Locksley Resources

INVESTOR UPDATE

ASX RELEASE
24 February 2025

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DHEM OFF-HOLE CONDUCTORS INDENTIFY A POTENTIAL THIRD MINERALISED ZONE

Locksley Resources Limited is pleased to announce that downhole electromagnetic surveying has been received for the Tottenham Copper Project, located near the township of Tottenham, NSW.

Highlights:

- **Recent DHEM survey identifies strong drill targets for resource expansion**
- **Off-hole conductors identified outside of the existing Orange Plains – Mount Royal mineral resource from surveys completed on drillholes TORC024 and TORC029**
- **Conductors support the concept of a new mineralised ribbon or horizon.**
    - **Current Mount Royal – Orange Plains resource is 7.13Mt @ 0.73% Cu, 0.22g/t Au**

Locksley Resources Limited (ASX:LKY) ("Locksley" or "the Company") is pleased to announce the results from the downhole electromagnetic (DHEM) survey completed at the Tottenham Copper-Gold Project ("Tottenham" or "the Project"). Tottenham has a current JORC (2012) compliant Inferred mineral resource of 9.86Mt @ 0.72% Cu, 0.22g/t Au[1] across the Carolina and Mount Royal – Orange Plains deposits.

Figure 1: Mount Royal – Orange Plains Prospect – TORC024 & TORC029 off-hole conductor plates and Mineral Resource Blocks > 2,000ppm Copper on aerial photography

[1] *1st April 2022 – Locksley ASX Announcement – 9.86Mt Resource Defined at The Tottenham Project*

DHEM was conducted on 6 (six) holes at Orange Plains, Lacey's Tank and Jimmy Woodser prospects, with the only strong responses at Orange Plains; with strong off-hole responses observed from both TORC024 and TORC029. The response is interpreted to be from the same, large, strike extensive zone, but the holes are too far apart to be modelled with a single plate.[2]

The Tottenham Project is hosted within the Girilambone sediments, with mineralisation associated with silica magnetite alteration. This results in mineralisation correlating with high responses in magnetic surveys. The known resources are typified by shallowly west plunging mineralised ribbons which are coincident with subparallel magnetic highs in response to the magnetite alteration. The newly identified EM off-hole conductors are coincident with a parallel magnetic anomaly to the south-east and outside of the existing resources, indicating the potential for a whole new mineralised ribbon that could add significantly to the existing resource base at Mount Royal – Orange Plains.

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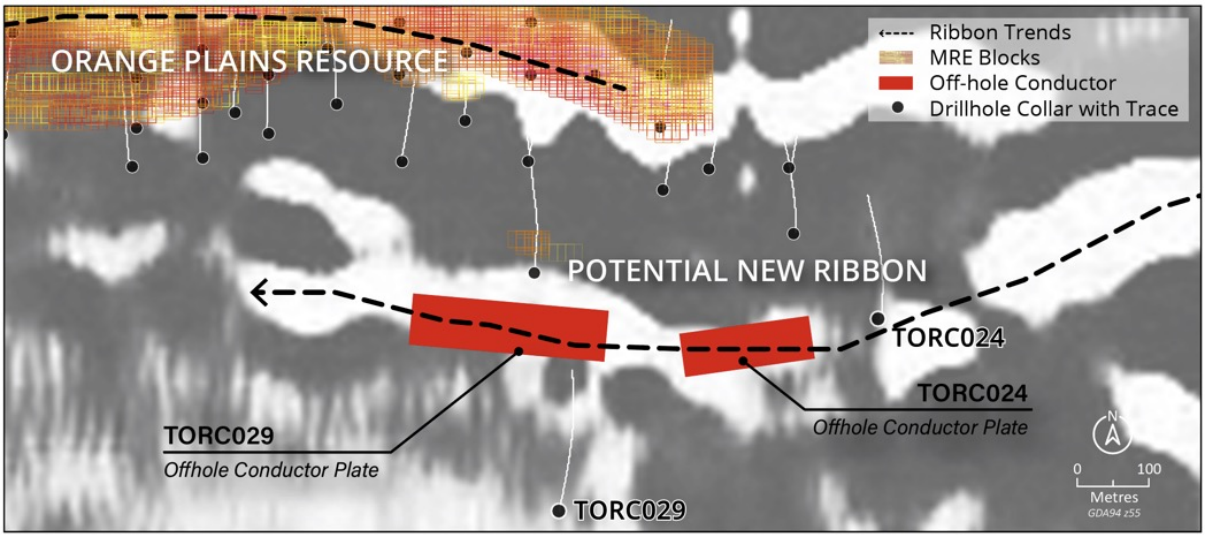

Figure 2: Mount Royal – Orange Plains Prospect – Inset TORC024 TORC029 off-hole conductor plates on RTP_2VD magnetics

Locksley Resources Limited Managing Director, Steve Woodham commented:

"I am pleased to report the results from the recently completed DHEM survey.

The DHEM survey has identified strong off-hole conductors to the south-east of the existing Orange Plains resource, potentially representing a previously unknown third mineralised horizon, which provides the opportunity to significantly increase the size of the resource.

These results give the Company additional confidence that this highly prospective area represents a strong drill target which will be planned and budgeted as soon as practicable.

The purpose of the DHEM program is to use sub-surface geophysical techniques on previously drilled reverse-circulation (RC) drill holes to determine whether off-hole DHEM conductors are present.

DHEM has been used successfully to identify massive sulphides within the Tottenham Project at Carolina and neighbouring exploration projects within the same host rock and deposit style.

This tried and tested geophysical technique has also been instrumental in the discovery of numerous other discoveries in the region."

[2] *2024 Tottenham DHEM Report – Mitre Geophysics*

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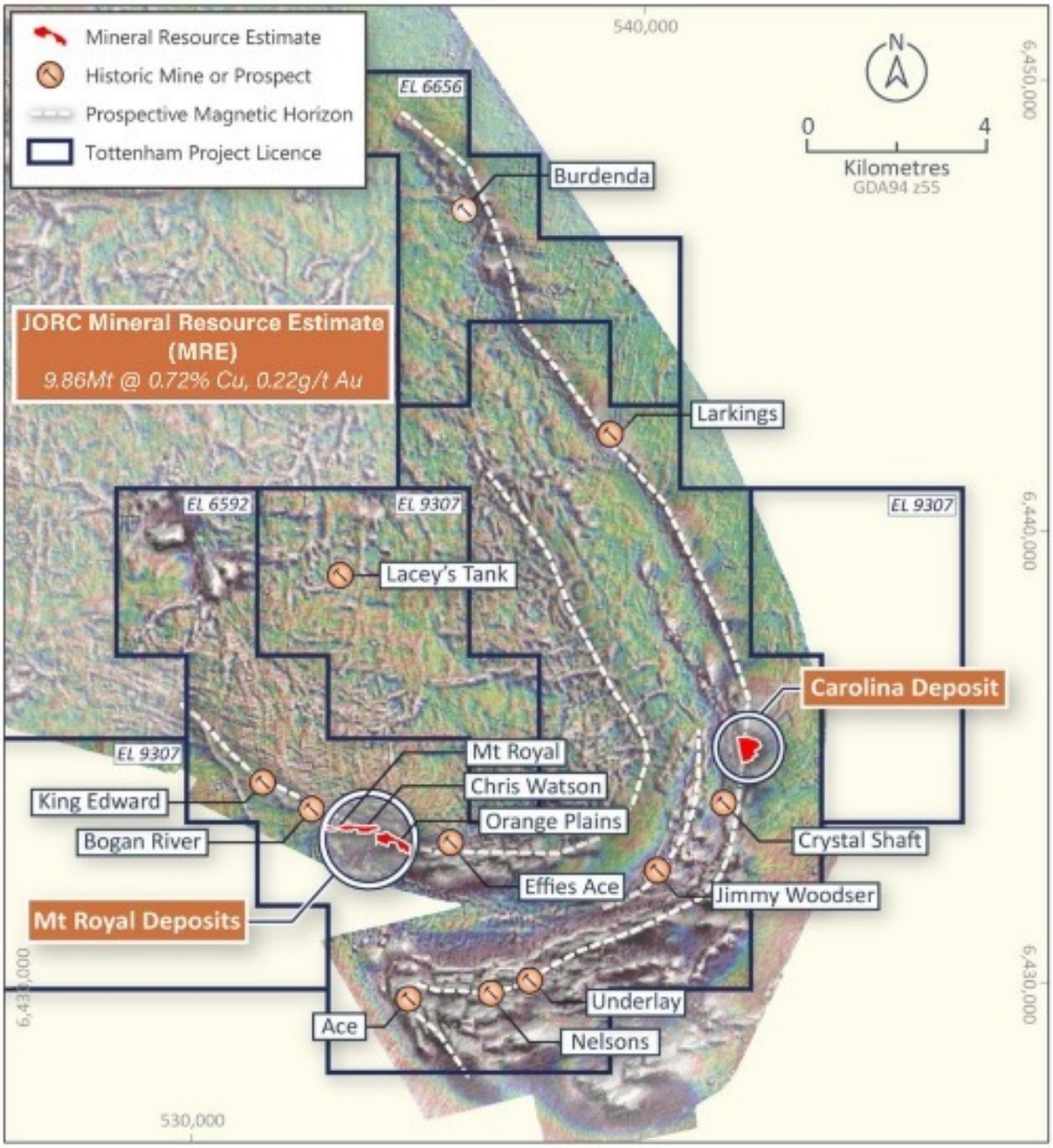

Figure 3: Tottenham Project – DHEM areas (Carolina, Jimmy Woodser, Orange Plains and Lacey's Tank)

Survey Methodology

Locksley designed the downhole electromagnetic (DHEM) survey to target the Jimmy Woodser, Orange Plains/Mount Royal, and Lacey's Tank Prospects (Figure 3).

Six (6) drillholes for 1,128m were cased with PVC and surveyed with the goal of identifying the presence and location of off-hole electromagnetic (EM) conductors to identify new drill targets with the potential to expand the current 9.86Mt @ 0.72% Cu, 0.22g/t Au, 2g/t Ag JORC (2012) Compliant Inferred Resource.

The survey was also designed to target potential DHEM conductors within the three prospect areas to delineate a strong EM response that may assist with highlighting and narrowing down copper targets within the Project for further follow-up drilling.

The DHEM program commenced in early December 2024 and ran for approximately 2.5 weeks. The survey techniques and data acquisition were undertaken using the EMIT DigiAtlantis triaxial fluxgate DHEM system, Zonge ZT30 transmitter with a modified output of 50A, a 22kva 3 phase generator, 6mm² Tx Loop Wire, a hand-held GPS navigation system and field vehicle along with two technicians to assist with the program.

Next steps

- Drilling Program: Targeting multiple targets including the high-priority off-hole conductors.

The Board of Directors of Locksley Resources Limited authorised the release of this announcement.

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Compliance Statements

Cautionary Statement

This announcement may contain visual exploration results in respect of the Mojave Project. Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. No representation is made that, in relation to the tenements the subject of this presentation, the Company has now or will at any time the future develop resourcesor reserves within the meaning of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves.

Competent Persons

The information in this document that relates to exploration targets, exploration results, mineral resources or ore reserves is based on information compiled by David Ward BSc, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM), (Member 228604). David Ward is a shareholder of Locksley Resources Ltd. David Ward has over 25 years of experience in metallic minerals mining, exploration and development and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaking to qualify as a 'Competent Person' as defined under the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ward consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

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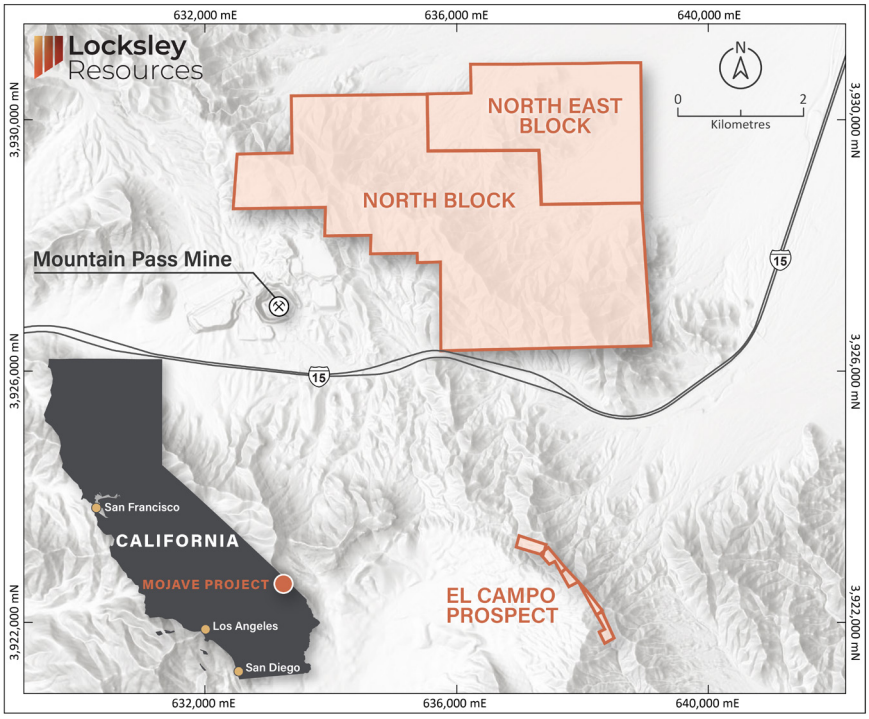
About Locksley Resources Limited

Locksley Resources Limited (ASX:LKY) is an ASX-listed minerals explorer with a focus on copper, gold and base metal assets throughout Australia. LKY is also active in exploring for Rare-Earth Element (REE) projects located in the United States of America (USA), positioning LKY as a player in the fast-growing REE exploration market. LKY aims to build shareholder wealth through the discovery and development of mineral deposits across various Australian and USA projects; being the Tottenham Project and Mojave Project.

Mojave Project

The Mojave Project is in the Mojave Desert, California, USA. Consisting of two areas: The North Block is 14.9km², North East Block 5.7km² and El Campo Prospect totalling 0.34km². This brings the total land tenure for the Mojave Project to 20.94km^2 held within two distinctive contiguous claim blocks.

The Mojave Project is positioned next to one of the highest-grade REE mines in the world and multiple significant carbonatite REE veins have been identified. The Mojave Project has returned high grade TREO rock-chip results of up to 9.49%. The Desert Antimony Mine has returned high-grade rock chip assays as high 46% Antinomy (Sb).



MOJAVE PROJECT – Location of the Mojave Project Blocks in south-eastern California, USA

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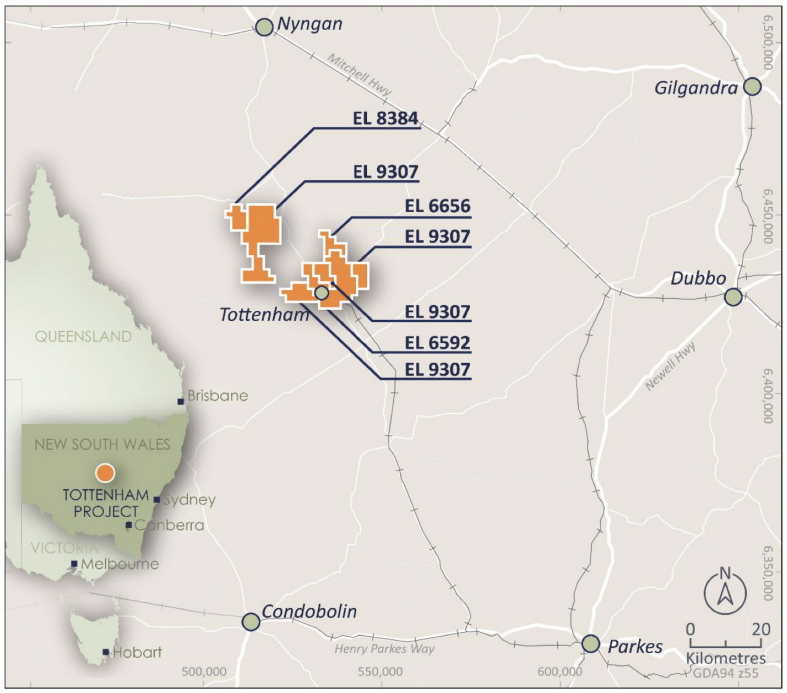
Tottenham Project

The Tottenham Project is an advanced Cu-Au exploration project that consists of four Exploration Licences, (EL6592, EL6656, EL8384, EL9307), covering 470km^2, located in the Lachlan Fold Belt of central New South Wales.



TOTTENHAM PROJECT – Location of the Tottenham Project in central NSW, Australia

The Tottenham deposits are hosted within the Ordovician Girilambone Group that also host the Tritton and Girilambone Mines and Constellation Deposit, 110km to the north-northwest (Aeris Resources Ltd.), and is immediately along strike from the CZ Copper Deposit (Helix Resources Ltd). Resources have been defined at both the Mount Royal to Orange Plains and Carolina Deposits for a global inferred resource of:

9.86Mt @ 0.72% Cu, 0.22g/t Au, 2g/t Ag at a 0.3% Cu cut off

The Competent Person for the Tottenham Project 2022 Resource is Mr Jeremy Peters FAusIMM CP(Geo, Min), a Director of Burnt Shirt Pty Ltd. The Mineral Resource estimate is stated in accordance with the provisions of the JORC Code (2012). Mr Peters has more than five years' experience in the estimation and reporting of Mineral Resources for base metals mineralisation in Australia and overseas, 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 Peters consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

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JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• A downhole electromagnetic (DHEM) survey was carried out on six (6) previously drilled reverse-circulation (RC) drillholes to a depth ranging from 168m to 240m. The survey was carried out by Fender Geophysics under the guidance and supervision of Mitre Geophysics Pty Ltd. Two holes TORC024 and TORC029 were re-surveyed using a larger survey loop in order to more accurately identify potential DHEM conductors.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.

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Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The DHEM survey conducted on drillholes six (6) boreholes was acquired to the below specifications. **DigiAtlantis EM down-hole probe** / **Zonge ZT30 (modified) 120A Trans** Sensor: Tri-axial fluxgate magnetometer / Output current: up to to 120A Max. signal level: ± 70,000nT / Loop input voltage: up to 400V Noise level: approx. 3pT on late time window / Duty cycle: 50% or 100% ADCs: 24-bit delta-sigma / Turnoff – resistive load: 1µs Bandwith: DC to 4kHz / Turnoff – 100m loop: < 150µs at 20A Depth rating: 2000m vertical depth
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All geophysical data is recorded electronically and stored in a Sharepoint cloud server.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.*	• All drillhole collars were located with a hand-held GPS Garmin 64s. • The Geodetic Map Grid of Australia (MGA94 Zone 55) system was used to reference locations.

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Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only and is not sufficient to establish and or improve Mineral Resource and Ore Reserve estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.
Sample security	• *The measures taken to ensure sample security.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• All drilling on EL6592 which is 100% owned by Locksley Resources Ltd. EL6592, EL6656, EL8384 and EL9307 form the Tottenham Project. • The majority of these licences are covered by freehold farmland. Parts of EL6592 are covered by the Tottenham and Carolina State Forests, administered by Forestry Corporation NSW. • All exploration licences are in good standing. EL6592 expires 29/6/2026. EL6656 expires 27/10/2026. EL8384 expires 28/7/2026. EL9307 expires 16/10/2027.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Tottenham field had mining present from 1872 to 1977. Major mines were present at Mount Royal, Orange Plains, Bogan River, Ace, and Carolina. The most active period of production was between 1905 and 1917. Little or no production was recorded between 1921 and 1925, owing to a combination of low copper prices and drought. There was no production in 1928 and between 1931 and 1942. In

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Criteria	JORC Code explanation	Commentary
		1943 minor tonnages were won from the Mt. Royal, and Bogan River mines. There was minor production each year from 1946 to 1977 which came from operations at the Mt. Royal, Bogan River, Underlay and Carolina Mines and from leaching at the Mt. Royal, Carolina and Underlay Mines. • Significant exploration drilling has occurred at the Bogan River to Effies Ace group of mines and about the Carolina Mine. Main recent explorers are Arimco Mining – Straits Resources (1996-2001) with 93 RC holes and Mincor Resources – Bacchus Resources (2006 -2020) with 83 aircore holes, 104 RC holes and 48 diamond holes. All of this drilling appears to have been undertaken using standard industry practice. 19 historic holes are also present at the NSW government core archive.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Tottenham deposits are hosted within the Ordovician Girilambone Group. The project area lies within the Girilambone Anticlinorium Zone of the Lachlan Fold Belt. Rock types are dominantly sequences of turbidites comprising sandstone and siltstone as well as minor chert, and conglomerate. Interbedded mafic volcanic, volcaniclastic and intrusive mafic units show a spatial association with copper mineralisation. The Girilambone Group is characterised by north-south trending thrust-bounded packages that separate Early Ordovician (Narrama Formation) and Middle Ordovician (Ballast and Lang Formations) units. The Early Ordovician Narrama Formation (~475Ma) hosts the bulk of the mafic igneous units, coarser-clastics, quartz-magnetite units and mineralisation. The majority of the mafic units are interpreted to be sills that have intruded into unconsolidated turbiditic sediments. Younger sediments cover much of the belt resulting in limited outcrop of less than 10%. The Girilambone Group is regionally metamorphosed to greenschist facies with a complex deformation history and is strongly folded with noticeably more metamorphism and deformation in the Tottenham area. Tight isoclinal folds are observed at the sub-metre scale, although large open folds are common such as the Orange Plains anticline. Metamorphism and deformation are mostly related to the Early Silurian Benamberan Orogeny, (~435 Ma). Metamorphism in the Tottenham area has led to the rocks being described as metasedimentary and mafic schists. The deposits are considered to be Besshi - Type sulphide copper-gold deposits that have been modified by deformation. Besshi - Type deposits are named after deposits on the

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Criteria	JORC Code explanation	Commentary
		southern Japanese island of Shikoku. The mineralisation in these systems is typically copper-rich with lesser zinc, silver, gold and minor cobalt within well-developed iron-sulphide (pyrite / pyrrhotite) bodies. The host rocks are commonly sedimentary rocks, and, as at Tottenham, these have been intruded and interlayered with basaltic igneous rocks. Mineralised horizons tend to be narrow but extensive. The best copper and zinc grades are typically proximal to the source of the fluids that formed these bodies – possibly "black smokers" erupting from the sea floor, driven by underlying igneous activity. Alternatively, unconsolidated sediments may be impregnated by metal bearing solutions below the sea floor.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.
Relationship between mineralisation widths and	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.

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Criteria	JORC Code explanation	Commentary
intercept lengths	*width not known').*	
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See the main body of the announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• This announcement is referring to downhole electromagnetic (DHEM) surveying only.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• See the main body of the announcement.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Additional drilling is being planned to follow up the off hole conductors identified.