



ASX ANNOUNCEMENT

25th January 2017

Electronic lodgement

COMPANY SNAPSHOT

LODESTAR MINERALS LIMITED

ABN: 32 127 026 528

CONTACT DETAILS

Bill Clayton, Managing Director
+61 8 9423 3200

Registered and Principal Office

Level 2, 55 Carrington Street
Nedlands, WA 6009

PO Box 985
Nedlands, WA, 6909

info@lodestarminerals.com.au

www.lodestarminerals.com.au

CAPITAL STRUCTURE

Shares on Issue:

453,294,938 (LSR)

Options on Issue:

45,357,092 (listed)

41,050,127 (unlisted)

ASX: LSR

PROJECTS

Peak Hill – Doolgunna:

Camel Hills – gold

Neds Creek – gold

Marymia – gold

Imbin – gold and base metals



DECEMBER 2016 QUARTERLY ACTIVITIES REPORT

HIGHLIGHTS

NEDS CREEK

Contessa

- In-fill aircore drilling intersected significant supergene gold mineralisation¹ including:
 - 8m at 3.35g/t Au from 48m in LNR810
 - 20m at 1.61g/t Au from 48m in LNR792
 - 12m at 1.6g/t Au from 44m in LNR795
 - 12m at 1.3g/t Au from 48m in LNR799
 - 4m at 4.3g/t Au from 48m in LNR804
- Strong gold anomalies to be targeted by follow-up drilling extend beneath the supergene zone and include:
 - 20m at 0.3g/t Au from 80m in LNR804
 - 13m at 0.40g/t Au from 80m to end of hole in LNR805
 - 3m at 1.0g/t Au from 96m to end of hole in LNR806
 - 10m at 0.13g/t Au from 80m to end of hole in LNR800
 - 10m at 0.91g/t Au from 80m to end of hole (including 4m at 1.7g/t Au from 84m) in LNR792
- Significant advance towards the goal of locating a primary gold source at Contessa.

Brumby

- Shallow drilling targeted auger gold anomalies on the granite contact.
- Hole LNR824, the final hole of the southern traverse, intersected 3m at 1.6g/t Au from 40m to end of hole. The 20m interval from 16m to 36m averaged 0.53g/t Au.
- Successful “proof of concept” test for contact-style mineralisation and the intrusion-related mineralisation model, higher grades expected where structural overprinting has maximised fluid access.
- Reconnaissance drilling has confirmed high potential along the 1,200m length of the western contact.

CORPORATE

- Completion of fully underwritten rights issue to raise \$643,000 before costs.

¹ See Lodestar’s ASX announcement dated 1 December 2016.

NED'S CREEK

Contessa

In-fill aircore drilling over the Contessa supergene zone was completed in November. Forty four holes were drilled to an average depth of 79m on a 40m grid, with the hole azimuths oriented at either 40 or 220 degrees (90 degrees to the earlier traverses) to test the potential for northwest trending, structurally-controlled mineralisation (see Figure 2).

The drilling identified an area of strong gold anomalism extending at depth into the transition zone at the western end of the area tested and, in addition, has confirmed the extent and tenor of supergene mineralisation within a 200m long east-west trending zone. Significant intercepts of low grade gold mineralisation extending to the end of hole were reported in adjacent drill holes LNR799, LNR800, LNR804 (to a maximum depth of 102m) and LNR805, suggesting proximity to a local alteration zone and/or vein system. The transition zone anomaly extends over a distance of 120m.



Figure 1. Photograph of end of hole sample from LNR806 (98-99m) within intersection of 3m at 1g/t Au from 96m, quartz and quartz-feldspar-sericite vein material.

Drill hole LNR806, collared 60m north east of and drilled towards LNR805, intersected 3m at 1g/t Au from 96m to end of hole. The last metre of this interval includes quartz and quartz-feldspar-sericite fragments containing iron oxides after probable sulphide mineralisation and is evidence of the vein or stockwork style of gold mineralisation being sought (see Figure 1).

Key observations from the drilling include:

- Increase in alteration and foliation intensity within the diorite from south to north, towards the granite contact.
- Contact zone marked by intense deformation (mylonite) and development of quartz-sericite schist.
- Transition zone mineralisation developed on the margin of this major shear zone.
- The distribution of the graphitic unit is restricted to drillholes on a single NW-SE section and it appears to be steeply dipping. There is no primary relationship between the graphitic shear and mineralisation.
- Core drilling is required to identify the potential structural controls to mineralisation.

The latest drilling has added significantly to the understanding of Contessa and identified an area of strongly anomalous gold mineralisation extending below and to the west of the main supergene zone. This area will now become a focus for follow-up drilling, with further analytical work to map trace element and pathfinder element distribution in the transition zone also planned.



Figure 2: Contessa in-fill drilling collar plan showing drill intercepts and area of the deeper transition zone target (MGA94 Zone 50).

Brumby

Shallow aircore drilling at Brumby was designed as a first-pass test of auger gold anomalies, reporting up to 217ppb Au, identified in 2014². Thirteen holes were completed on a wide, 50m spacing over the auger anomalies on two lines, 320m apart. The base of weathering in this area is shallow and hammer drilling was employed for the final 3m interval of each hole.

The objective of this limited drill program was to test for contact-related mineralisation on the western margin of the Brumby syenite body and the outcome is regarded as a major success, with the last hole on the southern traverse terminating in >1g/t Au mineralisation.

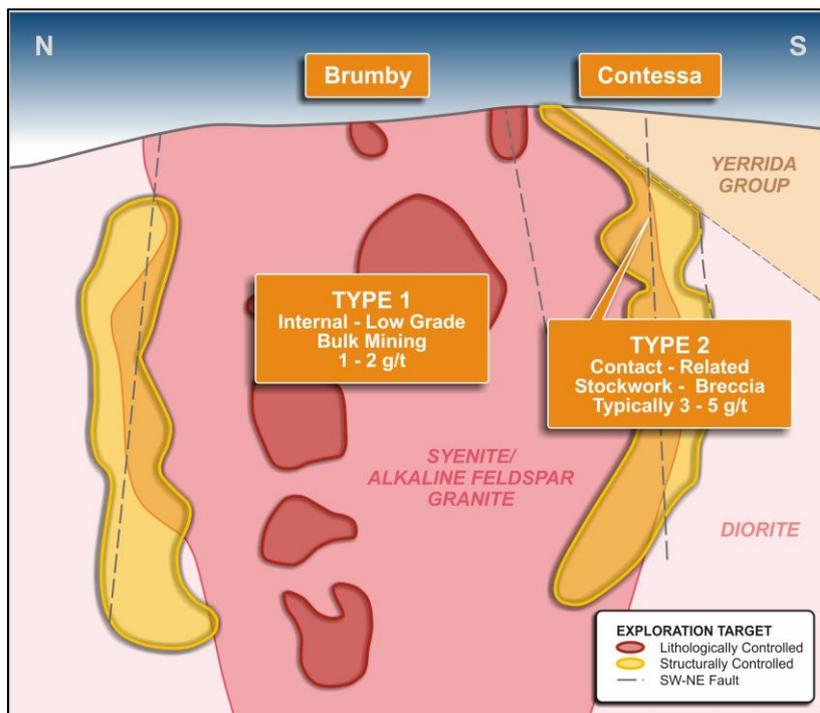


Figure 3: Intrusion-related gold exploration model.

The drilling results have confirmed the validity of the contact-style (“Type 2”), intrusion-related gold mineralisation model (see Figure 3) that is guiding Lodestar’s exploration in the Contessa-Brumby area and it is believed that the granite contact in this area has significant untested potential. Most of the drilling encountered variations of the Brumby syenite and included low-grade mineralisation typical of the internal style of mineralisation (e.g. LNR829 - 16m at 0.5g/t Au from 4m).

Towards the western end of the southern traverse drill hole LNR826 intersected mafic to intermediate rocks (also intersected in LNR831), followed by strongly sheared quartz-feldspar-chlorite rocks in adjacent hole LNR825 and mineralised, fine grained and altered granite in LNR824 (see Figures 4 and 5).

As drilling is relatively widely spaced the relationship between these different units has not been determined, but the drilling does indicate a complex contact zone showing a combination of locally strong shearing, inclusions of mafic to intermediate composition usually found in the wallrocks to the intrusion and relatively undeformed granite in the LNR824. The mineralisation and granite contact position remains open to the west and along strike.

Given this early success, follow-up drilling is being planned for the coming field season to determine the extent of mineralisation along 1200m of the sheared western granite margin.

² See Lodestar’s ASX release dated 29 December 2014.

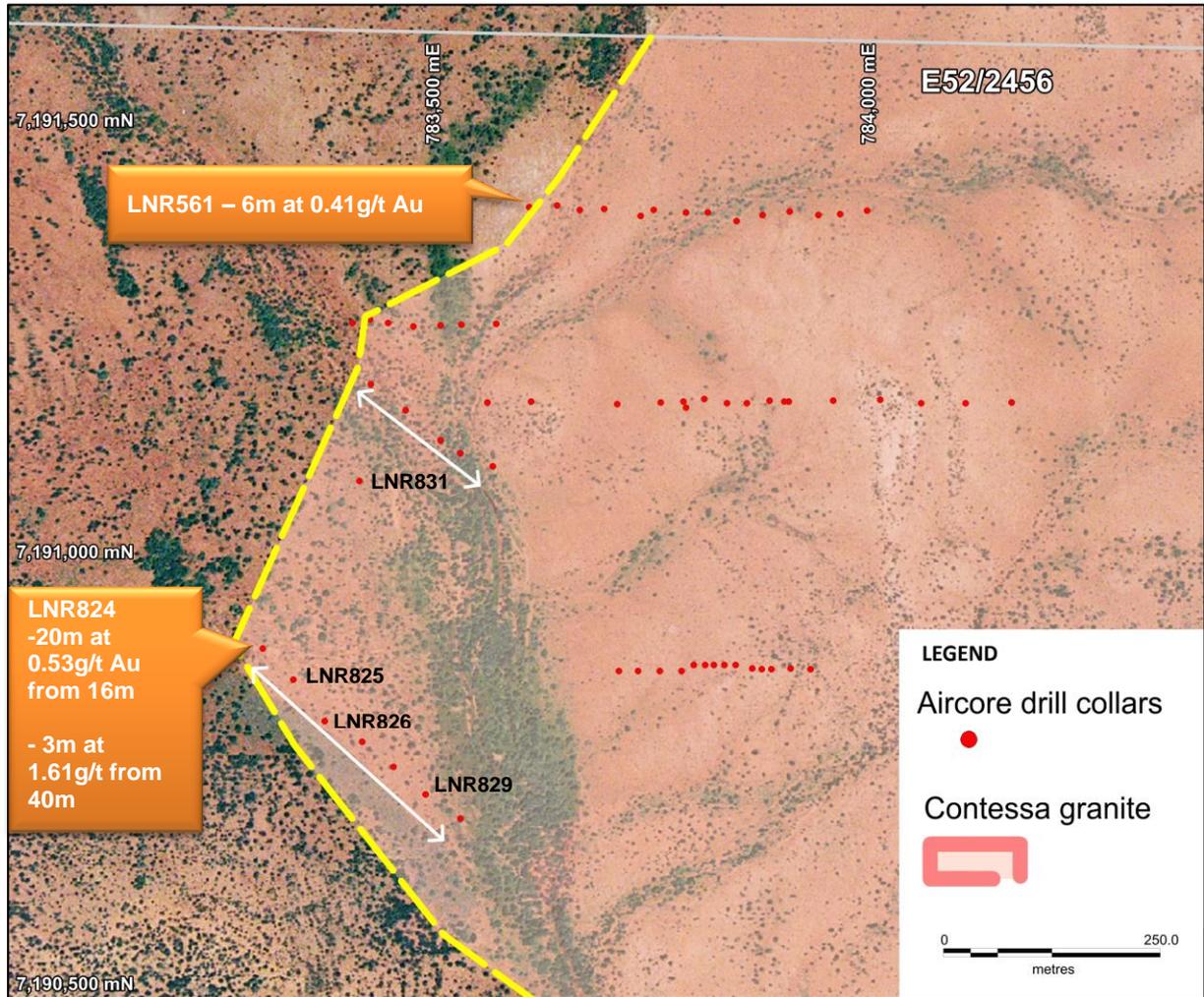


Figure 4: Plan showing aircore drill traverses completed at Brumby (white arrows), targeting contact-style mineralisation (interpreted contact position shown as dashed yellow line). MGA94 Zone 50.

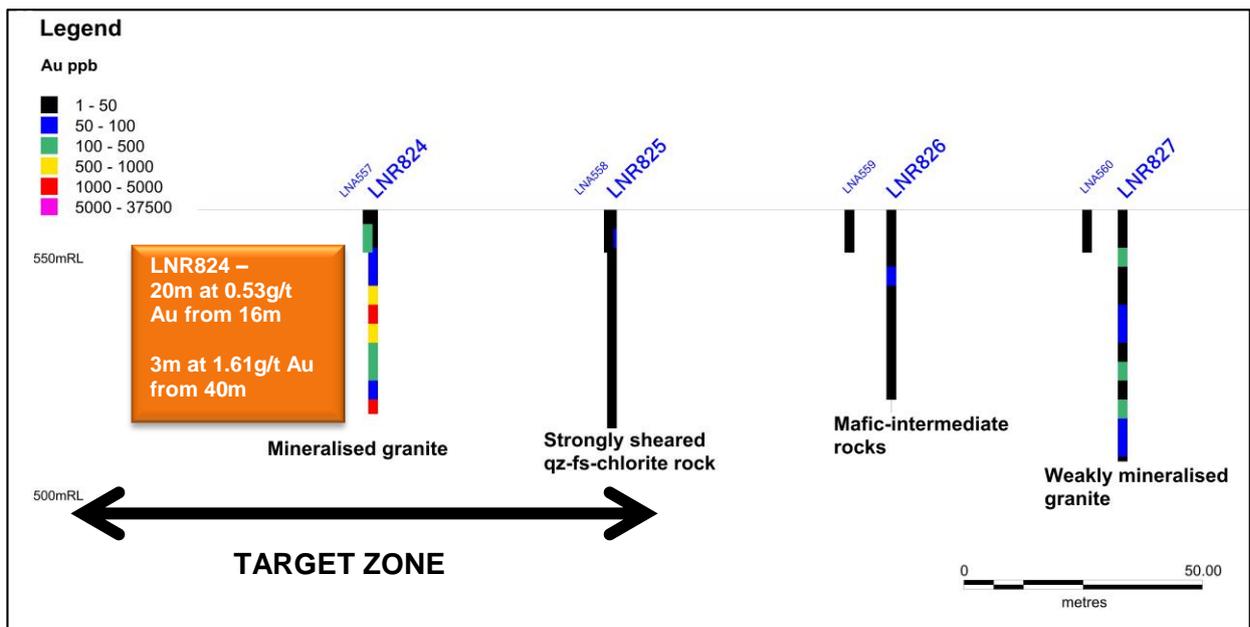


Figure 5. Southern aircore traverse, drill section showing 2014 auger drilling, assay results and the relationship between rock units.

Other Activities

Lodestar has applied for two exploration licences over areas interpreted to cover Archaean basement that surrounds the Contessa – Brumby area (see Figure 6).

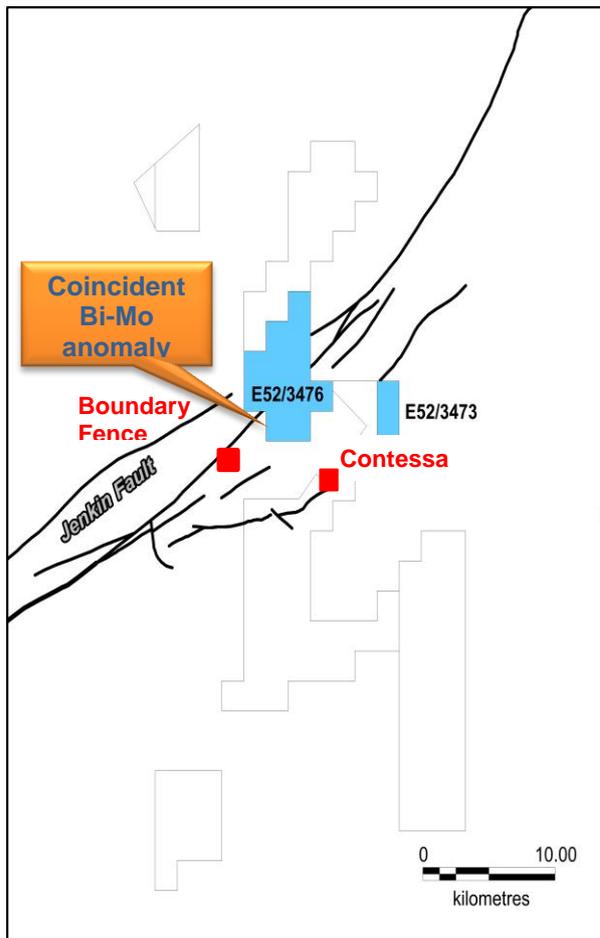


Figure 6. Ned's Creek tenement applications.

The northern tenement covers part of the northeastern extent of the Jenkin Fault, a regional fault that defines much of the tectonic southern margin of the Marymia Inlier. The Jenkin Fault is linked at depth to crustal scale, north-dipping shear zones³ that flank the Marymia Inlier. Within major gold provinces, second and third order faults associated with these major structures are important in localising gold mineralisation.

The northern tenement is located 4km along strike from the Boundary Fence gold prospect (discovered by Marmia Exploration NL in 1993) and 5km northwest of Contessa. Much of the tenement area is covered by transported alluvial sheetwash that impedes surface exploration, however historic soil sampling⁴ within application E52/3476 has identified untested coincident low-level Bi-Mo anomalies, a geochemical signature characteristic of the Contessa intrusion-related mineralisation. A program of work to confirm and in-fill sample around these anomalies will be planned once the tenement has been granted.

CORPORATE

At the start of the quarter, the fully underwritten rights issue launched in September was completed. A total of 55,958,583 shares were applied for in the offer, including applications for shortfall shares made by eligible shareholders. The shortfall of 8,412,122 shares were dealt with by the underwriter.

Under the rights issue, shareholders were entitled to subscribe for one new share priced at 1c for every six shares held and would receive one free-attaching option for every three new shares subscribed for. The option is exercisable at 3c on or before 31 October 2019.

Each of the Directors of Lodestar took up their full entitlements under the offer. The rights issue was successful in raising approximately \$643,000 before costs.

Bill Clayton
Managing Director

Media Enquiries

Michael Vaughan, Fivemark Partners
michael.vaughan@fivemark.com.au
m: +61 422 602 720

³ Dentith et al., 2014. A magnetotelluric traverse across the eastern part of the Capricorn Orogen: Geological Survey of Western Australia, Report 135, 49p.

⁴ See Australian Mines Partial Surrender Report for the period 31 August 2010 to 30 August 2016. Open file report number A109904, Western Australia Department of Mines and Petroleum.

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 29th December 2014, "RC Drilling Intersects Significant Gold in Alteration Zone" and 1st December 2016, "Contessa – Brumby Aircore 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.

APPENDIX 1: Schedule of Exploration Tenements as at 31 DECEMBER 2016

Tenement Description	Tenement Numbers	Status	Percentage Interest
Ned's Creek			
Marymia	E52/2440	Granted	100% - Audacious Resources
Yowerrena Hill	E52/2456	Granted	100% - Audacious Resources, compulsory partial surrender 26 blocks.
Little Well	E52/2468	Granted	100% - Audacious Resources, compulsory partial surrender 7 blocks.
Yowerreena Hill	E52/2493	Granted	100% - Audacious Resources
Yowereena Hill	E52/2734	Granted	100% - Lodestar Minerals
Yowereena Hill	E52/3473	Application	
Yowereena Hill	E52/3476	Application	
Imbin – Troy Creek			
Wiluna	E69/3254	Surrendered	0%
Wiluna	E69/3255	Surrendered	0%
Ingebong Hills	E69/3261	Surrendered	0%
Wiluna	E69/3263	Surrendered	0%
Pierre Spring	E69/3271	Surrendered	0%
Ingebong Hills	E69/3483	Application	
Camel Hill / Mt Erong			
Meekatharra	E09/2099	Granted	100% - Lodestar Minerals
Meekatharra	E09/2100	Granted	100% - Lodestar Minerals
Billycan Bore	E52/3064	Granted	100% - Lodestar Minerals
Meekatharra	E09/2138	Granted	100% - Lodestar Minerals
Meekatharra	E09/2139	Granted	100% - Lodestar Minerals

Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

LODESTAR MINERALS LIMITED

ABN

32 127 026 528

Quarter ended ("current quarter")

31 DECEMBER 2016

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(250)	(526)
(b) development	-	-
(c) production	-	-
(d) staff costs	(68)	(142)
(e) administration and corporate costs	(89)	(139)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(408)	(808)
2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2 Proceeds from the disposal of:		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-
2.3 Cash flows from loans to other entities	-	-
2.4 Dividends received (see note 3)	-	-
2.5 Other (provide details if material)	-	-
2.6 Net cash from / (used in) investing activities	-	-

3. Cash flows from financing activities		
3.1 Proceeds from issues of shares	644	644
3.2 Proceeds from issue of convertible notes	-	-
3.3 Proceeds from exercise of share options	-	-
3.4 Transaction costs related to issues of shares, convertible notes or options	(98)	(119)
3.5 Proceeds from borrowings	-	100
3.6 Repayment of borrowings	(100)	(100)
3.7 Transaction costs related to loans and borrowings	-	-
3.8 Dividends paid	-	-
3.9 Other (provide details if material)	-	-
3.10 Net cash from / (used in) financing activities	446	525

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	54	375
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(408)	(808)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4 Net cash from / (used in) financing activities (item 3.10 above)	446	525
4.5 Effect of movement in exchange rates on cash held	-	-
4.6 Cash and cash equivalents at end of period	92	92

5. Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	92	54
5.2 Call deposits	-	-
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)	92	54

Subsequent to the end of the quarter, the company raised \$643,707 through an Entitlements Issue.

6. Payments to directors of the entity and their associates	Current quarter \$A'000
6.1 Aggregate amount of payments to these parties included in item 1.2	71
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

6.1 - Includes salaries paid to directors, as well as superannuation paid on behalf of directors. A percentage of the Managing Director's salary has been expensed to exploration activities. Also, includes corporate and accounting services paid to a company associated with one of the directors.

7. Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1 Aggregate amount of payments to these parties included in item 1.2	
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

Mining exploration entity and oil and gas exploration entity quarterly report

8. Financing facilities available <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1 Loan facilities	200	-
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

David McArthur, a director of the company, has provided the company with a draw down loan facility of up to \$200,000 for a period of 12 months or until a capital raising by the company. The loan is unsecured with interest payable at 10% per annum, quarterly in arrears.

9. Estimated cash outflows for next quarter	\$A'000
9.1 Exploration and evaluation	25
9.2 Development	-
9.3 Production	-
9.4 Staff costs	43
9.5 Administration and corporate costs	50
9.6 Other (provide details if material)	-
9.7 Total estimated cash outflows	118

10. Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	N/A			
10.2 Interests in mining tenements and petroleum tenements acquired or increased	N/A			

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.



Sign here:

Director and Company Secretary

Date: 25 January 2017

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 that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, 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. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.