ASX ANNOUNCEMENT

17 July 2023

MULTIPLE GOLD HITS IN MAIDEN EARAHEEDY DRILL PROGRAMME

HIGHLIGHTS

- **Drilling has returned significant gold intersections in the Earaheedy Project for the first time by any explorer**
- **Encouraging drill hits included intersections of >0.2 g/t Au in three of the seven targets drilled**
- **These three targets are spread over an area at least 5km x 3km in size**
- **Best intersections to date included:**
    - **7m @ 1.03 g/t Au** from 36m (EOH) in LEA0008 and
    - **8m @ 0.95 g/t Au** from 56m in LEA0021

      inc. 4m @ 1.69 g/t Au from 52m
- **Copper (Cu) and multi-element assays are pending and expected in the coming weeks**
- **Follow up RC drilling is being planned for depth and strike extensions**

Management Commentary:

Commenting on these encouraging initial gold results, Lodestar Managing Director Ed Turner said: *"This is a great start for Lodestar at our flagship Earaheedy Project. These are fantastic results for first pass wide spaced aircore drilling and clearly confirm the abundant potential of the Earaheedy Project to host both base metal and gold mineralisation. This is the first time that any explorer has intersected significant gold in the project area and to do so at multiple targets demonstrates the potential scale of the mineralised system or systems.*

Importantly, these initial results validate our geological model, which has gold and copper being associated, much the same as the high-grade DeGrussa deposit within the region. It is particularly pleasing given the mineralisation is blind at surface as it is beneath windblown sand cover. The possibility for further gold occurrences is high and RC drilling is being planned to test for depth and strike extensions. This will commence once all outstanding multi-element assays have been received and we can determine if additional copper targets also require RC drill testing."

Lodestar Minerals Limited ("**LSR**" or "**the Company**") (**ASX:LSR**) is pleased to report **significant gold intersections have been returned from three of the seven targets** tested in the Company's maiden aircore drilling programme at the Earaheedy Project (the "**Project**"). This is the first-time gold has been intersected within the Project by any exploration company.

The best intersections included **7m @ 1.03 g/t Au** from 36m in LEA0008 (to EOH), **8m @ 0.95 g/t Au** from 56m in LEA0021 ***(inc. 4m @ 1.69 g/t Au** from 56m)*, **20m @ 0.2 g/t Au** from 32m in LEA0022 and **7m @ 0.2 g/t Au** from 40m (to EOH) in LEA0047 (Figures 1-5).

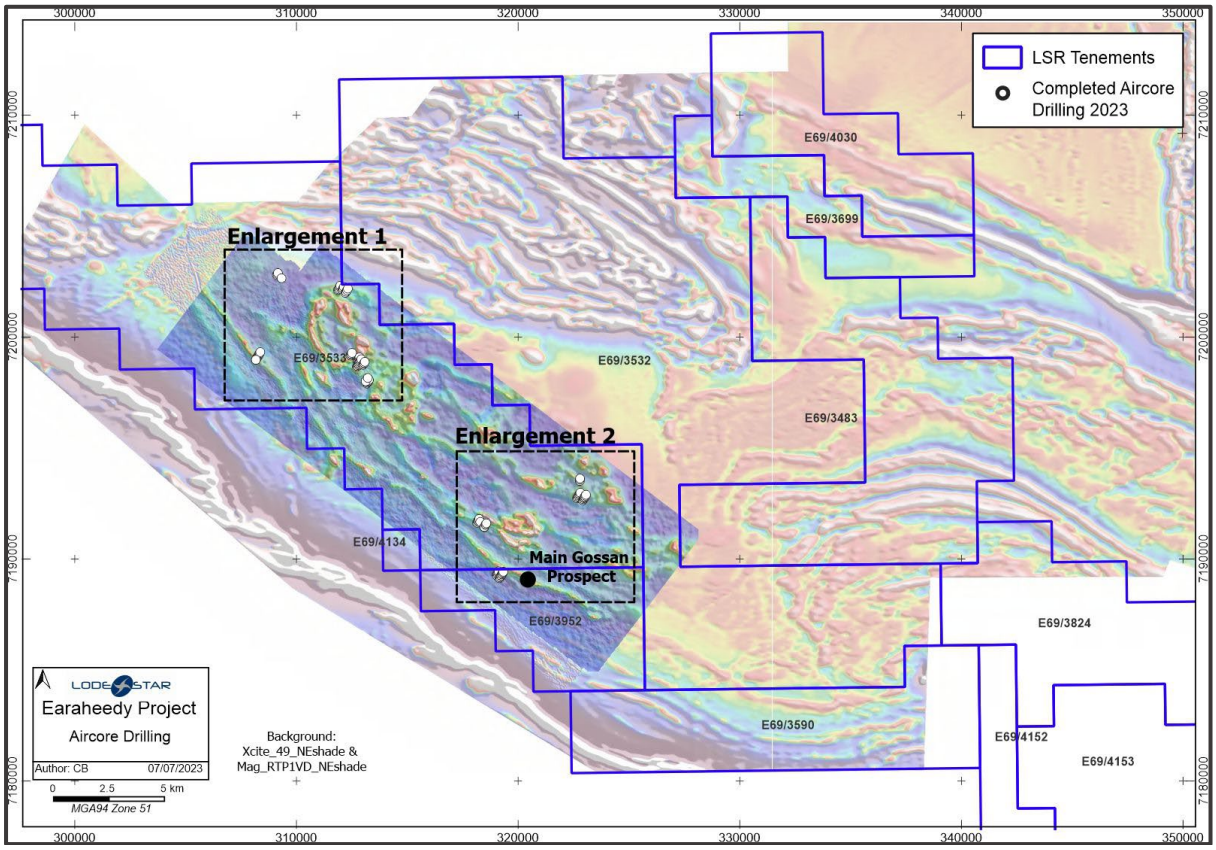

Figure 1: Drill hole location plan in relation to LSR Tenure on aeromagnetics background.

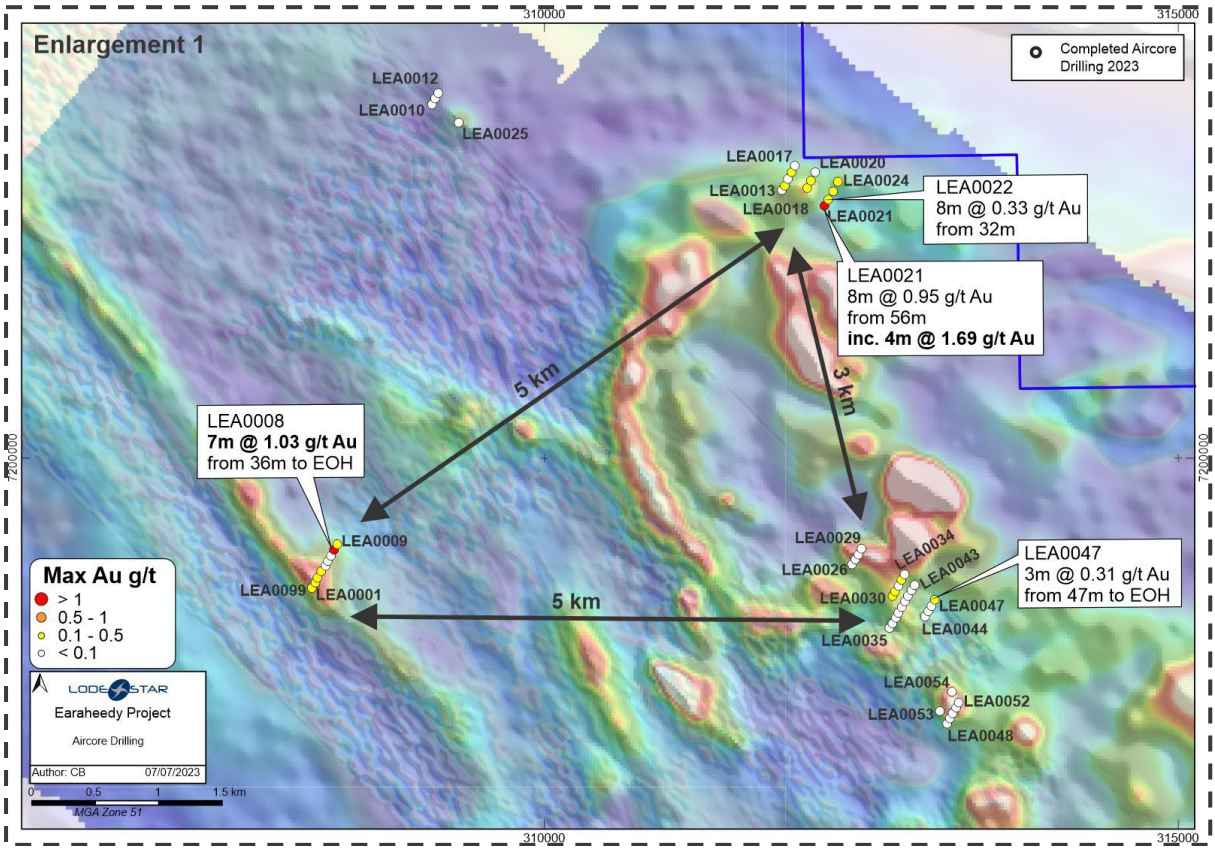

Figure 2: Northern Area of the Aircore drilling (Enlargement 1)

The cross sections below (Figures 3 & 4) are across the two main gold target areas showing the spread of the significant gold results through the aircore holes. The spread of the anomaly is highly significant and show the excellent potential for gold mineralisation. The geology has shown the presence of quartz veining and brecciated sediments associated or close to the gold intercepts. The definition of these quartz veins will require additional drilling.

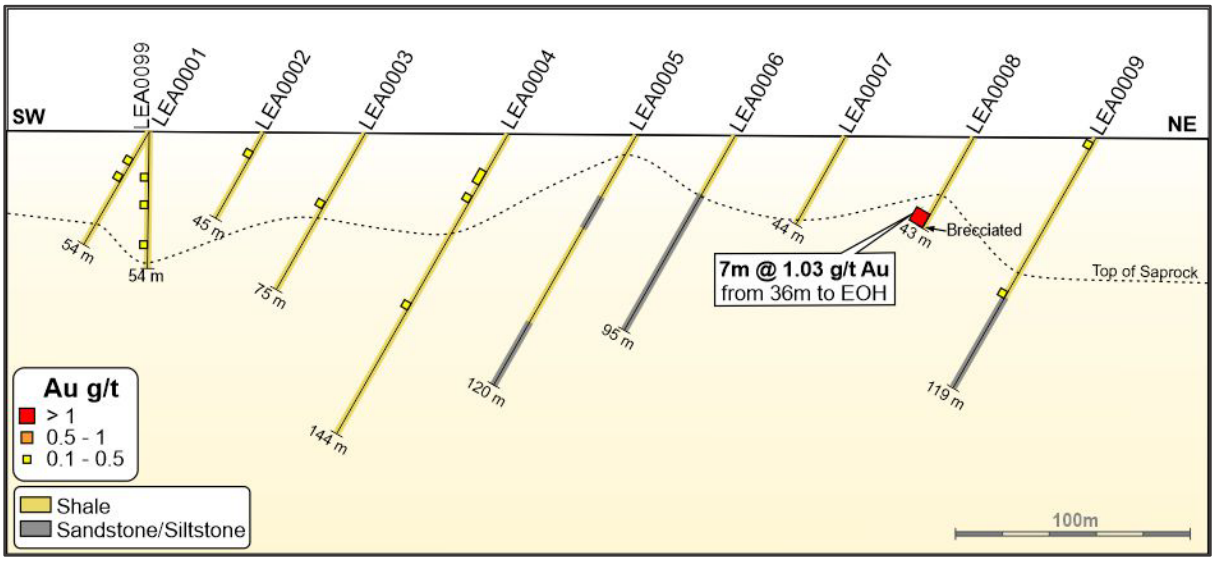

Figure 3: Cross Section LEA0001 – LEA0009 + LEA0099

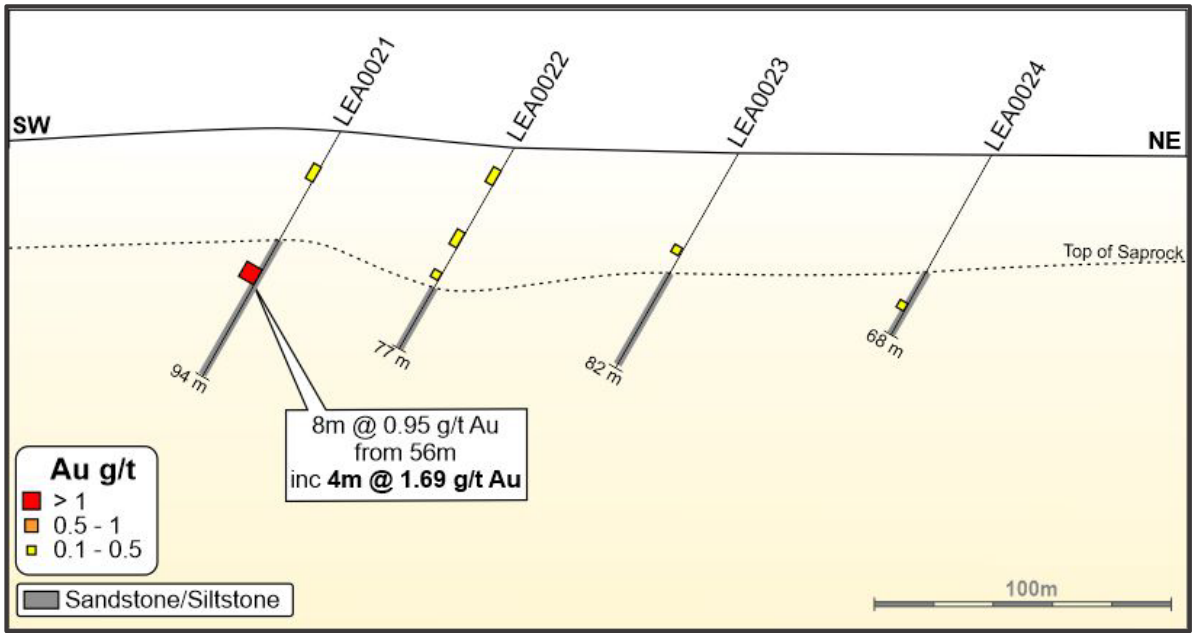

Figure 4: Cross Section LEA0021 – LEA0024

All gold assays have been received for the 99 holes comprising 5,386m. Significant gold intersections are included in Table 1. Samples are 4m composites unless the hole finished at an uneven interval. All multi-element assays remain pending.

Table 1: Significant Au intersections (>3m@0.2 g/t Au)

Hole ID	From (m)	To (m)	Interval (m)	Au (g/t)	Description
LEA0001	12	24	12	0.20	12m @ 0.20 g/t Au
LEA0002	12	16	4	0.22	4m @ 0.22 g/t Au
LEA0003	32	36	4	0.39	4m @ 0.39 g/t Au
LEA0008	36	43 (EOH)	7	1.03	**7m @ 1.03 g/t Au**
LEA0014	68	72	4	0.23	4m @ 0.23 g/t Au
LEA0019	116	120	4	0.20	4m @ 0.20 g/t Au
LEA0021	16	20	4	0.23	4m @ 0.23 g/t Au
LEA0021	52	60	8	0.95	**8m @ 0.95 g/t Au**
Inc.	*56*	*60*	*4*	*1.69*	***4m @ 1.69 g/t Au***
LEA0022	8	12	4	0.32	4m @ 0.32 g/t Au
LEA0022	32	40	8	0.33	8m @ 0.33 g/t Au
LEA0047	44	47 (EOH)	3	0.31	3m @ 0.31 g/t Au

N.B. EOH = end of hole

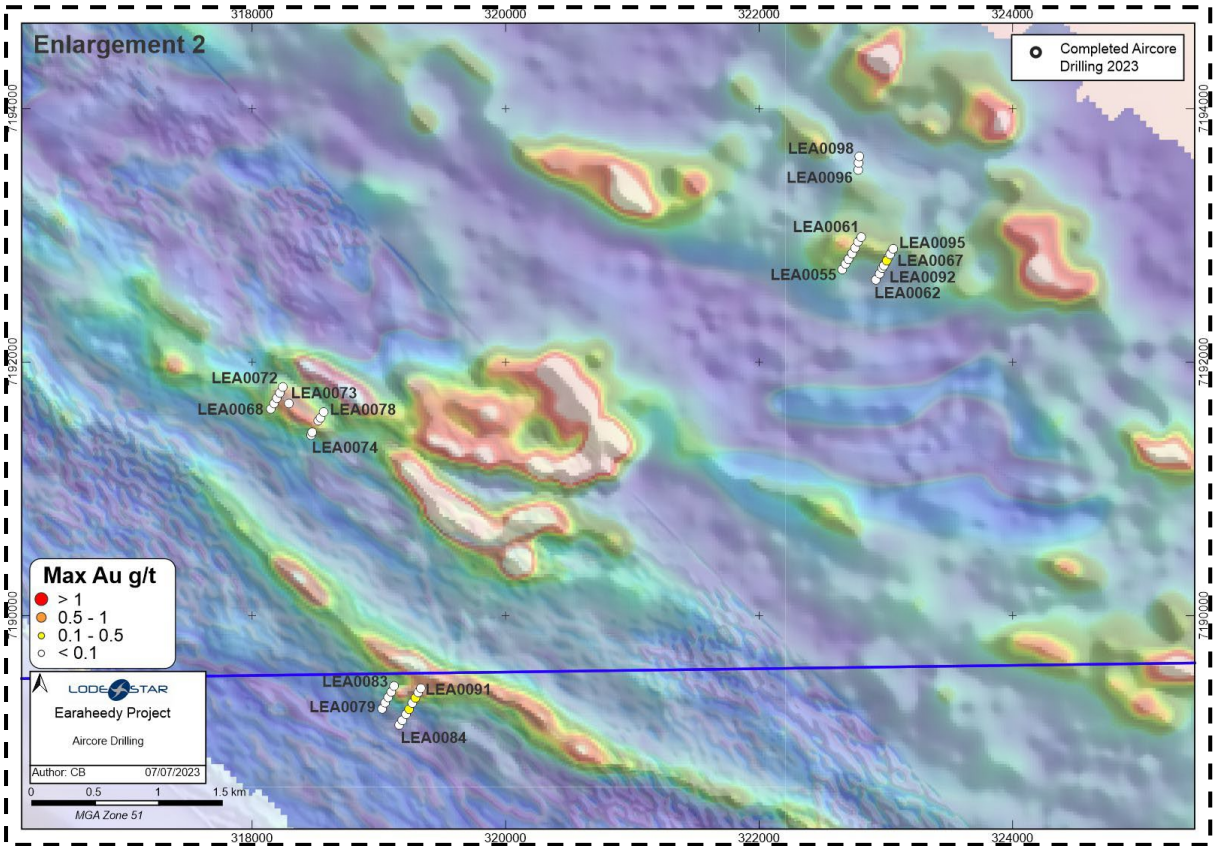

Figure 5: Southern Area of the Aircore drilling (Enlargement 2)

These seven targets were defined by both electromagnetic (EM) anomalies and soil geochemistry anomalies using ultrafine (UFF+) multi-element assaying methods developed by the CSIRO who also analysed and interpreted the assay data for LSR. **Large areas outside of, and between, these targets have never been tested and are yet to undergo soil sampling.**

In addition to the gold intersections, the copper potential is high. The drilling intersected dolerite sills within the sedimentary sequence of rocks at several locations within the seven targets. Mafic volcanic rocks can be an important ingredient in VMS style copper-gold mineralised systems as a source of copper, similar to the DeGrussa Copper Deposit which is located in the neighbouring Bryah Basin.

Limited historic drilling within Lodestar's tenements has intercepted high grade copper including **2m @ 4.65% Cu and 3m @ 1.97% Cu** at the **Main Gossan Prospect** (see ASX announcement dated 21 December 2021. ASX:LSR).

NEXT STEPS

Results for multi-element assays are expected to be received within the coming weeks. In the meantime, Lodestar is planning follow up RC drilling, and has started a large soil sampling programme across multiple unexplored areas throughout the Project. This includes the Tripod tenements (see ASX announcement dated 28 April 2023. ASX:LSR) which have never been explored in the past and have strong Zn Potential similar to the Rumble Resource's Zn-Pb Ag Chinook Deposit.

About Lodestar

Lodestar Minerals is an active Western Australian base metal, lithium and gold explorer. Lodestar's projects comprise the 100% owned Earaheedy, Jubilee Well and Coolgardie West projects as well as the Kangaroo Hills JV Project and the Ned's Creek JV Project.

The Earaheedy Project (Figure 6) is a major strategic land holding comprising over 1,400 sqkm in the emerging Earaheedy Province. The Project is located on the northern margin of the prospective Earaheedy Basin and Lodestar now owns approximately 100km of strike length of the Yelma-Frere unconformity which hosts Rumble Resource's Zn-Pb Ag Chinook Deposit on the Earaheedy Basin's southern margin. The Chinook MRE is **94Mt @ 3.1% Zn+Pb** and **4.1 g/t Ag**.

The Project also includes Cu-Au targets within a similar geological setting to the DeGrussa Copper Deposit which is located in the neighbouring Bryah Basin. Limited historic drilling within Lodestar's tenements has intercepted high grade copper including **2m @ 4.65% Cu and 3m @ 1.97% Cu**.

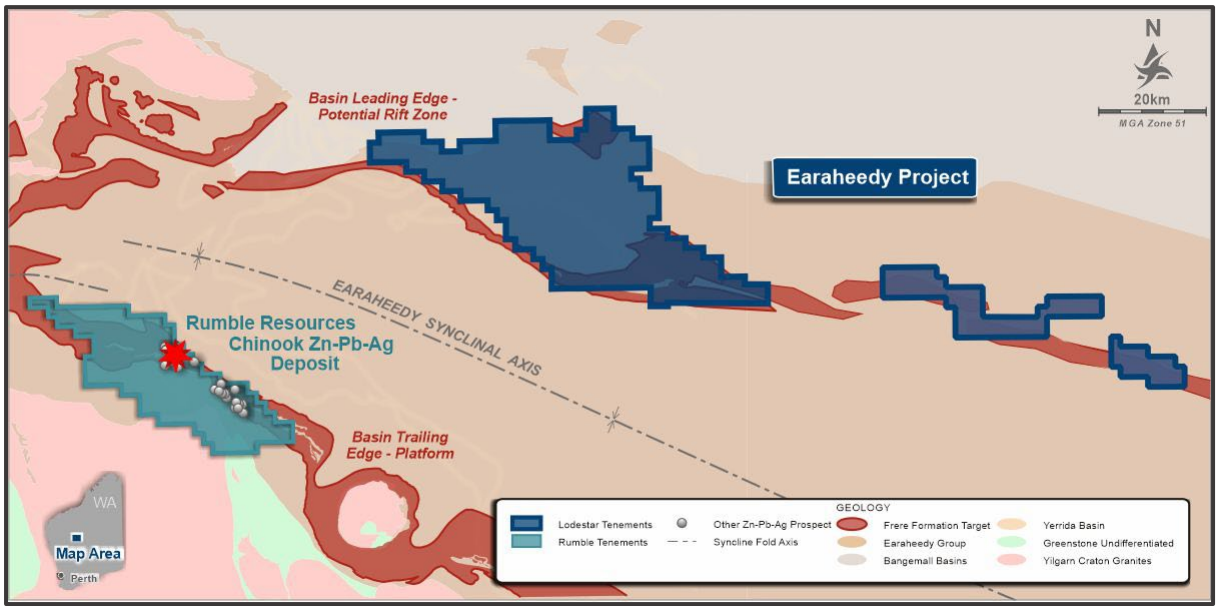

Figure 6: Lodestar's Earaheedy Project tenements

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
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*	• AC drill holes were sampled on 4m composites intervals throughout (last composite is between 1 - 4 m). Samples were collected from the cyclone every 1m and were laid in sequence on the ground in rows of 20. • Sample representivity is maintained by placing the samples in a pre-numbered calico bag with a corresponding sample number on an excel spreadsheet and for drill samples maintaining dry sampling and good drilling practice, avoiding sample over runs and contamination. Certified reference materials, field duplicates and laboratory repeat samples are analysed routinely. • AC 4m-Composite samples were collected using an aluminum scoop and combined to create a 2.5 to 3.0kg composite sample. • The samples were submitted to Bureau

Criteria	JORC Code explanation	Commentary
	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.	Veritas, Perth, laboratory for drying, crushing, and pulverising to produce a 40g charge for fire assay of gold and multi-elements by multi-acid digest.
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).*	• AC drilling used an 85mm blade or hammer. • AC holes were collar surveyed with a compass and GPS
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.*	• Sample recoveries and wet samples were monitored and recorded qualitatively in Lodestar's drill hole database. Recoveries were generally 80 -100%. • High pressure air used to maintain a dry sample and drill sampling equipment was cleaned regularly to minimise contamination. Duplicate samples were taken routinely with satisfactory results. • There is no apparent relationship between sample recovery and grade.
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.* • *The total length and percentage of the relevant intersections logged.*	• Logging is qualitative in nature. • All AC holes are geologically logged every meters.
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.*	• No core samples taken. AC Drilling: • AC: Composite 4m metre samples were collected from the sample pile using an aluminum scoop and combined to create a 2.5 to 3.0kg composite sample. • All AC samples are stored in pre-numbered calico bags and submitted to Bureau Veritas Laboratories, Perth, for sample preparation and analysis. • Sample preparation for drill samples involves drying the whole sample, crushing to 3mm and pulverising to 90% passing -75 microns. The pulverised sample was split with a rotary sample divider to obtain a 40 gram charge. • Certified reference standards (1:30) and laboratory repeats are used to monitor satisfactory reproducibility and accuracy of sampling and assays.
Quality of assay	• *The nature, quality and*	• Fire Assay was used for gold analysis.

Criteria	JORC Code explanation	Commentary
data and laboratory tests	*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.*	Multi-elements were analysed by mixed Acid Digest - Full ICP-AES & ICP-MS Scan giving us a full suite of 59 elements. • No geophysical tools were used to determine any element concentrations. • Reference standards were inserted at 1:30 throughout the drill program for AC. Results indicate satisfactory accuracy and precision was achieved.
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 significant interception were verified against the geological logging. • Twinned holes were not drilled in this program. • Field and laboratory data are collected electronically and entered into an excel spreadsheet which is then stored into an access database. • No adjustment to assay data.
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.* • *Quality and adequacy of topographic control.*	• A hand-held GPS has been used to locate the drillhole collars and the soil samples with estimated 3-5m accuracy. • Drill hole coordinates were recorded in MGA94 Zone 51 grid. • The topography within prospect areas has been derived from GPS RL (2-10 m accuracy).
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.*	• 50 - 70 m spaced Aircore holes above the defined EM and geochemical targets is considered adequate for a first pass drilling. • Aircore drilling is not used for resource estimation. • Sample compositing over 4m intervals throughout the drilling program with 1m split samples available for check assays where anomalous grades are reported.
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.*	• At Earaheedy, the main geological stratigraphy is steeply dipping to the NNE with some variation within the geological sequence. • At Earaheedy, the geology is not known enough yet to extrapolate the thickness of the intercepts.
Sample security	• *The measures taken to ensure sample security.*	• All samples were stored at Lodestar's exploration camp in sealed bags under supervision prior to dispatch by Lodestar contractors to Bureau Veritas Laboratories.
Audits or	• *The results of any audits or reviews of*	• No audit or reviews carried out.

Criteria	JORC Code explanation	Commentary
reviews	*sampling techniques and data.*	
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.*	• The drilling in Earaheedy is located on E69/3533 and E69/3952 owned 100% by Lodestar Minerals Ltd. The tenements are within the Birriliburu People (MNR) and the Matuwa Piarku Aboriginal Corporation (TMPAC) Native Titles.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• On Earaheedy tenements, several episodes of limited exploration for gold, diamonds 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 under shallow aeolian sand cover were unexplored.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Earaheedy tenements are located on the northeastern margin of the Earaheedy 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 Earaheedy Project to the "Troy Creek Beds" that were thought to pre-date the Earaheedy 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 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.

Criteria	JORC Code explanation	Commentary

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.*
		• See tables in the main text.

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.*	• Minimum cut off 0.2g/t Au, with dilution of maximum 8m @ 0.1g/t Au.
Relationship between mineralisation widths and intercept lengths	• *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 width not known').*	• Drilling at Earaheedy is -60 towards 210 which is across the regional stratigraphy dip. Two holes were drilled on different azimuth (same dip) to target the EM anomaly from an area with cleared heritage access.
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.*	• For illustration refer to Figures for interpreted geological drillhole cross section.
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*	• All assays greater than 0.2g/t gold are reported.

Criteria	JORC Code explanation	Commentary
	Results.	
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.*	• All information have been reported within the text of the announcement, no other information to report.
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.*	• At Earaheedy, additional RC drilling will follow up anomalies from the Aircore drilling and from the soil sampling. In addition, soil sampling will be done in unexplored areas across all tenements.