

6 December 2023

## CANOBIE PROJECT UPDATE

### HIGHLIGHTS

- **First field season complete at the Canobie Farm-In and Joint Venture with Fortescue**
- **Three geophysical prospects tested by diamond drilling (>3,300 metres)**
- **Intense Iron Oxide Copper Gold (IOCG) type alteration intersected across all three prospects**
- **Assays from the Wondoola Prospect (CNDD004) received, minor copper anomalism associated with IOCG-type alteration; assays pending for remaining prospects**
- **Planning underway for the 2024 field season**

**Strategic Energy Resources Limited (“SER” or “the Company”)** has completed the first field season at the Canobie Project in northwest Queensland which is being explored under a Farm-in and Joint Venture with FMG Resources Pty Ltd (“**Fortescue**”), a wholly owned subsidiary of Fortescue Ltd.

SER and Fortescue are targeting both Iron Oxide Copper-Gold (IOCG) and nickel-copper sulphide mineralisation west of the Gidyea Suture Zone, a crustal-scale fault system that is associated with several significant copper-gold deposits to the south including the Ernest Henry mine and the Mount Margaret (E1), Eloise and Roseby deposits.

### **Commenting on the first field season at Canobie, SER Managing Director, Dr David DeTata said:**

*The first field season at the Canobie Project in partnership with Fortescue has seen the successful drill testing of three new prospects. To complete over 3,000 metres of drilling within the shortened season is a remarkable effort by everyone involved. We are highly encouraged by what we have seen in the drill core already, and planning is well underway for the coming field season which will include geophysical surveys to advance the next round of prospects towards drill ready status as we continue the search for the next major discovery in Northwest Queensland’.*

### **WONDOOLA PROSPECT**

The drill program at the Wondoola Prospect was targeting the terminus of a northward striking chonolith (intrusive body) interpreted to be a favourable setting to host higher tenor sulphide mineralisation. Wondoola is distal to the Kalarka Prospect drilled in 2021 (CNDD001A) that intersected 132m of ultramafic peridotite with elevated nickel (0.1% Nickel) from 507m including a basal massive sulphide zone grading 2m @ 0.68% Nickel, 0.17% Copper from 635m<sup>1</sup> (Figure 1).

Rotary-mud drilling was used in the cover sequence until basement was intersected, and the hole was cased-off for diamond drilling. Drillhole CNDD004 was the third attempt at completing the hole after the two previous attempts (CNDD003 & CNDD003A) deviated significantly in the overburden sediments to a degree whereby the projected trajectory of the drill holes would have failed to intersect the magnetic vector and gravity targets. CNDD003A intersected intensely altered basement but was abandoned due to excessive hole deviation. CNDD004 was collared east of the first two attempts and drilled vertically. The core was orientated and geologically logged, with systematic collection of petrophysical measurements for the entire length of the cored

<sup>1</sup> SER ASX Announcement 20 December 2021

section of the drillhole. One and two metre composite samples of half core were sent to ALS Laboratories for full geochemical analysis using fire assay and four-acid digest. Results have been received with the best copper intercepts summarised in Table 1.

Basement was intersected at 430.7m downhole with diamond coring undertaken to end of hole at 930.4m. The geophysical targets (gravity, magnetic vector and magnetic shells) are explained by the geology intersected in the hole (see below).

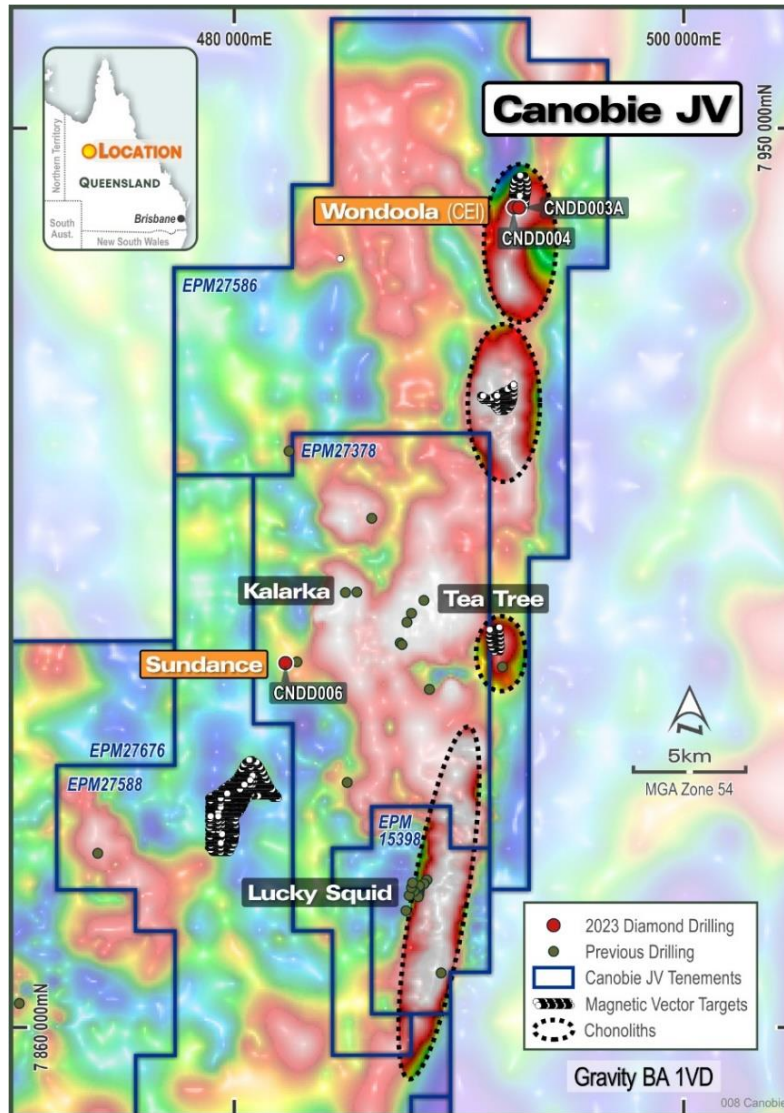


Figure 1: Location of the interpreted chonoliths and drill holes at Canobie JV over gravity image

The basement rocks were dominated by intercalated felsic and mafic host rocks. No disseminated magmatic sulphides or varied textured mafics (taxites) were observed within the mafic unit which downgrades the potential for significant nickel-copper sulphide deposits at the base of the Wondoola target. However, despite the target mineral system not being present at the Wondoola prospect, extensive hydrothermal magnetite and IOCG-type sodic-calcic-iron alteration and veining was observed throughout the hole with a zone of intense alteration coincident with the low-level Cu anomalism identified in the assay results (Table 1).

The Wondoola Prospect was one of several prospects identified at Canobie that have both prospective intrusion geometries to host sulphide mineralisation and significant magnetic vector anomalies<sup>2</sup> that may

<sup>2</sup> SER ASX Announcement 7 November 2022

contain massive monoclinic pyrrhotite. Multiple targets with similar gravity and remanent magnetic responses remain untested within the project area.

This Wondoola Prospect was awarded a \$275,000 Queensland Government grant under the Collaborative Exploration Initiative (CEI).

Table 1: CNDD004 intersect table using a 1000ppm cut off with a 1m internal dilution

Hole ID	From (m)	To (m)	Interval (m)	Cu ppm	Comment
CNDD004	432	433	1	2480	pyritic veins through carbonate altered unit
	798	803	5	1551	Intense IOCG alteration zone in pegmatite and mafic host units
	820	821	1	1205	HT alteration zone

## ERNEST HENRY TYPE MAGNETITE IOCG TARGETS

The main aim of the first field season of the JV was to drill test multiple Ernest Henry style IOCG targets to provide evidence for the development of IOCG style mineralisation and validate the exploration model. In this first year, two targets were tested prior to adverse weather conditions halting further exploration (Figure 2).

The two IOCG targets drilled were the Apollo Bore Prospect (CNDD005) which is a high amplitude, large magnetic anomaly that was modelled as an elliptical pipe and the Sundance Prospect (CNDD006) which appears as an isolated bullseye magnetic feature that is remanently magnetised (Figure 2). Drilling has now concluded and the core from both holes have been orientated and geologically logged with systematic collection of petrophysical measurements for the entire cored section of the drillholes. From preliminary interpretation of logged lithologies and alteration both targets appear explained by intense hydrothermal magnetite and IOCG-type sodic-calcic-iron alteration and veining similar to what was intersected at Wondoola.

One and two metre half core composites will be sent to ALS Laboratories for full geochemical analysis using fire assay and four-acid digest. Results will be reported when received.

## FUTURE EXPLORATION WORK PROGRAM

Assays from the two IOCG targets are expected in mid-January 2024, at which time the core will be relogged and all datasets collected from the drill holes will be used to refine the exploration model. Steps have already been undertaken to identify and plan additional geophysical surveys in the new year to further enhance the understanding of the project area, prior to the on-ground drilling season where we anticipate a number of selected high priority targets will be drill tested.

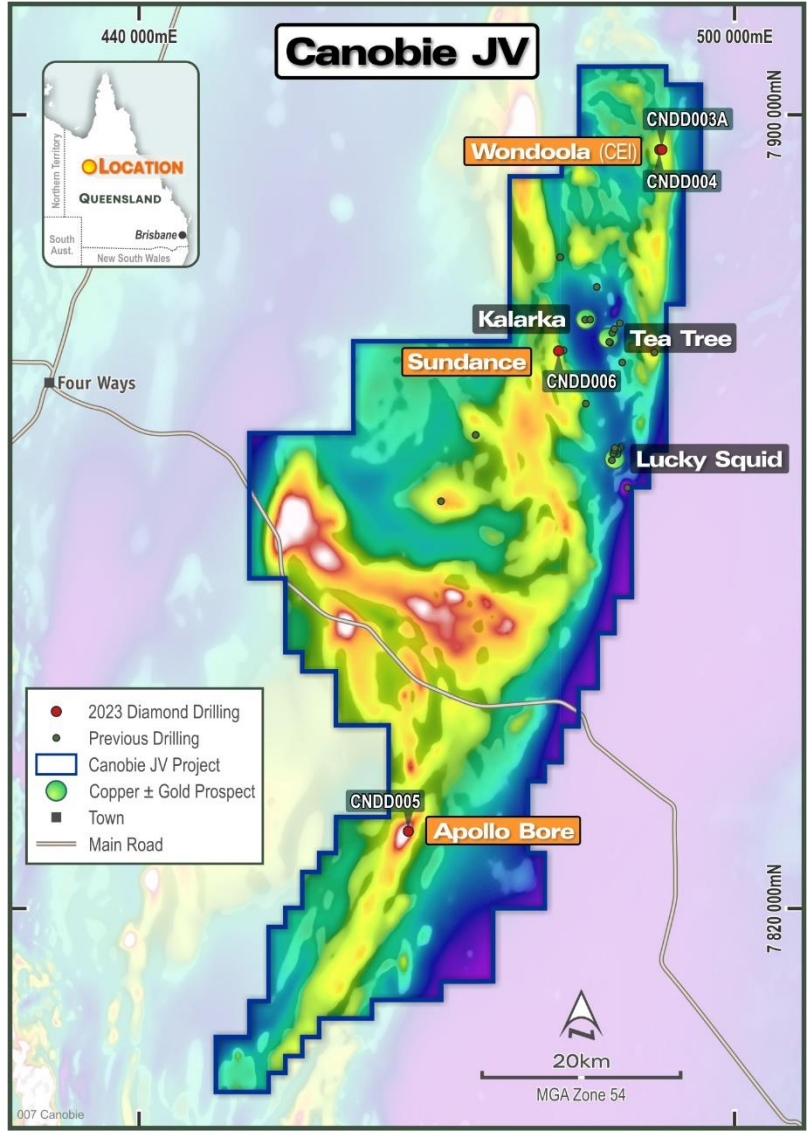


Figure 2: Location of the completed drill holes at Canobie JV over magnetic image

Table 2: Drill collar summary

Hole ID	Easting	Northing	RL	Azimuth	Dip	Total Depth (m)
CNDD003A	485385	7879490	60	90	-70	537.7
CNDD004	492628	7896510	60	000	-90	930.4
CNDD005	467103	7827793	60	000	-90	1233.7
CNDD006	482250	7876200	60	000	-90	697.2



## FARM-IN AND JOINT VENTURE KEY TERMS

The key terms of the Agreement include:

1. Fortescue may earn a 51% interest in the Canobie Project (**Stage 1 Interest**) by incurring \$4M in expenditure on exploration which will include a minimum of 3,000m of basement drilling within the first three years. This includes a minimum obligation of \$2.5M in expenditure on exploration within the first 2 years. **A total of 1467m of basement was drilled in this first field season.**
2. During the Stage 1 Period SER will operate and conduct all exploration activities as directed by the Exploration Committee which will comprise two members from each Party.
3. Fortescue may earn an additional 29% interest (for a total interest of 80%) (**Stage 2 Interest**) by incurring an additional \$4M in expenditure on exploration over an additional 3 years which shall include a minimum of 3,000m of basement drilling (Stage 2 Period).
4. Co-contribution to expenditure may occur after Fortescue earns the Stage 1 Interest (Fortescue 51%: SER 49%) or the Stage 2 Interest (Fortescue 80%: SER 20%). If SER elects not to contribute, its JV Interest will be diluted according to industry formula.

### 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.

*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 discovery in the Greenfield frontiers of Australia. Our science driven, expert technical team leverages collaborations with government and industry partners in our search for the next major mineral deposit.

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

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• Diamond core samples are obtained from diamond drilling in basement lithologies</li> <li>• Core was cut and half core sampled on selected 1m or 2m intervals, with occasional &lt;1m samples in mineralised sections using significant mineralisation contacts which were recorded in the sampling data</li> <li>• CNDD003A through CNDD006 2023 diamond drillholes (mud-rotary pre collar) by SER in JV with Fortescue</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• Cover sequences were drilled by mud rotary drilling until intersecting basement</li> <li>• Diamond core drilling was used to collect HQ and NQ diameter core of basement</li> <li>• Downhole surveys of diamond core drilling were conducted approximately every 30m</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• Drillers core blocks indicate the length of a run and the amount of recovered core</li> <li>• When core recovery has been recorded by field geologist prior to sampling it has been described as typically 100%</li> <li>• No relationship between recovery and grade was observed</li> <li>• Recovery of cover sequence samples drilled by mud rotary was not recorded</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• SER has undertaken an initial quantitative geological log of the lithologies, mineralisation and alteration. Petrology is planned to better understand the geological units and sulphide associations.</li> <li>• SER has compiled all available logging data into a comprehensive database capturing collar, survey, lithology, mineralisation, alteration, veining, structural data (when available) and recovery (when recorded)</li> <li>• Photos (wet and dry) were taken of all core trays for later review</li> <li>• SER recorded magnetic susceptibility measurements of core every meter and collected Specific Gravity (SG) measurements on average every 5m</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• SER: samples were crushed to 90% passing 4mm, then split and pulverised to better than 85% passing 75 microns</li> </ul>
Quality of assay data and laboratory tests (Equipment used)	<ul style="list-style-type: none"> <li>• SER's laboratory analysis included fire assay analysis with AAS finish for Au, Pt and Pd and four acid digest followed by ICP-MS for 31 element package, undertaken by ALS. SER inserted certified reference material and blanks every 40 samples.</li> <li>• QAQC analysis of assay results indicates an acceptable level of accuracy and precision</li> <li>• Laboratory in-house QAQC includes the use of internal lab standards, splits and duplicates and participation in external umpire laboratory assessments</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• Sample intervals defined by field geologist are assigned a sample identification number prior to core cutting and dispatch to laboratory</li> <li>• Assessment of reported significant assays are verified by review of core photography</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• Drill collar location surveyed using a handheld GPS</li> <li>• Locations are reported in metres in GDA94 MGA Zone 54</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Drilling sampling is adequate for early exploration</li> <li>• Information available is not sufficient for the estimation of a Mineral Resource</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• Downhole lengths are not considered true widths given limited geological understanding</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• SER samples were collected, sealed and delivered to laboratory by company personnel</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>• None undertaken</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>SER drilling occurred on EPM27586, EPM27587 and EPM27378 which are 100% owned granted licences</li> <li>Canobie Project comprises 8 granted tenements 100% owned by SER EPM15398, EPM27378, EPM27586, EPM27587, EPM27588, EPM27638, EPM27676 &amp; 28180</li> <li>The project is located 165km NNE of Cloncurry</li> <li>Conduct and Compensation Agreement executed with landholders</li> <li>Exploration Agreement executed with Traditional Owners</li> <li>Tenements in good standing with no known impediments</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>In 1994 MIM Exploration was targeting IOCG mineralisation by drilling magnetic / gravity anomalies when TT001D intersected 10m @ 0.28% Cu and 0.25% Ni</li> <li>In 2004, Falcon Minerals drilled two further holes (SMD01 &amp; SMD02) targeting Ni sulphides at Tea Tree</li> <li>In 2008, Anglo American was targeting magmatic Ni-Cu-PGE mineralisation by drill testing bedrock electromagnetic conductors (7 holes SXDD001-SXDD007) hole SXDD005 hit high grade gold including 17m @ 6.75g/t Au from 631m at Lucky Squid/Saxby Prospect</li> <li>In 2010, AngloGold Ashanti drilled five holes (SXDD011-015) to test for gold mineralised structures with best results in SXDD014 including 15m @ 9.09 g/t Au (Lucky Squid)</li> <li>In 2012, Falcon Minerals drilled four further holes (SXDD0016-0019) with disappointing results. The best result was from hole SXDD016 which included 1m @ 26.1 g/t gold (Lucky Squid)</li> <li>In 2019-2020 SER drilled a further four diamond drillholes at SXDD020-SXDD023 targeting Cu-Au mineralisation at Lucky Squid/Saxby. Best result was SXDD020 6m @ 12.08g/t Au from 519m.</li> <li>In 2021 SER drilled 2 diamond drillholes (CNDD001A, CNDD002) at Kalarka intersecting thick ultramafics with disseminated and semi massive sulphide zones</li> </ul>
Geology (Target deposit type)	<ul style="list-style-type: none"> <li>SER is targeting IOCG and Ni-Cu-PGE sulphide mineralisation hosted in basement rocks of the Eastern Succession of the Mt Isa Province buried beneath younger sedimentary cover of the Carpentaria Basin</li> <li>There is very limited knowledge of the northeast Mt Isa Province, the small amount of drilling in this virgin terrain has a high strike ratio of mineralisation</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>Please see table and figures in main body of text</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>Significant intersections: average grades are weighted by the sample width of each assay within the intersection</li> <li>No metal equivalence calculations are used in reporting</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>Downhole lengths are not considered true widths given limited geological understanding</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>This report describes all relevant historical exploration and SER's planned work</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 and Fortescue will thoroughly review the results from the initial drill program when received and will identify drill targets for the 2024 drilling season</li> </ul>