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East Star Resources PLC
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East Star Resources Plc

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

Talairyk Rare Earths Project Update, Kazakhstan

East Star Resources Plc (LSE:EST), the Kazakhstan-focused minerals exploration company, is pleased to provide an update for the Talairyk heavy rare earth elements ("HREE") project in East Kostanay, Kazakhstan.

Highlights:

- All 966 recovered samples from the 1,001 m / 30 borehole initial RC drilling programme in November 2022 have undergone analysis by a pXRF analyser to provide an indication of rare earth element grades
- The element yttrium was used as a proxy for HREE mineralisation and was reported in all samples from the prospective kaolinitic clay horizon with 12 boreholes recording grades above 500 ppm
- In consultation with The MSA Group - Minerals Consulting Ltd (''MSA''), individual and composite samples were selected and sent for sample preparation at ALS laboratories in Karaganda and have now arrived at ALS laboratories in Ireland where assay work has begun
- Additional composite samples will be sent for five stage sequential leach test work, which will be a major indicator of the liberation qualities of the ore and the first step in producing a process flow sheet and understanding potential project economics

Alex Walker, East Star CEO, commented:

''We are very excited to be moving towards the results stage of initial exploration on the Talairyk HREE project. The kaolinitic clays seen in drilling, when combined with the yttrium pXRF results and historical reports, provide us confidence in the presence of HREE elements with a geochemical signature resembling those of the producing mines in South China. Positive results from pending assay and leach tests will give us the confidence to move rapidly into resource drilling of the historical deposit, exploration of the significant granitic trend, and more detailed metallurgical work required for a scoping study."

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 square kilometres in three mineral rich districts, East Star is undertaking an intensive exploration programme, applying modern geophysics and out-of-the-box geological concepts to discover minerals under cover and at depths 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.

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

Appendix

Summary of Talairyk HREE Project

- Potential for low-cost entry to a geologically de-risked Ionic Absorption Clay (IAC) hosted Heavy Rare Earth (HREE) deposit

deposit

- Historical database includes 128 core holes and 61 auger holes for 3,755 samples. East Star drilling aims to verify the historical grades
- Historical estimates suggest the presence of elevated grades of Total Rare Earth Oxides including yttrium oxide (TREO) in a zone approximately 20 m thick at an average of 7.5 m from surface (1994,estimates are unverified GKZ estimates and not compliant and should not be relied upon until verified - East Star aims to verify and further expand on the historical GKZ resource estimate)
- Using the recent reverse circulation (RC) drilling information, East Star aims to establish whether the Talairyk deposit is similar in nature to the deposits of South China from where most of the world's HREEs are currently produced
- Exploration upside exists within the project area across similar weathering profiles over prospective basement lithologies and with potential for regional expansion
- IAC peers generally have lower CAPEX and lower OPEX than hard rock rare earth projects
- Farm-in terms up to 90% ownership:
    - No cash payments
    - First tranche of US$250,000 in shares for 51% after expenditure of US$500,000 including recent drilling and initial metallurgical test work
    - Second tranche of US$250,000 in shares for 75% after expenditure of a further US$500,000 which will include scoping study level assessment
    - Additional expenditure secures up to 90% of the project on a 'contribute or dilute' basis

Deposit

According to historical reports, the thickness of the deposit varies along the historically tested sections from 5.88 m to 58.6 m, averaging 19.46 m. The average overburden thickness is 7.38 m. Historical reports suggest that elevated grades of yttrium oxide and other rare earth oxide elements occur (unverified historical GKZ exploration information and estimates) in broad kaolinitic clay zones similar to the IACs of South China.

Historical Exploration

Geological surveys of the site have been done since 1916, however, the first prospecting work was not carried out until 1972. In 1988-89, a magnetic survey on a scale of 1:5000 and a gravity survey at a scale of 1:10000 were conducted over a 50 m by 10 m and 200 m by 50 m grid. From 1987-1991 prospecting work was carried out resulting in discoveries of yttrium and REEs. From 1991-1994 prospecting was carried out to establish the size of the mineralised zone in plan and in depth, the morphology and conditions of occurrence of mineralised zones, the qualitative characteristics of mineralisation, and the hydrogeological conditions. This latest work was conducted by the State Holding Company "Marzhan" and the Joint Stock Company "Turgai Geological Exploration Expedition".

Vertical diamond drillholes across the strike of the mineralised zone were drilled on a 200 m by 50 m grid to an average depth of up to 75 m including three hydrogeological wells. 128 holes were drilled by core drilling for 6,022 m and 61 holes by auger drilling for 903 m. 3,755 samples were taken. On average, the core recovery ranged from 68% to 76%.

Samples were subjected to the following types of analyses:

- Semi-quantitative spectral analysis for 19 elements
- XRF analysis for yttrium, zirconium, tin, and niobium
- Approximate quantitative analysis for the sum of rare earth oxides
- Grain-size analysis of weathering crust
- Lithological analysis of weathering rocks

Geology

The project area is situated in the northern part of the Ulutau meganticlinorium which consists of Middle Proterozoic gneisses, minor Late Proterozoic mafic rocks, and Paleozoic granitoids.

The REE mineralisation is located within the weathering crust of the lower part of the Middle Proterozoic Talairyk suite, composed of mica gneisses, two-mica-plagioclase gneissic schists, thick (100-300m) units of amphibolite, garnet amphibolite, and plagioclase-amphibolite schists. The thickness of this unit is 600-800 m.

The average thickness of the weathering crusts is 20 m. In some areas, the depth of fresh rock is up to 100 m. The minerals in the weathering crust are quartz (approximately 40%), kaolinite (approximately 42%), and sericite (approximately 18%). In the weathering crust, the main minerals hosting yttrium and rare earth elements are kaolinite, hydromuscovite, and to a lesser degree, plagioclase.

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