

Quarterly Activity Report and Appendix 5B

Period Ending 31 March 2020

For Immediate Release

30 April 2020

Highlights

- Sunlands Co. Collaboration**

The Company and Sunlands are very pleased with the progress of work under the collaboration agreement for the use of Uley 2 flake product as the critical heat sink material for Sunlands' thermal energy storage cells.

Sunlands has delivered a draft of its independent Commercialisation Study to the Company for comment. The study's draft findings confirm the commercial feasibility of Sunlands' technology, its overall performance and efficiency and importantly its suitability for electricity grid connected applications.

Sunlands has notified the Company that as soon as the Commercialisation Study is published it will begin planning for the development of a commercial pilot that will demonstrate the technology's performance with Uley 2 flake product.
- Flake Graphite Market**

The global market for the Company's medium, large and extra-large flake graphite (i.e., > 95%, >+100 mesh) continues to support the premium pricing that has prevailed since the third quarter of 2017. Prices range from approximately US\$850 for large flake product to more than US\$1,250 for extra-large flake, averaging significantly more than the Company's projected basket price of US\$919.

In contrast the market for electric vehicle (EV) feedstock, i.e., fine flake graphite (94%, -100 mesh) continues to struggle at levels below US\$550. The EV market has suffered from a downturn in demand generally for battery minerals.
- COVID 19 Impact: Marketing**

The Company's planned European visit to its major refractory target customers has been deferred for a second time. The Company will continue to progress discussions and negotiations and will schedule target customer visits when travel restrictions are lifted.



Sunlands Co. Collaboration

The Company continues to work with The Sunlands Company Pty Ltd (Sunlands) on the necessary specification for the flake graphite required for the heat sink component of Sunlands' thermal energy storage (TES) cell technology. The main and highest cost input for a TES cell is graphite, the critical driver of performance of the overall technology.

As part of Sunlands commercialisation strategy, it appointed specialist thermal process engineers to prepare an independent feasibility and commercialisation study (Commercialisation Study).

The study draft findings have now been made available to the Company and Sunlands has requested that the Company review the specification and design of the flake graphite heat sink material that will be installed within a TES cell.

The scope of the study was broadly two-fold:

- (a) Confirmation of the feasibility of Sunlands' design of thermal energy storage cells and associated generation systems as set out in its patent filings; and
- (b) Detailed design of a complete commercial electricity generation system comprising the thermal energy storage cells and the turbine generator power plant.

The Sunlands thermal energy storage cells store heat energy produced from the conversion of electrical energy from various sources, including asynchronous generation such as solar photovoltaic or wind. This energy is released through a conventional thermal power plant to produce dispatchable electrical power for supply to grid connected networks or the commercial or industrial market segments as behind-the-meter solutions.

The Commercialisation Study documented the overall performance and commercial feasibility of the technology. Importantly, the results of the study detailed the technology's efficiencies and suitability for grid applications. The following is an extract from the report:

"The application of the technology to large scale time shifting of asynchronous generation is self-evident..."

Importantly the heat sink material within a TES [thermal energy storage] cell and the heat transfer fluid remain a solid and gas respectively across the entire temperature range of the thermal storage and cycling process.

These features of the technology combined with the low cost of the thermal cycle process deliver a level of reliability well suited to certain grid connected applications. In particular, it is noted that:

- (a) *Sunlands' technology make it a potential candidate for grid connected applications directed at network stability such as the restoration of inertia or the increasing needs of distributed electricity networks. For example, TES Generation Systems are likely to be ideally suited for STEM (short term energy market) applications and as participants providing SGA (small generation aggregator) services; and*
- (b) *The TES Generation System does not require grid connectivity or an external fuel source (i.e. diesel, methane, etc.) to commence operations and consequently, with an appropriately matched captive renewable source, the TES Generation System has the potential to be deployed as a 'blackstart' solution."*



The Company welcomes the findings and looks forward to working with Sunlands on its commercial pilot development.

Global Flake Graphite Market

The global natural flake market continues its strong support for medium, large and extra-large flake product (i.e., > 95%, >+100 mesh). Since late 2017 the market has demonstrated a resilience and stability in pricing for these products ranging from approximately US\$850 for large flake to more than US\$1,250 for extra-large flake.

The Company's Uley 2 production which is principally medium, large and extra-large flake targets customers generally in thermal management products, especially high-grade refractory products.

In part due to the ongoing decrease in existing large flake mining output and the tightening of environmental controls in China, supply is expected to remain largely in balance but small increases in demand beyond existing growth levels will put significant upward pressure on prices.

The Chinese market supplements its large flake demand requirements from imports including from the large and extra-large natural flake deposits of Madagascar. These exports are expected to continue and will be essential to China meeting the increasing use of large flake beyond traditional refractories to the growing expandables and foils market segments.

The Company's historical positioning within these market segments, the low-cost production profile of Uley 2 and the reliable supply from a first world mining jurisdiction provides a robust platform to tackle these markets aggressively.

In contrast, the market for EV feedstock, i.e., fine flake graphite (94%, -100 mesh) continues to struggle at levels below US\$550. The EV market has suffered from the general downturn in Chinese demand for battery minerals. Although the long-term outlook for fine flake graphite remains compelling, the prevailing existing oversupply is unlikely to change until EV growth/penetration rates increase.

COVID 19 Impact: Marketing

The Company's planned pan European visit to its major refractory target customers has been deferred for a second time. The Company will continue to progress its discussions and negotiations and will schedule target customer visits when travel restrictions are lifted.

In light of this delay, the Company intends to explore the commencement of pre-qualification trials with target customers utilising its existing warehoused products prior to face to face meetings taking place.

The Company's negotiations with Sunlands continues under the framework outlined in the collaboration agreement. The parties' technical work has confirmed that the Uley 2 range of mesh sizes and purities will meet Sunlands' needs for high purity flake graphite, however the level, if any, of advanced processing required has yet to be concluded.

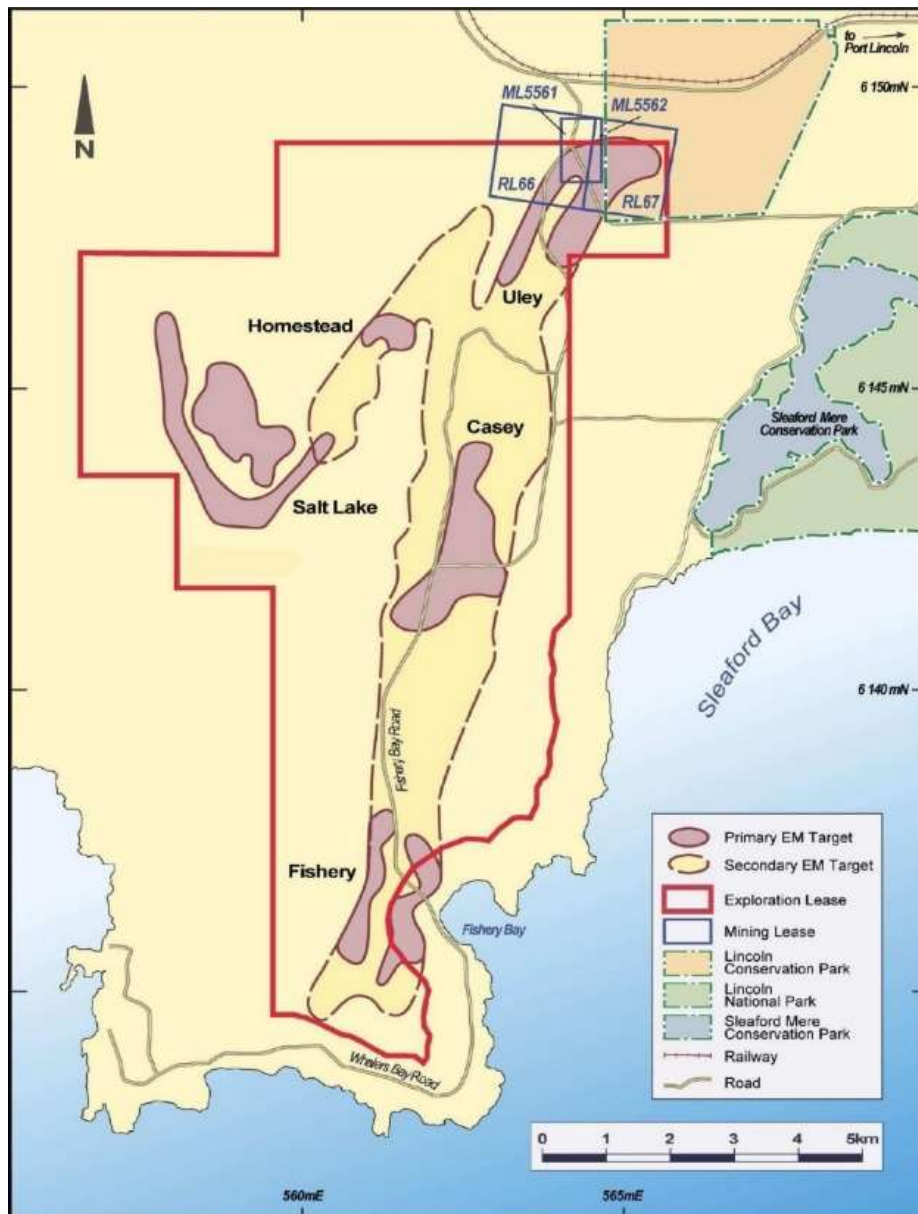
Determining the processing requirements, is one of the key workstreams remaining under the collaboration agreement before Uley 2 flake production can be accepted as the critical heatsink material within Sunlands' TES generation systems.



Schedule of Tenements (ASX Listing Rule 5.3.3)

Tenement	Tenement Type	Interest ¹	Changes during the Quarter
ML5561	Mining Licence	100%	Nil
ML5562	Mining Licence	100%	Nil
RL66	Retention Licence	100%	Nil
RL67	Retention Licence	100%	Nil
EL6224	Exploration Licence	100%	Nil

1. All interests are registered in the name of the company's subsidiary, Quantum Graphite Operations Pty Ltd and held as at the end of the quarter.



Corporate Information and Announcements

As at 31 March 2020 the company had 218,874,240 ordinary shares and 28,571,429 unlisted options on issue and 1,015 shareholders. The top 20 shareholders held 67.07% of the issued ordinary shares in the company.

As at 31 March 2020 the company held cash at bank of \$114,331. As at 30 April 2020 the company held cash at bank of \$73,787.

This report should be read in conjunction with all prior announcements made by the company to the ASX including all announcements released under the company's previous code, VXL (on and from 18 November 2013 until 30 November 2016) available at

<http://quantumgraphite.com/investors>.

The pro forma Appendix 5B (Mining exploration entity and oil and gas exploration entity quarterly report) is attached to this report.

For further Information

For further information contact:

Company Secretary

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Competent Persons Statement

QGL confirms that it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters relating to Mineral Resources is based on, and fairly represent, the Mineral Resources and information and supporting documentation extracted from the reports prepared by a competent person in compliance with the JORC Code (2012 edition) and released to the ASX (including under the company's previous code, VXL on 17 December 2014, 5 May 2015 and 15 May 2015 respectively).

Forward Looking Statements

All statements other than statements of historical fact included in this announcement including, without limitation, statements regarding future plans and objectives of are forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as 'may', 'could', 'believes', 'estimates', 'targets', 'expects' or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this announcement, are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the company, its directors and management of QGL, that could cause QGL's actual results to differ materially from the results expressed or anticipated in these statements.

QGL cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. QGL does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Quantum Graphite Limited

ABN

41 008 101 979

Quarter ended ("current quarter")

31 March 2020

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation (if expensed)	-	-
(b) development	-	-
(c) production	-	-
(d) staff costs	(21)	(89)
(e) administration and corporate costs	(125)	(645)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	-	(1)
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	276
1.8 Other (provide details if material)	(1)	287
1.9 Net cash from / (used in) operating activities	(147)	(172)

2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation (if capitalised)	-	-
(e) investments	-	-
(f) other non-current assets	-	-

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	165
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	-	165
3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(6)
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	-	(6)
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	297	401
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(147)	(410)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	165

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	(6)
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	150	150

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	-	-
5.2	Call deposits	150	297
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)	150	297

6. Payments to related parties of the entity and their associates		Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(170)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.	Financing facilities <i>Note: the term 'facility' includes all forms of financing arrangements available to the entity.</i> <i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	Total financing facilities	-	-
7.5	Unused financing facilities available at quarter end		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(147)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	-
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(147)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	150
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	150
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	(1)

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: No because the Company has substantially concluded the work in connection with the Uley 2 Definitive Feasibility Study and it has the capacity to reduce or defer cash outflows whilst maintaining its key operating activities.

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: Yes. Steps include plans for the raising of further capital by way of the issue of additional equity. The Company expects to be successful in the raising of equity capital.

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes. The Company's operations will continue on substantially the same basis as recent quarters subject to the ongoing review, and if necessary, reduction or deferral, of non-essential cash outflows.

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.

DATE:	30 APRIL 2020
AUTHORISED BY:	SAL CATALANO COMPANY SECRETARY

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow 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 cash flow 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. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.