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ASX ANNOUNCEMENT

27th January 2016

Electronic lodgement

COMPANY SNAPSHOT

LODESTAR MINERALS LIMITED
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CAPITAL STRUCTURE
Shares on Issue:
352,157,030 (LSR)

Options on Issue:
43,550,127 (unlisted)
34,067,203 (listed - 31 Mar 2016)

ASX: LSR

PROJECTS
Peak Hill – Doolgunna:
Camel Hills – gold
Neds Creek – gold
Marymia – gold
Imbin – gold and base metals

MARYMIA DRILLING RESULTS AND CAMEL HILLS UPDATE

HIGHLIGHTS

- First-pass aircore drilling of three gold targets at Marymia returned numerous lower grade intervals from 5 metre composite assays including:
  - 5 metres at 0.45g/t gold from 45 metres (hole LMR047);
  - 5 metres at 0.11g/t gold from 30 metres (LMR055); and
  - 5 metres at 0.1g/t gold from 25 metres (LMR046).
- Drilling intersected a complex, deformed geological sequence including discrete, intensely sheared intervals with associated alteration and oxidised relicts after disseminated sulphides; features that are characteristic of the Archaean lode gold environment.
- Detailed geochemical, structural and aeromagnetic analysis to be undertaken to further understand the gold targets at Marymia.
- Results from auger drill program completed at Big Sky prospect at Camel Hills to follow-up previous high-grade RC drill results expected this week.

West Australian gold and base metals explorer Lodestar Minerals Limited (ASX:LSR, "Lodestar" or "the Company") advises that assay results from the first-pass aircore drilling of the Marymia gold targets within the Ned's Creek project, have been received.

The targets are located on Marymia tenements E52/2734 and E52/2493, which include the southern margin of the Plutonic Well greenstone belt, located 200 kilometres northeast of Meekatharra, Western Australia (Figure 1) and south of the historic Marymia gold mine.

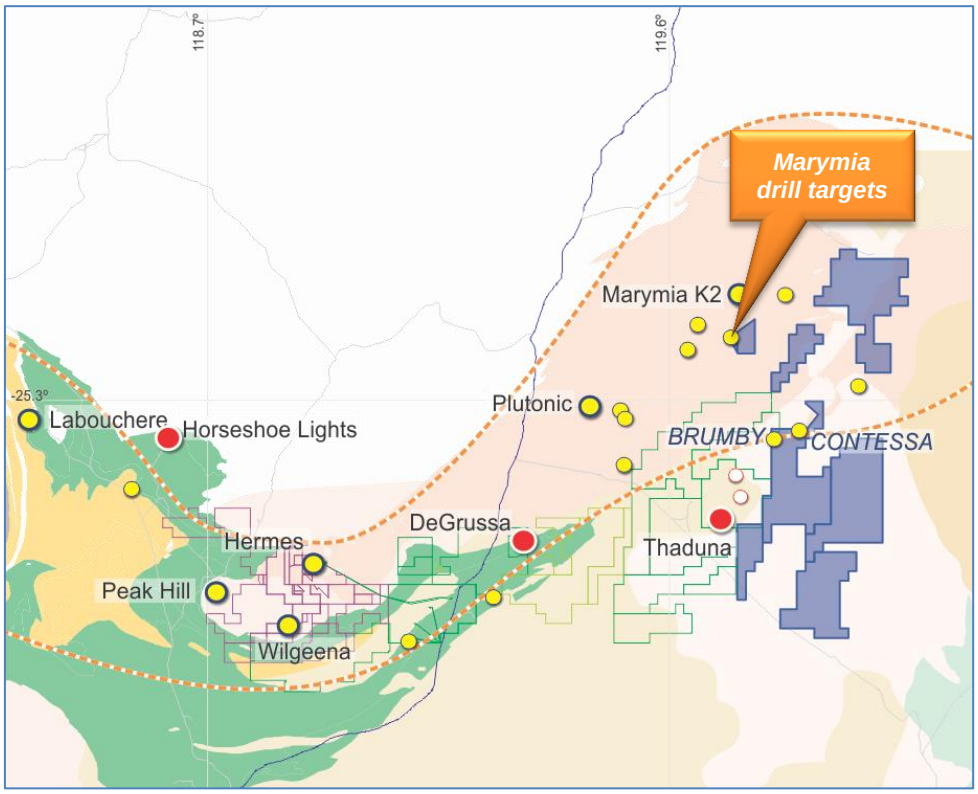

Figure 1 Location plan showing area of Marymia drilling within Lodestar's Ned's Creek project tenements.

A total of 59 aircore holes for 3,464 metres tested three adjacent targets (Figures 2 and 3 and Tables 1 and 2) at Marymia. Holes were completed to blade refusal with an average depth of 58 metres achieved. Drilling was completed on traverses between 60 metres and 100 metres apart with holes spaced an average of 40 metres apart on section. This was a first-pass drilling program designed to test areas of anomalous surface geochemistry and an area where gold specimens have been recovered at surface.

Table 1 Anomalous Aircore Drill Intersections

Area	Target	Drill hole sequence	Results >0.1g/t gold
Area A	Gold specimens in duricrust. Area tested – 250m by 190m	LMR038 to LMR062	LMR046 – 5m at 0.102g/t gold LMR047 – 5m at 0.452g/t gold LMR055 – 5m at 0.115g/t gold LMR062 – 5m at 0.107g/t gold
Area B	Anomalous rock chip samples. Area tested – 100m by 200m	LMR063 to LMR081	
Area C	Multi-element lag geochemical anomaly. Area tested – 100m by 160m	LMR082 to LMR096	LMR093 – 5m at 0.141g/t gold

Drilling in Areas A and B intersected discrete zones of intense shearing, silica, chlorite and biotite alteration and iron oxides after disseminated sulphide mineralisation. Widespread elevated copper to a maximum 2,460ppm (0.246% Cu) is associated with the gold anomalies in Area A drilling. Together, these features suggest proximity to a major shear and hydrothermal system in which economic mineralisation may be present.

Area C is located within a 1,000 metre long de-magnetised zone and appears more deeply weathered than Areas A and B. Area C also displays evidence of localised chlorite alteration and iron oxide pseudomorphs after disseminated sulphides.

Planned follow-up work will aim to determine the relationship between structures, alteration and the gold anomalies using multi-element geochemical indices to map the intensity of alteration and identify host rocks. Detailed (25 metre line spacing) aeromagnetic data will be re-processed to assist the interpretation of the structural setting of these initial gold targets, and the wider project area, in comparison to the nearby deposits of the Plutonic Well greenstone belt.

Anomalous intervals from the aircore drilling will be re-sampled as 1 metre split samples from the bagged samples and submitted for assay.

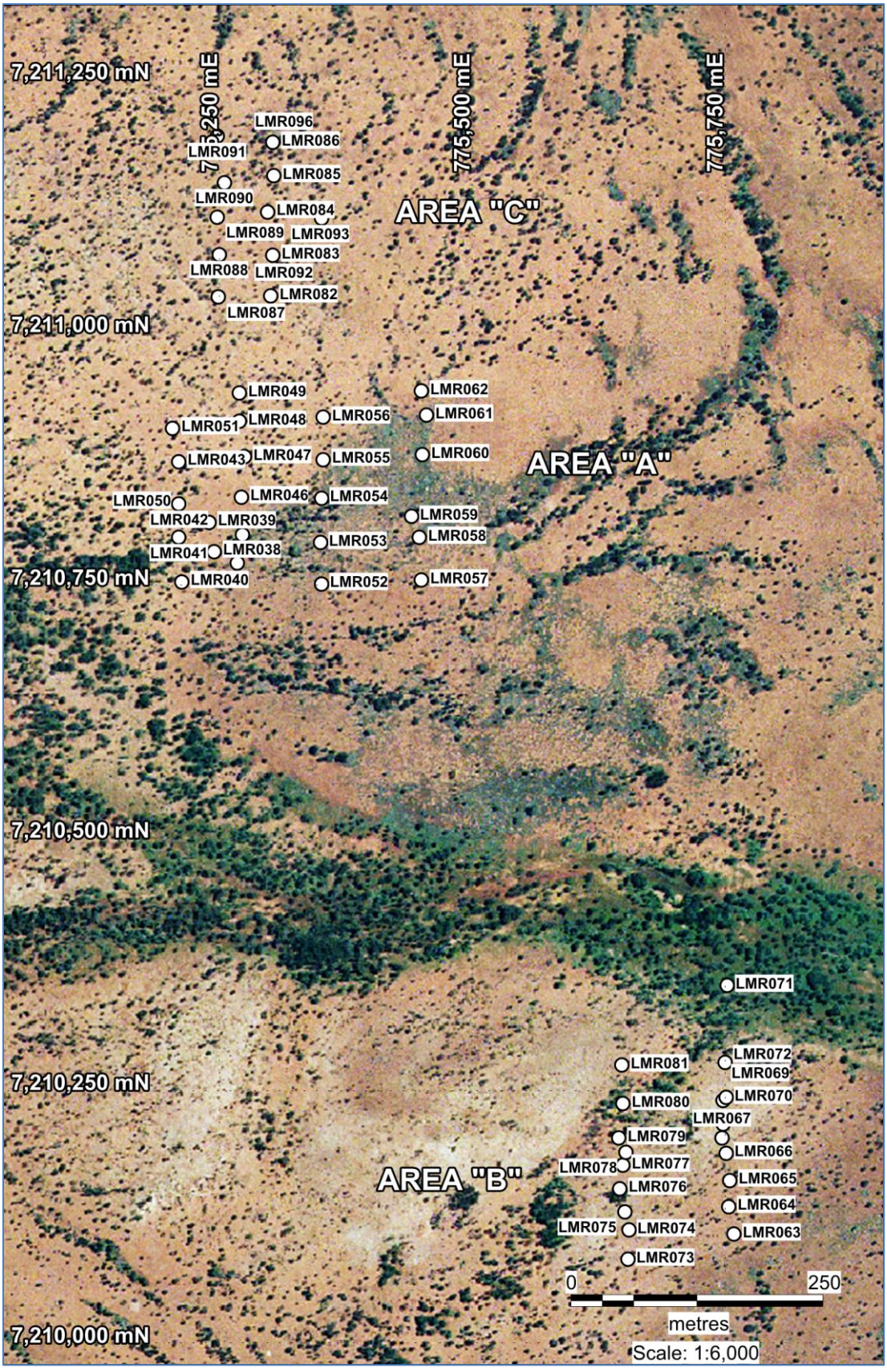

Figure 2: Location plan of aircore drill hole collars (MGA94 Zone 50)

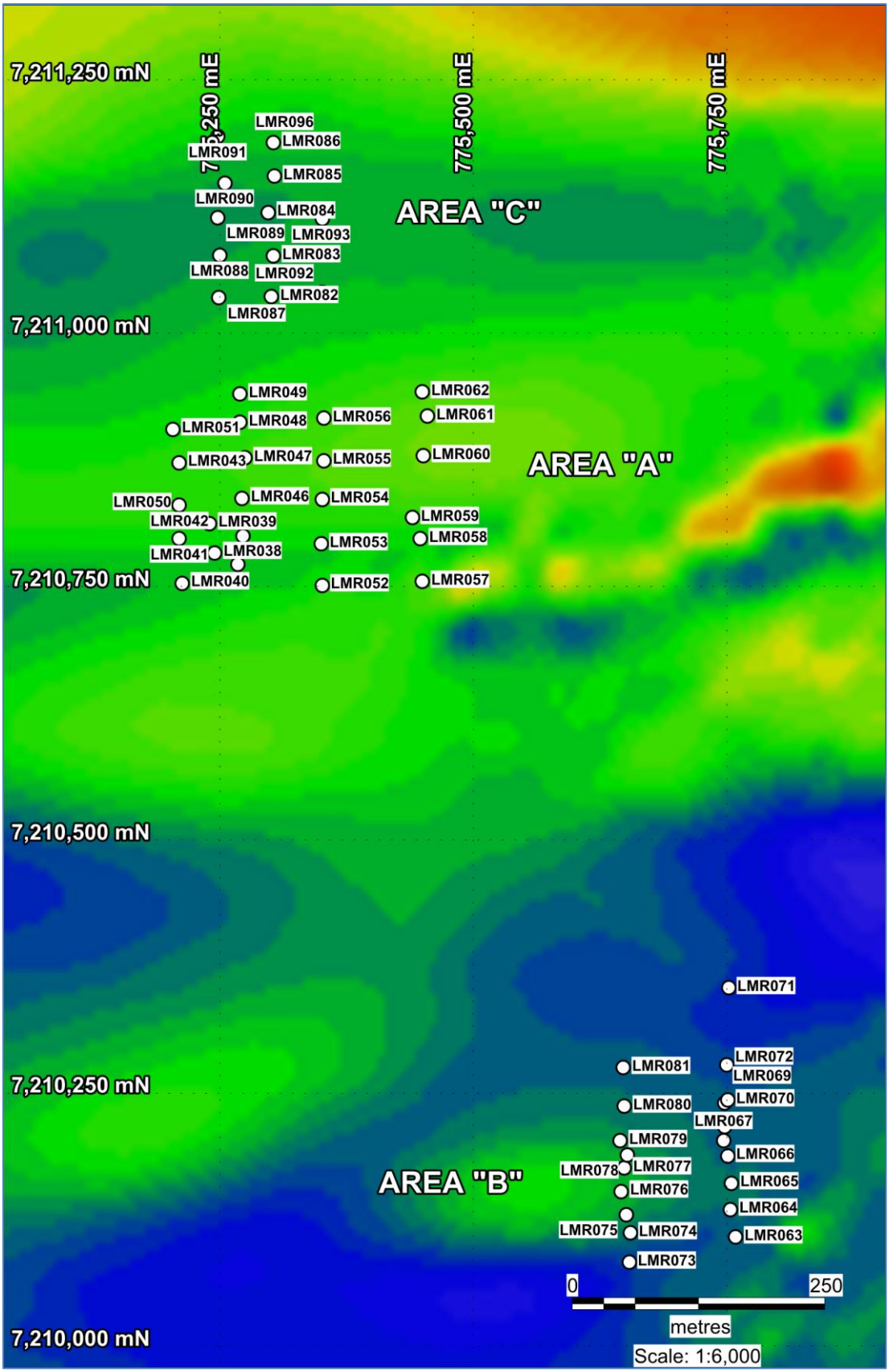

Figure 3 Location Plan of Aircore drill collars on aeromagnetic image (TMI) GDA94 Zone 50.

Table 2: Significant intersections (>0.1g/t gold) from aircore drilling.

HoleID	Easting	Northing	RL	Depth (m)	Dip	Azimuth	From	To	Au ppb	Cu ppm
LMR046	775272	7210839	640	60	-60	180	25	30	102	1300
LMR047	775275	7210879	640	60	-60	180	45	50	452	1880
LMR055	775353	7210876	640	60	-60	180	30	35	115	1450
LMR062	775450	7210944	640	60	-60	180	55	60	107	2460
LMR093	775350	7211080	640	81	-60	180	65	70	141	165

Big Sky Update

Lodestar completed a 1,065 hole program of auger sampling at its Big Sky gold prospect on the Camel Hills project in December 2015. The auger program extended 550 metres along strike from the high-grade gold lode, with the aim of defining extensions to this system. Assay results from the auger samples are expected this week.

Bill Clayton
Managing Director

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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 30th January 2015 "December 2014 Quarterly Activities Report", 22nd September 2015 "New priority gold target at Marymia" and 1st December 2015 "Auger drilling to commence at Big Sky Gold Target". 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.

Table 3 Summary of Drill Collar locations and significant assays >100ppb Gold.

HoleID	Easting	Northing	RL	Depth(m)	Dip	Azimuth	From	To	Au_ppb
LMR038	775245	7210785	640	60	-60	180	0	60	*nsi*
LMR039	775240	7210814	640	60	-60	180	0	60	*nsi*
LMR040	775213	7210755	640	60	-60	180	0	60	*nsi*
LMR041	775210	7210799	640	60	-60	180	0	60	*nsi*
LMR042	775210	7210832	640	60	-60	180	0	60	*nsi*
LMR043	775210	7210874	640	66	-60	180	0	66	*nsi*
LMR044	775268	7210774	640	60	-60	180	0	60	*nsi*
LMR046	775272	7210839	640	60	-60	180	25	30	102
LMR047	775275	7210879	640	60	-60	180	45	50	452
LMR048	775270	7210914	640	72	-60	180	0	72	*nsi*
LMR049	775270	7210942	640	75	-60	180	0	75	*nsi*
LMR050	775211	7210816	640	60	-60	180	0	60	*nsi*
LMR051	775204	7210907	640	69	-60	180	0	69	*nsi*
LMR052	775351	7210753	640	60	-60	180	0	60	*nsi*
LMR053	775350	7210794	640	63	-60	180	0	63	*nsi*
LMR054	775351	7210838	640	60	-60	180	0	60	*nsi*
LMR055	775353	7210876	640	60	-60	180	30	35	115
LMR056	775353	7210918	640	60	-60	180	0	60	*nsi*
LMR057	775450	7210757	640	60	-60	180	0	60	*nsi*
LMR058	775448	7210799	640	63	-60	180	0	63	*nsi*
LMR059	775440	7210820	640	60	-60	180	0	60	*nsi*
LMR060	775451	7210881	640	60	-60	180	0	60	*nsi*
LMR061	775455	7210920	640	50	-60	180	0	50	*nsi*
LMR062	775450	7210944	640	60	-60	180	55	60	107
LMR063	775759	7210110	640	40	-60	180	0	40	*nsi*
LMR064	775754	7210137	640	42	-60	180	0	42	*nsi*
LMR065	775755	7210163	640	39	-60	180	0	39	*nsi*
LMR066	775751	7210190	640	42	-60	180	0	42	*nsi*
LMR067	775747	7210205	640	42	-60	180	0	42	*nsi*
LMR068	775748	7210219	640	34	-60	180	0	34	*nsi*
LMR069	775748	7210242	640	26	-60	180	0	26	*nsi*
LMR070	775751	7210245	640	34	-60	180	0	34	*nsi*
LMR071	775752	7210356	640	35	-60	180	0	35	*nsi*
LMR072	775750	7210280	640	29	-60	180	0	29	*nsi*
LMR073	775654	7210085	640	58	-60	180	0	58	*nsi*
LMR074	775655	7210114	640	51	-60	180	0	51	*nsi*
LMR075	775651	7210132	640	42	-60	180	0	42	*nsi*
LMR076	775646	7210155	640	42	-60	180	0	42	*nsi*
LMR077	775649	7210178	640	40	-60	180	0	40	*nsi*
LMR078	775652	7210191	640	26	-60	180	0	26	*nsi*
LMR079	775645	7210205	640	30	-60	180	0	30	*nsi*
LMR080	775649	7210239	640	36	-60	180	0	36	*nsi*

HoleID	Easting	Northing	RL	Depth(m)	Dip	Azimuth	From	To	Au_ppb
LMR081	775648	7210277	640	39	-60	180	0	39	*nsi*
LMR082	775301	7211038	640	83	-60	180	0	83	*nsi*
LMR083	775303	7211078	640	81	-60	180	0	81	*nsi*
LMR084	775298	7211121	640	81	-60	180	0	81	*nsi*
LMR085	775304	7211157	640	72	-60	180	0	72	*nsi*
LMR086	775303	7211190	640	81	-60	180	0	81	*nsi*
LMR087	775249	7211037	640	81	-60	180	0	81	*nsi*
LMR088	775250	7211079	640	84	-60	180	0	84	*nsi*
LMR089	775248	7211116	640	90	-60	180	0	90	*nsi*
LMR090	775255	7211150	640	84	-60	180	0	84	*nsi*
LMR091	775248	7211196	640	72	-60	180	0	72	*nsi*
LMR091	775248	7211196	640	72	-60	180	5	10	*nsi*
LMR092	775351	7211042	640	81	-60	180	0	81	*nsi*
LMR093	775350	7211080	640	81	-60	180	65	70	141
LMR094	775351	7211115	640	81	-60	180	0	81	*nsi*
LMR095	775345	7211160	640	81	-60	180	0	81	*nsi*
LMR096	775351	7211191	640	66	-60	180	0	66	*nsi*

nsi- no significant interval >100ppb gold

JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data

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.*	• Aircore drill holes were sampled at 1m intervals from a cyclone on the rig and collected in plastic bags. From 0 metres to end of hole, samples submitted for assays were composited to 5 metre samples. Samples were dry and recoveries monitored. • Samples are logged and ground conditions that impact sample recoveries are recorded in the sample and geology ledger. • Sample results reported in Table 1 and Table 3 used the sampling protocol described below; Samples from 0 metres to end of hole were collected as 5 metre composites by spearing consistently down the side of bagged 1 metre samples using a PVC spear. This method is applied as a first-pass screening for anomalous gold results. Approximately 2.5kg of material was dried, crushed pulverised and split to produce a 40g charge for aqua regia digest and ICPMS (DL 1ppb Au).
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).*	• Aircore method using a 3.5" blade bit, hammer bit used if required. Non-core method, no downhole surveys.
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 included in Lodestar's drill hole database. • Samples collected at 1 metre intervals were placed in plastic bags and placed in rows sequentially. Drill sampling equipment was cleaned regularly to minimise contamination. • Lodestar monitors the distribution of high grade gold and sample recoveries, anomalous samples do not appear to be significantly affected by sample smearing.

Criteria	JORC Code explanation	Commentary
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.*	• Chips samples were routinely geologically logged. The drilling and sampling methods used were first-pass exploration methods and not intended to support Mineral Resource estimation. • Logging is qualitative in nature. • All aircore samples were geologically 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.*	• Aircore samples were recovered from the drill hole via a cyclone at 1 metre intervals. Each 1 metre sample was placed in a plastic bag on the ground in sequence. A hollow PVC spear is used to obtain a sub-sample through each 1 metre interval, these are combined for submission as a 2.4kg 5 metre composite sample. Wet samples are recorded if present, in this program samples remained dry. • All samples for assay are stored in pre-numbered bags and submitted to Bureau Veritas (UltraTrace) Laboratories for sample preparation and analysis. • Sample preparation for drill samples involved 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. For composite sampling duplicate field samples were not submitted, laboratory repeats show satisfactory reproducibility. • Sample size is appropriate for early exploration drilling where mineral grainsize is unknown.
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.*	• A nominal 40 gram charge is digested with aqua regia and gold is determined by ICP-MS, the detection limit is 1ppb. This is a partial digest for base metal and refractory elements, although it is extremely efficient for the extraction of gold. Ag, As, Bi, Cd, Co, Cu, Fe, In, Mn, Mo, Ni, Pb, Sb, Te, W and Zn were analysed from the aqua regia solution by ICP-AES/MS. • No geophysical tools were used to determine any element concentrations. • Laboratory QAQC includes the use of laboratory standards and replicates, Lodestar's certified reference standards were inserted at a ratio of 1:20 (5%) with each batch of samples. These quality control results are reported with the sample results in the final laboratory reports. Lodestar's certified reference standards ranging from blanks to ppm gold were inserted throughout the drilling program, accuracy is within acceptable limits.

Criteria	JORC Code explanation	Commentary
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.*	• Significant intersections have not been independently validated at this time and follow-up sampling of anomalous zones at 1 metre intervals is required. • No twinned holes have been completed. • Field and laboratory data were collected electronically and entered into a relational database. Data collection protocols are recorded in Lodestar's operation manual. • There has been 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.*	• Drill hole locations are fixed by handheld GPS, accuracy is estimated to be +/-5 metres. • Drill hole coordinates were recorded in MGA94 Zone 50 grid. • The topography within prospect areas is gently sloping; RL's are reported from GPS readings of individual drill holes in each area and are subject to significant error.
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.*	• Drill holes are spaced at 20 metres to 40 metres on section and 25 metres to 100 metres between sections. The data is insufficient to establish continuity for Mineral Resource estimation. • 1 metre aircore samples have been composited to 5 metre samples for assay.
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.*	• The aircore drilling method does not provide structural information and the orientation of the underlying geology has not been established. Drilling is oriented perpendicular to the strike of the lithology as determined from interpretation of aeromagnetic data and local mapping.
Sample security	• *The measures taken to ensure sample security.*	• Samples were stored at Lodestar's exploration camp in sealed bags under supervision prior to dispatch by registered courier or Lodestar staff to Bureau Veritas - UltraTrace Laboratories.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been carried out.

Criteria	Commentary
Mineral tenement and land tenure status	• The Marymia gold drilling is located on E52/2493 and E52/2734, within Lodestar's Ned's Creek project. The tenements are wholly-owned by Lodestar Minerals and its subsidiary entity, Audacious Resources. The tenements lie within the Gingirana (WAD6002/2003) native title claim and are included in the Exploration and Prospecting Deed of Agreement between Lodestar and Gingirana Pty Ltd. • E52/2493 expires on 16/09/2020. • E52/2734 expires on 23/08/2017
Exploration done by other parties	• First reported gold exploration commenced in the late 1980's when Resolute carried out reconnaissance mapping, rock and drainage sampling. No anomalies were reported from the area of the Marymia drilling. Homestake Gold Australia Limited completed reconnaissance drilling in the period 1999 - 2000, most of the drilling occurred outside Lodestar's tenements. First-pass RAB drilling by Resolute targeting a low-level gold in soil anomaly reported anomalous gold intersections at their West Pinnyriny prospect.
Geology	• The project area lies on the southern margin of the Plutonic Well greenstone belt. The geology comprises a north east trending sequence of mafic volcanics or mafic tuffs, strongly sheared (mylonitic) quartzite, carbonaceous shale and undifferentiated felsic rocks. The contacts between major units are believed to be thrust faulted, with movement towards the south east.
Drill hole information	• Tabulated data is provided in Table 3.
Data aggregation methods	• Assay data are reported as 5 metre composite samples.
Relationship between mineralisation widths and intercept lengths	• Drilling is oriented -60 degrees towards 180 degrees, perpendicular to the interpreted strike and northerly dip of the host sequence. The dominant structures mapped at surface dip at 60 to 85 degrees to the northwest however, the sequence is folded and true thickness of intersections cannot be determined from current drilling.
Diagrams	• See Figures 2 and 3.
Balanced reporting	• All drill holes and intercepts are reported in Table 3.
Other substantive exploration data	• None to report.
Further Work	• Multi-element assay data from drill samples will be used to map alteration intensity within the prospect area and identify host units. Re-processing of detailed aeromagnetic data will assist in interpreting the main structural features to allow comparison with the structural setting of nearby gold deposits.