

17 June 2024

## SOUTH COBAR EXPLORATION UPDATE

### HIGHLIGHTS

- Drilling of Achilles 1 Polymetallic Prospect planned to commence in July
- Recent outstanding Au-Ag-Pb-Zn-Cu drill results from Australian Gold & Copper (ASX:AGC) 7km north at Achilles 3 demonstrates the fertility of the Achilles Shear Zone
- Drilling approval submitted; land access secured

Strategic Energy Resources Limited (“SER” or “the Company”) is pleased to announce that drill testing of the Achilles 1 Polymetallic Prospect at our South Cobar project is planned to commence in July. The Achilles 1 Prospect lies along the Achilles Shear Zone, host to the recent Achilles 3 polymetallic (Au-Ag-Pb-Zn-Cu) discovery by Australian Gold & Copper (ASX:AGC) just 7km to the north<sup>1</sup>. SER’s 100% owned South Cobar project also captures the northern and southern extensions of the Woorara fault, directly along strike from Eastern Metals’ (ASX: EMS) Brown’s Reef polymetallic deposit (Fig 1).

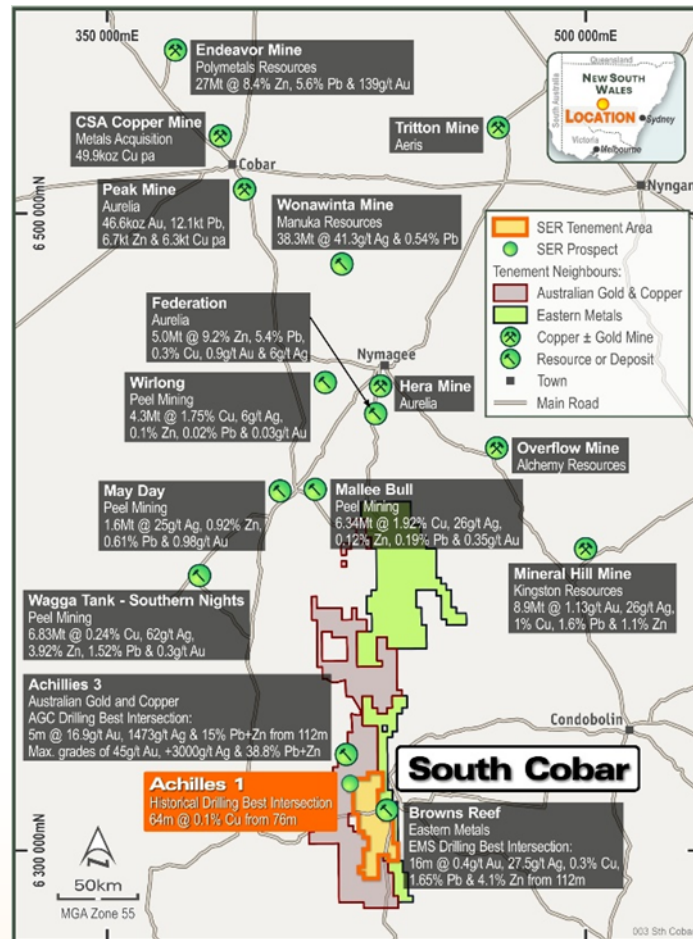


Figure 1: South Cobar regional map showing nearby mines and mineral deposits\*

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

\*Information extracted from each company’s website, market announcements, company presentations and reports lodged during the FY2023 and FY2024 periods

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**Commenting on the upcoming drill program, SER Managing Director, Dr David DeTata said:**

*“The Achilles Shear has now been proven to host significant high-grade precious metal rich polymetallic mineralisation as shown in the recent drilling at Achilles 3 by Australian Gold and Copper which followed up a multi-element soil anomaly. The drill program that we have designed for Achilles 1, will test the source of our own significant soil geochemical anomaly that extends over a 1.5km by 500m footprint. With drilling approvals now submitted, planning is well advanced to begin the drill campaign next month”.*

## **PROJECT BACKGROUND**

The South Cobar Project lies within an area identified by the Geological Survey of NSW where precious and base metals potentially exist under a layer of younger barren geology; an undercover, underexplored extension of the Cobar Basin<sup>2</sup>. The project area captures over 270km<sup>2</sup> of fertile sequences of the Cobar Supergroup and contains multiple gold and base metal occurrences that exist along prospective north-east trending reactivated growth faults between basement and basin infill sequences.

The Achilles 1 Prospect lies at the southern end of a major shear zone that hosts the AGC Achilles 2 and 3 Prospects, the latter recently returned significant precious and base metal drill intersections<sup>1</sup>. Historical exploration conducted at Achilles 1 has been previously reported by SER<sup>3</sup> and includes a grid-based soil sampling program by Santa Fe Mining (SFM) in 1996 and 1997 which defined strong copper (up to 169ppm), lead (to 810ppm) and zinc (to 1680ppm) anomalies with lesser gold (to 15ppb), molybdenum (to 23ppm) and arsenic (to 150ppm). The anomalous results coincide with mapped ~N-S striking zones of strong silicification. In 1998 Savage Australian Exploration under a joint venture agreement with SFM conducted a rotary air blast drill program surrounding the Achilles 1 soil sampling program which returned anomalous base metal values of up to 410ppm Cu, 2050ppm Pb and 818ppm Zn.

A two-hole diamond drill program was completed by Western Plains Gold (WPG) in 2005, 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. HyLogger™ hyperspectral logging of these two diamond holes by the GSNSW revealed mineralogical changes that are typical for Cobar-style Cu-Au mineral systems, including replacement of phengite by muscovite, replacement of Mg-chlorite by Fe-chlorite and destruction of potassium feldspar. These trends, coupled with the low-grade copper mineralisation in DDH-A1-2, suggest to SER that the two drillholes represent near misses.

Exploration undertaken to advance the South Cobar Project by SER has included an airborne magnetic and radiometric survey across the entire tenement with infill lines to 50m spacing across Achilles 1, and the subsequent integration of the magnetic and radiometric data with previous exploration data, including the 2.5km line spaced AEM data collected by GSNSW and Geoscience Australia<sup>4</sup>.

An Ultrafine+™ geochemical soil survey was completed over a 4km-by-4km area designed to provide more regional context to the previously closed-spaced soil sampling undertaken by Santa Fe Mining in 1996 and 1997. The survey returned strongly anomalous copper, lead and zinc, and elevated gold, molybdenum and arsenic results coincident with mapped ~N-S striking zones of strong silicification that is limited to the Achilles 1 Prospect<sup>3</sup>. Statistical analysis of the survey revealed an 800m strike extent gold in soils anomaly, with a peak

<sup>2</sup> See: [MinEx CRC | Mining, Exploration and Geoscience \(nsw.gov.au\)](https://www.nsw.gov.au/mining-exploration-geoscience)

<sup>3</sup> See SER Announcement 16<sup>th</sup> June 2021

<sup>4</sup> See SER Announcement: 22<sup>nd</sup> June 2022

value of 17.4ppb Au that lies along the Achilles shear where it is intersected by interpreted NW-trending fault structures and NE-trending magnetic lineaments. The anomaly is also associated with anomalous copper, lead, zinc and silver, as well as anomalous pathfinder chemistry, including arsenic, bismuth, molybdenum and tungsten, strongly suggesting the presence of a Cobar-style structurally controlled polymetallic copper-gold mineralising system.

## ACHILLES 1 DRILL PROGRAM

The proposed reverse circulation (RC) drill program has been designed to test the strong polymetallic soil anomaly defined by the historical soil data and SER's Ultrafine+™ program and its relationship to the prospective Achilles Shear and intersecting prominent NE-trending magnetic highs identified in SER's airborne magnetic survey (Fig. 2).

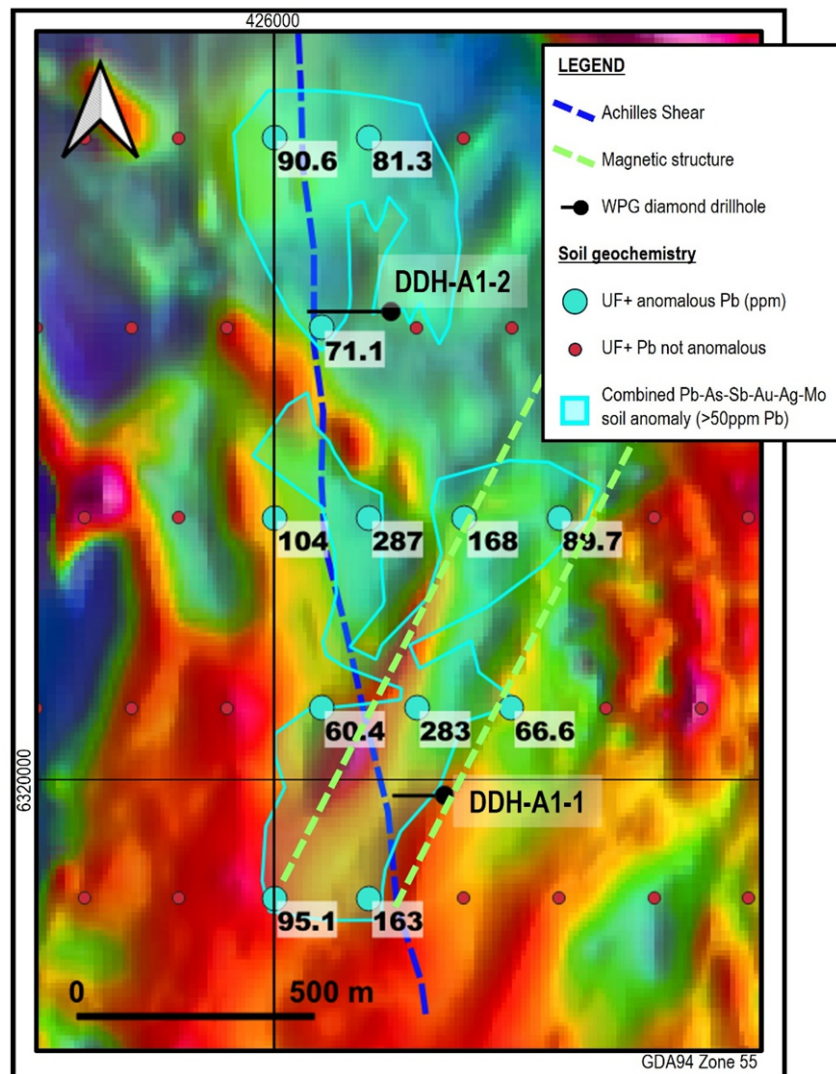


Figure 2: Location of Ultrafine+ soil geochemical samples containing anomalous Pb relative to the Achilles 1 multielement soil anomaly and historical diamond drilling undertaken by WPG (2005). The mapped location of the Achilles shear is also shown, as are two prominent NE-trending magnetic highs identified in the 2021 airborne survey as shown in the 0.5VD of the 50m spaced airborne magnetics. Note the apparent control of the NE-trending structures and their intersections with the Achilles Shear on the orientation and location of the geochemical anomaly.

## NEXT STEPS

The historical diamond drilling at Achilles 1 shows that stratigraphy dips to the east and recent discoveries at Federation and Achilles 3 have shown that primary mineralisation may not lie directly beneath the highest geochemical anomaly. Twenty-five drill hole locations have been sited directly on top of and to the east of the peak soil geochemical anomaly with the aim of understanding the relationship between the soil anomalism and the underlying geology<sup>5</sup>.

A drilling permit application has been submitted to the NSW Department that allows for up to 40 Reverse-Circulation (RC) drill holes up to 200m deep over the wider Achilles 1 area. The drill program will begin on the southern line, which coincides with the peak soil geochemical anomaly (Fig. 3).

A Land Access Agreement (LAA) is already in place with the sole landholder and earthworks will commence upon granting of the drill permit. The Company will provide an update when a drill rig is on site.

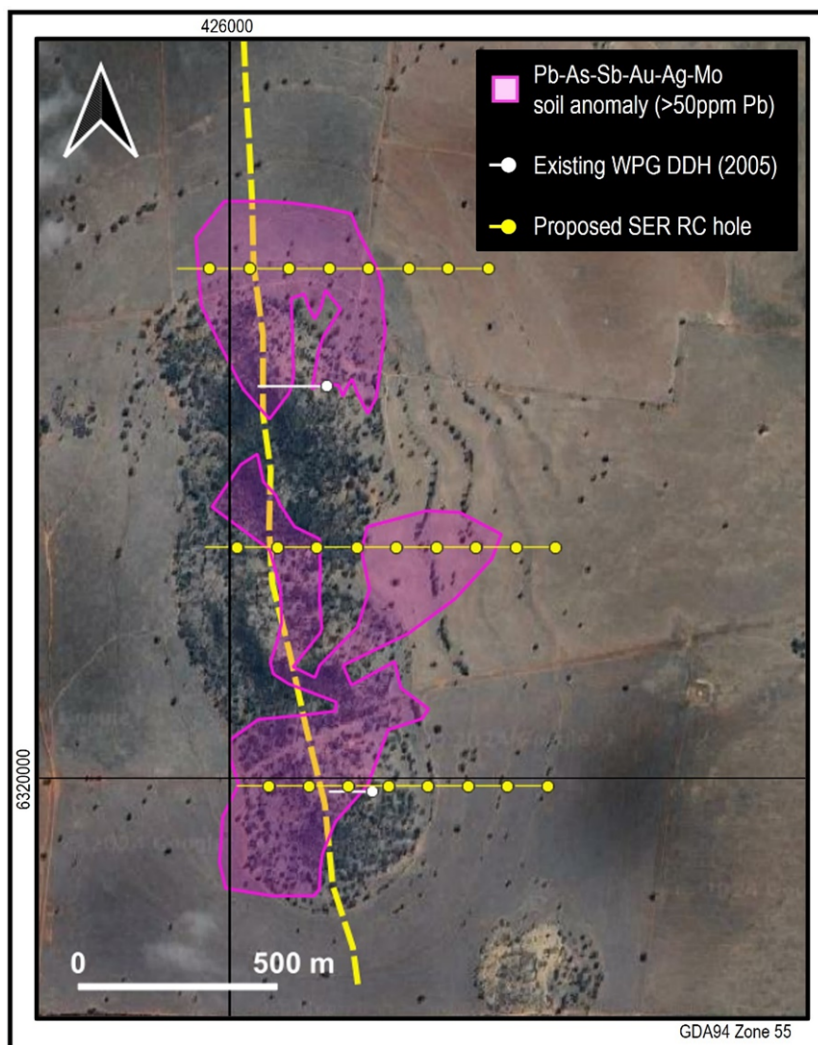


Figure 3: The Achilles 1 Prospect showing the soil geochemical anomaly, previous diamond drill hole locations and the proposed drill locations.

<sup>5</sup> See SER Announcement: 24<sup>th</sup> May 2024

*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.*

For further information please contact:

**Investors**

**Dr David DeTata**

Managing Director

**T** +61 3 9692 7222

**E** [info@strategicenergy.com.au](mailto:info@strategicenergy.com.au)

**W** [www.strategicenergy.com.au](http://www.strategicenergy.com.au)

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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 Copper deposits in the Greenfield frontiers of Australia. SER is actively exploring the undercover extensions of the world-class 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.