

ASX ANNOUNCEMENT

30 September 2021

Exploration Update

HIGHLIGHTS

- East Tennant drill campaign completed at Cottage IOCG Prospect
- Drill rig mobilising to Queensland to drill Kalarka Prospect at Canobie Project
- Ground gravity survey completed over southern Canobie Project region

Strategic Energy Resources (SER) is pleased to announce that drilling has completed at the Cottage Iron Oxide Copper-Gold (IOCG) Prospect at our East Tennant Project and the drill rig is en route to our Canobie Project in Queensland. SER completed a single inclined diamond drill hole (BKDD001) designed to test a pipe like feature evidenced in gravity modelling at the Cottage Prospect.



Figure 1: Core processing undertaken at the Cottage Prospect

Drill hole BKDD001 was drilled towards 180° with an inclination of 75°. Basement rocks were intersected from 204.3m with end of hole at 690.4m. Diamond core will be orientated, geologically logged, structurally logged and have petrophysical measurements taken. The basement core will be sampled and assayed with fire assay for gold and four-acid digest / inductively coupled plasma mass spectrometry and atomic emission spectroscopy for a full suite of elements. Assays are expected to start arriving mid-November.

Initial on-site logging of core suggests drilling has not intersected a major mineralising system and the geological source of the gravity and magnetic anomalies have not been identified. However, further analysis and geochemical data is needed to determine if we are on the periphery of such a system. Given this, SER has postponed the proposed second hole at Cottage until we have reviewed all data collected to understand and refine our exploration model. This will also allow the drill rig to reach SER's Canobie Project in northwest Queensland to test the base metal target 'Kalarka' before the onset of the wet season.

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The Cottage drill program was awarded co-funding from the Northern Territory Government under the Resourcing the Territory initiative.¹

Hole ID	Easting	Northing	RL	Azimuth	Dip	Total depth
BKDD001	519875	7847086	228	180	-75	690.4m

Table 1: Collar table of drill hole BKDD001

Imminent Drilling of the Kalarka target at Canobie Project

The diamond drill rig is now on the way to SER's Canobie Project in northwest Queensland to commence drilling at the Kalarka base metals target.

The Kalarka target is a discrete 750 x 600m, 40nT aeromagnetic response characterised by an elevated Electromagnetic (EM) response and partially coincident anomalously higher density (Fig. 2). SER has modelled a steep westerly dipping plate as the source of the EM response, which will be tested in the upcoming drill program. The target is interpreted to lie within a NNW orientated, ~20 x 4km sub-basin defined by a structurally controlled region of low magnetic response, rimmed by a conductive zone and evident in an historical seismic line that crosses the tenement.

The drilling at Kalarka is co-funded through the Queensland Government Collaboration Exploration Initiative.²



Figure 2: Left: Kalarka magnetic anomaly with planned drilling; Right: Cross section of magnetic intensity shells with interpreted EM plate (green)

² business.gld.gov.au/industries/mining-energy-water/resources/geoscience-information/exploration-incentives/exploration-grants

¹ <u>resourcingtheterritory.nt.gov.au/about</u>



Canobie Ground Gravity Survey complete

A detailed ground gravity survey has been completed this month over priority targets at the southern end of the Canobie Project. The survey collected over 730 gravity stations at 500m and 250m spacings. The data is now being incorporated into existing datasets which will be used to model targets and design a drill program.

Additionally, the Canobie Airborne Gravity survey, an initiative of the Queensland Government's New Economy Minerals Initiative is set to begin this quarter. This survey will be flown at ~100m height with 1km spaced flight lines over an area of 5,000km², covering nearly all of SER's Canobie Project.

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.

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.



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

Criteria	Commentary
Sampling techniques	 Diamond core samples are obtained from diamond drilling in basement lithologies Core will be cut at 90° to orientation line and half core sampled on 1m intervals
Drilling techniques	 Cover and basement sequences were drilled by diamond drilling Diamond drilling was used to collect NQ diameter core Inclined drillholes are orientated using electronic orientation tool (ACT Mk2 NQ Core Orientation kit) marking the end of each 6m drill run. Downhole surveys of diamond drilling were conducted every 30m using an Axis North Seeking Gyro
Drill sample recovery	 Drillers core blocks indicate the length of a run and the amount of recovered core Core recovery is measured by field geologist prior to sampling Drilling methodology is modified if recovery falls until acceptable recovery achieved
Logging	 SER will compile all available logging data into a comprehensive database capturing collar, survey, lithology, mineralisation, alteration, veining, structural data and recovery Geological logging by field geologist recorded qualitative descriptions Photos (wet and dry) are taken of all core trays for later review Magnetic susceptibility of core is collected every meter Density measurements of core are collected every core tray
Sub-sampling techniques and sample preparation	 Samples will be crushed to 90% passing 4mm, then split and pulverised to better than 85% passing 75 microns
Quality of assay data and laboratory tests (Equipment used)	 Laboratory analysis includes fire assay analysis with AAS finish for Au and four acid digest followed by ICP-MS and ICP-AES for 61 element package, undertaken by ALS. SER to insert certified reference material, blanks and duplicates every 40 samples QAQC analysis of assay results will be conducted to ensure an acceptable level of accuracy and precision Laboratory in-house QAQC includes the use of internal lab standards, splits and duplicates and participation in external umpire laboratory assessments
Verification of sampling and assaying	 Sample intervals defined by field geologist are assigned a sample identification number prior to core cutting and dispatch to laboratory Assessment of reported significant assays are verified by review of core photography
Location of data points	 Collar location, azimuth and inclination surveyed using GPS, compass, and clinometer Locations are reported in metres in GDA94 MGA Zone 53 and relative depths in AHD
Data spacing and distribution	 Drill hole spacing is appropriate for early exploration Information available is not sufficient for the estimation of a Mineral Resource
Orientation of data in relation to geological structure	 The core is manually reconstructed and orientated from orientation tool mark An orientation line is marked indicating bottom of hole along the core Downhole lengths are not considered true widths given limited geological understanding
Sample security	SER samples were collected, sealed and delivered to laboratory by company personnel
Audits or reviews	None undertaken



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

Criteria	Commentary
Mineral tenement and land tenure status	 EL32617 is a granted tenement held 100% by SER The project is located ~100km east of the township of Tennant Creek, 12km south of the Barkly highway Tenements in good standing with no known impediments
Exploration done by other parties	 During early 2010's VALE Exploration Pty Ltd undertook shallow drilling within the target region of EL32617 (their tenement EL27198) exploring for phosphate. The holes were typically <100m deep and lithology logging indicated they ended in 'dolomite' interpreted to be part of the Georgina Basin sediments. The closest applicable hole is VGRC079 which is located 1.2km NW from SER's drill hole. The hole terminated at 101m, with minor limonite within dolomite noted in the end of hole logging. This phosphate drilling is the only recorded drilling within EL32617.
Geology (Target deposit type)	 The understanding of the basement geology in EL32617 is interpreted solid geology based primarily on geophysical expression The area is covered in transported sediments, typically sandy plain, sand dunes and dry water courses. EL32617 is also covered by the Georgina Basin, a Neoproterzoic basin underlain by flood basalts of the Kalkarindji suite. SER is targeting basement-hosted IOCG mineralisation based on prospectivity analysis by Geoscience Australia over the NE striking zone between Tennant Creek and Mt Isa The closet known mineralisation is the copper-gold deposits of Tennant Creek. These are commonly interpreted as ironstone (magnetic) IOCG mineralisation.
Drill hole Information	Please see table and figures in main body of text
Data aggregation methods	No metal equivalence calculations are used in reporting
Relationship between mineralisation widths and intercept lengths	Downhole lengths are not considered true widths given limited geological understanding
Diagrams	See figures in release
Balanced reporting	 This report and previous reports released by SER describe all relevant historical and current exploration and SER's planned future work
Other substantive exploration data	All relevant finalised exploration data has been included in this and previous SER reports
Further work	Assessing drill core as described in the announcement