**ASX: PSM** 

**ASX ANNOUNCEMENT** 

31 July 2018

# **QUARTERLY ACTIVITIES REPORT TO 30 JUNE 2018**

#### **HIGHLIGHTS**

- The Company's flake-graphite programme was advanced significantly during the Quarter, including:
  - i) Generation of high-grade, >95%, flake graphite concentrate for Eunha and Gapyeong projects
  - ii) Drilling and channel sampling of the Eunha graphite targets to establish resource potential
  - iii) Launch of the testing programme to generate high-purity (targeting >99.95%) spherical graphite to supply this value-added product directly to the Korean Li-lon battery industry
- Drilling and targeting of high-grade zinc-lead and copper massive sulphides at Ubeong also advanced:
  - i) Zinc-Lead sulphide breccia intersected at the Python target produced significant Zn-Pb results
  - ii) Previous high-grade Zn-Pb-Cu intersections identified at Ilweol target associated with a skarn horizon that has now been extended to a 2km strike based on Peninsula ground magnetics

#### **SUMMARY**

Peninsula Mines Limited ("Peninsula" or "the Company") has developed a strategy focussed on supplying high-technology industries in Korea such as the Lithium-ion battery ("Li-Ion Battery") industry with the key mineral products they require, in particular:

1. **Flake Graphite**: a major component of Li-Ion Batteries, the Company intends to develop flake graphite resources in South Korea to initially generate high-grade (>95%) concentrate, then value-added process to produce high-purity (>99.95%) spherical graphite to directly supply this critical product to the Korean Li-Ion Battery anode manufacturers.

The Company is focussed on achieving two key milestiones in the near term:

- i) To establish flake-graphite resource potential in Korea, through electromagentics (EM), channel sampling and drilling of key targets. To this end the Company has signficantly advanced its, recently granted, Eunha and Gapyeong projects through the commencement of drilling and channel sampling, testing the EM anomalies generated last quarter. The next stage will be to continue drilling with the objective of generating Mineral Resources.
- ii) Demonstrate the metallurgical potential to produce high-purity, spherical graphite to supply Li-Ion Battery anode producers in Korea. To this end the Company has generated high-grade (>95%) flake-graphite concentrate for both the Eunha and Gapyeong Projects and has launched the spherical graphite testing programme with the depatch of a >5kg concentrate sample from Eunha to Germany for micronisation, spheronisation and purification, targeting a >99.95%, value-added, spherical graphite product.
- 2. **Base and Precious Metals**: are also in demand to supply the high-technology automotive and renewable energy industries in Korea. Peninsula is advancing, through drill targeting, multiple high-grade zinc-lead-copper as well as gold-silver targets on its large and highly prospective, 100% owned, Ubeong Project in eastern South Korea.

Drilling has intersected significant zinc-lead mineralisation at the new Python target and previous, high-grade, zinc-lead-copper intersections are to be followed up at the Ilweol target where the Company has extended the skarn horizon strike length to over 2km.

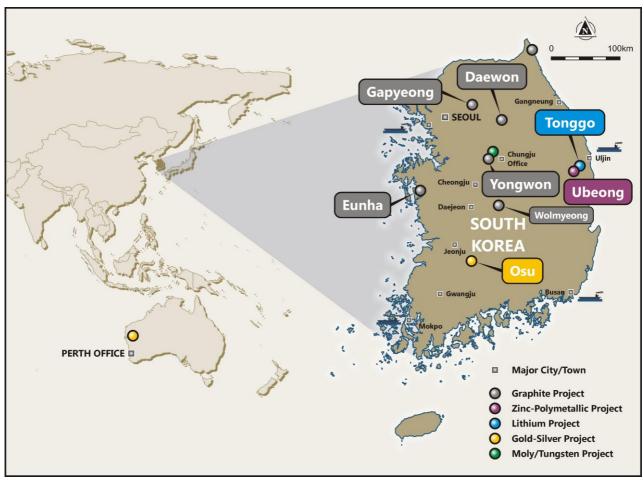


Figure 1: Peninsula Mines Project Locations

#### Flake Graphite:

The Company has identified four, key, flake-graphite projects in South Korea (see Figure 1 above) that have all demonstrated flake-graphite in petrography and metallurgical potential to produce >95% flake-graphite concentrate.

The current focus is on advancing the Eunha Graphite Project and the Gapyeong Graphite Project towards resource delineation through channel sampling and drilling, having already identified extensive electromagnetic (EM) anomalies at both projects during the previous Quarter.

#### Eunha Graphite Project (100% owned, two granted tenements):

During the Quarter, the Company completed five diamond drillholes on approximately 80m spaced sections for 488.9m at Eunha North prospect<sup>D1</sup>. Four out of the five initial drill holes intersected a steeply dipping graphitic unit associated with the previously identified EM anomaly (see Figure 2). Results were released post Quarter end (27<sup>th</sup> July 2018) and included the following intersections<sup>D12</sup>:

EHD0001: 7.82m (4.2m TW) @ 2.1% Total Graphitic Carbon (TGC) from 91.94m incl. 3.48m @ 3.6% TGC

EHD0003: 10.87m (8.3m TW) @ 2.5% TGC from 56.1m incl. 5.19m @ 4.0% TGC incl. 2.35m @ 6.3% TGC

EHD0004: 6.07m (3.9m TW) @ 2.2% TGC from 35.13m incl. 2.43m @ 3.3% TGC

EHD0005: 6.68m (4.3m TW) @ 2.8% TGC from 66.99m incl. 4.53m @ 3.73% TGC incl. 1.33m @ 10.9% TGC

In addition, channel sampling was completed at Eunha Roadhouse prospect (see Figure 2). The channel sampling has been completed on approximately 40m spaced tranches with the initial results received from four of the seven channels post the Quarter end (27<sup>th</sup> July 2018), and included the following intersections<sup>D12</sup>:

EC0007: 6.32m @ 2.2% TGC from 0.68m including 1.72m @ 4.4% TGC and, 6.89m @ 3.1% TGC from 11.57m including 3.11m @ 4.5% TGC

EC0010: 6.4m @ 2.1% %TGC from 0.0m including 1.01m @ 4.3% TGC

EC0005: 8.9m @ 2.8% TGC from 0.62m including 4.0m @ 3.2% TGC

Exploration Targets will be estimated once all available information is collated, including the channel sampling and drilling intersections, prior to planning of additional drilling to define Mineral Resources.

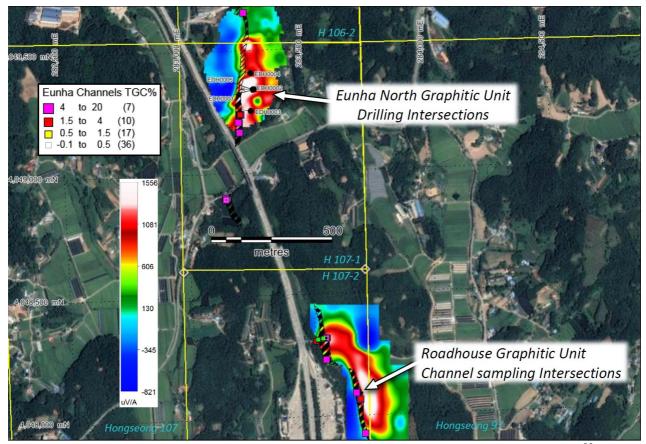


Figure 2: Eunha Graphite EM anomalies, graphitic units, channel sampling and resource drilling<sup>D2</sup>

# **Gapyeong Graphite Project (100% owned, one granted tenement):**

During the Quarter the key exploration and mining tenement was granted over the majority of the 1km strike length EM anomaly / graphitic units at Gapyeong (see Figure 3 below).

During the previous Quarter the EM survey detected an intense EM conductor / graphitic unit over a >1km strike length with surface rockchip and limited channel sampling data indicating an average grade of the graphitic unit of >16% TGC.

Additional channel sampling completed across the main, sub-cropping, graphitic unit indicates a width of >10m of graphitic material and the results for this work are expected shortly.

Negotiations are in progress with key local landholders to provide access for a drilling programme to test this large, high-grade, graphite target<sup>D3</sup>.

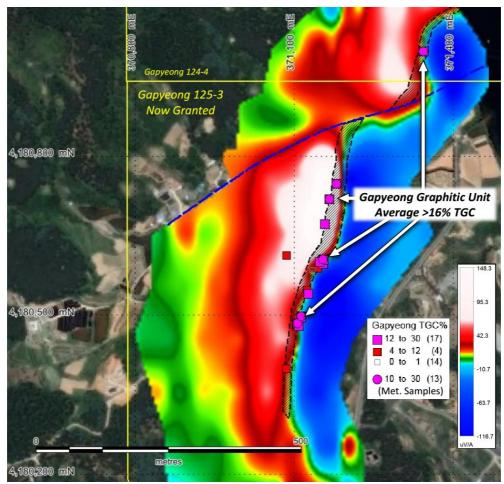


Figure 3: Gapyeong granted tenure, electromagnetics, metallurgical sampling D3

In addition to the channel sampling at Gapyeong, the Company has generated a **high-purity metallurgical concentrate of 95.4% TGC** for the high-grade Gapyeong graphite deposit. This high-purity metallurgical concentrate result was obtained by Independent Metallurgical Operations Pty Ltd ("IMO") from initial batch grinding and flotation testing of a >80kg composite sample, that produced a **high-grade confirmatory bulk composite assay of 17.7% TGC**<sup>D5</sup>.

The next step will be to generate a >5kg, -150 micron, concentrate sample (targeting >95% TGC) for despatch to Germany for spherical graphite testwork. The testwork will involve micronisation and spheronisation, prior to purification with the objective of generating a >99.95% TGC purity, uncoated spherical graphite product suitable for lithium-ion (graphite) battery anode production in Korea<sup>D5,D8</sup>.

#### **Other Key Graphite Projects:**

**Daewon Graphite Project (100% owned, granted tenement):** During the previous Quarter the EM survey detected a shallow dipping graphitic unit, striking over 1km. The majority of the Daewon prospect is covered by multiple private landholders and the Company is attempting to establish contact in order to negotiate drilling access<sup>D10</sup>.

**Yongwon Graphite Project (100% owned, granted tenement):** The Company is in negotiations with the Chungju City Council regarding access to drill the Yongwon graphitic unit, supported by the Ministry of Trade, Industry and Energy (MOTIE)<sup>D10</sup>.

**Wolmyeong Graphite Project (100% owned, five granted tenements):** Previously South Korea's largest graphite mine from several high-grade, predominantly amorphous, graphitic units. The Company is seeking partners in the steel making sector to advance this very high-grade graphite deposit<sup>D10</sup>.

### **Ubeong Zinc-Lead-Copper Project**

The Ubeong Project, located at the south end of the highly mineralised Taebaek Basin of eastern South Korea, consists of seven granted exploration tenements and multiple tenement applications over more than 100km<sup>2</sup>. The tenement package adjoins the operating Keumho Zinc-Lead-Silver Mine (see Figure 4).

Limestone-skarn units have been historically mined at Chilbo and Ilweol. The Company has applied modern exploration techniques for the first time in this highly prospective area, including surface rock-chip and soil geochemistry, detailed magnetics and Induced Polarisation ("IP") geophysics.

The Company is systematically testing, with diamond drilling, a series of high-grade, zinc-lead-copper (+/-silver, gold) targets and has intersected significant massive, breccia and disseminated sulphides at its Chilbo and Python targets with further drilling planned<sup>D1</sup>.

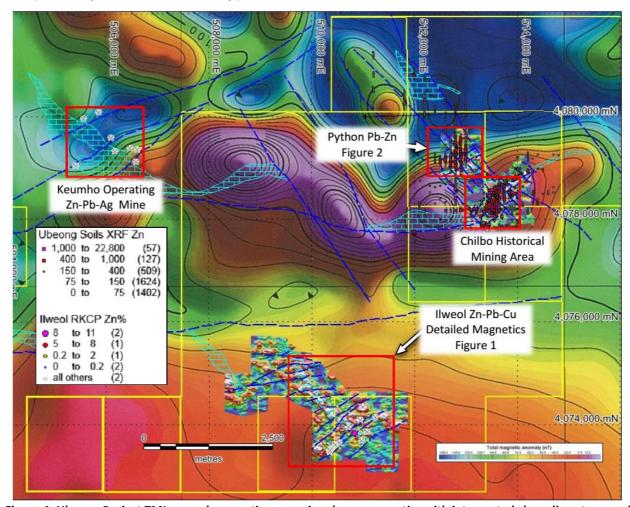


Figure 4: Ubeong Project TMI ground magnetics on regional aeromagnetics with interpreted skarn-limestone and intersecting fault structures, tenements granted and applied, and rock chip and soil sampling

In addition the Company has identified very high-grade zinc (Zn) with lead (Pb) and copper (Cu) drilling intersections in a report released by the Korea Resources Corporation (KORES) following the grant of the **Ilweol tenements**, located approximately 5km to the south of the Chilbo area. The KORES report includes the following drilling intersections:

ILW 77-1: 7.0m (3.5m true width, TW) @ 14.58% Zn, 1.37% Pb, 2.12% Cu from 191.9m

ILW 77-3: **2.1m (1.5m TW) @ 18.66% Zn, 11.08% Pb, 3.21% Cu from 253.6m and,** 

5.5m (4.0m TW) @ 10.16% Zn, 1.61% Pb, 1.45% Cu from 263.6m

ILW 76-3: **3.6m (2.5m TW) @ 15.5% Zn, 1.48% Pb from 181.3m**<sup>D7</sup>

The high-grade Zn-Pb-Cu massive and breccia sulphide mineralisation at Ilweol is associated with a >2km strike length limestone-skarn horizon (see Figure 4), that was previously mined from the 1940s to the 1970s to a depth of approximately 150m, accessed by an adit from the valley floor which is still accessible.

Post Quarter-end, Peninsula announced that the extended ground magnetics programme at Ilweol Prospect had highlighted new magnetic targets, effectively doubling the strike length of the skarn target to 2km. Soil sampling was underway to define zinc-lead-copper drilling targets<sup>D1</sup>.

Diamond drilling is being planned to investigate the new magnetic targets and to verify historical drilling results<sup>D1</sup>, subject to drilling access negotiations with local landholders that are in progress.

At **Python Prospect**, to the northwest of the Chilbo historical mining area (see Figure 4), ground magnetics had been followed up with soil sampling near the skarn contact during the previous Quarter.

A diamond drillhole, UBD0005, tested under the Pb-Zn soil anomaly and intersected multiple zones of massive, breccia and disseminated sulphides in psammitic and pelitic sediments. Analytical results were in line with previous hand-held XRF measurements<sup>D6</sup>, and produced the following intersections:

UBD0005: 9.31m @ 1.17% combined Zn and Pb (0.7%Zn and 0.47%Pb) from 54.14m, including 1.03m @ 3.03% Zn, 2.53%Pb from 61.38m (XRF spot readings up to 22.5% Pb, 21.4% Zn), 1.1m at 2.12% Zn, incl. 0.4m @ 4.69% Zn from 42.55m & 0.09m @ 8.8% Zn from 82.05m<sup>D1</sup>

Further, deeper drilling is planned to intersect the skarn unit interpreted to lie below UBD0005, as indicated by previous ground magnetics<sup>D1,D7</sup>.

## **Other Projects:**

#### **Tonggo Lithium Project**

A close spaced soil sampling grid was designed to identify sources of anomalous lithium within the north east trending pegmatite swarm. This programme is ongoing<sup>D10</sup>.

#### **Osu Gold Project**

The Company has received Forestry access approval for two drilling sites to test the Pal Gong East and Pal Gong West, high-grade, silver-gold targets repectively. Drilling will be prioritised against the other targets that the Company is progressing<sup>D10</sup>.

# **Daehwa Molybdenum-Tungsten Project**

The final payment of KRW 400 million (~AUD 480k) for the sale of the Daehwa Project is now due and payable as the conditions for final payment have now been satisfied, including renewal of the mining tenement for a further three (3) years and transfer of the Forestry Access Lease to the new owners<sup>D10</sup>.

The Company has previously received KRW 200 million (~AUD 240k) non-refundable deposit and the final payment will complete the sale of the Daehwa Project for KRW 600 million.

#### Camel Hills Joint Venture, Western Australia (Aurora Minerals Ltd 51.29%/Peninsula 48.71%)

Data review of the Camel Hills Project highlighted potential for further drill targeting of the VTEM anomalies identified in the 2012 survey.

#### Corporate

Peninsula's expenditure for the Quarter was \$0.8 million, including 80% (\$0.6 million) in South Korea focussed on the Company's exploration and pre-development programmes.

The Company retained \$0.58 million and no debt at the end of the June Quarter, in addition to the final payment for the Daehwa Project sale of approximately \$0.48 million being due and payable.

**ENDS** 

#### For further information contact:

#### Jon Dugdale

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E: <u>jdugdale@peninsulamines.com.au</u> Ph: +61 8 6143 1840 M: +61 402 298 026

# Summary list of all previous Peninsula ASX releases referenced in this report:

- D1 New Magnetics Highlights High-Grade Zinc Targets at Ilweol, 3/07/18
- D2 Eunha North Drilling Graphite Intersections, 21/06/18
- D3 Key Tenement Granted Over Gapyeong Graphite Project, 12/06/18
- D4 Resource Drilling Commences at Eunha Graphite Project, 31/05/18
- D5 High Purity Graphite Concentrate Results Confirm Potential of High-Grade Gapyeong Project, 23/05/18
- D6 Sulphide Breccia with High Grade Zinc and Lead Intersected at Python on Ubeong Project, 21/05/18
- D7 Peninsula Identifies High-Grade Zinc Intersections at Ilweol on the Ubeong Project, 15/05/18
- D8 Peninsula Launches Testing Programme for Value-Added Spherical Graphite Processing, 24/04/18
- D9 Very High-Purity Graphite Concentrate Grades for Eunha Graphite Project, South Korea, 10/04/18
- D10 Peninsula Mines Limited Quarterly Report to 31 March 2018, 30/04/18
- D11 Peninsula Mines Limited Investor Presentation, 05/06/18
- D12 Eunha Graphite Intersections Confirm Resource Targets, 27/07/18

For full versions of the Company's releases see Peninsula's website www.peninsulamines.com.au

#### **Forward Looking Statements**

This report contains certain forward-looking statements. These forward-looking statements are not historical facts but rather are based on Peninsula Mines Ltd's current expectations, estimates and projections about the industry in which Peninsula Mines Ltd operates, and beliefs and assumptions regarding Peninsula Mines Ltd's future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates" "potential" and similar expressions are intended to identify forward-looking statements. These statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties and other factors, some of which are beyond the control of Peninsula Mines Ltd, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. Peninsula Mines Ltd cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of Peninsula Mines Ltd only as of the date of this report. The forward-looking statements made in this report relate only to events as of the date on which the statements are made. Peninsula Mines Ltd does not undertake any obligation to report publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this report except as required by law or by any appropriate regulatory authority.

#### **Competent Persons Statements**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Daniel Noonan, a Member of the Australian Institute of Mining and Metallurgy. Mr Noonan is an Executive Director of the Company.

Mr Noonan 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'. Mr Noonan consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this release that relates to Geophysical Results and Interpretations is based on information compiled by Karen Gilgallon, Principal Geophysicist at Southern Geoscience Consultants. Karen Gilgallon is a Member of the Australasian Institute of Geoscientists (AIG) and 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'. Karen Gilgallon has previously consented to the inclusion in the release of the matters based on this information in the form and context in which it appears.

+Rule 5.5

# 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

PENINSULA MINES LTD				
ABN Quarter ended ("current quarter")				
56 123 102 974	30 JUNE 2018			

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(582)	(2,015)
	(b) development		
	(c) production		
	(d) staff costs*		
	(e) administration and corporate costs	(197)	(763)
1.3	Dividends received (see note 3)		
1.4	Interest received	3	15
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)		
1.9	Net cash from / (used in) operating activities	(776)	(2,763)

<sup>\*</sup> The company's accounting policy allocates staff costs to activities and are accordingly included in items 1.2 (a) and 1.2 (e).

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(12)	(34)
	(b) tenements (see item 10)		
	(c) investments		

<sup>+</sup> See chapter 19 for defined terms

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Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
	(d) other non-current assets		
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)*	-	232
2.6	Net cash from / (used in) investing activities	(12)	198

\*Includes 200,000,000 Korean Won paid as part deposit on sale of Daehwa Project per agreement announced 29 August 2017

173.	Cash flows from financing activities	
3.1	Proceeds from issues of shares	- 2,000
3.2	Proceeds from issue of convertible notes	
3.3	Proceeds from exercise of share options	- 274
3.4	Transaction costs related to issues of shares, convertible notes or options	- (162)
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)	
3.10	Net cash from / (used in) financing activities	- 2,112

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,374	1,039
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(776)	(2,763)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(12)	198
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	2,112
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	586	586

<sup>+</sup> See chapter 19 for defined terms

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5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	586	167
5.2	Call deposits	-	1,207
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	586	1,374

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	116
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 transaction items 6.1 and 6.2	ns included in
Fees	to directors	
Fees	to directors	
Fees <b>7.</b>	Payments to related entities of the entity and their associates	Current quarter \$A'000
	Payments to related entities of the entity and their	
7.	Payments to related entities of the entity and their associates	

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8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities		
8.2	Credit standby arrangements		
8.3	Other (please specify)		
8.4	Include below a description of each facility ab whether it is secured or unsecured. If any add proposed to be entered into after quarter end	ditional facilities have bee	en entered into or are

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	215
9.2	Development	
9.3	Production	
9.4	Staff costs	
9.5	Administration and corporate costs	155
9.6	Other (provide details if material)	
9.7	Total estimated cash outflows	370

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginnin g of quarter	Interest end of quarter
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	Hongseong 107-1 and 107-2	100% via South Korean subsidiary Korea Graphite Company Ltd (KGCL)	Application	100%) (Formal grant notified on 15 May 2018 to SMCL subsequently transferred to KGCL)

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#### **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.

B.D. Worddelf

Sign here: Date: 31 July 2018

(Company secretary)

Print name: Bruce Waddell

#### **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.

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<sup>+</sup> See chapter 19 for defined terms