

10 JANUARY 2025

## NEW COPPER TARGETS IDENTIFIED IN EARAHEEDY SOIL SAMPLING

### HIGHLIGHTS

- Three new copper (Cu) targets identified at the Anticline Prospect in the Earahedy Project, Western Australia (WA)
- A single point gold result of 43ppb Au also identified

Lodestar Minerals Limited ("LSR" or "the Company") (ASX:LSR) is pleased to announce the results of the October 2024 soil sampling program at the Company's Earahedy Project (the "Project") in Western Australia. Following the compilation of a total of 637 samples taken in the newly granted E69/3532 tenement across 2 prospects: Anticline and Imbin Central, which had respectively 565 and 72 samples. All samples were of 200 µm size fractions. Samples at the Anticline Prospect had a grid spacing of 400 x 400m in the main area of interests and 800 x 200m grid in the regional extensions. These were targeting extensions from the targets identified from the 524 samples sampled in early 2024 on a 200 x 100m grid. Imbin Central Prospect had a grid spacing of 400 x 200m targeting a gravity high.

**Lodestar Managing Director Ed Turner added:** "After more than 9620 soil samples completed by Lodestar since 2022, we are pleased to announce newly defined targets at our Earahedy Project in Western Australia. E69/3532 is one of our most prospective tenements in the Project, and this is the first work we could complete since the grant of the tenement in October 2024.<sup>1</sup> Following the identification of these new anomalies detailed geological mapping will be required to evaluate each target and their potential. This work will commence in March 2025."

<sup>1</sup>Lodestar Minerals ASX announcement of 28<sup>th</sup> October 2024

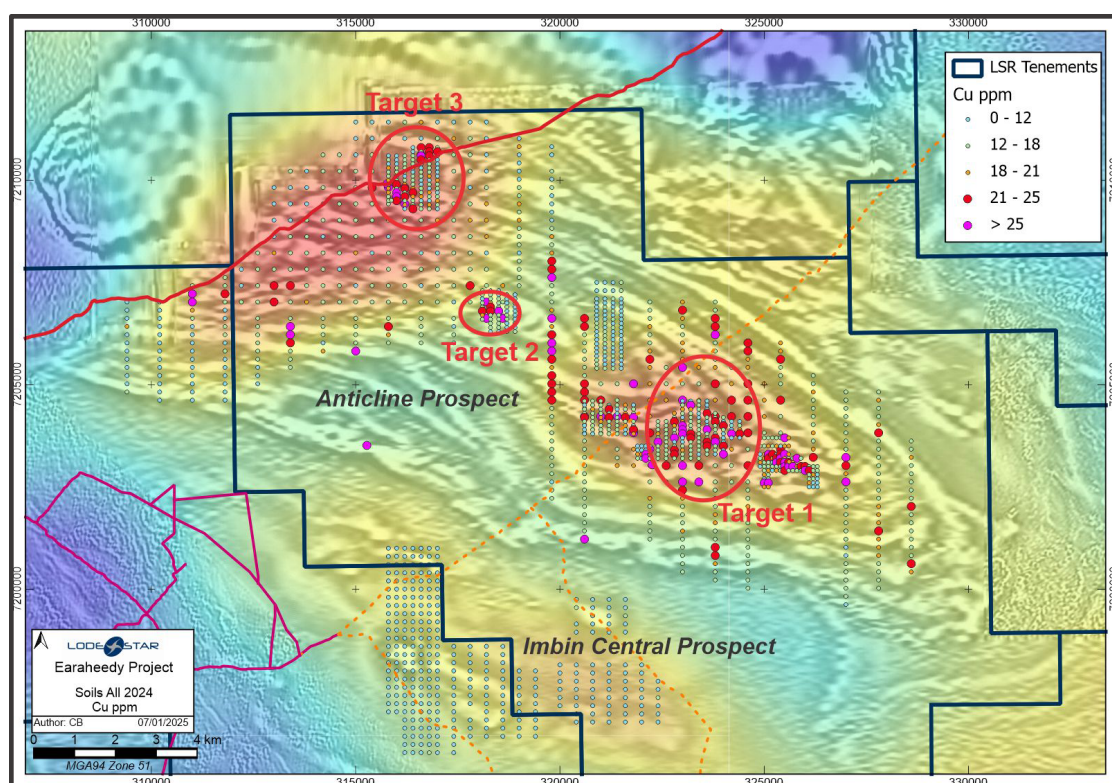
### Geochemical Soil Sampling - Discussion of Results

At the Anticline Prospect, the sampling covers an area of almost 20 km long by 8 km wide. The area presents two gravity highs associated with a complex magnetic response. Volcanic rocks were identified on the ground, although most of the area is under cover making geological mapping difficult.

Each sample was assayed for a multi-element suite of 49 elements (including gold). This large suite of elements includes potential “path finders” which may be associated with various styles of mineralisation and are used as tools, along with geological and geophysical information to improve the interpretation and delineation of new targets.

Using the multielement analysis on the 637 samples of October 2024 and the 524 samples collected in early 2024, we have been able to define new targets in the newly granted tenement E69/3532 which will require further exploration in 2025. The results were evaluated for their potential of mineralisation and or indication of specific geological lithologies, such as mafic and ultramafic volcanic rocks. Following this review, three main targets were identified (Figures 1-2). Target 1 is in the main axial plane of the structurally defined anticline (“A” shaped fold) and at the fold closure, which is a recognised trap for potential mineralisation. It is also linked to a gravity high, and a magnetic complex area. Target 2 is also on the axial plane of the fold. Target 3 is out of the main axial plan but is associated with the gravity high.

This target also presents a single point gold anomaly at 43ppb Au (316600E, 7211422N) which will need to be further investigated.



**Figure 1: Copper soil sample results displayed on top of gravity 1vd over 2vd magnetic surveys showing the three newly identified targets.**

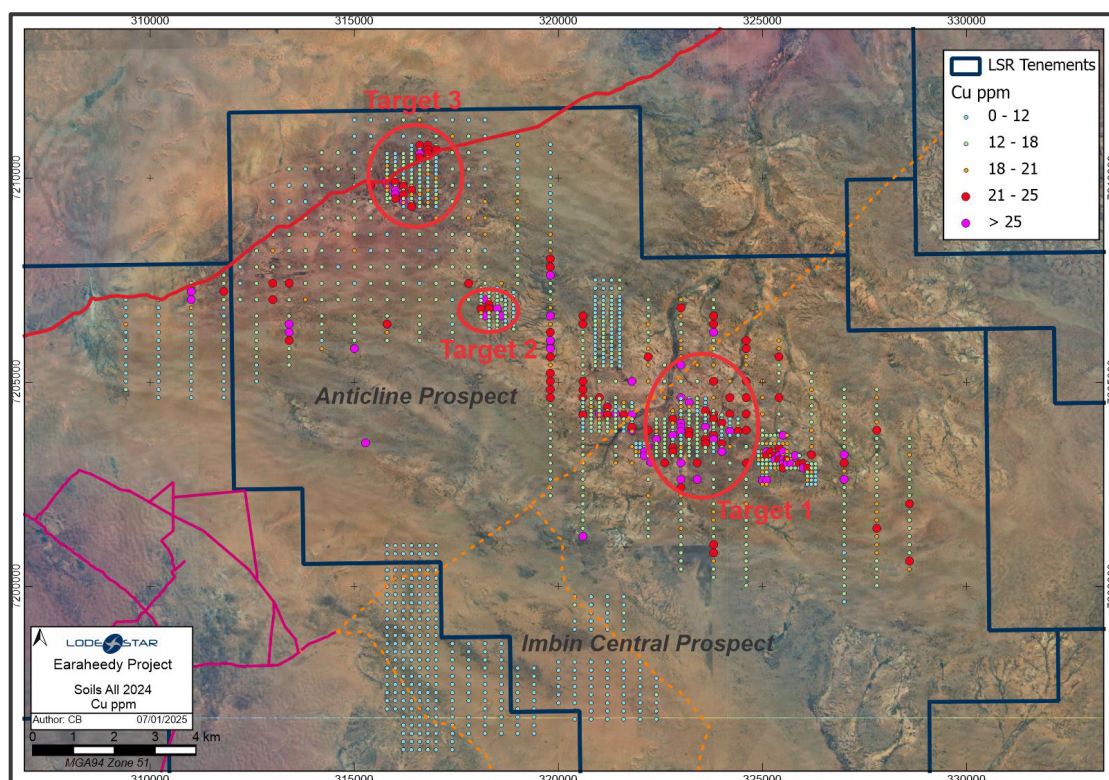


Figure 2: Soil sample Copper results displayed on aerial photo.

## FUTURE STEPS

The three targets are to be ground proofed and geologically mapped to determine the likelihood of economic mineralisation at these locations and to decide on infill sampling over the targets with wide spaced sampling. More detailed geophysical surveys will also be considered to better define structural targets.

## About Lodestar

Lodestar Minerals is an active base metal and gold explorer. Lodestar's projects, comprise the 100% owned Earraheedy, Ned's Creek and Coolgardie West projects in Western Australia (Figure 3) and the Darwin Project in Chile (Figure 4).

Lodestar also has exposure to lithium via its 27.5M performance rights in Future Battery Minerals (ASX:FBM) who own the Kangaroo Hills and Miriam lithium Projects in Western Australia.



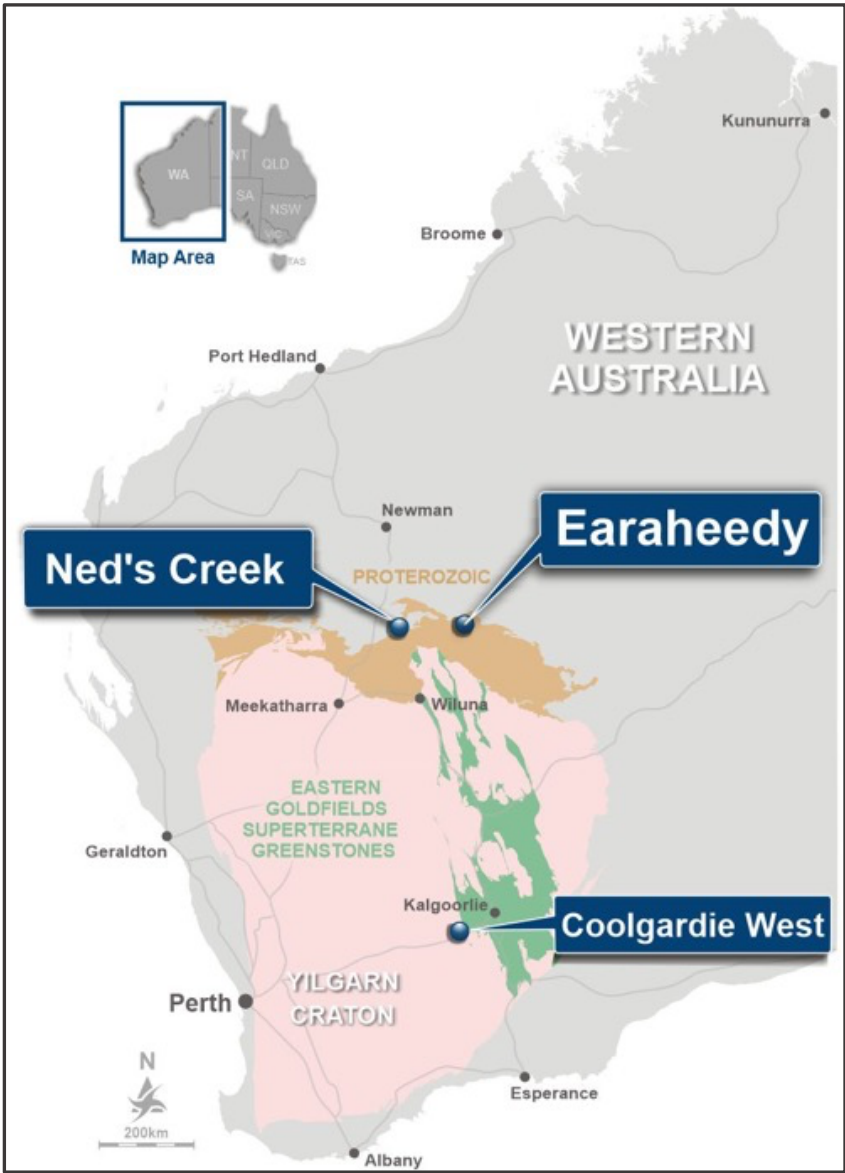


Figure 3: Lodestar's WA Project locations



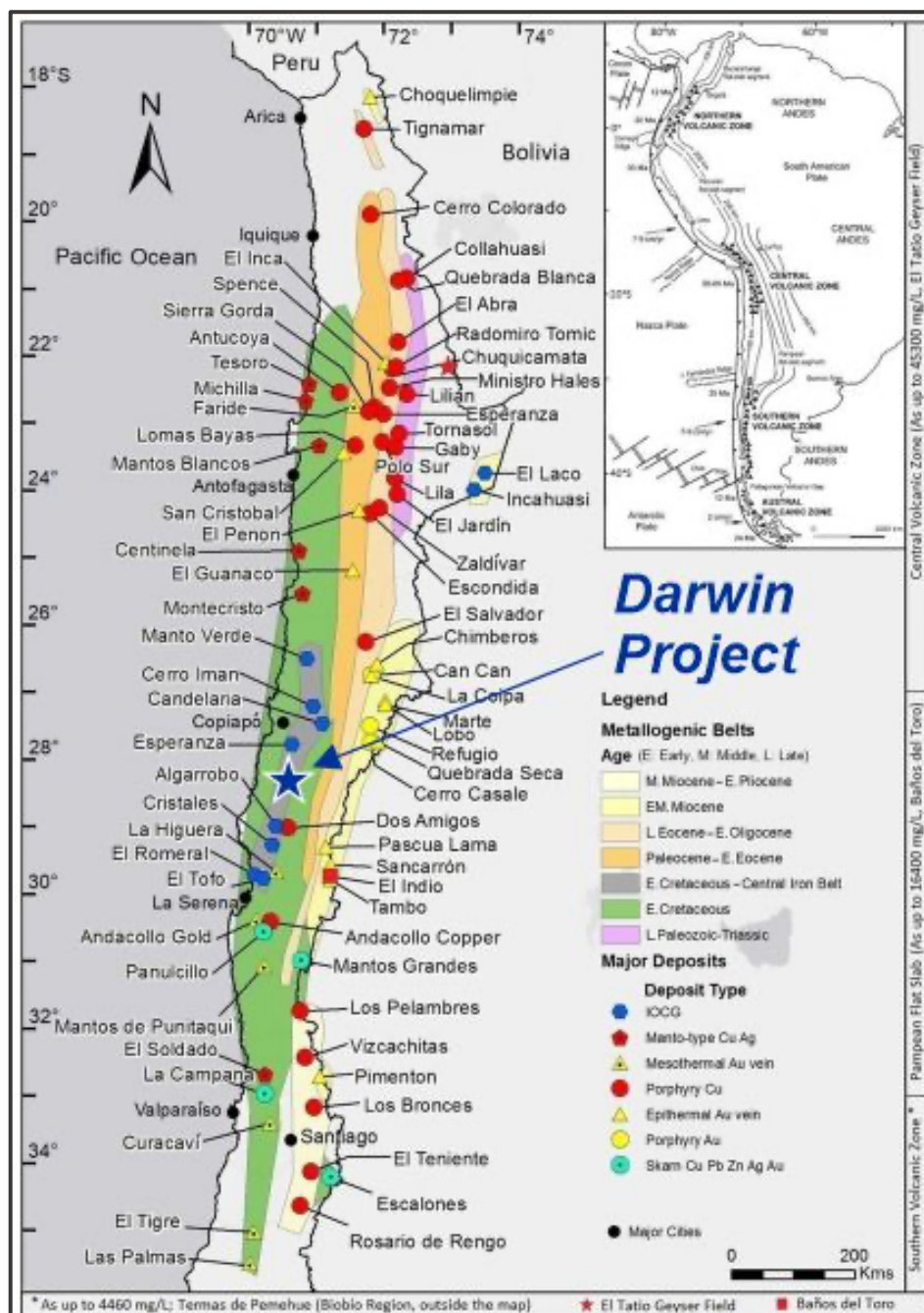


Figure 4: Lodestar's Chile Project location

This announcement has been authorised by the Board of Directors of the Company.

-ENDS-

## Contacts

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## Competent Person Statement

*The information in this report that relates to Exploration Results is based on information compiled by Ed Turner, Managing Director, who is a Member of the Australasian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Turner consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.*

*This announcement is available to view on the Lodestar website. The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.*

# 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</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. 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.</li> </ul>	<ul style="list-style-type: none"> <li>Soil samples were collected by hand using a mattock to remove surface material prior to extracting approximately 150g to 200g of soil sieved to -200 µm.</li> <li>Soil sampling is a first-pass geochemical reconnaissance technique where a single sample is taken at each sample location through a sampling grid. The grids used in these samples were 400 x 200m, 400 x 400m and 800 x 200m.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling results being reported.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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>No drilling results being reported.</li> <li>No drilling results being reported.</li> <li>No drilling results being reported.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically</li> </ul>	<ul style="list-style-type: none"> <li>Sample comments include a brief description of the regolith environment</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p> <ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<p>which is qualitative in nature.</p>
<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>No drilling results being reported.</li> <li>No drilling results being reported.</li> <li>No sub-sampling has been conducted. Samples were sieved in the field to the desired size fraction of -200 µm.</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 adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>The 200 µm samples were sent to Intertek in Perth. Fire Assay was used for gold analysis and a 48 multi-elements suite using mixed Acid Digest - Full ICP-AES &amp; ICP-MS Scan.</li> <li>Reference standards and blanks were inserted at 1:30. Results indicate satisfactory accuracy and precision was achieved.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling results being reported.</li> <li>No drilling is reported.</li> <li>The sampling was completed by Lodestar employees. No QAQC problems were identified in the results.</li> <li>No adjustment to assay data</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Sample locations were located and recorded using a hand-held GPS.</li> <li>GPS coordinates were recorded in MGA94 Zone 51 grid.</li> <li>Handheld GPS coordinates are regarded</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>as being accurate within 4m in the east and west directions. No RL was recorded for soil sampling locations.</li> </ul>
<b>Data spacing and distribution</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 degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sampling to date is on wide based grids And geological mapping and infill sampling is required before pursuing exploration drilling.</li> <li>No compositing was done.</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>By its nature, surface geochemistry represents a two-dimensional image of metal distribution. The spacing and location of the data is currently only being considered for exploration purposes.</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>All samples were stored at Lodestar's exploration camp then transported to Perth Laboratories by Lodestar personnel.</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>No audit or reviews carried out.</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>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The soil sampling in Earahedy is located on E69/3532 and E69/3533 owned 100% by Lodestar Minerals Ltd. The tenements are within the Birriliburu People (MNR) Native Title Area.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Several episodes of limited exploration for gold, diamonds, iron ore and base metals have been carried out in the area, including surface geochemistry, aeromagnetics, EM surveys, vacuum, RAB, RC and diamond drilling. Exploration of the southern part of the tenements completed by Sons of Gwalia, Aztec Exploration and MIM defined and tested the main outcropping targets, identifying significant copper mineralisation in drilling at the Main Gossan Prospect. Follow up drilling by Empire Resources (up to 2011) has in the main targeted the outcropping, siliceous ironstones representing sulphide-bearing strata within complexly deformed metasediments and discrete magnetic anomalies within the regional aeromagnetic data. Large areas undershallow aeolian sand cover were unexplored.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Earahedy tenements are located on the northeastern margin of the Earahedy Basin, a NW-trending asymmetric east-plunging synclinal basin 250km long and 150km wide. The northern margin has been locally strongly deformed by folding and faulting and was formerly known as the Stanley Fold Belt. Early explorers assigned the sedimentary sequence in the Earahedy Project to the "Troy Creek Beds" that were thought to pre-date the Earahedy Basin. The sediments have since been assigned to the Yelma Formation. MIM state that conformable dolerite sills intrude the sequence in the area of the North Chert prospect, raising the possibility of syn-sedimentary volcanic activity on the northern margin. Bunting (1986) regards the northern margin as tectonically active, the presence of mafic</li> </ul>



Criteria	JORC Code explanation	Commentary
		intrusives and ultramafic rocks indicates potential for a rifted margin and Besshi-style VMS mineralisation with SEDEX and epigenetic structurally controlled mineralisation styles also possible.
<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>No drilling results being reported.</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 (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. The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>There were no weighting or upper/lower cuts applied for the soil samples.</li> <li>No drilling results being reported.</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. <ul style="list-style-type: none"> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul> </li> <li>If it is not known and only the down hole lengths are reported, there should be a</li> </ul>	<ul style="list-style-type: none"> <li>Samples were collected from the surface with no relationship to geometry.</li> <li>No drilling results being reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>clear statement to this effect (eg 'down hole length, true width not known').</i>	
<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>Plans of sample locations are included in the body of the text.</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 be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>The information in this report is based on the current data available.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All information has been reported within the text of the announcement, no other information to report.</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg 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 drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further work is discussed in the document.</li> </ul>