

19<sup>th</sup> February 2025

## SOUTH COBAR EXPLORATION UPDATE

### HIGHLIGHTS

- Soil geochemistry survey at Mt Tooronga identifies two major polymetallic anomalies
  - 2.2km x 1.5km Pb-Zn dominant anomaly (Heilia Prospect)
  - 1.5km x 1.2km Au dominant anomaly (Miti Prospect)
- Prospects anomalous in Cobar-style Pb-Zn-Ag-Cu-Au zoned elemental signature
- Induced Polarisation (IP) survey now underway over Heilia, Miti and Achilles Prospects

Strategic Energy Resources Limited ("SER" or "the Company") is pleased to announce an exploration update for the 100% owned South Cobar Project in NSW. Drilling at the Achilles Prospect in late 2024 demonstrated that South Cobar is fertile for Cobar-style polymetallic mineralisation. A reconnaissance soil geochemistry survey was also completed last year at Mt Tooronga, 20km southeast of Achilles, which has identified two significant Pb-Zn-Ag-Cu-Au anomalies that demand further investigation. An IP survey is now underway over both prospects.

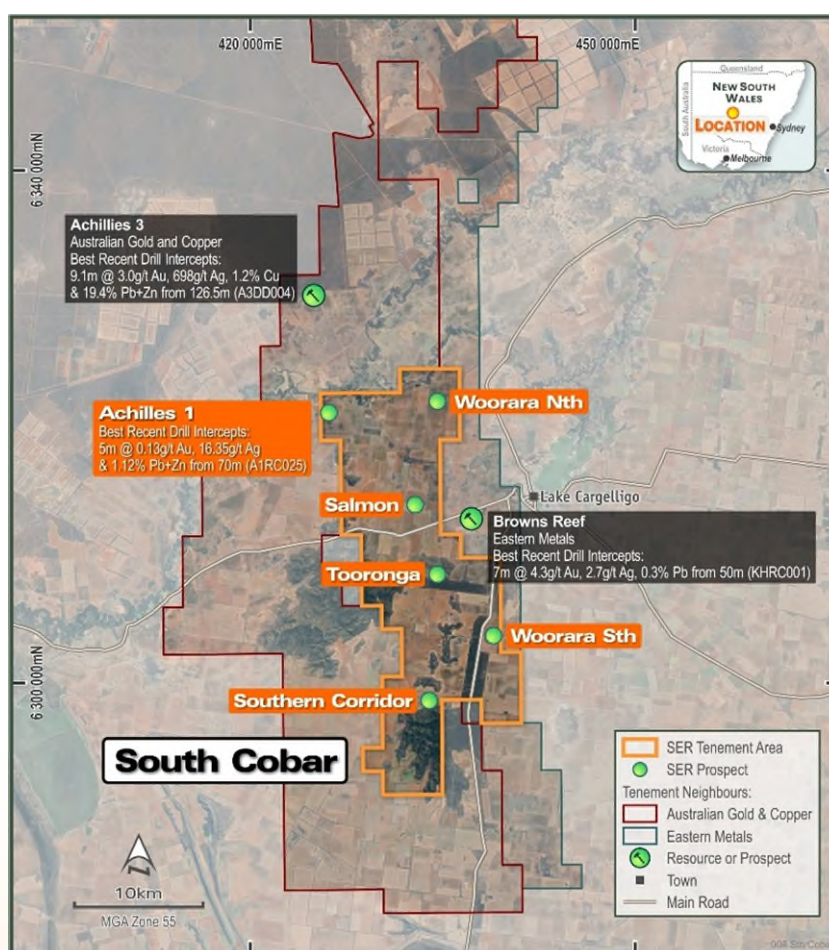


Figure 1: Location of the South Cobar Project with exploration targets and neighbouring explorers.

## SOUTHERN COBAR BASIN – THE NEXT FRONTIER

The South Cobar Project covers 273km<sup>2</sup> within the Rast Trough of the southern Cobar Basin. The northern and central Cobar Basin host multiple producing mines while the southern region remains dormant. Recent exploration has demonstrated this region hosts Cobar-style polymetallic mineralisation. Notably, the Achilles 3 polymetallic (Au-Ag-Pb-Zn-Cu) discovery by Australian Gold & Copper (ASX:AGC) lies just 7km north of SER's large land holding<sup>1</sup>.

In late 2024, a 25-hole reconnaissance drill program was completed at the Achilles Prospect with 17 holes returning significant intercepts of polymetallic mineralisation.<sup>2</sup> These results provided the confidence to explore further south in the basin at Mt Tooronga, 20km from Achilles on a major NNW-trending structure cut by numerous NE-trending faults. The Ultrafine+ soil geochemistry survey has revealed two compelling targets.

**Commenting on recent exploration at South Cobar, SER Managing Director, Dr David DeTata said:**

*“On ground exploration has continued at South Cobar following encouraging results from the maiden drill program at Achilles last year. The team has since completed a reconnaissance soil sampling program at Mt Tooronga which has identified two significant polymetallic soil anomalies and have already completed a tighter spaced infill soil survey with results pending. An Induced Polarisation survey is underway at Achilles in search of zones of higher-grade mineralisation and at Mt Tooronga as we refine our drill targets for testing this year”.*

### SOIL GEOCHEMISTRY RESULTS IDENTIFY MULTIPLE TARGETS AT MT TOORONGA

Mt Tooronga lies 20km southeast from Achilles 1 on a major NNW-trending structure cut by numerous NE-trending faults and is prospective for Cobar-style Pb-Zn-Ag-Cu-Au mineralisation. With no previous systematic exploration conducted at Mt Tooronga, a 220-sample reconnaissance soil geochemistry program was conducted over a 3km by 6km area on a 400m (N-S) by 200m (E-W) grid. The survey covered outcropping and subcropping hills, cleared crop paddocks and cattle grazing paddocks. The soil samples were analysed using the Ultrafine+ methodology, the same analytical technique used at Achilles<sup>3</sup> to inform the previous drill program. Regolith logging and interpretation assisted in delineating two subsets of data within the soil sampling program. Cleared land with a thin colluvium layer and non-cleared land proximal to outcrop. Appropriate anomaly detection was applied to both subsets of data independently. Two significant prospects were identified for follow-up.

The Heilia Prospect is defined from anomalous Cu, Au, Pb, Zn & Ag measuring 2.2km wide x 1.5km, with multiple Pb and Zn values greater than 20x background levels, with a maximum Pb value of 605ppb and Zn 699ppb (Fig. 2). The Cu anomaly is offset from the Pb and Zn anomaly showing metal zonation commonly associated with hydrothermal mineral systems (Figure 3). The anomalism is interpreted to be located at the intersection of NNW and NE striking faults.

The Miti Prospect is anomalous for Cu, Au, Ag, Zn, As over a 1.5km wide x 1.2km area with multiple Au values exceeding 20x background (23.1ppb), noting the peak Au value at Achilles 1 was 17.4ppb<sup>2</sup> (Fig. 2). Metal zonation comprised a central Cu, Au, Ag, Zn, As zoned anomaly with anomalous Sn, Bi and W on the periphery (Fig. 3). The Miti Prospect is located directly above a dilatational jog, with the structural corridor interpreted to be an extension of the Achilles shear zone.

<sup>1</sup> See AGC Announcement 15<sup>th</sup> May 2024

<sup>2</sup> See SER Announcements of 29<sup>th</sup> October 2024 & 22<sup>nd</sup> November 2024

<sup>3</sup> See SER Announcement 22<sup>nd</sup> June 2022



As a result of the highly encouraging assays from the reconnaissance soil sampling program, a 202-sample infill soil program and rock chip program was completed in January over extents of the identified anomalies. The results are expected next month and will inform the next phase of drilling at South Cobar this field season.

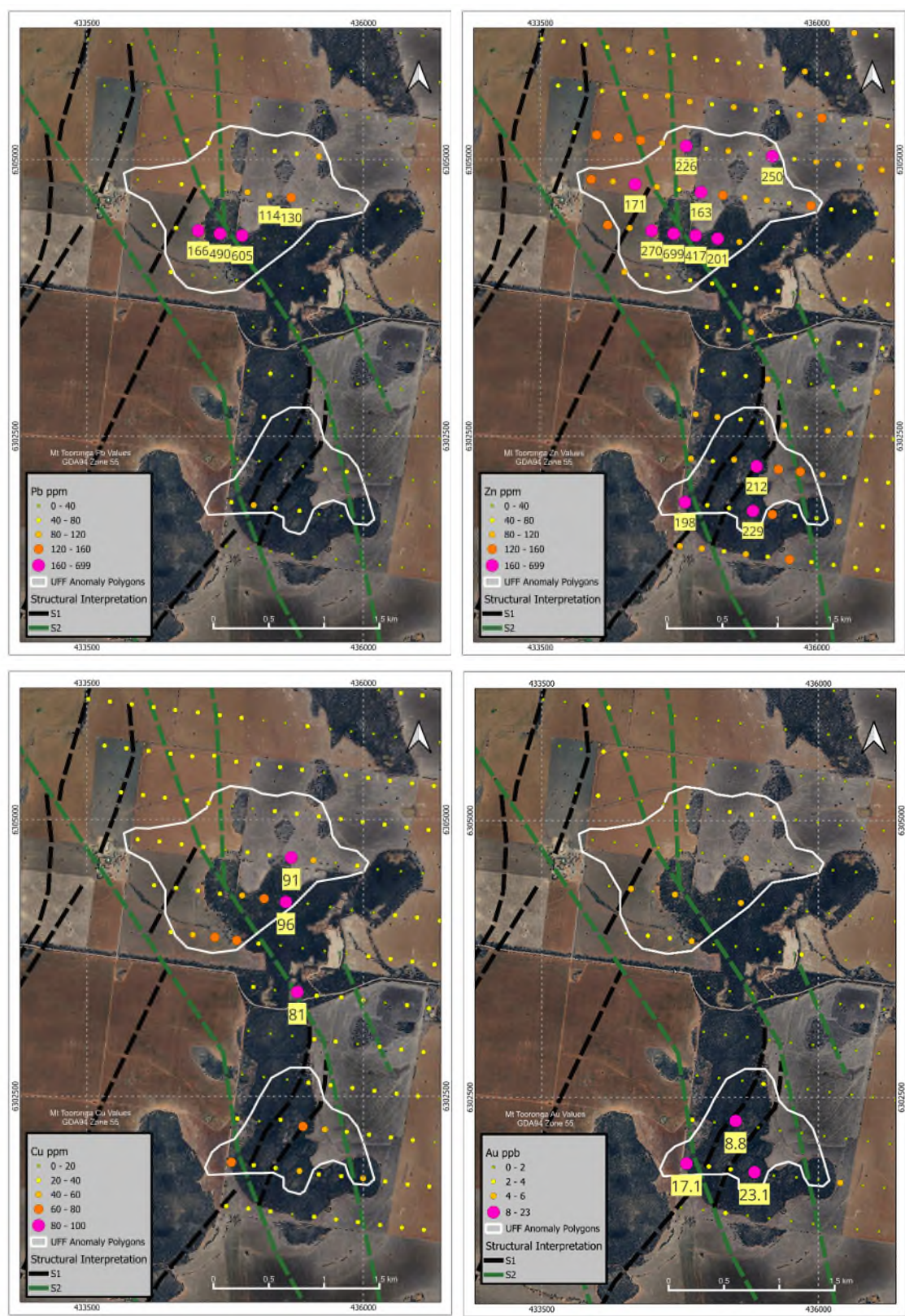


Figure 2: Location of anomalous soil samples at the Heilia (top) and Miti (bottom) Prospects at Mt Toorong Prospect.

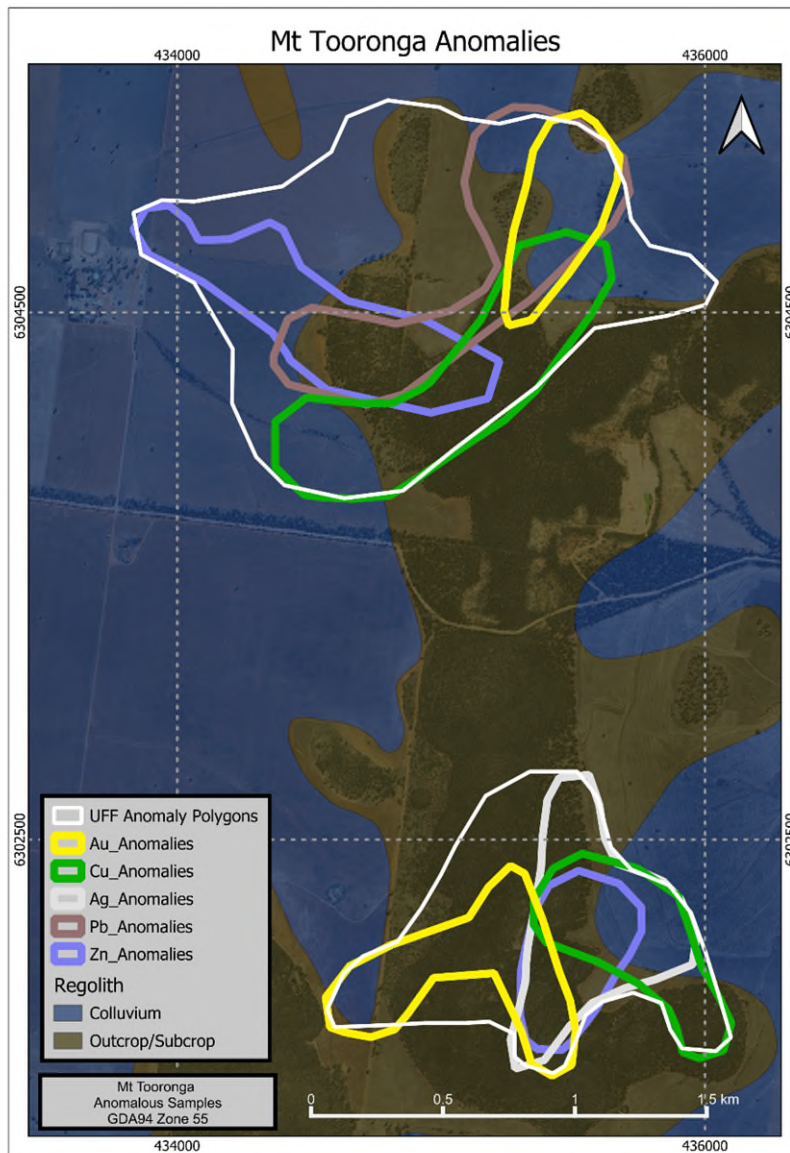


Figure 3: Coincident elemental anomalism indicating metal zonation at Heilia (top) and Miti (bottom). Anomalism defined as significant positive statistical outlier for the corresponding regolith type data population. Absolute values can be seen in Figure 2.

## INDUCED POLARISATION SURVEY UNDERWAY TO DEFINE DRILL TARGETS

An IP survey is currently underway over the newly identified soil geochemical anomalies, Heilia and Miti, in search of sulphides associated with mineralisation undercover.

An Induced Polarisation (IP) survey will also be completed at Achilles where drilling at Achilles last year intersected mineralisation in a probable NNW striking trend (approximately 15m wide zone over 600m) which included Cu and Ag bearing zones in addition to Pb + Zn<sup>4</sup>. This trend remains open to the north along the Achilles Shear Zone which extends towards AGC's Achilles 3 discovery. The IP survey is targeting the area north of the mineralised trend in search of higher-grade gold, silver and copper mineralisation associated with sulphides. The IP survey will also target areas proximal to the secondary trends of mineralisation that were identified east of the outcropping hill.

<sup>4</sup> See SER Announcement 24<sup>th</sup> May 2024 & 25<sup>th</sup> November 2024



## NEXT STEPS

The assay results from the infill soil program at Mt Tooronga are expected next month and will be reviewed alongside modelling of the IP survey data to define a drill program to test identified anomalies this year. The IP survey completed at Achilles will be reviewed alongside drill hole data from the recent RC program for evidence of possible secondary trends of mineralisation that may occur east of the outcropping hill or further extensions north along the main structure warrant further exploration.

### **Competent Persons Statement**

*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.*

### **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.

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

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## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• Soil samples referred to in this report were collected by digging to a depth of 15 to 20cm using a shovel and/or mattock and collecting 200g to 300g of bulk soil material from the bottom of the hole.</li> <li>• Each sample site was described and photographed immediately following sample collection.</li> <li>• Soil sampling was conducted along 400m spaced E-W lines with a sample station every 200m i.e. a 400m x 200m grid pattern.</li> <li>• The grid orientation and sampling interval were selected based upon the size, geometry and geochemical signature of known Cobar-style mineralisation.</li> <li>• Sampling protocols were consistent with CSIRO's published guidelines for Ultrafine+™ soil sampling<sup>5</sup></li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• Each sample site was described and photographed following sample collection.</li> <li>• All samples were analysed by portable X-Ray Fluorescence (pXRF) providing quantitative logging of elemental composition for internal targeting use.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• Soil samples were collected in dry conditions and placed in numbered paper Geotech sample bags, which were grouped into poly-weave bags for dispatch to the laboratory.</li> <li>• Field duplicate samples were collected at a rate of 1:20. Duplicate results show an acceptable level of variability for the material sampled and style of mineralisation.</li> <li>• Samples were transported by the collecting geologist by road from site to Ron Pillon Transport, Dubbo and then shipped directly to LabWest Minerals Analysis in Perth via a tracked freight consignment.</li> <li>• Sample preparation and analysis was conducted at the LabWest Laboratory, Perth.</li> </ul>
Quality of assay data and laboratory tests (Equipment used)	<ul style="list-style-type: none"> <li>• Assaying of the soil samples was conducted by LabWest Minerals Analysis, Perth.</li> <li>• The Ultrafine+™ methodology utilises &lt;2µm size fraction. LabWest use a propriety hydraulic settlement procedure to collect the &lt;2µm size fraction.</li> <li>• A sub-sample of the 2µm size material was taken for analysis.</li> <li>• This fraction was digested in aqua-regia under high pressure and temperature using microwave apparatus.</li> <li>• Elemental concentrations for Au and 51 other elements were determined using a combination of ICP-MS &amp; ICP-OES, using state-of the-art instruments.</li> <li>• As SER is a partner in the CSIRO-led <i>Ultrafine+™ Next Gen Analytics</i> research project, spectral mineralogy, particle size distribution, pH, electrical conductivity and total organic carbon content were also measured for each sample.</li> <li>• In addition to blind field duplicates. sampling and assaying quality control procedures consisted of the inclusion of Certified Reference Materials (CRMs) at a rate of 1:40.</li> <li>• Analysis of the available QC sample assay results for gold and the multi-element data indicates that an acceptable level of accuracy and precision has been achieved and the database contains no analytical that that has been numerically manipulated.</li> <li>• The assaying techniques and quality control protocols used are considered appropriate for the data to be used for reporting exploration soil geochemistry results.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• Individual soil sample locations were selected by SER personnel and assigned unique sample identification numbers. Corresponding sample numbers matching labelled paper Geotech sample bags are assigned to each sample.</li> <li>• Digital sample submission forms provided the sample identification numbers accompanying each submission to the laboratory.</li> <li>• Assay results from the laboratory with corresponding sample identification are loaded directly into the sample database.</li> <li>• No adjustments have been made to assay data.</li> <li>• The verification of the soil sample assay results has been completed by company personnel and the Competent Person.</li> </ul>

<sup>5</sup> CSIRO UltraFine South Sampling Procedure

Location of data points	<ul style="list-style-type: none"> <li>• All soil sample locations (x-y) have been recorded with a 64s Garmin Handheld GPS with 3-5m accuracy. Elevation (z) relative to AHD is also recorded from the GPS but adjusted with more accurate measurements (see below).</li> <li>• All soil samples location coordinates are provided in the Geocentric Datum of Australia (GDA94 Zone 55)</li> <li>• Elevation (RL) data is verified utilising publicly available SRTM-derived (30m pixel) Digital Elevation Model and SER's detailed DEM, collected as part of our 2021 airborne magnetic and radiometric survey.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Soil sample spacing: 200m along east west lines; lines spaced 400m north south (MGA54).</li> <li>• No sample compositing is applied to samples.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• The strike of the geology is approximately N-S (range ~340° - 010°).</li> <li>• Soil sample spacing and orientation is reconnaissance in nature and not targeted at specific structures or known trends of mineralisation.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• All samples were secured in closed polyweave sacks by company personnel and delivered to Ron Pillon Transport, Dubbo for shipment to Perth by tracked consignment.</li> <li>• Samples were directly delivered to Labwest Minerals Analysis, Perth via a tracked freight consignment.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>• The quality of the assay data was independently assessed by CSIRO as part of <i>Ultrafine+™ Next Gen Analytics</i> research project and no issues were found.</li> </ul>

## 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>• EL9012 is 100% owned by SER.</li> <li>• The Achilles Prospect is located approximately 15km WNW of Lake Cargelligo.</li> <li>• Access and Compensation Agreement executed with landholders.</li> <li>• Tenements in good standing with no known impediments.</li> </ul>
Exploration done by other parties (and SER work to date)	<ul style="list-style-type: none"> <li>• In 1996-97 Santa Fe Mining (SFM) undertook grid soil sampling across the Achilles 1 Prospect and defined copper (up to 169ppm), lead (to 810ppm), zinc (to 1680ppm), gold (to 15ppb), molybdenum (to 23ppm) and arsenic (to 150ppm) anomalies coincident with mapped ~N-S striking zones of strong silicification.</li> <li>• In 1998 Savage Australian Exploration (SAE) undertook a program of shallow rotary air blast drilling at Achilles 1 under a joint venture agreement with SFM. Anomalous base metal values of up to 410ppm Cu, 2050ppm Pb and 818ppm Zn were recorded.</li> <li>• In 2005, Western Plains Gold (WPG) drilled two diamond drillholes at Achilles 1, designed to test two of the soil anomalies identified by SFM. Hole DDH-A1-1 was abandoned due to caving at 184.1m, failing to reach its target depth of 250m. The hole intersected significant metamorphic recrystallisation and silicification related to shearing, but no evidence of base metal mineralisation. DDH-A1-2 was successfully completed to 300.4m and intersected a broad zone of intense hydrothermal alteration, with blebs of chalcopyrite and minor chalcocite. The hole returned a peak value of 0.33% Cu from 90m to 92m, within a 64m zone averaging 0.10% Cu, from 76m to 140m.</li> <li>• In 2021, holes DDH-A1-1 and DDH-A1-2 were HyLogged by the GSNSW.</li> <li>• In 2021 SER completed an airborne magnetic and radiometric survey over the entirety of EL9012. The survey was flown along 100m spaced East/West orientated lines with more detailed infill lines across a northern area, which included Achilles 1 and a central region which covers the Mount Bowen, Ural Mine and Tooronga East prospects.</li> <li>• In 2022 SER conducted a 250-sample Ultrafine+ soil geochemistry survey over a 4x4km area surrounding the Achilles hill on a 400m (N-S) by 200m (E-W) grid.</li> <li>• In 2024 SER conducted a 25-hole RC program (4,254m) at Achilles 1 Prospect cross 4 traverses designed to test the soil anomalies identified by in 2021. 17 of the 25 holes returned significant intercepts of polymetallic mineralisation.</li> </ul>
Geology (Target deposit type)	<ul style="list-style-type: none"> <li>• EL9012 lies within the Rast Trough of the southern Cobar Basin and is cut by a number of structural corridors that have the potential to host Cobar-style Au-Ag-Pb-Zn-Cu mineralisation.</li> <li>• The Achilles 3 Au-Ag-Pb-Zn-Cu prospect lies 7km north and the Browns Reef polymetallic deposit lies immediately east of EL9012.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>• Statistically significant gold and base metal soil anomalies are reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>• The exact relationship of soil sample assay results reported to any mineralisation present is unknown at the time of reporting.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>• See figures in release.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>• Only statistically significant soil sample assay results have been reported.</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>• IP survey and infill geochemical survey likely followed by drilling.</li> </ul>