ASX ANNOUNCEMENT

25 August 2021

EARAHEEDY PROJECT – SOIL SAMPLING RE-COMMENCES OVER IMBIN ZINC-LEAD TARGET

- **Soil geochemical sampling has commenced over the Frere unconformity Zn-Pb target.**
- **First-pass 300 sample program extends over 10km strike within 100%-owned E69/3590.**
- **Samples to be submitted for Ultrafine+ analysis (LabWest/CSIRO) with expected four week turn-around.**

Lodestar Minerals Limited ("Lodestar" or "the Company") (ASX:LSR) advises that regional scale, first-pass geochemical sampling of the Frere unconformity Zn-Pb target within E69/3590 is underway. E69/3590 forms part of Lodestar's 900 sq km Earaheedy Project, located 170km northeast of Wiluna and 70km northeast of Rumble Resource's Chinook Zn-Pb discovery in the Warburton Mineral Field of Western Australia (see Figure 1).

Geological mapping indicates that the Frere unconformity can be traced around the perimeter of the Earaheedy Basin into E69/3590. The Frere unconformity is the setting for the major zinc lead discovery announced by Rumble Resources[1] and until now has not been targeted on the northern margin of the basin. The program will comprise 300 soil samples collected on a 500m by 100m grid spacing over 10km of the unconformity and overlying Proterozoic sediments (see Figure 2). On completion, samples will be submitted for Ultrafine+™ multi-element analysis, a technique developed by LabWest and CSIRO to assist exploration in areas of transported cover.

Soil sampling completed by Sons of Gwalia and Mount Isa Mines (MIM) identified elevated zinc and lead at the south eastern limit of the historic sampling grid, this is also the area where MIM discovered anomalous zinc and lead in gossanous veinlets[2]. Lodestar intends to complete first-pass sampling on E69/3699 and (depending on results) progressively extend the program along the Frere unconformity towards the area of historic sampling.

[1] See Rumble Resources Limited's ASX announcement of 19th April 2021.
[2] See Lodestar's ASX announcement dated 3rd June 2021.

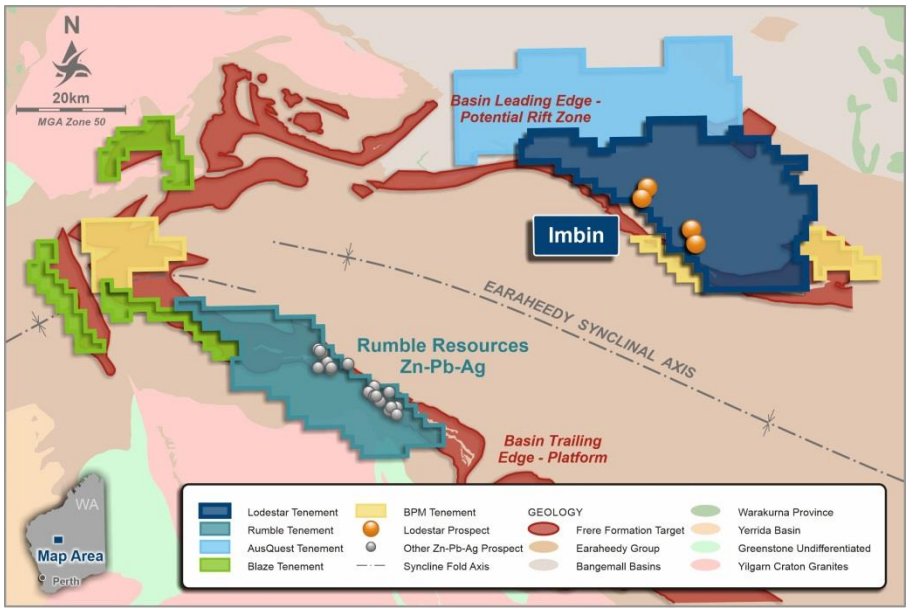

Figure 1 Location Plan Imbin Project tenements.

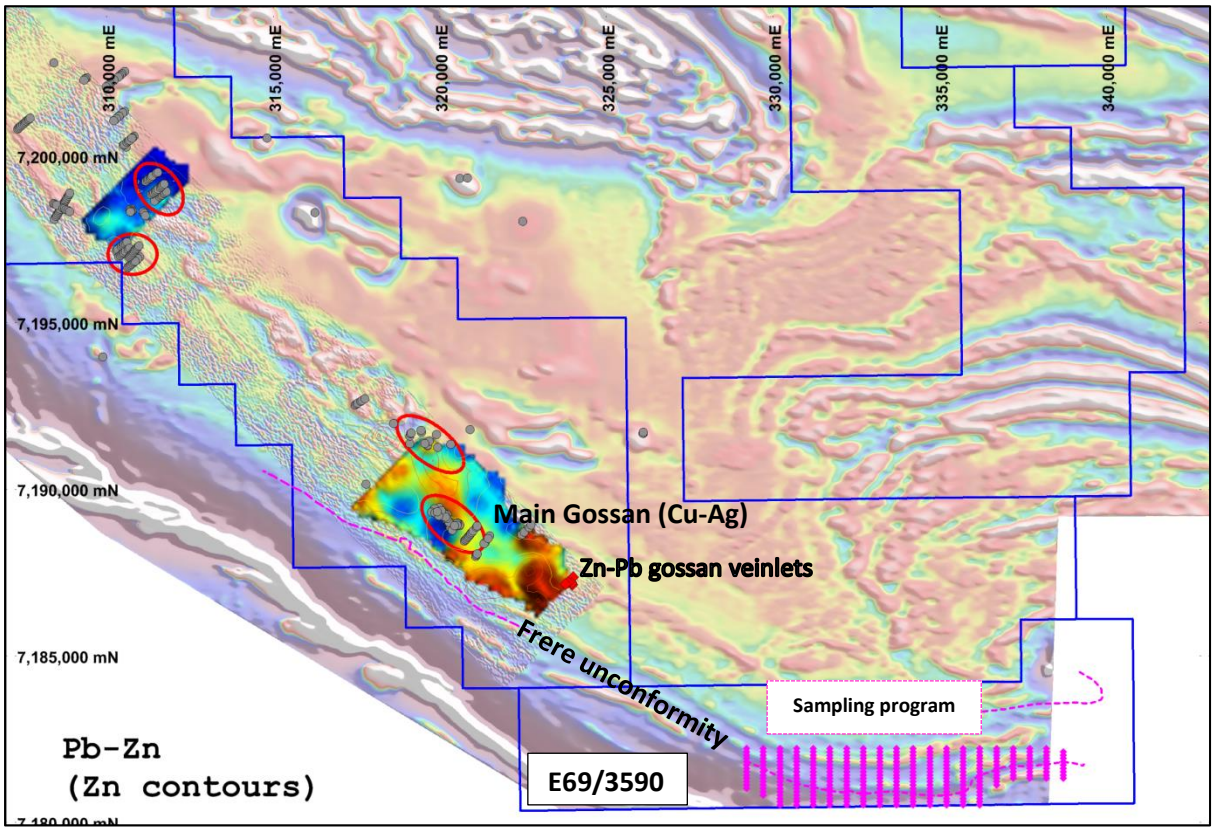

Figure 2 Location of soil sampling program, showing historic zinc-lead in soil sampling over the Imbin corridor (much of the corridor lies under shallow sand cover and has not been sampled). Zinc & Lead relative abundance increases towards the south east, an area where MIM identified Zn-Pb gossanous veins at the south eastern limit of historic sampling (see Table 1 for summary statistics). Grey dots represent drill holes > 50m depth. Background magnetic image TMI_RTP MGA zone 51.

This announcement has been authorised by the Managing Director of the Company.

Table 1 Summary statistics, historic soil sampling programs completed by Sons of Gwalia (SOG) and Mount Isa Mines (MIM) (Figure 2).

Company	Element	n	mean	std dev	range	Max	Min	Reference WAMEX Rpt
MIM	**Zn**	685	11.45	5.93	61	61	1	A56029
SOG	**Zn**	341	18.35	5.38	30	38	8	A34445
MIM	**Pb**	685	9.36	2.14	15	19	4	A56029

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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 and Bulong projects.

Lodestar holds a 20% interest in the Nepean Nickel Project with Auroch Minerals (ASX:AOU; 80%). The Nepean Nickel Project comprises the historic Nepean nickel mine (32,200t Ni production 1970 to 1987) and 12 km of the host ultramafic sequence. Nepean is an advanced project that represents a unique opportunity to add value by regional discovery, identifying extensions to the Nepean orebody at depth and confirming a near-surface remnant resource suitable for rapid development.

The Imbin Project is a major strategic land holding in the emerging Earaheedy 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 includes 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.

Camel Hills is the site of a high grade gold discovery in the Gascoyne region of Western Australia. The exploration target is lode style gold associated with a major structure, the Errabiddy Shear Zone.

Bulong and Jubilee Well are recent acquisitions in highly endowed gold districts; first-pass drill programs are being planned.

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

- *3rd June 2021 "Earaheedy Project – Imbin Base Metal Exploration Update".*

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.*	• Soil samples collected from near surface. • Regolith mapping to identify residual and erosional landscapes generally suitable for soil geochemistry. • Soil sampling, not applicable. • Sons of Gwalia (SOG) - a -bulk soil fraction was collected, sample size not recorded but laboratory reports indicate ~2.5kg collected for gold bulk cyanide leach from which a sub-sample was split for base metal assays. Mount Isa Mines (MIM) – a -2mm soil fraction collected, 150g approximate sample weight. Sample collection protocols not recorded.
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).*	• Soil sampling, not applicable.
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.*	• Soil sampling, not applicable.
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.*	• Brief description of surface characteristics in ledger, e.g. bedrock, pisolite sand, deep sand, deep soil etc. • Not applicable. • Not applicable.

Criteria	JORC Code explanation	Commentary
	• *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.*	• Not applicable. • Dry samples, sieved to -2mm fraction, approximately 150g submitted for assay (MIM). Sample size not recorded (SOG) 2.5kg? • Sample preparation involved drying, followed by a single stage mix and grind (MIM). Samples were dried, sieved to -2mm, mixed and split to recover a 250g sub-sample which was pulverised (SOG). • Second splits not analysed. Laboratory repeat assays and standards included in laboratory reporting. • Sampling protocols not reported in detail. Duplicate field samples collected 1:20 (MIM). Duplicate sampling not reported (SOG). • Sample sizes are standard for regional geochemical sampling. SOG used BCL to analyse for gold and although not specified in company reports, it appears a ~2.5kg sample was collected from which a split sub-sample was analysed for base metals.
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.*	• Samples from both companies were analysed in a reputable commercial laboratory (Genalysis) using an aqua regia digest and AAS. Cu, Pb & Zn have a DL of 1ppm.The method is not a complete digest and refractory minerals will not be taken into solution. A sand component in the sample may contribute to dilution. • Soil sampling, not applicable. • Laboratory standards and repeat assays were inserted in the sample stream routinely. MIM specified reference standards at 1:50 samples and field duplicates at 1:20 samples, SOG QA not specified.
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.*	• Regional geochemical sampling to identify low-level anomalies, no independent verification. • Not applicable. • Protocols not described, methodology outlined in memo within MIM WAMEX report A56029. • No adjustment to assay data but data has been standardized to allow the datasets to be combined.
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.*	• Not applicable. • MIM completed sampling on a DGPS controlled grid. • Topographic control derived from airborne survey DEM on plan

Criteria	JORC Code explanation	Commentary
	• *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	images (MIM).
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.*	• Sampling completed on a regular 400m by 100m grid using 50m samples composited to 100m (SOG). Sampling completed on a 100m by 400m grid, with 50m samples composited to 100m (MIM). • Not Applicable. • 50m field samples composited to 100m centres for both MIM and SOG programs.
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.*	• Not applicable. • Not applicable.
Sample security	• *The measures taken to ensure sample security.*	• Not reported.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been completed.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and 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.*	• Historic regional exploration was completed over E69/3532 and E69/3533 within the Warburton Mineral Field. The tenements are currently under application by Lodestar Minerals and form part of the Imbin base metal project. The main area of the tenements lies within granted native title area Birriliburu People WC1998/068, Lodestar has concluded heritage agreements with the representatives of the Birriliburu People and the Tarlka Matua Piarku People and is now awaiting grant of the tenements, pending signing of a State Deed by the Tarlka Matuwa Piarku people. There are no other known impediments to obtaining the grant of the tenements.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration within the area of historic drilling includes geological mapping, surface sampling, auger drilling, aeromagnetic and ground magnetic surveys, electromagnetic surveys, RAB, RC and diamond drilling. Previous explorers include Sons of Gwalia, Aztec Mining, MIM Exploration, Herald-Palladium Resources, Empire Resources and Zodiac Resources.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Target deposit types include VMS, sediment-hosted base metal, sediment-hosted base metal-gold related to exhalative, replacement or structurally emplaced mineral systems and orogenic gold. The Troy Creek inlier represents a sequence of strongly folded and sheared carbonaceous shale, dolomitic and quartz sandstones, pelite, cherts, mafic volcanics and felsic intrusives and volcanic rocks. The sequence is intruded by dolerites. The northern margin of the Troy Creek Beds is faulted against the Scorpion Group and unconformably overlain by the Bangemall Group. The southern margin is believed to be an unconformity with the overlying Frere Formation. The depositional environment is thoug**h**t to be an active basin margin – back arc rift.

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.*
		• Not applicable – soil geochemistry, summary sample statistics provided in Table 1.
		• Regional soil geochemistry used in definition of drill targets.

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*	• No weighted averages or cuts have been applied. Standardisation of assay results used to allow compilation of historic sampling programs. • Not applicable.

Criteria	JORC Code explanation	Commentary
	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.*	• Not applicable.
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').*	• Not applicable. • Not applicable. • Not applicable.
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.*	• Not applicable, standardized results shown as grid or contour images to illustrate relative abundance of the metal elements.
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.*	• Historic exploration results are used to provide evidence of low-level zinc and lead abundance at a district scale in a prospective geological setting. Insufficient work has been done to fully understand the influence of the regolith environment on these 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.*	• No other results to report in relation to geochemical sampling.
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.*	• Additional soil geochemistry planned over prospective units, regional airborne geophysics (AEM) to define potential massive sulphide conductors and map stratigraphy.