

## SEPTEMBER 2018 QUARTERLY ACTIVITIES REPORT

### HIGHLIGHTS

- Diamond drilling of twin holes at Gidgee Flat and Contessa confirms potential for intrusion-related, high-grade gold;
  - Contessa – 5.1m at 28.0g/t Au from 143.0m, including 1.0m at 134.0g/t Au from 143.0m.
  - Gidgee Flat – 6.0m at 2.0g/t Au from 206.5m, including 1.0m at 6.9g/t Au from 211.4m and 6.6m at 2.0g/t Au from 203.7m, including 1.6m at 4.8g/t Au from 208.1m.
- Extensive RC drilling program targeting extensions to bedrock gold mineralisation at Gidgee Flat, Contessa and Central Park commenced.
- Drilling continued throughout October, extending first-pass RC drilling over 270m strike distance at Gidgee Flat. First samples from the program submitted for assay.
- Preliminary metallurgical test work on gold mineralisation from Gidgee Flat transition and primary zones demonstrated excellent gold extraction using conventional cyanide leach.
- Planned activities for the December 2018 quarter include:
  - Heritage survey on the Yowereena tenements in preparation for a program of 5,000m of aircore drilling to test strong gold and pathfinder element geochemical anomalies on the northern margin of the Contessa granite.
  - Interpretation of RC drilling results following receipt of assays. Follow up drilling will be planned once this information has been compiled.

### NED'S CREEK PROJECT (LSR -100%)

Lodestar identified district-scale gold anomalies at Ned's Creek, leading to the discovery of bedrock gold mineralisation at Gidgee Flat and Contessa. Gidgee Flat and Contessa are located 35km east of the 5.5Moz Au Plutonic gold mine, within the highly endowed northern margin of the Yilgarn Craton (see Figures 1 and 2). The targets cluster along the margin of the 6km long Contessa granite and are regarded as intrusion-related gold mineralisation, a style of mineralisation previously unrecognised within the Bryah and Plutonic Well greenstone regions.

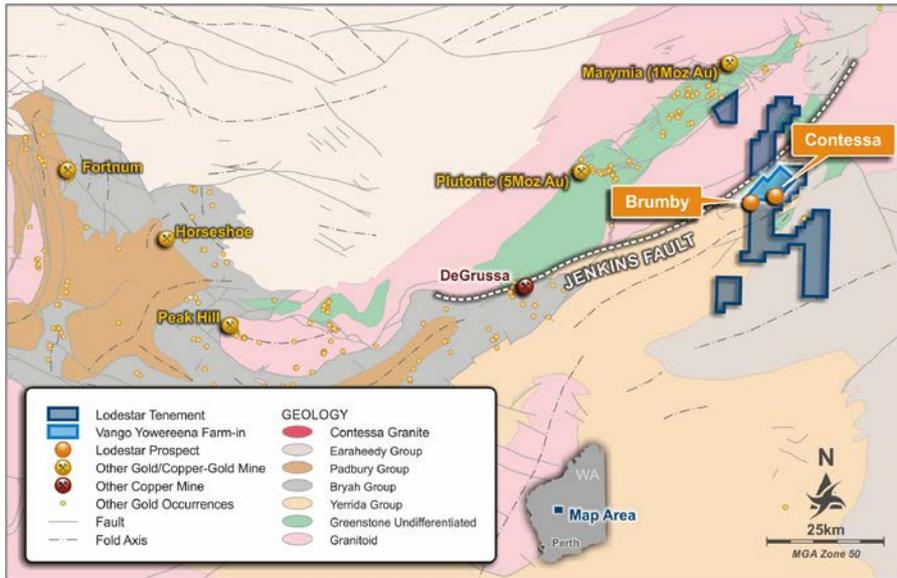


Figure 1 Ned's Creek project location.

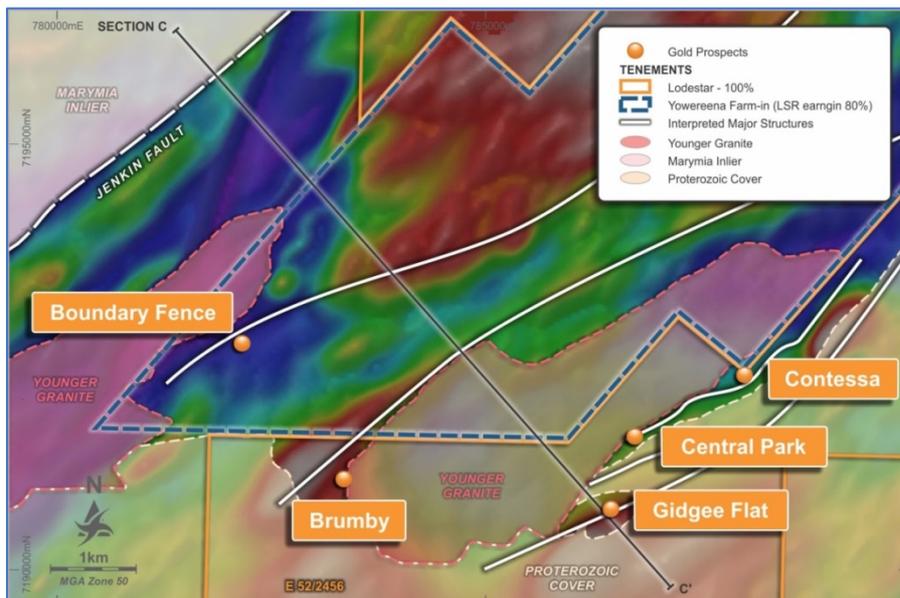


Figure 2 Location plan, showing Contessa, Gidgee Flat prospects on background aeromagnetic image.

### **Successful Twin-Hole Program**

Two diamond drill holes were completed as twin holes targeting high-grade gold intersected in RC drilling at Gidgee Flat and Contessa to identify the orientation of key structures and mineralised zones.

At Contessa, hole LND003 was drilled alongside the discovery hole LNRC026 (4m at 74g/t Au from 140m, including 1m at 151g/t Au from 140m, see Lodestar's ASX announcement dated 12<sup>th</sup> June 2018) to a depth of 156.2m to intersect the mineralised interval in drill core and allow observations of structures not visible in RC drilling.

The diamond drill hole intersected partly oxidised, strongly deformed and altered diorite with local concentrations of pyrite and reported 5.1m at 28g/t Au from 143m, including 1m at 134g/t Au from 143m (see Lodestar's ASX announcement dated 9<sup>th</sup> October 2018). The mineralised interval shows strong feldspar alteration that degrades to clay with weathering. Intervals of broken core resulting from deep weathering prevented reliable core orientation and measurement of the prevailing structures within the mineralised zone.

In-fill RC drilling above and beneath LNRC026, to assist in defining the orientation of high-grade mineralisation, has been completed.

At Gidgee Flat, hole LND004 was drilled alongside LNRC039 (11m at 5.8g/t Au, including grades of up to 28g/t Au, see Lodestar's ASX announcement dated 22<sup>nd</sup> May 2018). LND004 intersected 6.0m at 2.0g/t Au from 206.4m, including 1.01m at 6.9g/t Au from 211.4m (see Lodestar's ASX announcement dated 9<sup>th</sup> October 2018).

Gold mineralisation at Gidgee Flat is associated with concentrations of pyrite within zones of silica-feldspar-haematite-carbonate alteration. The mineralised zones tend to have a close association with felsic intrusives (loosely termed syenites) close to the granite contact and the felsic intrusives also contain sparsely disseminated pyrite.

The variation in gold grade between RC and diamond drilling is believed to result from the local variations in grade and thickness common to many lode-style gold systems. As drilling progresses and more assay results are received the range of variation should become apparent. Diamond drilling confirmed a steep to moderate northerly dip to the mineralised lodes.

### **Follow Up Diamond Hole at Gidgee Flat**

A second diamond hole (LND005) was completed as a tail to LNRC034, extending the hole from 167.0m to 225.8m. LNRC034 was a single hole drilled to target the northern extension of gold mineralisation intersected in aircore drilling. RC drill holes 25m south west of LNRC034 had reported significant gold (e.g. LNRC033 – 18m at 0.9g/t Au from 107m, see Lodestar's ASX announcement dated 22<sup>nd</sup> May 2018) and LNRC034 was extended to intercept the down-dip continuation of this zone. LND005 intersected the predicted mineralised zone, reporting 6.6m at 2.0g/t Au from 203.7m, including 1.6m at 4.8g/t Au from 208.1m.

Gidgee Flat mineralisation is open along strike to the north east and south west and is interpreted to continue 100m north east of LND005 towards aircore hole LNR1079 (9m at 3.4g/t Au from 44m, including 4m at 6.8g/t Au from 44m, see Lodestar's ASX announcement dated 4<sup>th</sup> July 2018). This area has been targeted by RC drilling, to test the potential strike of the Gidgee Flat mineralisation, initially over a distance of 300m.

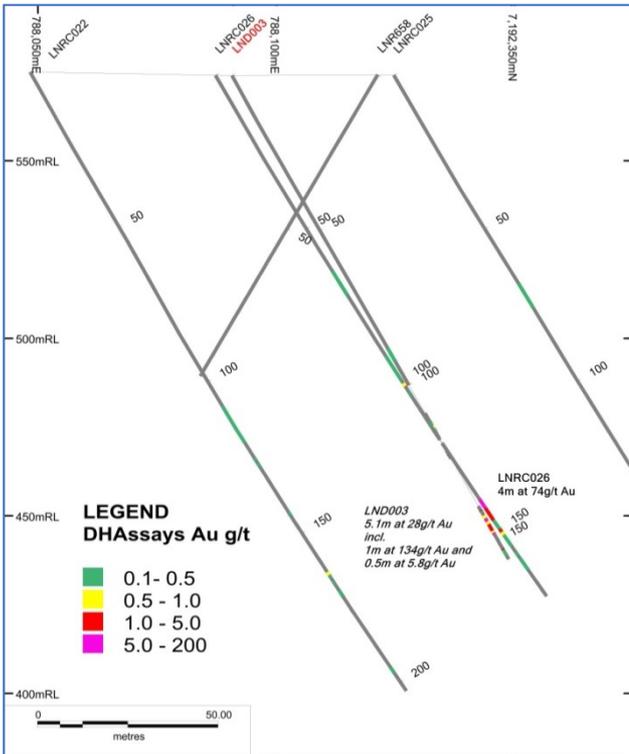


Figure 3 Cross-section looking north east, showing LNRC026 and diamond twin hole LND003



Figure 4 Altered and partly oxidised (iron-stained) drill core from mineralised zone, LND003.

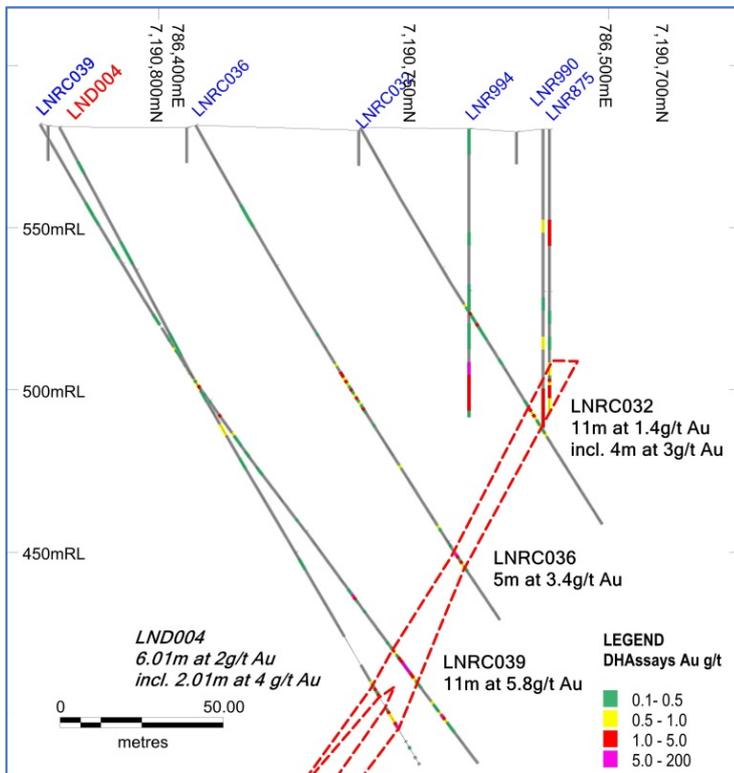


Figure 5 Cross-section looking north east, showing LNRC039 and diamond twin hole LND004.

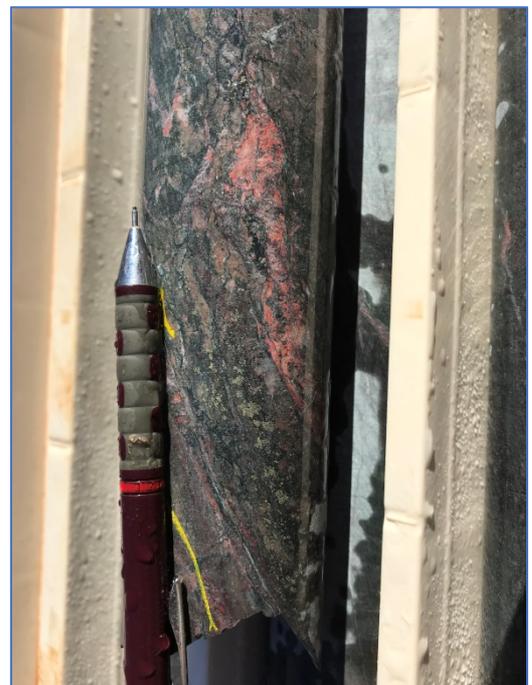


Figure 6 Pyrite mineralisation associated with partly silicified and feldspar altered interval, LND005.

### Preliminary Metallurgical Test Work

Scoping level metallurgical test work was carried out on two bulk samples of Gidgee Flat mineralisation recovered as sample pulps and coarse samples from the first RC drilling program. The pyrite associated, intrusion-related gold mineralisation discovered at Ned's Creek is believed to be a style of mineralisation not previously encountered or recognised within the Bryah or Plutonic Well gold domains. Test work was carried out at a commercial laboratory to determine if the mineralisation is amenable to conventional cyanide leach extraction.

Samples representing transition zone (semi-oxidised) and fresh mineralisation were selected from two drill holes:

- LND033 – 107m to 125m (transition zone), 18m at 0.93g/t Au; and
- LND039 – 195m to 207m, (fresh) 12m at 5.4g/t Au.

Bottle roll cyanide leach tests were carried out on a 1kg bulk sample comprising sample pulps from the selected interval of each drill hole. Both transition zone and primary zone mineralisation show very good extraction of gold from the initial test work (see Table 1), indicating that the gold mineralisation at Gidgee Flat should be suitable for conventional cyanide leach extraction.

**Table 1 Cyanide leach test work results.**

| Drill hole | Sample Type | Interval  | Drill Assay Grade Au (g/t) | Extraction (24hrs)<br>45% solids, 500ppm NaCN, pH=10.5 |
|------------|-------------|-----------|----------------------------|--|
| LNRC033    | Transition  | 107m–125m | 0.93                       | 89.7%  |
| LNRC039    | Fresh       | 195m–207m | 5.4                        | 90.5%  |

### RC Drilling

The program of RC drilling targeting bedrock mineralisation at Contessa, Gidgee Flat and Central Park commenced on the 18<sup>th</sup> September 2018. The specific aims of the program were to:

- Test the high-grade gold mineralisation at Contessa, intersected in LNRC026, with in-fill RC drilling and target potential extensions to this zone up to 80m along strike to the north east.
- To scope strike extensions to bedrock mineralisation at Gidgee Flat to the south west and north east, targeting the granite/syenite contact. Additional drilling was completed around LNRC039, targeting mineralisation at a similar RL to the intersection in LNRC039.
- At Central Park, first-pass RC drilling aimed to demonstrate bedrock mineralisation north and down-dip from the extensive supergene gold anomalies in aircore drilling.

At the end of September a total of 2,062m in 11 holes had been completed. The first samples from the program have been dispatched and were received at the laboratory on 10<sup>th</sup> October 2018, with assay results imminent.

### DECEMBER QUARTER 2018 ACTIVITIES

The following activities are planned for the December quarter 2018:

- A heritage survey over the Yowereena mining leases (LSR 80%) in preparation for a 5,000m aircore drilling program targeting untested, historic geochemical anomalies coincident with north east trending shear zones along the northern margin of the Contessa granite.
- Interpretation of RC drilling results following receipt of assays. Follow up drilling will be planned once this information has been compiled.

## Contacts

| Bill Clayton   | Media enquiries   |
|--|---|
| Managing Director<br><a href="mailto:info@lodestarminerals.com.au">info@lodestarminerals.com.au</a><br>+61 8 9435 3200 | Michael Vaughan, Fivemark Partners<br><a href="mailto:michael.vaughan@fivemark.com.au">michael.vaughan@fivemark.com.au</a><br>+61 422 602 720 |

## About Lodestar

Lodestar Minerals is an active Western Australian gold explorer with a prospective tenement package spanning more than 2,000km<sup>2</sup> at the edge of the Pilbara and Yilgarn Cratons. Lodestar has three main projects – Ned’s Creek, Camel Hills and Imbin – and has an 80% interest in the Yowereena gold project which is adjacent to Ned’s Creek.

Lodestar’s main focus is Ned’s Creek where it was first to identify the potential for syenite intrusion-related gold mineralisation within a craton margin setting and subsequently has made greenfields gold discoveries at the Contessa and Gidgee Flat prospects. Contessa is one of many partly explored gold anomalies located within a large shear zone developed along the southern margin of a 6 kilometre long, elongate composite granite intrusion. The Yowereena gold project provides Lodestar with access to the unexplored northern margin of the Contessa granite and under-explored prospective Archaean greenstone terrane within a region of major gold endowment and production.

## 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*

- 22<sup>nd</sup> May 2018 “Outstanding RC Drill Results at Gidgee Flat and Contessa”.
- 12<sup>th</sup> June 2018 “Confirmation of Exceptional Gold Grades at Contessa”
- 4<sup>th</sup> July 2018 “Aircore Results Confirm Large Bedrock Gold Drill Targets”
- 9<sup>th</sup> October 2018 “Diamond Drilling Returns High Grades – Contessa/Gidgee Flat”

*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 announcements. 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 30 SEPTEMBER 2018

| Tenement Description         | Tenement Numbers | Status      | Percentage Interest  |
|------------------------------|------------------|-------------|--|
| <b>Ned's Creek</b>           |                  |             |  |
| 7 Mile Well                  | E52/2440         | Granted     | 100% - Audacious Resources                                       |
| Yowereena Hill               | E52/2456         | Granted     | 100% - Audacious Resources.                                      |
| Little Well                  | E52/2468         | Granted     | 100% - Audacious Resources                                       |
| Yowereena Hill               | E52/2493         | Granted     | 100% - Audacious Resources                                       |
| Yowereena Hill               | E52/2734         | Granted     | 100% - Lodestar Minerals   |
| Yowereena Hill               | E52/3473         | Granted     | 100% - Lodestar Minerals   |
| Yowereena Hill               | E52/3476         | Granted     | 100% - Lodestar Minerals   |
| Yowereena Hill               | M52/779          | Granted     | 80% - Lodestar Minerals: 20% - Vango Mining                      |
| Yowereena Hill               | M52/780          | Granted     | 80% - Lodestar Minerals: 20% - Vango Mining                      |
| Yowereena Hill               | M52/781          | Granted     | 80% - Lodestar Minerals: 20% - Vango Mining                      |
| Yowereena Hill               | M52/782          | Granted     | 80% - Lodestar Minerals: 20% - Vango Mining                      |
| <b>Imbin – Troy Creek</b>    |                  |             |  |
| Ingebong Hills               | E69/3483         | Granted     | 100% - Lodestar Minerals   |
| Ingebong Hills               | E69/3532         | Application |  |
| Ingebong Hills               | E69/3533         | Application |  |
| <b>Camel Hill / Mt Erong</b> |                  |             |  |
| Meekatharra                  | E09/2099         | Granted     | 100% - Lodestar Minerals   |
| Meekatharra                  | E09/2100         | Granted     | 100% - Lodestar Minerals   |
| Billycan Bore                | E52/3064         | Granted     | 100% - Lodestar Minerals – voluntary partial surrender 10 blocks |
| Meekatharra                  | E09/2215         | 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")

30 SEPTEMBER 2018

| Consolidated statement of cash flows                      | Current quarter<br>\$A'000 | Year to date<br>(3 months)<br>\$A'000 |
|---|----------------------------|---------------------------------------|
| <b>1. Cash flows from operating activities</b>            |                            |                                       |
| 1.1 Receipts from customers                               | -                          | -                                     |
| 1.2 Payments for  |                            |                                       |
| (a) exploration & evaluation                              | (441)                      | (441)                                 |
| (b) development   | -                          | -                                     |
| (c) production  | -                          | -                                     |
| (d) staff costs   | (70)                       | (70)                                  |
| (e) administration and corporate costs                    | (126)                      | (126)                                 |
| 1.3 Dividends received (see note 3)                       | -                          | -                                     |
| 1.4 Interest received                                     | 3                          | 3                                     |
| 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)                   | -                          | -                                     |
| <b>1.9 Net cash from / (used in) operating activities</b> | <b>(634)</b>               | <b>(634)</b>                          |
| <b>2. Cash flows from investing activities</b>            |                            |                                       |
| 2.1 Payments to acquire:                                  |                            |                                       |
| (a) property, plant and equipment                         | (1)                        | (1)                                   |
| (b) tenements (see item 10)                               | -                          | -                                     |
| (c) investments   | -                          | -                                     |
| (d) other non-current assets                              | -                          | -                                     |

| <b>Consolidated statement of cash flows</b>               | <b>Current quarter<br/>\$A'000</b> | <b>Year to date<br/>(3 months)<br/>\$A'000</b> |
|---|------------------------------------|--|
| 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)                   | -                                  | -  |
| <b>2.6 Net cash from / (used in) investing activities</b> | <b>(1)</b>                         | <b>(1)</b>                                     |

|   |            |            |
|---|------------|------------|
| <b>3. Cash flows from financing activities</b>                                  |            |            |
| 3.1 Proceeds from issues of shares  | -          | -          |
| 3.2 Proceeds from issue of convertible notes                                    | -          | -          |
| 3.3 Proceeds from exercise of share options                                     | 703        | 703        |
| 3.4 Transaction costs related to issues of shares, convertible notes or options | -          | -          |
| 3.5 Proceeds from borrowings  | -          | -          |
| 3.6 Repayment of borrowings   | -          | -          |
| 3.7 Transaction costs related to loans and borrowings                           | -          | -          |
| 3.8 Dividends paid  | -          | -          |
| 3.9 Other (provide details if material)   | -          | -          |
| <b>3.10 Net cash from / (used in) financing activities</b>                      | <b>703</b> | <b>703</b> |

|   |              |              |
|---|--------------|--------------|
| <b>4. Net increase / (decrease) in cash and cash equivalents for the period</b> |              |              |
| 4.1 Cash and cash equivalents at beginning of period                            | 1,067        | 1,067        |
| 4.2 Net cash from / (used in) operating activities (item 1.9 above)             | (634)        | (634)        |
| 4.3 Net cash from / (used in) investing activities (item 2.6 above)             | (1)          | (1)          |
| 4.4 Net cash from / (used in) financing activities (item 3.10 above)            | 703          | 703          |
| 4.5 Effect of movement in exchange rates on cash held                           | -            | -            |
| <b>4.6 Cash and cash equivalents at end of period</b>                           | <b>1,135</b> | <b>1,135</b> |

| 5. <b>Reconciliation of cash and cash equivalents</b><br>at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | Current quarter<br>\$A'000 | Previous quarter<br>\$A'000 |
|--|----------------------------|-----------------------------|
| 5.1 Bank balances  | 1,135                      | 1,135                       |
| 5.2 Call deposits  | -                          | -                           |
| 5.3 Bank overdrafts  | -                          | -                           |
| 5.4 Other (provide details)  | -                          | -                           |
| <b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>   | <b>1,135</b>               | <b>1,135</b>                |

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 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

**Current quarter  
\$A'000**

88

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**

- 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

**Current quarter  
\$A'000**

**8. Financing facilities available**

*Add notes as necessary for an understanding of the position*

- 8.1 Loan facilities
- 8.2 Credit standby arrangements
- 8.3 Other (please specify)

**Total facility amount  
at quarter end  
\$A'000**

**Amount drawn at  
quarter end  
\$A'000**

-

-

-

-

-

-

- 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.

| <b>9. Estimated cash outflows for next quarter</b> |                                      | <b>\$A'000</b> |
|--|--------------------------------------|----------------|
| 9.1  | Exploration and evaluation           | 815            |
| 9.2  | Development                          | -              |
| 9.3  | Production                           | -              |
| 9.4  | Staff costs                          | 75             |
| 9.5  | Administration and corporate costs   | 68             |
| 9.6  | Other (provide details if material)  | -              |
| <b>9.7</b>   | <b>Total estimated cash outflows</b> | <b>958</b>     |

| <b>10. Changes in tenements (items 2.1(b) and 2.2(b) above)</b> | <b>Tenement reference and location</b>  | <b>Nature of interest</b> | <b>Interest at beginning of quarter</b> | <b>Interest at end of quarter</b> |
|---|---|---------------------------|---|-----------------------------------|
| 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: 31 October 2018

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.