



# ASX ANNOUNCEMENT

29<sup>th</sup> January 2016

Electronic lodgement

## COMPANY SNAPSHOT

**LODESTAR MINERALS LIMITED**  
ABN: 32 127 026 528

### CONTACT DETAILS

Bill Clayton, Managing Director  
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www.lodestarminerals.com.au

### 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*



## DECEMBER 2015 QUARTERLY ACTIVITIES REPORT

### HIGHLIGHTS

#### CAMEL HILLS

- Auger sampling program tested a 500 metre zone along strike from high-grade lode intersected in RC drilling at Big Sky prospect.
- Close-spaced auger sampling targeted extensions to the lode system along the Petter Calc-silicate contact, following analysis of multi-element geochemical data from first-pass drilling.
- Assay results from the auger drilling program imminent.

#### MARYMIA

- 59 hole program of first-pass aircore drilling completed in December.
- Three discrete targets tested and composite assays received after the end of the quarter returned a series of lower grade results.
- Additional drilling planned, following review of detailed aeromagnetic data and multi-element geochemistry.
- Historic gold target “West Pinnyriny” identified in data review. Target reports up to 10m at 0.34g/t gold in previous shallow RAB drilling and field work to verify the target will begin in the March quarter.

### CORPORATE

- Placement to raise \$468,000 through the issue of 15.6 million shares priced at 3c a share (plus a 1:2 free-attaching option exercisable at 6c by 31 December 2018) completed in December.
- Underwriting agreement secured relating to \$500,000 worth of the existing 3c options exercisable by 31 March 2016.

## CAMEL HILLS

**(E09/2099, E09/2100, E09/2138, E09/2139 & E09/3064 – LSR 100%)**

Lodestar Resources Limited's (Lodestar) (ASX:LSR) Camel Hills tenements are located 170 kilometres northwest of Meekatharra and 60 kilometres south and east of Gascoyne Resources' Glenburgh gold deposits (1M oz Au in resources, see Figure 1). The tenements cover 924 square kilometres and 90 kilometres of strike over the Errabiddy Shear Zone (ESZ), a 5 to 20 kilometre wide suture that marks the boundary between the Archaean Narryer Terrane to the south and the accreted Palaeoproterozoic Glenburgh Terrane to the north. The ESZ is linked at depth to the Cardilya Fault, a deep crustal fault that marks the major tectonic boundary between the Archaean Yilgarn craton and accreted Palaeoproterozoic terrane.

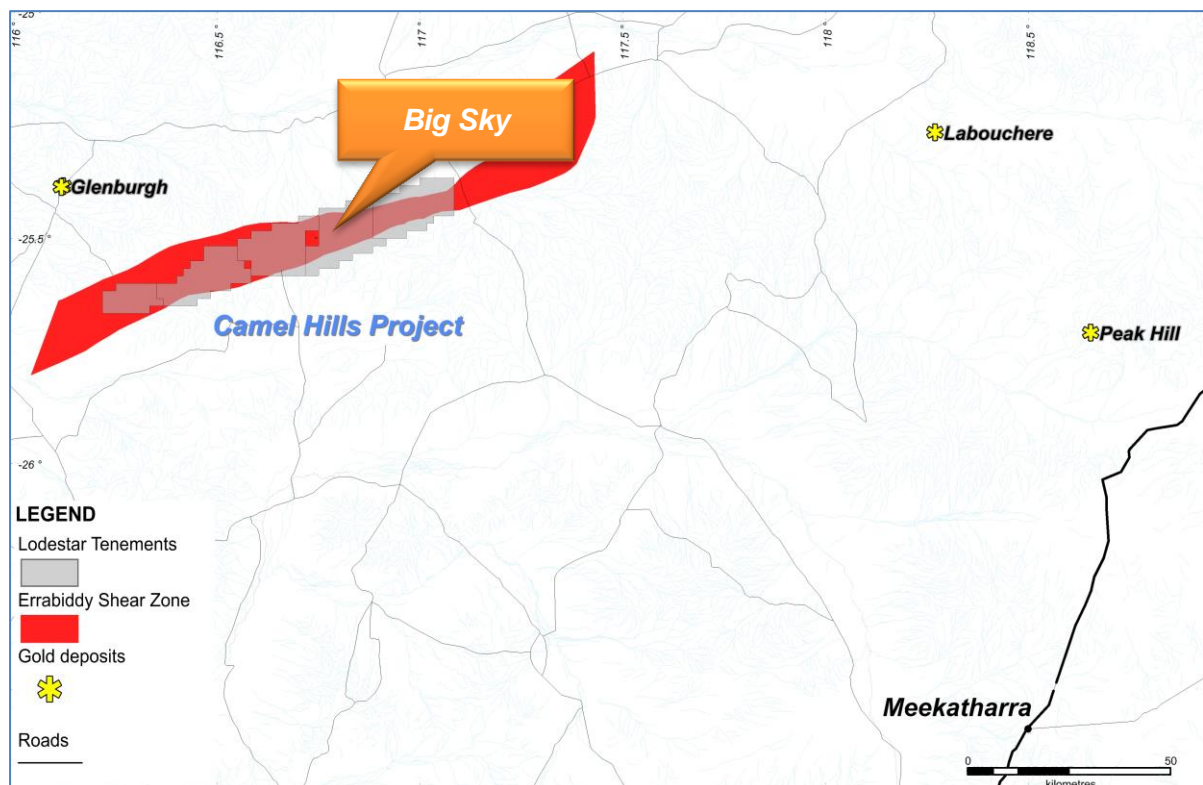


Figure 1 Location Plan - Lodestar's Camel Hills tenements

Lodestar is targeting orogenic gold deposits along the northern Yilgarn margin where mineral systems prospectivity mapping by the Geological Survey of Western Australia (GSWA) identified the ESZ as a favourable site for large-scale gold mineralisation. Historic surface sampling identified strong gold anomalies associated with outcropping gneiss in the Big Sky area and this has been the focus of Lodestar's activities. Exploration to date has comprised rock sampling, shallow trenching, ground magnetic surveying, RAB drilling, RC drilling and shallow auger sampling.

## WORK COMPLETED

Multi-element geochemical data from Lodestar's drilling at the Big Sky prospect was used to map alteration around the high-grade vein, where earlier RC drilling intersected high-grade gold including:

- 6 metres at 6.6g/t gold from 13 metres in LCC011, including
  - 1 metre at 33.3g/t gold from 13 metres and
  - 1 metre at 4.1g/t gold from 17 metres
- 6 metres at 20.3g/t gold from 21 metres in LCC012, including
  - 1 metre at 105g/t gold from 21 metres and
  - 1 metre at 12.8g/t gold from 26 metres

(see Lodestar's ASX announcement dated 20<sup>th</sup> October 2015)

Alteration intensity is used as an indicator of hydrothermal activity associated with mineralising events.

A review of the geochemistry by geological consultant Dr Walter Witt indicated that elevated alteration indices extend to the west of the Big Sky mineralised vein and the search for extensions and additional *en echelon* shoots was directed into this area (see Figure 1). The poor reliability of conventional soil sampling for gold, due to variable and shallow depths of transported surface cover over weakly weathered basement and predominantly physical dispersion of gold, led to the adoption of close-spaced shallow auger sampling to collect

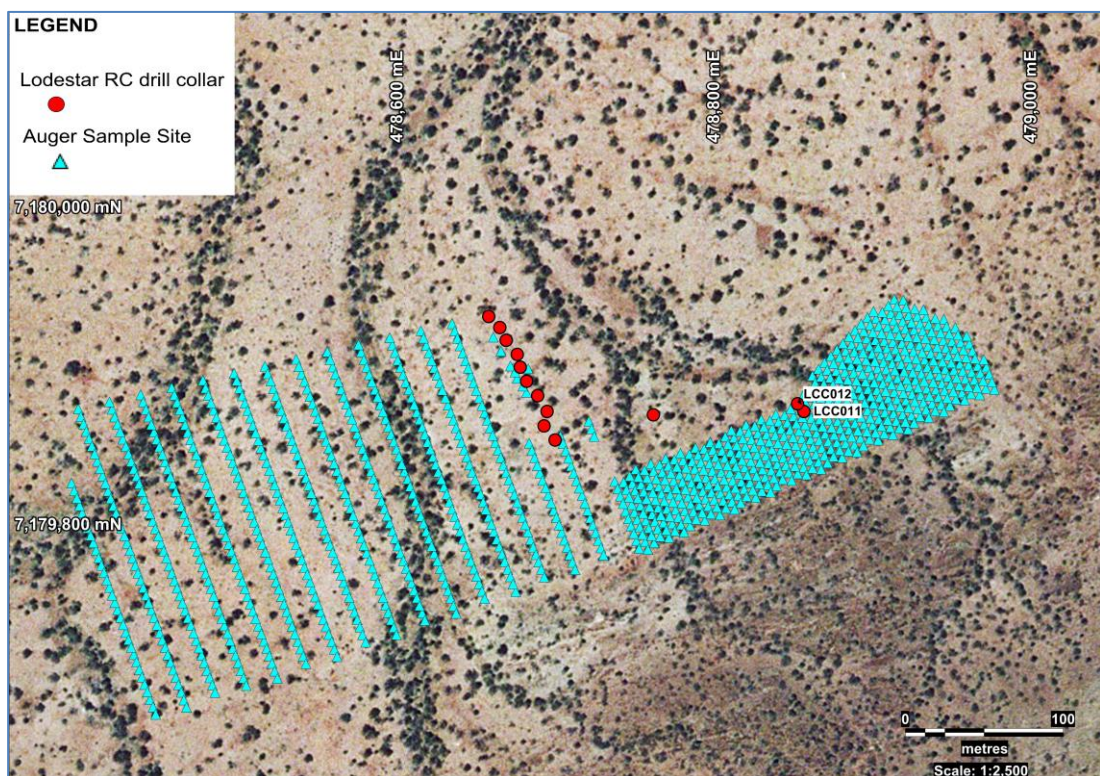


Figure 2 location Plan showing auger sample locations at Big Sky (MGA94 Zone 50).

samples from the interface between cover and bedrock. Some 1,065 auger samples were collected from a 500 metre long zone along the magnetic Petter Calc-silicate contact

The results from this program will assist in targeting the next phase of RC drilling, with potential to extend the program along the 6 kilometres of contact trending southwest from Big Sky.

**MARYMIA  
(E52/2493 and E52/2734 – LSR 100%)**

The Marymia tenements are located within Lodestar’s Ned’s Creek project and overlie the southern margin of the Plutonic Well greenstone belt 200 kilometres northeast of Meekatharra, Western Australia (Figure 3) and south of the historic Marymia gold mine. Gold exploration within the Plutonic Well greenstone belt commenced in the 1980’s and to date an endowment of more than 10Moz of gold in production and resources has been defined.

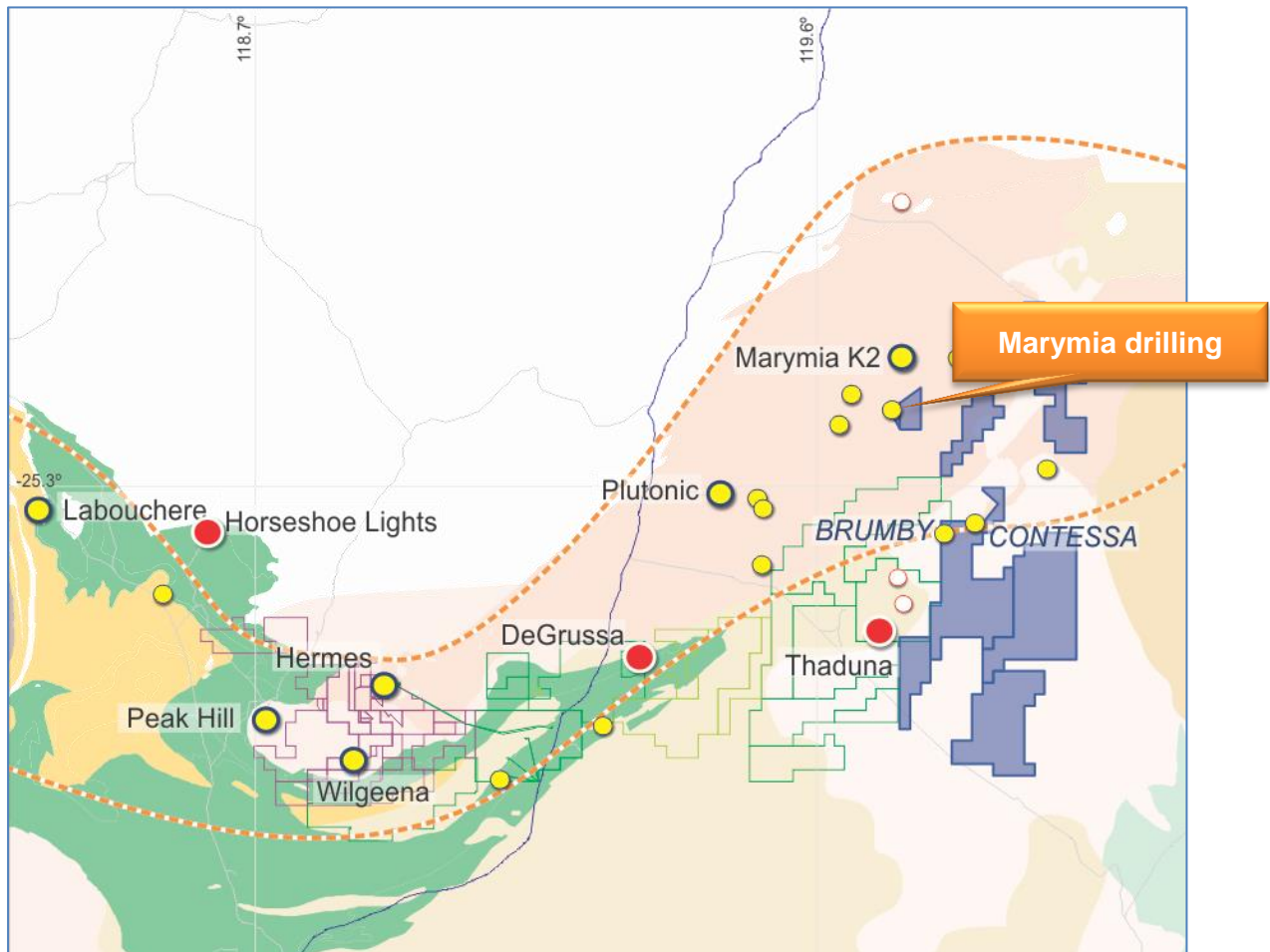


Figure 3 Location Plan - Marymia drill program on the Ned’s Creek project

## Aircore Drilling

A first-pass program of aircore drilling comprising 59 holes for 3,464 metres was completed in December. The drilling tested three adjacent targets identified by surface geochemistry and prospecting that located gold specimens in duricrust. 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. Drill targets and anomalous intercepts are listed in Table 1 and drill collar locations are shown in Figure 4.

**Table 1 Anomalous aircore drill intersections<sup>1</sup>**

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 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 1000m 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 by using multi-element geochemical indices to map the intensity of alteration and identify the host rocks. Detailed (25m line spacing) aeromagnetic data will be re-processed to assist in 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.

<sup>1</sup> See Lodestar's ASX announcement dated 27<sup>th</sup> January 2016.

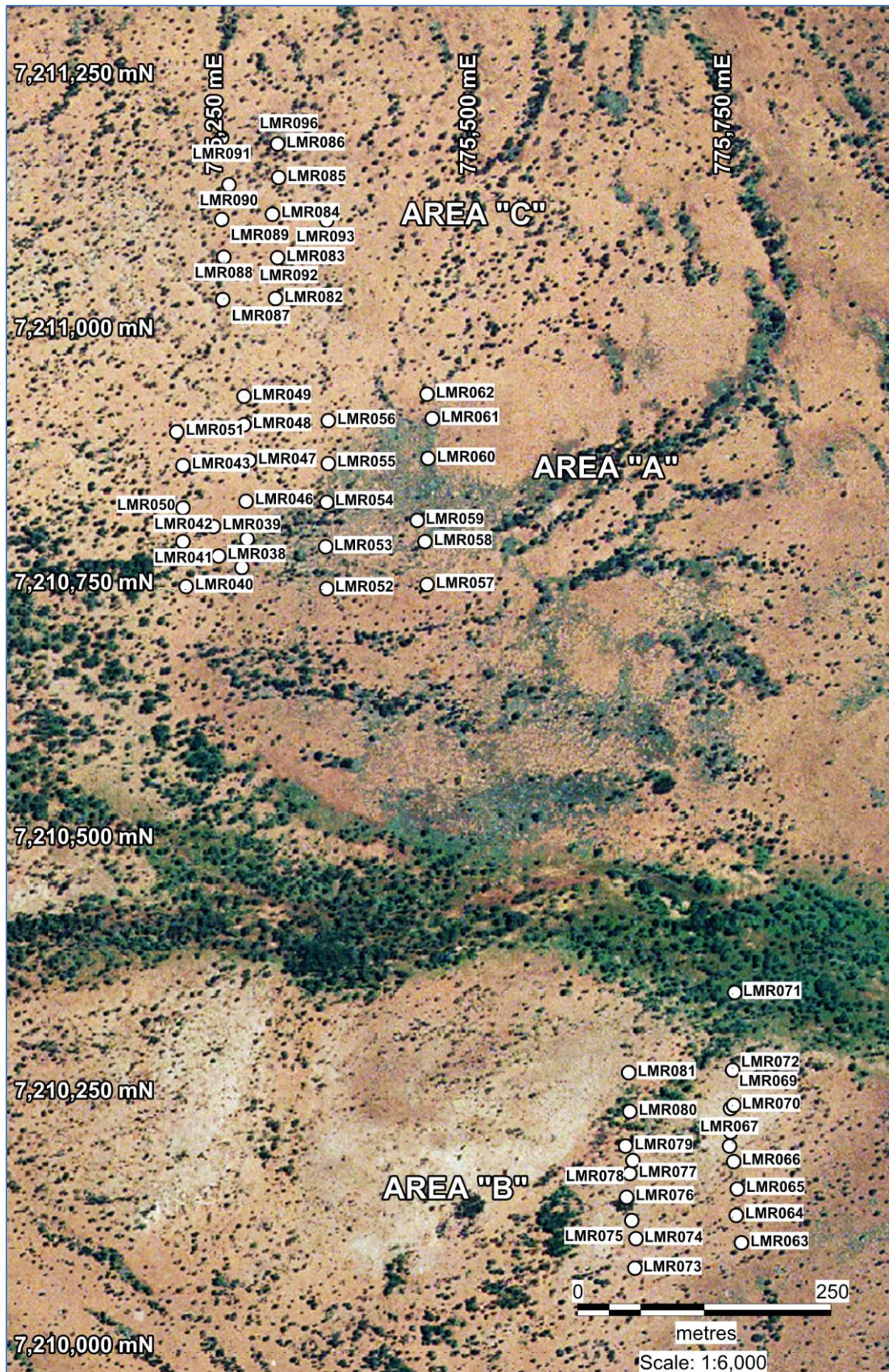


Figure 4 Location Plan showing targets A, B and C and aircore drill collars. (MGA94 Zone 50)

### Historic Gold Target

Resolute Ltd carried out gold exploration in the Plutonic Well greenstone belt and Marymia Inlier during the late 1980's and early 1990's. They completed reconnaissance-scale geochemical sampling, mapping, soil sampling and limited RAB drilling over the area now held by Lodestar under E52/2734 and E52/2493.

A review of historic data has relocated a gold prospect known as West Pinnyriny that was discovered by Resolute<sup>2</sup> following regional sampling that returned a rock sample grading 5.1g/t gold and a regional stream anomaly of 1.4ppb gold. This historic prospect is located within the area where Lodestar's lag geochemistry has reported anomalous As, Cu, Pb and Sb (see Figures 5 and 6) .

Results of interest include:

- Sampling of an old prospecting pit (788490E 7209960N, location approximate) reported an assay of 5.13g/t gold, the samples were described as "quartz, buck white with thin massive sulphide zones", repeat sampling returned <0.02g/t gold.
- An area 400m south of the prospecting pit reported consistently anomalous Au, As, Cu and Pb from outcropping weathered schists (up to 0.95g/t gold, 1280ppm As, 610ppm Cu and 470ppm Pb). This anomaly and an associated 2 to 4ppb gold in soil anomaly, which was subsequently drill tested, occurs over an area of approximately 100m by 100m.
- Two traverses of drilling were completed, the drill spoils are evident on aerial photography and approximate collar locations can be determined. 16 inclined holes (GRAB001 to GRAB016) were drilled on two traverses 90m apart. The average depth of drilling was 42m and the maximum depth was 50m. Drill results from 5 holes on the western traverse were highly anomalous in the near surface zone, reporting
  - GRAB01 – 0 to 5m at 0.34g/t gold
  - GRAB002 – 0 to 10m at 0.34g/t gold
  - GRAB003 – 5 to 10m at 0.11g/t gold
  - GRAB004 – 5 to 10m at 0.10g/t gold
  - GRAB016 – 0 to 5m at 0.11g/t gold

No anomalous results were reported in any of the holes at depths greater than 10m, it is possible that drilling may have been too shallow and stopped in a gold-depleted, oxidised zone above basement.

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<sup>2</sup> Resolute Resource's Limited Report on the Marymia Gold Project, E52/322, 1991. Open file report no. A32637, Department of Mines and Petroleum, Western Australia.

West Pinnyriny provides further evidence of the gold potential of poorly explored greenstone sequences within the Marymia tenements, there has been no additional drilling in the immediate area of this anomaly. Lodestar will commence field work to verify the target in the coming weeks.

## **CORPORATE**

On 13 November Lodestar advised that it had entered into an agreement whereby the conversion of up to \$500,000 of its outstanding 31 March 2016 options had been underwritten. Lodestar currently has 34,067,203 listed options outstanding which are exercisable at 3 cents each on or before 31 March 2016. If all of these remaining options are exercised a total of \$1.02 million will be received by Lodestar. The underwriting agreement guarantees will provide Lodestar with a minimum cash receipt of \$500,000 should no additional options be exercised for any reason. The underwriting agreement applies to the shortfall of options unexercised as at 31 March 2016. A fee of 6% of the amount underwritten is to be paid.

On 21 December Lodestar advised that it had placed approximately 15.6 million shares at an issue price of 3 cents per share to raise \$468,000 (the Placement). As part of the Placement, a further 7.8 million free attaching unlisted options were issued on a 1:2 basis. The options are exercisable at 6 cents each on or before 31 December 2018. The Placement was made to sophisticated investors and pursuant to Rule 7.1 of the ASX Listing Rules.

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+61 422 602 720

## **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 30<sup>th</sup> January 2015 "December 2014 Quarterly Activities and Cashflow Report", 20<sup>th</sup> October 2015, "Big Sky RC Drilling results high-grade gold" and 27<sup>th</sup> January 2016 "LSR Marymia Drilling Results". 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.*



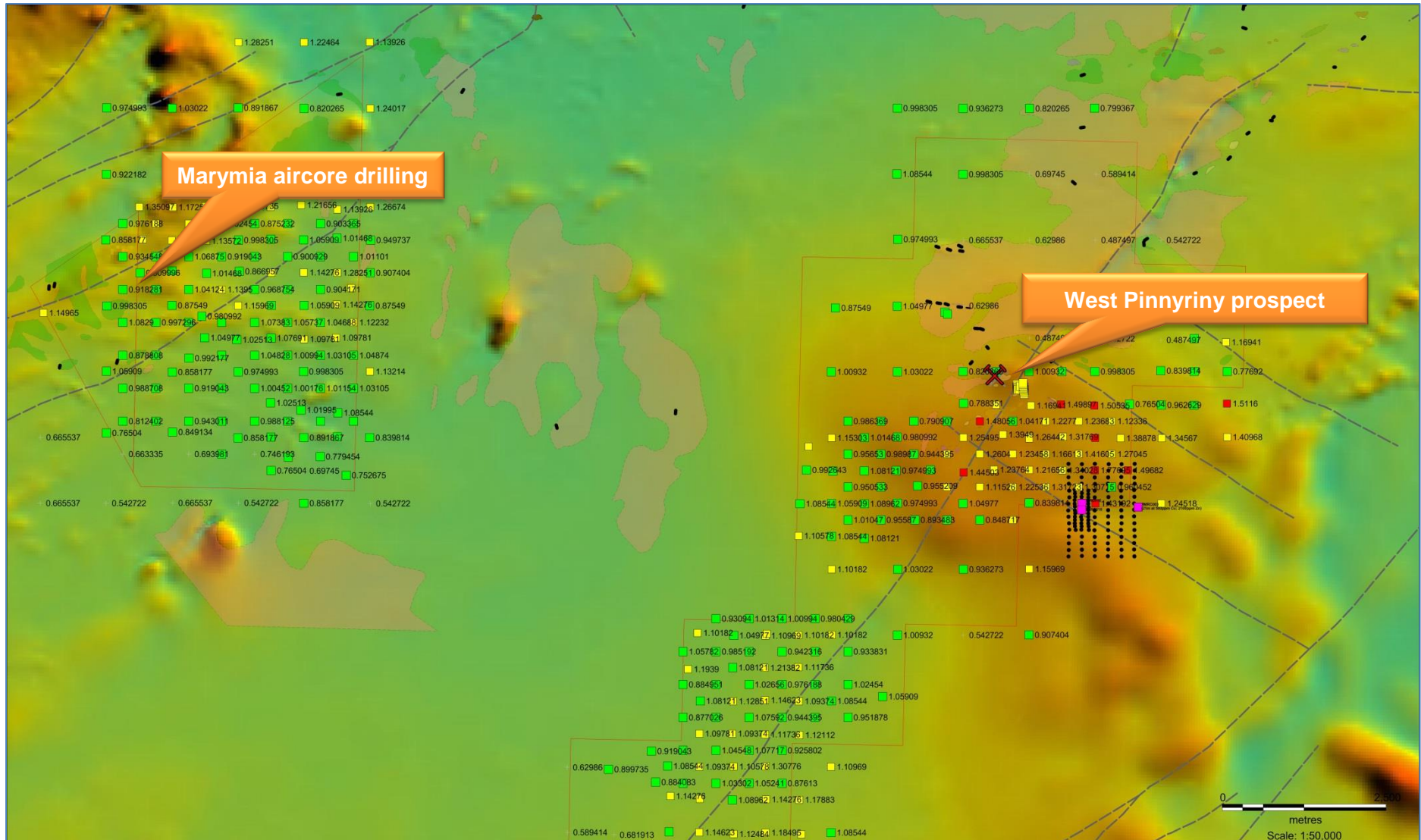


Figure 5 Overview - Location of the West Pinnary gold prospect on aeromagnetic image (GDA94 Zone 50).

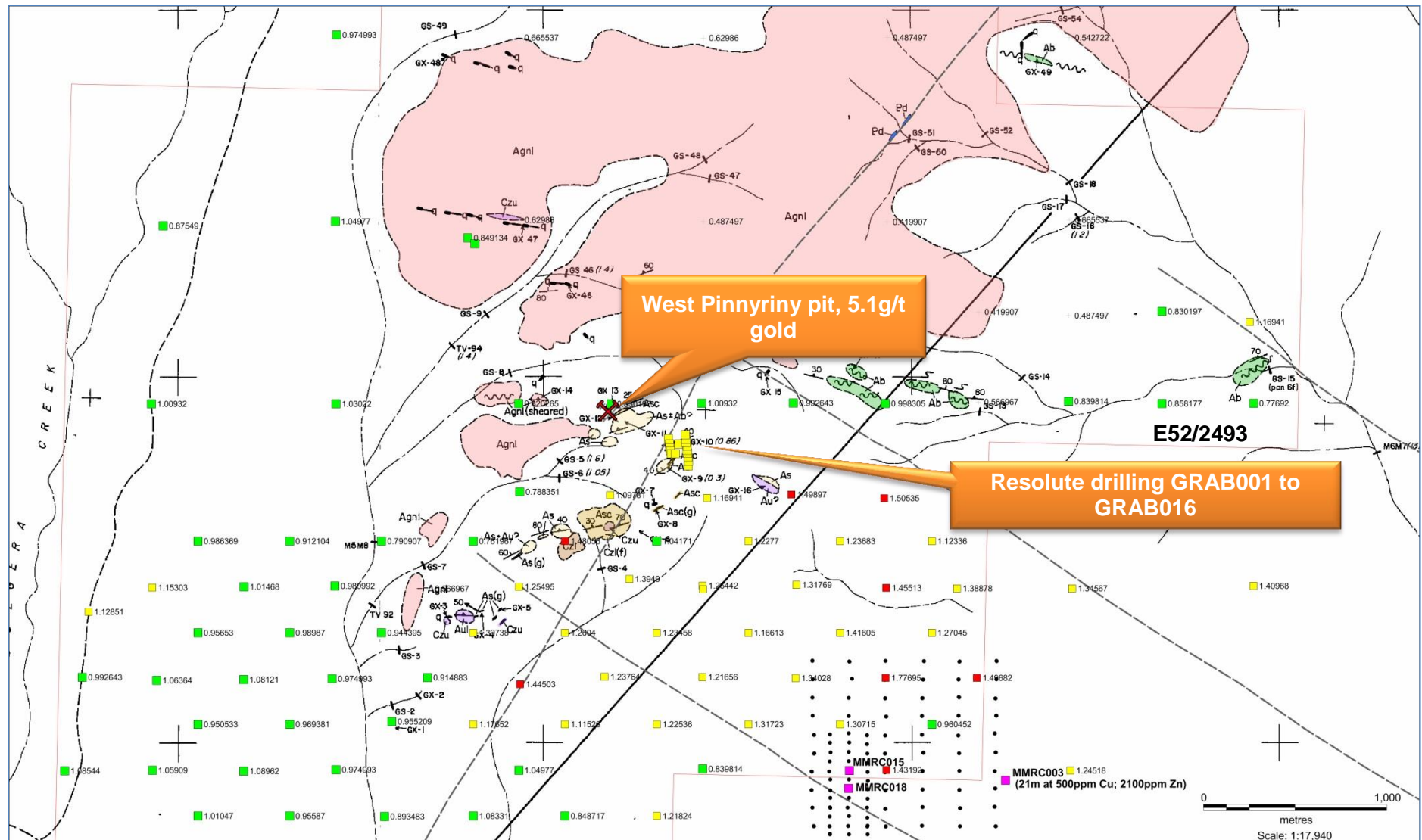


Figure 6 Resolute geological mapping West Pinyriny, showing Lodestar lag geochemistry (copper, levelled data) MGA94 Zone 50.

# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/01, 01/06/10, 17/12/10

Name of entity

LODESTAR MINERALS LIMITED

ABN

32 127 026 528

Quarter ended ("current quarter")

31 DECEMBER 2015

### Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (6 months) \$A'000
1.1 Receipts from product sales and related debtors	-	-
1.2 Payments for		
(a) exploration and evaluation	(260)	(405)
(b) development	-	-
(c) production	-	-
(d) administration (see 1.25)	(154)	(262)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	-	-
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes received / (paid)	-	-
1.7 Other –	-	-
<b>Net Operating Cash Flows</b>	<b>(414)</b>	<b>(667)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	(9)
1.9 Proceeds from sale of:		
(a) prospects	-	-
(b) equity investments	-	-
(c) other fixed assets	-	-
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other (provide details if material)	-	-
<b>Net investing cash flows</b>	<b>-</b>	<b>(9)</b>
1.13 Total operating and investing cash flows (carried forward)	<b>(414)</b>	<b>(676)</b>

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

1.13	Total operating and investing cash flows (brought forward)	(414)	(676)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	498	599
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	60	160
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other – capital raising costs / borrowing costs	(38)	(43)
	<b>Net financing cash flows</b>	<b>520</b>	<b>716</b>
	<b>Net increase (decrease) in cash held</b>	<b>106</b>	<b>40</b>
1.20	Cash at beginning of quarter/year to date	240	306
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	346	346

**Payments to directors of the entity and associates of the directors**  
**Payments to related entities of the entity and associates of the related entities**

	Current quarter \$A'000	
1.23	Aggregate amount of payments to the parties included in item 1.2	71
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

1.2(d) – Includes \$41,000 yearend audit, printing and postage costs.  
1.16 - \$60,000 is a loan from one of the directors with interest accrued at 7% per annum.  
1.23 - Includes salaries paid to directors, as well as superannuation paid on behalf of directors. Also includes corporate and accounting services paid to a company associated with one of the directors. A percentage of the Managing Director's salary has been expensed to exploration activities.

**Non-cash financing and investing activities**

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows
- None
- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest
- None

+ See chapter 19 for defined terms.

### Financing facilities available

Add notes as necessary for an understanding of the position.

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	360	160
3.2 Credit standby arrangements	-	-

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	150
4.2 Development	-
4.3 Production	-
4.4 Administration	82
<b>Total</b>	<b>232</b>

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	346	240
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter (item 1.22)</b>	<b>346</b>	<b>240</b>

### Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1 Interests in mining tenements relinquished, reduced or lapsed	E52/3064 – partial surrender (retained 34%)	Holder	100%	100%
	E52/2444 – surrender	Holder	100%	0%
6.2 Interests in mining tenements acquired or increased				

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

**Issued and quoted securities at end of current quarter**


*Description includes rate of interest and any redemption or conversion rights together with prices and dates.*

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference securities <i>(description)</i>	Nil	N/A	N/A	N/A
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions	N/A	N/A	N/A	N/A
7.3 +Ordinary securities **	352,157,030	352,157,030	N/A	N/A
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	17,577,121	17,577,121	3	3
7.5 +Convertible debt securities <i>(description)</i>	Nil	N/A	N/A	N/A
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted	N/A	N/A	N/A	N/A
7.7 Options <i>(description and conversion factor)</i>	7,800,127 15,000,000 16,000,000 2,250,000 2,500,000 34,067,203	- - - - - 34,067,203	6 cents 5 cents 5 cents Various Various 3 cents	31 December 2018 31 December 2018 16 December 2017 8 May 2017 29 November 2016 31 March 2016
7.8 Issued during quarter	7,800,127	-	6 cents	31 December 2018
7.9 Exercised during quarter	1,976,865	1,976,865	3 cents	31 March 2016
7.10 Expired during quarter	N/A	N/A	N/A	N/A
7.11 Debentures <i>(totals only)</i>	Nil	N/A		
7.12 Unsecured notes <i>(totals only)</i>	Nil	N/A		

+ See chapter 19 for defined terms.

## Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:  Date: 29 January 2016  
Company Secretary

Print name: David M McArthur

## Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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