ASX ANNOUNCEMENT

2 August 2023

SIGNIFICANT COPPER INTERSECTED IN EARAHEEDY DRILLING

HIGHLIGHTS

- **Significant copper intersections in the first Earaheedy Aircore drilling programme in five of seven targets tested**
- **Best copper intersections to date included:**
  - **12m @ 1462 ppm Cu** from 4m in LEA0092 (inc. **4m @ 3,674 ppm Cu** from 4m)
  - **16m @ 1124 ppm Cu** from 8m in LEA0058 (inc. **8m @ 1536 ppm Cu** from 12m)
  - **8m @ 959 ppm Cu** from 12m in LEA0064 (inc. **4m @ 1329 ppm Cu** from 12m)
  - **24m @ 642 ppm Cu** from 12m in LEA0007
- **Follow up RC and diamond core drilling is planned for September to further test depth and strike extensions**

Management Commentary:

Commenting on these initial copper results, Lodestar Managing Director Ed Turner said*: "We continue to be very encouraged by the early indications from our maiden drilling programme at Earaheedy. These results confirm the potential of the Project to host multiple copper-gold deposits given significant mineralisation was intersected at five targets spread over a wide area. This first pass aircore drilling cannot penetrate fresh bedrock, which may host massive sulphide mineralisation beneath the regolith and weathered bedrock, so these results are very significant and have identified multiple targets that warrant deeper RC and diamond core drilling. This drilling is now being planned and is expected to commence in September. Following the recently announced significant gold intersections these copper intersections further validate our geological model, which has gold and copper being associated, much the same as the* ***high-grade VMS copper-gold DeGrussa deposit*** *within the region."*

Lodestar Minerals Limited ("**LSR**" or "**the Company**") (**ASX:LSR**) is pleased to report **significant copper intersections have been returned at five targets** tested in the Company's maiden aircore drilling programme at the Earaheedy Project (the "**Project**"). Some of these intersections are coincidental with the significant gold intersections reported on 17 July 2023 (see Figure 1 for drill hole location plan).

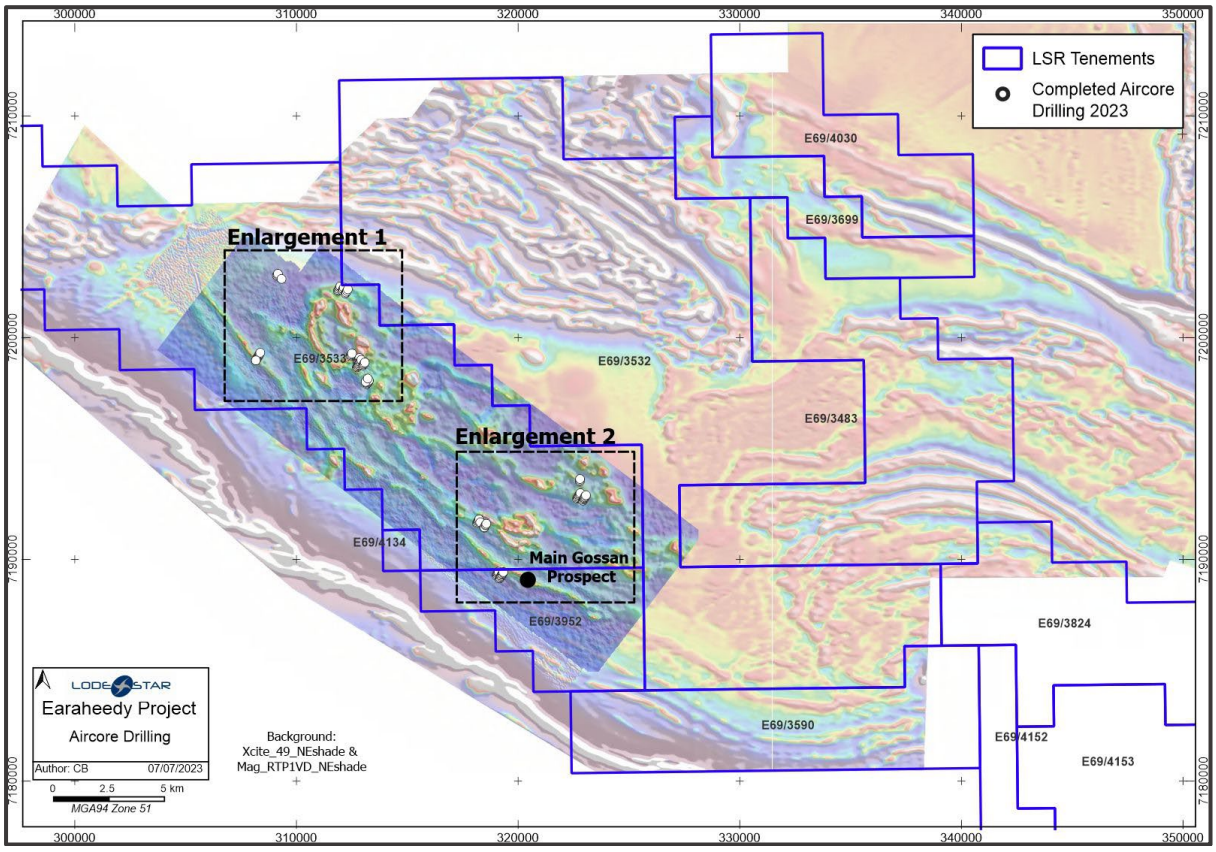

Figure 1: Drill hole location plan in relation to LSR Tenure on aeromagnetics background.

DISCUSSION OF RESULTS

All assays have been received for the 99 holes comprising 5,386m. Significant copper intersections, based upon a threshold of 500ppm Cu are included in Table 1. Samples are 4m composites unless the hole finished at an uneven interval less than 4m.

Table 1: Significant intersections (>4m @ 500ppm Cu)

Hole ID	From (m)	To (m)	Interval (m)	Cu (ppm)	Description
LEA0001	48	54	8	612	8m @ 612 ppm Cu
LEA0002	24	28	4	556	4m @ 556 ppm Cu
LEA0003	20	24	4	514	4m @ 514 ppm Cu
LEA0007	12	36	24	642	24m @ 642 ppm Cu
LEA0008	36	43 (EOH)	7	574	7m @ 574 ppm Cu
LEA0009	0	4	4	570	4m @ 570 ppm Cu
LEA0016	60	64	4	534	4m @ 534 ppm Cu
LEA0052	8	12	4	531	4m @ 531 ppm Cu
LEA0058	8	28	20	962	20m @ 962 ppm Cu
Inc.	***12***	***20***	***8***	***1536***	***8m @ 1536 ppm Cu***
LEA0064	12	20	8	959	8m @ 959 ppm Cu
Inc.	***12***	***16***	***4***	***1329***	***4m @ 1329 ppm Cu***
LEA0089	40	47	7	625	7m @ 625 ppm Cu
LEA0092	4	16	12	1462	12m @ 1462 ppm Cu
Inc.	***4***	***8***	***4***	***3674***	***4m @ 3674 ppm Cu***
LEA0097	4	16	12	510	12m @ 510 ppm Cu

N.B. EOH = end of hole

A threshold of 500ppm has been used for two main reasons.

1. Statistical analysis of all assays in this programme returned a value of 500ppm Cu for the 98th percentile (therefore assays >500ppm Cu represent the top 2% of all assays).
   - Lodestar has been intentionally conservative in selecting the 98th percentile as above threshold, rather than, say, the 95th percentile, which is 300ppm Cu, because some of the mineralisation (but not all) was intersected in black carbonaceous shales which are known to acts as "sponges" for many metals, commonly resulting in elevated metal concentrations.
2. Lodestar researched metal concentrations in black shales to establish global ranges of concentrations and therefore distinguish between natural but high concentrations versus anomalous values indicative of an actual mineral deposit. This research* revealed that the concentration of Cu in black shales is approximately 100ppm Cu (range 35ppm - 150ppm), implying that 500ppm is five times greater than the "background" concentration of Cu expected for a black shale, and therefore is significantly anomalous and likely to be related to a mineralising event.

*Ketris (M.P.) and Yudovich (Ya.E.), 2009. "Estimations of Clarkes for Carbonaceous biolithes: World averages for trace element contents in black shales and coals" The International Journal of Coal Geology 78 (2009) p135-144

The research also enabled the concentrations of other elements to be compared to expected "background" concentrations in black shales, yielding the following five-times-background thresholds: Arsenic (As) 135 ppm, Bismuth (Bi) 5 ppm, Cobalt (Co) 100 ppm, Molybdenum (Mo) 90 ppm, Nickel (Ni) 350 ppm, Lead (Pb) 150 ppm, Antimony (Sb) 20 ppm, Vanadium (V) 1000 ppm and Zinc (Zn) 700 ppm. Defining these thresholds is an important step in understanding the significance of assay results and prioritising targets for follow-up drilling.

It is important to note that elevated element concentrations were encountered in other types of rocks, which have lower background values than black shales, but Lodestar is applying the same high element thresholds as for black shales in order to be conservative at this stage of the exploration process. Furthermore, the effects of weathering processes, including leaching, mobilisation and secondary enrichment at pH and REDOX boundaries are also considered.

The best intersections included **12m @ 1462 ppm Cu** from 4m in LEA0092 (inc. **4m @ 3,674 ppm Cu** from 4m), **16m @ 1124 ppm Cu** from 8m in LEA0058 (inc. **4m @ 1832 ppm Cu** from 12m), **8m @ 959 ppm Cu** from 12m in LEA0064 (inc. **4m @ 1329 ppm Cu** from 12m) and **24m @ 642 ppm Cu** from 12m in LEA0007 (see Figures 2 and 3 for northern and southern area drill hole locations with significant results).

The 4-16m interval in LEA0092 straddles the transported sediment/insitu weathered bedrock boundary with coarse grained conglomerate and siltstone hosting the 4m @ 3,674 ppm Cu. This is accompanied by elevated Ag (8ppm), Co (122ppm), Bi (7.4ppm), Ni (6,710 ppm) and Sn (141 ppm). However Cu values > 500ppm also occur within the weathered bedrock between 12-16m in LEA0092, and in the adjacent LEA0064 there is also elevated Cu (4m @ 1329ppm Cu), As (872 ppm), Co (265 ppm), Ni (328 ppm), and V (1,020 ppm).

The fact that other elements such as Arsenic (As), Silver (Ag), Cobalt (Co), Bismuth (Bi) and Lead (Pb) are also elevated coincidentally with Cu give Lodestar extra confidence that these intersections are related to a mineralised system or systems, particularly as the weathered bedrock and regolith that drilling has penetrated is usually depleted in mineral concentrations as the primary mineralisation is dispersed upon weathering. Aircore drilling is a useful drilling method for first-pass regional drilling but has very limited capacity to penetrate fresh bedrock, so follow-up deeper RC and diamond core drilling is required, particularly in areas where there is significant anomalism in adjacent drill-holes, e.g. LEA0064 and LEA0092, where the nature of the results suggest a nearby source in the bedrock for the high grade mineralisation intersected.

It is also important to note that the drilling also 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.

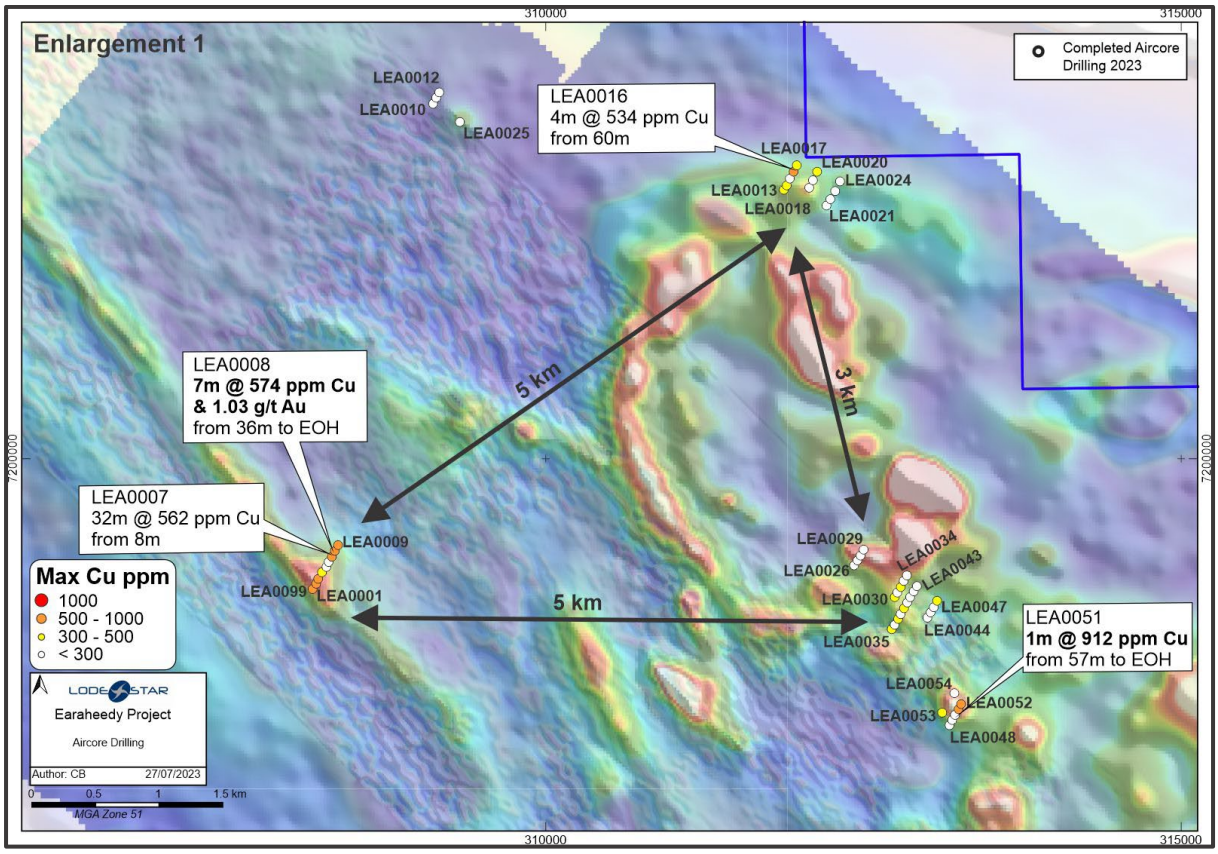

Figure 2: Northern Area of the Aircore drilling (Enlargement 1)

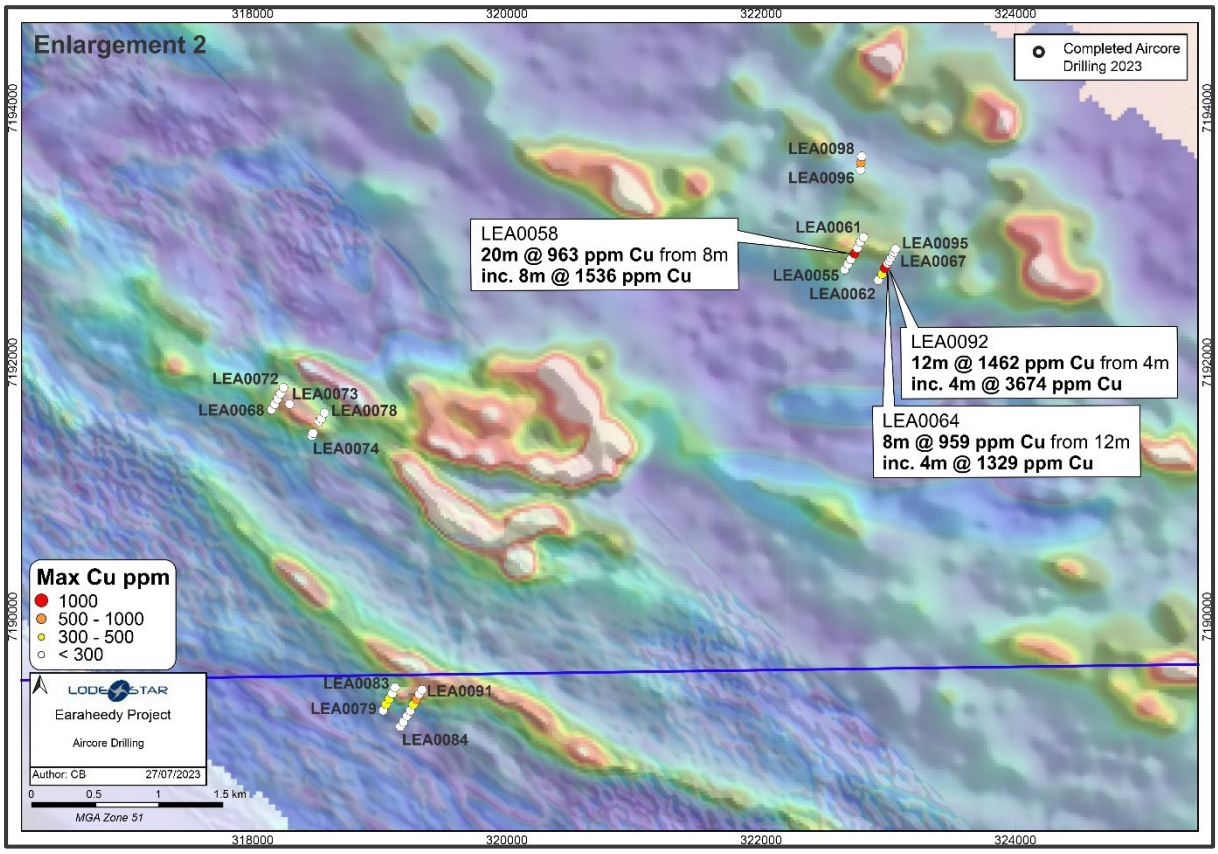

Figure 3: Southern Area of the Aircore drilling (Enlargement 2)

The cross sections below (Figures 4-6) are across the three main copper-gold target areas showing the spread of the significant results in the aircore holes. The spread of the intersections are highly significant and show the excellent potential for economic copper-gold mineralisation within the Project.

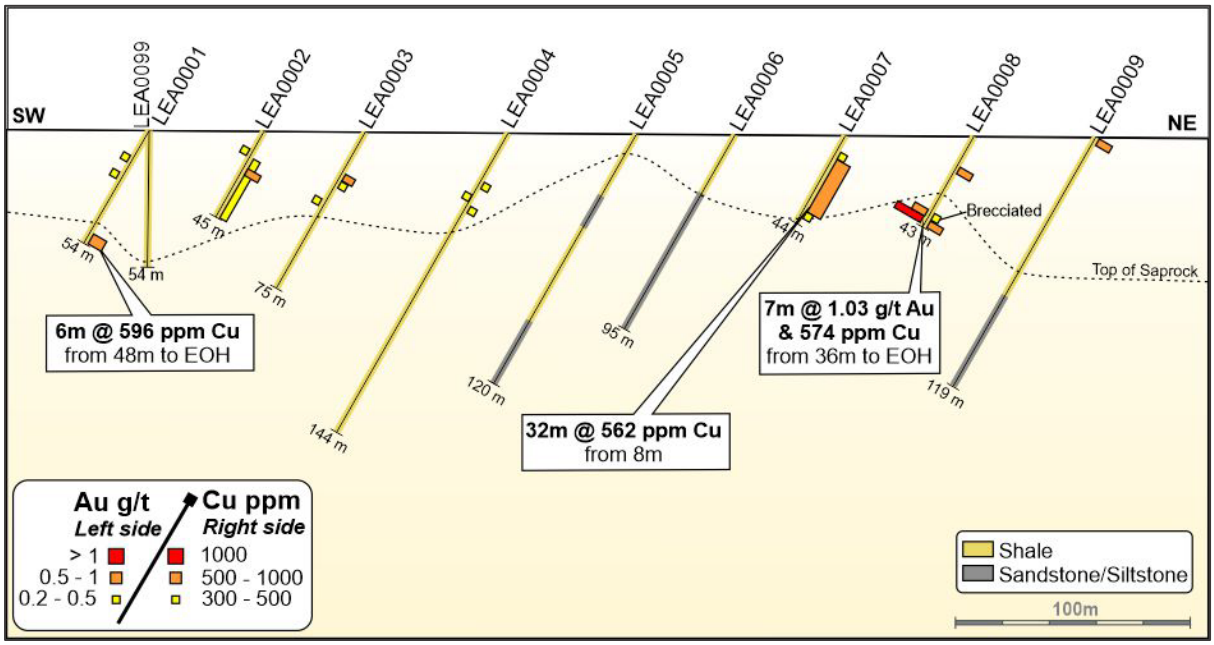

Figure 4: Cross Section LEA0001 – LEA0009 + LEA0099

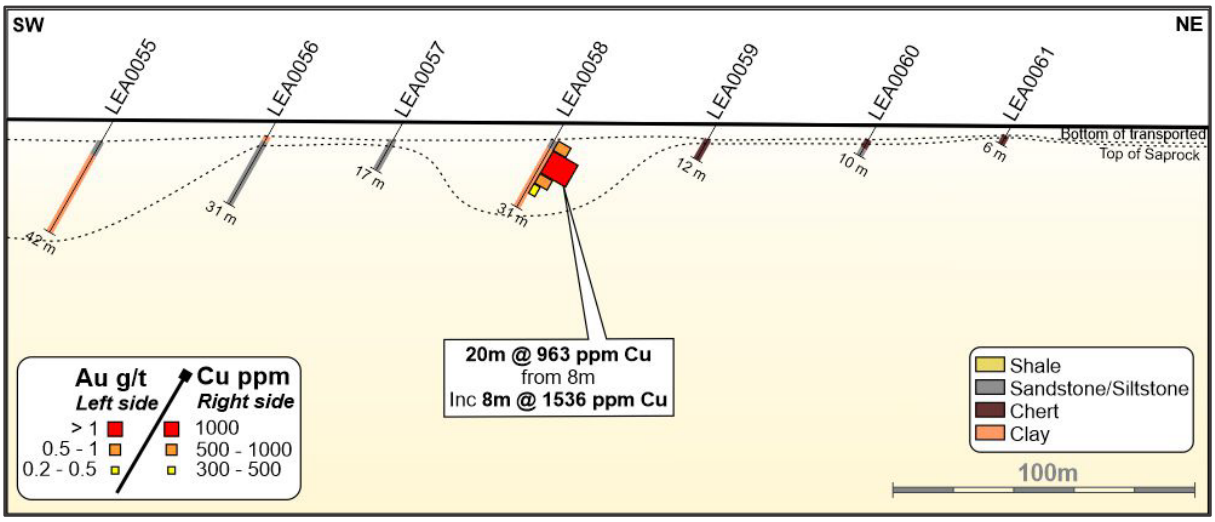

Figure 5: Cross Section LEA0055 – LEA0061

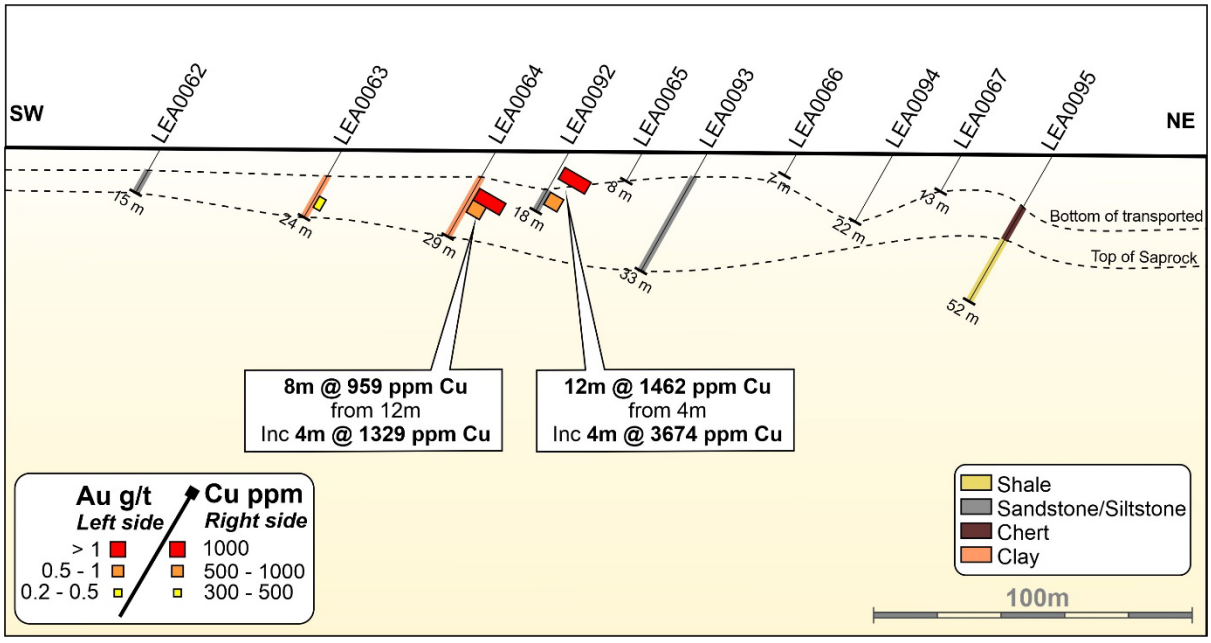

Figure 6: Cross Section LEA0062 – LEA0067 and LEA0092 – LEA0095

EXPLORATION STRATEGY: NEXT STEPS

Lodestar is planning follow up RC and diamond core drilling for September to better test the significant gold and copper targets at depth, across strike and along strike. The exact meterage of this programme is yet to be determined and further details on this programme will be reported shortly.

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 7) 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**.

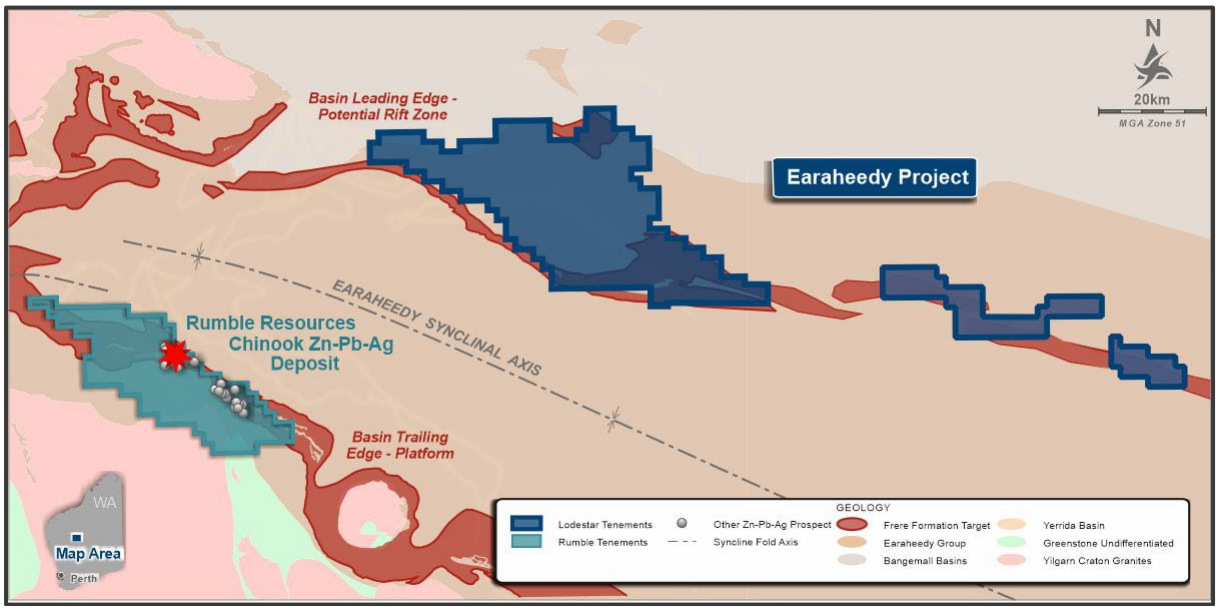

Figure 7: Lodestar's Earaheedy Project tenements

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 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.*	• 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 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*	• Logging is qualitative in nature. • All AC holes are geologically logged every meters.

Criteria	JORC Code explanation	Commentary
	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.*	
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 data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Fire Assay was used for gold analysis. 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.*	• 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

Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	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 reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audit or reviews carried out.
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

Criteria	JORC Code explanation	Commentary
		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.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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*	• Minimum cut off 0.2g/t Au, with dilution of maximum 8m @ 0.1g/t Au.

Criteria	JORC Code explanation	Commentary
	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.	
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 Results.*	• All assays greater than 0.2g/t gold and greater than 500ppm copper are reported.
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.