

ERDENE COMMENCES DRILLING AT THE ZUUN MOD MOLYBDENUM-COPPER PORPHYRY PROJECT

Press Release
Halifax, Nova Scotia
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Erdene Resource Development Corporation (TSX: ERD | MSE: ERDN) (“Erdene” or the “Company”) is pleased to announce the commencement of drilling at its 100% owned Zuun Mod molybdenum-copper porphyry project in southwest Mongolia, located within the Khundii Minerals District, 35 kilometres east of the Bayan Khundii Gold Project.

Quotes from the Company

“We are excited to commence the 2023 drilling program at our Zuun Mod project, one of the largest undeveloped molybdenum-copper deposits in Asia,” said Peter Akerley, Erdene’s President and CEO. “We see exceptional opportunities to grow the Project as the deposit is open in all directions and there are multiple untested copper and molybdenum prospects within the large Zuun Mod porphyry complex.”

“Mongolia’s strategic location next to the largest resource consumer, as well as its improving infrastructure should support a robust, long life project that will provide key inputs for the growing high strength steel industry and the green energy transition,” continued Mr. Akerley. “With the molybdenum market in a supply deficit and strong copper demand forecast, it is an ideal time to return to Zuun Mod and continue to build our project pipeline alongside our flagship Bayan Khundii Khundii Gold Project.”

Zuun Mod Technical Program – Q2 2023

Significant exploration, metallurgical studies, engineering and hydrogeological work has been completed at Zuun Mod, preparing the project for an economic assessment focused on the NI 43-101 deposit area. The Q2 program will advance those efforts, providing data to update the various technical studies with an additional 4,000 metres of diamond drilling. This first phase of the drill program, targeting 2,500 metres, is designed to identify areas at the fringes of the currently defined resource, where larger scale expansion drill programs could materially increase resources. In addition, higher grade areas within the deposit have not been fully defined in the current reported resource due to the wide spacing (~100 metres) of drilling and have the potential with closer spacing to increase grade and therefore total resource. Drilling will also test indications of a preferred orientation of the increasingly higher grade molybdenum and copper zones at depth with deeper drilling and oriented core. The second phase of drilling will focus on earlier stage targets throughout the 16-kilometre circumference, porphyry complex including the Khuvyn Khar copper discovery area (ZMD-121: 34 metres of 1.3% copper) where limited drilling has been completed. Results from the Q2 drill program and an update of previous technical information will be compiled in Q3 to support an independent technical study.

About the Zuun Mod Molybdenum-Copper Project

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

Erdene acquired the rights to the Project from Gallant Minerals Mongolia Ltd (Gallant) in 2005, as part of an inventory of copper targets in Mongolia. Zuun Mod had been identified as a large porphyry complex with significant copper-molybdenum-rhenium (Cu-Mo-Re) mineralization intersected in limited drilling in the southeast and northern portions of the complex. Erdene undertook a multi-year exploration program outlining the Zuun Mod molybdenum-copper deposit and multiple copper and molybdenum prospects, within the outer rim of the 16-kilometre circumference porphyry complex.

In 2011, Minarco-MineConsult (now RPMGlobal) prepared an NI 43-101 resource estimate for a three-kilometre portion of the porphyry system, hosting the Zuun Mod deposit. In total, the Zuun Mod molybdenum-copper deposit resource estimate has a Measured and Indicated ("M&I") resource of 218 million tonnes ("Mt") at an average grade of 0.057% molybdenum ("Mo"), and 0.069% copper ("Cu") at a cut-off grade ("cog") of 0.04% Mo. This equates to 273.5 million pounds ("Mlbs") of contained Mo metal and 330.7 Mlbs of contained Cu metal. In addition, there is a 138 Mt Inferred Resource at an average grade of 0.052% Mo and 0.065% Cu, equating to a further 157.7 Mlbs of contained Mo metal and 197.7 Mlbs of contained Cu metal.

Table 1. Zuun Mod Project Mineral Resource Estimate as at June 2011

Cut-off Grade Mo%	Resource Category	Quantity Mt	Mo %	Contained Mo Metal Mlbs	Cu %	Contained Cu Metal Mlbs
0.03%	Measured	55	0.050	61.1	0.060	73
	Indicated	260	0.050	287	0.065	373.6
	M&I	315	0.050	348.1	0.064	446.6
	Inferred	275.4	0.043	262.1	0.061	373.7
0.04%	Measured	40	0.056	49.5	0.064	57
	Indicated	178	0.057	224	0.070	273.7
	M&I	218	0.057	273.5	0.069	330.7
	Inferred	138	0.052	157.7	0.065	197.7
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	64	0.060	85.0	0.067	94.9

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

Beyond the Zuun Mod Deposit, the broader license hosts several high-potential copper and molybdenum prospects. The Khuvyn Khar prospect, located in the northern portion of the Zuun Mod porphyry complex hosts a large area of disseminated copper mineralization within several kilometres of phyllic and potassic altered quartz monzonite

and granodiorite intrusives. Multiple copper mineralized zones have been intersected in wide-spaced drilling, including 34 metres of 1.3% copper and 9.24 g/t silver from 308 to 342 metres (hole ZMD-121). This zone remains untested at depth and to the southwest where it trends under andesite cover.

In addition to exploration work, initial metallurgical studies were carried out on Zuun Mod drill core samples by AMMTEC Limited of Perth Australia including flotation and comminution testwork. Ore samples have shown that a conventional recovery flowsheet is suitable for the production of both molybdenum and copper concentrates. Based on an average grade of 0.06% Mo and similar copper grades it is reasonable to expect that an overall molybdenum recovery of 85-87% to a concentrate grade of 52% Mo is achievable and a copper recovery of at least 75% would be expected to a 25% Cu concentrate. The Q2 program will include the collection of fresh material for future metallurgical study testing.

Erdene completed a water exploration program to identify a source with the volume necessary to process ore at Zuun Mod. This program successfully identified, drill tested and registered a water resource with the Water Authority of Mongolia for a basin 35 kilometres north of Zuun Mod. The additional work required to further define this water resource and update the permitting will be better defined as the project advances.

Erdene will complete further market, technical and economic studies as well as permitting work in the coming months, to build upon a conceptual assessment completed by RPMGlobal in late 2021. Based on the studies, as well as the results from the exploration program underway, Erdene anticipates preparing a preliminary economic assessment for the project in the coming months.

About Molybdenum

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

Global molybdenum production was 578 million pounds in 2022, while global usage rose 3% to 631 million pounds from 614 million pounds the previous year. Although molybdenum output was largely stable for the past 5 years, production cuts at major mines, delays in commissioning new projects and degrading resource quality in long life molybdenum assets has led to shortages and a severe increase in the molybdenum price, reaching all time highs in early 2023. Should the current level of growth be maintained an additional 50M lbs of shortfall is projected over the next three years. Regional consumption (China, Japan and Korea) exceeds 50% of the global production and although China is the world's largest producer, increasing production by 12% in 2022, it has been unable to meet demand with a shortfall of ~20M lbs in 2022. (IMOA 03/04/23)

In addition, molybdenum is seeing strong demand from both the renewables and traditional energy sector as its used in multiple clean energy generation and storage technologies. The World Bank report "Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition" named molybdenum as one of the

six cross-cutting critical minerals needed in all future green technologies (2020), while the International Energy Agency also named molybdenum in 2021 as a critical mineral for the green energy transition.

About Erdene

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

Qualified Person

Peter Dalton, P.Geo. (Nova Scotia), Senior Geologist for Erdene, is the Qualified Person as that term is defined in National Instrument 43-101 and has reviewed and approved the technical information contained in this news release.

Forward-Looking Statements

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

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

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Figure 1: Zuun Mod Project Location & Regional Molybdenum Supply & Demand



Figure 2: Gold, Copper & Molybdenum Deposits and Prospects – Khundii Minerals District

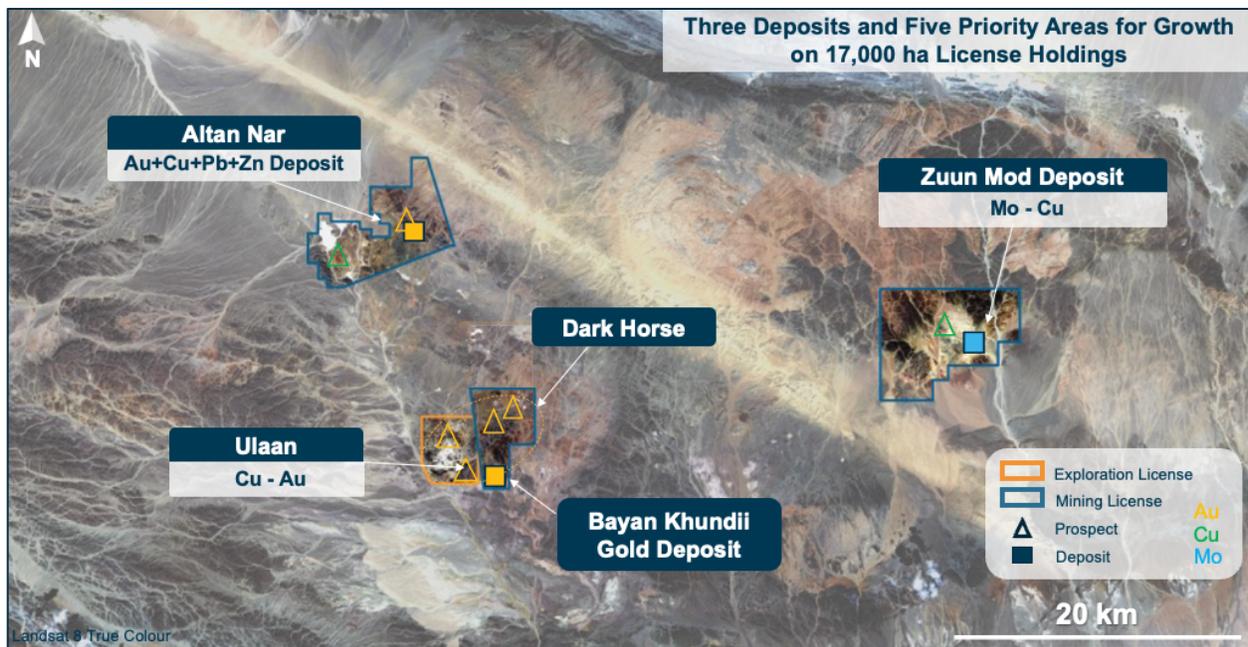


Figure 3: Khuvyn Khar Porphyry Complex – Zuun Mod Deposit

