

## Quarterly Report – December 2017

### Highlights

- **Completion of Entitlement Offer raises \$13.87m** – To accelerate project development activities at Mt Mulgine, in early October the Company launched a Non-Renounceable Entitlement Offer raising \$13.87m before costs. Funds raised will be applied towards completing feasibility studies, detailed engineering, to secure long lead items and other works related to the development of the Mt Mulgine Tungsten Project.
- **Non-binding MoU signed with Xiamen Tungsten Co., Ltd** – execution of a non-binding MoU with Xiamen Tungsten Co., Ltd (XTC) in relation to the Mt Mulgine Project and co-operation in relation to concentrate offtake and technical assistance. In mid-January senior management of XTC hosted meetings attended by the entire Tungsten Mining board in Xiamen, China. This included an opportunity to visit their tungsten and battery materials processing facilities and China National R&D Centre for Tungsten Technology.
- **Global tungsten price recovery sustained** – Global tungsten prices recovered substantially in the prior quarter as environmental inspections in China saw plant closures and tightening supply. Prices for ammonium para tungstate (APT) prices have remained strong through the December quarter with the APT price some 55% higher in December 2017 than 12 months earlier.
- **Relocation of modular processing plant to the Mt Mulgine Tungsten Project** – modular heavy mineral gravity processing plant was safely relocated from Pilgangoora mine site to a secure laydown area located adjacent to the Golden Dragon gold processing plant.
- **Commencement of ECI phase** – to incorporate modular processing plant into flowsheet design and provide the basis for the development of a reliable capital and operating cost estimate.
- **Director appointment** – Following the end of the quarter, the Company announced the appointment of Tan Sri Dato Tien Seng Law to the Board as a Non-executive Director and Deputy Chairman.
- **Cash position** – The Company's cash position as at 31 December 2017 was \$15.92m.

### Commentary

During the December quarter Tungsten Mining has built upon the momentum achieved in past quarters by accelerating project work on the Mt Mulgine Tungsten Project. Following completion of a \$13.87m capital raising the Company is ideally positioned to take full advantage of the improving tungsten market and fulfil its stated objective of becoming a producer of tungsten concentrate.

In seeking to establish a strategic partnership with Xiamen Tungsten Company., Ltd (XTC) of China the Company has identified a pathway to further accelerate its technical development and capability. The MoU announced in early November reflects the intention of the parties to work together to build a long standing commercial relationship.

Tungsten Mining enters 2018 with a substantial body of project work completed, financially strong and with a clear strategy to advance from project developer to tungsten producer.

## Tungsten Mining

Tungsten Mining NL (“the Company”) is focussed on the discovery and development of tungsten deposits in Australia. The Company’s key projects are Mt Mulgine, Big Hill and Kilba Projects, all in Western Australia.

Through exploration and acquisition, the Company has established a portfolio of advanced tungsten projects with Mineral Resources at a 0.10% WO<sub>3</sub> cut-off comprising Indicated Resources of 14.8Mt at 0.21% WO<sub>3</sub> and 35ppm Mo and Inferred Resources of 72.5Mt at 0.17% WO<sub>3</sub> and 220ppm Mo, totalling 87.4Mt at 0.18% WO<sub>3</sub> and 188ppm Mo. This represents more than 15.6 million MTU (metric tonne units) of WO<sub>3</sub> and 16,400 tonnes of contained Mo, providing the platform for the Company to become a globally significant player within the primary tungsten market through the development of low cost tungsten concentrate production.

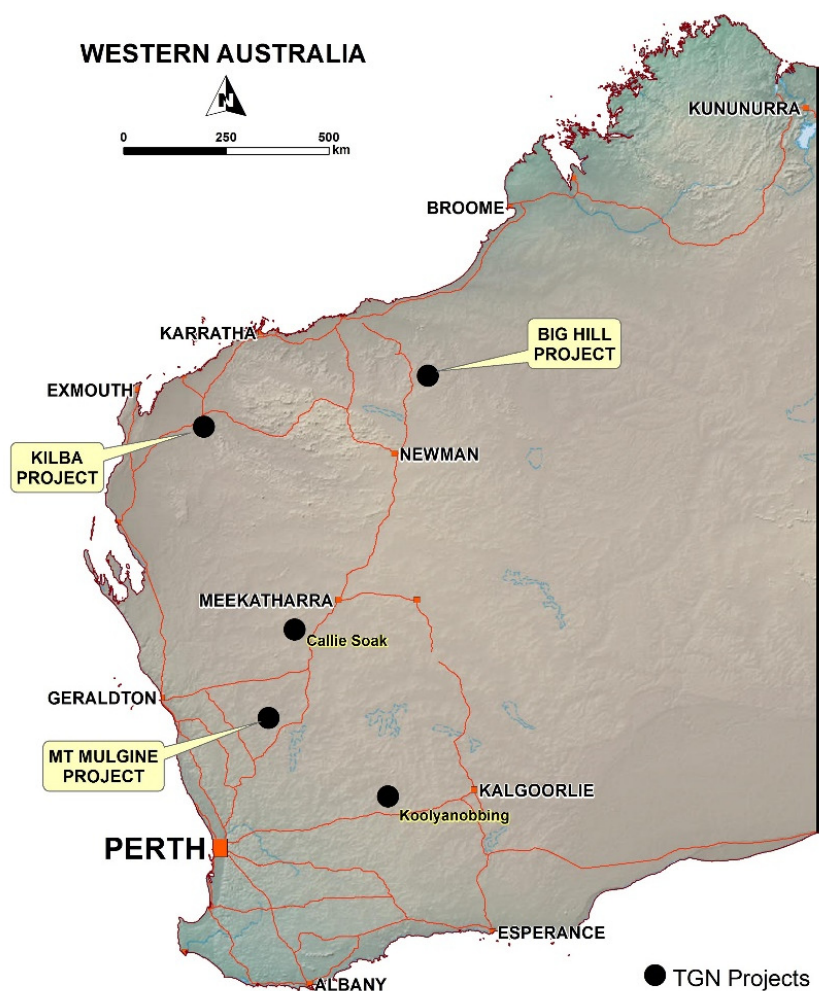


Figure 1 – Project location map

## Mt Mulgine Project, Murchison WA

The Mt Mulgine Project is located within the Murchison Region of Western Australia, approximately 350km north northeast of Perth. The Company has 100% of the tungsten and molybdenum rights on a contiguous group of tenements that have been the subject of significant previous exploration for tungsten and molybdenum.

Two near surface Mineral Resources have been delineated at the Mulgine Trench and Mulgine Hill deposits. Currently, there is a combined Mineral Resource estimate of 70.9Mt at 0.18% WO<sub>3</sub> and 230ppm Mo (0.10% WO<sub>3</sub> cut-off) comprising Indicated Resources of 4.5Mt @ 0.24% WO<sub>3</sub> and 120ppm Mo and Inferred Resources of 66.4Mt @ 0.18% WO<sub>3</sub> and 240ppm Mo.

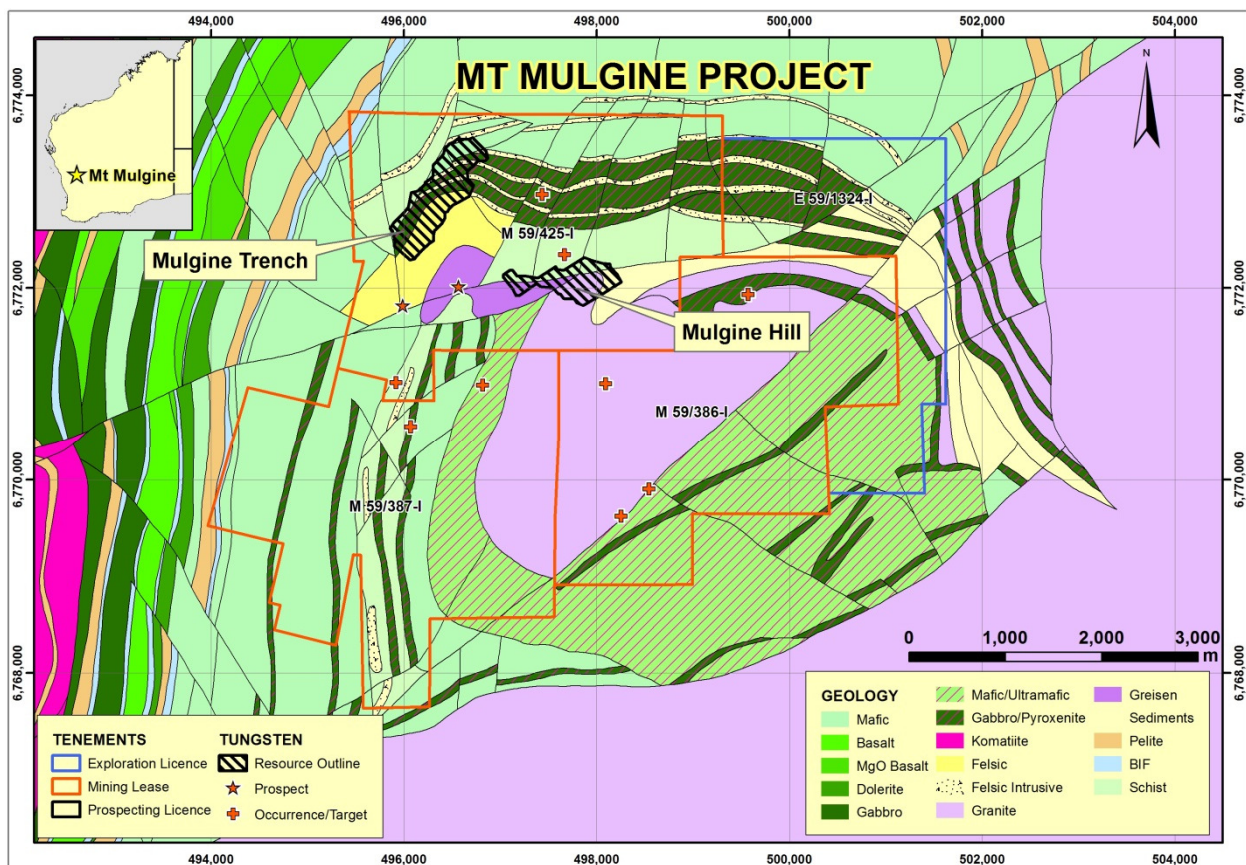


Figure 2 –Mt Mulgine project geology

## Mt Mulgine Strategic Development Plan

The Company continues to deliver on the Strategic Development Plan for the Mt Mulgine Project, directed towards the production of tungsten concentrate.

| Task   | Mar 17 | Jun 17 | Sep 17 | Dec 17 | Mar 18 | Jun 18 | Sep 18 | Dec 18 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Geology and resource development             |        |        |        |        |        |        |        |        |
| Metallurgy                                   |        |        |        |        |        |        |        |        |
| Engineering                                  |        |        |        |        |        |        |        |        |
| Pilot Scale Test work                        |        |        |        |        |        |        |        |        |
| Project management, permitting and approvals |        |        |        |        |        |        |        |        |
| Marketing and Commercial                     |        |        |        |        |        |        |        |        |
| Mining                                       |        |        |        |        |        |        |        |        |
| Production                                   |        |        |        |        |        |        |        |        |

Figure 3 – Mt Mulgine Strategic Development Plan – Indicative Project Schedule

For the December quarter, work was focussed on the following activities:

- Relocation of the near new modular heavy mineral gravity processing plant from Pilgangoora to a laydown area located adjacent to the Golden Dragon processing plant;
- Commencement of an ECI (early contractor involvement) phase to provide definition to the flowsheet design, incorporating the modular heavy mineral gravity processing plant;
- Commencement of sterilisation drilling at Mulgine Hill to assist in designing the mine site layout and location of infrastructure;
- Commencement of various work packages including waste rock and tailings characterisation to support the mining proposal;
- Completion of Spring flora survey and subsequent development of a NVCP (native vegetation clearing permit);
- Continued Phase 2 R&D activities with CSIRO on the recovery of tungsten from the oxide layer of the Mt Mulgine deposit;
- Progression of pit optimisation modelling and subsequent pit designs.
- Execution of a non-binding MoU (Memorandum of Understanding) with XTC (Xiamen Tungsten Co. Ltd) in relation to the Mt Mulgine Project and co-operation in relation to concentrate offtake and technical assistance.

Major planned activities for the March quarter will be:

- Completion of the Early Contractor ECI process;
- Advance activities directed at defining the optimum contracting strategy for the project implementation phase, operational readiness and beyond;
- Completion of sterilisation drilling;
- Progressing the various activities required to support the preparation of a Mining Proposal, Works Approval and other regulatory requirements prior to operations;

- Finalisation of mine site design and layout.
- Continued R&D on the recovery of tungsten from the oxide layer of the Mt Mulgine deposit.

## **Mulgine Hill**

At Mulgine Hill, mineralisation is associated with the sub-horizontal upper contact of a mafic schist unit and overlying quartz-muscovite greisen. Tungsten occurs as scheelite in coarse disseminations within the greisen or within numerous quartz and greisen veins in both the mafic schists and the quartz-muscovite greisen.

During August 2016, the Company drilled 26 reverse circulation (RC) holes for 1,007 metres and five large diameter (PQ) diamond holes for 202.4 metres at Mulgine Hill to test shallow tungsten mineralisation (refer ASX Announcement 23 September 2016).

Results from this drilling were encouraging, intersecting thick zones of tungsten mineralisation at all target areas. Drilling confirmed continuity of mineralisation within the existing Mineral Resource plus defined extensions in both fresh and weathered material along strike and down dip.

### ***Resource Update***

Interpretation of all new data collected since the June 2016 Mulgine Hill Mineral Resource estimate was completed during the June 2017 quarter. Specialist Mineral Resource consultants, Optiro Pty Ltd were engaged to update the Mulgine Hill Mineral Resource estimate. Two new components have been added to the 2017 Mineral Resource estimate, comprising the introduction of a high-grade sub-domain for the Main Zone and a Mineral Resource reporting constraint addressing the prospects for eventual economic extraction.

The Mineral Resource estimate for Mulgine Hill as of 30 June 2017 is 7,100,000 tonnes at 0.23% WO<sub>3</sub> and 98 ppm Mo (Refer to ASX announcement dated 28 July 2017).

### ***December 2017 Quarter Drilling***

During the quarter, 37 RC holes for 2,692 metres were drilled on the Mt Mulgine Project. The objectives of this drilling were to complete sterilisation drilling across two proposed waste landforms locations and complete the 40 metre drill spacing over optimised pits at Mulgine Hill.

A total of 28 holes for 2,344 metres were completed across proposed waste landforms. Geological logging and UV lamping identified numerous zones of tungsten (scheelite) mineralisation present to the south of the Mulgine Hill Mineral Resource. This tungsten mineralisation was associated with quartz veining in greisen and amphibolite.

Two holes on the Mulgine granite contact immediately south of Mulgine Hill intersected visible molybdenite associated with scheelite mineralisation in quartz veined greisen up to 10 metre thick. The historic diamond hole DDM040 drilled by Minefields Exploration NL in the 1970s on the southern strike extension intersected 10.7 metres at 0.12% WO<sub>3</sub> and 0.21% Mo in a similar geological setting.

Completion of 40 metre spaced infill drilling of optimised pits at Mulgine Hill was commenced during the quarter. A total of 9 holes for 348 metres were drilled before the end of the quarter with the drilling scheduled to continue from early February.

Results from drilling are expected in the March quarter.

## **Mulgine Trench**

Tungsten mineralisation at Mulgine Trench is hosted by quartz-scheelite veins in mafic and ultramafic volcanics in a 100 to 250 metre thick zone that extends over 1.5 kilometres of strike. Mineralisation is open



along strike and down dip and is associated with foliation parallel quartz veins generally less than 10 centimetres in width. Mineralisation is strongest where quartz veining averages 15 – 20% of the total rock volume.

Tungsten Mining's strategy at Mulgine Trench is to target potentially low strip ratio fresh tungsten and molybdenum mineralisation beneath and adjacent to the Bobby McGee pit and gain a greater understanding of the Mulgine Trench oxide layer.

During August 2016, the Company drilled 9 RC holes for 476 metres at Mulgine Trench to test tungsten mineralisation adjacent to and beneath the Bobby McGee pit (Figure 4). Results from this drilling have been extremely encouraging, intersecting substantial thicknesses of low to medium grade tungsten mineralisation including 72 metres at 0.16% WO<sub>3</sub> and 0.02% Mo from surface in MMC030.

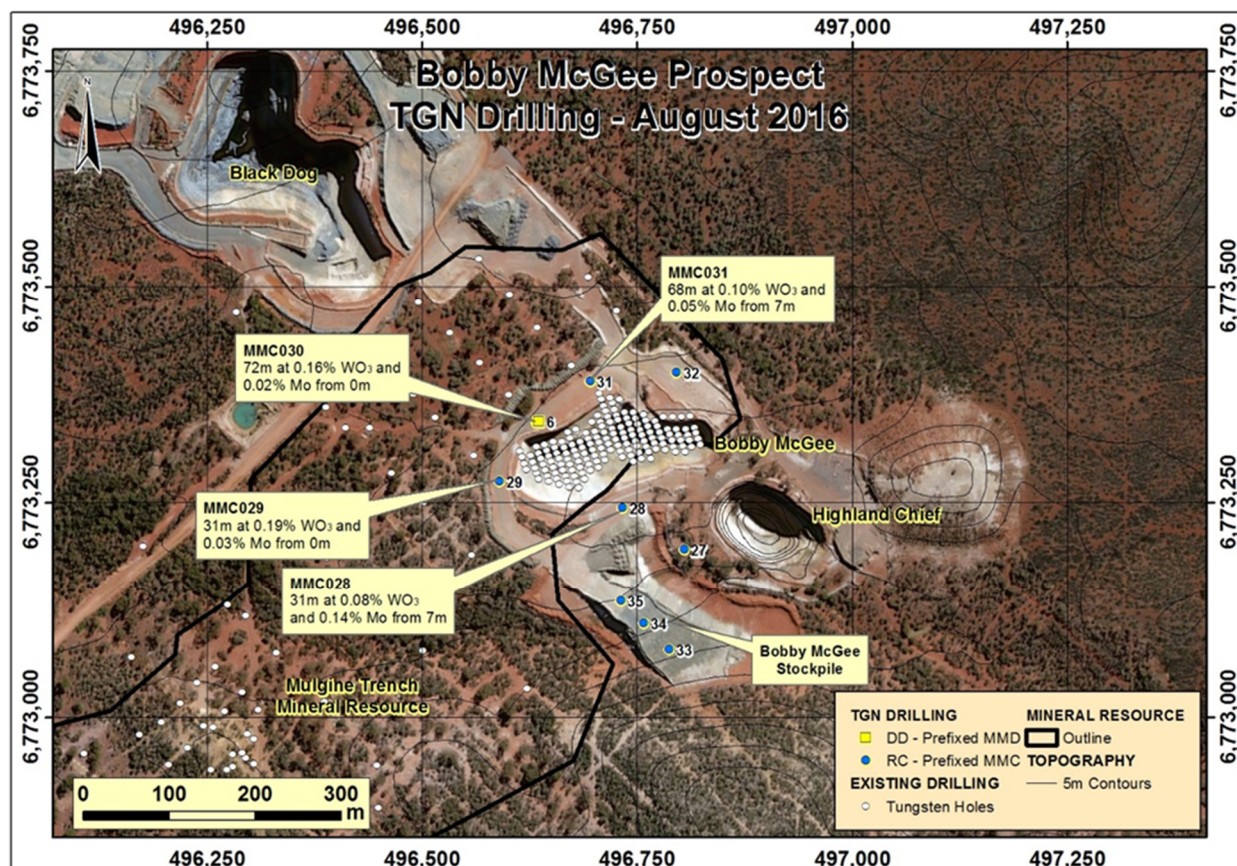


Figure 4 – Plan displaying better results from Tungsten Mining's drilling around the Bobby McGee pit.

### Diamond Drilling

In August 2016, the large diameter (PQ) diamond hole MMD006 was drilled to provide material for metallurgical studies of the oxide layer at Mulgine Trench. This hole twinned MMC030 that assayed 32 metres at 0.13% WO<sub>3</sub> over the corresponding interval.

Four samples from MMD006 containing tungsten mineralisation were examined to determine the mineralogy and distribution of tungsten in the Mulgine Trench oxide layer, the details of which are described further below.

### Early Contractor Involvement (ECI) Phase

In October, engineering group Minnovo Pty Ltd were awarded the scope of work to complete an ECI phase with the main objective of enhancing project value by defining and developing the project parameters that

most effect project economics. This phase has involved the review of metallurgical test work to drive flowsheet development, with the design inclusive of the recently acquired modular plant. This will also include the development of a reliable capital and operating cost estimate.

Another important activity of the ECI process has been the familiarisation of the modular processing plant, including installation and fabrication requirements to support the project implementation phase.

Completion of the ECI phase is due early February.

## Metallurgical Testwork

### *Oxide/Weathered Layer R&D*

As previously reported, the quantity of oxidised tungsten minerals in the oxide layer is broadly equivalent to the scheelite found in the fresh material and represents significant upside potential to the project if an economic extraction methodology can be established.

Building on the preliminary results that indicated that tungsten could be leached from the oxide/weathered layer at Mt Mulgine, the second phase of test work has identified that tungsten is mostly mineralogically associated with iron oxides. Subsequent heavy liquid separation has been successful in concentrating the iron oxides and other heavy minerals with greater than 75% of the tungsten bearing minerals being recovered in 8% (on average) of the sample mass.



*Figure 5 – products from heavy liquid test work showing the separation of “heavy” minerals containing greater than 75% of the tungsten bearing minerals.*

The Company is very encouraged by these results and future test work phases will concentrate on identifying an economic extraction methodology of tungsten concentrate from the heavy fraction.

## Pit Optimisation and Design

During the quarter further pit optimisation work was conducted for the Mulgine Hill deposit using updated input data including changes in the tungsten price. Based on the latest optimisation results a pit design for the Mulgine Hill deposit was completed.





Figure 6 – Plan showing new pit designs and location of geotechnical diamond drill holes.

A scope of works for a Geotechnical Study into the pit design criteria was commenced during the quarter. This program includes specific geotechnical diamond holes, material strength testing and pit slope design configuration.

## Modular Gravity Plant Relocation

In October, the modular heavy mineral gravity processing plant was safely relocated from Pilgangoora mine site to a secure laydown area located adjacent to the Golden Dragon gold processing plant operated by Minjar Gold Pty Ltd. The laydown area is located 35km due north of the Mt Mulgine Tungsten Project and is serviced by an existing haul road. The plant has been stored in its specific modules to assist in the re-assembly during construction.





*Figure 7 – secure laydown yard adjacent to the Golden Dragon gold processing plant for the storage of the gravity processing plant.*

## **Mining Proposal**

### ***Waste Rock and Tailings Characterisation, Groundwater.***

Three major scopes of work to support the preparation of the Mining proposal commenced during the quarter; a waste rock and tailings characterisation study, a tailings storage facility design study and a groundwater characterisation study.

Specific diamond core and wet tailings samples were supplied for waste rock characterisation to determine the geochemistry of the host rock, in particular the presence of potential acid forming (PAF) material that may require a specific management plan.

Samples of tailings material taken from the metallurgical test work program were used for tailings settling and air drying tests with the results used in the design of the tailings storage facility.

A desktop review using the current hydrogeological information in the Mt Mulgine Project area was completed. A detailed hydrogeological assessment is planned in the March quarter to confirm groundwater levels and water quality, and to address any key water issues that may impact groundwater.

### ***Native Vegetation Clearing Permit (NVCP)***

Completion of the Spring flora survey has enabled the preparation of a NVCP for the clearing of native vegetation at the Mt Mulgine Project. In Western Australia an NVCP is required under the Environmental Protection Act 1986 (EP Act) prior to the clearing of any native vegetation unless for an exempt purpose.

The NVCP submission is planned early in the March quarter.

## Big Hill Project, Eastern Pilbara, WA

The Big Hill Project area is located approximately 30km northeast of the Nullagine township in the Eastern Pilbara of Western Australia. The project contains the Big Hill deposit where 22,871 metres of diamond and RC drilling have defined a JORC-2012 Mineral Resource estimate totalling 11.5Mt at 0.15% WO<sub>3</sub> (0.10% WO<sub>3</sub> cut-off) comprising an Indicated Resource of 6.2Mt at 0.16% WO<sub>3</sub> and an Inferred Resource of 5.3Mt at 0.13% WO<sub>3</sub>.

Metallurgical test work conducted on samples from Big Hill at bench and pilot scale has produced high quality tungsten concentrates at acceptable scheelite recoveries. This work has identified a simple and potentially low cost processing route.

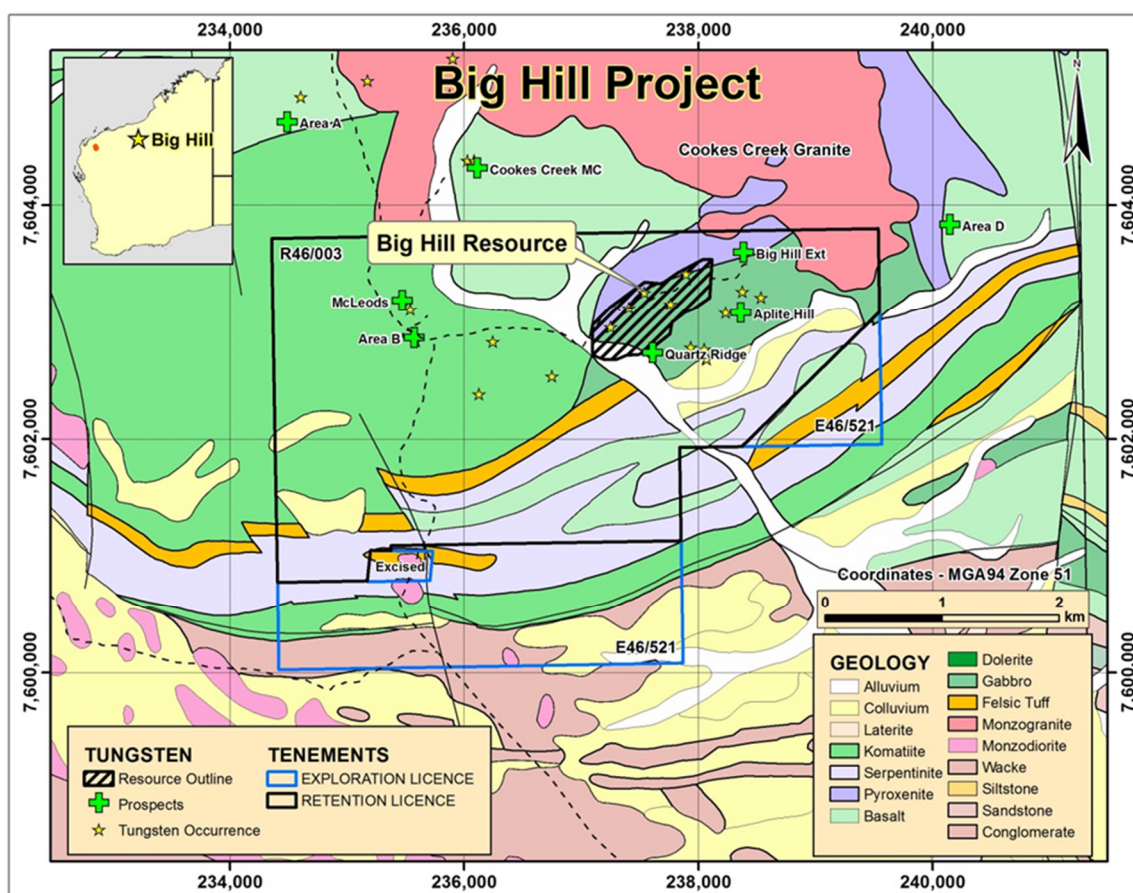


Figure 8 –Big Hill project geology

Retention License R46/003 was granted in April 2017. There are no planned activities for the Big Hill Project in the next quarter.

## Kilba Project, Ashburton Region, WA

The Kilba Project is located within the Ashburton Region of Western Australia, 250km southwest of Karratha. To date, Tungsten Mining has focused on the historic Zones 8, 11 and 12 that Union Carbide discovered in the 1970s. Drilling has targeted high-grade tungsten mineralisation associated with skarns and calc-silicate units situated close to the Kilba granite.

This work has defined a JORC-2012 compliant Mineral Resource totalling 5.0Mt at 0.24% WO<sub>3</sub> (0.10% WO<sub>3</sub> cut-off) comprising an Indicated Resource of 4.1Mt at 0.25% WO<sub>3</sub> and an Inferred Resource of 0.8Mt at 0.20% WO<sub>3</sub>.

Metallurgical test work shows that the tungsten is present as coarse-grained scheelite that will respond well to conventional gravity separation. Test work completed in 2015 has demonstrated the ability to produce an extremely high grade tungsten concentrate.

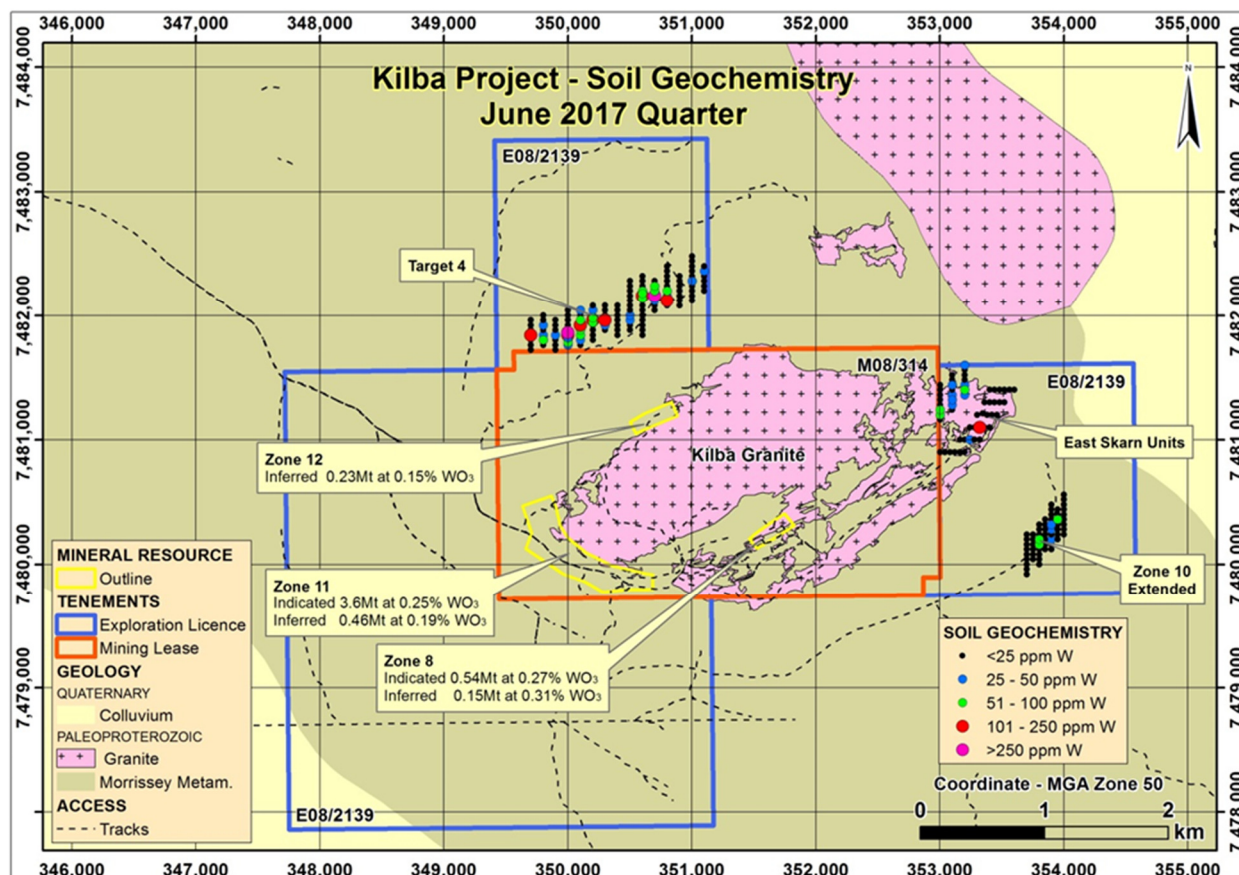


Figure 9 – plan displaying location of recent soil geochemistry and Mineral Resource at the Kilba Project

In May 2017 the WA Department of Mines, Industry Regulation and Safety approved a 5 year exemption from expenditure for M08/314 pursuant to the Mining Act. No work was undertaken during the December quarter and none is planned for the coming quarter.

## Other Projects

Tungsten Mining has a portfolio of other projects in Western Australia prospective for tungsten. These include the Koolyanobbing and Callie Soak projects. Work on these projects is in the initial stages of reconnaissance and target generation and it is hoped that these tenements will yield additional mineralisation, which Tungsten Mining can exploit.



## Corporate

### ***Non Binding MoU with Xiamen Tungsten Company., Ltd***

Tungsten Mining announced to the ASX on 3 November 2017 that the Company and Xiamen Tungsten Co., Ltd (Shanghai Stock Exchange Code: SH600549) (“XTC”) had executed a non-binding Memorandum of Understanding (“MoU”) in relation to the Mt Mulgine Project and cooperation in relation to off take and technical assistance.

XTC is a China Fortune 500 Company domiciled in the Peoples Republic of China and has a market capitalisation of more than 30 billion CNY (~A\$6 billion). XTC’s principle business activities covers tungsten, molybdenum, rare earth, new energy materials and real estate. XTC has an established tungsten industry supply chain which includes mining, smelting and downstream processing. XTC is a large producer of the intermediate products including ammonium paratungstate and tungsten oxide. Its downstream products are tungsten powder, cemented carbide, tungsten steel, tungsten bar and tungsten wire.

XTC and Tungsten Mining have agreed to commence negotiations in good faith for XTC to have the right to purchase tungsten concentrate to be produced at Mt Mulgine. In addition, the parties have also agreed to collaborate in relation to technical support directed at enhancing concentrate grades and recovery rates for tungsten concentrate to be produced at Mt Mulgine.

XTC have recently completed a preliminary “whole of ore” flotation test work program on a 300kg sample recovered from Mulgine Hill. This work was completed from June to August 2017 at XTC’s Xingluokeng mine and processing facility in Fujian province in China. The results of this work were very encouraging producing a tungsten concentrate grade of +55% WO<sub>3</sub>.

The MoU provides a framework for ongoing cooperation between XTC and Tungsten Mining, however remains non-binding until the execution and delivery of formal agreements with respect to the transactions contemplated by the MoU.



*Figure 10 – Tungsten Mining Directors and CEO during visit to XTC in January 2018*

In mid-January senior management of XTC hosted meetings attended by the entire Tungsten Mining board in Xiamen, China. This included an opportunity to visit their tungsten and battery materials processing facilities and China National R&D Centre for Tungsten Technology.

### **Completion of Non-Renounceable Entitlement Offer Raises \$13.87m**

To accelerate project development activities at Mt Mulgine, in early October the Company launched a Non-Renounceable Entitlement Offer to raise \$13.87m before costs. The Entitlement offer to existing Shareholders was on the basis of one new share for every three shares held. By closing date the Company had received applications reflecting an acceptance rate of 46% from existing shareholders. The directors placed the balance (Shortfall Shares) to sophisticated investors prior to the end of December, resulting in the offer being fully subscribed.

Funds raised will be applied towards completing feasibility studies, detailed engineering, to secure long lead items and other works related to the development of the Mt Mulgine Tungsten Project.

### **Tungsten Pricing**

Global tungsten prices (by reference to price quotations for European ammonium paratungstate – APT) increased by approximately 55% over the 12 month period to the end of December 2017 (based on the monthly average price).

The resurgence in the tungsten price which accelerated in August 2017, after an extended period of price recovery, has resulted from a tightening of supply in tungsten concentrates, particularly in China where environmental inspections have impacted on production.

The improving market for tungsten endorses the Company's commitment to continuing development activities through the different stages of the commodity cycle and its strategic development plan for the Mt Mulgine Tungsten Project.

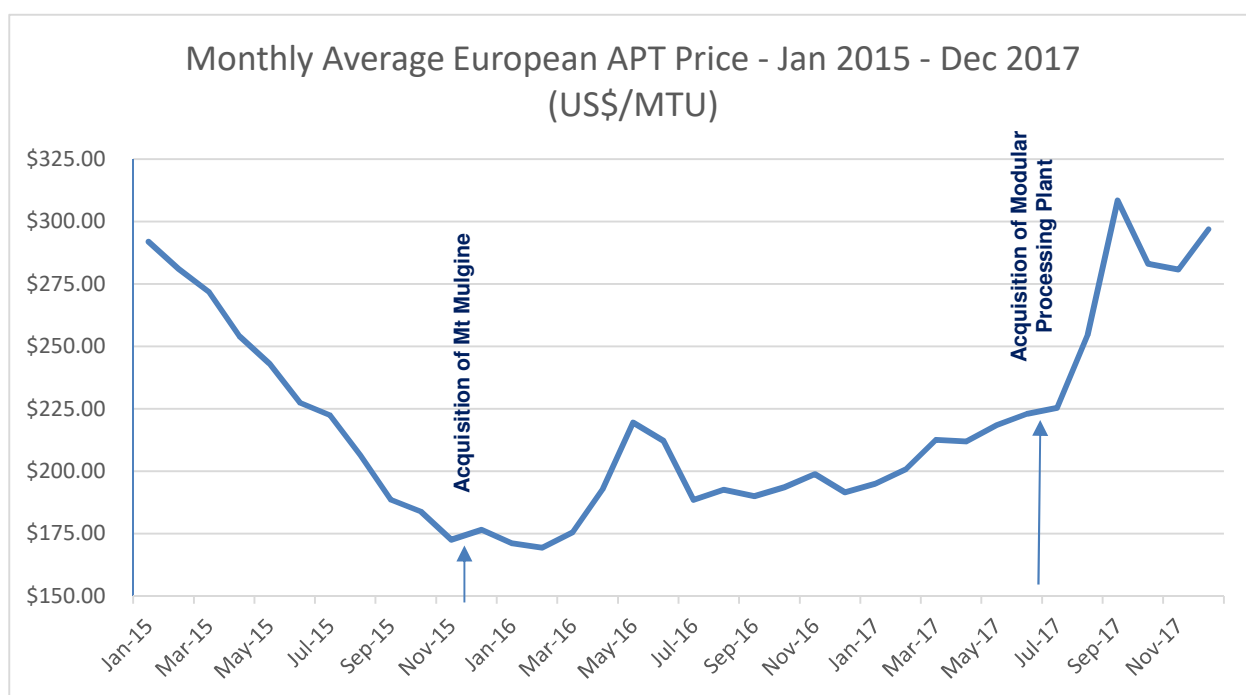


Figure 11– APT Price (source: Metal Bulletin, Argus)

### **Director Appointment**

Following the end of the quarter, the Company announced the appointment of Tan Sri Dato Tien Seng Law to the Board as a Non-executive Director and Deputy Chairman.

Mr Law is a highly experienced investor with extensive business interests and investments in China and Malaysia. He is currently the executive Chairman of T.S. Law Holding Sdn Bhd, an investment holding company in Malaysia, covering a diverse range of industries. These companies include those with activities in steel making and distribution, property investment and development and food and beverage.

### **Other**

The Company's cash position as at 31 December 2017 was \$15.2m.

During the December quarter, the Company received \$13.87m following the subscription for shares pursuant to the Entitlement Offer described above. A further \$0.44m was received pursuant to the conversion of unlisted options during the quarter.

As at the end of December 2017 the Company had 555,581,527 fully paid ordinary shares on issue.

### **March Quarter Planned Activities**

During the March quarter, the Company intends to advance its strategic development plan by undertaking the following activities:

- Completion of the Early Contractor ECI process;
- Advance activities directed at defining the optimum contracting strategy for the project implementation phase, operational readiness and beyond;;
- Completion of sterilisation drilling;
- Progressing the various activities required to support the preparation of a Mining Proposal, Works Approval and other regulatory requirements prior to operations;
- Finalisation of mine site design and layout;
- Continued R&D on the recovery of tungsten from the oxide layer of the Mt Mulgine deposit.

#### **For further information:**

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### **Competent Person's Statement**

*The information in this report that relates to Exploration Targets and Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Peter Bleakley, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Bleakley is not a full-time employee of the company. Mr Bleakley is a consultant to the mining industry. Mr Bleakley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Bleakley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to Mineral Resources is extracted from the report titled 'June 2016 Mineral Resource Update and Core Sampling' released to the Australian Securities Exchange (ASX) on 24 June 2016 and the report titled 'Mulgine Hill Resource Update' released to the ASX on 28 July 2017, both are available to view at [www.tungstenmining.com](http://www.tungstenmining.com). The Company confirms that it is not aware of any new information or data that materially affects the information included in either of the ASX announcements and that all material assumptions and technical parameters underpinning the estimates in original ASX announcements continue to apply and have not materially changed. 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 ASX announcements.*



## About Tungsten Mining

Emerging Australian tungsten developer, Tungsten Mining NL is an Australian based resources company listed on the Australian Securities Exchange. The Company's prime focus is the exploration and development of tungsten projects in Australia.

Tungsten (chemical symbol W), occurs naturally on Earth, not in its pure form but as a constituent of other minerals, only two of which support commercial extraction and processing - wolframite ((Fe, Mn)WO<sub>4</sub>) and scheelite (CaWO<sub>4</sub>).

Tungsten has the highest melting point of all elements except carbon – around 3400°C giving it excellent high temperature mechanical properties and the lowest expansion coefficient of all metals. Tungsten is a metal of considerable strategic importance, essential to modern industrial development (across aerospace and defence, electronics, automotive, extractive and construction sectors) with uses in cemented carbides, high-speed steels and super alloys, tungsten mill products and chemicals.

Tungsten Mining has three advanced tungsten projects in Australia: the Mt Mulgine Project in the Murchison region, the Big Hill Project in the Pilbara region and the Kilba Project in the Ashburton region of Western Australia.

Tungsten Mining is currently identifying opportunities for near term tungsten production, particularly from the Mulgine Hill and Mulgine Trench deposits within the Mt Mulgine Project.

## Tenement Summary

| Tenement Name  | Tenement   | Interest held at<br>30 September 2017                             | Interest acquired/<br>disposed of during<br>quarter | Interest Held at<br>31 December 2017                                |
|----------------|------------|---|---|---|
| Kilba Well     | E08/2139   | 100%  | N/A   | 100%  |
| Kilba Well     | M08/314    | 100%  | N/A   | 100%  |
| Koolyanobbing* | E77/2279   | 100% mineral rights<br>for tungsten, 20% for<br>other commodities | N/A   | 100% mineral rights<br>for tungsten, 20% for<br>other commodities " |
| Callie Soak    | E20/854    | 100%  | N/A   | 100%  |
| Mt Mulgine**   | E59/1324-I | 100% mineral rights<br>for tungsten and<br>molybdenum             | N/A   | 100% mineral rights<br>for tungsten and<br>molybdenum               |
| Mt Mulgine**   | M59/386-I  | "   | N/A   | "   |
| Mt Mulgine**   | M59/387-I  | "   | N/A   | "   |
| Mt Mulgine**   | M59/425-I  | "   | N/A   | "   |
| Big Hill^      | E46/521-I  | 100%  | Relinquished  | 0%  |
| Big Hill       | L46/70     | 100%  | N/A   | 100%  |
| Big Hill       | R46/3      | 100%  | N/A   | 100%  |

\* This tenement is held by Lithium Australia NL and subject to the terms of the Seabrook Rare Metals Venture

\*\*Mt Mulgine tenements are registered in the name of Minjar Gold Pty Ltd with Mid-West Tungsten Pty Ltd, a subsidiary of Tungsten Mining NL being the holder of the Tungsten and Molybdenum Mineral Rights.

^ The area covered by Retention License R46/3 previously formed part of tenement E46/521-I. A condition of the grant of the Retention License was that the exploration license (E46/521-I) be relinquished. The formal process of surrender was completed in October 2017.

## Tungsten Mining Mineral Resource Estimates - reported at a WO<sub>3</sub> cut-off grade of 0.10%

| Class   | Tonnes            | Grade<br>WO <sub>3</sub> % | Metric Tonne<br>Units | Mo (ppm)   | Contained Mo<br>Tonnes |
|---|-------------------|----------------------------|-----------------------|------------|------------------------|
| <b>Mulgine Trench (October 2014) <sup>1</sup></b> |                   |                            |                       |            |                        |
| Measured  | 0                 | -                          | -                     | -          | -                      |
| Indicated   | 400,000           | 0.14                       | 50,000                | 400        | 150                    |
| Inferred  | 63,400,000        | 0.17                       | 11,050,000            | 250        | 15,600                 |
| <b>Total</b>                                      | <b>63,800,000</b> | <b>0.17</b>                | <b>11,100,000</b>     | <b>250</b> | <b>15,700</b>          |
| <b>Mulgine Hill (June 2017) <sup>2</sup></b>      |                   |                            |                       |            |                        |
| Measured  | 0                 | -                          | -                     | -          | -                      |
| Indicated   | 4,100,000         | 0.25                       | 1,030,000             | 90         | 400                    |
| Inferred  | 3,000,000         | 0.19                       | 570,000               | 110        | 300                    |
| <b>Total</b>                                      | <b>7,100,000</b>  | <b>0.23</b>                | <b>1,630,000</b>      | <b>98</b>  | <b>700</b>             |
| <b>Mt Mulgine (Total)</b>                         |                   |                            |                       |            |                        |
| Measured  | 0                 | -                          | -                     | -          | -                      |
| Indicated   | 4,500,000         | 0.24                       | 1,080,000             | 120        | 500                    |
| Inferred  | 66,400,000        | 0.17                       | 11,620,000            | 240        | 15,900                 |
| <b>Total</b>                                      | <b>70,800,000</b> | <b>0.18</b>                | <b>12,600,000</b>     | <b>230</b> | <b>16,400</b>          |
| <b>Big Hill (June 2016) <sup>3</sup></b>          |                   |                            |                       |            |                        |
| Measured  | 0                 | -                          | -                     | -          | -                      |
| Indicated   | 6,200,000         | 0.16                       | 992,000               | -          | -                      |
| Inferred  | 5,300,000         | 0.13                       | 689,000               | -          | -                      |
| <b>Total</b>                                      | <b>11,500,000</b> | <b>0.15</b>                | <b>1,681,000</b>      |            |                        |
| <b>Kilba (January 2015) <sup>4</sup></b>          |                   |                            |                       |            |                        |
| Measured  | 0                 | -                          | -                     | -          | -                      |
| Indicated   | 4,100,000         | 0.25                       | 1,030,000             | -          | -                      |
| Inferred  | 830,000           | 0.20                       | 170,000               | -          | -                      |
| <b>Total</b>                                      | <b>5,000,000</b>  | <b>0.24</b>                | <b>1,200,000</b>      |            |                        |
| <b>Total Resource Inventory</b>                   |                   |                            |                       |            |                        |
| Measured  | 0                 | -                          | -                     | -          | -                      |
| Indicated   | 14,800,000        | 0.21                       | 3,080,000             | 35         | 500                    |
| Inferred  | 72,500,000        | 0.17                       | 12,490,000            | 220        | 15,900                 |
| <b>Total</b>                                      | <b>87,400,000</b> | <b>0.18</b>                | <b>15,610,000</b>     | <b>188</b> | <b>16,400</b>          |

Note: Totals may differ from sum of individual numbers as numbers have been rounded in accordance with the Australian JORC code 2012 guidance on Mineral Resource reporting.

1. Refer ASX (HAZ) Announcement 5 November 2014, "Hazelwood continues to increase tungsten resource"

2. Refer ASX (Tungsten Mining) Announcement 28 July 2017, "Mulgine Hill June 2017 Mineral Resource Update"

3. Refer ASX (Tungsten Mining) Announcement 23 June 2016, "Big Hill June 2016 Mineral Resource Update"

4. Refer ASX (Tungsten Mining) Announcement 30 January 2015, "Kilba Mineral Resource Update"



## 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**

Tungsten Mining NL

**ABN**

67 152 084 403

**Quarter ended ("current quarter")**

31 December 2017

| 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                              | (420)                      | (730)                                 |
| (b) development   | -                          | -                                     |
| (c) production  | -                          | -                                     |
| (d) staff costs   | -                          | -                                     |
| (e) administration and corporate costs                    | (348)                      | (608)                                 |
| 1.3 Dividends received (see note 3)                       | -                          | -                                     |
| 1.4 Interest received                                     | 13                         | 33                                    |
| 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>(755)</b>               | <b>(1,305)</b>                        |

|  |       |       |
|--|-------|-------|
| <b>2. Cash flows from investing activities</b> |       |       |
| 2.1 Payments to acquire:                       |       |       |
| (a) property, plant and equipment              | (207) | (509) |
| (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>(207)</b>                       | <b>(509)</b>                                   |

|             |   |               |               |
|-------------|---|---------------|---------------|
| <b>3.</b>   | <b>Cash flows from financing activities</b>                                 |               |               |
| 3.1         | Proceeds from issues of shares  | 13,873        | 13,873        |
| 3.2         | Proceeds from issue of convertible notes                                    | -             | -             |
| 3.3         | Proceeds from exercise of share options                                     | 470           | 705           |
| 3.4         | Transaction costs related to issues of shares, convertible notes or options | (32)          | (33)          |
| 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>14,311</b> | <b>14,545</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                             | 2,570         | 3,188         |
| 4.2        | Net cash from / (used in) operating activities (item 1.9 above)              | (755)         | (1,305)       |
| 4.3        | Net cash from / (used in) investing activities (item 2.6 above)              | (207)         | (509)         |
| 4.4        | Net cash from / (used in) financing activities (item 3.10 above)             | 14,311        | 14,545        |
| 4.5        | Effect of movement in exchange rates on cash held                            | -             | -             |
| <b>4.6</b> | <b>Cash and cash equivalents at end of period</b>                            | <b>15,919</b> | <b>15,919</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  | 619                        | 1,270                       |
| 5.2 Call deposits  | 15,300                     | 1,300                       |
| 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>15,919</b>              | <b>2,570</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**

49

-

Payments to Directors for fees and consulting.

**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**

151

Payments to associate entity GWR Group Limited for management and technical services and the reimbursement of expenses incurred by GWR Group on behalf of the Company.

**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.

| 9.  | Estimated cash outflows for next quarter          | \$A'000      |
|-----|---|--------------|
| 9.1 | Exploration and evaluation (see note 4)           | 3,000        |
| 9.2 | Development                                       | -            |
| 9.3 | Production  | -            |
| 9.4 | Staff costs                                       | -            |
| 9.5 | Administration and corporate costs                | 250          |
| 9.6 | Other (Payments related to plant acquisition)     |              |
| 9.7 | <b>Total estimated cash outflows</b> (see note 4) | <b>3,250</b> |

| 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 | Big Hill<br>E46/521-I<br>(see note 5) | Surrendered        | 100%                             | 0%                         |
| 10.2 | Interests in mining tenements and petroleum tenements acquired or increased           |                                       |                    |                                  |                            |



**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: .....  
(Chief Executive Officer)

Date: 30 January 2018

Print name: Craig Ferrier

**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.
4. The estimated cash outflows for the next quarter are predominantly related to the planned development of the Mt Mulgine Project and will vary relative to the timing of expenditure and progress against the project schedule.
5. Tenement E46/521 was surrendered following the earlier grant of Retention Licence R46/3 covering the Big Hill deposit and project area.