

## ACTIVITIES REPORT – SEPTEMBER QUARTER 2017

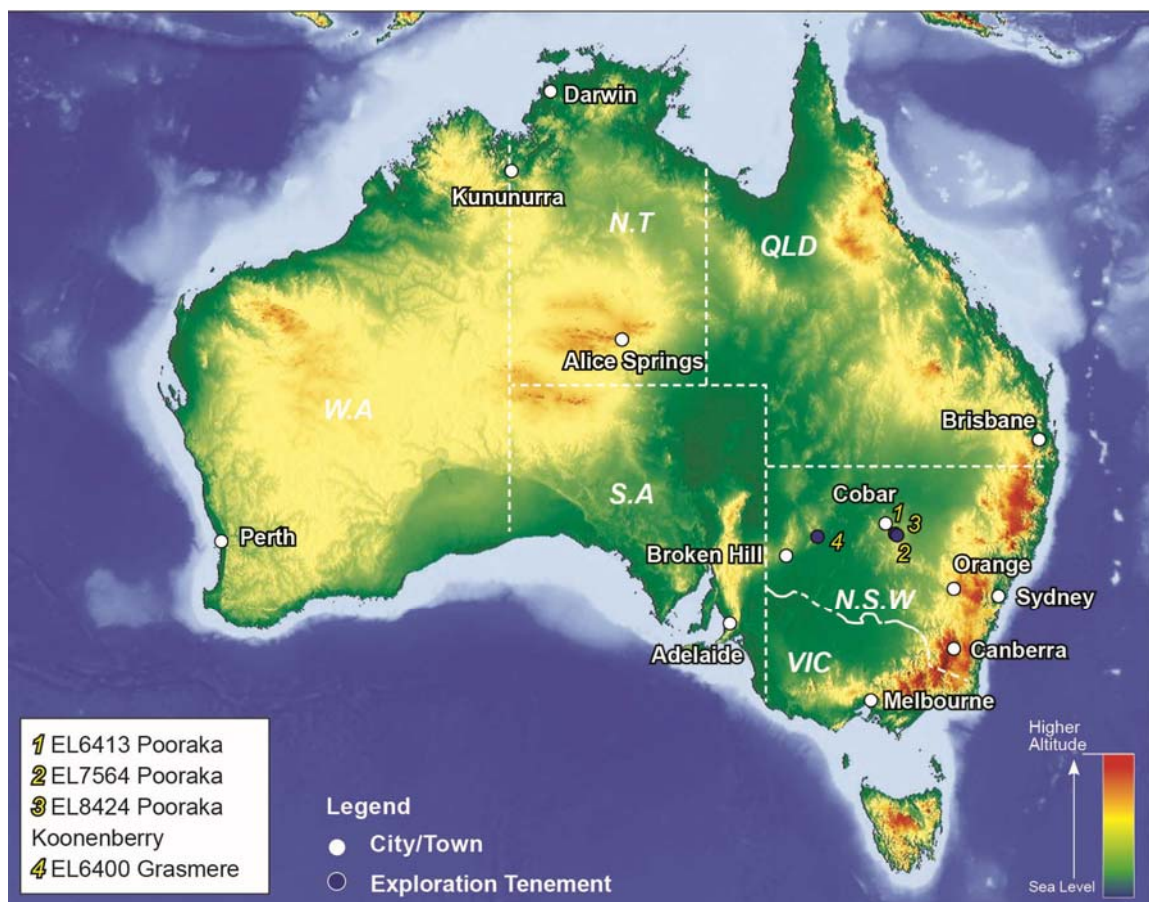
### Summary

#### Koonenberry EL 6400 , NSW

- EL6400 has been renewed with 65% area reduction, for 2 years to 1 April 2019 . Commenced research on the potential of in-situ Cu (copper) leaching–extraction of existing JORC Code (2004) resource at Grasmere-Peveril.

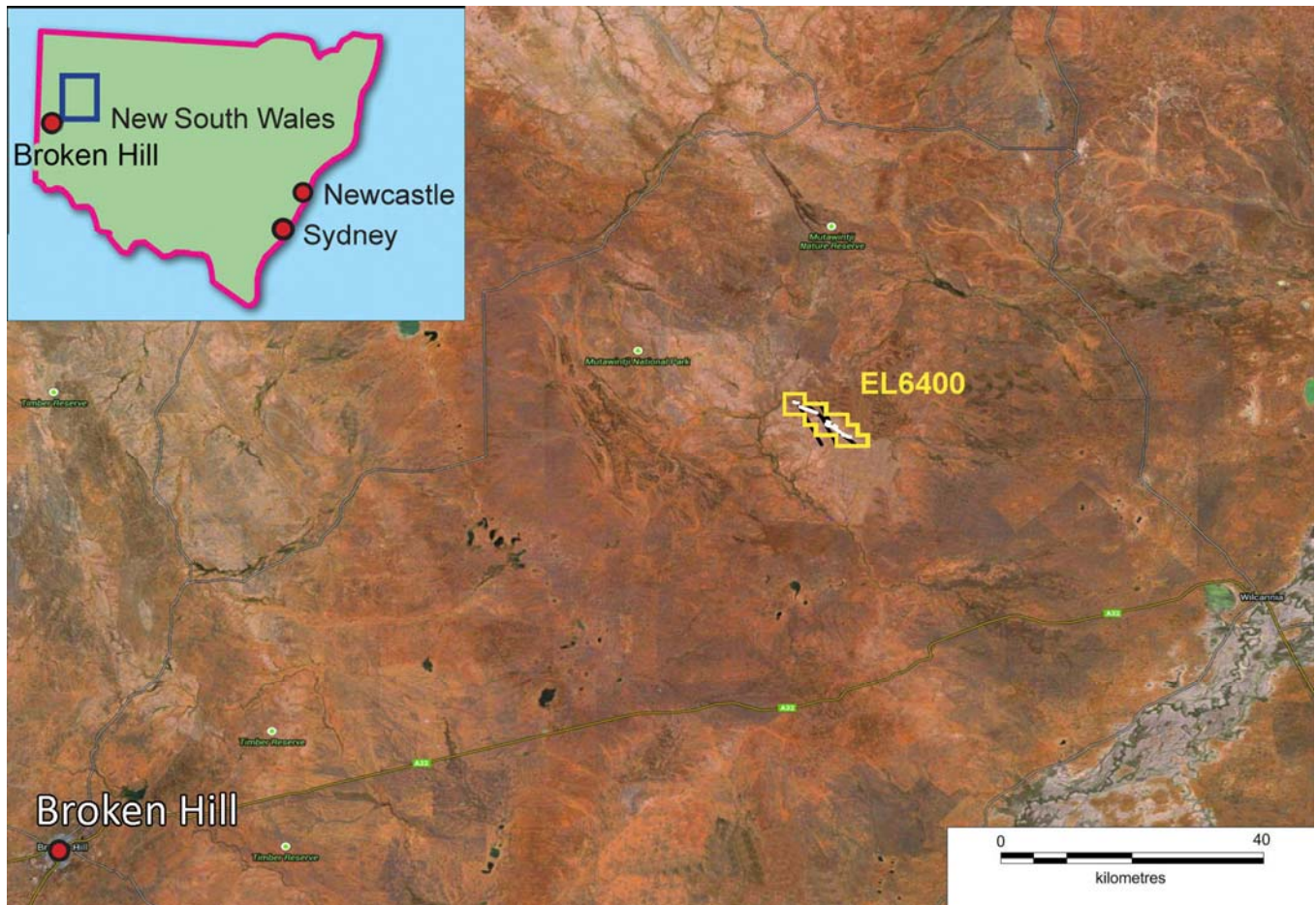
#### Pooraka ELs 6413, 7564, and 8424, NSW

- EL 6413 (Pooraka 1) has been renewed for 2 years to 17 May 2019. EL 8424 (Pooraka 3) is renewed until 17 February 2019, and EL 7564 (Pooraka 2) until 17 June 2018. These 3 ELs cover possible WNW strike extensions of the Canbelago gold mine directly to the south, and also cover the Gilmore Suture.



## ACTIVITIES IN THE KOONENBERRY

*EL 6400 NSW – 100% interest*  
Copper-Zinc-(Silver) Exploration



**Figure 2 - Location of Current Koonenberry Exploration Licence EL 6400**  
*Note: Line of mineralization – white; Faults- black*

**EL 6400:** This EL has been renewed, with 65% area reduction to 17 units, for 2 years to 1 April 2019. It is of principal interest to the Company as it covers the Grasmere-Peveril Cu-Zn-(Ag) deposits, which contain a significant indicated and inferred JORC Code 2004 compliant resource of 5.75mt @ 1.03% Cu, 0.35% Zn, 2.3g/t Ag and 0.05g/t Au ( Inferred: 2.73 mt grading 0.9% Cu, 0.4% Zn, .04 g/t Au and 2.05 g/t Ag. Indicated: 3.02 mt grading 1.15% copper, 0.3% Zn, 0.06 g/t Au and 2.53 g/t Ag). Information relating to this mineral resource was prepared and first reported in accordance with the JORC Code 2004 in 2006. It has not been updated since, to comply with the JORC Code 2012, on the basis that the information has not materially changed since it was reported in 2006.

Following unsuccessful attempts in early 2015 to locate WNW extensions to the line of lode (9 RC percussion holes





drilled) the Company is now proceeding to investigate the potential of *in-situ leaching* (“ISL”) techniques to extract Cu from known lodes. ISL of copper was first undertaken in China around 980 AD, and probably as early as 200 BC. Copper is usually leached using acid (sulfuric acid or hydrochloric acid), then recovered from solution by *solvent extraction-electro-winning* (SX-EW) or by chemical precipitation, e.g. using iron as a precipitant. Ores most amenable to ISL include the copper carbonates malachite and azurite, the oxide tenorite, and the silicate chrysocolla. Other copper minerals, such as the oxide cuprite and the sulfides chalcocite and chalcopyrite require addition of oxidizing agents such as ferric sulfate and/or oxygen (air) to the leachate before the minerals can be fully dissolved. In some situations oxidation can be speeded up by introduction of the bacteria *Thiobacillus ferrooxidans* which feeds directly on sulfide minerals.

Copper ISL is normally undertaken by *stope leaching* where broken low-grade ore is leached in a current or former underground mine. Leaching can also take place in backfilled stopes or caved areas. By 1994 ISL of copper was reported at some 16 mines in arid parts of the USA. The most successful was the San Manuel mine in Arizona where ISL was initially used on waste solutions from underground mining, but later improved using the *well-to-well recovery* method. That method has since been applied to many other copper deposits in Arizona. At the San Manuel Mine by 1996 with over 900 leach wells installed, annual recovered copper production reached 15,000t of metal at an operational cost of about \$900t. ISL also has the benefit of having a low environmental impact, with little infrastructure and capital investment required.

In the case of the Grasmere-Peveril line of lode the 600+ existing drill holes could be selectively re-entered (cleaned out) and used as leach wells or extraction wells. The leach wells would introduce an oxygenated acidic leaching liquid with a fine suspension of quartz grains, into the lodes under sufficient pressure to frack them and deposit quartz grains in cracks as the *propping agent*. Oxygen would react with the abundant contained pyrite, and, in the presence of the aqueous leach liquid, should rapidly produce ferric sulfate and additional sulfuric acid, which would speed up dissolution of chalcopyrite. The reaction is exothermic (generates heat) which also enhances the process. In the unlikely event that acid leaching was found to be difficult ammonia-oxygen leaching could be used.

The Grasmere-Peveril mineralization exhibit a number of features that appear efficacious for ISL extraction of copper, using sulphuric acid. Firstly, the ore consists largely of broken and fractured pyrite grains, with chalcopyrite and lesser sphalerite conveniently located in cracks and crevices between pyrite grains. Hydraulic fracking should preferentially open those cracks and crevices, and the abundant pyrite, when oxidized, should produce new (additional) sulphuric acid. The low proportion of acid reactive carbonate minerals (gangue) in the ore means that acid would not be consumed reacting with non-sulphide minerals. The consistent sulphide mineralogy all along the 5 km line of lode means that once an ISL acid extraction process is optimized in one area, it can then be applied in all other areas.

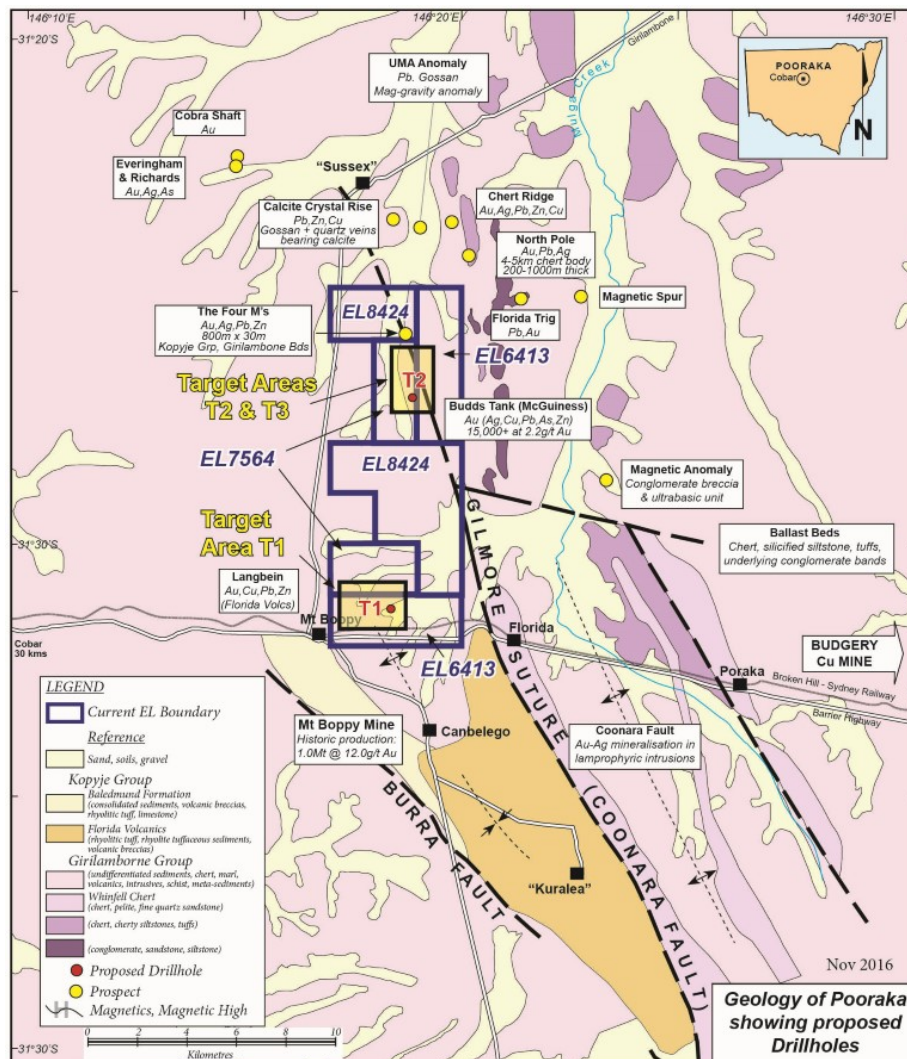
The retained units of the renewed EL cover the line of lode and immediate environs. It is planned to carry out bench test metallurgical studies together with further field studies, including hydrogeological assessments, as part of a preliminary feasibility assessment of using ISL to commercially exploit the Grasmere-Peveril mineralization.

Following positive outcomes from the studies, the Company will begin scoping commercial application of ISL of the existing JORC Code (2004) resource which is not suitable for conventional mining and treatment due to the small scale, narrow shoots, remote location and high capital costs.



## ACTIVITIES NEAR COBAR

**Pooraka ELs 6413, 7564 and 8424 – NSW - 100% interest**  
**Gold, Silver and Base Metal Exploration**

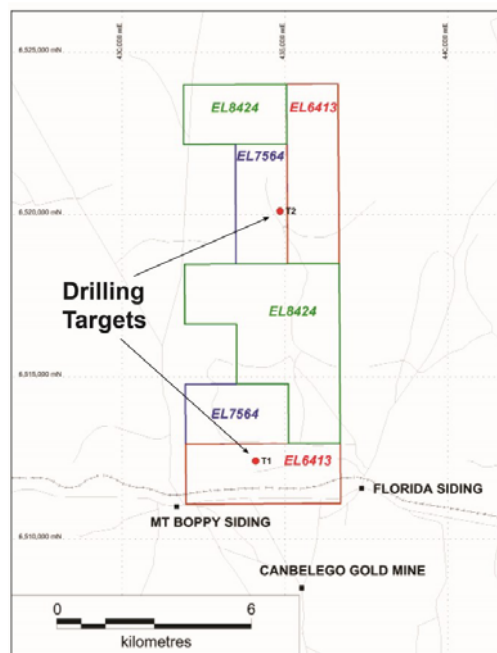


**Figure 3 – Geology and Prospect Locations - Pooraka Project**

Contiguous ELs 6413, 8424 & 7564 (Figure 3) at Pooraka, 50 km east of Cobar, contain several gold and base metal target areas gleaned from earlier exploration results. Due to the extent and thickness of magnetic palaeo channels, aeromagnetic data were noted to be of limited use, so in 2014, the Company decided to undertake a ground based EM survey to seek hidden conductors. Target areas were chosen using bedrock geochemical data and historic air-core/RC drilling data. Those data highlighted two sub-areas: T1, Langbein – Langbein West and T2/T3, Mc Guinness - McGuinness North (see Figure 3). During April and May 2015, a ground based 200m x 200m geophysical survey was undertaken over the two target areas using the time domain electromagnetic (TDEM) technique. TDEM data were

processed to define anomalies caused by conductors. Using CSIRO/AMIRA computer programs targets data were further analysed to ascertain geometry-depth, orientation, thickness – and electrical properties. The results were considered by geotechnical advisers to the Company to be very encouraging. At T1, Langbein - Langbein West target area a broad formational conductive zone was detected, however a small discreet strong conductor (open to the east) was detected proximal to where the Company's 2009 RC-percussion drilling encountered low grade mineralization in bedrock. Lying directly on strike from the nearby historic Mt Boppy gold-base metal mine at Canbelego, this became a significant drill target. In the T2/T3, Mc Guinness - Mc Guinness North, target area, which takes in the Gilmore Suture, a large strong, discreet, north running 1200m x 800m conductor, was also outlined. This was interpreted to be most probably caused by hidden low-grade sulphide concentrations.

Responses from the two conductor targets were modelled in 2016 by the Company's geophysical consultant, who also designed 2 deep, inclined, RC percussion holes to test the nature of their conductivities (Figure 4).



**Figure 4 – Pooraka ELs showing Drill Holes 1 and 2**

Hole 1 (150m) was drilled and sampled on 18 and 19 March 2017. Hole 2 was drilled on 28 March 2017, and sampled on 28 and 29 March 2017. Sampling of both holes was at 1m intervals, During April 2017 the 290 samples were analyzed for key elements- Au, Ag, Cu, Pb, Zn, As, and S.

**Assessment** The results were received from the laboratory in early May 2017 and reported in the June Quarter Activities Report in July 2017. Weak anomalism was evident over 7 intervals, or zones. Unexpectedly, the conductors turned out to be formational in origin (caused by saline, clay-rich rocks) and not related to sulphide-gold mineralization.



In both holes the TDEM anomalies closely align to the clay-rich zones which in the field were observed to be quite saline (to taste & also clays flocculated (settled quickly) in fresh water when wet sieving). Salt water bearing clay-rich zones would be highly conductive. Also they are sandwiched between non-conductive, non-permeable rocks (shales and volcanic rocks). The strong suspicion is that in areas where this occurs at detectable depths (20m to 200m) it can create convincing, but spurious, TDEM anomalies—described by geophysicists as “strong formational anomalies”, which in some situations can mimic low grade sulphide anomalies.

The findings cast doubt on the cost effectiveness of the TDEM geophysical technique to locate hidden low-grade sulphides at Pooraka, but it does not follow that similar targets are the result of similar strong formational anomalies. Other deep targets (bedrock Au anomalies) are known in the McGuiness-Buds Tank area (Sub-Area 2/3). At that location earlier explorers (1986-1992) discovered significant inferred shallow Au resource in three pods to a depth of 12m. Also, at Langbein West (Sub-Area 1) the Company’s early (2010) bedrock sampling (shallow air core drilling) detected bedrock Au anomalies. The Company is now considering the more cost effective method of using RC drilling.

## LICENCES STATUS

Minerals tenements held at 30 September 2017 and acquired or disposed of during the quarter and their locations are as follows:

Tenement	Project Name	Location	Beneficial Interest	Expiry
EL 6400	Koonenberry	NSW	100%	1 April 2019
EL 6413	Pooraka 1	NSW	100%	17 May 2019
EL 7564	Pooraka 2	NSW	100%	17 June 2018
EL 8424	Pooraka 3	NSW	100%	17 February 2019

There were no other tenements acquired or disposed of or change in beneficial interests under farm-in or farm-out agreements during the quarter

*(The information in the report above that relates to Exploration Results is based on information compiled by Dr Pieter Moeskops, a member of The Australasian Institute of Mining and Metallurgy. Dr Moeskops has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activities which he is undertaking to qualify as a Competent Person as defined in the 2004 and 2012 Editions of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Moeskops consents to the inclusion in this report of matters based on his information in the form and context in which it appears.)*

**John Wang**  
Managing Director

30 October 2017



## 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

AUSMON RESOURCES LIMITED

### ABN

88 134 358 964

### Quarter ended ("current quarter")

30 SEPTEMBER 2017

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(17)	(17)
	(b) development		
	(c) production		
	(d) staff costs	(10)	(10)
	(e) administration and corporate costs	(62)	(62)
1.3	Dividends received (see note 3)		
1.4	Interest received	1	1
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Research and development refunds		
1.8	Other (GST)	(1)	(1)
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(89)</b>	<b>(89)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$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 (Security deposit refund)	10	10
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>10</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		
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</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>-</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	566	566
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(89)	(89)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	10	10
4.4	Net cash from / (used in) financing activities (item 3.10 above)		
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>487</b>	<b>487</b>



<b>5. Reconciliation of cash and cash equivalents</b> 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 \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	36	126
5.2 Call deposits	451	440
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>487</b>	<b>566</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**

3

- Office rent contribution to a related entity of Managing Director John Wang.

**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**

## Mining exploration entity and oil and gas exploration entity quarterly report

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

--

<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	10
9.2 Development	
9.3 Production	
9.4 Staff costs	10
9.5 Administration and corporate costs	20
9.6 Other (provide details if material)	
<b>9.7 Total estimated cash outflows</b>	<b>40</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				
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: .....  
(Managing Director)

Date: 30 October 2017

Print name: .....JOHN WANG.....

### **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.