

SER WINS GOVERNMENT FUNDING FOR DRILLING AND KEY EXPLORATION GROUND IN NSW

HIGHLIGHTS

- SER awarded NSW Government funding to drill Achilles Copper-Gold target at South Cobar
- Next generation “Ultrafine+” geochemistry set to begin at Achilles to refine drill targets
- SER wins prized exploration ground in Macquarie Arc, Parkes Fault Zone, Cobar Basin and Curnamona Province

Strategic Energy Resources Limited (ASX: SER) is pleased to announce our recent success in the latest round of the NSW Government’s Cooperative Drilling Program. SER has been awarded a \$120,000 co-funded grant to support diamond drilling activities at the Achilles 1 Prospect within our South Cobar project (EL9012). The drill program will follow a soil geochemistry survey over the target area using CSIRO’s *Ultrafine+™ next gen analytics*¹ scheduled for later this month.

SER was also awarded the exclusive right to apply for Exploration Licences over four new, highly prospective areas as part of the NSW Department’s 2021 competitive expression of interest process. SER has now lodged four Exploration Licence Applications (ELAs) which expand our existing tenement footprints in the Cowal Igneous Complex and southern Cobar Basin; and now includes a project in the Curnamona Province covering a crustal-scale conductivity anomaly north of Broken Hill, and an untested length of the orogenic-gold rich Parkes Fault Zone south of Forbes. A detailed description of each area is provided later in this announcement.

New Frontiers Drilling Program Awarded

In December 2021 SER was awarded a New Frontiers Cooperative Drilling grant² to undertake a proposed five hole, 1700m diamond drilling program at Achilles 1 ranging in depth from 250m to 400m to test for possible Cobar-style Cu-Au mineralisation associated with the Achilles shear. The drill program is eligible for the reimbursement of 50% of the direct drilling cost.

Since EL9012 was granted in November 2020, SER has undertaken a technical review of historical exploration and geophysical datasets and conducted a detailed 50m and 100m spaced airborne magnetic and radiometric survey. This survey was utilised to plan a 250-sample, 400m x 200m spaced CSIRO *Ultrafine+™ next gen analytics* soil geochemical survey over a 4km x 4km area surrounding the Achilles 1 Prospect, which is set to commence this month and will be used to further refine planned drillhole locations.

¹ Refer to <https://www.csiro.au/en/work-with-us/industries/mining-resources/exploration/sampling-methods/ultrafine-gold>

² [New Frontiers Cooperative Drilling | Department of Regional NSW](#)

NEW EXPLORATION LICENCE APPLICATIONS:

In 2018, the Geological Survey of NSW (GSNSW) identified five key regions as part of their involvement in the MinEx Cooperative Research Centre (MinEx CRC) National Drilling Initiative program³. These regions are undercover extensions to known mineralised terranes and the focus areas for the next 10 years of the GSNSW involvement in the MinEx CRC. GSNSW has already undertaken a detailed review of the legacy data within these regions and has planned targeted geochemical and geophysical surveys prior to drilling. SER has successfully secured a significant portfolio of high-quality exploration projects that all reside within the NSW Mineral Allocation Areas (MAAs) as shown below (Fig. 1), along with an area inside the Mundi MAA region.

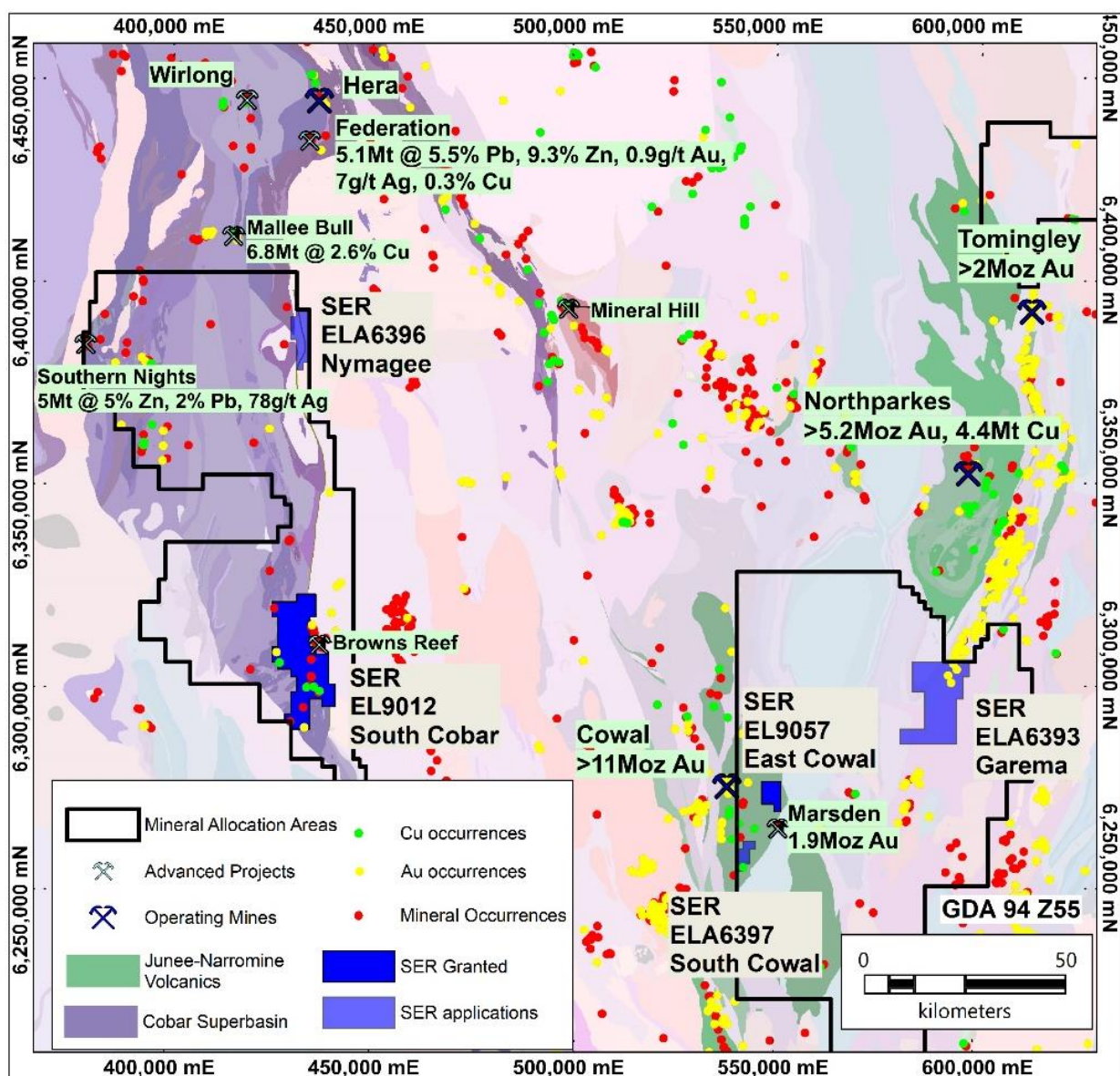


Figure 1: Location of SER NSW existing exploration licences and the new exploration licence applications.

³ Refer to [NSW Planning Template \(smedg.org.au\)](https://www.smedg.org.au)

ELA6397 South Cowal

This new application is located approximately 15km SSW of SER's current EL9057, within the Junee-Narromine Volcanic Belt of the Macquarie Arc (Fig. 2). The area is prospective for porphyry and epithermal copper-gold mineralisation and lies approximately 20km SSE of Evolution Mining's (ASX:EVN) Cowal Gold Mine, a epithermal-porphyry system that has published resources and reserves totaling >11Moz Au, and 10km SW of their Marsden porphyry copper-gold deposit, with currently listed resources and reserves of 1.9Moz Au and 971kt Cu⁴.

The new tenement application has seen previous exploration for copper and gold mineralisation, which has resulted in a large, high quality dataset of high resolution geophysical data (detailed airborne magnetics/radiometrics, ground gravity and ground EM), diamond drilling and aircore drilling. SER will reinterpret the existing drilling and geophysical data to identify potential untested Cu-Au targets for further detailed geophysics, and where appropriate conduct drill testing.

Upon grant, ELA6397 will form part of a larger SER Cowal porphyry-epithermal Cu-Au exploration project, alongside EL9057 where SER has already identified several potential porphyry-epithermal Cu-Au targets that are currently being prioritised for follow-up. SER is advancing the necessary land access agreements to commence on-ground exploration later in the year.

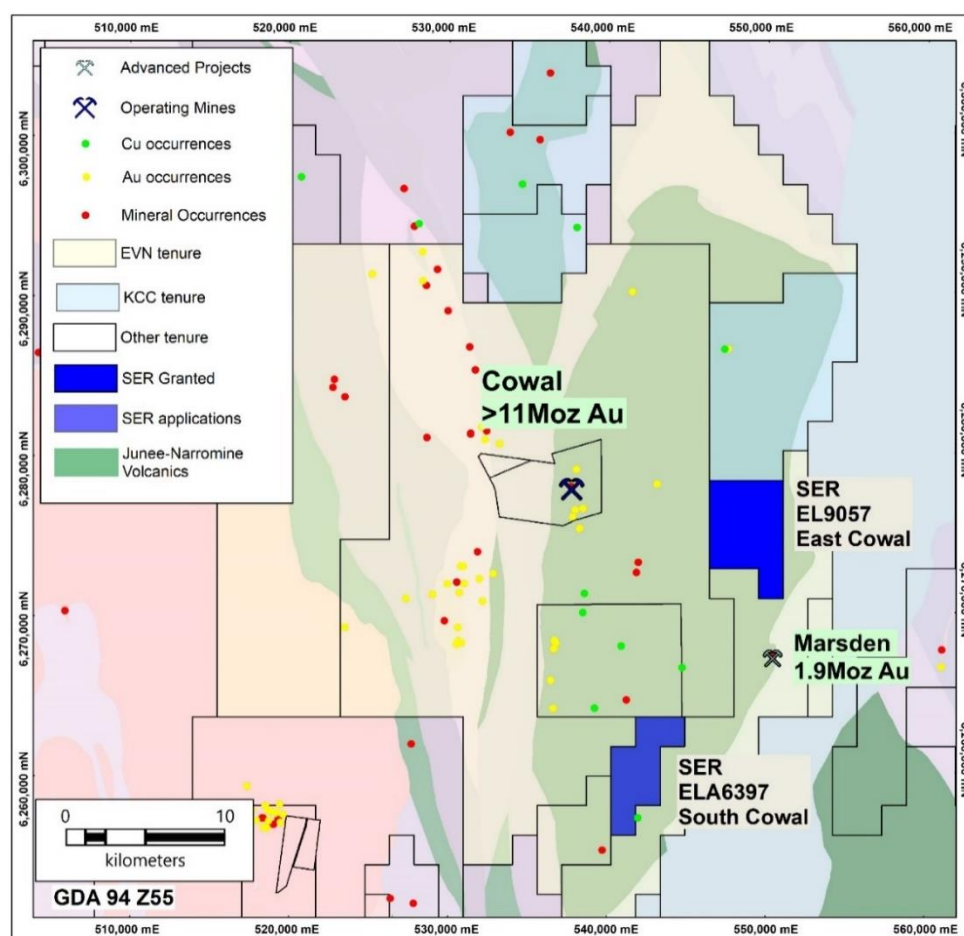


Figure 2: The location of ELA6397 and EL9012 within the Cowal Igneous Province.

⁴ [Refer to Reserves & Resources – Evolution Mining](#)

ELA6407 Northeast Mundi

The Northeast Mundi project covers 474km² of the Curnamona Province in the northeast of the Mundi MAA, centred approximately 65km NNW of Broken Hill (Fig. 3). Basement geology within the proposed EL is obscured by Cenozoic cover but is interpreted to comprise metasedimentary rocks of the Palaeoproterozoic Willyama Supergroup, unconformably overlain by and faulted against Neoproterozoic sedimentary and volcanic rocks, which correlate with Adelaidean sequences in South Australia. The area is cut by prominent North- to NNW-trending structures, as exemplified by the Stanley and Teilita Faults, which have the potential to provide fluid conduits for mineralisation.

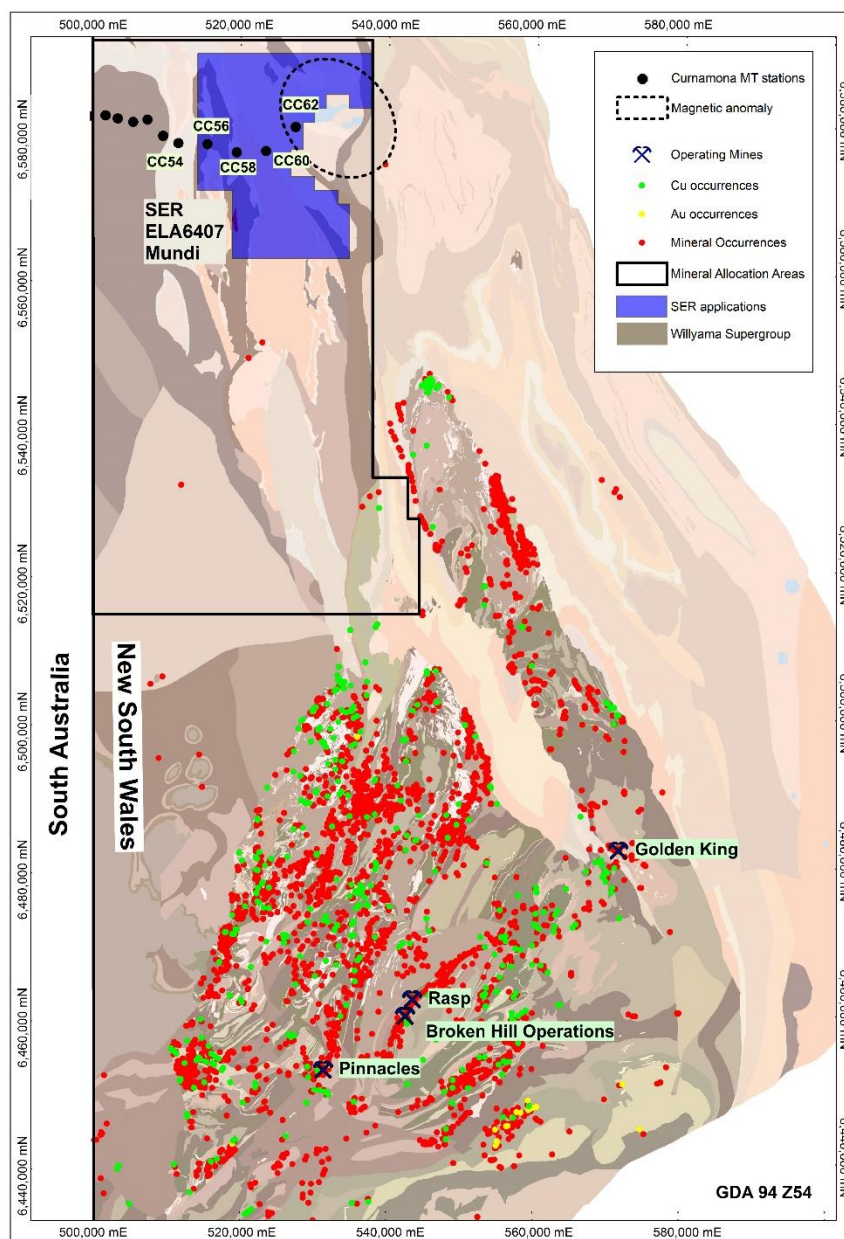


Figure 3: The location of ELA6407 within the Curnamona Province.

SER was drawn to the project following the identification of a large crustal conductivity anomaly, which was initially identified in the lower- to middle-crust by the 55km-spaced AusLAMP long period magnetotelluric (MT) survey and further resolved in the upper crust by the 2km- to 4km-spaced Curnamona Crustal broadband MT (CCMT) transect, undertaken in 2017⁵. The "finger"-shaped conductor identified in the CCMT, which is closest to surface at station CC56 (Fig. 4), has strong similarities to MT conductivity anomalies that have been demonstrated to be associated with iron oxide copper-gold (IOCG) mineralisation in South Australia's Gawler Craton⁶.

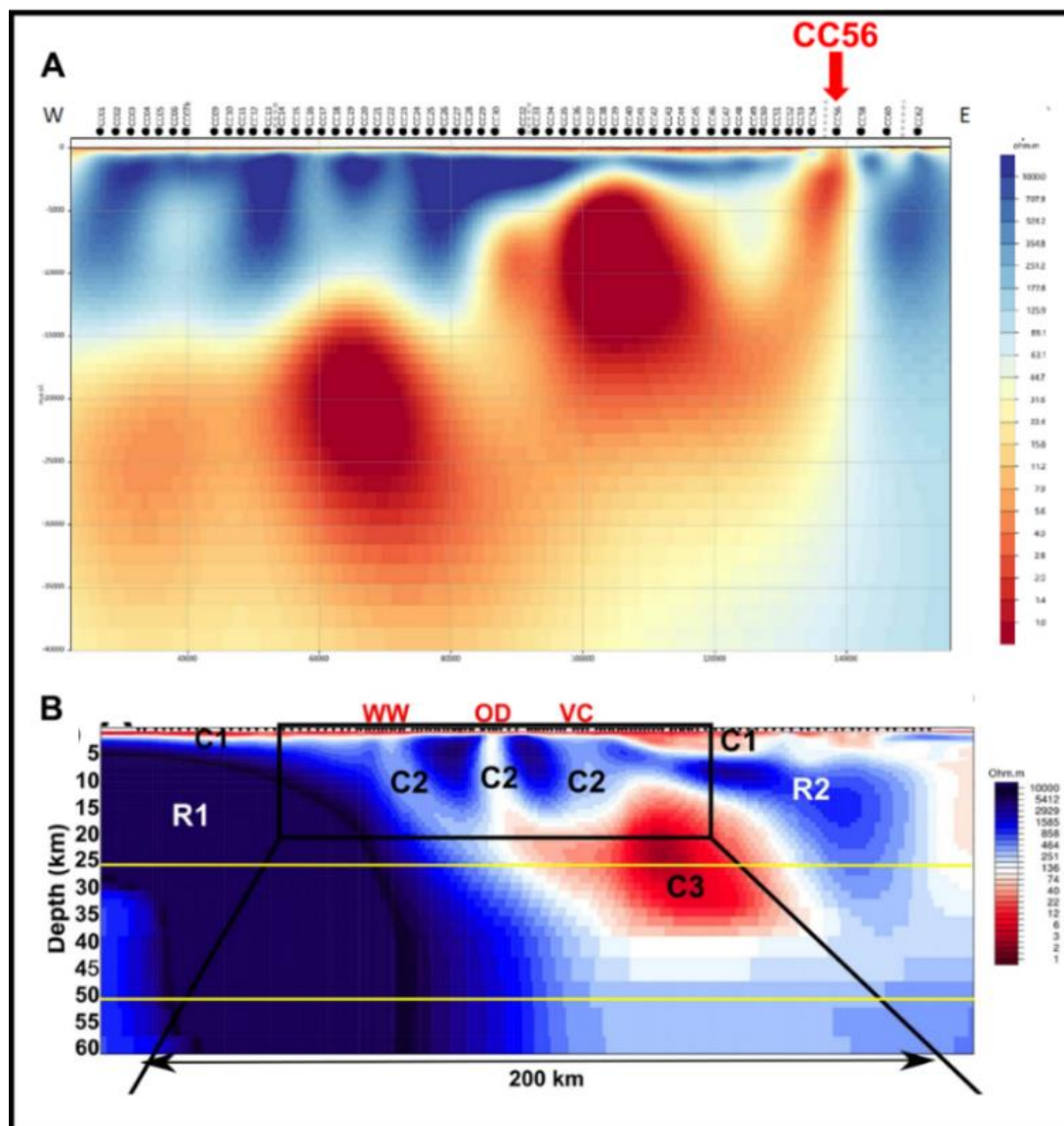


Figure 4: (A) 2D resistivity model to a depth of 40km of the CCMT transect that crosses ELA6407 from Kay et al. (2019). (B) 2D resistivity model to a depth of 60km across the Gawler Craton from Heinson et al. (2018). Note the similarity between feature C1 under Wirrda Well (WW), C2 under Olympic Dam (OD), C3 under Vulcan and the feature under station CC56 of the CCMT transect, which lies within ELA6407.

⁵ Kay, B., Heinson, G., Robertson, K., Thiel, S., 2019, Lithospheric architecture in the Curnamona from MT. In Gilmore, P.J. (compiler), 2019, Uncover Curnamona 2019: Symposium Presentations. Geological Survey of New South Wales Report GS2019/1007.

⁶ Heinson, G., Didana, Y., Soeffky, P., Thiel, S., Wise, T., 2018, The crustal geophysical signature of a world-class magmatic mineral system. Scientific Reports, 8:10608, 6 p.

The Mundi area has been exposed to very little exploration with only one drillhole in the application area and three immediately adjacent, all completed by BHP Minerals in 1992. Two of these holes were targeted on a ~10km by 5km NW-elongate ovoid magnetic high that approximately corresponds to the location of the MT anomaly and is interpreted by GSNSW to represent a shallow mafic intrusion of unknown age. The BHP drilling intersected anomalous zinc values within weathered muscovite schist⁷. Fresh basement included muscovite schist, quart-muscovite pegmatite, magnetite-bearing quartzite and granite, which BHP interpreted to represent the greisenised roof zone of a Delamerian granite intruded into Neoproterozoic sediments. No further work was completed and there remains significant scope within the proposed EL for the discovery of an IOCG mineral system.

This is a true Greenfields project that is considered as primarily prospective for IOCG mineralisation. The exploration plan is based around building a systematic, high quality geologic and geophysical database over the project area, leveraging off the new data generated through the MinEx CRC including the Mundi AEM survey whilst increasing the quality of key datasets (magnetics and gravity) as required.

ELA6393 Garema

The Garema project covers a 20km long undercover extension of the Parkes Fault Zone, recognised as a major controlling structure for orogenic gold mineralisation associated with the Middle Devonian Tabberabberan Orogeny in NSW⁸, and is associated with significant gold mineralisation along its ~150km exposed length, from Alkane's (ASX:ALK) >2 Moz Au Tomingley gold project⁹ to the north to the extensive historical underground workings at Wheogo Mountain, approximately 30km WNW of Grenfell, for which production is unknown (Fig. 5).

Beneath the shallow (<50m thick) Cenozoic cover, SER considers the Ordovician, Silurian and Devonian sedimentary and volcanic units of the Lachlan Orogen of the Parkes Fault Zone to be highly prospective for Tabberabberan orogenic gold mineralisation. This prospectivity is supported by the presence of two orogenic and two alluvial gold occurrences in the northern part of the application area.

The application area has seen little previous exploration, with the only significant on ground work being undertaken by Newcrest in the early 1990's, drilling 13 RC holes, between 11m and 88m in depth, into a palaeo-topographic high (as mapped by gravity) on the premise that primary gold mineralisation would be associated with silicified quartz-rich rocks that would be resistive to erosion. The drilling intersected very low level gold mineralisation in basement. The area is also covered by a open file high-resolution (100m line spacing, 45m sensor height) aeromagnetic dataset, which was flown in 2011.

⁷ BHP Minerals, 1993, CR 7842 Exploration Licence 3953 – 3963, 4005 – 4006 and 4008 – 4009 North Broken Hill New South Wales: Final Report. 178 p.

⁸ Downes, P.M., 2019. A mineral system model for orogenic gold mineralisation in the eastern Lachlan Orogen, New South Wales. Geological Survey of NSW Report GS2019/0173, 24p.

⁹ Alkane Resources Ltd. Resource and Reserve Statements FY21. ASX release 7/9/2021.

SER will compile and reinterpret the existing available data (in particular the aeromagnetics) across the area to define exploration targets for further detailed work. Follow up work will include detailed ground or drone geophysics, soil geochemistry and aircore drilling to map basement geology and identify geochemically anomalous areas. SER believes that *Ultrafine+™ next gen* soil geochemistry will be an effective tool to identify orogenic gold mineralisation and will utilise this technique. Priority targets will then be followed up through RC drilling.

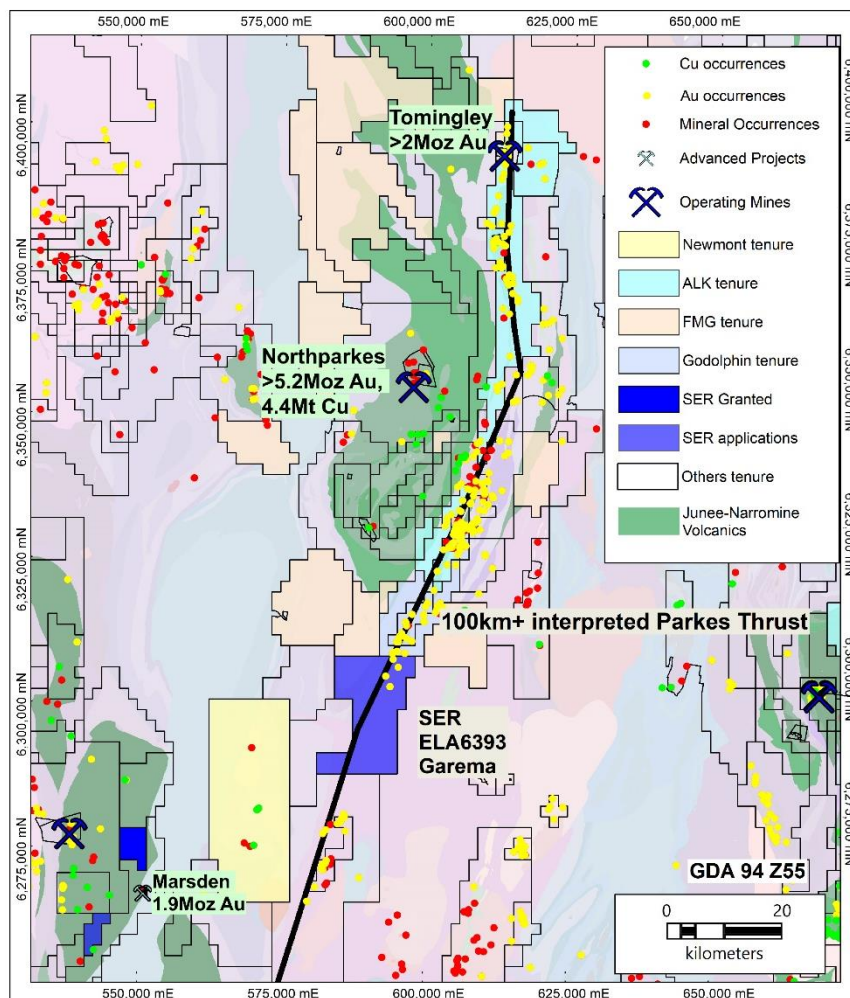


Figure 5: The location of ELA6393 within the Greater Parkes Fault Zone.

EL6396 Nymagee

SER has been awarded a further 18 units within the South Cobar area located on the eastern margin of the the Siluro-Devonian Cobar Basin, overlying the approximately N-S trending Woorara Fault, which also intersects SER's current EL9012, located 60km to the south. Basement outcrop within the application area is limited, comprising Devonian shallow marine sedimentary rocks of the Cobar Supergroup to the west, and Silurian Erimeran Granite to the east. A fault bounded package, interpreted to be Ordovician deep marine sandstone of the Abercrombie Group, does not outcrop in the application area.

The proposed area has seen very little previous exploration, other than a handful of stream sediment samples and 30 shallow auger holes that were targeted on magnetic highs and intersected magnetic palaeochannel fill. Further to the south, the Woorara fault is associated with polymetallic Cobar-style mineralisation, most notably at Brown's Reef, and SER considers this application area to be prospective for this style of mineralisation. This potential is supported by the results of the GSNSW-CSIRO Cobar hydrogeochemical study, published in 2020, which highlighted the area under application as anomalous for Ag, Pb, Zn, Cu and Co. There is also an apparent conductivity anomaly associated with the Woorara Fault on GSNSW AEM Line 10510, which warrants further investigation (Fig. 6).

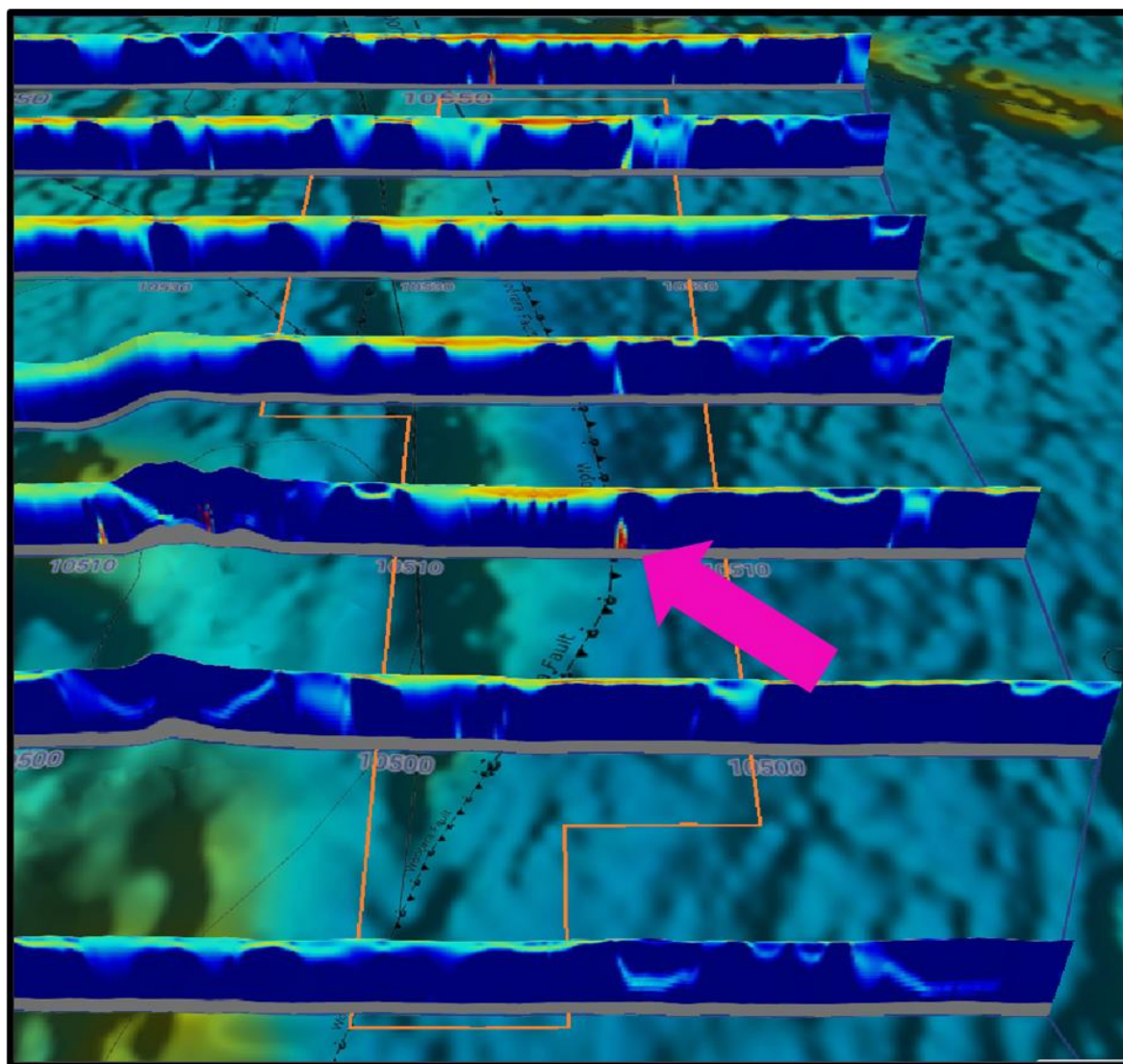


Figure 6: 3D-perspective view of ELA6396, looking North, showing GSNSW AEM conductivity-depth curtains. The location of the conductivity anomaly on Line 10510 is highlighted by the arrow. Base image is GSNSW TMI-RTP, with Lachlan Orogen geological boundaries.

NSW Exploration Strategy

SER is a specialised undercover explorer and project generator and has been very successful in securing multiple highly prospective exploration projects within NSW over the last year. Furthermore, we now have a dedicated Geologist, Dr Chris Yeats, who was instrumental in defining the MAAs within NSW to guide exploration efforts into the future and we continue to review potential partnership opportunities for these projects.

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

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About Strategic Energy Resources

Strategic Energy Resources (ASX: SER) is a specialised undercover mineral explorer and project generator focused on discovery in greenfield frontiers of Australia. SER is actively exploring our large tenement package in the emerging East Tennant copper-gold province of the Northern Territory; the undercover extensions of the world-class Mt Isa Province in northwest Queensland; and the Cobar Basin and Lachlan Fold belt of New South Wales.