

## JUNE 2018 QUARTERLY REPORT

Sovereign Metals Limited (“the Company” or “Sovereign”) is pleased to present its quarterly report for the period ended 30 June 2018. The Company is focused on the **world-class Malingunde Sapolite Hosted Graphite Project in Malawi**.

### HIGHLIGHTS:

#### ***Progression of Pre-feasibility Study (“PFS”) at Malingunde.***

- ❖ During the quarter the Company progressed key PFS disciplines, including engineering, mining, processing, environmental and social activities.
- ❖ Opportunities have been presented to further optimise the project which include potential supply of reliable and cost-effective grid power by ESCOM, or solar / diesel hybrid power solutions, and a transition to an owner-operator mining strategy.
- ❖ Additionally, an initial investigation into in-pit tailings deposition indicates that there may be significant cost benefits associated with this strategy.
- ❖ Sovereign has substantially advanced the PFS with completion expected this quarter.

#### ***Upgrade to the world’s largest sapolite resource at Malingunde.***

- ❖ A resource upgrade at Malingunde was released in June 2018, providing the basis for a future low capex and low opex natural flake graphite operation.
  - **Sapolite + Saprock:** 45.7Mt @ 7.2% TGC (4.0% cut-off, 81% Measured + Indicated)
  - **High Grade Component:** 14.5Mt @ 9.7% TGC (7.5% TGC cut-off, 88% Measured + Indicated)

#### ***Validation of Malingunde flowsheet and identification of potential for additional plant feed.***

- ❖ Test-work for the front end of the proposed graphite processing plant at Malingunde validated the use of a high-energy scrubber (as opposed to a primary crusher and mill).
- ❖ The test-work also highlighted the ability to process the more competent saprock (beneath the very soft sapolite) with the addition of a small recycle pebble crusher to the circuit.

#### ***99.9995% purity graphite confirms suitability for multiple downstream applications***

- ❖ Sovereign has demonstrated the ability to produce ultra-high purity levels of 99.9995 weight % C from its Malingunde natural crystalline flake graphite.
- ❖ Ultra-high purity graphite is used in downstream applications such as lithium-ion batteries, aerospace, electronics and nuclear energy.

### **ENQUIRIES**

**+618 9322 6322**

***Dr Julian Stephens – Managing Director***

***Sam Cordin – Business Development Manager***

## MALINGUNDE PFS UPDATE

Sovereign is completing the final stages of the pre-feasibility study (PFS) for the Malingunde saprolite-hosted graphite project. The Company is now targeting completion of the PFS in the coming weeks, with certain work programs designed to continue directly through into the definitive feasibility study (DFS) stage.

The PFS has optimised the base case identified in the 2017 Scoping Study and has reviewed a number of options in order to identify the optimal scenario that meets the requirement of a low upfront capital plant with low operating costs for an operation capable of producing high quality coarse flake graphite.

During the quarter the Company progressed the following key PFS activities:

- The geotechnical study for the infrastructure foundations.
- Consultation with potential suppliers of construction materials such as gravel and sand.
- Discussions with the Malawian Roads Authority and Energy Supply Commission of Malawi (ESCOM) to confirm access road upgrades and access to grid power on site.
- An updated JORC resource estimate was announced in June 2018
- The metallurgical program to test the flotation response of the material produced from the ALS Ammtec scrubbing test-work was completed.
- Variability flotation test-work is now underway and will be completed shortly.
- Solid / liquid separation tests of tailings and concentrate, tailings geochemical and tailings geotechnical tests to support the engineering studies are well advanced.
- Orelogy has completed the final mine design and mining schedules and the previously obtained request for budget pricing (RFBP) from the mining contractors has been used to determine the mining costs.
- The mine layout including haul roads, stockpiles and mining contractor facilities has been finalised.
- Minnovo has completed the process design, mass balances and layouts for the plant and associated infrastructure. All enquiry documents have been sent out and budget quotations received from all suppliers. Capital and operating cost estimates for the plant and associated infrastructure are nearing completion.
- SLR Consulting has completed the study into the preferred method for wall raising methodology and are in the process of investigating further optimisation strategies that could reduce the initial construction costs.
- The TSF capital costs are being updated with the new design and the in-country supplier rates and construction rates that were recently obtained.
- Further work is also being considered for the in-pit disposal of tailings.
- The groundwater and surface water studies are well progressed with reporting of the results currently underway.
- Work has now started on preparing the various reports and chapters required for the Pre-feasibility Study.

During the quarter the Company progressed the following key ESIA activities:

- The ESIA terms of reference were submitted to, and accepted by, the Environmental Affairs Department (EAD) allowing the ESIA to progress as planned.
- Fieldwork associated with the baseline specialist environmental studies has been finalised with data assessment and reporting now underway.

- Extensive consultation and stakeholder engagement was undertaken in which community information was collected to inform the resettlement action plan (RAP) that is currently being prepared.

In finalising key components of the study and liaising with key stakeholders, opportunities have been presented to the Company to further optimise the Malingunde project under the PFS. These include the potential for Electricity Supply Corporation of Malawi Limited (ESCOM) to install and supply a reliable and cost-effective source of grid power, offers from third party providers to build, own and operate a solar / diesel hybrid power station to supply energy under a power purchase agreement (PPA), and a transition to an owner-operator mining strategy.

Additionally, the initial investigation into in-pit tailings deposition indicates that there is significant incremental value associated with this strategy. The Company is currently investigating in-pit tailings deposition in detail as its potential base case strategy under the PFS.

Sovereign expects to complete the study of these additional options shortly with delivery of the PFS expected in the coming weeks.

## MALINGUNDE MINERAL RESOURCE UPGRADE

During the quarter, the Company reported an updated Mineral Resource Estimate (“MRE”) for the soft saprolite-hosted Malingunde deposit in Malawi. The updated MRE provides the basis for a future low capex and low opex natural flake graphite operation focused on the soft saprolite (clay)-hosted component.

Malingunde is the world’s largest reported soft saprolite-hosted graphite Mineral Resource, with 81% of the total Mineral Resource (>4.0% TGC) and 88% of the high-grade (>7.5% TGC) component now classified as Measured or Indicated.

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***Saprolite + Saprock MRE (Measured, Indicated & Inferred):***

**45.7Mt @ 7.2% TGC** (4.0% TGC cut-off, 81% Measured + Indicated)

*including High Grade Component:*

**14.5Mt @ 9.7% TGC** (7.5% TGC cut-off, 88% Measured + Indicated)

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Recent metallurgical test-work confirmed that a blend including up to 15% saprock can be processed along with the very soft saprolite material, enabling the Company to access additional soft mineralised material not previously considered in the 2017 Scoping Study.

MALINGUNDE MINERAL RESOURCE ESTIMATE								
4.0% cut-off grade								
	Measured		Indicated		Inferred		Total	
	Tonnes (Mt)	Grade (% C)						
Saprolite	4.8	8.5%	18.7	7.1%	5.4	6.3%	28.8	7.2%
Saprock	-	-	13.6	7.4%	3.3	6.3%	16.9	7.2%
<b>Total</b>	<b>4.8</b>	<b>8.5%</b>	<b>32.3</b>	<b>7.2%</b>	<b>8.6</b>	<b>6.3%</b>	<b>45.7</b>	<b>7.2%</b>
Fresh rock	-	-	-	-	19.3	7.3%	19.3	7.3%
<b>Total resource</b>	<b>4.8</b>	<b>8.5%</b>	<b>32.3</b>	<b>7.2%</b>	<b>27.9</b>	<b>7.0%</b>	<b>65.0</b>	<b>7.2%</b>

MALINGUNDE MINERAL RESOURCE ESTIMATE								
7.5% cut-off grade								
	Measured		Indicated		Inferred		Total	
	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)	Tonnes (Mt)	Grade (% C)
Saprolite	2.7	10.0%	5.4	9.6%	1.1	9.0%	9.2	9.7%
Saprock	-	-	4.7	10.0%	0.6	9.1%	5.3	9.9%
<b>Total</b>	<b>2.7</b>	<b>10.0%</b>	<b>10.1</b>	<b>9.8%</b>	<b>1.7</b>	<b>9.0%</b>	<b>14.5</b>	<b>9.7%</b>
Fresh rock	-	-	-	-	6.5	9.9%	6.5	9.9%
<b>Total resource</b>	<b>2.7</b>	<b>10.0%</b>	<b>10.1</b>	<b>9.8%</b>	<b>8.3</b>	<b>9.7%</b>	<b>21.0</b>	<b>9.8%</b>

**Table 1. Summary of 2018 Malingunde JORC Mineral Resource Estimate (Malingunde + Msinja deposits) at 4.0% and 7.5% TGC cut-off grades.**

The global MRE also includes the newly discovered Msinja deposit, some 1.5km along strike to the south-east of the main Malingunde deposit. Features of the Malingunde MRE include:

- A high-grade core @ ~10% TGC which forms the focus for the upcoming PFS;
- Very soft, free-digging material for the life of mine and a very low strip ratio will equate to very low mining costs;
- No requirement for primary crushing and grinding, significantly reducing capital requirements and operating costs;
- Proximity to Malawi’s capital means access to existing infrastructure – rail, water, power & labour;
- Premium graphite products in terms of flake sizes and concentrate grades will equate attractive concentrate pricing.

Malingunde has the potential to be a world-class asset with the potential for low capital requirements, low operating costs and high revenues per tonne of concentrate, likely resulting in a high margin operation.

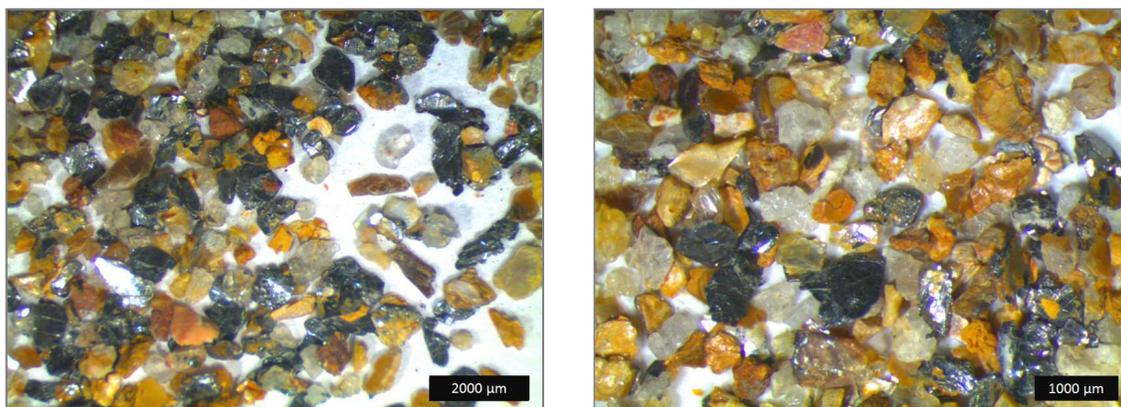
## VALIDATION OF MALINGUNDE FLOWSHEET

The very soft nature of the Malingunde saprolite-hosted material indicated that it would be amenable to low cost scrubbing as opposed to more traditional crushing and milling required for hard rock deposits. As part of the Malingunde PFS, a scrubber test-work program was designed to validate the front-end process flowsheet.

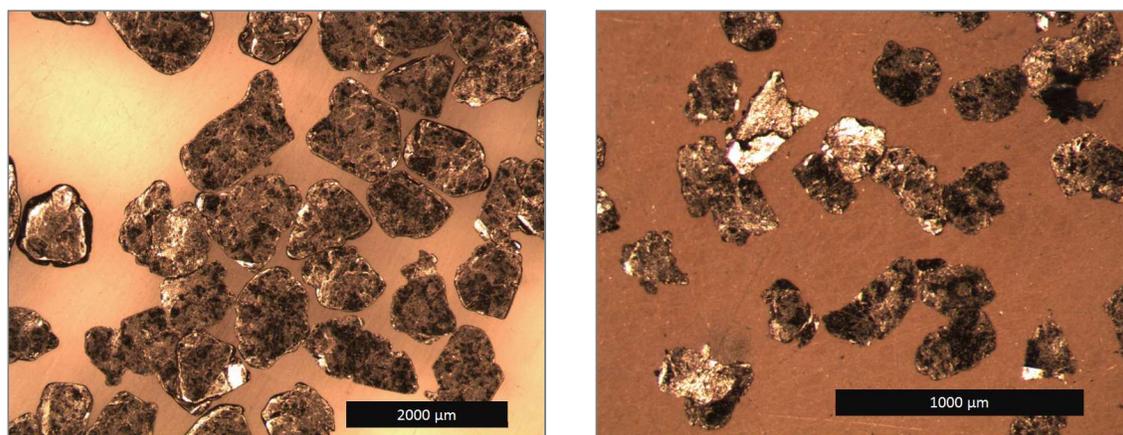
Four weathering types (mottled saprolite, upper saprolite, lower saprolite and saprock) and a blended master composite were tested. Optimal results were achieved with the addition of a small amount of media to achieve a scrubber power input of 2.5kWh/t. Key results include:

- 93% of master composite reduced to the required rougher flotation size of -2mm in a single pass
- 68% of saprock composite reduced to the required rougher flotation size of -2mm in a single pass

To ensure a robust circuit capable of handling a range of materials, the proposed plant circuit will include a recycle pebble crusher for the coarse scrubber product. Material between 2mm and 10mm is recycled directly back through the scrubber, whilst +10mm oversize is processed through the pebble crusher. This will ensure all scrubber feed material reports to the flotation circuit.



**Figure 1: Images of +300µm fraction of scrubber product from Master Composite (L) and Saprock (R) showing well liberated graphite flakes amongst quartz-dominant gangue.**



**Figure 2: Images of +500µm super-jumbo flake final concentrate (L) and +150µm medium flake final concentrate (R).**

**MALINGUNDE HIGH PURITY TEST WORK RESULTS**

Downstream application test work at Malingunde has produced ultra-high purity levels of 99.9995 weight % C from Malingunde natural crystalline flake graphite. The purification process utilises a simple high temperature process, which as a result of inherent uniqueness of the Malingunde flake graphite, requires low energy input to efficiently achieve some of the highest purity graphite in the world.

Initial weight – concentrate (g)	Final weight – ash (g)	C lost as CO <sub>2</sub> (g)	Ash (wt %)	LOI (wt %C)
20.0774	0.00010	20.0773	0.000498	<b>99.999502</b>

*Table 2. LOI950-Platinum crucible data with thermally purified graphite from Malingunde.*

The exceptionally high carbon purity and very low levels of critical impurities indicate that this material meets prerequisites for commercialization in the value-added marketspace. One of the targeted market uses of the flake is the advanced Li-ion battery sector. Standard Li-ion battery anodes are currently >99.95 wt%C, so Sovereign’s purified material could lead to superior electrochemical performance. Another major market for ultra-high purity graphite is in nuclear science, namely for pebble bed modular reactors.

The next steps in the downstream processing test work program will focus on milling and classification of the purified flake into spheronised graphite products for Li-ion battery anodes and other high-end electrical and electrochemical applications. This will be followed by electrochemical cell testing to examine the purified, spheronised material’s performance (i.e. reversible, irreversible capacity and irreversible capacity loss, etc.).

**CARPENTARIA JOINT VENTURE**

Mount Isa Mines (MIM), a Glencore Company, continues to manage and sole fund exploration on all tenements comprising the Carpentaria Joint Venture (“CJV”). Sovereign currently holds a 26.05% diluting interest in the tenements.



**Competent Person Statements**

*The information in this Announcement that relates to Mineral Resources is extracted from an announcement dated 12 June 2018. This announcement is available to view on [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). The information in the original ASX Announcement that related to Mineral Resources was based on, and fairly represents, information compiled by Mr David Williams, a Competent Person, who is a Member of The Australian Institute of Geoscientists. Mr Williams is employed by CSA Global Pty Ltd, an independent consulting company. Mr Williams has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, 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'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement 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 market announcement.*

*The information that relates to previous Metallurgical Testwork Results is extracted from an announcement on 29 May 2018. This announcement is available to view on [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). The information in the original announcement that related to Metallurgical Testwork Results was based on, and fairly represents, information compiled by Mr Kelvin Fiedler, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy. Mr Fiedler is a consultant of Mineral Processing Consultants Pty Ltd. Mineral Processing Consultants Pty Ltd is engaged as a consultant by Sovereign Metals Limited. Mr Fiedler 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'. 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 announcements.*

*The information that relates to previous Downstream Testwork Results is extracted from an announcement on 19 July 2018. This announcement is available to view on [www.sovereignmetals.com.au](http://www.sovereignmetals.com.au). The information in the original announcement that related to Downstream Testwork Results was based on, and fairly represents, information provided to Mr Oliver Peters, M.Sc., P.Eng., MBA, who is a Member of the Professional Engineers of Ontario (PEO), a 'Recognised Professional Organisation' (RPO) included in a list promulgated by the ASX from time to time. Mr Peters is the President of Metpro Management Inc and a consultant of SGS Canada Inc. ("SGS"). SGS is engaged as a consultant by Sovereign Metals Limited. Mr Peters has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, 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'. 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 announcements.*

**Forward Looking Statement**

*This release may include forward-looking statements, which may be identified by words such as "expects", "anticipates", "believes", "projects", "plans", and similar expressions. These forward-looking statements are based on Sovereign's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Sovereign, which could cause actual results to differ materially from such statements. There can be no assurance that forward-looking statements will prove to be correct. Sovereign makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of that release.*



## Appendix 1: Summary of mining tenements

As at 30 June 2018, the Company had an interest in the following tenements:

Project Name	Permit Number	Percentage Interest	Joint Venture Partner	Status
<b><u>Malawi</u></b>				
Central Malawi Graphite Project	EPL 0413	100%	-	Granted
	EPL 0372	100%	-	Granted
	EPL 0355	100%	-	Granted
	EPL 0492	100%	-	Granted
<b><u>Queensland, Australia:</u></b>				
Mt Marathon	EPM 8586	26.05%	Mount Isa Mines	Granted
Mt Avarice	EPM 8588	26.05%	Mount Isa Mines	Granted
Fountain Range	EPM 12561	26.05%	Mount Isa Mines	Granted
Corella River	EPM 12597	26.05%	Mount Isa Mines	Granted
Saint Andrews Extended	EPM 12180	26.05%	Mount Isa Mines	Granted

Beneficial percentage interests in Farm-out agreements disposed during the quarter ending 30 June 2018:

Project Name	Permit Number	Type of change	Interest at beginning of quarter	Interest disposed of during quarter	Interest at end of quarter
<b><u>Carpentaria JV:</u></b>					
Mt Marathon	EPM 8586	Farm out	26.24%	0.19%	26.05%
Mt Avarice	EPM 8588	Farm out	26.24%	0.19%	26.05%
Fountain Range	EPM 12561	Farm out	26.24%	0.19%	26.05%
Corella River	EPM 12597	Farm out	26.24%	0.19%	26.05%
Saint Andrews Ext.	EPM 12180	Farm out	26.24%	0.19%	26.05%



## 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**

SOVEREIGN METALS LIMITED

**ABN**

71 120 833 427

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

30 June 2018

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(1,178)	(3,259)
(b) development	-	-
(c) production	-	-
(d) staff costs	(142)	(471)
(e) administration and corporate costs	(85)	(514)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	26	73
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):		
- Business development	(30)	(161)
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(1,409)</b>	<b>(4,332)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	(51)	(73)
(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 (12 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 (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(51)</b>	<b>(73)</b>
<b>3. Cash flows from financing activities</b>			
3.1	Proceeds from issues of shares	-	6,500
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	(2)	(401)
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>(2)</b>	<b>6,099</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	<b>5,407</b>	<b>2,251</b>
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,409)	(4,332)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(51)	(73)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(2)	6,099
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>3,945</b>	<b>3,945</b>

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

<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	49	35
5.2 Call deposits	3,896	5,372
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>3,945</b>	<b>5,407</b>

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

	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to these parties included in item 1.2	140
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	

Payments include director fees and salaries, superannuation and provision of a fully serviced office.

**7. Payments to related entities of the entity and their associates**

	<b>Current quarter \$A'000</b>
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	

Not applicable

**8. Financing facilities available**

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

	<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.		

Not applicable

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

9. Estimated cash outflows for next quarter		\$A'000
9.1	Exploration and evaluation	1,250
9.2	Development	-
9.3	Production	-
9.4	Staff costs	110
9.5	Administration and corporate costs	80
9.6	Other (provide details if material)	-
<b>9.7</b>	<b>Total estimated cash outflows</b>	<b>1,440</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	EPM 8586 EPM 8588 EPM 12561 EPM 12597 EPM 12180	Reduction of interest in accordance with terms of joint venture agreement.	26.24%	26.05%
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: .....  
(Company secretary)

Date: 30 July 2018

Print name: .Clint McGhie.....

**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.