

27 January 2017

## QUARTERLY ACTIVITIES REPORT

Quarter ended 31 December 2016

### HIGHLIGHTS

#### Chilalo Graphite Project

- Completion of all technical due diligence by CN Docking Joint Investment & Development Co. Ltd (a subsidiary of China National Building Materials) and China Gold Group Investment Co. Ltd (**'Project Partners'**) that included:
  - Independent testwork which confirmed the product quality and marketability of Chilalo graphite
  - A feasibility study carried out by the Suzhou Design and Research Institute for Non-Metallic Minerals
- Identification of a new zone of graphite mineralisation on the Mining Licence area – significant widths of mineralisation intersected included:<sup>1</sup>
  - 68m @ 6.6% Total Graphitic Carbon (**'TGC'**) from 50m in hole NRC16-186, including
    - 18m @ 13.8% TGC from 80m, including
    - 5m @ 20.3% TGC from 91m
  - 45m @ 8.2% TGC from 10m in hole NRC16-184, including
    - 22m @ 11.9% TGC from 10m
- Four strongly conductive, high quality drill targets identified from Fixed Loop Electromagnetic (FLEM) surveys
- Basic flotation testwork which achieved concentrate grades up to 99.4% TGC
- Mining Licence (ML/569/2016) granted for a period of ten years

#### Corporate

- Closing cash balance of \$2.6 million
- Commencement of research coverage by The Sophisticated Investor

<sup>1</sup> Since announcing the results of the RC drilling program on 16 November 2016, Graphex confirms that it is not aware of any new information or data that materially affects the information included in that announcement.

## CHILALO GRAPHITE PROJECT

### Offtake and financing agreements

During the Quarter, the Project Partners completed all technical due diligence on the Chilalo Graphite Project, a key milestone in securing their commitment to offtake and finance.

The technical due diligence was comprehensive and included a feasibility study that was completed by the Suzhou Design and Research Institute for Non-Metallic Minerals. The feasibility study used the results of the extensive product testwork undertaken by the Project Partners over a long period of time to ascertain the flow sheet capable of producing graphite which meets their desired product specifications. The feasibility study contained detailed engineering that refined the capital and operating cost estimates associated with graphite processing.

Completion of the Project Partners' technical due diligence is consistent with the parties' agreement on the specific milestones to be achieved in progressing towards binding agreements for offtake and finance. These milestones include:

- Completion of independent, confirmatory testwork – **completed**;
- Finalisation of due diligence, including confirmation of desired project scale and product specifications – **completed however final scale and specifications now part of negotiations**;
- Finalisation of commercial terms – **substantial discussions have already been held and a term sheet is well advanced**;
- Completion of detailed commercial documentation;
- Approval from the Group boards of the Project Partners; and
- Securing Chinese regulatory approvals required for overseas investment.

### New high-grade zone identified at Chilalo

An RC drilling program that comprised 13 holes for 1,365 metres identified a new mineralised zone in close proximity to the current mineral resource (Shimba) on the Mining Licence area (Figures 1, 2 and 3). Assay results confirmed:

- The discovery of a new zone of mineralisation with a high-grade core within significant widths of mineralisation, located 200-300m to the north of Shimba. This deposit remains open to the north-east; and
- A south-west extension of the Shimba mineral resource.

Figure 1 presents a plan view showing the drill hole locations and Figure 2 shows a cross section for the new zone of high-grade mineralisation.<sup>2</sup>

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<sup>2</sup> Since announcing the results of the RC drilling program on 16 November 2016, Graphex confirms that it is not aware of any new information or data that materially affects the information included in that announcement.

Figure 1: Plan view showing drill hole locations and assay results on FLEM imagery

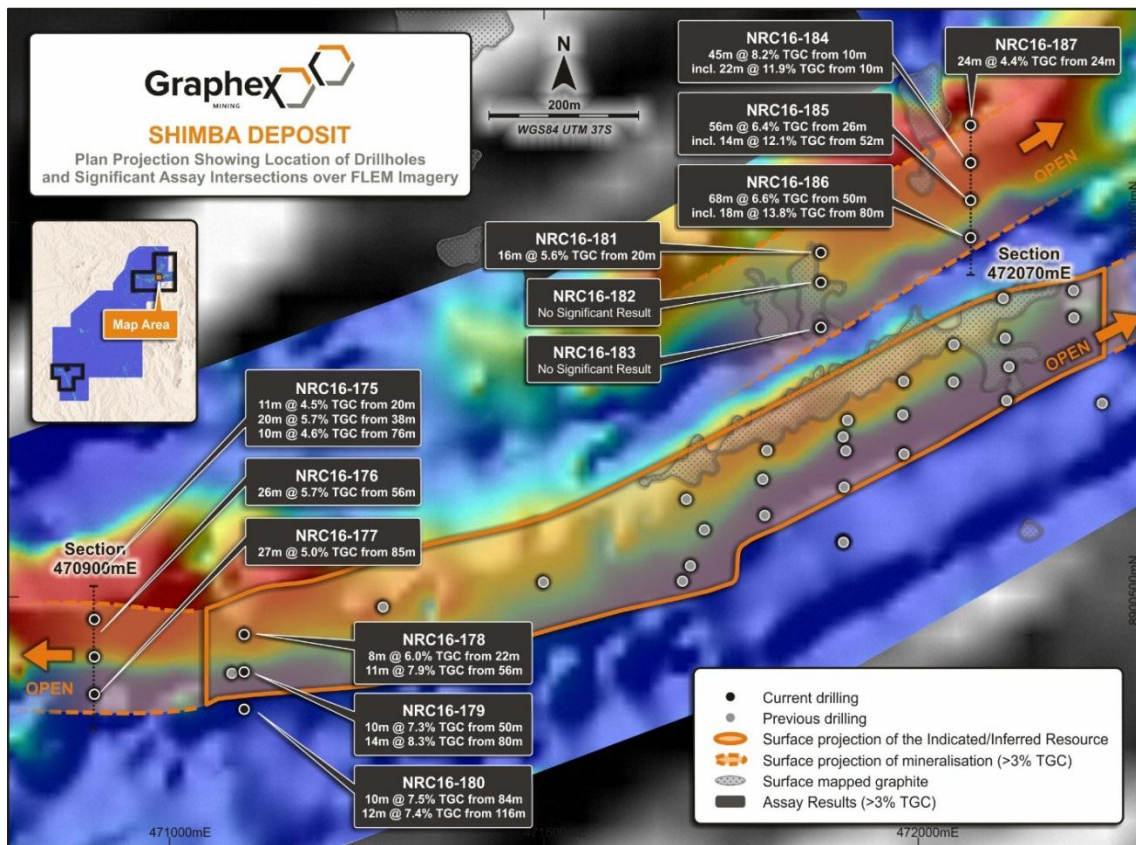
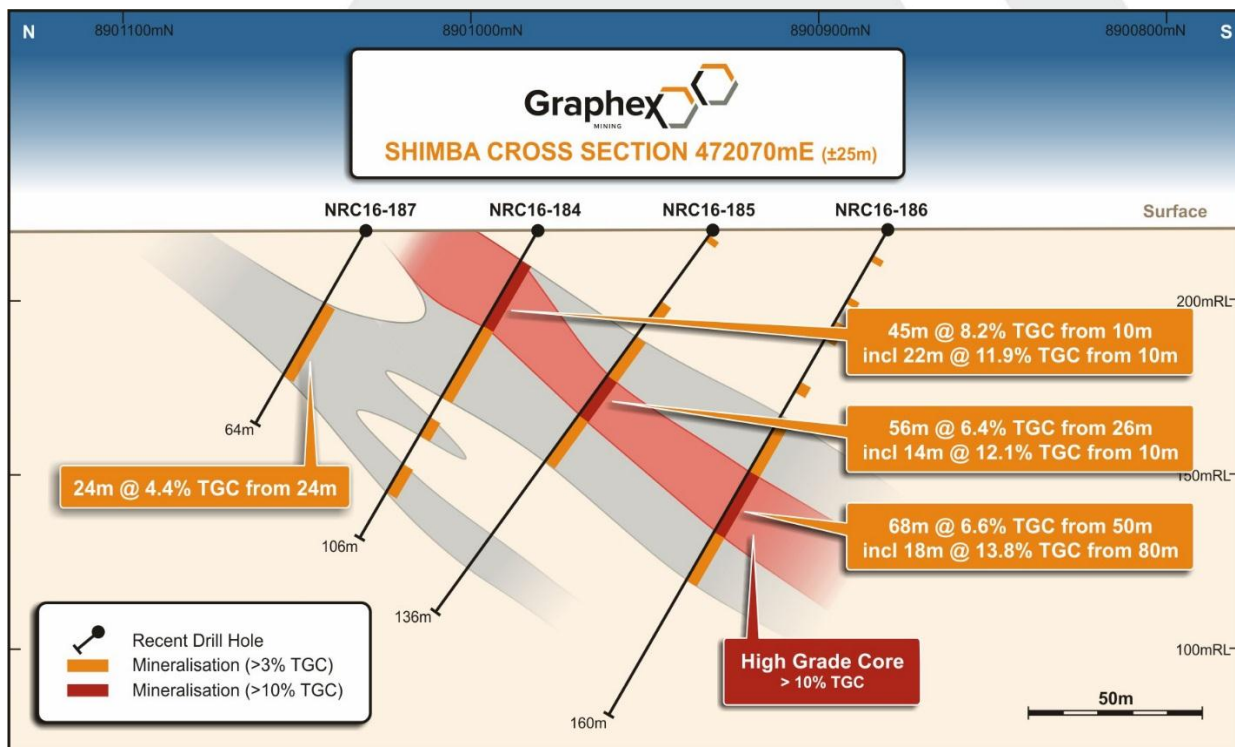


Figure 2: Cross-section 472070E





The targets for the RC drilling program were derived principally from a FLEM survey, with this most recent success validating the use of FLEM surveys as a cost-effective means of identifying quality drilling targets. To date, only 0.8km of the 34km of high conductance targets at Chilalo have been tested.

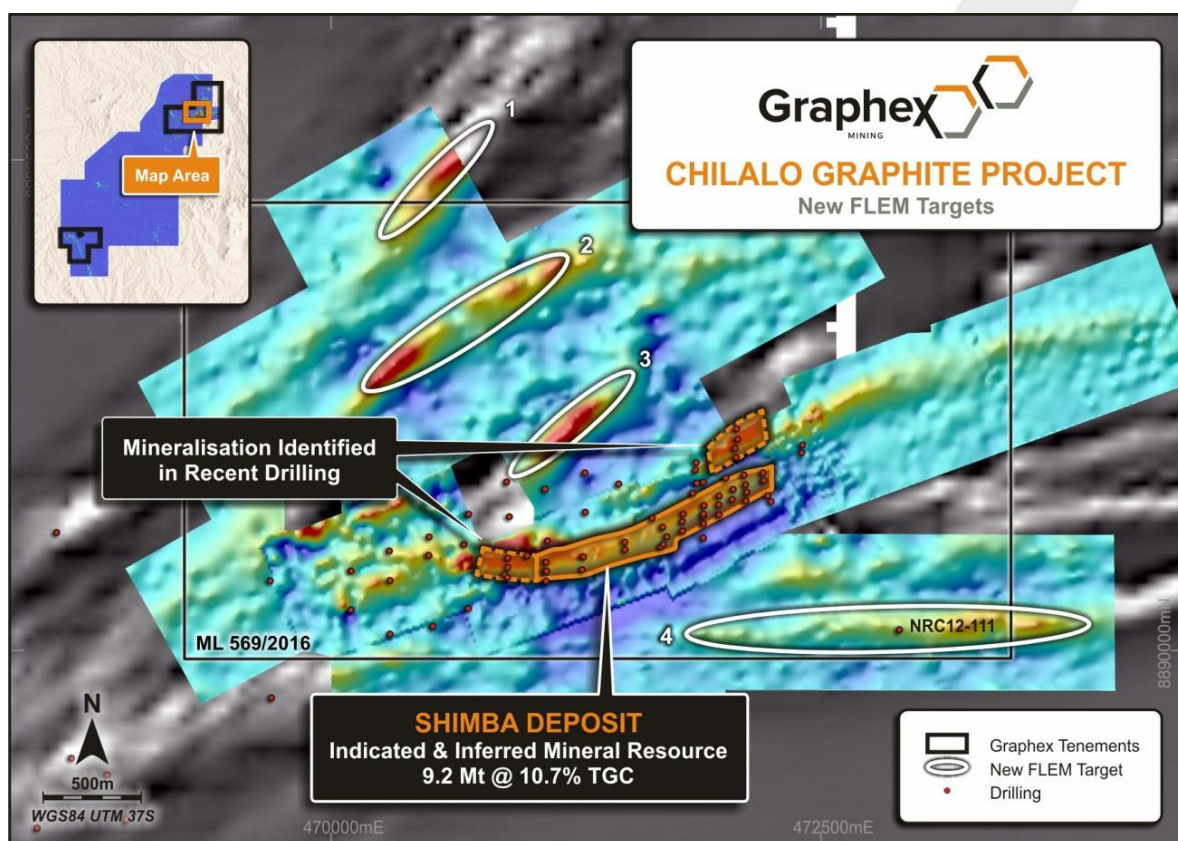
The results of the RC drilling program are expected to underpin an increase in the existing mineral resource, which is likely to provide an improvement to the already favourable project economics. Resource modelling is nearing completion and announcement of an updated Mineral Resource is expected in the coming days.

### Geophysical survey work

A FLEM survey conducted over the Chilalo Mining Licence area identified four strongly conductive, high quality drill targets, with the potential to increase Chilalo's graphite resources. The conductors are located in close proximity to the high-grade Shimba Mineral Resource.

Three of the conductors (Conductors 1, 2 and 3) are located to the north of Shimba, all of which had FLEM responses that indicate the potential for thick and/or high grade graphitic mineralisation and are yet to be drilled. Conductor 4 is located to the south of Shimba and has a single historic drill hole which was part of a nickel exploration program conducted by IMX Resources Limited in 2012. Geological logging from this hole identified that it included an intersection of 41m of graphitic gneiss, with the mineralisation open at the end of the hole.<sup>3</sup> Figure 3 shows the location of the four high-conductance targets.

**Figure 3: Location of recently identified FLEM targets – Conductors 1, 2, 3 and 4**



<sup>3</sup> Since announcing these exploration results on 15 December 2016, Graphex confirms that it is not aware of any new information or data that materially affects the information included in that announcement.

The FLEM survey was carried out as a cost effective means of sterilising the Chilalo Mining Licence area for the dual purpose of confirming that the assumed locations of infrastructure in the PFS remain suitable and to identify targets in close proximity to the Shimba Mineral Resource.

### Basic flotation achieves 99.4% purity

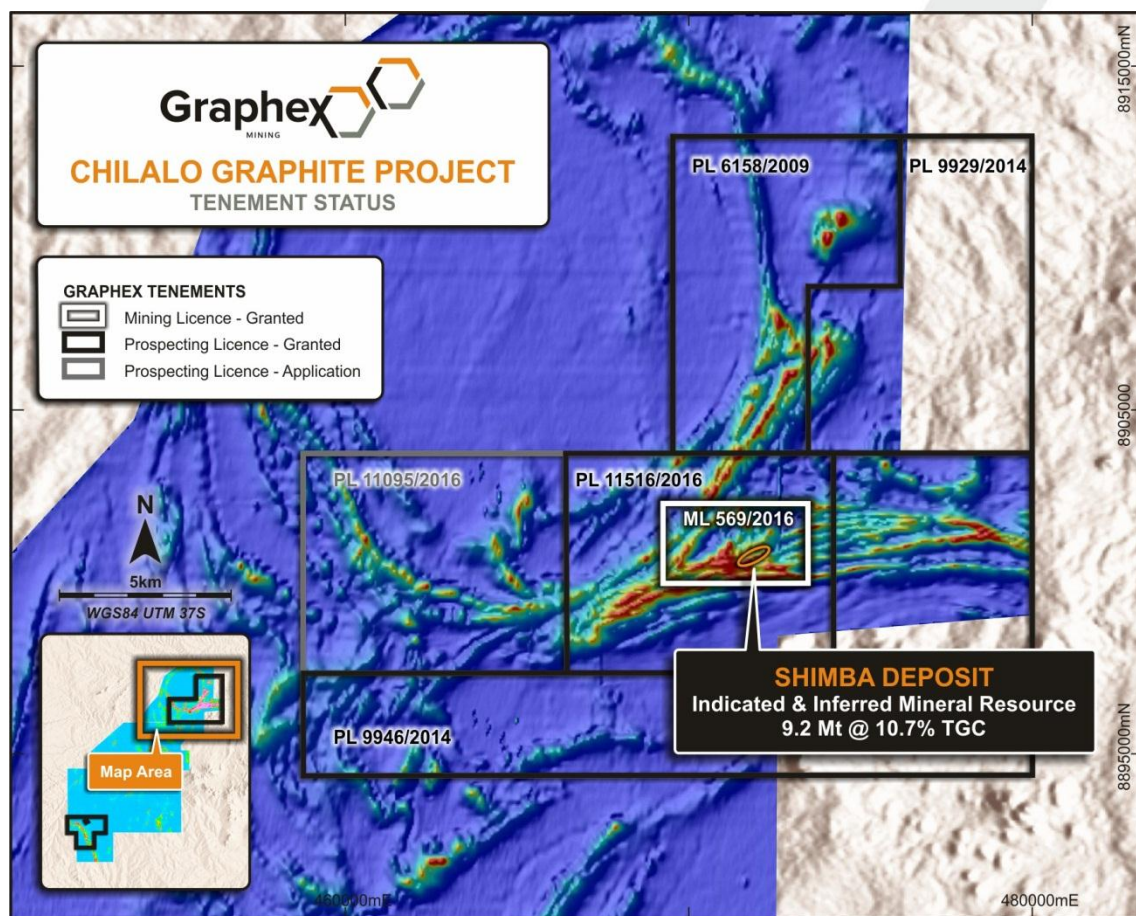
During the Quarter, the Company carried out basic flotation testwork on Chilalo graphite, which achieved concentrate grades of up to 99.4% TGC. The testwork confirmed that Chilalo is capable of producing high purity concentrates through basic flotation.

While these results provide optionality for the markets that Chilalo graphite can access, the Company continues to receive consistent and strong feedback from potential buyers on the importance of preservation of flake size distribution and expandability, and it is these characteristics that make Chilalo graphite desirable and which will continue to be the key focus for the Company.

### Chilalo Mining Licence

During the Quarter, the Company was notified by the Tanzania Ministry of Energy and Minerals that it had been granted a Mining Licence (ML/569/2016) for the Chilalo Graphite Project. ML/569/2016 covers an area of 10km<sup>2</sup> (Figure 4) and has been granted for a period of 10 years. Mining Licences can be renewed following the initial 10 year period and, if an area greater than 10km<sup>2</sup> is required, additional Mining Licences can be applied for.

Figure 4. Location of Chilalo Mining Licence ML/569/2016



## CORPORATE

### Cash

As at 31 December 2016, the Company had cash of \$2.6 million.

### Share capital

As part of the initial public offering ('IPO') completed in the June Quarter, the Company issued 55,000,000 ordinary shares and 11,666,667 Loyalty Options. An additional 12,365,316 unquoted options were issued to advisors to the IPO, directors and employees.

The Loyalty Options were issued to subscribers under the IPO and vested on 14 September 2016 ('Vesting Date') subject to the number of shares held by subscribers on the Vesting Date. As at 31 December 2016, 7,826,475 Loyalty Options are unexercised, with 2,499,585 having lapsed on the Vesting Date and a further 1,491,021 having been exercised since the Vesting Date.

During the Quarter, 133,913 options were exercised and 112,610 shares issued as consideration for capital markets advisory services. As a result, the Company now has 56,603,631 issued and outstanding ordinary shares.

### Annual General Meeting

The Company held its Annual General Meeting on 17 November 2016. A total of five resolutions were put to shareholders, all of which were passed.

## TENEMENT INTERESTS

Table 1 shows the Company's tenement interests as at 31 December 2016.

**Table 1. Tenement interests**

| Tenement                     | Ownership | Project | Location |
|------------------------------|-----------|---------|----------|
| ML 569/2016 - Chilalo        | 100%      | Chilalo | Tanzania |
| PL 11516/2016 - Chilalo      | 100%      | Chilalo | Tanzania |
| PL 5447/2008 - Noli SE       | 100%      | Chilalo | Tanzania |
| PL 6158/2009 - Kiperere East | 100%      | Chilalo | Tanzania |
| PL 8628/2012 - Kipendengwa   | 100%      | Chilalo | Tanzania |
| PL 9929/2014 - Chikwale      | 100%      | Chilalo | Tanzania |
| PL 9946/2014 - Machangaja    | 100%      | Chilalo | Tanzania |

During the Quarter, the Company was granted a Mining Licence (ML 569/2016) which is located within the area covered by the former Prospecting Licence PL 6073/2009. The area that was covered by PL 6073/2009 is now represented by ML 569/2016 and PL 11516/2016.



**PHIL HOSKINS**  
Managing Director

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**About Graphex**

Graphex Mining Limited is an Australian exploration and development company, dedicated to advancing the world class Chilalo Graphite Project, located in south-east Tanzania. Chilalo is host to a high-grade mineral resource and has demonstrated an ability to produce a premium graphite concentrate with a substantial portion of large and jumbo flake material. Chilalo graphite possesses outstanding expandability characteristics, making it ideally suited to the rapidly growing expandable graphite market.

Graphex's current focus of effort is on securing offtake and financing agreements for the development of Chilalo. In accordance with an existing MOU, Graphex is working closely with CN Docking Joint Investment & Development Co. Ltd, a subsidiary of China National Building Materials and China Gold Group Investment Co. Ltd. on the negotiation of such agreements.

Graphex has an experienced board and management team with specific skills and extensive experience in African based project development, exploration, mining and processing. Tanzania is a stable democracy, with a globally competitive tax and regulatory regime. The Company has a long and well-established presence in Tanzania.

For more information, visit [www.graphexmining.com.au](http://www.graphexmining.com.au).





## 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

Graphex Mining Limited

### ABN

77 610 319 769

### Quarter ended ("current quarter")

31 December 2016

| Consolidated statement of cash flows                      | Current quarter<br>\$A'000 | Year to date<br>(6 months)<br>\$A'000 |
|---|----------------------------|---------------------------------------|
| <b>1. Cash flows from operating activities</b>            |                            |                                       |
| 1.1 Receipts from customers                               | -                          | -                                     |
| 1.2 Payments for  |                            |                                       |
| (a) exploration & evaluation                              | (602)                      | (1,173)                               |
| (b) development   | -                          | -                                     |
| (c) production  | -                          | -                                     |
| (d) staff costs   | (191)                      | (376)                                 |
| (e) administration and corporate costs                    | (533)                      | (972)                                 |
| 1.3 Dividends received (see note 3)                       | -                          | -                                     |
| 1.4 Interest received                                     | 10                         | 32                                    |
| 1.5 Interest and other costs of finance paid              | -                          | -                                     |
| 1.6 Income taxes paid                                     | -                          | -                                     |
| 1.7 Research and development refunds                      | -                          | -                                     |
| 1.8 Other (Business Development)                          | (44)                       | (126)                                 |
| <b>1.9 Net cash from / (used in) operating activities</b> | <b>(1,360)</b>             | <b>(2,615)</b>                        |

|  |     |      |
|--|-----|------|
| <b>2. Cash flows from investing activities</b> |     |      |
| 2.1 Payments to acquire:                       |     |      |
| (a) property, plant and equipment              | (7) | (10) |
| (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/>(6 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</b>                                  | <b>Net cash from / (used in) investing activities</b> | <b>(7)</b>                         | <b>(10)</b>                                    |

|             |   |              |              |
|-------------|---|--------------|--------------|
| <b>3.</b>   | <b>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                                     | 164          | 373          |
| 3.4         | Transaction costs related to issues of shares, convertible notes or options | (1)          | (247)        |
| 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</b> | <b>Net cash from / (used in) financing activities</b>                       | <b>(163)</b> | <b>(126)</b> |

|            |  |              |              |
|------------|--|--------------|--------------|
| <b>4.</b>  | <b>Net increase / (decrease) in cash and cash equivalents for the period</b> |              |              |
| 4.1        | Cash and cash equivalents at beginning of period                             | 3,780        | 5,075        |
| 4.2        | Net cash from / (used in) operating activities (item 1.9 above)              | (1,360)      | (2,615)      |
| 4.3        | Net cash from / (used in) investing activities (item 2.6 above)              | (7)          | (10)         |
| 4.4        | Net cash from / (used in) financing activities (item 3.10 above)             | 163          | 126          |
| 4.5        | Effect of movement in exchange rates on cash held                            | 17           | 17           |
| <b>4.6</b> | <b>Cash and cash equivalents at end of period</b>                            | <b>2,593</b> | <b>2,593</b> |

| <b>5. 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 | <b>Current quarter<br/>\$A'000</b> | <b>Previous quarter<br/>\$A'000</b> |
|--|------------------------------------|-------------------------------------|
| 5.1 Bank balances  | 841                                | 1,780                               |
| 5.2 Call deposits  | 1,752                              | 2,000                               |
| 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>2,593</b>                       | <b>3,780</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

| <b>Current quarter<br/>\$A'000</b> |
|------------------------------------|
| 72                                 |
| Nil                                |

Non-executive Directors fees and Managing Director's salary.

**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

| <b>Current quarter<br/>\$A'000</b> |
|------------------------------------|
| Nil                                |
| Nil                                |

| 8. <b>Financing facilities available</b><br><i>Add notes as necessary for an understanding of the position</i>   | <b>Total facility amount<br/>at quarter end<br/>\$A'000</b> | <b>Amount drawn at<br/>quarter end<br/>\$A'000</b> |
|--|---|--|
| 8.1 Loan facilities  | -   | -  |
| 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. |   |  |

|  |
|--|
|  |
|--|

| 9. <b>Estimated cash outflows for next quarter</b> | <b>\$A'000</b> |
|--|----------------|
| 9.1 Exploration and evaluation                     | (774)          |
| 9.2 Development                                    | -              |
| 9.3 Production                                     | -              |
| 9.4 Staff costs                                    | (239)          |
| 9.5 Administration and corporate costs             | (226)          |
| 9.6 Other (Business Development)                   | (120)          |
| <b>9.7 Total estimated cash outflows</b>           | <b>(1,360)</b> |

| 10. <b>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 | PL 6073/2009                           | Prospecting license (Tanzania) | 100%                                    | Nil                               |
| 10.2 Interests in mining tenements and petroleum tenements acquired or increased           | PL 11516/2016                          | Prospecting license (Tanzania) | Nil                                     | 100%                              |
|  | ML 569/2016                            | Mining license (Tanzania)      | Nil                                     | 100%                              |

During the Quarter, the Company was granted a Mining Licence (ML 569/2016) which is located within the area covered by the former Prospecting Licence PL 6073/2009. The area that was covered by PL 6073/2009 is now represented by ML 569/2016 and PL 11516/2016.

**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: .....  
(Company secretary)

Date: 27 January 2016

Print name: Stuart McKenzie

**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.