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East Star Resources PLC
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25 January 2023

East Star Resources Plc

("**East Star**" or the "**Company**")

Substantial copper-lead-zinc deposit identified on Rudny Altai, Kazakhstan

East Star Resources Plc (LSE:EST), the Kazakhstan-focused mineral explorer, is pleased to announce that, as a result of a detailed literature review following its successful 2022 helicopter electromagnetic ("HEM") survey, it has identified a substantial copper-lead-zinc-deposit ("Cu-Pb-Zn") located within its 100% owned 'RA3' licence, centrally located in the world-class Rudny Altai VMS belt. The newly identified polymetallic volcanic and sediment hosted exhalative sulphide ("VSHMS") deposit (the "Verkhuba Deposit") is within the greater Verkhuba Ore District which includes the (previously announced) four Priority 1 HEM anomalies, and has the potential to become a deposit of regional significance.

Highlights:

- The Verkhuba Ore District occurs over 10 km x 3 km and is comprised of the polymetallic Verkhuba Deposit and several occurrences identified in historic drilling results and the Company's 2022 HEM survey, implying a long-lived system producing multiple high-grade ore bodies from several hydrothermal vents related to the same metal source
- The Verkhuba Deposit, delineated in 1990 by >45,000 m of drilling, has up to seven parallel and several metre thick high-grade Cu-Pb-Zn layers of massive sulphides in Devonian sediments formed around large-scale, hydrothermal exhalative centres
- Best intercepts include:
  - Hole 14: **11.0 m @ 2.8% Cu** from 32.9 m; and **6.3 m @ 3.7% Cu** from 60.3 m
  - Hole 25: **42.0 m @ 0.5% Cu** and **1.3% Zn** from 84.5 m (including **16.0 m @ 0.35 % Cu** and **2.52% Zn** from 84.5 m)
  - Hole 27: **9.0 m @ 1.2% Cu** from 299.4 m
  - Hole 54: **5.0 m @ 0.2% Cu, 1.8% Pb** and **3.4% Zn** from 221.5 m; and **7.6 m @ 0.86% Cu** and **2.44% Zn** from 239.4
  - Hole 63: **7.1 m @ 0.8% Cu** and **2.6% Zn** from 239.4 m; and **5.0 m @ 1.57% Cu** and **5.48% Zn** from 252.7 m
  - Hole 245: **10.5 m @ 0.27% Cu, 1.7% Pb** and **2.59% Zn** from 687.5 m
  - Hole 269: **15.0 m @ 0.9% Cu** and **3.06% Zn** from 155.0 m (including **4.0 m @ 2.48% Cu** and **2.59% Zn** from 155.0 m and **2.2 m @ 0.7% Cu** and **10.5% Zn** from 166 m)
- Historical flotation recovery rates of 94-96% Cu and 60-90% Zn into concentrate
- Au and Ag reported to concentrate in some metallurgical samples allowing further upside potential from precious metals
- Preparation of an independent Mineral Resource Estimate has commenced and multiple drill-ready targets have been added to the 2023 exploration programme which will aim to establish a JORC compliant resource
- The Rudny Altai region is one of the largest VMS provinces in the world with the Kazakhstan part of the belt hosting major producers including Glencore and KAZ Minerals

Alex Walker, East Star CEO, commented:

"The Verkhuba Deposit is a game changer for East Star. It leapfrogs the Company from being a greenfield explorer to a brownfield resource development company. Part drilled and part buried beneath thin cover, the Cu-Pb-Zn deposit has huge potential upside from ore zone extensions within the Verkhuba Ore District as well as high-priority EM targets.

The Verkhuba Ore District contains volcanogenic-hosted massive sulphide targets adjacent to sediment-hosted exhalative sulphide mineralisation, implying a long-lived hydrothermal system generating multiple high-grade deposits within the same area.

Rudny Altai is a significant copper producing region with excess processing capacity from both Glencore and KAZ Minerals. The identification of the Verkhuba Deposit is yet another validation our exploration thesis and we are excited to commence resource delineation drilling with additional updates to be delivered as digitisation of historic drilling continues and the 2023 exploration programme commences."

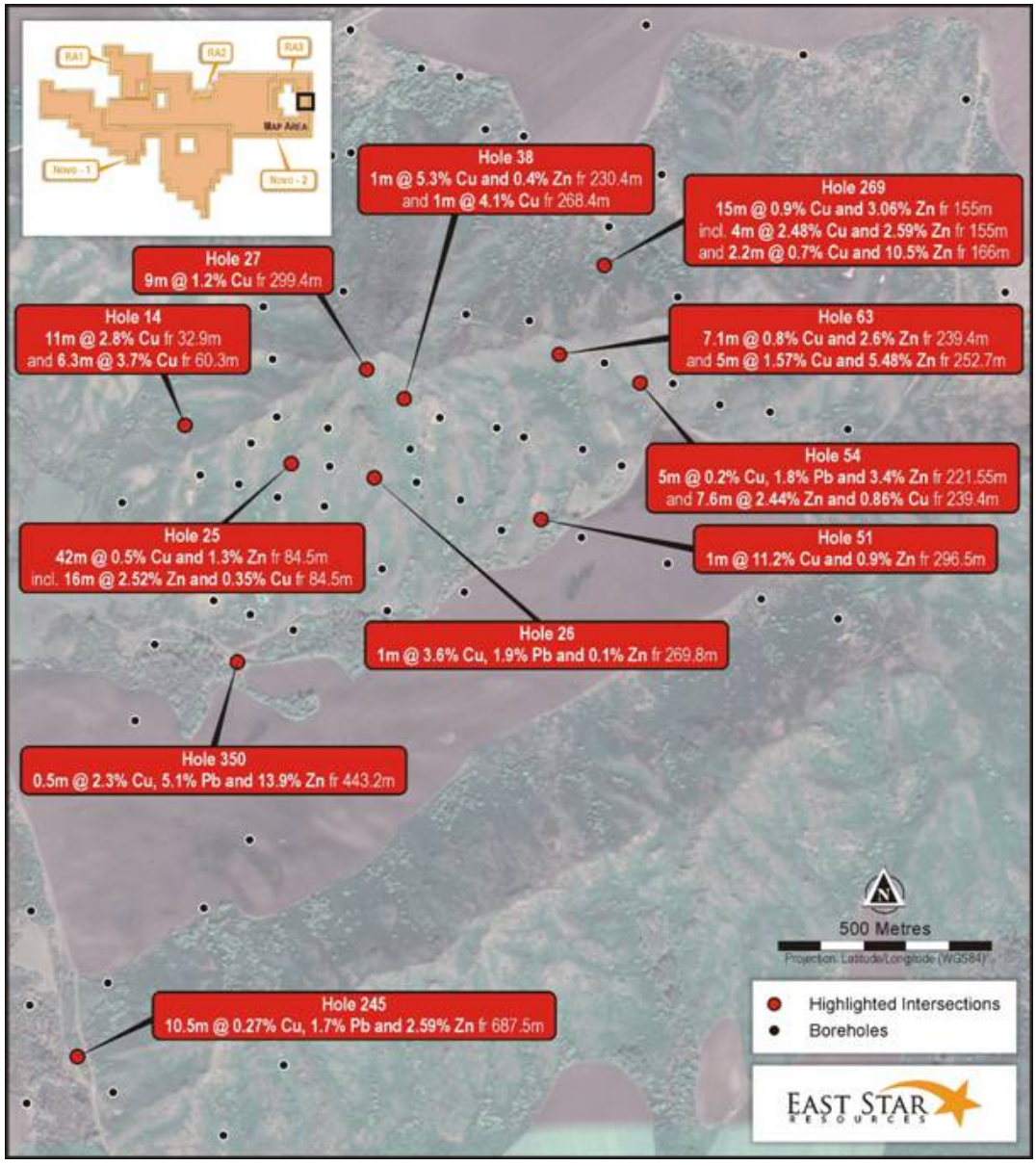


Figure 1: Verkhuba Deposit with highlighted intersections

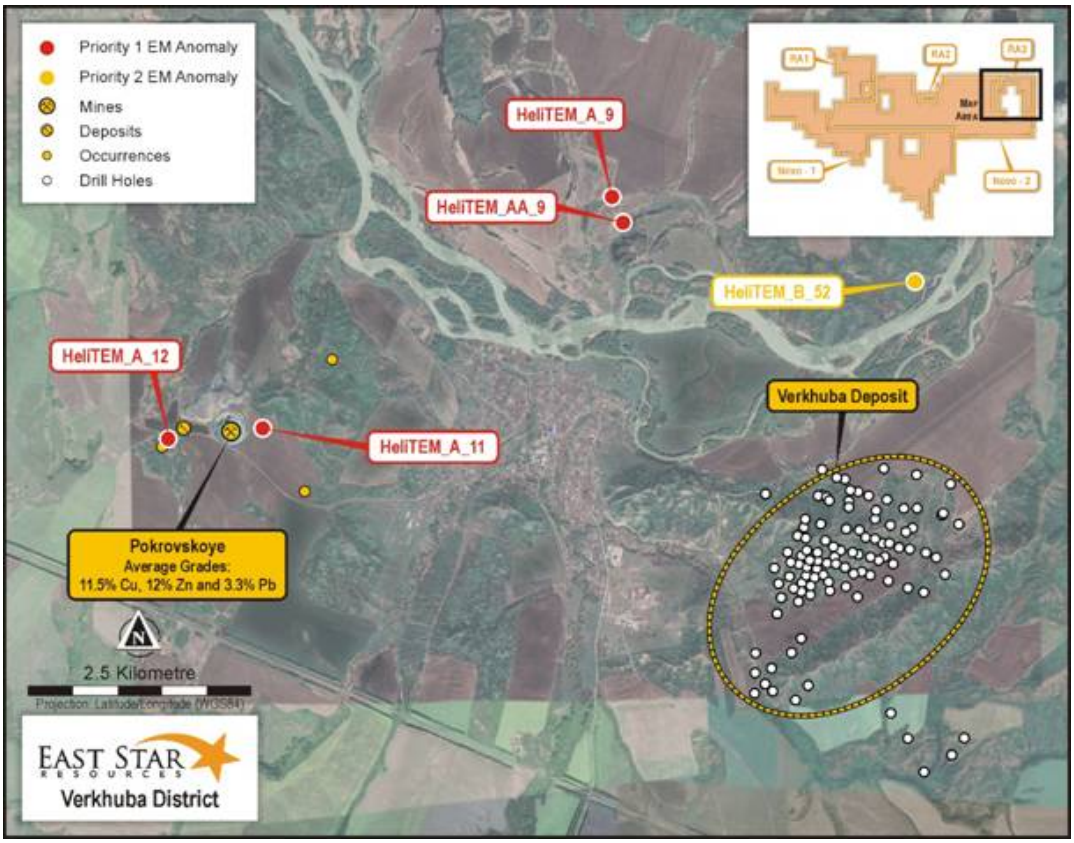


Figure 2: The Verkhuba Ore District incorporating EM targets from East Star's 2022 HEM survey

Introduction

The Verkhuba Ore District is situated in an anticlinal structure (Luninskaya Anticline) composed of Devonian volcanogenic and sedimentary formations. The Verkhuba Ore District hosts more than 24 occurrences of Cu-Pb-Zn mineralisations, including four VMS/VSHMS deposits where mineral resources have been estimated in the Kazakhstan GKZ system in the C2 and P1 resource categories. The Company also delineated several untested EM targets during the 2022 HEM survey programme.

The Verkhuba Ore District covers an area of 10 km x 3 km elongated principally in an E-W direction. East Star's licence, 1795-EL, covers the eastern and the western part of the Verkhuba ore field and includes the old Pokrovskoye-2 VMS mine and the Verkhuba Deposit.

Verkhuba Deposit

Surface outcrops of sulphide ore within the Verkhuba Ore District have been known since the bronze age with the first geological description and small-scale mining in the 17th century. The systematic geological study of the area started in the 1920s. The Verkhuba Deposit was delineated between 1970 and 1990 (completing just prior to the dissolution of the Soviet Union) as part of a greater Verkhuba Ore District exploration programme which included 9,104.5 m of shallow non-core holes and 142 diamond holes totalling 67,581.5 m of drilling.

Diamond drilling was conducted across the area on a 200 m x 400 m grid, with infill drilling on 100 m x 200 m grids and 75 m x 100 m grids on the Deposit. Core recoveries were between 40-80% with average core recovery in mineralisation of 72%.

Mineralisation occurs as stratabound sheet- and ribbon-like bodies principally striking E-W. Ore bodies pinch and swell, probably related to paleogeographic controls by the basin architecture and remobilisation by post-depositional tectonics.

Up to seven parallel high-grade Cu-Pb-Zn sulphide horizons occur in two lithological units and are mapped on surface over 10 km strike length. Mineralisation in the lower level is hosted by carbonaceous siltstone and limestone, while the upper level is tied to the contact of clayey siltstones and sandstones with felsic volcanic rocks. High-grade and thick mineralised zones occur within the ore deposit which are related to Middle Devonian volcanic centres. Cu-Zn zonation appears to have a spatial control inferred to be related to proximity to the hydrothermal source of sulphide brines. Au mineralisation may be related to later stage fluids infiltrating along post-depositional faults.

East Star is continuing to digitise all available historic drilling data over the Verkhuba Deposit to build a 3D model. This model will allow better interpretation of controls on ore distribution, including structure and paleogeography of the volcano-sedimentary basin, location of the main lithological boundaries and faults controlling

mineralisation. Results of the 3D model will also be used to generate a Mineral Resource Estimate and Exploration Target for the Verkhuba Deposit and guide future drilling.

Metallurgical test work

According to a historical resource drilling report, 10 bulk sulphide ore samples from the Verkhuba Deposit were tested in several metallurgical laboratories of Kazakhstan between 1988-1989, including by the Institute of Non-Ferrous Metals in Ust-Kamenogorsk and the processing metallurgical plant of the Berezovskoe VMS deposit. The studied ores had different mineral composition and varied in weight from 9.7 kg to 1,500 kg.

Four mineralogical ore types (Cu-Zn, Zn-pyrite, Cu-Pb-Zn, and Pb-Zn) were defined based on grades of copper, zinc and lead and content of pyrite. The sulphide mineralisation is simple with a mineral composition of pyrite, chalcopyrite, galena and sphalerite.

Mineral recoveries in the tested ore types were good with preliminary flotation tests indicating high recoveries from polymetallic ore:

- Type 1 (Cu-Zn):Recoveries of Cu 84-87%, Zn 84-93%, pyrite (FeS) 27-81%
- Type 2 (Zn-pyrite): Recoveries of Cu 71-94%, Pb 76%, Zn 61-68%, pyrite 48%
- Type 3 (Cu-Pb-Zn): Recoveries of Cu 93-97%, Pb 83% and Zn 47-68%, pyrite 41-60%
- Type 4 (Pb-Zn): Recoveries of Cu 75%, Pb 84%, Zn 92%, pyrite 23-62%

Au grade in nine of those ore samples was reported within 0.1-0.4 g/t, and Ag grade as 4.2-22.9 g/t, however, no information of Au and Ag grade in concentrates and recovery of precious metals was provided. In previous metallurgical studies Au and Ag grades in polymetallic concentrates reported from 6-20 g/t and 46-496 g/t respectively with best Ag grades associated with high grade Pb. Additional data is required to understand grade distribution and potential upside of byproduct Au and Ag within a precious-metal mineralised system.

EM Targets within the Verkhuba Ore District

East Star conducted a HEM survey between May and July 2022. In total, 50 anomalies were identified across the Rudny Altai licence areas, with priority targets defined by size, continuity, and association with known geochemical anomalies, magnetic or IP anomalies, and association with favourable structural or lithological indicators such as the presence of rhyolite, which is a common footwall indicator for the region.

A region of untested priority targets were identified in the NE of the Rudny Altai area. Based on additional geological information, these untested HEM targets are now interpreted to be spatially related to the Verkhuba Ore District. These include:

- HeliTEM _A_11 target is a strong, narrow, double peak, strike extensive and very shallow anomaly (from about 25 m) coinciding with a very strong magnetic anomaly.

- HeliTEM_A_12 target is a strong single peak late time response, coinciding with a strong magnetic anomaly, at about 100 m deep and associated with phyllic alteration zone in granite porphyries, rhyolitic lava and siltstones mapped at surface.

Two anomalies are adjacent to the historic Pokrovskoye Mine. The massive sulphide ore body was reported as 150 m long by 200 m wide and up to 22 m thick with average ore grades of 11.5% Cu, 3.3% Pb and 12% Zn. The ore body was mined in open pit to 70 m depth until 1979.

- HeliTEM_AA_9 target is a large, shallow, highly conductive, strike-extensive, strong north-east striking and moderately dipping conductor, coinciding with a moderate magnetic anomaly and big enough to represent a large ore zone, with no known prior exploration history.

- HeliTEM_A_9 target is a large, shallow, strike-extensive, double peak anomaly dipping towards the east, also with no known prior exploration history.

A site visit in October 2022 found these targets to be expressed as depressions with river systems, with the lack of geological surface expression making a discovery by mapping very difficult.

Verkhuba Ore District

The presence of multiple anomalies within a 10 km x 3 km area including; a historic high-grade VMS open pit deposit (Pokrovskoye), the drilled Verkhuba Deposit, and several untested EM, IP and magnetic anomalies, implies a long-lived system producing multiple high-grade ore bodies from several hydrothermal vents related to the same metal source.

VMS deposits form in subaqueous environments from circulating hydrothermal fluids heated by volcanic activity. These deposits form as sulphide mounds, stratiform exhalative and/or replacive bodies and commonly have stockwork/vein mineralisation in their immediate footwall. These various styles are essentially facies of mineralisation, each one being the product of a particular set of conditions that control the ore-forming processes and the consequent geometry and architecture of the deposits. Long lived VMS systems therefore typically contain a number of deposit styles as vent conditions and location changes over time.

The style of exhalative deposits is controlled by the salinity of the vented fluids and the redox state at the seafloor. Hydrothermal fluids with salinities less than twice that of seawater that vented into open, oxidic oceanic environments, typically formed small mound and chimney complexes. The massive sulphides were rapidly oxidised and partly dissolved by seawater. In contrast, stratiform sheet-like deposits are typically formed in anoxic bottom waters, ponded in depressions such as second- or third-order basins to form a sulphide brine pool. Deposits formed in anoxic environments can be significantly larger than those in oxidic settings. This is attributed to several factors that include longer-lived hydrothermal circulation, more efficient sulphide precipitation and reduced or inhibited oxidation thereof.

Replacement of volcanic and sedimentary strata by sulphide typically occurs within the feeder zones beneath the exhalative mineralisation. However, successions with abundant porous, permeable and/or reactive rocks such as glassy and/or pumiceous volcaniclastic rocks, and in some cases limestone, favoured the development of large replacive deposits.

Additional studies are required to identify and test different mineralisation styles and exhalation centres and determine a genetic model to benefit interpretation of geophysical data and direct future drilling.

Rudny Altai region

The Rudny Altai region is one of the largest VMS provinces in the world, part of the Central Asian Orogenic Belt. The Company's newest 1794-EL, 1795-EL and 1799-EL licences are located adjacent to the Company's existing 847-EL and 914-EL licences (together, the "Licences"). Administratively, the Licences are within the Shemonaikha District and are extraordinarily well connected to infrastructure. The regional centre of Ust-Kamenogorsk is located 45 km, and its international airport is located 35 km, southeast of the Licences. The railway connecting Ridder (Kazzinc Mine) and Tomsk cities crosses the Licences from the south to the northwest with two railway stations located on the territory of the Licences. There is a network of dirt roads within the Licences that are suitable for driving all year round. A hard-surfaced road from Ust-Kamenogorsk to Shemonaikha crosses the western part of the Licences.

The area is characterised by moderately hilly terrain with elevations ranging between 270 m and 630 m above the mean sea level.

For further information visit the Company's website at www.eaststarplc.com, or contact:

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About East Star Resources Plc

East Star Resources is focused on the discovery and development of gold, rare earth, and copper deposits in Kazakhstan. With an initial nine licences covering 1,687 sq km in three mineral rich Ore Districts, East Star is undertaking an intensive exploration programme, applying modern geophysics to discover minerals in levels that were not previously explored. The Company also intends to further expand its licence portfolio in Kazakhstan.

East Star's management are based permanently on the ground, supported by local expertise, and joint ventures with the state mining company on certain projects.

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The person who arranged for the release of this announcement was Alex Walker, CEO of the Company.

Competent Persons Statement

The information in this release that relates to Exploration Results has been reviewed by Mr. Mikhail Tsypukov. Mr. Tsypukov is a Fellow of the Institute of Materials, Minerals and Mining (FIMMM, Reg. No 459707). He has a PhD in geology from A.P. Vinogradov Institute of Geochemistry Siberian Branch Russian Academy of Sciences with over 30 years of experience of gold and base metal exploration in Russia, Kazakhstan, Mongolia, Rwanda and Islamic Republic of Mauritania.

Mikhai Tsypukov has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity being undertaken to qualify as a Competent Person as defined in 2012 Edition of the "Australasian Code for Reporting of Exploration targets, Exploration Results, Mineral Resources and Ore Reserves", also known as the JORC code. The JORC code is a national reporting organisation that is aligned with CRIRSCO. Mr Tsypukov consents to the inclusion in the announcement of the matters based on his information in the form and context in which they appear.

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