

Quarterly Activities Report for the Period ended 31 December 2022

The 2022 resource definition drilling programs concluded, paving the way for next resource update. Evaluation of alternative process routes progressed, with encouraging initial results. Global supply chain dislocation continues to underpin high SOP prices.

Highlights

Lake Throssell Sulphate of Potash (SOP) Project, WA

- The groundwater bore installation program commenced, with three wide-diameter groundwater monitoring bores established to facilitate geophysical logging and mini aquifer testing.
- Borehole magnetic resonance geophysical logging was completed on the monitoring bores to measure in-situ porosity and specific yield across the resource profile and assist with test production bore planning. Results are expected shortly.
- A continuous monitoring weather station was installed. This weather information will provide detailed information for the design and operational management of the proposed evaporation ponds.

Evaluation Studies

- A bulk evaporation trial was successfully completed, including Halite (NaCl), Schoenite ($K_2Mg(SO_4)_2 \cdot 6H_2O$)/Leonite ($K_2SO_4 \cdot MgSO_4 \cdot 4H_2O$), Kainite ($KMg(SO_4)Cl \cdot 3H_2O$) and Carnallite ($KMgCl_3 \cdot 6H_2O$) type salt production stages and salts prepared for analysis.
- Investigation of alternative process routes for the controlled production of KTMS continued with encouraging initial results.

Macro Environment and SOP Market

- Sulphate of Potash prices have remained strong at above US\$1,000/t, well above the long-term price assumption used in the Lake Throssell Scoping Study (US\$550/t), driven by continued dislocation of global supply chains.

Corporate

- Trigg received the “Discovery of the Year” award at the 2022 Australian Mining Prospect Awards for the Lake Throssell discovery, reflecting the vast scale, grade and potential economic impact of the deposit.
- Rights Issue raised \$1.6 million before costs.
- Cash at the end of the Quarter of \$3.1 million, with ongoing management of costs.

Trigg Mining’s Managing Director, Keren Paterson, commented: “The December Quarter saw a significant body of work completed, both on and off-site, the fruits of which should begin to flow through in the coming weeks and months as we work towards an updated Mineral Resource for Lake Throssell.

“Key achievements during the quarter included the completion of the resource drilling program at Lake Throssell for 2022 with the successful installation of wide-diameter groundwater monitoring bores to facilitate geophysical logging and mini aquifer testing. We expect initial results shortly from this work, including a much clearer technical picture of the in-situ porosity and specific yield across the deposit.

“These data will feed into a pivotal resource update, scheduled for this quarter, We see the delivery of an updated Mineral Resource as a key value catalyst for Trigg, which will feed into future evaluation studies.

“We also continued to progress the studies during the quarter, with the focus being on the evaluation of alternative process routes that could reduce the ramp-up time to production, increase the reliability of the KTMS production process and reduce recovery losses. We have had some very positive initial results from this work, and we are very much looking forward to reporting more on the outcomes in this regard during the March Quarter. Our overriding objective here is to learn from the first movers in the sector and achieve a processing flowsheet that is both technically robust and commercially sound.

“At the macro-level, the SOP sector continues to experience significant impacts from global supply chain dislocation, which has helped maintain the price around US\$1,000 a tonne. The ongoing issues around global food security provide a compelling backdrop to our efforts to develop a new long-life, environmentally friendly SOP production hub in Western Australia.”

“Finally, our team received well-deserved recognition during the quarter with Trigg receiving the ‘Discovery of the Year’ award at the 2022 Australian Mining Prospect Awards, based on the scale and economic significance and value of the discovery. My warmest congratulations to everyone who has been involved on the journey.”

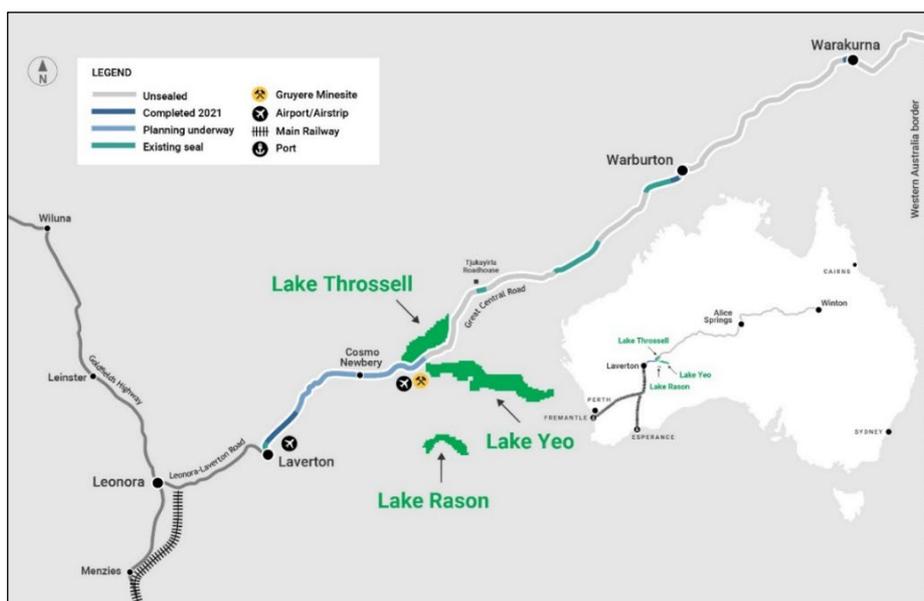


Figure 1: Location of Trigg Mining’s Sulphate of Potash Projects in WA showing established and proposed infrastructure and project locations

Lake Throssell Sulphate of Potash Project

100% Trigg

The Lake Throssell Project (Figure 1) covers an area of 1,085km² approximately 170km east of Laverton, Western Australia. The Project contains a total drainable Mineral Resource Estimate (MRE) of 14.4Mt of SOP, plus an additional Exploration Target. The October 2021 Scoping Study outlined an initial 21-year mine life with forecast production of 245,000tpa SOP in the lowest cost-quartile, which would position Trigg as a potential top-10 global SOP producer.

Exploration and Resource Definition

During the quarter, three large-diameter groundwater monitoring bores were installed using mud rotary drilling for a total of 332m and cased with 80 to 125mm diameter PVC. The larger diameter holes were installed to facilitate running of borehole magnetic resonance geophysical tools and low flow aquifer testing.

Each hole was drilled until refusal, geologically logged and brine samples were sent to the laboratory for analysis together with 43 brine samples taken during the air-core program.

Low-flow aquifer testing was completed to obtain preliminary aquifer parameters and additional brine assays from screened sections. This work was completed to assist with determining the locations and designs of the test production bores. Further higher flow rate testing is planned.



Figure 2: Lake Throssell - Groundwater Bores

Ongoing maintenance issues with the air-core and mud rotary drill rigs resulted in fewer holes being drilled than planned.

Despite this, the initial results from the groundwater monitoring bore program are positive and will underpin a planned significant update to the Mineral Resource Estimate (MRE) during the March 2023 Quarter, as well as future drilling and test pumping programs required to prepare the MRE for the Pre-Feasibility Study.

Geophysical Surveys

Following installation of the groundwater bores, down-hole geophysical surveys were carried out to increase understanding of the porosity, specific yield and permeability of the system.

Assessments included:

- Borehole Magnetic Resonance (BMR) – porosity, drainable porosity (specific yield) and permeability.
- Spectral Gamma Ray (SGR) – clay typing.
- Resistivity – dual focused induction – salinity/formation.
- Resistivity – dual laterolog – formation.
- BMR logging significantly assists with the estimates of specific yield across the formation and will provide the highest level of detail possible on the formation. These data will provide additional confidence in the in-situ brine storage of the resource.

The results of these surveys will be incorporated in the Mineral Resource Estimate update due later this quarter.

Weather Station

A weather station was installed adjacent to Lake Throssell during the quarter. The weather station has satellite telemetry to communicate data from the three modules (weather, soil and evaporation) to an online data portal.

The weather station will enable monitoring of local brine evaporation rates which will be used to inform design and operation of the proposed Lake Throssell evaporation ponds and associated infrastructure.



Figure 3: Lake Throssell – Weather Station

Demobilisation

Following completion of the 2022 exploration season, all exploration vehicles, equipment and personnel were demobilised. This included packing up and removing the mobile exploration camp.

All drill holes were either rehabilitated, or appropriately capped and left safe. Sumps used for the drilling of the groundwater bores remained too wet to rehabilitate, and will therefore be left to drain/evaporate and will be rehabilitated during the next drilling program.

Evaluation Studies

Process Flowsheet

During the quarter, the bulk evaporation trial concluded with all salting phases – Halite (NaCl), Schoenite ($\text{K}_2\text{Mg}(\text{SO}_4)_2 \cdot 6\text{H}_2\text{O}$)/Leonite ($\text{K}_2\text{SO}_4 \cdot \text{MgSO}_4 \cdot 4\text{H}_2\text{O}$), Kainite ($\text{KMg}(\text{SO}_4)\text{Cl} \cdot 3\text{H}_2\text{O}$) and Carnallite ($\text{KMgCl}_3 \cdot 6\text{H}_2\text{O}$) – completed.

The recovered salts from these phases have been sampled and are being dried at low temperatures for analysis and characterisation. The final brine has been retained for further salt production trials and potentially magnesium product evaluations.

Evaluation and interpretation of the trial results will begin next quarter once the brine and salt analyses have been received.

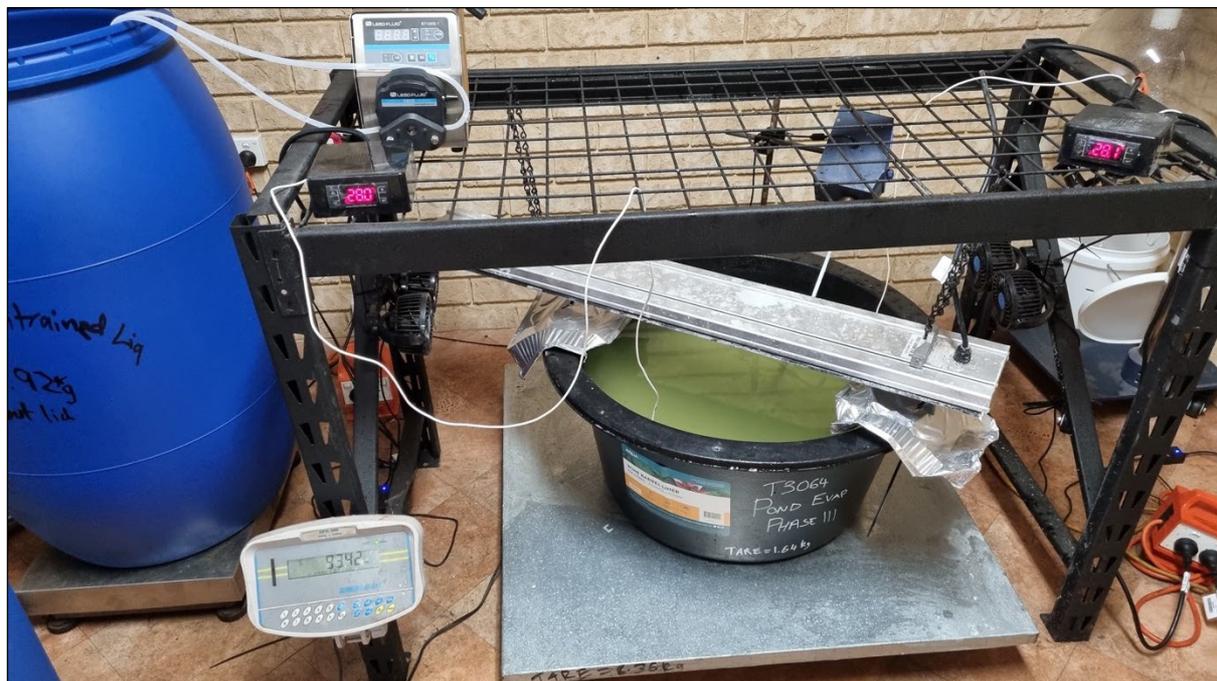


Figure 4: Lake Throssell – Kainite and Carnallite Phase test set-up

Alternative Process Flowsheets

In recognition of the continued difficulties being experienced by the first-movers in the Australian SOP industry in providing sufficient and suitable mixed potassium type salts (KTMS) as feed to the SOP processing plants, Trigg has been investigating alternative process routes to improve the reliability of producing the feed salts for processing.

There are two alternative processing routes that are showing encouraging early results for producing KTMS salts under controlled conditions.

Preliminary laboratory-scale test-work for one of the alternative process routes has returned encouraging results from controlled salt production through the recovery of water from the brine using established water recovery technology. Salt characterisation from this initial test program will be conducted in the March Quarter to assist in establishing the control conditions required to undertake further trials of this alternative process pathway.

Additional Revenue Streams

The current Inferred and Indicated Mineral Resource Estimate (MRE) of the Lake Throssell brine contains 32Mt Sulphate (SO_4^-), 11Mt of Magnesium (Mg^+) and 6Mt of Potassium (K^+) ions. To date the processing pathway has only assessed the technical and economic potential of producing Potassium Sulphate (K_2SO_4) (SOP) from the brine.

Other minerals may also be technically and economically viable, which would both enhance the Project's economic potential and reduce waste.

Potential technology partners are being evaluated to determine a process pathway for magnesium-rich salts that would otherwise be treated as a waste product.

Environmental Approvals

Project Approvals

The Lake Throssell SOP Project will require assessment under Part IV of the *Environmental Protection Act 1986* (WA) (EP Act). Trigg commenced baseline environmental assessments to support this approvals process in April 2021. These studies were ongoing throughout the Quarter.

Lake Throssell Exploration

During the quarter, the following approvals for exploration activities were granted for the Lake Throssell Project:

- 5C Licence approved for taking of saline groundwater to support exploration activities.
- Programme of Works granted for installation of additional groundwater bores.

Lake Yeo Sulphate of Potash Project

100% Trigg Mining

The Lake Yeo SOP Project lies from 35km to the south of the Lake Throssell SOP Project and covers an area of 1,915km², with over 200km² of playa area. Within the granted tenements, the interpretation of a recent gravity survey suggests the presence of an 80km long palaeovalley target, up to 3.5km wide (Figure 8).

During the quarter, planning for the initial Lake Yeo air-core drilling program continued. A Works Program, which described the proposed activities, was submitted to the Native Title Determination holders in accordance with a Heritage Protection and Land Access Deed of Agreement. Discussions and planning for heritage clearance surveys of the proposed activities were commenced.

A Programme of Works for the Lake Yeo exploration program was submitted and approved under the *Mining Act 1978*.

A Program of Works for an auger drilling program at Lake Rason has also been submitted and approved.

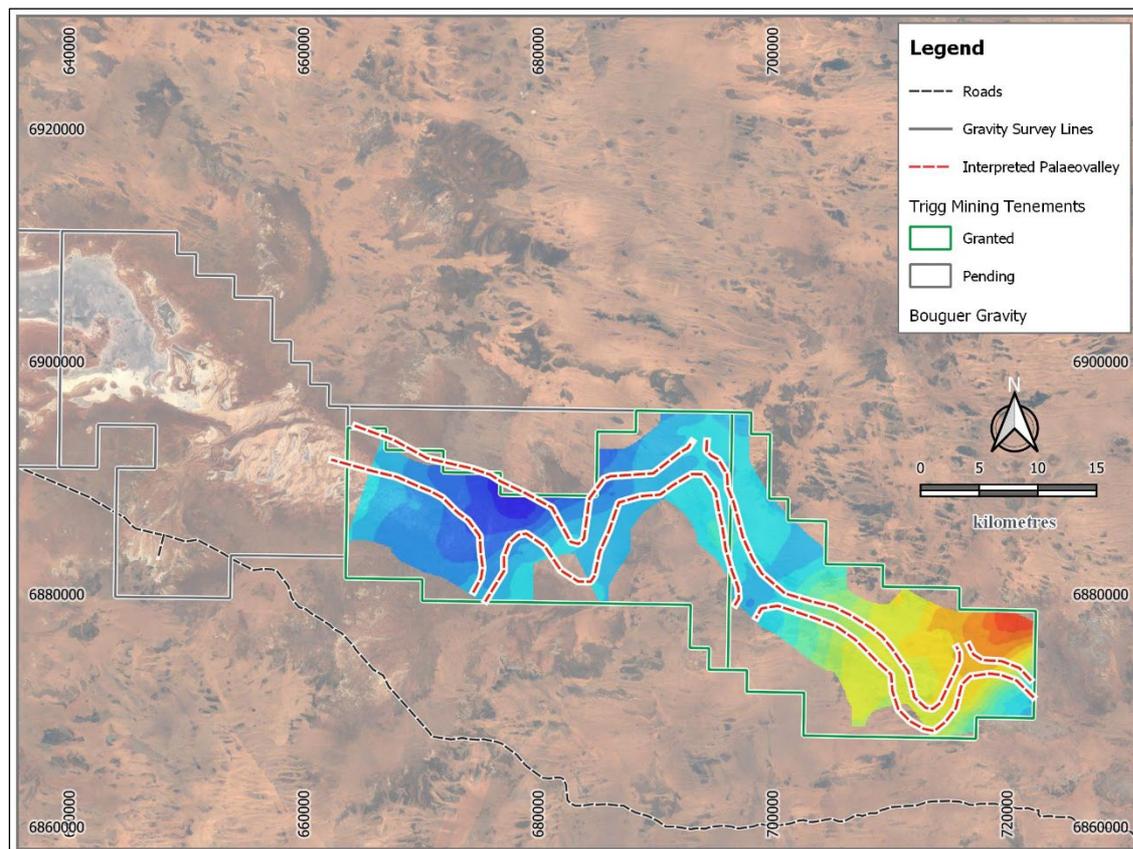


Figure 5: Lake Yeo SOP Project Bouguer Gravity survey and interpreted palaeovalley

Macro Environment and SOP Market

Unprecedented supply disruptions impacted the global potash market in 2022. Sanctions against Belarus and Russia, together with China's domestic policy to restrict exports of agricultural inputs, is affecting the global potash trade.

This saw the price of SOP reach US\$1,190/t in 2022, but prices have since softened to US\$1,000/t (Jan 2023). This price still compares favourably to the long-term price assumption in the Lake Throssell Scoping Study of US\$550/t.

While sanctions and trade restrictions remain, the overall potash market is expected to remain in tight supply against the backdrop of an expected rebound in demand in 2023 as farmers look to replenish nutrients and maintain crop yields following lower application rates in 2022.

Two additional key events occurred during the quarter. The world population grew to 8 billion people, increasing demand for food, and at the COP 27 Conference the overarching cover decision included food security for the first time. It was noted: "the fundamental priority of safeguarding food security and ending hunger and the vulnerability of food production to climate change."

These events highlight the importance of securing global food supply chains and the increasing demand for efficient agricultural practices, such as replenishing soil nutrients through adequate application of fertilizers to optimize crop yields from current agricultural land, reducing the need for additional land clearing.

As a result, the world needs more reliable sources of mineral fertilisers, especially outside of Russia, Belarus and China – from new long-life projects in Tier-1 jurisdictions, such as Lake Throssell.

Corporate

At the 2022 Australian Mining Prospect Awards, Trigg's greenfield SOP discovery was awarded Discovery of the Year, reflecting the scale, grade and potential economic impact of this globally significant deposit.

Finance

At 31 December 2022, the Company held \$3.1 million in cash and cash equivalents (FY23 Q1: \$3.4 million) following payments for exploration and evaluation expenditure of \$1.4 million (FY23 Q1: \$0.9 million) during the Quarter.

The board is reviewing key work streams and cost-management strategies - reflecting the ongoing challenges the WA SOP sector is facing and global financial market uncertainty.

Capital raising

During the quarter, the Company raised \$1.6 million (before costs) from a Renounceable Rights Issue to continue the drilling program, progress evaluation studies and for general working capital.

Mahe Capital Pty Ltd (ACN 634 087 84) (AFSL 517 246) (**Mahe Capital**) advised the Company on the Rights Issue and acted as Lead Manager and Underwriter to the capital raising.

Secondary Listing

With increasing global interest in Trigg and its Lake Throssell Project, the Company made an application for OTC-QB listing in the United States. This will allow investors in North America to purchase shares in Trigg and trade in the North American time zone with minimal additional

compliance costs for Trigg.

Payments to related parties of the entity

During the quarter the Company paid salaries, fees and superannuation of \$0.16 million to its Directors.

This announcement was authorised to be given to ASX by the Board of Directors of Trigg Minerals Limited.



Keren Paterson
Managing Director & CEO
Trigg Minerals Limited

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Forward Looking Statements

This report contains forward-looking statements that involve several risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

Competent Persons Statement

For information referring to the exploration results in this document, refer to ASX announcements dated 5 October 2021, 21 March 2022. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, Exploration Target or Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements; and that the information in the announcement relating to exploration results is based upon, and fairly represents the information and supporting documentation prepared by the named Competent Persons.



Schedule of Tenements

as at 31 December 2022

Tenement Number	Location	Registered Owner/Applicant	Status	Interest
E38/3065	Lake Throssell	K2O Minerals Pty Ltd	Granted	100%
E38/3458	Lake Throssell	K2O Minerals Pty Ltd	Granted	100%
E38/3483	Lake Throssell	K2O Minerals Pty Ltd	Granted	100%
E38/3537	Lake Throssell	K2O Minerals Pty Ltd	Granted	100%
E38/3544	Lake Throssell	K2O Minerals Pty Ltd	Granted	100%
E38/3745	Lake Throssell	K2O Minerals Pty Ltd	Application	100%
E38/3746	Lake Throssell	K2O Minerals Pty Ltd	Application	100%
L38/379	Lake Throssell	K2O Minerals Pty Ltd	Application	100%
E38/3610	Lake Yeo	K2O Minerals Pty Ltd	Granted	100%
E69/3851	Lake Yeo	K2O Minerals Pty Ltd	Granted	100%
E38/3607	Lake Yeo	K2O Minerals Pty Ltd	Application	100%
E38/3608	Lake Yeo	K2O Minerals Pty Ltd	Application	100%
E38/3724	Lake Yeo	K2O Minerals Pty Ltd	Granted	100%
E38/3089	Lake Rason	K2O Minerals Pty Ltd	Granted	100%
E38/3437	Lake Rason	K2O Minerals Pty Ltd	Granted	100%
E38/3464	Lake Rason	K2O Minerals Pty Ltd	Granted	100%

Interests in Mining Tenements Acquired or Increased

for the Quarter ended 31 December 2022

Tenement Number	Location	Nature of Interest	Interest at beginning of quarter	Interest at end of quarter	Note
Nil					

Interests in Mining Tenements Lapsed, Relinquished or Reduced

for the Quarter ended 31 December 2022

Tenement Number	Location	Nature of Interest	Interest at beginning of Quarter	Interest at end of Quarter	Note
Nil					

Appendix 5B

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

Name of entity

Trigg Minerals Limited (ASX:TMG)

ABN

26 168 269 752

Quarter ended ("current quarter")

31 December 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(1,401)	(2,327)
(b) development	-	-
(c) production	-	-
(d) staff costs	(226)	(469)
(e) administration and corporate costs	(329)	(625)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	22	33
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	482	482
1.8 Other – GST	(58)	(84)
1.9 Net cash from / (used in) operating activities	(1,510)	(2,990)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	(98)	(100)
(d) exploration & evaluation	-	-
(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 (6 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	(98)	(100)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	1,569	1,569
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	(218)	(221)
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	1,351	1,348

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	3,362	4,847
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,510)	(2,990)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(98)	(100)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,351	1,348

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 (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	3,105	3,105

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	3,085	3,342
5.2	Call deposits	20	20
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)	3,105	3,362

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	160
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	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<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>		
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) <i>(Note cash inflows from Government Grants and tax incentives has been excluded)</i>	(1,992)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(1,992)
8.4 Cash and cash equivalents at quarter end (item 4.6)	3,105
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	3,105
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.6
<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 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: Cash flow for the next quarter is expected to be less than the current quarter due to the end of the field season.	
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: The Company is closely managing cash flow and exploring other opportunities.	

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

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, please refer to Item 8.8.2

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 January 2023**

Authorised by: **Board of Directors**
(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.