

Gravity Survey commissioned for East Tennant

- Extensive detailed ground gravity survey for Copper-Gold targets
- 50% co-funded by Northern Territory Government
- National Drilling Initiative regional stratigraphic drilling this quarter

Strategic Energy Resources (SER) is pleased to announce that a detailed ground gravity survey has been commissioned over our three tenements in the East Tennant Iron Oxide Copper-Gold (IOCG) province of the Northern Territory. The survey is scheduled to commence this quarter.

Gravity is a key dataset to target IOCGs as they involve the introduction of iron rich fluid into a host rock which increases the density. SER will collect a systematic 800m spaced ground gravity grid over all of EL32109 with zones of 400m infill over key target areas. EL32306 and EL32307 will be covered with a 400m spaced grid. The gravity data will reveal density anomalies for drill testing. There is no historical drilling recorded on any of SER's tenements.



Figure 1: Geoscience Australia IOCG Prospectivity¹ map of East Tennant Project with SER applications

¹ Ore Geology Reviews (October 2019): <u>https://www.sciencedirect.com/science/article/pii/S0169136819303099?via%3Dihub</u>

LEGEND

EL32109 SER Grantee

In to 400m zones

GDA94 Z53

530.000 mE

Existing Gravity stations

Tenements

530.000 mE



close proximity to SER's three tenements in the province and is scheduled for this quarter. The NDI is funded by the Mineral Exploration Cooperative Research Centre (MinEx CRC: the world's largest mineral exploration collaboration with \$218m to discover new mineral deposits) of which SER is a member. The NDI will drill multiple holes through cover to map the regional geology, structural architecture and mineral systems in this underexplored

The results from the NDI will be critical to understanding the geology of the province and could significantly upgrade the prospectivity of SER's tenements.

province identified by Geoscience Australia as favourable for hosting large mineral systems.

The region is covered by sediments of the Georgina Basin, has no basement outcrop and has seen very little previous exploration. SER believes prospective basement geology lies beneath the younger cover based on distinct NE-trending structures visible in regional magnetics, gravity and conductivity extending along-strike from area of known mineralisation. Cover is assessed as relatively shallow (less than 250m depth to basement).



Background: East Tennant Regional Geology and Ground Release

In 2019, data acquired under Geoscience Australia's \$100m "Exploring for the Future" program revealed a lithospheric connection between the Tennant Creek and Mt Isa mineral fields. In particular, previously unrecognised major features favourable for hosting large mineral systems were seen in the East Tennant region². A moratorium on Exploration Licence Applications was placed over the region and a competitive tender process flooded with applications from exploration companies. SER won key ground in this process.



Figure 3: Tennant Creek to Mt Isa (TISA) region with crustal structures (yellow dashed lines) over gravity image

This announcement is authorised by the Strategic Energy Resources Limited Board. **Executive Chairman Stuart Rechner**

For further information, please contact Mr Rechner +61 3 9692 7222 or visit website www.strategicenergy.com.au

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 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.

² For further details regarding Geoscience Australia's work at East Tennant see: <u>https://www.ga.gov.au/eftf/minerals/fis/east-tennant</u>



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

Criteria	Commentary
Sampling techniques	 Ground gravity survey using precision Global Navigation Satellite System (GNSS) techniques and geodetic principles to allow first order accuracy in position and height. Gravity and GNSS base stations established with values derived through ties to Australian Fundamental Gravity Network (AFGN) or Daishsat network base stations.
Drilling techniques	Not applicable
Drill sample recovery	Not applicable
Logging	Not applicable
Sub-sampling techniques and sample preparation	Not applicable
Quality of assay data and laboratory tests (Equipment used)	 Scintrex CG-5 Gravity meters: accuracy standard deviation of ~0.025mGal. Gravity meters calibrated regularly on Government and Daishsat Calibration Ranges. Leica 1200 & 500 dual frequency GPS receivers: accuracy <5cm Stations read to ~0.01mGals and reduced to Bouguer Anomalies at 2.67g/cc density Gravity loops kept under 10 hours to control drift and tares
Verification of sampling and assaying	 Two or more observations per station to detect interference or meter malfunction Repeat of at least 5% of all observations to determine repeatability for the survey
Location of data points	 Gravity stations located with Leica 1200 & 500 dual frequency GPS receivers Coordinates in GDA94 MGA94 Z53, height in AHD Observed gravity Isogal 84 (IGSN-71)
Data spacing and distribution	 St Barbara Ltd collected 750 stations over EL23028 (now expired, covers western portion of EL32109, see Figure 2) with gravity stations collected on 400m x 400m and 800m x 800m grids (includes 5% repeat stations)
Orientation of data in relation to geological structure	Regular spaced gravity data has proven suitable to identify and model IOCG targets
Sample security	Not applicable
Audits or reviews	Data corrections and validation was undertaken daily by the geophysical contractor



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

Criteria	Commentary
Mineral tenement and land tenure status	 EL32109 East Tennant (granted 18 November 2019, 100% SER) Area and Location: EL32109 807km² in East Tennant area (100km E of Tennant Creek) Landholders: Vacant Crown Land Tenement in good standing with no known impediments
Exploration done by other parties	 Previous explorers targeted IOCG mineralisation within EL32109, although no drilling has been recorded from within EL32109 St Barbara Ltd collected ground gravity (400m and 800m spacing) in 2008 using Daishsat Geodetic Surveys on the western side of what is now EL32109 (previously EL23028) Geoscience Australia's Tennant East ground gravity survey covers the eastern half of EL32109 (East Tennant Gravity Survey P201901, NT 2019)(see Figure 2). The data was collected by Atlas Geophysics Pty Ltd in 2019 at a nominal 2km spacing.
Geology (Target deposit type)	Iron Oxide Copper-Gold (IOCG) mineralisation
Drill hole Information	Not applicable
Data aggregation methods	Not applicable
Relationship between mineralisation widths and intercept lengths	Not applicable
Diagrams	See figures in release
Balanced reporting	This report describes all relevant historical exploration and SER's planned work
Other substantive exploration data	All relevant finalised exploration data has been included
Further work	 Upcoming ground gravity survey as described in this report