

# THIRTY ADDITIONAL PRIORITY TARGETS IDENTIFIED AT THE ACHILLES ANTIMONY PROJECT

#### **HIGHLIGHTS**

- **High-resolution satellite imagery analysis** completed over the Achilles Antimony Project discovered thirty new target areas, each requiring priority field confirmation.
- The Achilles Antimony Project hosts the globally significant high-grade Wild Cattle Creek deposit, featuring some of Australia's thickest and highest-grade antimony intersections, including but not limited to<sup>1</sup>:
  - 10.7m at 14.24% Sb (Hole D119)
  - 18.7m at 4.5% Sb, including 5.2m at 9.8% Sb (Hole 10WDD11)
  - o 10.8 at 9.28% Sb (Hole D115)
  - 22.5m at 3.9% Sb (Hole DDH16)
  - 51.2m at 1.8% Sb, including 5.5m at 4.8% Sb (10WRD15)
- The Achilles Antimony project also includes several other historical high-grade antimony mines across a substantial 6km strike that have not yet undergone systematic exploration an initiative Trigg has now commenced.
- **Ultra-high-grade drill intersections**, with grades up to **11.8% Sb** (Hole DDH36<sup>1</sup> Jezebel Prospect), extend beyond the boundaries of the current MRE, underscoring significant exploration potential for further high-grade resource expansion.
- Exploration will focus on completing the data compilation and geophysical surveys to prioritise exploration targets while minimising the impact on the environment and local communities.
- Trigg is actively pursuing funding opportunities with various domestic and international government bodies and end users and has received several unsolicited approaches regarding potential M&A and off-take opportunities.
- Antimony prices have now surged to ~US\$35,000² per metric ton, reflecting an increase of over 100% in the past year, following China's export ban on certain antimony products effective from 15 September 2024.

**Trigg Minerals Executive Chairman Timothy Morrison said:** "Our recent advancements at the Achilles Antimony Project underscore Trigg's commitment to leveraging cutting-edge technology to uncover and prioritise high-value exploration targets.

With growing inbound interest from potential partners and industry participants, we're even more motivated to strategically prioritise these targets and advance the project. This milestone marks an important step forward in our goal to expand Trigg's footprint in critical mineral resources and deliver long-term value to our shareholders."

<sup>&</sup>lt;sup>1</sup> Refer to ASX announcement dated 30 September 2024.

<sup>&</sup>lt;sup>2</sup> Reported as at 31 October 2024, data sourced from S&P Global - Antimony 99.65% CIF new (USD\$/tonne).



**Trigg Minerals Limited** (ASX: TMG) ("Trigg" or "Company") is pleased to update shareholders on recent exploration activities at its recently acquired Achilles Antimony Project in northern New South Wales. Trigg engaged Dirt Exploration, led by remote-sensing expert Dr. Neil Pendock, to conduct a multispectral analysis using Sentinel visible/near-infrared (VNIR), shortwave infrared (SWIR), and PULSAR synthetic aperture radar (SAR) satellite imagery. The analysis results have identified a substantial number of exploration targets, including 30 new targets and several previously noted by the former owner.

Trigg is now collating historical exploration and production records with the newly acquired remote sensing data to assess and rank these targets. This approach enables prioritization based on geological potential and exploration viability, supporting well-informed decision-making for the upcoming campaign.

#### **REMOTE SENSING STUDY**

Dirt Exploration used advanced remote imaging techniques, including VNIR, SWIR, and SAR satellite data, to generate exploration targets across the Achilles Project. A multivariate statistical classifier was trained on 12 drill holes from the Wild Cattle Creek Deposit, effectively creating a digital fingerprint for detecting antimony responses in the region. Within the project area, antimony occurrences include vegetation signatures, which can obscure signals from buried deposits. To address this, spectral unmixing was applied to separate vegetation spectra from other mineral signatures, improving detection accuracy. Additionally, Sentinel-2 VNIR and SWIR bands were used to estimate mercury (Hg) vapor and methane (CH<sub>4</sub>) gas anomalies. These gases, which can penetrate vegetation and shallow soils, appeared anomalous across the 12 drill holes, correlating with known antimony occurrences (see Figure 1).

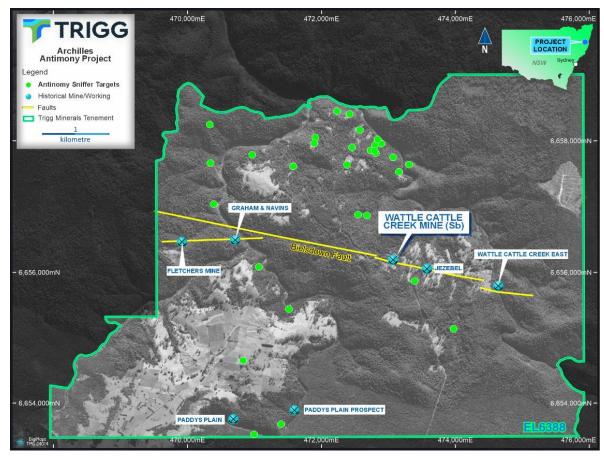


Figure 1: Mercury and Methane gas targets across the Achilles Project and its known prospects.



Gas anomalies at Achilles coincide with established antimony prospects—such as Wild Cattle Creek, Jezebel, Graham & Navins, and Fletchers Mine, providing confidence in the generated responses (see Figure 2). Many gas anomalies display a WNW-trending distribution, which may indicate a series of potentially mineralised structures running sub-parallel to the Bielsdown Fault. This trend is particularly pronounced in the northern half of the Achilles Project.

The study has identified broadly prospective areas for antimony mineralisation, which are now being ranked and prioritised based on Sentinel and radar responses, alongside existing geological mapping and known rock geochemistry. Ground reconnaissance of the 30 selected targets will be conducted as access to these areas becomes available.

#### **BACKGROUND INFORMATION**

Mercury and methane are strongly associated with antimony in hydrothermal systems of the New England Orogen. Methane is crucial in mineralisation processes, while mercury—unique among metals for its ability to vaporise at relatively low temperatures—occurs in its native form or as cinnabar within the Wild Cattle Creek deposit. The VNIR/SWIR spectral unmixing has identified an end member interpreted as stibnite and quartz, with antimony occurring within quartz veins. The stibnite response also correlates with mercury estimates, suggesting that mercury gas may serve as a useful indicator for concealed targets.

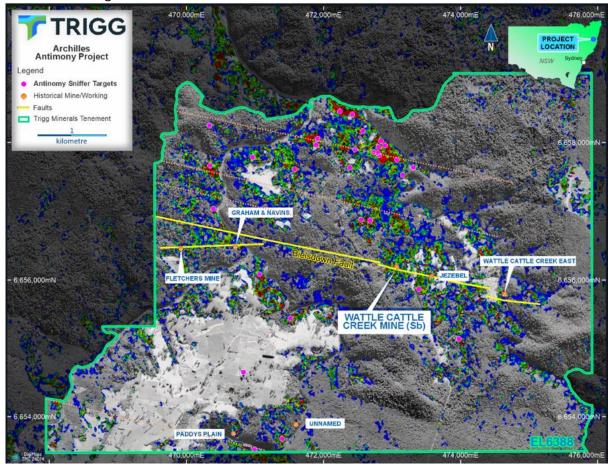


Figure 2: Mercury and Methane target layer with selected gas targets, historical prospects and key structures known to host antimony mineralisation. Interpreting the target layer Heat gradient - red is high mercury vapour/Methane gas = Stibnite; blue is background.

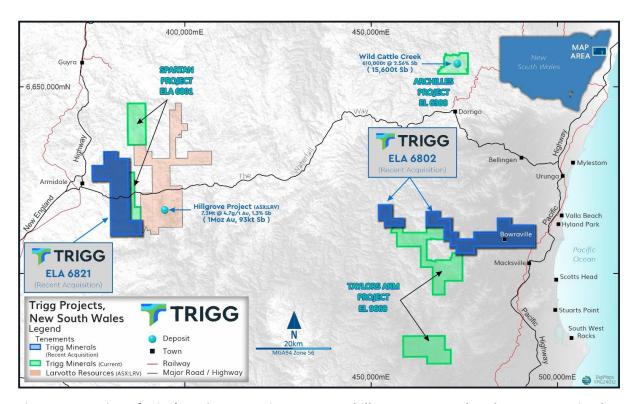


Figure 3: Location of Trigg's antimony project areas - Achilles, Spartan, and Taylor Arm - proximal to Larvotto Resources' (ASX: LRV) Hillgrove Project.

Announcement authorised for release by the Board of Trigg Minerals Limited.

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#### **IMPORTANT NOTICES**

#### **Competent Persons Statement**

The information related to Exploration Results is based on data compiled by Jonathan King, a Competent Person and Member of the Australian Institute of Geoscientists. Jonathan King is a director of Geoimpact Pty Ltd. Jonathan King has sufficient experience that is relevant to the style of mineralisation and type 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. Jonathan King consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

#### **Compliance Statements**

For full details of previously announced Exploration Results in this announcement, refer to the ASX announcement or release on the date referenced in the body text. The Company confirms that it is unaware of any new information or data that materially affects the information included in the original market announcements and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

### **Forward Looking Statements**

This report contains forward-looking statements that involve several risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.





### APPENDIX 1: JORC Code, 2012 Edition – Table 1 Achilles Antimony Project

### **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Comment
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	No sampling has been completed by Trigg Minerals.  Dirt Exploration interpreted potential antimony targets and trends from the Sentinel-2 and Alos-1 SAR data products.  Eight spectral bands of Sentinel-2 VNIR imagery have 10 m spatial resolution, and two bands of SWIR have 20 m resolution. The Sentinel-2 scene was collected on 24 September 2024.  The ALOS-1 SAR data was collected at 12.5 m resolution in 2008.  Trigg will complete reconnaissance work to verify the interpretation presented in this release on gaining land access.  The targets were generated by training a multivariate statistical classifier on the location of the historical antimony workings on the property. The classifier is a digital fingerprint of the Sb response in the ROI.  Vegetation cover is an issue in the ROI as it may obscure spectral signals from buried deposits. Spectral unmixing may separate vegetation spectra from other signatures if vegetation cover is < 100%.  Gas estimated from Sentinel-2 VNIR and SWIR can penetrate vegetation and shallow soil cover and targets are reported as being anomalous in methane are thought to reflect antimony occurrences.  Not relevant
	calibration of any measurement tools or systems used.	
	②Aspects 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 (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 (eg submarine nodules) may warrant disclosure of detailed information.	Not relevant
Drilling techniques	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).	No drilling performed





Criteria	JORC Code explanation	Comment
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling performed
	②Measures taken to maximise sample recovery and ensure representative nature of the samples.	No drilling performed
	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.	No drilling performed
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.	No drilling performed
	☑Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	No drilling performed
	②The total length and percentage of the relevant intersections logged.	No drilling performed
Sub- sampling	②If core, whether cut or sawn and whether quarter, half or all cores taken.	No drilling performed
techniques and sample preparation	②If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No drilling performed
	②For all sample types, the nature, quality and appropriateness of the sample preparation technique.	No assay data being reported
	②Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	No assay data being reported
	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.	No assay data being reported
	①Whether sample sizes are appropriate to the grain size of the material being sampled.	No samples taken
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.	No assay data being reported
	The 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.	No new geophysical or geological data has been collected by Trigg





Criteria	JORC Code explanation	Comment
	Plature of quality control procedures 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.	No assay data being reported. No drilling performed
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	No verification was undertaken No drilling performed
assaying	②The use of twinned holes.	No drilling undertaken
	②Discuss any adjustment to assay data.	No sampling identified
Location of data points	PAccuracy 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.	No drilling performed
		The grid system used at the Achilles Antimony Project is MGA94 (Zone 56).
	②Quality and adequacy of topographic control.	No topographic control used
Data spacing and distribution	☑Data spacing for reporting of Exploration Results.	The Hyperspectral program used Sentinel-2 satellite visible/near-infrared (VNIR) and shortwave infrared (SWIR) imagery for interpretation across the Achilles Project. This is early-stage high level exploration data that is appropriate at this stage of the Project.
	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.	No drilling performed.
	②Whether sample compositing has been applied.	No drilling performed
Orientation of data in relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Not relevant
structure	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.	No drilling performed
Sample security	The measures taken to ensure sample security.	No drilling performed
Audits or reviews	2The results of any audits or reviews of sampling techniques and data.	No audits were conducted

### **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	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding</li> </ul>	<ul> <li>The Achilles exploration licence (EL 6388) is 40km west of Coffs Harbour, northeast New South Wales and ~11km north of Dorrigo.</li> </ul>





# 4 November 2024

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land tenure status	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.	within EL 6388, originally granted on 04 March 2005. The licence is granted for Group 1 minerals and embraces 13 units covering approximately 40km <sup>2</sup> .  • The deposit lies on the Dorrigo-Coffs Harbour 1:250,000
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>History of Wild Cattle Creek Antimony Deposit and Achilles Project</li> <li>1890 First applications for a mining lease lodged.</li> <li>1890-1892 Six tonnes antimony ore mined at an average grade of 46% Sb.</li> <li>1900 Shaft sunk to 60 feet (18.3m) by W Maher.</li> <li>1915 Shaft and underground development by EHJ Smith and A Hewitt.</li> <li>1926-1930 Adit and shaft development; discovery of gold and wolframite in 1927 by TJ Maher and Syndicate.</li> <li>1928 Discovery of stibnite at Fletcher's Mine (Frypan Mine), 3km west of Wild Cattle Creek. Production reported to be 1.5t antimony.</li> <li>1942 Shaft sunk to investigate wolframite mineralisation at Lone Pine workings, on the south side of the antimony lode at Wild Cattle Creek, by ER Snow.</li> <li>1964 Leases consolidated by Dundee Mines Limited.</li> <li>1965 Dundee Mines formed a joint venture with New Consolidated Goldfields on 1 July. The joint venture ran for 6 months. Goldfields completed 11 diamond drill holes (2,634m), resource estimation and metallurgical testwork but withdrew from the joint venture because the project did not meet the Company's investment criteria at the time.</li> <li>1966 Dundee Mines commenced adit development with ore production totalling 6,100 tonnes averaging 4.4% Sb (3.82% Sb estimated by Australian Rock Engineering Consultants Pty Ltd in 1974). Exploration drilling recommenced and 4 holes drilled. A total of 5,121m was drilled from 1965-1966</li> <li>1967 Mapping by the Geological Survey of NSW.</li> </ul>





### 4 November 2024

Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	<ul> <li>1969 Australian Antimony Corporation NL (AAC) listed on the Australian Stock Exchange on 7 November and planned to develop a mine at the Wild Cattle Creek antimony deposit. Dundee Mines was the largest shareholder in AAC.</li> <li>1970 AAC commenced extensive mine development, including a 4-compartment 3.66m (12 foot) diameter shaft sunk to 165m (541 feet) with 3 plats developed at 40m (131 foot) levels and an adit driven west along the line of lode for 365.76m (1,200 feet). An adit was also driven 18.3m (60 feet) east from the gully. A cross-cut was developed from the shaft to the west adit (No.1 Level) and cross cuts were reportedly developed to the lode on No.2 and No. 3 Levels.</li> <li>1971 Development suspended mid-year after approximately \$2M spent following public listing.</li> <li>1973 Development resumed and 2,110 tonnes of ore produced from underground workings. AAC acquired Broken Hill Antimony NL and its processing plant at Urunga in October to treat ore from Wild Cattle Creek.</li> <li>1974 Open cut mining commenced in second semester and Sb head grades dropped from &gt;5% to about 2.4% Sb. The open cut was only developed to a depth of 7-10m.</li> <li>1975 AAC went into liquidation. Reported total ore production is approximately 16,500 tonnes from underground and open cut workings.</li> <li>1986 Dundee Mines NL prepared a draft prospectus and attempted to form another public company without success.</li> <li>1992 Allegiance Mining NL granted EL 4221 and EL 4222 on 10 March and acquired the Wild Cattle Creek deposit.</li> <li>1992-1998 Allegiance Mining acquired the Wild Cattle Creek deposit with the intention of mining and processing 100,000 tonnes of ore per annum averaging &gt;3.5% antimony. The company planned to use the ANTEC hydrometallurgical process developed by an Australian company, Hydromet Corporation, to produce antimony trioxide under licence, rather than selling a conventional flotation concentrate with potentially high mercury (and arsenic) values in the concentrate. Work underta</li></ul>
		agreement between Allegiance Mining and Mineral Estates, the ANTEC process operators of the hydrometallurgical process, collapsed. No further work was undertaken on the property and the ground was relinquished.  • 2005-2010 Anchor Resources granted EL6388 on 04 March. Anchor has completed 4,034m in 23 holes, two resource estimate undertaken studies (with a third resource estimate undertaken seil group seil group mintro.

estimate underway), orientation soil geochemistry,



# 4 November 2024

Criteria	JORC Code explanation	Commentary
		<ul> <li>water and noise monitoring work, and is sponsoring university research into the genesis of the Wild Cattle Creek deposit.</li> <li>Total drilling at the Wild Cattle Creek deposit is only 10,363m.</li> </ul>
Geology	Deposit type, geological setting and style or mineralisation.	<ul> <li>The Wild Cattle Creek antimony deposit is a structurally controlled hydrothermal deposit hosted by a subvertical dipping regional east-west trending strike-slip fault in turbiditic metasediments of inferred Late Carboniferous age. The deposit is enriched in antimony, tungsten, gold, arsenic, mercury, selenium and sulphur, and low in manganese and potassium.</li> <li>Wild Cattle Creek is described as an epizonal antimony-gold deposit, which formed at shallow crustal levels (typically less than 6 km depth) under relatively low temperature and pressure conditions. These deposits are often associated with orogenic systems and are commonly hosted in quartz veins within fault or shear zones.</li> <li>Primary antimony mineralisation consists dominantly of stibnite (Sb<sub>2</sub>S<sub>3</sub>) and minor berthierite (FeSSb<sub>2</sub>S<sub>3</sub>). Pyrite (FeS<sub>2</sub>), arsenopyrite (FeAsS), wolframite [(Fe,Mn)WO<sub>4</sub>] and scheelite (CaWO<sub>4</sub>) are present. Cinnabar (HgS) and native mercury globules are accessory.</li> <li>High-grade antimony mineralisation occurs within a cohesive breccia cemented by silica and sulphides (arsenopyrite, pyrite and stibnite). The breccia contains polymictic angular clasts of milky-white vein quartz and hydrothermally altered meta-argillite wall rock ranging in size from several millimetres to centimetres. Stibnite is found finely disseminated throughout the cement, in quartz clasts, as coarse-grained blades intergrown with vein quartz and in stringer veins.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material dril holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level elevation above sea level in metres) or 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>	downhole surveys have been completed on most holes.  All pertinent drilling and sampling information has been captured and stored in a Microsoft Access database.  The level of information is at a sufficient standard for resource estimation work.





Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>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.</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>	55 5
Relationship between mineralisation widths and intercept lengths	<ul> <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 (eg 'down hole length, true width not known').</li> </ul>	The orientation of the fault-hosted deposit strikes approximately east-west with a sub-vertical to steeply south dip.
Diagrams	<ul> <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>	and the composite section indicating the structure of the mineralisation within the Wild Cattle Creek Lode, are included.
Balanced reporting	<ul> <li>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.</li> </ul>	·
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.	Appropriate plans are included in the body of this release.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future</li> </ul>	and step-out drilling to grow the resource.





# 4 November 2024

Criteria	JORC Code explanation	Commentary
	drilling areas, provided this information is not commercially sensitive.	identified targets as they assess other opportunities at Achilles.

