

9<sup>th</sup> September 2024

## WEST KOONENBERRY PROJECT UPDATE

### HIGHLIGHTS

- Airborne magnetic survey complete; geophysical data review ongoing
- Land access secured; surface mapping of exposed geology initiated
- CSIRO Kick-Start funding awarded to map exploration targets undercover

Strategic Energy Resources Limited (“SER” or “the Company”) is pleased to provide an exploration update for the West Koonenberry Project in NSW which covers 483km<sup>2</sup> of the interpreted western rifted portion of the Koonenberry Cu-Ni belt. SER is targeting mafic host rocks on the western side of the Bancannia Trough equivalent to the Mount Arrowsmith Volcanic Belt on the eastern side currently being explored by S2 Resources<sup>1</sup> (ASX:S2R). The Koonenberry belt is interpreted to be analogous to the Pechenga Copper-Nickel camp in Russia.

Commenting on the ongoing work program, SER Managing Director, Dr David DeTata said:

*‘The team has worked quickly to advance the West Koonenberry Project and has recently completed a detailed airborne magnetics survey, reconnaissance fieldwork and initiated a research and development project in collaboration with Australia’s national science agency, CSIRO, through a Kick-Start Program. These new datasets will aid in the assessment of the prospectivity of the Project and inform future exploration programs that will be essential in drill targeting into the future’.*

### AIRBORNE MAGNETIC SURVEY COMPLETE

A review of existing geophysical datasets covering the Project area identified poor gravity and magnetic coverage. These two datasets are crucial for mapping any mafic intrusive bodies present beneath younger sedimentary cover within the Project, and as a priority an airborne magnetic/radiometric (AMR) survey was designed and subsequently completed in June.

The AMR survey was conducted by Thomson Airborne over the entire West Koonenberry Project area utilising a fixed-wing single engine Cessna 210, flying 100m spaced NE/SW orientated lines for a total of over 6,600-line kilometres. The survey greatly increased the quality of magnetic data across the project, allowing detailed resolution of strongly magnetised bodies (Figure 1).

The data from the survey will be integrated with 2.5D inversions of the publicly available 2021 Eastern Resources Corridor 20km spaced and 2022 Bancannia 2.5km spaced AEM to understand the depth of cover across the project area and identify any potential conductive basement anomalies associated with mafic rocks, which may represent sulfide targets.

<sup>1</sup> S2 Resources (ASX: S2R) Announcement October 2023

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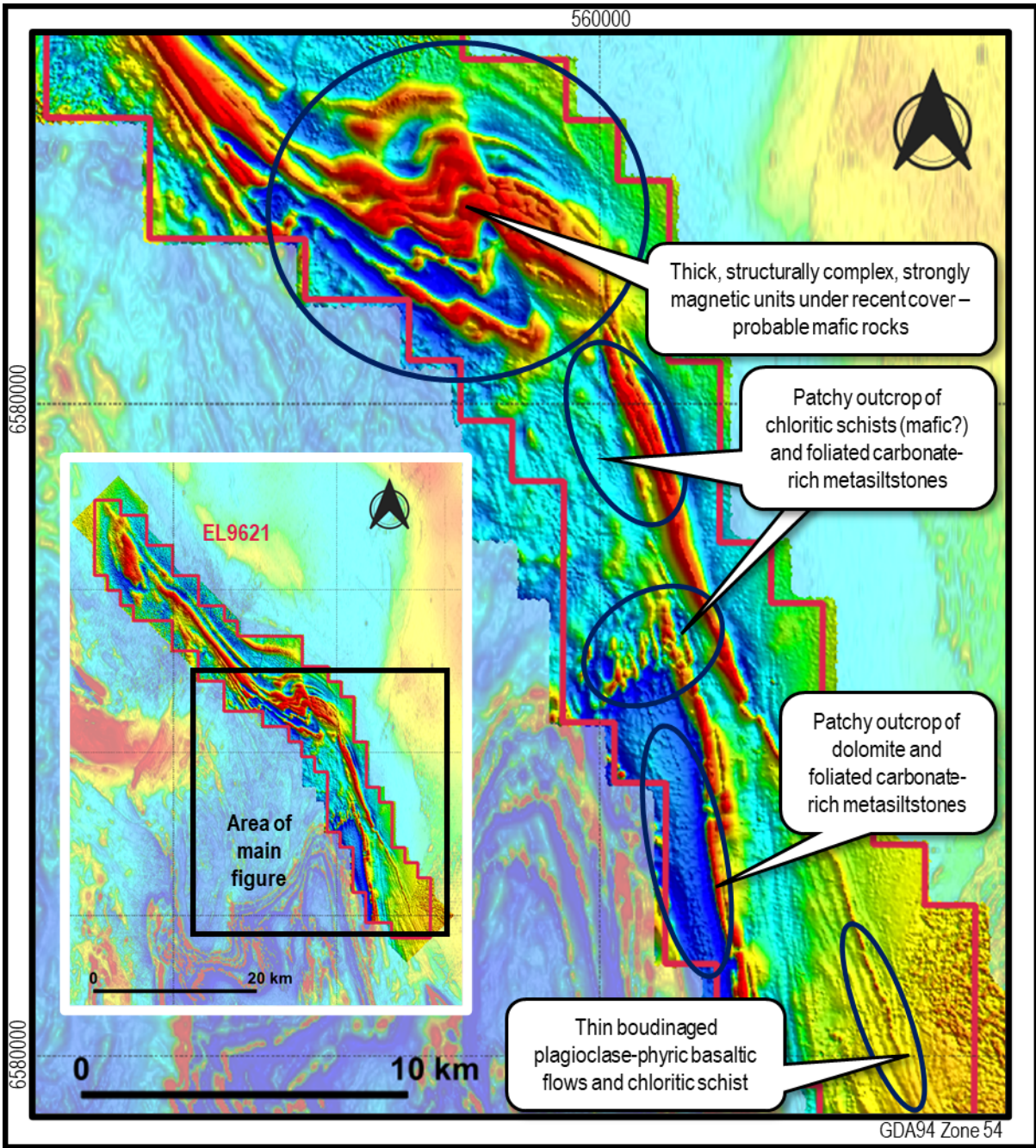


Figure 1: 0.5VD TMI-RTP magnetic image showing SER's recently collected magnetic data across EL9621 and the results of reconnaissance field mapping. The inset shows the magnetic data across the entire tenement, while the main image shows more detail of the southern half of the EL, highlighting areas traversed during the July fieldwork.

## LAND ACCESS SECURED AND RECONNAISSANCE FIELD MAPPING COMPLETED

In the period since March this year when the Project was announced, several landholder access agreements have been secured which cover over 95% of EL9621. These agreements preceded the reconnaissance field mapping program (Figures 1 and 2) which was undertaken to identify areas for future rock and soil sampling which will be collected and analysed as part of a collaboration with CSIRO under the Kick-Start Program.

The mapping confirmed that units with a high magnetic response in the southern part of EL9621 outcrop as thin, strongly boudinaged plagioclase-phyric basaltic lavas within a sequence of chloritic schists. Further north, magnetic highs correlate with similar chloritic schist units, hosted within a sequence of carbonate-rich foliated metasilstones. A structurally complex, strongly magnetic zone approximately 7km in diameter in the central portion of the Project is also interpreted to include mafic igneous units. It lies entirely beneath shallow recent cover and will be the focus of soil sampling planned under the CSIRO Kick-Start Program (see below).



*Figure 2: SER's exploration team led by Dr Chris Yeats and Dr Steve Beresford undertaking reconnaissance field mapping program at the West Koonenberry Project in July 2024.*

## CSIRO KICK-START PROGRAM

SER and CSIRO have entered into an agreement supported through CSIRO's Kick-Start Program<sup>2</sup> which will access CSIRO research expertise to investigate the prospectivity of West Koonenberry to host a magmatic Ni-Cu-Co-PGE deposit. The objectives of the project are to confirm the presence of prospective geological units, particularly the hypothesised second belt of the Mt. Arrowsmith Volcanics, and map nickel-copper sulfide targets undercover.

<sup>2</sup> [CSIRO Kickstart Program](#)

SER and CSIRO will collect 20-30 samples of outcropping mafic rock from EL9621, which will be analysed for whole rock chemical composition, focusing on key immobile elements and metal content for comparison with values for fertile units within the Mount Arrowsmith Volcanics. 80 soil samples will also be collected and processed to produce heavy mineral separates for an in-depth indicator mineral study across the predominantly undercover portion of the tenement. These samples will undergo quantitative mineral analysis to identify potential magmatic sulphides indicative of undercover mineralisation. Further characterisation of apatite and oxides will be conducted on the heavy mineral separates in order to assess prospectivity using the CSIRO-developed indicator mineral for nickel sulfide (IM4NiS) classification model.

The CSIRO Kick-Start Program is an initiative for innovative Australian start-ups and businesses, providing matched funding support and access to CSIRO's research expertise and capabilities to help grow and develop their business. SER has been approved for a \$50k Kick-Start voucher. Sample collection will begin in October and the project is expected to take 12 months to complete.

## NEXT STEPS

The recent field visit has identified prospective areas for the collection of suitable rock and soil samples for analysis under the CSIRO Kick-Start Program. A further field program is planned for next month to collect rockchip samples for analysis, meanwhile a review of the new airborne magnetics dataset will be undertaken to assist in defining locations that are appropriate for surface geochemical soil sampling. Based on the results of the Kick-Start program, further detailed geophysics, likely including ground electromagnetic surveys and/or shallow aircore/RAB drilling will be completed across any identified targets to determine if the prospective intrusive and/or conductive units are present at depth, which can be drill tested for potential massive Ni-Cu-Co-PGE sulfide mineralisation.

*The information in this report that relates to Exploration Results is based on information compiled by Mr Stuart Rechner BSc (Geology) MAIG MAusIMM, a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy. Mr Rechner is a Director and shareholder of Strategic Energy Resources Ltd. Mr Rechner has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Rechner consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*This announcement is authorised by the Strategic Energy Resources Limited Board.*

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### About Strategic Energy Resources

Strategic Energy Resources is a specialised undercover mineral explorer and project generator focused on the discovery of world class base and precious metal deposits in the greenfield frontiers of Australia. SER is actively exploring the undercover extensions of the Mt Isa Province in northwest Queensland as part of a Joint Venture with Fortescue at Canobie, and at our Isa North Project. In New South Wales, SER is exploring the South Cobar Project and the Mundi and West Koonenberry projects which are located north of Broken Hill.

**JORC Code, 2012 Edition – Table 1**  
**Section 1 Sampling Techniques and Data**

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Not applicable – this announcement concerns geophysical surveys</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Not application – no drilling undertaken</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Not application – no drilling undertaken</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Not application – no drilling undertaken</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>Not application – no drilling undertaken</li> </ul>
Quality of assay data and laboratory tests (Equipment used)	<ul style="list-style-type: none"> <li>Scientrex CS-3 cesium vapour detector Magnetometer; Resolution 0.01 nT operating from 15,000 – 105,000 nT at 20Hz</li> <li>Radiation Solutions RS-500 Gamma-Ray Spectrometer; 33.6L detector volume; 2Hz</li> <li>NovAtel OEMV-3-L1L2 GPS unit; 6cm RMS, 0.6-1.8m; 2Hz.</li> <li>Collins ALT50 Radar Altimeter with 1ft measurement Precision; 10Hz</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>Not application – no drilling undertaken</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Coordinates were recorded using instrumental GPS in GDA 1994, MGA Zone 54</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>100m flight line spacing; 045-225 degrees line direction with tie lines at 1,000m flown at 50-60m nominal terrain clearance</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Flight lines (045-225 degrees) were approximately perpendicular to interpreted stratigraphy</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>Not applicable – no sampling undertaken</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>None undertaken</li> </ul>

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**JORC Code, 2012 Edition – Table 1**  
**Section 2 Reporting of Exploration Results**

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>• West Koonenberry (EL9621) is 100% owned by SER</li> <li>• The project is located 120km N of Broken Hill</li> <li>• Conduct and Compensation Agreement executed with landholders</li> <li>• Tenements in good standing with no known impediments</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>• The Project area is a conceptual greenfield exploration project with limited previous exploration within the EL.</li> <li>• There are no drillhole geochemical samples within GSNSW's public database and limited surface geochemical data.</li> <li>• Samples collected by the GSNSW (samples MXMUCBF0029.01B &amp; MXMUCBF0030.01B) at Picnic Creek lie at the southern end of the tenure and possibly represents evidence of ferropicrites on the western side of the Bancannia Trough.</li> </ul>
Geology (Target deposit type)	<ul style="list-style-type: none"> <li>• SER is targeting intrusion hosted Ni - Cu - PGE mineralisation based on the history of exploration for similar mineralisation in the Mount Arrowsmith Volcanics which lie on the eastern side of the Koonenberry belt.</li> <li>• SERs interpretation is that the Koonenberry belt is split across each side of the Bancannia Trough, with this tenement designed to capture the western side to the interpreted Koonenberry belt which represents equivalent geology.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>• Not applicable – no drilling undertaken</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>• Not applicable – no drilling undertaken</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• Not applicable – no drilling undertaken</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• The reported image displays results from the magnetic survey data modelling</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>• Not applicable – no drilling undertaken</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>• All relevant finalised exploration data has been included</li> </ul>
Further work	<ul style="list-style-type: none"> <li>• SER will thoroughly review the results from the magnetic survey which will inform future exploration programs</li> </ul>