilling campaigns. 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 name, however these are immaterial to global resource and as a result are ignored for the purpose of the review. The results of the standards are presented in **Figure 12-3** and **Figure 12-4.**

Figure 12-3 - Plot of OC-43 Standards

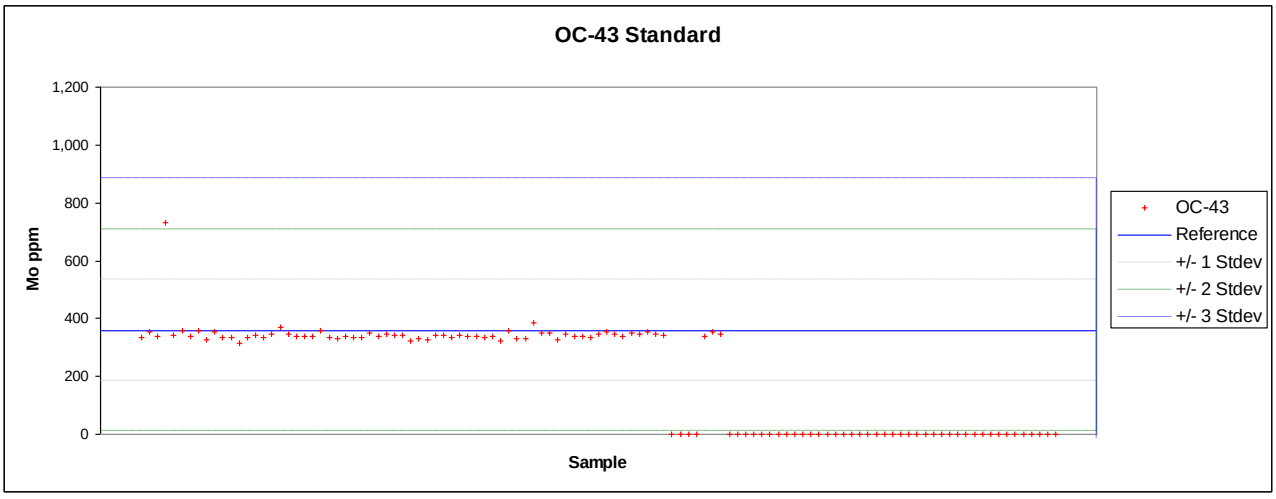
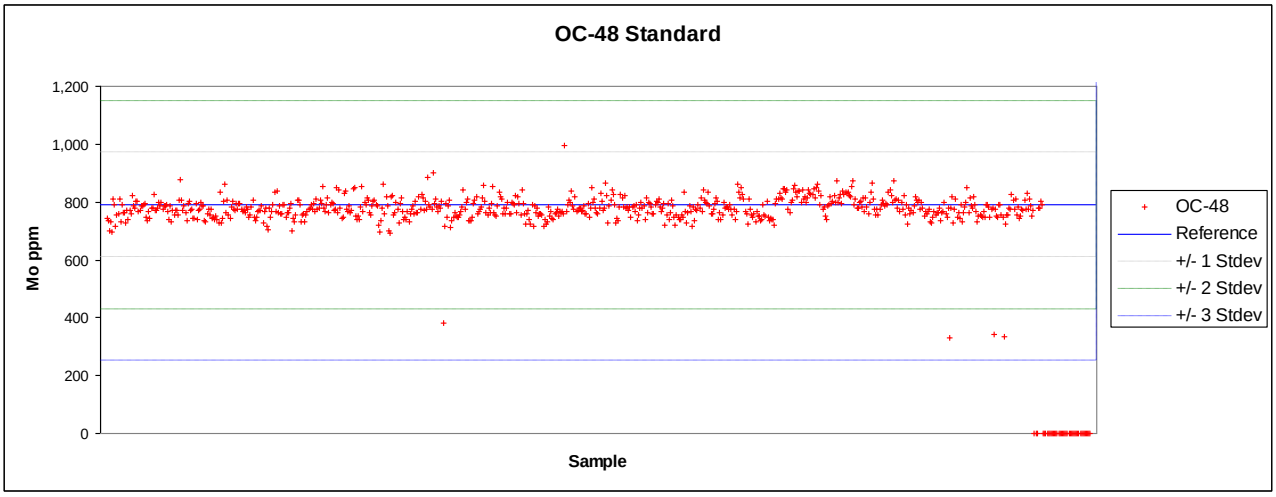


Figure 12-4 - Plot of OC-48 Standards



12.1.2 2009-2010 Drilling

External duplicates, Standard Reference material and Blanks were use analysed as part of the routine QAQC program during the drilling completed by Erdene in 2009-2010. These are outlined below.

External Duplicates

The external duplicate assays completed at Analabs indicates a potential low bias for the primary Cu grade for the low grade samples, while a good correlation is evident for the Mo assays(**Figure 11-5**). The magnitude of potential bias increases as the grade decreases, however the majority of duplicate samples are above 500 which tend to have a good correlation (**Figure 11-6**). Given the cut off grades used to report the Mineral Resource and the low number of samples below 500ppm, MMC considers the potential bias to be immaterial to the current resource, however should be investigated in further drilling programs.

Figure 12-5 Mo Duplicates Vs Original Samples

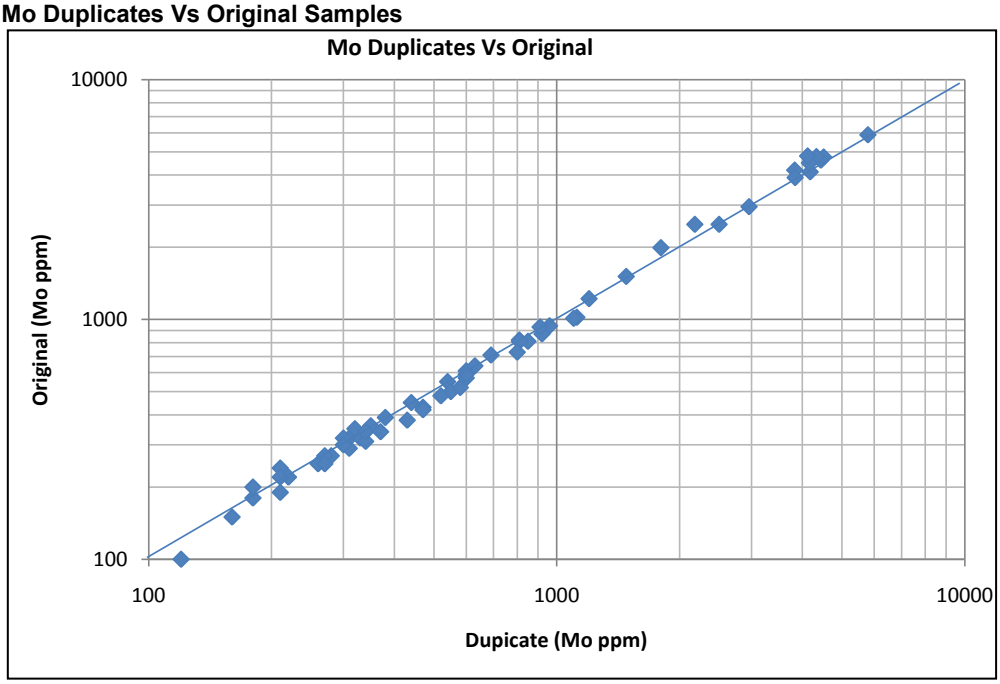
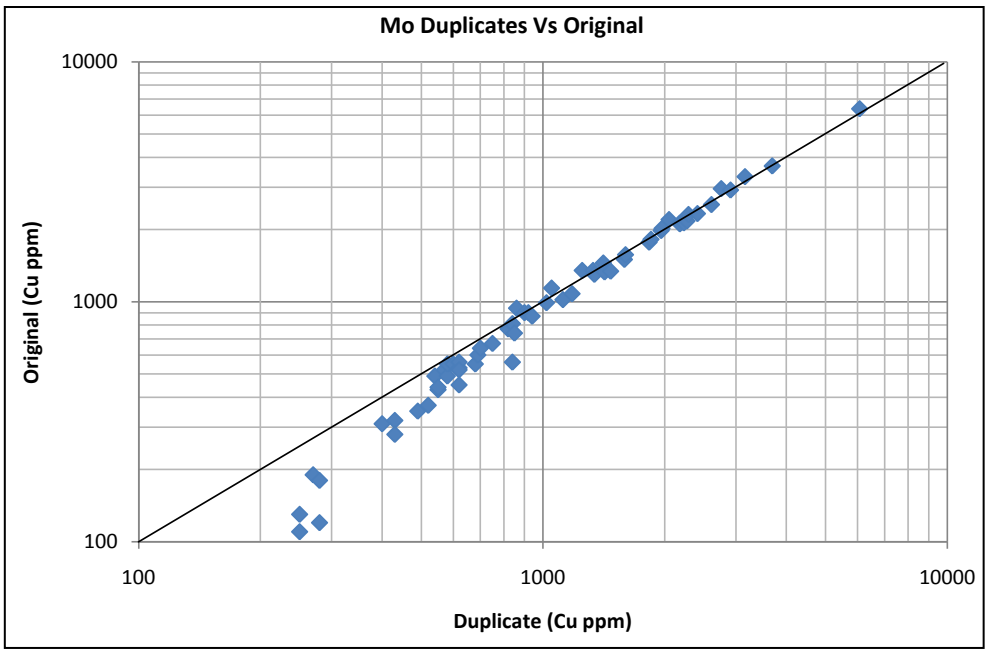


Figure 12-6. Cu Duplicates Vs Original Samples



Blanks

All blank samples returned assays below detection limit, indicating no contamination was occurring during sample preparation.

Standard Reference Material

Two standards were used (OC-43 and OC-48) during the campaign. The results 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 (**Figure 11-7** and **Figure 11-8** respectively). 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.

Figure 12-7. Standard OC-43.

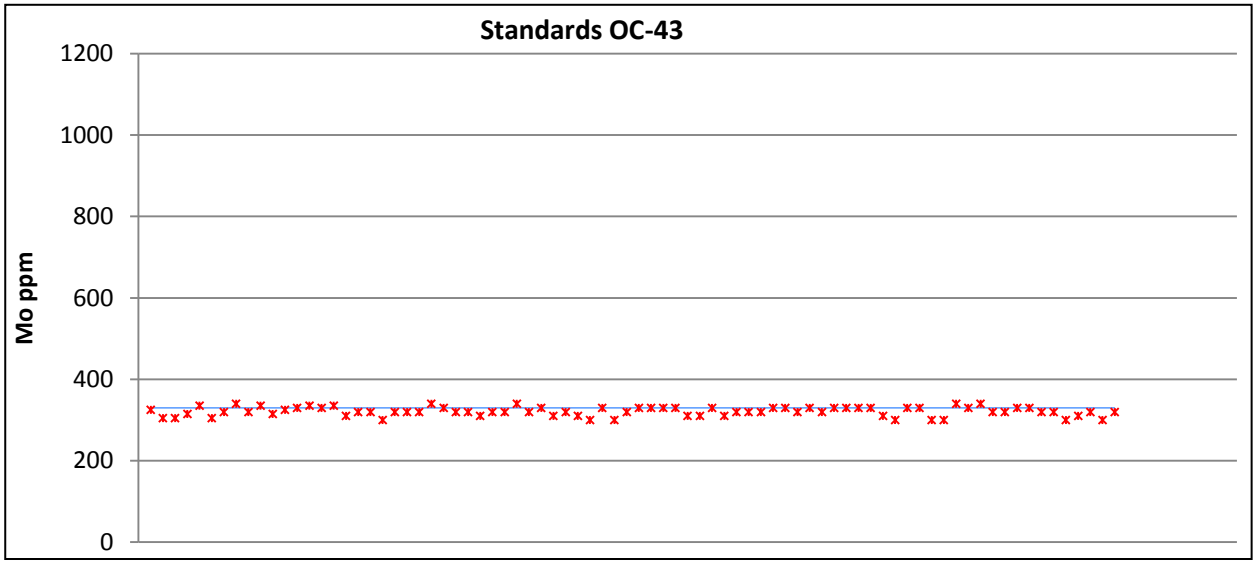
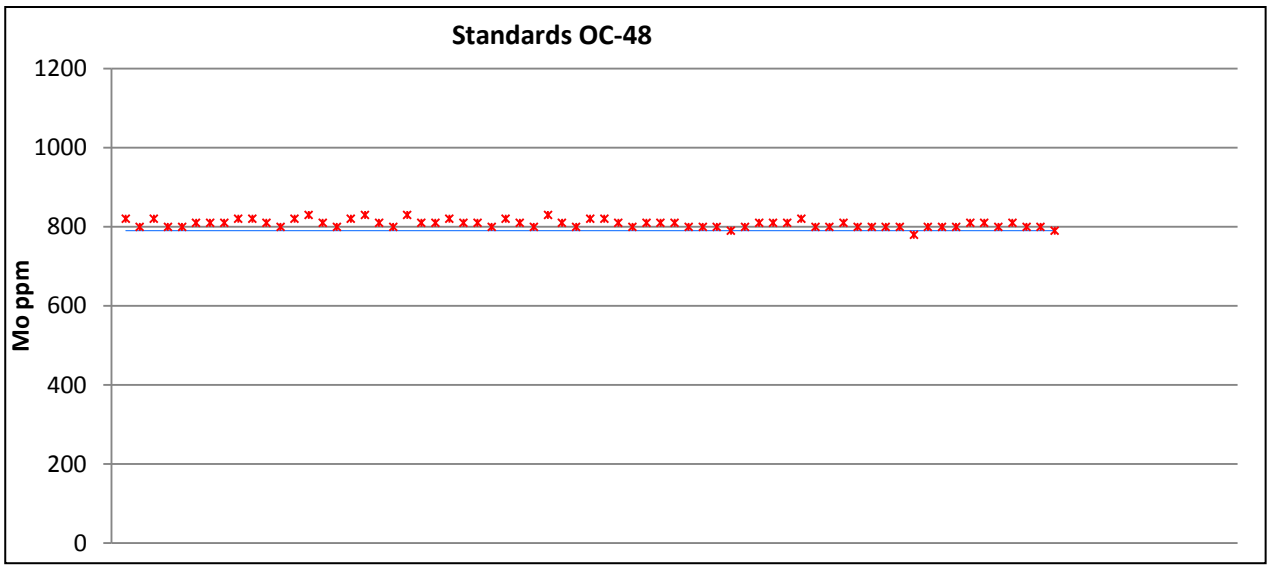


Figure 12-8. Standard OC-48.



12.2 SAMPLE SECURITY

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.

MMC considers the QAQC sample protocols installed by WMC and Erdene to be reliable.

12.3 MMC DATA VERIFICATION

MMC conducted a review of the digital data provided by the Company for the Project during the site visits and also as a desktop review. During this review MMC noted only very minor inconsistencies with the provided data, which were subsequently corrected in the digital database which formed the underlying data for the independent JORC Statement of Mineral Resource completed by MMC. These inconsistencies included differences between the hole ID recorded on the geological maps and observations during the site visit, different coordinate systems were used in different works and minor data entry errors. During discussions with the Company it was determined that these errors were the result of incorrect data entry or miscommunication and are immaterial to any Mineral Resource completed.

12.4 SITE VISIT

MMC travelled to site with representatives from Erdene in November 2008 and in May 2011. During these visit, a thorough validation of drill hole collar positions was undertaken using handheld GPS. Twenty one drill hole positions were checked and found to be accurately surveyed. Key geological features were also surveyed during this visit such as the ring dyke and andesite contact to ensure consistency with the geological maps provided. These were later reconciled with the extrapolated positions from the drill hole logging and found to correlate well.

A detailed investigation of the Ring Dyke was undertaken to check on the current interpretation of the area. A reconciliation of this work with landsat imagery and limited drilling allowed for an improved interpretation of the area.

Six holes were selected by MMC for re-logging. These were laid out in their entirety and re-logged by MMC. The re-logging of the holes confirmed the correlation of the higher grade zones with zones of higher vein intensity and Kspar alteration and subsequently assisted in the interpretation of the high grade domains within the broader resource area.

MMC also checked a random selection of hard copy logs against the data provided in the database. These did not indicate any issue with data integrity.

MMC independently checked sample assays by using previously prepared pulp samples and resubmitting them as check assays. A range of Mo assay values were 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 (**Table 12-1**).

Table 12-1 – Independent Check Analyses

Hole-ID	Sample No	Original	Duplicate - SGS Tianjin	Variance
ZMD-23	50030	0.77	<1	
ZMD-23	50031	0.73	<1	
ZMD-56	56207	273	263	3.70%
ZMD-39	50879	308	288	6.50%
ZMD-39	50878	336	301	10.40%
ZMD-56	56222	344	332	3.50%
ZMD-24	52877	584	509	12.80%
ZMD-29	50433	631	535	15.20%
ZMD-29	50432	587	579	1.40%
ZMD-24	52868	612	584	4.60%
ZMD-24	52886	904	771	14.70%
ZMD-29	50453	920	799	13.20%
ZMD-39	50970	917	822	10.40%
ZMD-24	52910	917	845	7.90%
Average				***8.70%***
Max				***15.20%***
Min				***1.40%***

Note: MMC independently selected samples

MMC independently requested a laboratory determination of in situ density for a range of rock types and potential ore grades to provide a reliable base to estimate tonnage of Mineral Resource estimates. Determination by laboratory analysis was required for NI 43-101 compliance rather than applying default densities from reference tables. Two samples per rock type and different grade intervals were taken and results of in situ rock type densities from the SGS Mongolia laboratory are shown in **Table 12-2**.

Table 12-2 – Rock type In Situ density

Reference Samples	Grade	% Mo	Sample 1	Sample 2	Composite
Granodiorite	High	>0.09	ZMD-29	ZMD-39	2.60
	Medium	>0.06	ZMD-29	ZMD-29	
	Low	0.02 to 0.04	ZMD-39	ZMD-39	
Monzonite	High	>0.09	ZMD-24	ZMD-24	2.60
	Medium	>0.06	ZMD-24	ZMD-24	
	Low	0.02 to 0.04	ZMD-56	ZMD-56	
Andesite	Waste		ZMD-23	ZMD-23	2.66

Source: Determined by Laboratory SGS Mongolia.

12.5 DATA QUALITY REVIEW

The review of the drilling and sampling procedures indicates that generally international standard practices were used with only very minor or immaterial issues being noted during the review completed by MMC. Furthermore a good correlation is observed for the majority of routine QAQC samples, while a good correlation is observed for the independent check assays completed at the SGS laboratory from the coarse reject samples retrieved from site by MMC. As a result MMC believes the sample preparation and assay determination procedures have not resulted in any sample bias and are representative of the sample taken.

12.6 DATA VERIFICATION STATEMENT

As a result of the above data verification and data quality, the digital database used as the basis for the Statement of NI 43-101 Mineral Resources is supported by verified certified assay certificates, original drill logs, QAQC, independent assays and independently verified survey data. Therefore MMC believes there is sufficient data to enable the use of this data in a Mineral Resource estimate and resultant classification following the guidelines set by the NI 43-101.

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 mineralization 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. Additional metallurgical testing will be carried out in 2011 to better determine the reagent scheme and flow sheet parameters as the project advances towards the pre-feasibility stage.

14 MINERAL RESOURCE ESTIMATES

The Mineral Resource for the Project was independently estimated by Mr. Philippe Baudry of MMC. Information contained in this report is based on information provided to MMC by Erdene and verified by MMC. All statistical analysis and mineral resource estimations were carried out by MMC. MMC developed three dimensional digital resources for the concentration of the Mo, Cu and Re metal and developed the resource estimates based on the statistical analysis of the data provided. MMC believes the Mineral Resource estimate meets general guidelines for NI 43-101 compliant resources for the Indicated and Inferred confidence levels.

14.1 DATA

14.1.1 Drill Hole Data

All drill hole collar, survey, assay and geology records were supplied to MMC in Excel spreadsheet format by the site geologists. All Mineral Resource work conducted by MMC was based on data received as at June, 2011. An Access database was created, and is managed, by MMC.

The database contains the records from 135 diamond drill holes ("DD") for a total of 45,574.55 m of which 32,167.32 m is inside the resource envelopes. A summary of the drill hole database is shown in ***Table 14-1*** while they are shown graphically in ***Figure 10-1*** and ***Figure 14-1***.

Table 14-1. Summary of Data Used in Resource Estimate.

Hole Type	In Database		
	Number	Total Length (m)	In Resource Envelopes (m)
Surface Diamond	135	45,574.55	32,167.32

14.1.2 Data Excluded

No Data was excluded from the estimate.

14.1.3 Bulk Density

Based on information and determinations supplied by the Company the average density for fresh rock material is 2.6 t/cu.m while weathered or oxidised rock has a density of 2.55 t/cu.m.

14.2 GEOLOGICAL AND RESOURCE INTERPRETATION

The Zuun Mod mineralization has a modelled strike extent of approximately 3,400 m and a maximum depth of approximately 550 m below surface. All surfaces have been constrained by wireframes. The initial model was provided by Erdene, and revised Resource envelopes constructed by MMC with advice from Erdene based on information and observation made during the site visits.

The main trend of the mineralization dips steeply towards the north-east and was sub-domained into separate units to account for the lack of continuity in the strike length of the mineralization and grade variation. Eight separate geological domains were defined based on lithological contact on the western side of the Project (**Figure 14-2**) and a combination lithology, veining intensity, kspar alteration and Mo grade for the remainder.

Mineralization that is continuous over two or more sections was contained within wireframes which were extrapolated to half of the drill spacing along strike. Field observations were also incorporated into the interpretation to ensure geological accuracy. A total of 8 domains were interpreted within the South Corridor area as shown in **Table 14-2** and **Figure 14-2**.

Density domains were defined based on the overall geology model generated for the Project and uses wireframes for the topography and base of weathering. The depth of weathered rock was defined as the top of fresh material.

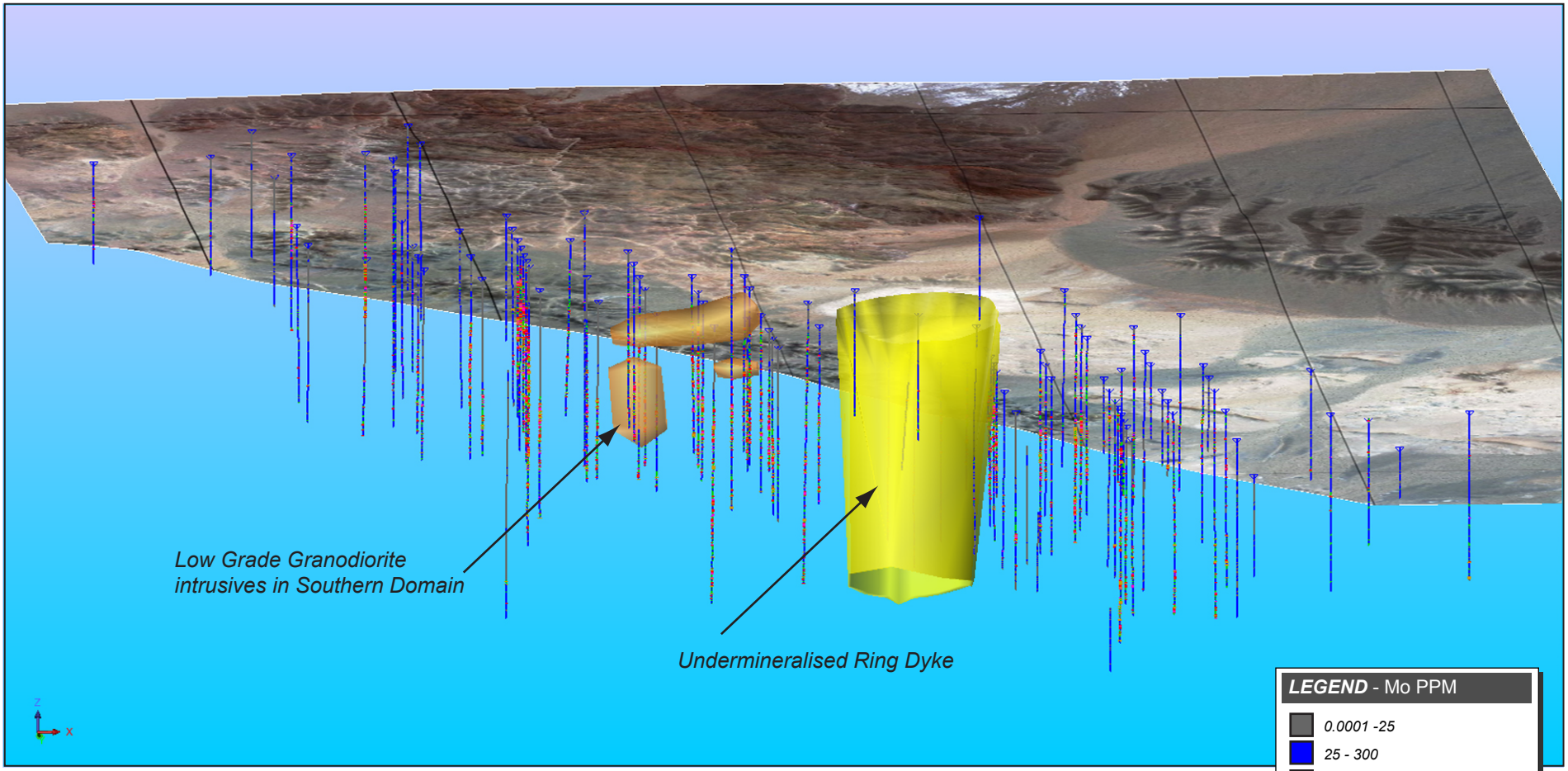


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FIGURE 14-1

Erdene

Zuun Mod

Zuun Mod Geology Wireframes

Drillholes coloured to Mo PPM Grade

Table 14-2 – Plan Geological domains

Domain	Description
1	South Domain Object 1 (stand-alone quartz monzonite pod at the south end of the deposit)
2	HG Mo South Racetrack (high grade internal zone of the south racetrack quartz monzonite area)
3	LG Mo South Racetrack (low grade envelope made up of quartz monzonite, South Racetrack)
4	LG Mo North Racetrack (Low grade granodiorite domain which makes up most of the North Racetrack
5	Late stage dacite porphyry intrusive in the central part of the deposit near the ring dyke and contact
6	Ring dyke, massive bucky barren quartz. Not included in the estimation plans.
7	Granodiorite Intrusives South (quartz monzonite),
8	HG Mo North Racetrack (High grade granodiorite of the North Racetrack area)

14.3 SAMPLE STATISTICS

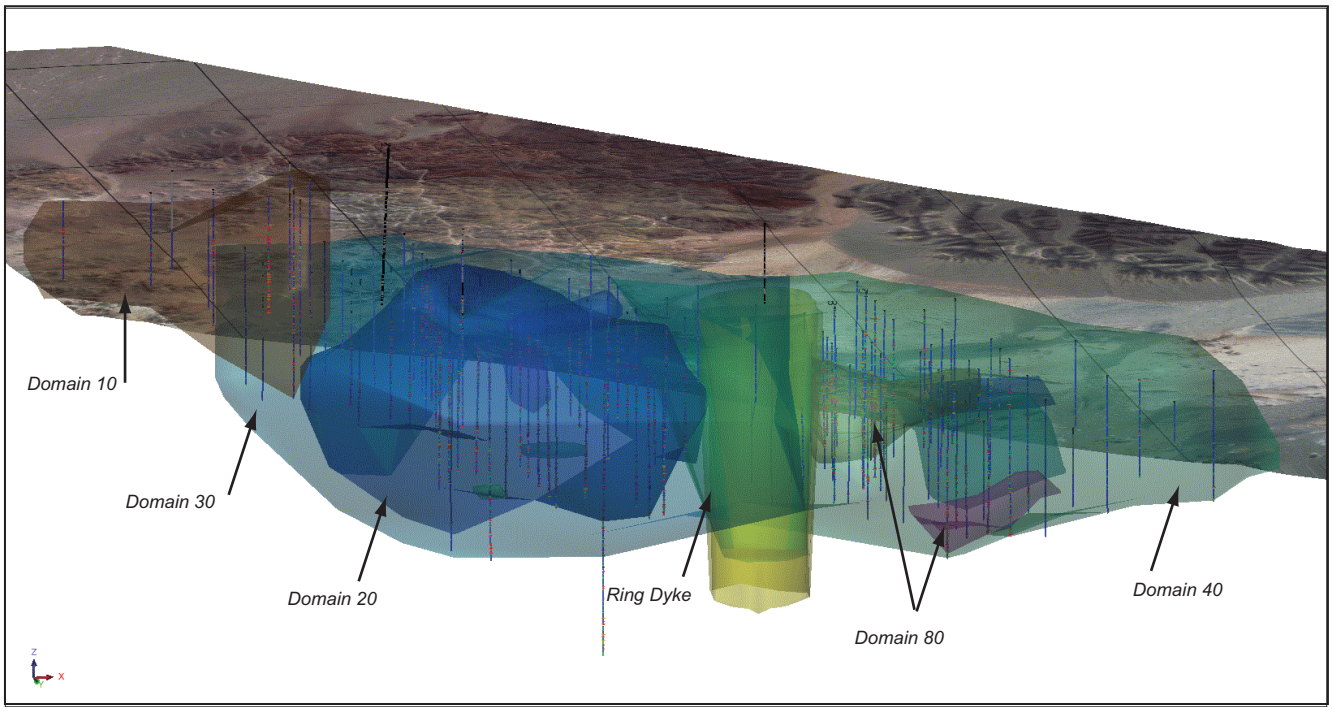
Drill holes were coded according to these domains and composited to 2m intervals and imported into Geoaccess Software for analysis. Statistics were produced for the Mo and Cu within each domain, as shown in ***Tables 14-3***

Table 14-3– Summary statistics of raw drill hole data and 2 m composite per domain

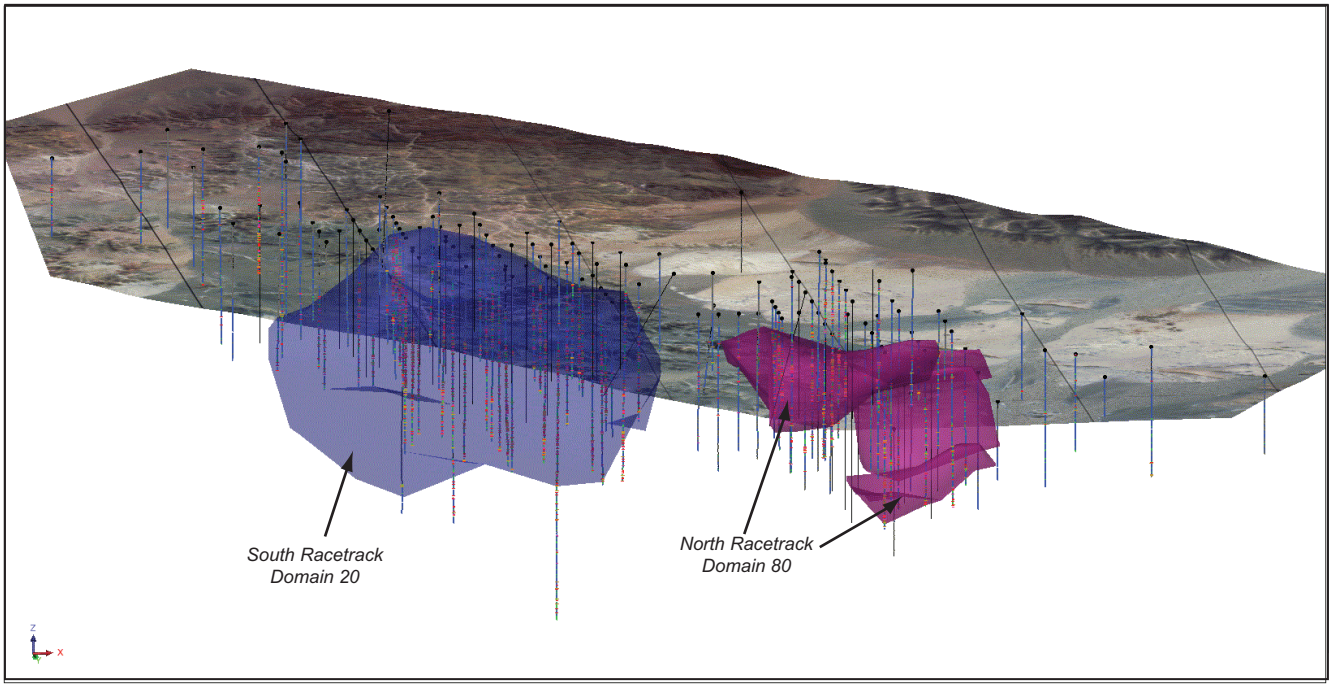
Domain	Element	Data source	Mean ppm	Minimum ppm	Maximum ppm	St.Dev	C.V.
1	Mo	Drill holes	196	0	5,030	321.17	1.48
		Composites	195	0	3,865	288.89	0.52
	Cu	Drill holes	531	32	3,810	319.77	0.6
		Composites	530	32	3,647	305.65	0.64
2	Mo	Drill holes	453	0	5,230	417.02	0.92
		Composites	452	0	4,581	405.29	0.9
	Cu	Drill holes	613	0	6,040	389.12	0.63
		Composites	613	28	5,936	379.31	0.62
3	Mo	Drill holes	138	0	2,550	168.32	1.22
		Composites	139	0	2,004	158.05	1.14
	Cu	Drill holes	350	8	6,720	314.89	0.9
		Composites	350	9	5,439	293.89	0.84
4	Mo	Drill holes	200	0	10,000	356.94	1.79
		Composites	200	0	10,000	349.77	1.75
	Cu	Drill holes	381	0	9,060	335.02	0.88
		Composites	381	9	9,060	329.3	0.87
5	Mo	Drill holes	61	0	1,235	129	2.1
		Composites	61	0	1,235	128.14	2.1
	Cu	Drill holes	180	12	1,220	143.44	0.8
		Composites	181	12	1,219	143.21	0.79
70	Mo	Drill holes	343	3	4,870	476.3	1.39
		Composites	343	3	4,870	476.3	1.39
	Cu	Drill holes	277	10	1,020	179.96	0.65
		Composites	277	10	1,020	179.96	0.65
80	Mo	Drill holes	524	8	9,650	561.87	1.07
		Composites	524	8	9,650	561.59	1.07
	Cu	Drill holes	625	32	16,200	628.39	1.01
		Composites	625	32	16,200	628.11	1.01

14.4 HIGH GRADE CUTS

No high grade cuts were applied to the distributions as no outliers were interpreted to be present. This is shown by the relatively low coefficient of variation for each domain and the histogram and log probability plots of the distributions.



Resource Wireframes >200PPM Mo



High Grade Domains >400PPM Mo

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FIGURE 14-2

Erdene Resource Development Corporation

Zuun Mod

Resource Wireframes

Project No : ADV-MN-00026

14.5 METALS CORREALTION

The correlation of the metals within the Project are typical of porphyry style systems, with a good correlation between Mo and Re, as shown in the scatter plot in ***Table 14-4,*** while a reasonable correlation was observed between Mo and Cu.. .

The good correlation between Mo and Re is expected as a result of the Re substituting for Mo in the predominate Mo bearing mineral. Due to all samples not being analyzed for Re, a regression analysis was completed to populate the block estimates to ensure the highest confidence.

Table 14-4 – Linear regression parameters for Re

Domain	Correlation Coefficient	Slope	Intercept
1	0.69	0.000961	-0.02352
2	0.93	0.000383	0.004531
3	0.90	0.000378	0.002383
4	0.83	0.000371	0.017052
7	0.98	0.000449	0.006801
8	0.85	0.000898	-0.20469

14.6 GEOSTATISTICAL ANALYSIS

Variography analysis was carried out for this update using Supervisor software with reference to the following points:

- Analysis was only conducted for Mo and Cu.
- Variogram models were fitted in “raw” space (i.e. no transforms were applied to the input data).
- Variogram parameters were modelled with the Major direction first, Semi-major direction second, and Minor direction last.
- The value of the nugget variance was chosen from the down-hole variogram. Lag distance in the downhole direction matched the average composite length (2.0m).
- Omni directional variogram models were fitted to all domains due to a lack of clear directional anisotropies.

The short range variability of grade is not well defined across domains. This is due to the fact that the data separation is very similar to the observed variogram ranges. No short-range structures could be visualised. Listings of the final variogram model parameters are provided in **Table 14-5** and **Table 14-6**. Graphs of the fitted models have been included in **Figure 14-3**.

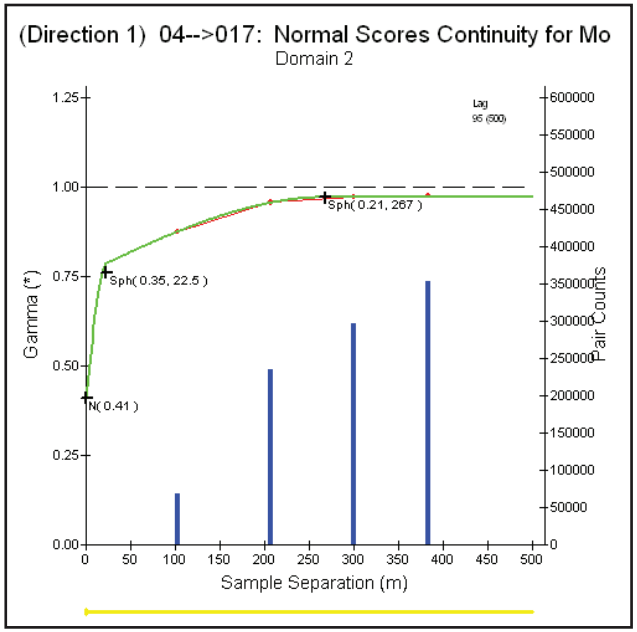
Table 14-5 – Variogram model parameters (Mo)

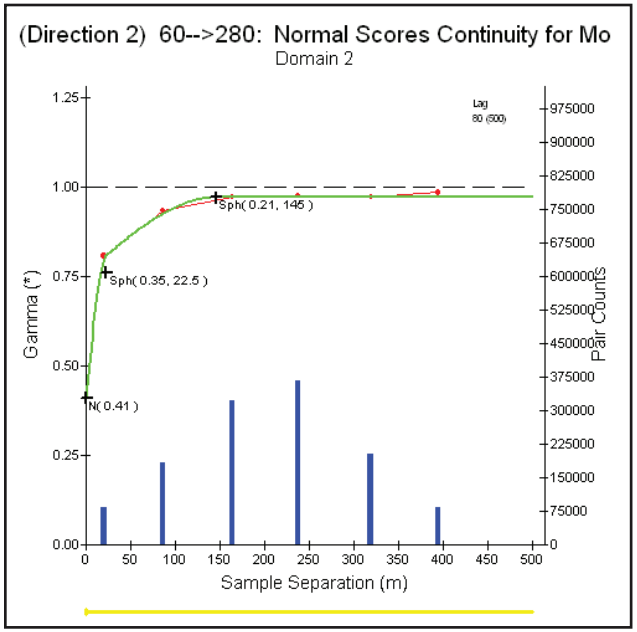
	Major				Structure 1				Structure 2	
Domain	Direction	C0	C1	A1	Maj/Semi	Maj/Minor	C2	A2	Maj/Semi	Maj/Minor
1	-8->339	0.37	0.39	105	5.12	5.12	0.24	303.5	1.15	1.20
2	4->17	0.49	0.35	22.5	1.00	1.00	0.16	267	1.84	1.84
3	0->339	0.25	0.49	68	3.40	3.40	0.26	400	1.00	1.14
4	-8->339	0.37	0.39	105	5.12	5.12	0.24	303.5	1.15	1.20
7	-8->339	0.37	0.39	105	5.12	5.12	0.24	303.5	1.15	1.20
8	-8->339	0.37	0.39	105	5.12	5.12	0.24	303.5	1.15	1.20

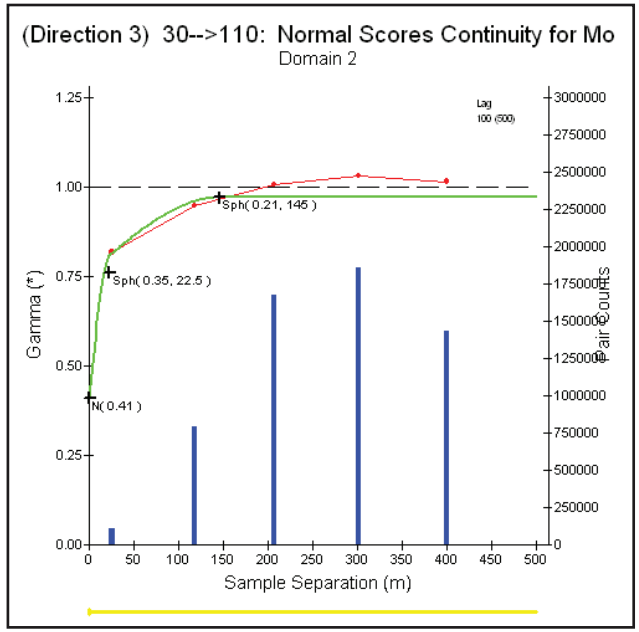
Table 14-6 - Variogram model parameters (Cu)

	Major				Structure 1				Structure 2	
Domain	Direction	C0	C1	A1	Maj/Semi	Maj/Minor	C2	A2	Maj/Semi	Maj/Minor
1	24->307	0.35	0.43	210	1.01	3.72	0.22	430.00	1.26	1.26
2	35->20	0.35	0.4	11	1.00	1.00	0.25	200.00	1.00	1.00
3	8->307	0.13	0.39	20	1.00	1.00	0.48	375.00	1.00	1.00
4	24->307	0.35	0.43	210	1.01	3.72	0.22	430.00	1.26	1.26
7	24->307	0.35	0.43	210	1.01	3.72	0.22	430.00	1.26	1.26
8	24->307	0.35	0.43	210	1.01	3.72	0.22	430.00	1.26	1.26

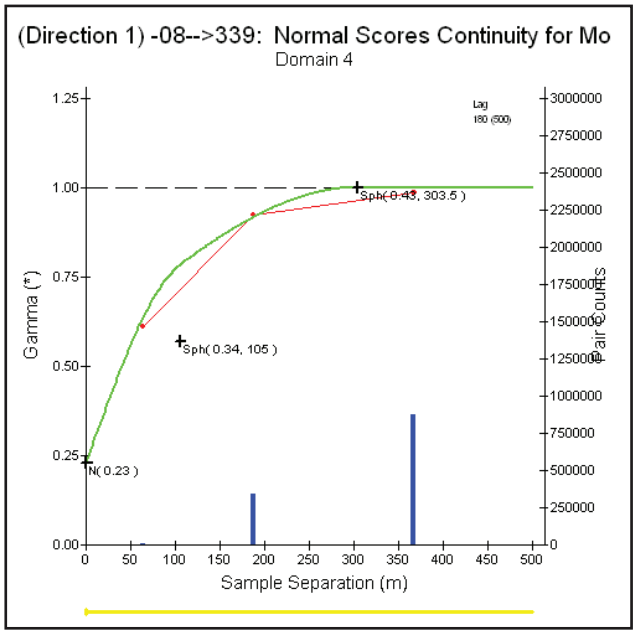
Domain 2

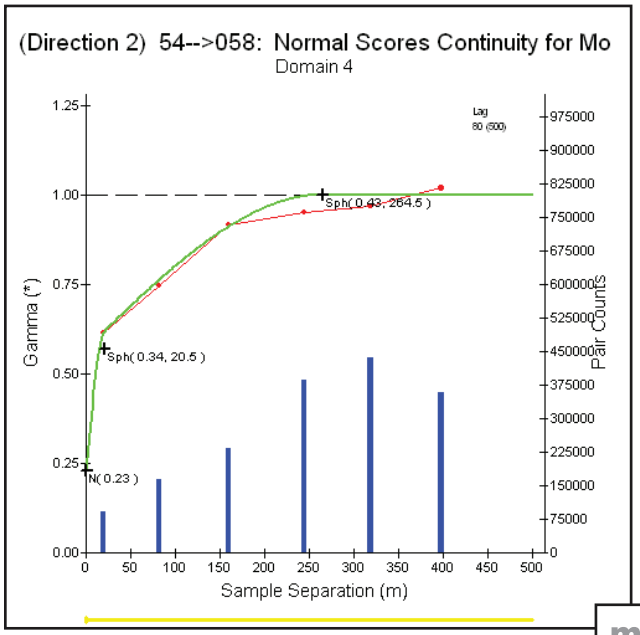






Domain 4





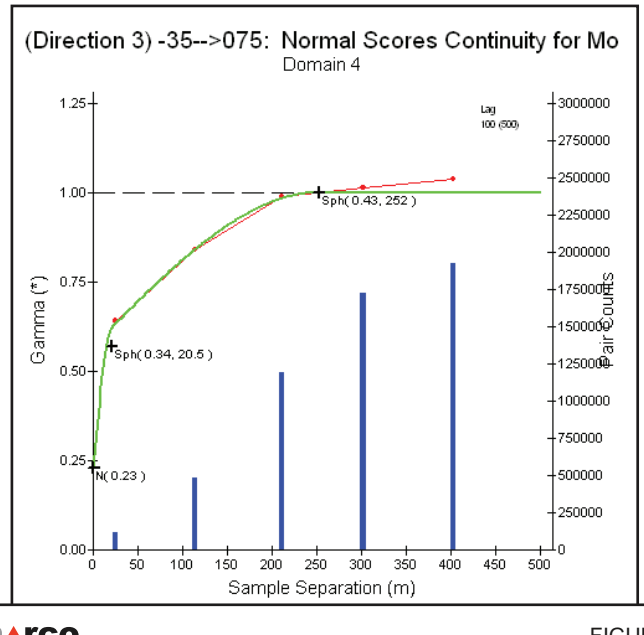


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FIGURE 14-3

Erdene Resource Development Corporation

Zuun Mod

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Interpreted Variogram Models

14.7 BLOCK MODEL

One Surpac block model was created to encompass the full extent of the mineralization within the Zuun Mod deposit. The block model origin and extents and attributes are listed in ***Table 14-5.***

Table 14-7 Block Model Dimensions

Model Names		bm_20110407		
		y	x	z
Minimum Coordinates		4,867,000	515,500	400
Extent		4,500	4,500	1,000
Block Size (Sub-blocks)		50 (25)	50 (25)	10 (5)
Rotation			0	
Attributes:				
mo_ppm	Reportable Mo ppm grade			
cu_ppm	Reportable Cu ppm grade			
pass	Estimation pass number			
Class	Classification (indicated, inferred)			
type	material type (lowgrade, highgrade, waste, air)			
bd	bulk density (t/cu.m)			
ns	Number of samples			

14.8 GRADE INTERPOLATION

For all domains within the deposit, the interpreted fault surfaces were used as hard boundaries, while the Re was also estimated by linear regression based on Mo. The Ordinary Kriging (OK) algorithm was selected for grade interpolation and utilized the parameters from the geospatial analysis. The OK algorithm was utilized to minimize over smoothing within the estimate which would result due to the clustered nature of the sample density.

An anisotropic search based on the geospatial analysis was used to estimate Mo and Cu. A variety of search distance, minimum and maximum number of samples was use for each element and pass depending on the geospatial analysis, drill density and the geological interpretation, as shown **in Table 14-8**.

Domains 50 (Dacite Porphyry) and 60 (Ring dyke) were excluded from grade interpolation, as they were interpreted to be un-mineralised. MMC notes however that the Racetrack Intrusive has not been defined at depth by drilling and the dimensions may vary from those interpreted.

Table 14-8 – Estimation Parameters domains 1, 2, 3 and 4 (Mo).

Parameter	Domain 1,4		Domain 2		Domain 3	
	Mo	Cu	Mo	Cu	Mo	Cu
Search Type	Ellipsoid					
Bearing	339	307	17	15	339	307
Dip	-35	50	30	35	-35	23
Plunge	-8	24	4	20	0	8
Major-Semi Major	1.15	1.25	1.85	1	1.15	1.25
Major-Minor Ratio	1.2	1.25	1.85	1	1.2	1.25
Search Radius	150,240,400					
Minimum Samples	11,8,4					
Maximum	20					
Maximum	10					
Block	4 X by 4 Y by 2 Z					

14.9 RESOURCE CLASSIFICATION

Mineral inventory was classified based on drilling density, grade continuity and geological confidence. Wireframes were generated to assist with the classification of Measured, Indicated and Inferred Resources. All material was classified into:

- Measured Resource (NI 43-101 classification)
- Indicated Resource (NI 43-101 classification)
- Inferred Resource (NI 43-101 classification)
- Mineral potential (not for public reporting)

The Zuun Mod deposit due to its mineralization type shows good geological and mineralization continuity at a low grade threshold (>200ppm Mo). Within this low grade envelope in areas where the drill spacing is less than 200m by 200m there is a reasonable level of confidence that further drilling whilst possibly impacting on the internal ore distribution would not change the overall contained metal greatly. These areas have been classified as Indicated Mineral Resource.

Recent drilling carried out in 2008 by Erdene has confirmed the existence and overall continuity of higher grade (>400ppm Mo) domains within low grade halos. The largest of these, Domain 20, in the South Race Track area is well defined by 34 drill holes, at an average spacing of 50m-100m by 100m. Whilst variability in the position of the high grade mineralization occurs hole to hole, the overall metal content, including that defined by the infill drilling, remains constant. Portions of this domain with closer spaced drilling have been classified as Measured Mineral Resource.

Areas of the resource where geological confidence is low such as the Ring Dyke area or where drill spacing is much greater than 200m by 200m have been classified as Inferred Mineral Resources.

Some areas within the resource wireframes which remained unfilled after the 3rd pass and required a further round of estimation to fill have not been classified under NI 43-101. These are all located at the extremities of the resource wireframes and usually >300m from the nearest drill hole. This material has been termed “Mineral Potential” and does not form part of the Mineral Resource.

The NI 43-101 classification for the Zuun Mod Resource is shown in **Figure 14-4** and a summary included in **Table 14-9**.

Table 14-9 – Resource Categories - Guidelines

Domain	NI 43-101	Criteria
10	Inferred	All blocks included in first and second estimation passes
	Potential	Blocks included in third estimation pass.
20	Measured	All blocks inside the ‘Measured100609.dtm’ wireframe
	Indicated	All blocks inside the ‘Indicated100609.dtm’ wireframe
	Inferred	All blocks outside Indicated wireframe
30	Indicated	All blocks inside the ‘Indicated100609.dtm’ wireframe
	Inferred	All blocks outside the ‘Indicated100609.dtm’ wireframe
40	Indicated	All blocks inside the ‘Indicated100609.dtm’ wireframe
	Inferred	All blocks inside Inferred wireframe
	Potential	Blocks outside Indicated and Inferred wireframes
70	Measured	All blocks inside the ‘Measured100609.dtm’ wireframe
	Indicated	All blocks inside the ‘Indicated100609.dtm’ wireframe
	Inferred	All blocks outside the ‘Indicated100609.dtm’ wireframe
80	Indicated	All blocks inside the ‘Indicated100609.dtm’ wireframe
	Inferred	All blocks inside Inferred wireframe

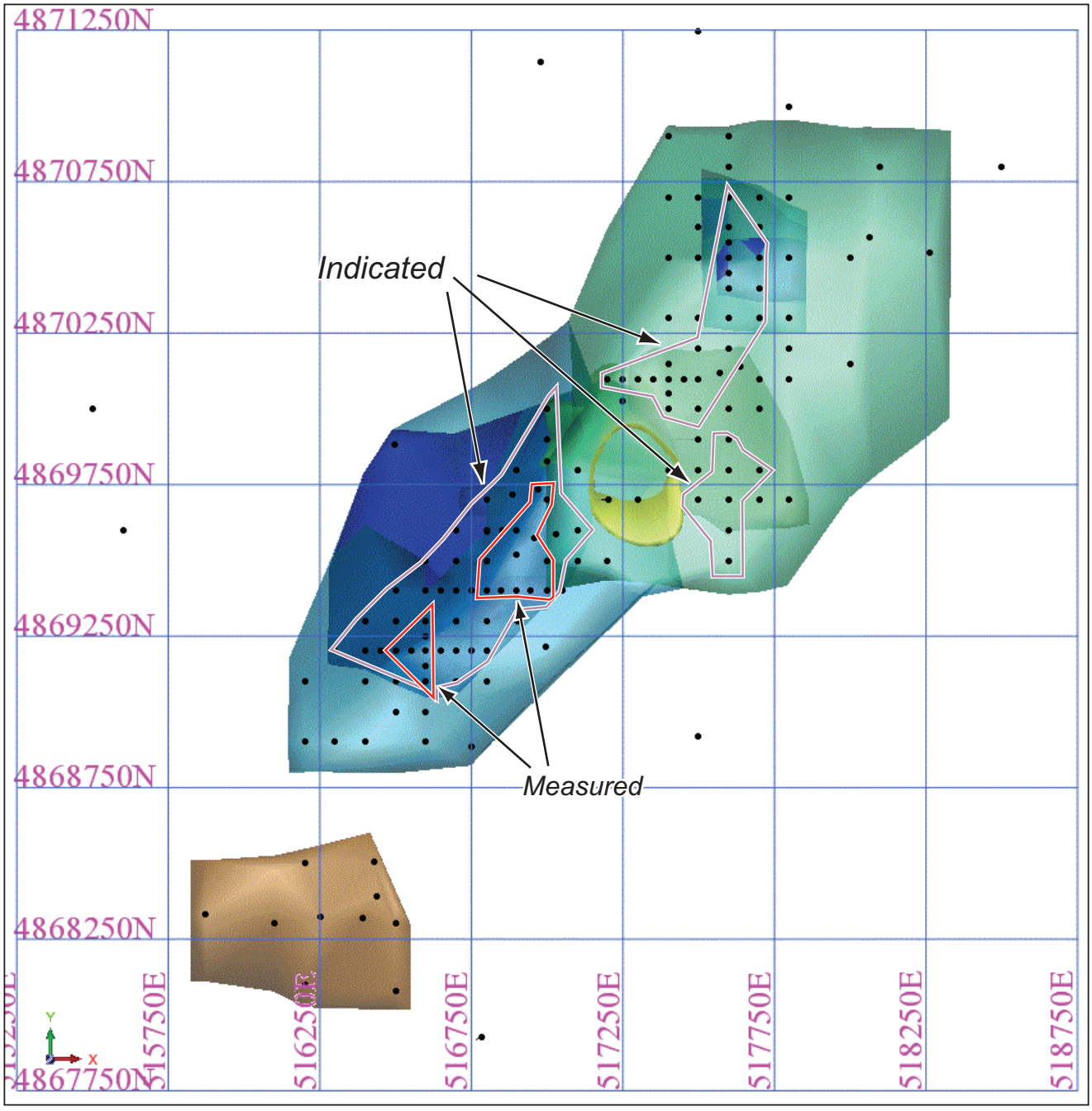

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FIGURE 14-4

Erdene Resource Development Corporation

Zuun Mod

Mineral Resource Classification

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14.10 MODEL VALIDATION

MMC carried out a validation of the estimates using the following procedures:

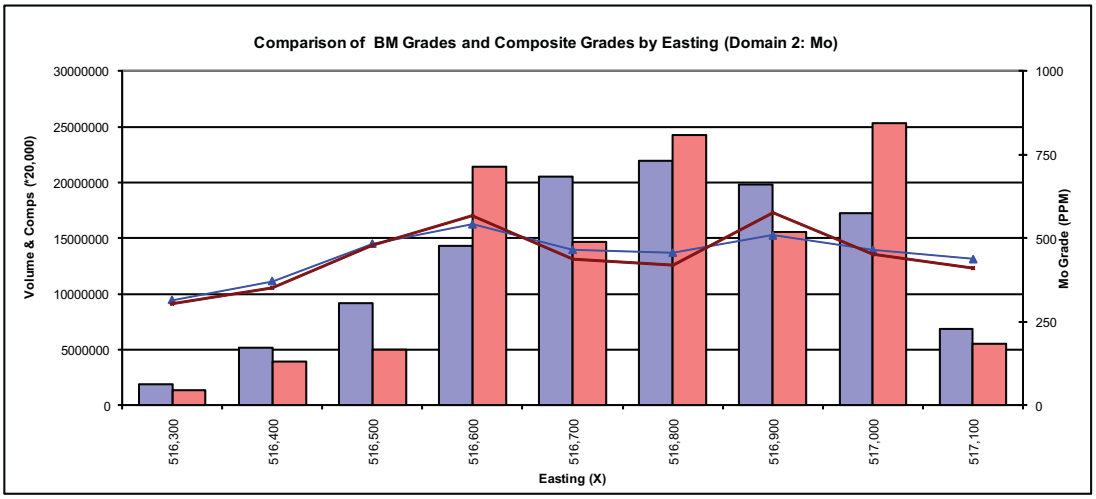
- A comparison of composited sample grade statistics with block model grade statistics for each domain.
- Comparison of volumes defined by the Resource wireframes and the associated block model.
- Visual sectional comparison of drill hole grades vs. estimated block grades.
- Spatial comparison of composite grades and block grades by easting and elevation.

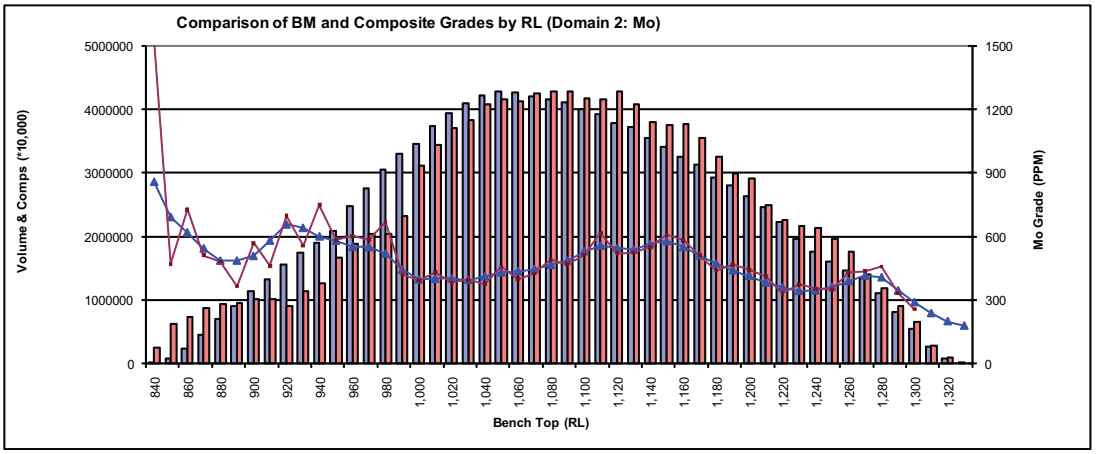
The volumes are almost identical. Domain 70 results in the biggest difference (the block model has includes 1.5% more volume that the associated wireframe). MMC interprets this difference to be not material to the global estimate.

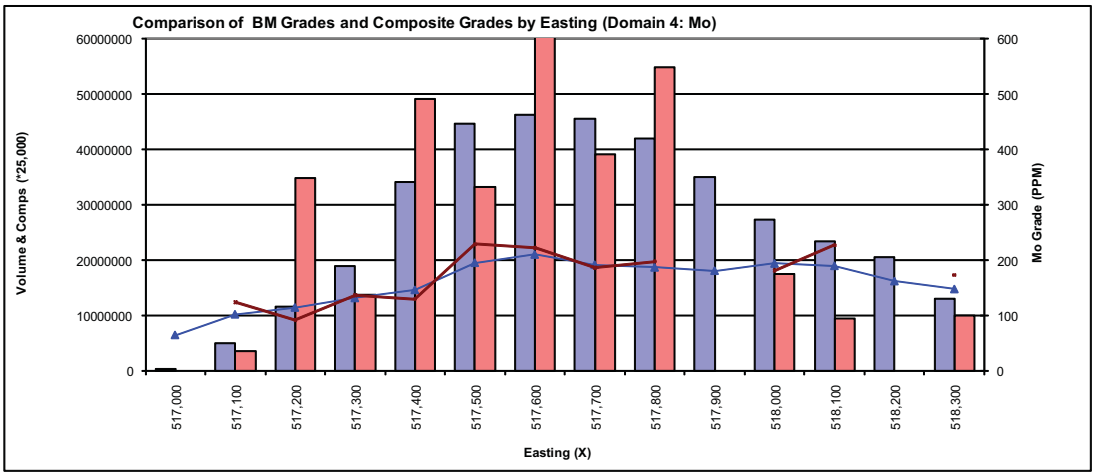
Comparison between the grades from block model and composites for both elements are acceptable. In the case of Mo, domain 10 presents the highest difference (the model underestimates the mean grade by 12% approximately). Other domains present differences within 10%. The case of Cu is similar with the highest difference being 11% between samples and block model (domains 10 and 30).

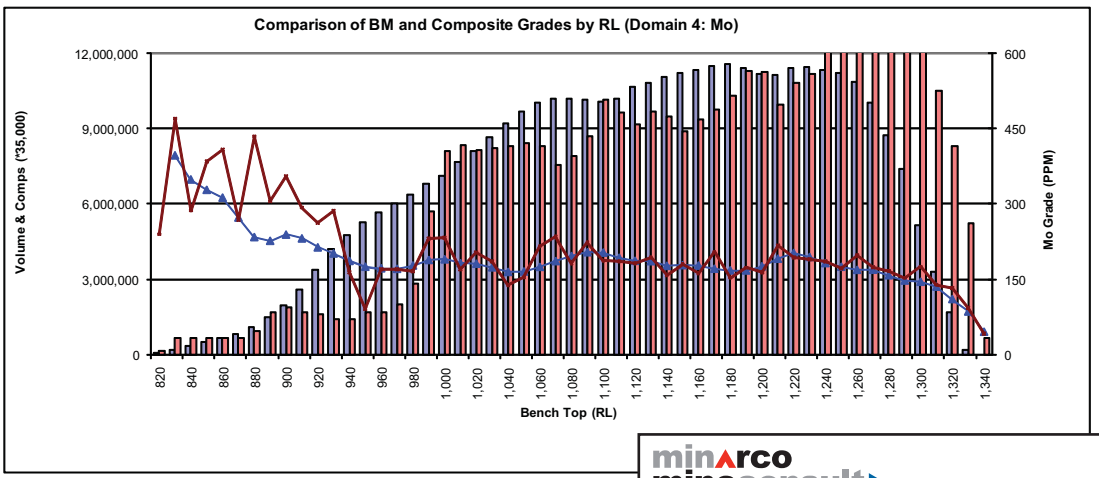
To check that the interpolation of the block model correctly honoured the drilling data, validation was carried out by comparing the interpolated blocks to the sample composite data along eastings, and elevations. The validation plot for Domain 20 by elevation is shown in **Figure 14-5**.

The validation procedures demonstrated that the estimated model honours the drill hole data and geological constraints applied to the estimate. Clearly the grades from the block model are smoother than the composites. This is not unexpected due to the inherent smoothing effect introduced by Ordinary Kriging and the current drilling density.









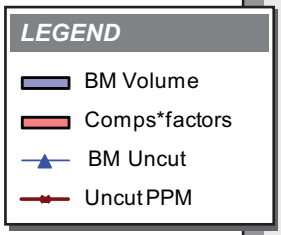


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FIGURE 14-5

Erdene Resource Development Corporation

Zuun Mod

Swath Plots

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14.11 MINERAL RESOURCE STATEMENT

The Mineral Resources were completed by Mr. Philippe Baudry of MMC in their Beijing Office and are reported at several cutoff values within the deposit. The results of the resource estimate for the Zuun Mod deposit are tabulated in ***Table 16-10*** and ***Table 16-11***below.

The entire Mineral Resource is contained within 2 mining licenses, one recently issued and one pending. MMC notes that all of the Measured and Indicated resources and 82.2% of the Inferred resource, at a 0.04% Mo cut off grade are located within the recently issued Zuun Mod Mining License, while 17.8% or 30 Mt is located on a contiguous property south of the Zuun Mod Mining License. An application for a second Mining License for this property is pending awaiting a final decision by the Government of Mongolia on the definition of the boundaries of a water protection area overlapping with the license area.

MMC has limited the vertical limit of the report resource to 500 m as a result of the geometry of the mineralisation and potential economic extraction. MMC will review this depth upon completion of the mining studies which are currently underway.

Table 14-10 – Resource Statement as at June 2011 Reported at Cut Off of 0.04% Mo

Resource Category	Quantity Mt	Mo %	Contained Mo Metal Mlbs	Cu %	Contained Cu Metal Mlbs
Measured	40	0.056	49.5	0.064	57
Indicated	178	0.057	224	0.07	273.7
M&I	**218**	**0.057**	**273.5**	**0.069**	**330.7**
Inferred	168	0.052	191.8	0.065	240.5

Table 14-11. Mineral Resource Estimate reported at a Variety of Cut-Off Grades.

Cut-off Grade Mo%	Resource Category	Quantity Mt	Mo %	Contained Mo Metal Mlbs	Cu %	Contained Cu Metal Mlbs
0.03%	Measured	55	0.05	61.1	0.06	73
	Indicated	260	0.05	287	0.065	373.6
	M&I	**315**	**0.05**	**348.1**	**0.064**	**446.6**
	Inferred	335	0.043	318.8	0.061	454.6
0.04%	Measured	40	0.056	49.5	0.064	57
	Indicated	178	0.057	224	0.07	273.7
	M&I	**218**	**0.057**	**273.5**	**0.069**	**330.7**
	Inferred	168	0.052	191.8	0.065	240.5
0.05%	Measured	25	0.063	34.5	0.068	37.5
	Indicated	105	0.066	152.5	0.074	171
	M&I	**130**	**0.065**	**187**	**0.073**	**208.5**
	Inferred	78	0.06	103.4	0.067	115.5

Resources Estimate Notes:

- *Effective Date: June 2011.*
- *1 tonne = 2204.64 lbs.*
- *Estimates are rounded to appropriate significant figures.*

M&I means the sum of Measured and Indicated Resources

SECTIONS 15-22

MMC is aware these technical studies are underway, however these studies have not been completed as of the effective date of this report as a result Sections 15-22 have been omitted from this Report.

23 ADJACENT PROPERTIES

There are no adjacent properties with similar mineralization to provide comparative mineralization characteristics.

24 OTHER RELEVANT DATA AND INFORMATION

MMC understands no additional exploration or mining activities have taken place since the delivery of the datasets in May 2011. MMC is aware further Technical studies are underway and will be completed over the next 6 months.

25 INTERPRETATION AND CONCLUSIONS

The following interpretations and conclusions have been made on the Zuun Mod Project from the findings of the Technical Report:

- The Project represents a promising polymetallic project, and has resources of sufficient quality that warrant additional investigation. Measured and Indicated Mineral Resources make up 73% of all Mineral Resources (at 0.04% Mo cut-off grade).
- A Mineral Resource estimate, using an ordinary kriging interpolation method, was completed by MMC of Beijing, China. The Mineral Resource estimate in this Technical Report is reported using cutoff grades which are deemed appropriate for the style of mineralization and the current state of the Mineral Resources.
- MMC considers the estimated Mineral Resources to be compliant with NI 43-101 Guidelines for Resource Estimates. Of importance for mine planning, the model accommodates in situ and contact dilution but excludes mining dilution.
- Potential for increasing of the Mineral Resources are good, with mineralization open to the north and south and also down dip, which requires further drilling to investigate potential. In addition Mineralization extends NW and is undefined by drill holes under the andesite mantle.
- Further closer spaced drilling may further define the patchy mineralization characteristics. This would be consistent with characteristics of vein type mineralization of the RTN Zone 1. Progressive improvements to geological confidence with additional drilling will provide the basis for short term planning models. This would most likely occur at a grade control phase during mining.
- The addition of drilling has resulted in a further refinement of controls of mineralization and confirmation of the classification system utilized.

26 RECOMMENDATIONS

The recommendations provided are based on observations made during the review of the Project and subsequent Mineral Resource estimate.

- Down hole EM should be considered around the high grade Cu intersection recently found in ZMD121 (2010 drilling). From the three nearby lower grade vertical holes the high grade mineralisation appears to be located in a steep structure, which could be missed by vertical holes. If correct, the structure can then be effectively targeted with inclined drill holes. Once it is confirmed that the body is conductive it could be explored laterally by surface EM methods, which will penetrate deeply in the generally resistive rocks.
- There is a relatively unexplored stock work zone sporadically outcropping in the area west of ZMD94 and ZMD95. The outcrop is mostly obscured by transported alluvium in the major north south drainage affecting the area but interesting unmapped stockwork and even milled breccias veins. This area needs re-mapping in detail and scout RAB drilling through cover then drilling at depth if mineralization is intersected.
- In-fill drilling is recommended to increase the Mineral Resource confidence categorisation of high grade areas currently and further define the internal grade variability within the deposit. This drilling is estimated to cost approximately USD 830K.
- Metallurgical Test work- Complete additional metallurgical test work to further define the processing characteristics of the material. USD 20K
- Complete a marketing study to confirm the saleability of the product and likely price forecasts.
- Complete a Preliminary Economic Assessment which will encompass the additional metallurgical test work, marketing study and additional drilling. USD 100K.
- Upon successful outcome of PEA study, complete additional drilling to increase Inferred areas within the proposed pit to Indicated and Measured to enable Reserve estimates to be completed. USD 2.5 M.

27 REFERENCES

AMMTEC, (2008), “Flotation and Comminution Test work on PAH-EG Samples for Erdene Resources Development Corporation Limited”, Australian Metallurgical & Mineral Testing Consultants, Report No. A11219, August 2008.

Knox, R.W., (2008), “Zuun Mod Porphyry Molybdenum-Copper Project Mongolia”, Minarco-MineConsult, Independent Technical Report, May 2008.

Larkin, B.J, (2008), “Geostatistical Study Zuun Mod Molybdenum Deposit Mongolia”. GeoCheck Pty Ltd, May 2008.

Cowan, C and Gillis, M, (2007), “Zuun Mod Exploration Report, Mongolia”. Erdene Pty Ltd, internal report, 2007.

28 APPENDIX A – TECHNICAL CONSULTANTS

Jeremy Clark – Senior Consultant Geologist – Beijing, Bsc. with Honours in Applied Geology, Grad Cert Geostatistics, MAIG

Jeremy has over 10 years of experience working in the mining industry. During this time he has been responsible for the planning, implementation and supervision of various exploration programs, open pit and underground production duties, detailed structural and geological mapping and logging and a wide range of experience in resource estimation techniques. Jeremy's wide range of experience within various mining operations in Australia and recent experience working in South and North America gives him an excellent practical and theoretical basis for resource estimation of various metalliferous deposits including iron ore and extensive experience in reporting resource under the recommendations of the NI-43-101 reporting code.

With relevant experience in a wide range of commodity and deposit types, Jeremy meets the requirements for Qualified Person for 43-101 reporting, and Competent Person ("CP") for JORC reporting for most metalliferous Mineral Resources. Jeremy is a member of the Australian Institute of Geoscientists.

Philippe Baudry – General Manager – China and Mongolia, Bsc. Mineral Exploration and Mining Geology, Assoc Dip Geo science, Grad Cert Geostatistics, MAIG

Philippe is a geologist with over 14 years of experience. He has worked as a consultant geologist for over 6 years first with Resource Evaluations and subsequently with Runge after they acquired the ResEval group in 2008. During this time Philippe has worked extensively in Russia assisting with the development of two large scale copper porphyry projects from exploration to feasibility level, as well as carrying out due diligence studies on metalliferous projects throughout Russia. His work in Australia has included resource estimates for BHPB, St Barbara Mines and many other clients both in Australia and overseas on most styles of mineralisation and metals. Philippe furthered his modelling and geostatistic skills in 2008 by completing a Post Graduate Certificate in Geostatistics at Edith Cowan University. Philippe relocated to China in 2008 and has since project managed numerous Due Diligences and Independent Technical Reviews for private acquisitions and IPO listings purpose mostly in China and Mongolia.

Prior to working has a consultant Philippe spent 7 years working in the Western Australian Goldfields in various positions from mine geologist in a large scale open cut gold mine through to Senior Underground Geologist. Before this time Philippe worked as a contractor on early stage gold and metal exploration projects in central and northern Australia.

With relevant experience in a wide range of commodity and deposit types, Philippe meets the requirements for Qualified Person for 43-101 reporting, and Competent Person ("CP") for JORC reporting for most metalliferous Mineral Resources. Philippe is a member of the Australian Institute of Geoscientists

Company's Relevant Experience

Minarco-MineConsult, part of Runge Ltd, is a premier international consulting and engineering firm. It provides a full range of services from pure technical consulting through to strategic corporate advice. And undertake assignments on mining projects covering a range of commodities and countries, serving clients in most of the countries around the West Pacific Rim region.

Minarco-MineConsult maintains a full time staff of qualified specialists in the fields of mining engineering, geology, process and metallurgical engineering, environmental and geotechnical engineering, and environmental economics.

Minarco-MineConsult typically completes over 200 assignments per year and has over 300 professionals (through its parent Runge Group) available in disciplines including:

- Mining Engineering;
- Minerals Processing;
- Coal Handling and Preparation;
- Power Generation;
- Environmental Management;
- Geology;
- Contracts Management;
- Project Management;

- Finance;
- Commercial Negotiations.

The roots of Minarco-MineConsult were established in the Australian mining industry. Minarco-MineConsult is committed to compliance with the codes which regulate Australian corporations and consultants and has established an International business which has continued to give its clients and those that rely on its work the confidence that can be associated by the use of the relevant Australian codes.

These codes include:

- The Australian Corporation Law;
- The Australian Institute of Company Directors Code of Conduct;
- The Securities Institute of Australia Code of Ethics;
- The Australasian Institute of Mining and Metallurgy Code of Ethics;
- The Australasian Code for Reporting of Exploration Results, Mined Resources and Ore Reserves (The JORC Code).

Minarco-MineConsult has conducted numerous mining technical due diligence programs and reporting for IPO's and capital raisings over the past six years, with involvement in projects raising a total of over $US 10 billion of capital.

29 ANNEXURE B - GLOSSARY

The key terms used in this report include:

- **Company** means Jayden Resources Inc. “Jayden” 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.
- **element** Chemical symbols used in this report
  Au – Gold; Ag – Silver; As – Arsenic; Cu – Copper; Pb – Lead; Zn – Zinc
- **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
- **In situ** means rock or mineralisation 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 but do not meet either NI 43-101 or Joint Ore Reserves Committee's recommendations
- **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, but 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
- **Lb** stands for pound, a unit of weight equal to 453.592 grams
- **m** stands for metres
- **M** stands for million
- **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.
- **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 Prospectus, mineral right includes exploration right, mining right, and leasehold exploration or mining right
- **mineralisation** 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 mineralisation 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
- **MMC** refers to Minarco-MineConsult
- **mRL** means meters above sea level
- **Mt** stands for million tonnes
- **Mtpa** means million tonnes per annum
- **NI 43-101** National Instrument 43-101
- **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
- **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, 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.
- **raw ore** is ore that has been mined and crushed in an in-pit crusher, but 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 prospects 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
• **saprolite**	is a geological term for weathered bedrock
• **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 metre (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