

EARAHEEDY IMBIN – EXPLORATION UPDATE

HIGHLIGHTS

- Grant of key tenement E69/3533 over the 20km long Imbin corridor.

COPPER

- Interpretation of heli-EM survey data identified 31 late-time discrete conductors within the Imbin Cu-Ag-Au corridor.
- Follow up geochemical sampling planned, prioritising those conductors that have a spatial relationship with magnetic anomalies, a favourable structural setting and/or relationship to known mineralisation.
- Initial surface EM planned for conductors MC8, MC9 and SC3, located along strike from the Main Gossan Cu-Ag-Au sulphide occurrence.
- Drilling to follow geochemistry and modelling of surface EM.

ZINC-LEAD

- Coincident Ag-Pb-Zn association over the Frere arenite (basal unit of the Frere Formation) represents a priority exploration target with follow-up in-fill and extensional geochemistry planned.
- Drilling to follow in-fill geochemistry and target definition.

Lodestar Minerals Limited (“**Lodestar**” or “**the Company**”) (ASX:LSR) provides the following update on progress at the Earahaedy-Imbin base metal project.

The recent grant of E69/3533, a key tenement that includes the 20km long Imbin Cu-Ag-Au corridor (see Figure 1), heralds the commencement of on-ground exploration over recently identified priority EM targets, subject to meeting heritage clearance requirements.

Interpretation of the heli-EM regional survey flown in July¹ is complete, with numerous discrete late time conductors identified within the northwest trending Imbin corridor. Most conductors are located outside the area of historic exploration in areas of shallow sand cover and exploration targeting will be guided by planned geochemical sampling in combination with geological interpretation.

¹ See Lodestar’s ASX announcements dated 8th July 2021 and 2nd September 2021.

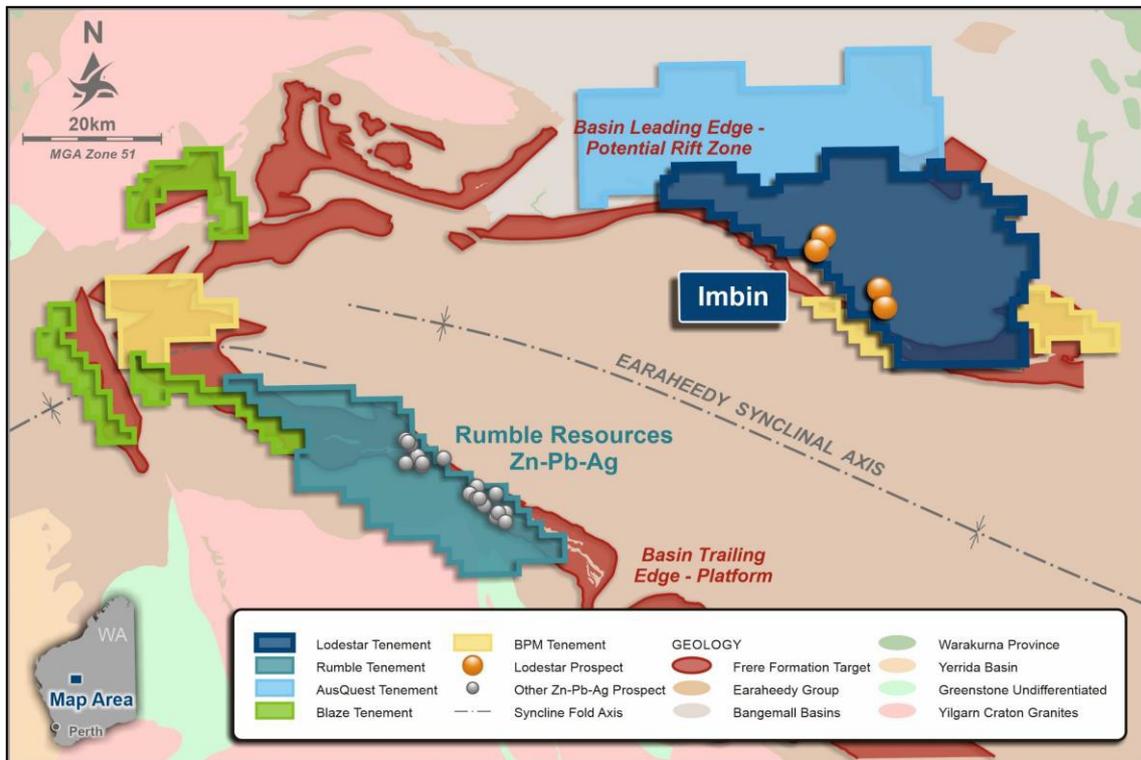


Figure 1 Location plan showing Lodestar's Imbin project tenements.

Lodestar's 900 sq. km Imbin project, located on the northeastern margin of the emerging Earraheedy metallogenic province, demonstrates important geological characteristics that indicate a favourable environment for hosting base metal mineralisation.

- Of similar age to ore-forming events in the Bryah Basin, on the same tectonic margin.
- Mafic intrusives within the sedimentary sequence represent a source of heat and metals and are consistent with a model of crustal thinning and local rifting for the genesis of volcanic massive sulphide (VMS) mineralisation.
- Gravity high supports the concept of a magmatic centre beneath the Imbin corridor.
- Regional scale northwest trending shear zones (thrusts) may represent reactivated early faults and pathways for metal-bearing hydrothermal fluids.
- Epigenetic Cu-Ag-Au mineralisation intersected in drilling at Main Gossan prospect² (e.g. 8m at 1.76% Cu, 9g/t Ag from 88m and 4m at 3.04% Cu from 104m in TCRC09-06) confirms the base metal potential of the project.
- Includes the continuation of the important Frere unconformity that hosts a major discovery of Zn-Pb-Ag SEDEX mineralisation on the southwestern margin of the Earraheedy Basin.

² See Lodestar's ASX announcement dated 17th July 2014.

Xcite™ airborne electromagnetic (EM) discrete anomaly peaks were identified from imaged dB/dT Z channel 49 (late time) data and rated using the following criteria:

- Strike length of <600m.
- Discrete location.
- Fault association.
- Magnetic anomaly association.
- Minimal response in the early and mid-time channels.

A total of 31 conductors were identified as Priority 1 (12) and Priority 2 (19) targets from the initial interpretation. Two conductors are considered adequately tested as they had been traversed by historic drilling. The 29 EM targets selected for follow up appraisal have not been targeted by drilling or historic surface exploration and are shown in Figures 2 & 3.

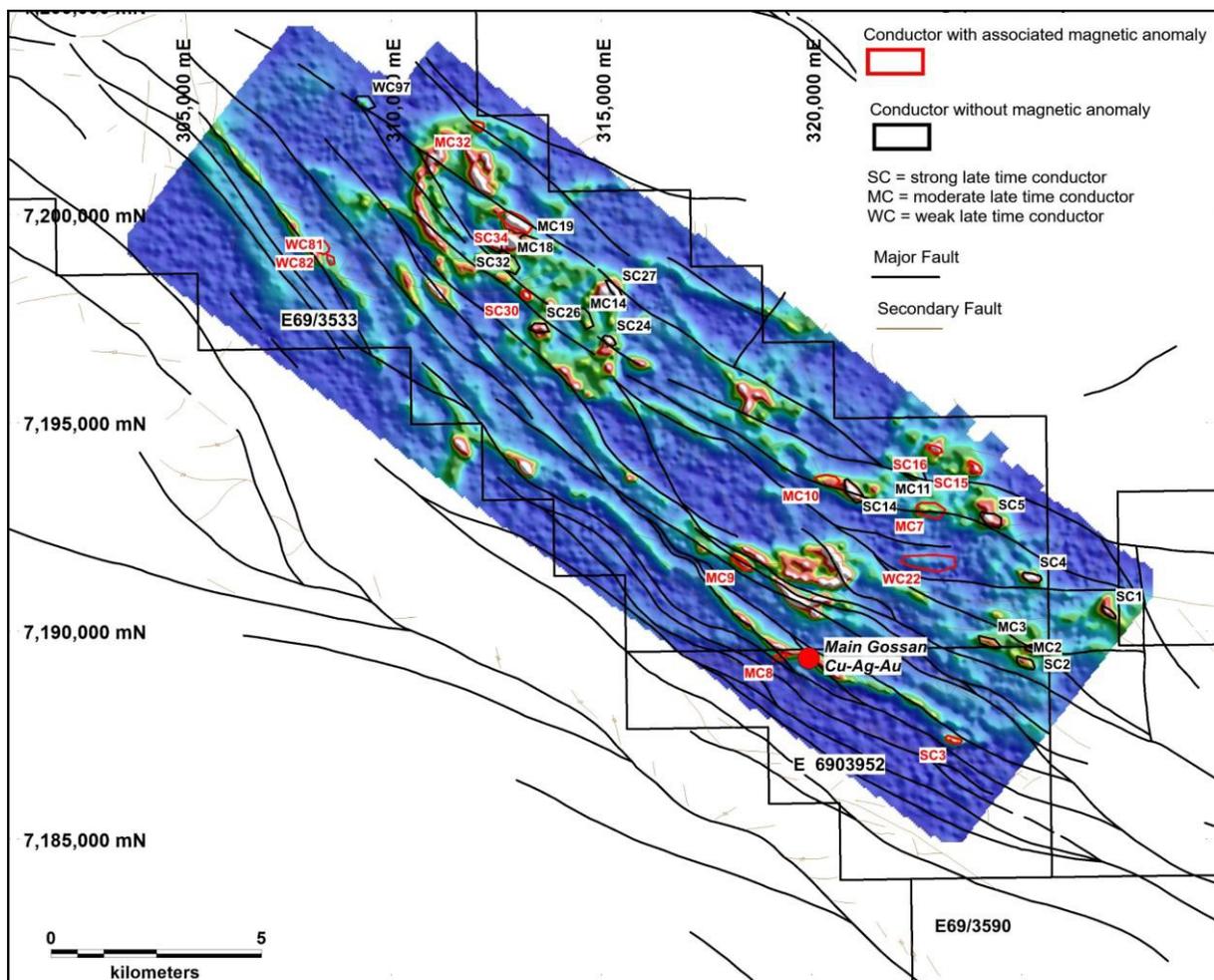


Figure 2 Selected EM conductor targets on Xcite channel 49 image NE shade (MGA94 zone 51).

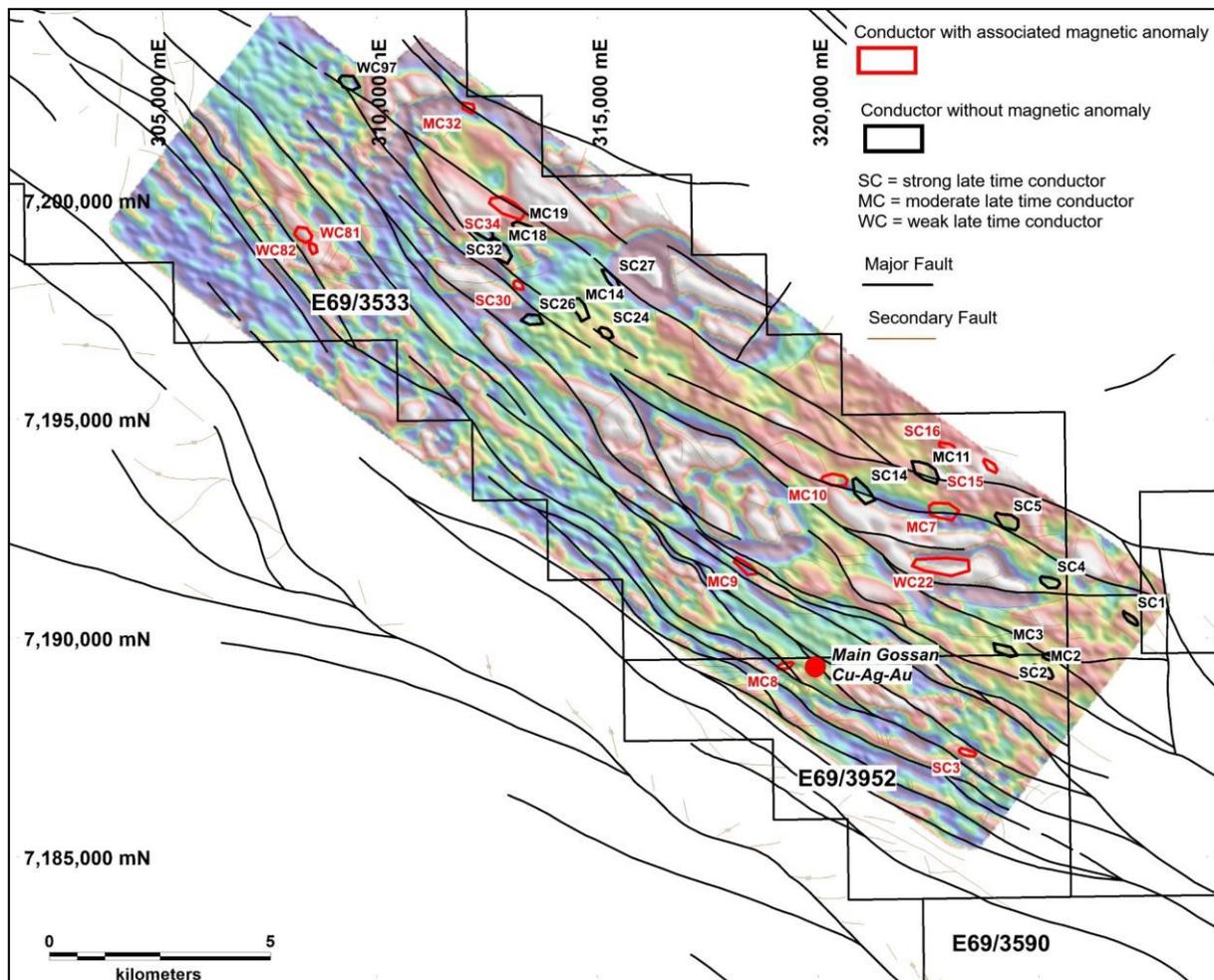


Figure 3 Selected EM conductor targets on RTP 1VD aeromagnetic image (MGA94 zone 51).

All EM conductors will be tested by planned surface geochemistry prior to drilling and three targets, **SC3**, **MC8** and **MC9** along strike from the Main Gossan prospect, have been prioritised for follow surface up EM surveys to model the conductors.

SC3 is located 4 kilometres along strike from Main Gossan and adjacent to the Zn-Pb anomaly first identified by MIM Exploration³ in rock sampling. Sampling adjacent to the conductor reported (maximum) values of Cu (175ppm), Pb (1550ppm), Zn (580ppm) and As (100ppm).

MC8 is located 600m west of Main Gossan and oriented east-west, within a flexure zone that offsets the adjacent northwest trending shear zone. Rock sampling by Sons of Gwalia⁴ and MIM Exploration in the vicinity of the conductor reported (maximum) values of Cu (343ppm), Pb (92ppm), Zn (760ppm) and As (910ppm).

MC9 is located 2.6 kilometres northwest along strike from Main Gossan on the western flank of the North Chert prospect. The conductor is coincident with conformable dolerite sills mapped by MIM within the folded sedimentary succession. Rock sampling by MIM Exploration, sons of Gwalia and Herald Resources⁵ in the vicinity of the conductor reported

³ See open file report WAMEX A56029

⁴ See open file report WAMEX A34445

⁵ See open file report WAMEX A58883.

(maximum) values of Au (180ppb), Cu (606ppm), Pb (110ppm), Zn (760ppm), As (848ppm) and Ag (2.5ppm).

ZINC – LEAD

First pass geochemical sampling over the interpreted Frere unconformity has identified multi-element anomalies associated with the concealed north-dipping arenite (sandstone) unit below the Frere iron formation. Soil sampling was completed over a 10 km long section of the Frere unconformity, with a total of 313 samples collected on a 500m by 100m grid. Samples were analysed for a suite of multi-elements using the Ultrafine™ assay method. The area covers the northern slopes of the Frere iron formation where extensive colluvial cover is developed over basement geology and expression of mineralisation is expected to be muted. Soil geochemistry results are summarised in Figure 3 and Table 1.

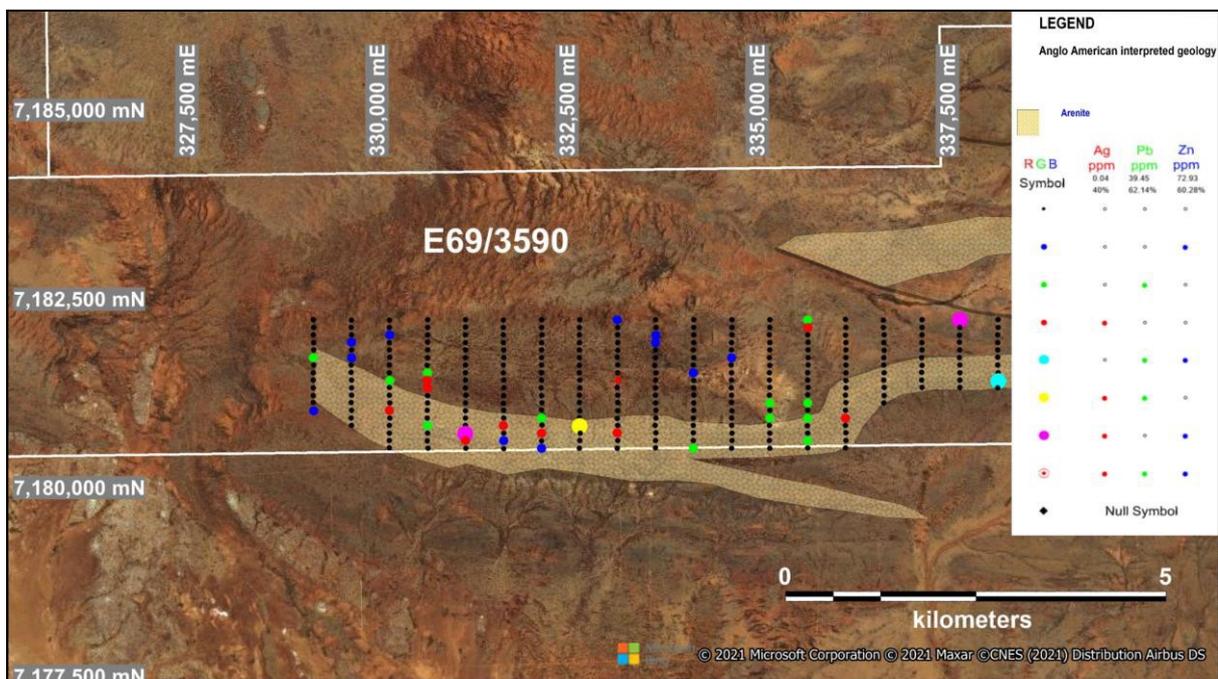


Figure 4 Soil sampling results showing distribution of the 95th percentile of Ag-Pb-Zn (MGA94 zone 51).

Table 1 Summary statistics for selected elements.

Ultrafine™ results	Cu_ppm	Pb_ppm	Zn_ppm	Ag_ppm	Mn_ppm
Mean	35	29	56	0.03	346
std. dev.	5	6.05	10.58	0.008	231
Maximum	56	53.8	103	0.09	1530
Minimum	21.8	15.9	27	0.01	94.7
Range	34.2	37.9	76	0.08	1435.3
n	313	313	313	313	313

PLANNED WORK PROGRAM

A program of work, including ~2,000 soil samples to be collected over the target conductors, a further 600 samples to in-fill the Zn-Pb target and a program of targeted surface EM surveys is planned for the start of 2022. These programs will be submitted for heritage clearance approvals with the aim of completing required heritage surveys at the commencement of the 2022 field season.

This release is authorised by the Managing Director, on behalf of the Board of Directors of the Company.

Contacts

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About Lodestar

Lodestar Minerals is an active Western Australian gold and base metal explorer.

Lodestar's projects comprise the advanced Nepean Nickel Project JV, the Ned's Creek JV and the 100% owned Camel Hills, Imbin, Jubilee Well, Bulong and Coolgardie West projects.

The Imbin Project is a major strategic land holding in the emerging Earraheedy Province, site of Rumble Resource's recent and potentially world-class Zinc-Lead discoveries. The Imbin Project is located on the northern margin of the prospective basin and is the site of significant historic copper intersections in drilling and approximately 20km of strike of the target Yelma-Frere unconformity

Lodestar discovered multiple zones of syenite intrusion-related gold mineralisation at the Ned's Creek Project on the Yilgarn craton margin, 150km west of Imbin. Vango Mining Limited is earning a 51% interest in the Ned's Creek JV by contributing \$5M of expenditure over 3 years.

Bulong and Jubilee Well are recent acquisitions in highly endowed gold districts; first-pass drill programs are being planned. Coolgardie West, located 12km west of Coolgardie, has potential for greenstone hosted nickel, gold and LCT pegmatite mineralisation.

Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Bill Clayton, 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 Clayton consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

The information in this announcement that relates to previously released exploration results was disclosed under JORC 2012 in the ASX announcements dated

- 17th July 2014 “Lodestar Corporate Presentation – July 2014”.
- 8th July 2021 “Landmark Airborne EM Survey Commences at Imbin Project”.
- 2nd September 2021 “Multiple Conductor Targets Identified at Imbin”.

These announcements are 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	<ul style="list-style-type: none"> Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. 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 (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Sons of Gwalia carried out surface exploration and drilling for base metals and gold up to 1992. 265 rock chip samples were collected from the Imbin project area. Mount Isa Mines Exploration Pty. Ltd. (MIM) collected a further 698 rock chip samples from the area up to 1997. Herald Resources reported results for 27 rock chip samples collected during 1999 and included a brief sample description. There is no reported information on the procedural details of the sampling or sample size submitted for analysis. Lodestar completed first-pass surface geochemistry on E69/3590. 313 soil samples were collected from a depth of 10cm on a regular 500m by 100m grid, using a sample size of approximately 200g.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> Surface sampling only.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Surface sampling only.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample locations and descriptions are recorded in written ledgers or spreadsheets.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. • The total length and percentage of the relevant intersections logged. • 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. 	<ul style="list-style-type: none"> • Samples from both Sons of Gwalia and MIM were submitted to Genalysis Laboratories in Perth, sample preparation procedures are not reported. Samples from the Herald Resources program were submitted to Minlabs and Ultratrace Laboratories, sample preparation procedures are not reported. • Lodestar's samples were submitted to LabWest in Perth for the Ultrafine™ method of analysis. A ~200g sample is added to de-ionised water to which sodium hexametaphosphate is added as a dispersant. The sample is rolled for 24hrs, followed by up to 4hrs settling. A solution containing the 2 micron particle size is drawn from the solution, 0.2g of the 2 micron fraction is analysed for gold and multi-elements using microwave assisted aqua regia digest. Analysis is completed by ICP-MS/OES. A detailed description of the technique is provided in Noble, R., Lau, I., Anand, R. and Pinchand, T. 2018, MRIWA Report no. 462: Multi-scaled near surface exploration using ultrafine soils: Geological Survey of Western Australia, Report 190. P. 31-82.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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 (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established. 	<ul style="list-style-type: none"> • Laboratory processes are not reported, samples from all episodes of exploration were analysed using standard methods by commercial laboratories. • Sons of Gwalia samples were analysed for gold using aqua regia digest AAS/carbon rod finish and a detection limit of 1ppb Au; Analysis for As, Cu, Pb, and Zn was by total acid digest with AAS, ICP optical or mass spectrometry finish. The aqua regia/AAS method is considered highly effective for extraction of gold and suitable for first pass exploration. • MIM samples were similarly analysed for gold by aqua regia digest and AAS/carbon rod finish. Pb and Zn were analysed using an aqua regia digest and AAS finish – this method may not attain a complete digest of refractory minerals. • Herald Resources analysed for Au, Cu, Pb, Zn, As, Ag, Pt and Pd but the analytical methods are not recorded. • Lodestar samples were analysed using Labwest's Ultrafine™ method, developed for geochemical exploration in sand covered terrane. • No geophysical instruments were used.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> The quality control measures are not reported, Lodestar collected duplicates for every 20th sample with consistent results.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Historic sample results have not been verified. Sample locations, sample descriptions and assay results were compiled in written ledgers from which information has been extracted. No adjustments to assay data were undertaken.
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sons of Gwalia sample locations are given in local coordinates. Sons of Gwalia geological mapping onto aerial photography is overlain with sample locations and tenement boundaries, enabling the sample data to be geo-referenced to MGA94 Zone 51 coordinates, location accuracy is probably within 50m. MIM provide sample locations in AMG84 Zone 51 coordinates which have been converted to MGA94 Zone 51. Herald Resources provide sample locations in AMG84 Zone 51 coordinates which have been converted to MGA94 Zone 51. Lodestar location data was recorded on hand held GPS with an estimated accuracy of 3-5m. Topographic variation is not significant at the current stage of exploration.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Surface sampling only to identify anomalies.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Any structural and geological controls are not known at the current stage of exploration.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Measures to ensure sample security are not reported. Lodestar samples were carried by the Company's contractor to the point of dispatch where they were transferred to a registered courier for transport to the laboratory.

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No independent audit or review has been carried out.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i> 	<ul style="list-style-type: none"> Tenements E69/3533 and E69/3590 are located in the Warburton Mineral Field of Western Australia, 170km northeast of the township of Wiluna. Lodestar owns a 100% interest in the tenements which occupy unallocated crown land north of the Granite Peaks pastoral lease. The tenements lie within the Birriliburu People determined area and the Wiluna #2 determination area. Lodestar has signed a land access and mineral exploration agreement with the Mungarlu Ngurrarankatja Rirraunkaja Aboriginal Corporation representing the Birriliburu People and a similar agreement with the Tarlka Matuwa Piarku Aboriginal Corporation representing the Wiluna People. E69/3590 is held by Lodestar Minerals Pty Ltd and was granted on 12/12/2019 and expires on 11/9/2024. The tenement is in good standing and no known impediments exist. E69/3533 is held by Lodestar Minerals Limited and expires on 29/11/2026.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> Several episodes of exploration for gold, diamonds and base metals have been carried out in the area, include surface geochemistry, aeromagnetics, EM surveys, vacuum, RAB, RC and diamond drilling. Systematic exploration completed by Sons of Gwalia, Aztec Exploration and MIM defined and tested the main targets, identifying anomalous gold and significant copper mineralisation in drilling at the Main Gossan prospect. Follow up drilling by Empire Resources has (to 2011) 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 remain unexplored.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The 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

Criteria	JORC Code explanation	Commentary
		<p>locally strongly deformed by folding and faulting and was formerly known as the Stanley Fold Belt. Early explorers assigned the sedimentary sequence in the Imbin Project to the “Troy Creek Beds” that were thought to pre-date the Earraheedy 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.</p>
<p><i>Drill hole Information</i></p>	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Surface sampling only.
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> • <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • No data aggregation, surface sampling only.
<p><i>Relationship between mineralisation widths and intercept</i></p>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there</i> 	<ul style="list-style-type: none"> • Surface sampling only.

Criteria	JORC Code explanation	Commentary
<i>lengths</i>	<i>should be a clear statement to this effect (e.g., 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Not applicable.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • Reporting of historic rock sampling as indicators of regional geochemical anomalies.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> • No other substantive data to report.
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Lodestar continues to review all the Imbin Project data to identify targets and determine if additional drilling is warranted. Drill targets remain at the historic Main Gossan and North Chert prospects, other areas have received only shallow, first-pass drilling. The completion of regional airborne EM interpretation has identified numerous areas requiring further exploration.