

ASX ANNOUNCEMENT

31 October 2023

September 2023 Quarterly Activities Report

- **Strategic Funding Facility Secured from US Institutional Shareholder**
- **Peter Lee Appointed Chief Executive Officer after strong performance and orderly succession plan from Chief Operating Officer**
- **The company was pleased to be able to report a critical milestone of 4N (99.99%) HPA ¹Purity across an impressive 66 elements.**
- **Maiden Manganese Resource Supports High Purity Strategy**

ChemX Materials (ASX:CMX) (ChemX or the Company), an Australian based high purity critical materials business, is pleased to present its June 2023 quarterly report. The Company is developing a high purity manganese (HPM) Project on the Eyre Peninsula in South Australia along with its high purity alumina (HPA) Project in Perth, Western Australia.

Strategic Funding Facility Secured from US Institutional Shareholder

During the quarter, the Company executed a Strategic Funding facility with US based Institutional Shareholder for up to \$6m to maintain momentum of its high purity alumina (HPA) and high purity manganese (HPM) projects.

The \$6m financing package was agreed via the issue of unsecured convertible notes (Convertible Notes) to ChemX's existing US Institutional Shareholder, Mercer Street Global Opportunity Fund, LLC, a US-based investment fund managed by Mercer Street Capital Partners, LLC (together, the Investor), who has been a strong supporter of the Company since the IPO in January 2022.

The Company initially drew \$500,000 through the issue of 600,000 convertible notes (Tranche 1) under the agreement with a further \$1.7m through the issue of 2,040,000 convertible notes for a total of 2,640,000 convertible notes (Tranche 1 and 2). following the close of the quarter after shareholder approval of the facility was obtained on 26 September 2023. Subject to shareholder approval and agreement between the parties, issue the investor up to a further 4,560,000 convertible notes for a subscription amount of \$3,800,000 (Further Tranches)

¹ Updated – Micro Plant Delivers Critical 4N HPA Milestone 3 ASX October 2023

The Company is pleased to have secured the strategic funding facility in the current market environment from an existing US shareholder and is in line with Company strategy to secure investment from leading US based institutions focused on the energy transition. Amvest Capital Inc (acting through Delphos MMJ LP) (Amvest) served as financial advisor to the transaction with Steinepreis Paganin acting as the legal advisor.

Peter Lee Appointed Chief Executive Officer after tenure as Chief Operating Officer

Following the resignation of Mr Mark Tory, in an orderly and logical succession plan, Peter Lee was appointed to the Chief Executive Officer role. Mr Lee brings a wealth of technical experience and operational leadership, across numerous commodities including: Alumina, Iron Ore, Copper and Electrochemical processes. As a Chemical Engineer (P.Eng, MBA, MAICD), Mr Lee has worked in senior leadership roles with market leaders including RioTinto, BHP, Roy Hill and was most recently Executive Process and Mechanical Engineering with WSPGolder.

Peter has delivered Scoping Studies, Pre-Feasibility, and Feasibility studies for Mining, Metals enterprises including Process Design, Due Diligence and Optimisation Studies. Mr Lee's experience will be pivotal as the Company advances its high-purity alumina (HPA) and high-purity manganese (HPM) projects.

HPA Delivers increased Operational Performance and archives Critical 4N Milestone Assay

Throughout the quarter, ChemX continued to deliver significant milestones advancing its 100%-owned HiPurA® HPA technology to achieve a 4N (99.99%) HPA ²Purity product across an impressive 66 elements.

With adjustments made through Micro Plant operations throughout the quarter, the company was pleased with amendments to the flow sheet optimising the Micro Plant as part of a scaled development approach. The Micro Plant has been crucial to collect data, model mass and energy balances for the development of the larger scale pilot plant. The pilot plant will be constructed at ChemX's facility in Perth Western Australia to deliver the required volumes of HPA for product qualification with Battery Separator manufacturers and consumers of high purity aluminous products and synthetic sapphire producers.

As a result of marketing activities and industry discussions, ChemX has identified markets for intermediate high purity aluminous products, which offer potential volume increases in addition to the markets for 4N and 5N HPA. The pilot plant designed is being adjusted to allow for intermediate high purity aluminous products, in addition to adjustments made as a result of experimental data obtained from the HPA Micro Plant.

Following recent strategic investment in high precision analytical equipment and dedicated human resources for high purity analysis, the HPA Micro Plant has experienced increased operational performance, with these enhancements being fed directly into the HPA Pilot Plant flowsheet design.

2 Updated – Micro Plant Delivers Critical 4N HPA Milestone 3 ASX October 2023

The step-change³ in performance of the HPA Micro Plant has been a key highlight and success of the scaled development approach, which has provided added confidence and reduced the risk associated with scaling up high purity metallurgical processes, which is common under continuous operation for novel technologies.

With adjustments made through Micro Plant operations the company was pleased to be able to report a 4N (99.99%) HPA ⁴Purity across an impressive 66 elements.

The Company has made further investment in quarter in high purity analytical laboratory equipment to speed process iteration and aid on high purity outcomes.

HPA is a high value material used in battery separators between the anode and the cathode to increase thermal efficiency and improve safety and performance. HPA is also used to create synthetic sapphire, for semiconductor applications, LEDs and optical devices. The ChemX process differs from incumbent technologies being scalable, modular allowing for co-location with battery separator manufacturers and synthetic sapphire producers. The Company has engaged Fremantle Metallurgy to build the pilot plant at the Company's HPA facility. The HPA pilot plant will be run in campaign mode to provide the necessary data on purity, mass and energy balances and to produce the necessary quantities of HPA for customer qualification.

Chief Executive Officer, Peter Lee commented:

"The Company is extremely proud to have achieved an outstanding result from our Micro Plant, with detailed logged data from feedstock delivery through each stage of the process being achieved."

"I'd like to acknowledge our best-in-class team who have succeeded in calibration of the novel HiPurA® process with highly effective removal of deleterious elements."

"This is a proud day for CMX shareholders and the team," Mr Lee said.

"The breakthrough to 4N validates the disruptive nature of the HiPurA® process and ChemX views that the ability to achieve bespoke high purity (4N) outcomes in a locally based, scalable, modular format may be a game-changer for gigafactory feedstock management".

"Importantly, data obtained during the optimisation of the Micro Plant will be included in the current Pilot Plant (design) which will produce sufficient sample volumes for global customer qualification," Mr Lee said.

³ Updated – Testwork Delivers HPA Flowsheet Enhancements ASX 3 October 2023

⁴ Updated – Micro Plant Delivers Critical 4N HPA Milestone 3 ASX October 2023

Distinguished Visitors – ongoing stakeholder engagement

During the quarter, the company was delighted to receive a variety of investors at its HPA Facility along with distinguished guests the Hon. Madeline King MP Commonwealth Minister for Resources; Northern Australia and Hon. Bill Johnston MLA Western Australian Minister for Mines and Petroleum; Energy; Hydrogen Industry; Industrial Relations on 26 July 2023 at ChemX's Operational Facility in O'Connor, WA.



Figure 1. (from Left) CMX Chair Warrick Hazeldine, Pasaka Otiob, Hon. Bill Johnston, Hon. Madeleine King, CMX CEO Peter Lee, Scott Stipkovich, Aleksandra Lozyk

ChemX is grateful for the opportunity to showcase our High-Purity Alumina Micro-plant, discuss progress of our (to be co-located) High-Purity Alumina Pilot-plant and demonstrate our rapidly expanding internal laboratory capabilities. ChemX continues ongoing engagement with stakeholders in the battery materials supply chain.

As pictured with the Ministers above, ChemX is proud to be supporting science graduates and students from WA's leading Universities.



ChemX's advanced laboratory equipment in O'Connor Western Australia

Maiden Manganese Resource Supports High Purity Strategy

Following a successful 2023, exploration campaign at the Jamieson Tank Deposit, located on the Eyre Peninsula South Australia, ChemX engaged Australia Consultants Pty Ltd to estimate a maiden mineral resource in accordance with JORC 2012 Code⁵.

JORC classification	Tonnes (Mt)	Mn (%)	Fe (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	P (%)
Indicated	2.7	5.9	14.8	48.9	9.1	0.093
Inferred	10.4	5.6	14.8	48.7	10.2	0.095
Total	13.1	5.7	14.8	48.7	10.0	0.094

Tabel A Mineral Resource estimate (MRE) summary, with applied grade cut-off 4%Mn

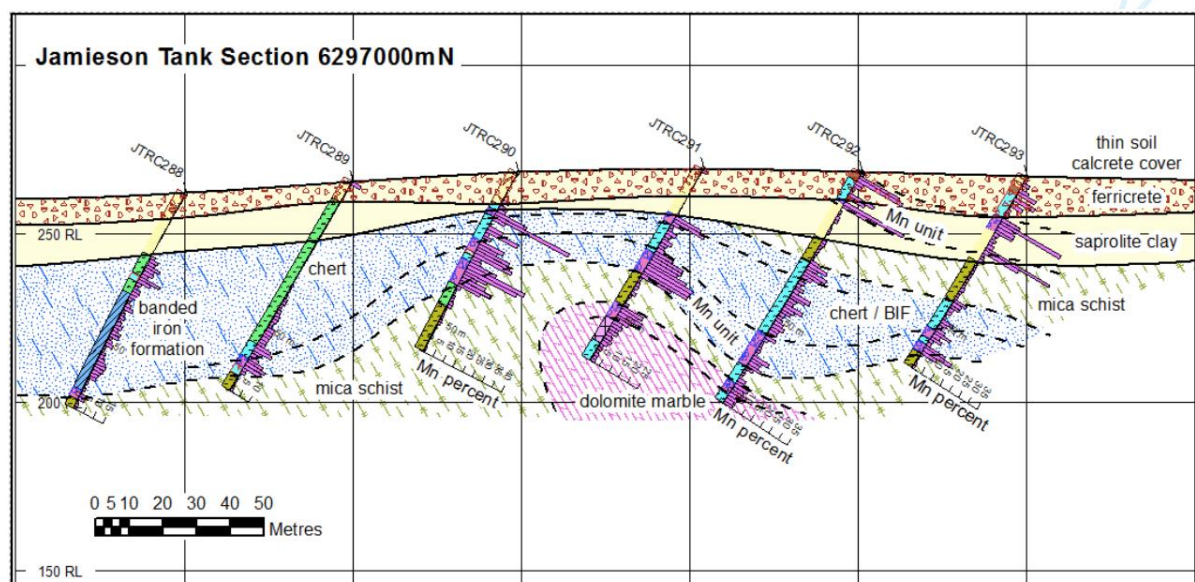


Figure 2: Jamieson Tank cross-section 6297000 mN, in the southern strike area

Mineralisation demonstrates near to surface and open at strike

Manganese mineralisation is exceptionally close to surface, extending down to approximately 70m and is defined within several cherty, banded iron formations. The sandy overburden thickness illustrated (Figure 2), ranges between 2m and 20m and is largely considered to be 'free-dig', requiring minimal use of drill and blast mining techniques, thereby envisaged to deliver mining costs towards the lower end of the spectrum.

⁵ Manganese resource Supports CMX High Purity Strategy ASX 20 September 2023

SOUTH AUSTRALIA - INFRASTRUCTURE RICH

The project is well positioned to take advantage of world-class regional infrastructure including sealed roads, rail networks, port operations, grid-power and an emerging renewable energy hub in Whyalla. ChemX has commenced an internal scoping study for the evaluation of the full high purity manganese (HPM) project including a possible hydrometallurgical facility in Whyalla supported by a skilled residential workforce and associated infrastructure.

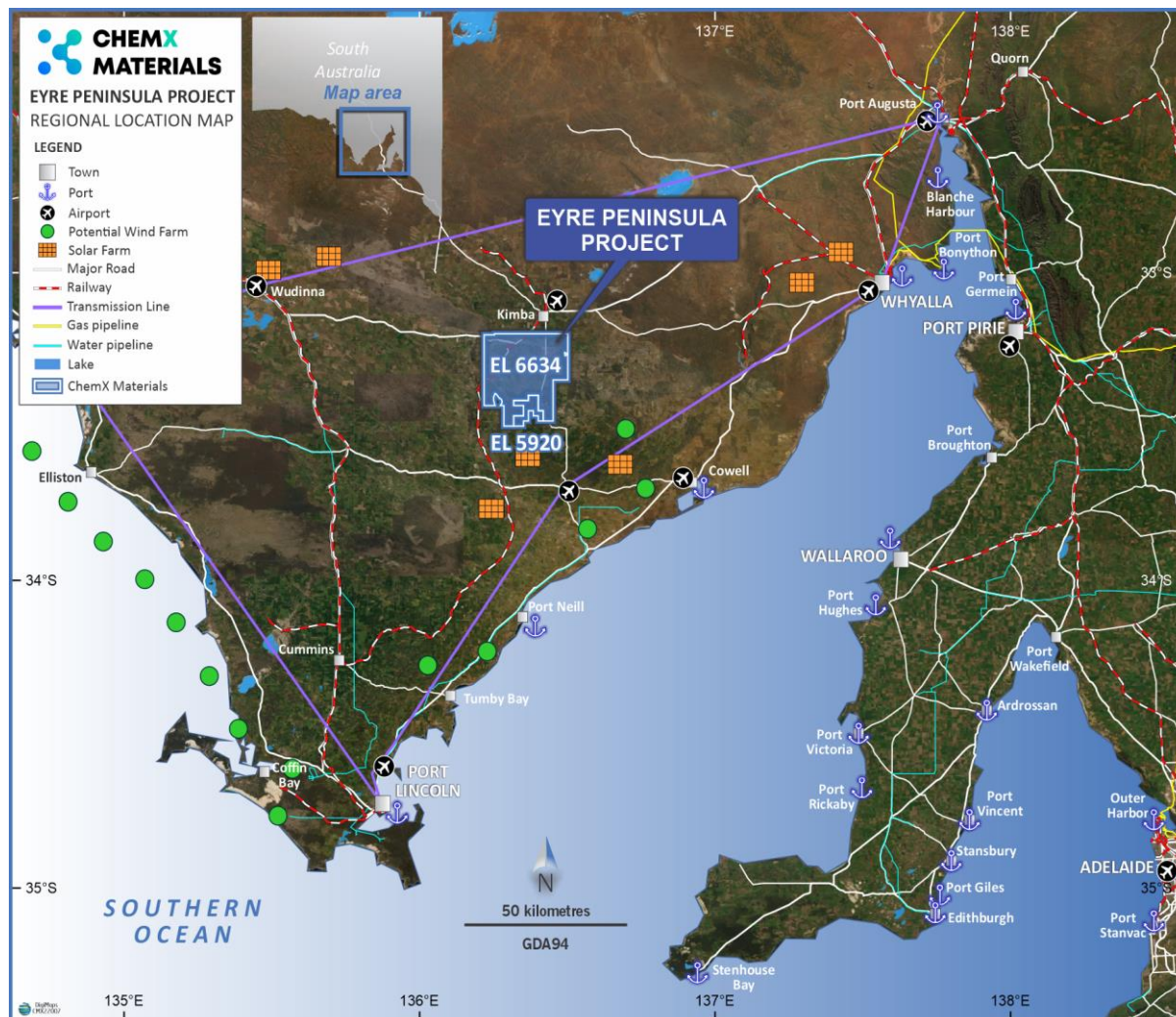


Figure 3 Tenement regional location setting with major infrastructure

WORLD CLASS BATTERY DOWN-STREAM OPPORTUNITY FOR SOUTH AUSTRALIA

ChemX seeks to develop South Australian sourced Manganese into a world-class HPM product for use within global battery supply chains, particularly Electric Vehicle (EV) markets. This will require a Beneficiation Plant, likely to be located in the Central Eyre Peninsula region and also a Hydrometallurgical facility, currently proposed to be located in Whyalla. It is envisaged both operations will create significant employment within a burgeoning Critical Minerals and High Purity Materials industry in South Australia.

Wood to lead internal scoping study on high purity manganese battery grade products

ChemX has appointed global engineering firm Wood to commence an internal scoping study program on the high purity manganese (HPM) project. The scoping study will be used to inform management and Board of the project's nominal capital and operating expenditure requirements (to a scoping accuracy level) in consideration of key synergies within the region such as logistics, industrial inputs, port and other infrastructure, within the burgeoning South Australian renewable energy landscape.

Key considerations with regard to both the HPM Beneficiation and Hydrometallurgical plants include but are not limited to: Siting, Feed assumptions, flowsheet, mechanical equipment listing, scale, intermediate and final product tonnages, grades and purities.

ASX Compliance

In accordance with ASX Listing Rule 5.3.1, the Company did not conduct any exploration during the quarter. \$52,843, in table below relates to costs predominantly associated with Mineral Resource estimate. Details of the Company's activities for the quarter, including any material developments or material changes in those activities and a summary of the expenditure incurred on those activities is detailed in the preceding sections and in Table B below.

With respect to Listing Rule 5.3.2, the Company confirms that there was no mine production or mine development activities for the quarter.

In accordance with Listing Rule 5.3.3, the Company provides the following information in relation to its mining tenements in Table A. No mining tenements were acquired or disposed of during the quarter. The Company is a party to a mineral rights agreement with Pirie Resources Pty Ltd to explore for, and if warranted, develop mining operations exclusively for graphite.

Table A – Tenements

Tenement	Registered Holder	Beneficial Interest	Location	Status
EL 6634	ChemX Materials Ltd	100%	South Australia	Live
EL 5920	ChemX Materials Ltd	100%	South Australia	Live

For the purposes of Listing rule 5.3.4, the Company provides that following comparison in Table B of actual expenditure during the quarter against the use of funds following the issue of securities pursuant to the Prospectus, together with an explanation of any material variances.

Table B – Comparison of actual expenditure versus estimated expenditure.

Use of Funds	Estimate for the first 2 years after ASX admission	Actual use September Quarter	Actual use Jan 22 to Sept 23	Balance Remaining
Exploration at Eyre Peninsula Project	1,043,000	52,843	2,697,433	(1,654,433)
HPA Test Work	650,000	320,942	1,591,829	(941,829)
HPA Pilot Plant	2,500,000	70,000	232,935	2,267,065
Product Development	1,000,000	31,656	424,547	575,453
Expenses of the Offer	875,715	-	703,654	172,061
Administration & Working Capital	2,431,285	538,757	3,636,320	(1,205,035)
Total	\$8,500,000	\$1,014,198	\$9,286,718	\$(786,718)

Differences between estimated expenditure and actual expenditure primarily relate to increased expenditure on manganese exploration designed to estimate a maiden mineral resource based on previous exploration results, investment in the high purity alumina project, and high admin costs to support activities along with cash received from R&D rebates and Strategic Funding Facility.

In accordance with Listing Rule 5.3.5, the Company confirms payments totalling \$97,000 were made to directors for employment costs as well as to associates and related parties of the Company, for services rendered up to 30 September 2023.

Deferred Consideration Shares

In relation to the acquisition of HiPurA Pty Ltd which was completed on 31 December 2021:

1. The number of Deferred Consideration Shares pending issue (on issue) is 2,500,000.
2. The terms of and conditions for the issue of Deferred Consideration Shares;
 - a. Commissioning of HPA Pilot Plant
3. During the quarter no Deferred Consideration shares were issued or cancelled.
4. There were no further milestones met during the quarter.

This Announcement has been authorised for release by the Board

For enquiries:**Peter Lee**

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The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant market announcements, and that the form and context in which the Competent Persons findings are presented have not been materially modified from the original announcements.

Where the Company refers to Mineral Resources in this announcement (referencing previous releases made to the ASX), it confirms that it is not aware of any new information or data that materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate in that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not materially changed from the original announcement.

About ChemX Materials (ASX: CMX)

ChemX is a materials technology company focused on providing critical materials required for electrification and decarbonisation. The Company's vision is to support the energy transition with materials and technology that provide real solutions to lowering carbon emissions. The Company is developing a high purity manganese (HPM) Project on the Eyre Peninsula in South Australia along with its high purity alumina Project in Perth, Western Australia.

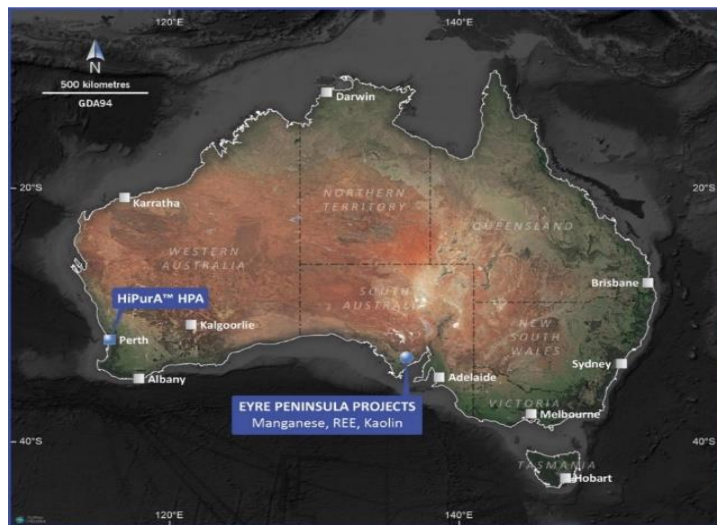


Figure 4 - ChemX Project Locations

www.chemxmaterials.com.au

[LinkedIn](#)

Appendix 5B

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

Name of entity

ChemX Materials Limited

ABN

88 644 982 123

Quarter ended ("current quarter")

30 September 2023

Consolidated statement of cash flows (Unaudited)		Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	(142)	(142)
	(c) production	-	-
	(d) staff costs	(433)	(433)
	(e) administration and corporate costs	(327)	(327)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	1
1.5	Interest and other costs of finance paid	(11)	(11)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	10	10
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(902)	(902)
2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(1)	(1)
	(d) exploration & evaluation	(53)	(53)
	(e) investments	-	-
	(f) other non-current assets	(30)	(30)

Consolidated statement of cash flows (Unaudited)		Current quarter \$A'000	Year to date (3 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	(84)	(84)

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	500	500
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		
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	(61)	(61)
3.8	Dividends paid	-	-
3.9	Other (repayment of lease liabilities)	(28)	(28)
3.10	Net cash from / (used in) financing activities	411	411

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	798	798
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(902)	(902)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(84)	(84)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	411	411

Consolidated statement of cash flows (Unaudited)		Current quarter \$A'000	Year to date (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	223	223

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	223	798
5.2	Call deposits	-	-
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)	223	798

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	97
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>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.</i>		

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 Convertible Note	2,200	500
7.4	Total financing facilities	2,200	500
7.5	Unused financing facilities available at quarter end		1,700
7.6	<p>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.</p> <p>Convertible note funding facility of up to A\$6m received from existing institutional shareholder Mercer Street Global Opportunity Fund LLC. (refer ASX release dated 4 August 2023). \$500,000 Drawn down 14/8/23. Subsequent to the end of the September quarter, following shareholder approval on 26 September 2023 a further \$A1.7m was drawn down. A further \$3.8m is available subject to further agreement between the parties.</p> <p>The unsecured convertible notes issued have a maturity date 15 months from the date of issue. Material terms of the facility are contained in Schedule 1 of the ASX release dated 4 August 2023. The notes have a face value of \$600,000(Expire 14/11/24) & \$2,040,000 (Expire 9 Jan 25)</p>		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(902)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(53)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(955)
8.4	Cash and cash equivalents at quarter end (item 4.6)	223
8.5	Unused finance facilities available at quarter end (item 7.5)	1,700
8.6	Total available funding (item 8.4 + item 8.5)	1,923
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	2.01
	<i>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.</i>	
8.8	<p>If item 8.7 is less than 2 quarters, please provide answers to the following questions:</p> <p>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?</p> <p>Answer: N/A</p>	

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

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: N/A

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: N/A

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: 31 October 2023.....

Authorised by: ...The Board.....
(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.