E-Tech Resources Unravels Regional-Scale Rare Earth Potential at Its Eureka Tenement in Namibia

06.02.2024 | Newsfile

Halifax, February 6, 2024 - E-Tech Resources Inc. (TSXV: REE) (FSE: K2I) ("E-Tech" or the "Company") is pleased to provide an update on the 2023 exploration activities on its 100%-owned Eureka project on Exclusive Prospecting License ("EPL") 6762 in Namibia.

E-Tech implemented corporate and exploration management changes in the second half of 2023 (see press releases of July 17, 2023 and October 16, 2023), which resulted in the Company reassessing and revising its exploration strategy and approach.

The reassessment of historic data in 2023 resulted in a revised view of the lithological and structural setting of the light rare earth element ("LREE") mineralization on the Eureka project and the immediate roll-out of an exploration program including a systematic property-wide geochemical soil sampling program covering the "Eureka dome" structure and selected ultra high-resolution drone-based magnetic surveys in Q4 2023.

Key results of the integration of all new and historic data are:

- Seven large soil geochemical LREE anomalies occur in a specific stratigraphic and structural corridor within the Eureka dome. With only one of these anomalies explored ("Eureka Central"), the exploration potential on EPL 6762 increased manyfold.

- Further potential exploration upside exists on the Company's recently secured EPL 8748, which covers at least a similar portion of the potential continuation of the zone as EPL 6762.

- First ground truthing by the field crew already confirmed the occurrence of monazite (the main LREE-bearing mineral on the property) in three of the six new targets.

- The preliminary interpretation of the ultra-high resolution aeromagnetic data produced by Flightec indicates spectacular high resolution, potentially mineralized structures, in both previously known and new targets.

CEO Todd Burlingame says, "The new data obtained from the late 2023 exploration program indicates that there is likely to be a multifold repeatability of the known Eureka Central mineralization on a regional scale on E-Tech's property. This, combined with enhanced geophysical tools and the first boots on the ground on the new EPL 8748 will allow us to expand our exploration activities on a regional scale. I am excited to see how integration and reinterpretation of all the data will get us going in 2024."

Geochemical soil survey

The Eureka project soil geochemical database entails approximately 33,000 samples by the end of 2023 covering all ground prospective for rare earth element ("REE") mineralization. The historic database of E-Tech comprises 11,745 sample points where leptosoils were sieved to <1 mm and analyzed in-situ with the Company's pXRF analyzer. The data of 20 m by 20 m grids cover irregularly shaped clusters throughout EPL 6762. The data points form part of the consolidated soil database.

In Q4 2023, the Company's field team and Gecko Exploration ("GEX") embarked on a systematic soil sampling program on N-S oriented sample lines on a grid of 40 m line spacing and 20 m sample spacing

covering the entire potentially prospective area on EPL 6762.

With the GEX sampling logistics and system in place, 22,295 samples were collected in 10 weeks. Samples of the <1 mm fraction were taken in the field and pXRF analysis conducted at the clean facilities of the Company's Karibib office. The sample material is safely stored at Karibib and is sufficient for further full laboratory analysis if required at a later point.

Figure 1: The >33,000 soil sample geochemical database clearly delineates seven large lanthanum anomalies. The field crew already identified monazite in lithic leptosoils outside the historic prospect of Eureka Central at the new Eureka East and Eureka North prospects.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/6102/196987_f8a4083a14c7d870_001full.jpg

Due to the clear correlation of lanthanum ("La") in soil samples with the LREE mineralization, La values were used to identify LREE anomalies (see figure 1).

The new systematic soil geochemical data puts previous exploration focus on Eureka Central (Zones 1 to 3) into perspective to new targets which seem to be qualitatively and quantitatively of a similar order of magnitude, and thus presenting highly prospective new targets.

The new anomalies will now guide the field team in planned, focused mapping before trenching, and eventually drilling will be conducted.

Review of the geological model

Mineralization of economic importance seems to be controlled by structures parallel to foliation while swelling of the mineralization occurs in dilatation zones (e.g. jogs and fold noses).

On a regional scale, significant REE soil anomalies seem to follow a specific pattern and position within the sedimentary sequence and dome structure (see figure 2). Besides the structural control of the mineralization, the systematic soil data supports a stratigraphic control to a carbonate containing sequence within the upper Etusis Formation (due to the dome structure forming the exploration target). Further structural and lithological studies are ongoing.

Figure 2: REE-anomalies seem to follow a certain position in the stratigraphic sequence of the Etusis Formation in the Eureka Dome. A stratigraphic control would allow focused exploration on the new tenement EPL8748 adjacent to the east of the Eureka project.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/6102/196987_fig2.jpg

Ultra-high resolution drone magnetic survey

E-Tech went into an agreement with Flightec Systems to conduct high-resolution, UAV-based magnetic surveys (see press release of October 16, 2023). A limited survey over three small, selected targets was conducted by Flightec to test methods in detecting zones which host monazite mineralization assuming magnetic responses from several magnetite and pyrrhotite-hosting lithologies.

First results are very encouraging with the new data clearly delineating NW-striking zones correlating with known mineralization in very high detail. Parts of the inferred carbonatite dykes from historical mapping correlate well with WNW to NW-striking positive magnetic anomalies.

Man-made anomalies especially from drill casings were identified within the Eureka Central prospect. Flightec managed to effectively erase the effects of the drill collars and provided a top-quality product for this prospect which allows for correlation with the dense drill data.

Linear WNW-striking magnetic features at Eureka Zone 1 and Zone 2 correlate well with structures hosting known monazite mineralization. The magnetic features clearly show the expected discontinuity due to tight folding and/or en-echelon step-overs.

Figure 3: Patch of Flightec's ultra-high resolution magnetic data (RTP tilt) over the Eureka Central prospect showing tremendous detail of structures most likely related to the monazite mineralization.

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/6102/196987_f8a4083a14c7d870_007full.jpg

About E-Tech Resources Inc.

E-Tech Resources Inc. (TSXV: REE) (FSE: K2I) is a rare earths exploration company focused on developing its Eureka Rare Earths Project in Namibia. Eureka represents a district-scale swarm of calc-silicate hosted monazite mineralization.

The Eureka project is located approximately 250 km north-west of Namibia's capital city Windhoek and 140 km east of Namibia's main industrial port Walvis Bay. The project is crossed by the national B1 highway and right next to the main national railroad line. The Eureka project is based on EPL 6762. E-Tech has also entered a definitive agreement to acquire an 85% interest in EPL 8748, which lies adjacent to and surrounds the Company's EPL 6762.

Namibia is recognized as one of Africa's most politically stable jurisdictions, with an extremely well-established infrastructure and clear and transparent mining legislative and regulatory framework.

Qualified Person

Keith Webb, BSc Honours in Applied Geology, is a Consulting Geologist with 37 years' experience in the mining and exploration sector and has reviewed and approved the scientific and technical information in this news release. Mr. Webb is a Member of The Australasian Institute of Geoscientists (AIG) membership number: 3688 and is a Qualified Person for the purposes of National Instrument 43-101 - Standards of Disclosure for Mineral Projects.

Cautionary Statements

This press release may contain forward-looking information. This information is based on current expectations and assumptions (including assumptions relating to general economic and market conditions) that are subject to significant risks and uncertainties that are difficult to predict. Actual results may differ materially from results suggested in any forward-looking information. E-Tech does not assume any obligation to update forward-looking information in this release, or to update the reasons why actual results could differ from those reflected in the forward-looking information unless and until required by securities laws applicable to E-Tech. Additional information identifying risks and uncertainties is contained in the filings made by E-Tech with Canadian securities regulators, which filings are available at www.sedarplus.ca.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

For further information, please contact Todd Burlingame, CEO of E-Tech Resources Inc., at (782) 409-5474.

To view the source version of this press release, please visit https://www.newsfilecorp.com/release/196987