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QUANTUM GRAPHITE

MARKET RELEASE
For Immediate Release
30 Apr 2026

March 31 2026 Quarterly Report and Appendix 5B

Highlights

- Uley 2 development status – mobilisation in preparation for FEED Study
- Uley 2 financing update – finalising downstream operational structure
- Quantum-Sunlands Eyre Peninsula Graphite (EPG) Hub - planning update
- Downstream (refinery) development status - Memorandum of Understanding (MOU) with the Governorate of Al Buraimi, Oman
- Sunlands Energy Co. Thermal Energy Storage Technology - Grant of Additional United States Patent

Uley 2 Project Development Status - Mobilisation for FEED

Mobilisation on the Uley 2 site commenced in late March 2026 in preparation of the front end engineering and design (FEED) study. The general terms and scope of the FEED have been concluded with Lycopodium Limited. The detailed terms of the FEED will be the subject of a further announcement following on site meetings with the Lycopodium project team in early May 2026.

On-site activities will include final surveys for the locations of process plant, logistics and mining support services as well as confirming the level of necessary upgrades to access road infrastructure.



Uley 2 Project - Financing Update

During the period, the Company moved forward with the proposal to integrate all processing and refining operations with its downstream partner, Sunlands Pure. As indicated in prior announcements, this structure was developed in consultation with prospective financiers. The structure delivers a superior end product, i.e., refined flake (purified flake rather than concentrate) at a more competitive price than that offered by conventional processing and refining pathways.

ABOUT QUANTUM GRAPHITE LIMITED

QGL is the owner of the Uley flake graphite mineral deposits located south-west of Port Lincoln, South Australia. The company's Uley 2 project represents the next stage of development of the century old Uley mine, one of the largest high-grade natural flake deposits in the world. For further information, qgraphite.com

ABOUT SUNLANDS ENERGY CO.

Sunlands Energy Co. is the leading developer of thermal energy storage technology (TES Graphite Cells) designed to drive commercial, industrial and utility-scale steam turbine generators. The company's TES Graphite Cells are capable of restoring baseload generation, delivering critical synchronous support to grid networks and eliminating the large-scale curtailment of renewables generation. For further information, www.sunlandsco.com

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Integrating downstream operations delivers a number of benefits, especially the substantial efficiencies derived from the removal of several steps in the processing and refining pathway. This translates to materially lower costs and a more resilient supply chain that offers customers superior access to scalable feedstock, especially within the LFP Li-ion battery anode supply chain. Further, the superior project economics greatly expands the available financing options for the Uley 2 Project.

This reorganisation of the Company's commercial activities does require a larger overall funding commitment but would significantly strengthen its competitive profile.

A further announcement will be made detailing the revised structure of the downstream operations and the commercial relationship between the Company and Sunlands Pure. The expected time frame for this announcement remains dependent on resolving several key terms currently the subject of negotiations with prospective financiers.

Quantum-Sunlands EPG Hub - Planning Update

EPG Hub planning remains focused on the due diligence of the shortlisted sites for the location of the hub and related infrastructure. Identification of appropriate sites that met the key criteria was completed in the prior period. The suitable sites were shortlisted with the assistance of the Port Lincoln City Council and the Department of State Development.

In light of the extensive activities planned for the EPG Hub, due diligence will include an assessment of operating more than a single site to accommodate:

- the planned expansion of the logistics capability, essential to managing increases in Uley 2 flake concentrate production; and
- the TES Graphite Cells manufacturing facility operated by Sunlands Power, the Company's joint venture with Sunlands Energy Co.

The due diligence process encompasses negotiations with landowners and other stakeholders and a preliminary evaluation of site infrastructure and environmental impacts.

Oman Flake Graphite Refinery - MOU Signed with the Governorate of Buraimi, Oman

The Company's downstream technology partner, Sunlands Pure Group (SPG), signed an MOU with the Governorate of Al Buraimi, Oman. The MOU recognizes the strategic importance of SPG's planned large-scale graphite refinery, to be built on a site exceeding 240 hectares approximately 60 kilometres from Sohar Port, Oman's main commercial port.



Signing Ceremony at the offices of His Excellency Sayyed Dr. Hamad bin Ahmed bin Saud Al Busaidi, Governor of Al Buraimi (right) with Mr Nasser Al Naaimi representing the Sunlands Pure Group.

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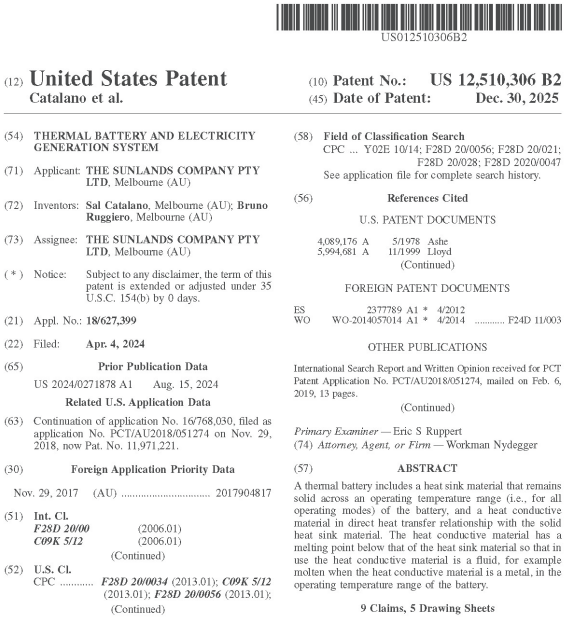
The project has been officially designated as an Oman Vision 2040 project — the framework underpinning Oman's national strategy and five-year development planning. The designation underscores the significance of the refinery to Oman's long-term economic development.

The MOU formalizes existing government support and provides a pathway for accelerated development of the facility, which will serve global markets including LFP Li-ion anodes, isostatic graphite, and thermal energy storage. Critically, the agreement recognizes Quantum Graphite as SPG's exclusive flake graphite supplier, cementing the Company's role as a key partner in the integrated downstream operation.

Sunlands Energy Co. - Grant of Additional United States Patent

During the period, the Company's joint venture partner, Sunlands Energy Co., was granted a new US patent for its TES Graphite Cell Technology. This new grant shares the same priority date (November, 2017) as the original US patent grant and significantly expands the scope of protected claims, strengthening the company's ability to commercialize the technology.





US012510306B2

(12) **United States Patent**
Catalano et al.

(10) **Patent No.: US 12,510,306 B2**
(45) **Date of Patent: Dec. 30, 2025**

(54) **THERMAL BATTERY AND ELECTRICITY GENERATION SYSTEM**

(71) Applicant: **THE SUNLANDS COMPANY PTY LTD**, Melbourne (AU)

(72) Inventors: **Sal Catalano**, Melbourne (AU); **Bruno Ruggiero**, Melbourne (AU)

(73) Assignee: **THE SUNLANDS COMPANY PTY LTD**, Melbourne (AU)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **18/627,399**

(22) Filed: **Apr. 4, 2024**

(65) **Prior Publication Data**

US 2024/0271878 A1 Aug. 15, 2024

Related U.S. Application Data

(63) Continuation of application No. 16/768,030, filed as application No. PCT/AU2018/051274 on Nov. 29, 2018, now Pat. No. 11,971,221.

(30) **Foreign Application Priority Data**

Nov. 29, 2017 (AU) 2017904817

(51) **Int. Cl.**
F28D 20/00 (2006.01)
C09K 5/12 (2006.01)
(Continued)

(52) **U.S. Cl.**
CPC ***F28D 20/0034*** (2013.01); ***C09K 5/12*** (2013.01); ***F28D 20/0056*** (2013.01);
(Continued)

(58) **Field of Classification Search**
CPC ... Y02E 10/14; F28D 20/0056; F28D 20/021; F28D 20/028; F28D 2020/0047
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,089,176 A 5/1978 Ashe
5,994,681 A 11/1999 Lloyd
(Continued)

FOREIGN PATENT DOCUMENTS

ES 2377789 A1 * 4/2012
WO WO-2014057014 A1 * 4/2014 ..... F24D 11/003

OTHER PUBLICATIONS

International Search Report and Written Opinion received for PCT Patent Application No. PCT/AU2018/051274, mailed on Feb. 6, 2019, 13 pages.
(Continued)

Primary Examiner — Eric S Ruppert
(74) *Attorney, Agent, or Firm* — Workman Nydegger

(57) **ABSTRACT**

A thermal battery includes a heat sink material that remains solid across an operating temperature range (i.e., for all operating modes) of the battery, and a heat conductive material in direct heat transfer relationship with the solid heat sink material. The heat conductive material has a melting point below that of the heat sink material so that in use the heat conductive material is a fluid, for example molten when the heat conductive material is a metal, in the operating temperature range of the battery.

9 Claims, 5 Drawing Sheets

The additional protections cover three key advancements:

- the ability to use any heat transfer fluid to transfer heat from TES Graphte Cells to the steam turbine generator electricity generation system;
- greater flexibility in how TES Graphite Cells are heated; and
- direct integration of the electricity generation system with the TES Graphite Cell into a complete electricity generation system

The application was originally filed under the WIPO Patent Cooperation Treaty in November 2017, providing coverage across 155 countries. Patents have now been granted in the US, Australia, and South Africa, with a European/UK patent application still under examination and expected to be approved by year's end.

Quantum Graphite participates in this technology through its 50% interest in joint venture company, Sunlands Power, the manufacturer of TES Graphite Cells. The critical raw material underpinning the performance of TES Graphite Cells is Uley 2 coarse flake.

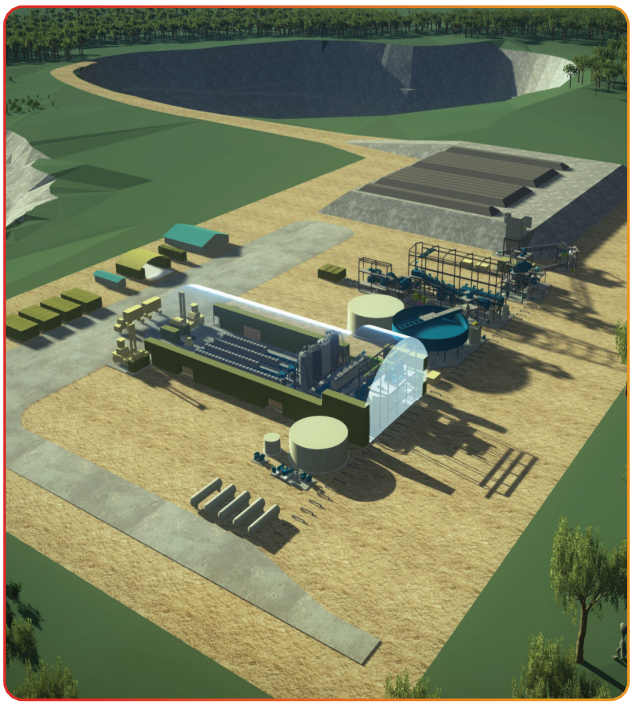
TES Graphite Cells represent the only technology capable of producing supercritical steam, essential to drive commercial and utility-scale turbine generators. Deployment of the technology will be an important decarbonization tool, offering coal-fired power stations a practical path to emissions-free retrofitting, while also providing superior grid management capabilities — including grid forming and voltage and frequency control — compared to existing alternatives.

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Uley 2 Phase 1 Mining Study and Feasibility Summary Financial Metrics (updated)

Total undiscounted cash flow	A$990.4 million[1]
Crusher feed	1,200,00 tpa
Graphitic carbon grade	11.89%
Graphitic carbon recovery	84%
Concentrate purity	94% graphitic carbon
Capital expenditure	A$152.7 million
Processing cost (PCAF)	A$236.05 per tonne (inclusive of admin)
Mining cost (MCAF)	A$2.5 per tonne milled at surface plus 5c for every 4m
Production	100,000 dmt per annum
Product Cost (Av LOM)	US$401.14 dmt (inclusive of drying and bagging)
Product Price (Ex-works)	US$1,225 dmt

[1] Includes JORC 2012 Reserves and Resources



Schedule of JORC 2012 Minerals Reserves and Resources

JORC 2102 Mining Study and Ore Reserve Statement, November 2019[2]

	Classification	Tonnes (kt)	Total Graphitic Carbon (%)
Uley 2	Proved	811	11.66
Uley 2	Probable	3,191	11.95
	Total	**4,003**	**11.89**

JORC 2012 Mineral Resource Estimate, November 2021[3]

Uley 3	Inferred	900	6.6
	Uley 3 Total	**900**	**6.6**
Uley 2	Measured	800	15.6
	Indicated	4,200	10.4
	Inferred	1,300	10.5
	Uley 2 Total	**6,300**	**11.1**
Uley Project Total	**TOTAL**	**7,200**	**10.5**

[2] Released to the market on 1 December 2019
[3] Released to the market on 18 November 2021

Schedule of Tenements (ASX Listing Rule 5.3.3)

Tenement	Tenement Type	Interest	Changes during the Quarter
ML5561[4]	Mining Licence	100%	Nil
ML5562[4]	Mining Licence	100%	Nil
RL66[5]	Retention Licence	100%	Nil
RL67[5]	Retention Licence	100%	Nil
EL6224[5]	Exploration Licence	100%	Nil
EL7019[5]	Exploration Licence	100%	Granted 10 October 2024

[4] Registered in the name of Quantum Graphite Operations Pty Ltd
[5] Registered in the name of Quantum Graphite Explorations Pty Ltd

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Uley Region Location and Resource Expansion Priorities

Priority 1 - Uley 2 Project Expansion

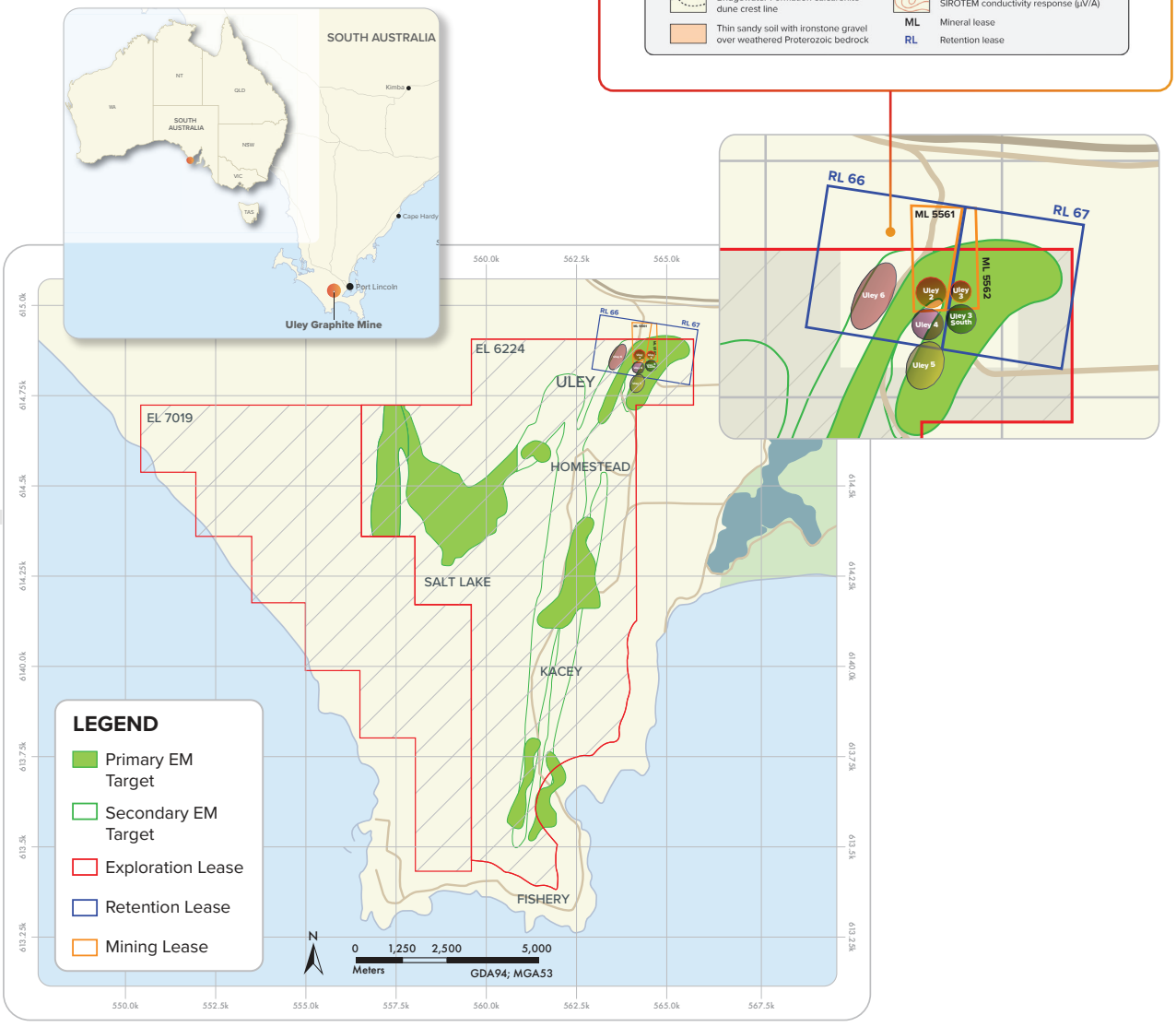
- Uley 4 Extension drilling to 50m-by-50m intervals
- Infill drilling at Uley 3

Priority 2 - Uley 2 Project Expansion

- Uley 3 South Extension drilling to 50m-by-50m intervals

Priority 3 - Uley Region Resource Definition

- Uley 6 geophysical anomaly target
- Uley 5 beyond Uley 4 along strike of the geophysical anomaly



Company tenements including highlighted mineralised zones

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Corporate Information and Announcements

As at 31 March 2026 the Company had 352,600,000 ordinary shares on issue and 1,482 shareholders. The top 20 shareholders held 62.01% of the issued ordinary shares in the Company. As at 31 March 2026 the Company held cash at bank of $122,320.82. As at 30 April 2026 the Company held cash at bank of $57,597.26 (and available cash facilities of $3.799million). Related party payments in the amount of $429,000 were made in the period. These payments were made to SC Capital Pty Ltd ($82,500 for technical services), Chimaera Capital Limited ($280,500 for asset management services) and WyerPlanVC Pty Ltd ($66,000 for consulting services).

Competent Person's Statement

The Company 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, 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.

FOR FURTHER INFORMATION CONTACT:
Company Secretary
Quantum Graphite Limited
E: info@qgraphite.com

ABOUT EPG HUB

The EPG Hub is a regional logistics hub to be developed for the Eyre Peninsula's flake graphite producers and selected downstream industries. The centrepiece of the hub is the concentrate supply from the Company's fully permitted Uley 2 project and the manufacture of long duration thermal energy storge cells by Sunlands Energy Co. utilising its thermal energy storage technologies. The hub's location is well suited to servicing all major markets including North America, Europe and the Middle East and the emerging Li-ion battery centre in Central Java

ABOUT SUNLANDS POWER

Sunlands Power is our joint venture with Sunlands Energy Co. for the manufacture of coarse natural flake based thermal storage media and the manufacture of TES Graphite Cells. The flake for the storage media will be sourced exclusively from the QGL's Uley mine. The manufactured media will be fitted within TES Graphite Cells and the completed cells delivered to Sunlands Co. for deployment as a grid connected long duration energy storage solution. For further information, www.sunlandsco.com

ABOUT SUNLANDS PURE

Sunlands Pure is Quantum Graphite Limited's (QGL) purification technology partner. It was established by the Sunlands Energy Co. following agreement with QGL for the specific purpose of undertaking all downstream purification of Eastern Eyre Peninsula flake graphite concentrate

ABOUT LDES

A scalable energy storage system that can store energy predominantly from renewable sources for more than 12 hours and deliver dispatchable, inertia restoring energy to grid networks as required especially when renewables generation is not available. LDES is the critical solution underpinning the decarbonisation of grid networks.

Appendix 5B

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

Name of entity

Quantum Graphite Limited

ABN	Quarter ended ("current quarter")
41 008 101 979	31 March 2026

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	-	-
	(b) development	(82)	(227)
	(c) production	-	-
	(d) staff costs	(75)	(225)
	(e) administration and corporate costs	(722)	(2,206)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	(248)	(248)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	370	370
1.8	Other (provide details if material)	-	-
1.9	**Net cash from / (used in) operating activities**	**(757)**	**(2,536)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(51)	(153)
	(e) investments	-	-
	(f) other non-current assets	-	-

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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	-	-
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**	**(51)**	**(153)**

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	-	-
3.5	Proceeds from borrowings	9,128	11,128
3.6	Repayment of borrowings	(9,900)	(9,900)
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**	**(772)**	**1,228**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	1,702	1,583
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(757)	(2,536)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(51)	(153)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(772)	1,228

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**122**	**122**

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	122	1,702
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)**	**122**	**1,702**

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	(429)
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.

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7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	9,128	9,128
7.2	Credit standby arrangements	3,799-	0-
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	9,128	9,128

7.5	**Unused financing facilities available at quarter end**	3,799-

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.

Finance facilities are provided by Pershing Nominees Pty Ltd and Chimaera Capital Limited at an interest rate of 11.75%, the maturity date for both facilities is 31 December 2027.

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(757)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(51)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(808)
8.4	Cash and cash equivalents at quarter end (item 4.6)	122
8.5	Unused finance facilities available at quarter end (item 7.5)	3,799
8.6	Total available funding (item 8.4 + item 8.5)	3,921
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	**4.9**

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

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

8.8.1 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. The Company has the capacity to reduce or defer cash outflows whilst maintaining its key operating activities.

8.8.2 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. The Company has taken steps to ensure it can fund its operations. These steps include the financial support from its principal shareholder, Chimaera Capital Ltd and Pershing Nominees Pty Ltd (director-related entity) in addition to the raising of additional equity. If an equity raising was pursued by the Company, the Board considers the success of such a capital raising to be highly likely.

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8.8.3	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.	

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

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: .....

Authorised by: Rochelle J Pattison
(Name of body or officer authorising release – see note 4)

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.

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