

## Copper Gold Mineralisation Detected at Pathfinder 38

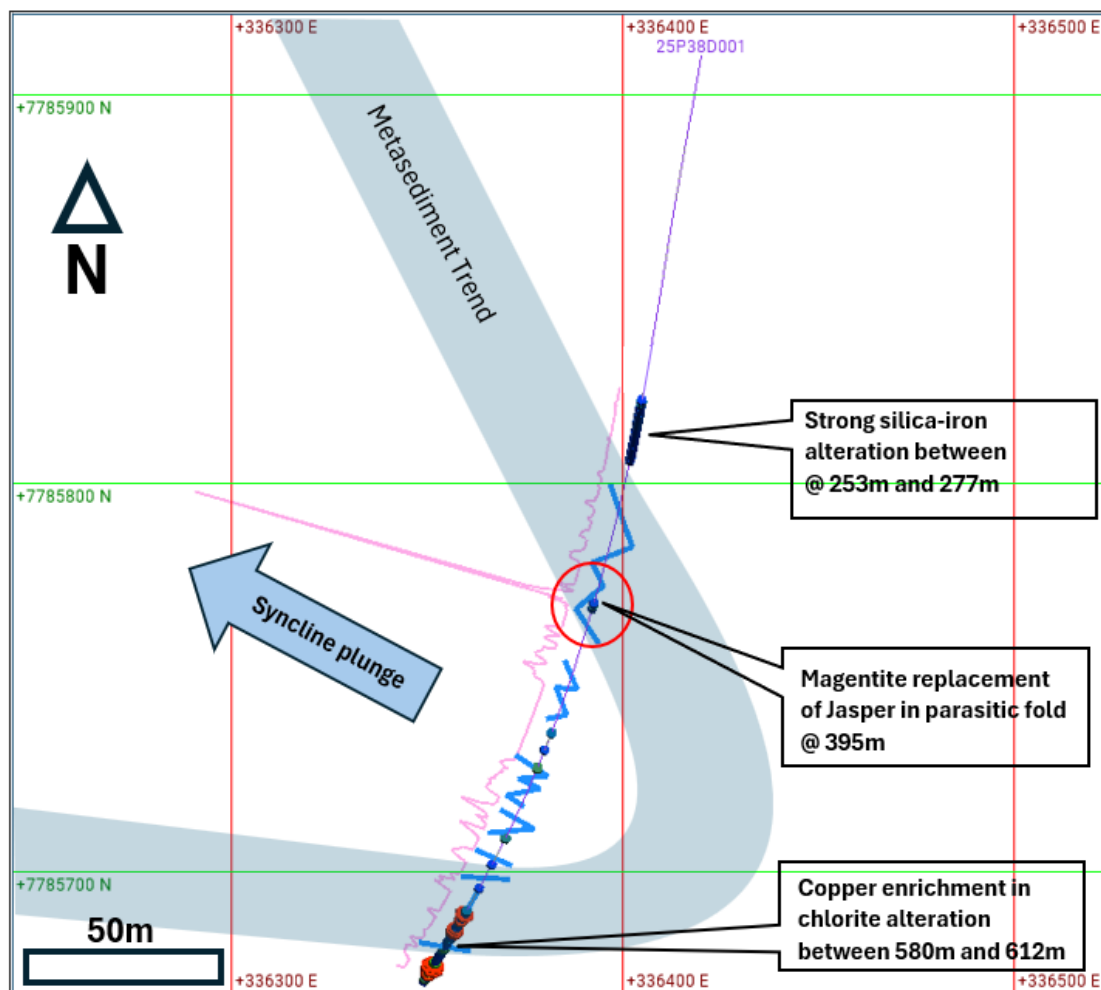
**Castile Resources Limited (Castile' or the 'Company')** is pleased to advise that exploration hole 25P38D001 at Pathfinder 38 has successfully intersected alteration associated with Iron Ore, Copper and Gold (IOCG) mineralisation using Ambient Noise Tomography Survey (ANT) as the primary targeting tool.

Hole 25P38D001 drilled at Pathfinder 38 is the first time an IOCG formation has successfully been detected using results obtained from an Ambient Noise Tomography Survey (ANT).

Castile believes 25P38D001 intersected the edges of an IOCG formation at multiple depths and that the source of the magnetic anomaly has not been accounted for in the geology intersected. Hole 25P38D001 encountered;

- A zone of distal silica-hematite alteration between 253m and 277m indicating mineralisation may occur to the north.
- A zone of strong magnetite replacement of jasper with pyrite in a parasitic fold between 395.35 and 396.2m which replicates the structural setting at Castile's flagship Rover 1 deposit.
- Chlorite alteration and associated disseminated magnetite with elevated copper up to 30 times background (max 770ppm) between 580.9m and 612.35m down hole.

Castile will now complete a downhole magnetic survey in hole 25P38D001 to further constrain the magnetic source and an ANT survey to determine another target to drill into this initial discovery at Pathfinder 38.



**Figure 1: Geological interpretation of 25P38D001 – plan view.** The drillhole has transected an antiform and shows alteration and mineralisation to be associated with parasitic folding on the limbs. The pink downhole trace depicts relative magnetic susceptibility which the blue lines represent primary bedding trends from structural logging.

Mark Hepburn, MD of Castile commented:

*"We are extremely excited to have proven the ability of ANT technology to vector exploration drilling towards IOCG mineralisation with our first hole at Pathfinder 38. This successful intersection of IOCG mineralisation in 25P38D001 will prove invaluable, by allowing Castile to benchmark ANT survey results to know geology to further refine targeting for high-value Rover 1 style deposits under cover.*

*"Our Rover 1 Project is ready for development, and we will continue to seek out additional inventory within our Rover Mineral Field for our "hub and spoke" strategy with our aggressive exploration program using the ANT technology.*

*"Hole 25P38D001 was 50% funded by the NT Government as part of the Geophysics and Drilling Collaboration program being run by the Northern Territory Geological Survey and we thank them for their continued support."*

Mark Hepburn

**Managing Director**

Castile Resources Limited

For further enquiries please contact

E: [info@castile.com.au](mailto:info@castile.com.au)

P: +61 8 6313 3969

Authorised for release by the Board of Castile Resources Limited

Hole Name	MGA Northing	MGA Easting	RL	Depth	Dip	MGA Azimuth
25P38D001	336420	7785910	300	616.05	-70	190

**Table 2: Drillhole spatial information**

### **Competent Person Statement**

The exploration results contained in this report are based on, and fairly and accurately represent the information and supporting documentation prepared by Mark Savage. Mr Savage is a full-time employee of Castile, and a Member of The Australasian Institute of Mining and Metallurgy. Mr Savage has sufficient experience which is relevant to the style of mineralisation and type of deposit 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, Exploration Targets, Mineral Resources and Ore Reserves. Mr Savage consents to the inclusion in the report of the matters based on the exploration results in the form and context in which they appear.

### **Forward Looking Statements**

Certain statements in this report relate to the future, including forward looking statements relating to Castile's financial position and strategy. These forward-looking statements involve known and unknown risks, uncertainties, assumptions, and other important factors that could cause the actual results, performance, or achievements of Castile to be materially different from future results, performance or achievements expressed or implied by such statements. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement and deviations are both normal and to be expected. Other than required by law, neither Castile, their officers nor any other person gives any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statements will occur. You are cautioned not to place undue reliance on those statements.

JORC 2012 Table 1

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
<p><b>Sampling techniques</b></p> <p><b>Drilling techniques</b></p> <p><b>Drill sample recovery</b></p>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).</li> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All data used in the following sections at Rover 1 has been gathered from diamond core. Multiple sizes have been used historically; HQ, NQ and BQ.</li> <li>Samples are selected to lie on geological boundaries, with intervals selected of lengths between 0.1 to 1.1m. Samples are halved using an automatic core saw then individual samples collected in prenumbered calico sample bags.</li> <li>To ensure representivity of analysis, field blanks and certified reference material is inserted in a nominal ratio of 1:20 samples.</li> <li>Sample recovery is recorded on retrieval of the core tube, measuring recovered core against drill string advance. No apparent relationship has been observed between sample recovery and grade. No has sample bias due to preferential loss or gain of fine or coarse material been noted.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean,</li> </ul>	<ul style="list-style-type: none"> <li>All geological data has been visually logged and validated by the relevant area geologists, recording lithology, alteration, mineralisation, structure, veining, magnetic susceptibility and geotechnical data.</li> <li>Logging is quantitative in nature.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>channel, etc.) photography.</p> <ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All holes are logged completely.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Drilling - Half-core niche samples, sub-set via geological features as appropriate.</li> <li>Core undergoes total preparation.</li> <li>For the 2025 field season, sample preparation process consists of; <ul style="list-style-type: none"> <li>Half ore samples of between 0.5 to 3kg are whole crushed using a Boyd Crusher to achieve a maximum sample size of 2mm.</li> <li>A cone splitter is used to split 1kg of material which is pulverised in a Keegor mill to a nominal 100µm particle size., then roll mixed to homogenise the sample.</li> <li>The mill inserts a barren coarse flush after every sample.</li> <li>From the analysis sample, 40g is taken for fire assay, while a 0.2g portion is taken for acid digestion. These samples are extracted from the packet with a spatula and weighed out.</li> </ul> </li> <li>QA/QC is ensured during sampling via the use of sample ledgers, blanks, standards and repeats.</li> <li>QA/QC is ensured during the assays process via the use of blanks, standards and repeats at a NATA / ISO accredited laboratory.</li> <li>Repeatability is performed by selecting 1:20 coarse reject material as field duplicates and re-assayed.</li> <li>The sample sizes are considered appropriate to the grainsize of the material being sampled.</li> <li>The un-sampled half of diamond core is retained for check sampling if required.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures</li> </ul>	<ul style="list-style-type: none"> <li>Analysis of drill core for Au, Ag, Bi, Co, Cu, Pb and Zn is as follows; <ul style="list-style-type: none"> <li>Gold (Au-AAS scheme – lower detection limit = 0.01ppm, upper detection limit = 100ppm). A 50g charge of prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents and then</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	<p>cupelled to yield a precious metal bead.</p> <ul style="list-style-type: none"> <li>○ The bead is then dissolved in acid and analysed by atomic absorption spectroscopy against matrix-matched standards.</li> <li>○ Samples returning assay values in excess of 100g/t Au were repeated using the screen-fire method.</li> <li>○ Silver, bismuth, cobalt, copper, lead and zinc samples are digested using a 4-acid digest.</li> <li>○ The subsequent solution is analysed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry.</li> </ul> <ul style="list-style-type: none"> <li>• No significant QA/QC issues have arisen in recent drilling results.</li> <li>• These assay methodologies are appropriate for the style of mineral deposit under consideration.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Anomalous intervals as well as random intervals are routinely checked assayed as part of the internal QA/QC process.</li> <li>• Several twinned holes have been drilled with no significant issues highlighted.</li> <li>• Primary data is collected on a ruggedised computer, on predefined and self-validating worksheets. This data is imported into a relational database (DataShed) and is backed up regularly.</li> <li>• All data used in the calculation of resources is compiled in databases which are overseen and validated by senior geologists.</li> <li>• No primary assays data is modified in any way.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All data is spatially oriented by survey controls via direct pickups by the survey department. Drillholes are all surveyed downhole. Modern holes are surveyed by Gyro tools.</li> <li>• All drilling and resource estimation is undertaken in MGA grid.</li> <li>• Topographic control is generated from a combination of aerial photogrammetry and ground-based surveys. This methodology is considered adequate for the resource in question.</li> </ul>
<b>Data spacing</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling has been undertaken on a nominal 40x40m spacing, infilled to a nominal 20x20m spacing where significant mineralisation has been</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>and distribution</b>	<p><i>degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>identified.</p> <ul style="list-style-type: none"> <li>• No compositing of primary samples is undertaken prior to analysis.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling intersections are nominally designed to be normal to the orebody under consideration as far topography and economics allows.</li> <li>• It is not considered that drilling orientation has introduced an appreciable sampling bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Individual samples in calico samples are collected in groups of 5 and placed into poly weave bags and secured with a zip-tie. All poly weave bags of a submission are then placed within a bulka bag, which is then sealed before delivery to a third-party transport service who provides a tracking number. The transport contractor then relays the samples to the independent laboratory contractor.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Site generated data is routinely reviewed by the Castile corporate technical team.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Tennant Creek Project comprises 5 granted exploration leases.</li> <li>• Native title interests are recorded against the Tennant Creek tenements.</li> <li>• The Tennant Creek tenements are held by Castile Resources exclusively.</li> <li>• Third party royalties exist across various tenements at Tennant Creek, over and above the Northern Territory government royalty.</li> <li>• Castile operates in accordance with all environmental conditions set down as conditions for grant of the leases.</li> <li>• There are no known issues regarding security of tenure.</li> <li>• There are no known impediments to continued operation.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Tennant Creek area has an exploration and production history in excess of 100 years.</li> <li>The Rover area in particular has an intensive exploration history stretching from the 1970's.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Rover Project is presently considered to be associated with a southern repeat of the 1860-1850Ma Warramunga Province, in particular, the Paleoproterozoic Ooradidgee Formation, after recent geochronology work undertaken by NTGS . This is a weakly metamorphosed succession of partly tuffaceous sandstones and siltstones and turbidite shales. Locally the turbidite metasediments are variably altered by hematite and silica flooding.</li> <li>Mineralisation is mainly of the Iron Ore Copper-Gold (IOCG) type, particularly the Tennant Creek sub-type. Massive ironstone comprised of magnetite or hematite +/-quartz is interpreted to be alteration of metasediments within a structural trap.</li> <li>Copper manifests as of chalcopyrite, associated with breccia fill within magnetite-quartz ironstones and Jasper/BIF that often form an alteration transition to a chlorite alteration envelope. Pervasive sub-economic copper levels can persist throughout the zone. Economic levels of copper are dominantly contained in the lower massive magnetite zone of the ironstone bodies, particularly where intense chlorite alteration replaces magnetite laterally and at depth, grading into magnetite chlorite stringer zones. Gold content is related to an increase in haematite dusted quartz veins, with bonanza grades associated with massive pyrite with subordinate bismuthite. Cobalt appears to have a direct relationship with pyrite.</li> <li>Lead and zinc mineralisation at Explorer 108 is associated with a brecciated, dolomitised metasedimentary unit, consisting of irregular, generally narrow bands or veins of semi-massive sphalerite and galena. A basal "high-grade" zone is present at the contact of the altered metasediments and lower felsic volcanoclastic unit.</li> <li>It is postulated that Explorer 108 mineralisation is an analogue of Mt Isa style base metal mineralisation.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are presented in Tables 2 of the ASX release dated 2 June 2025 related to this edition of JORC Table 1.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Results are reported on a length weighted average basis.</li> <li>Results are reported above a 1gm Au / Au Eq. cut-off / 1% Pb + Zn and 1% Cu.</li> <li>Results reported may include up to three metres of internal dilution below a 0.5g/t Au / Au Eq. cut-off / 0.5% Pb + Zn / 0.5% Cu.</li> <li>Metal equivalent values are reported based on the ratio of prevailing commodity prices which are given above.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Interval widths are reported as downhole width unless otherwise stated.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Diagrams are presented in the ASX release dated 2 June 2025 related to this edition of JORC Table 1.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should</li> </ul>	<ul style="list-style-type: none"> <li>Completed drilling where analysis is available is reported.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>be practiced to avoid misleading reporting of Exploration Results.</i>	
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Geological information related to the reported results is presented in the ASX release dated 2 June 2025 related to this edition of JORC Table 1.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing exploration and mine planning assessment continues to take place at the Rover Project.</li> </ul>