

ASX Announcement

30 April 2025

**QUARTERLY ACTIVITY REPORT
FOR THE PERIOD ENDED 31 MARCH 2025**

Highlights:

- Excellent correlation between Magneto-Telluric (MT) survey, litho-geochemical depth target modelling and Induced Polarisation (IP) data over the large Curiosity Copper-Gold Target at Llahuin
- RC drilling extends strike of the Cerro-Ferro system by 15% to 2.2km, ahead of H1 2025 JORC resource upgrade including results of:
 - 105m @ 0.64% CuEq from surface to EOH, incl. 16m @ 0.85% CuEq from surface and 26m @ 0.91% CuEq from 78m 24LHRC065
 - 132m @ 0.48% CuEq from surface incl. 60m @ 0.67% CuEq from surface 24LHRC058
 - 81m @ 0.49% CuEq from 2m to EOH, incl. 48m @ 0.58% CuEq from 30m 24LHRC055
 - 122m @ 0.41% CuEq from 2m, incl. 48m @ 0.52% CuEq from 66m 24LHRC048
 - 16m @ 0.51% CuEq from 102m 24LHRC051
 - 128m @ 0.41% CuEq from 16m to EOH, incl. 32m @ 0.57% CuEq from 66m 24LHRC067
 - 30m @ 0.42% CuEq from surface, incl. 26m @ 0.56% CuEq from 40m to EOH, incl. 8m @ 0.96% CuEq from 42m 24LHRC068

*Copper equivalent calculation is determined using the following metal prices and without metallurgical recovery %:
Copper US\$3.50/lb, Gold US\$2,550/oz and Molybdenum US\$20/lb with no recovery factors applied.*

Southern Hemisphere Mining Limited (“Southern Hemisphere” or “the Company”) (ASX: SUH, FWB: NK4) reports the quarterly activity for the period ended 31 March 2025.



Figure 1: Location map of Southern Hemisphere's Projects in South America.

EXPLORATION ACTIVITIES

RC Drilling Program 2024

The 2024 RC drill program completed a total of 2,728m drilled in 26 holes, 24LHRC044 to 069, and from depths of 53m to 168m.

Results include:

- **105m @ 0.64% CuEq from surface to EOH, incl. 16m @ 0.85% CuEq from surface and 26m @ 0.91% CuEq from 78m - 24LHRC065**
- **132m @ 0.48% CuEq from surface incl. 60m @ 0.67% CuEq from surface – 24LHRC058**
- **81m @ 0.49% CuEq from 2m to EOH, incl. 48m @ 0.58% CuEq from 30m - 24LHRC055**
- **128m @ 0.41% CuEq from 16m to EOH, incl. 32m @ 0.57% CuEq from 66m – 24LHRC067**
- **30m @ 0.42% CuEq from surface and 26m @ 0.56% CuEq from 40m to EOH, incl. 8m @ 0.96% CuEq from 42m – 24LHRC068**
- **120m @ 0.42% CuEq from 2m, incl. 58m @ 0.49% CuEq from 66m - 24LHRC048**
- **16m @ 0.51% CuEq from 102m - 24LHRC051**

*Copper equivalent calculation is determined using the following metal prices and without metallurgical recovery %:
Copper US\$3.50/lb, Gold US\$2,550/oz and Molybdenum US\$20/lb with no recovery factors applied.*

The RC drill program has resulted in the extension of the strike of the Cerro-Ferro system by a further 300m to 2.2km, and open potentially to the north and the south of Ferro.

As shown above, the drilling is all shallow, from surface with many large and wide mineralised zones, over a strike of 2.2km and open. This significantly advances the open pit potential of Llahuin, and validity of testing for longer term large underground mining scope too.

Water

All holes drilled in this campaign have intersected water at 40-60m, and a water test on hole 24LHRC053 demonstrated a flow rate of 40 litres per minute. Water test work indicates that it is fresh but not potable. This is positive for future development of Llahuin having water from the site that could be used in mine operations, potentially all sourced from the mine itself, but will be subject to further studies for confirmation at the appropriate stage.

Many of the RC holes ended in mineralisation and were stopped early due to water ingress to ensure all RC samples collected were kept dry.

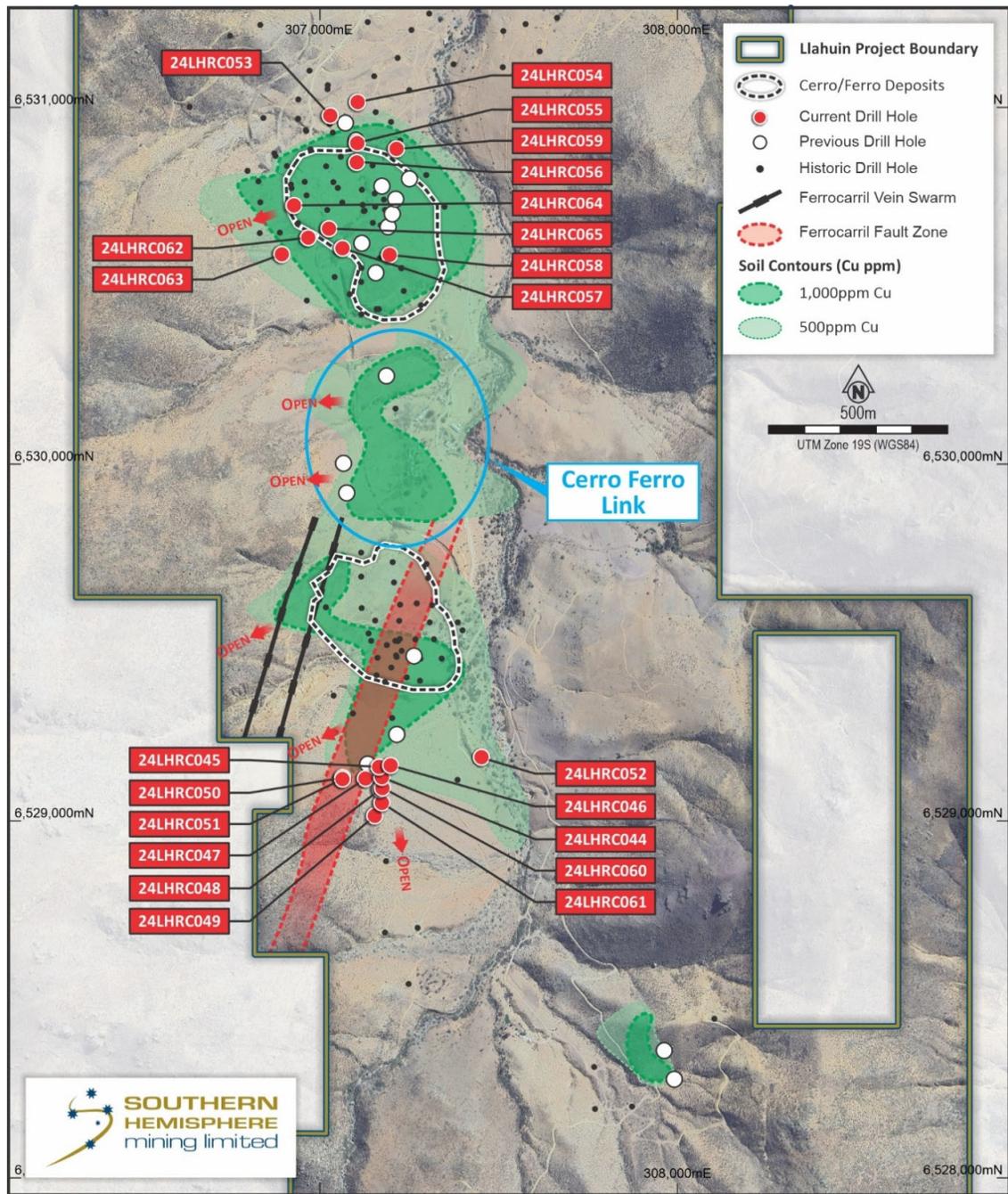


Figure 2. Plan view showing the locations of drillholes of the 2024 RC drilling program. Holes in white are 2023 drill collars.

The Magneto-Telluric (MT) Deep Target Study

Curiosity Copper-Gold Target

Subsequent to the quarter end, results were reported from the recently completed deep penetrating Magneto-Telluric (“MT”) geophysical survey, completed over the 100% owned Llahuin Project.

The MT survey was successful in establishing a clear correlation between the previously announced litho-geochemical Fathom depth target model for mineralisation comprising the Curiosity Copper-Gold Target, a sub-circular target 1km to 2km in diameter and this large MT resistivity anomaly extending significantly to depth.

Ferro West Copper Target

The MT survey was also successful in defining a second large resistivity anomaly west of the Ferro deposit at Llahuin in establishing a sub-circular target 500m in diameter and extending to 500m deep.

Next Steps

The Company intends to drill test the MT resistivity target with three to six deep drillholes. The first drillhole is to collar from an existing drill pad at Llahuin to a depth of ~1,400m. This hole is designed to intersect the MT and Fathom modelling target zones. Drill planning is in progress. (Refer Figure 6 in ASX announcement dated 15 April 2025, Large MT Geophysical Copper Target at Llahuin, Chile).

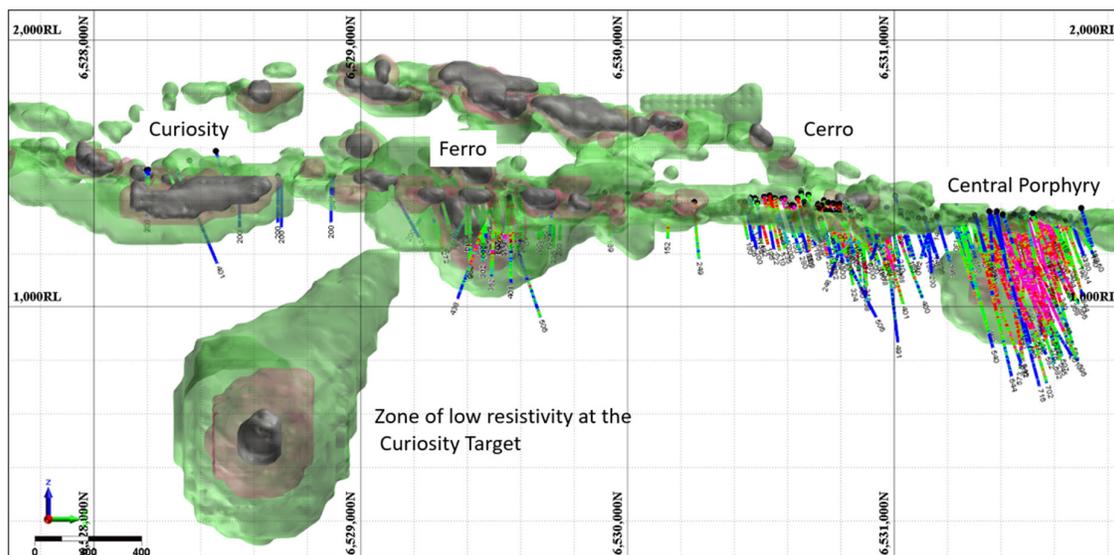


Figure 3. Llahuin Magneto-Telluric 3D Inversion Resistivity long section with north to right and MT Resistivity shells with green <100 Ω m, pink <50 Ω m and grey <35 Ω m. Drill traces overlain.

Cardawan Copper Project

The new Cardawan licence applications (ELA 52/433 and 4434) are located approximately 160km south of Newman, and the Great Northern Highway runs through the project. The tenements are 169 and 8 blocks size respectively. (Approximately 3km² per block).

This large copper prospect was pegged during the quarter by the Company based on an exploration concept for sedimentary hosted copper deposits. The historic Kumarina Group of copper deposits and prospects are along strike and in adjacent to other tenements to the east of Cardawan. The Abra lead silver mine is 70km west of the Cardawan Coper Project and the DeGrussa VMS copper gold silver mine is approximately 100km south.

Preliminary exploration work is in progress as an early-stage low-cost high impact copper prospect in an excellent location both geologically and strategically.

Sedimentary hosted copper deposits are common in the Zambian copperbelt.

Los Pumas Battery Metals Manganese Project 100%

The Los Pumas Project is an advanced manganese deposit for which Southern Hemisphere is seeking offtake/JV funding/sale for a long life mine to produce:

- Agriculture products for soil improvement;
- Electrolytic Manganese for steel making; and/or
- High-Purity Manganese Sulphate Monohydrate (“HPMSM”) to supply the Electric Vehicle (“EV”) and energy storage markets.

Southern Hemisphere is actively marketing this project, and welcome any inquires to cosec@shmining.com.au

Lago Lithium Brine Project 100%

The Company has prioritised expansion drilling at Llahuin, leading to the decision to relinquish the Lago Lithium Brine Project applications.

CORPORATE ACTIVITIES

Additional information required by ASX Listing Rule 5.3:

As at 31 March 2025, the Company had \$1.72m cash available and the following payments of:

- \$605k on exploration activities (refer to item 1.2(a) of the attached Appendix 5B), relating to drilling, assays, field expenses and geological consulting costs (ASX Listing Rule 5.3.1);
- There were no mining and development activities during the quarter (ASX Listing Rule 5.3.2); and
- \$103k on payments to related parties or their associates (refer to item 6.1 of the attached Appendix 5B) which included (ASX Listing Rule 5.3.5) Director’s fees, consulting fees, equipment hire, office lease expenses and superannuation.

The Directors have again taken the opportunity to accumulate and increase their shareholdings, purchases during the quarter totalled approximately \$41k.

Accrued VAT incurred and claimable across the Company’s Chilean subsidiaries now total circa A\$4.36m. The Company’s consultants are continuing to work on options for early recoupment of part or all. In any event these amounts are available for recoupment against equivalent VAT sales of product/assets at any time.

Approved by the Board of Directors

CONTACTS:

For further information on this announcement or the Company generally, please visit our website at

www.shmining.com.au or contact the Company.

Cosec@shmining.com.au

Ph 08 6144 0590

References:

LLAHUIN COPPER-GOLD PROJECT

ASX Release – Higher Grade Copper & Strike Extension At Llahuin, Chile – 28 January 2025.

ASX Release – Llahuin Resource Positioned for Significant Expansion – 10 February 2025.

ASX Release – Large MT Geophysical Copper Target at Llahuin, Chile – 15 April 2025.

ASX Release – New Large Ferro West Shallow MT Resistivity Copper Target – 22 April 2025.

LOS PUMAS BATTERY METALS MANGANESE PROJECT

ASX Release – Company Presentation – Los Pumas Manganese Project, Chile – 20 May 2024.

ASX Release – Intension to Demerge Battery Minerals Asset – 5 July 2023.

LAGO LITHIUM BRINE PROJECT

ASX Release – Application for the Lago Lithium Brine Concessions in Chile – 10 July 2023.

Southern Hemisphere confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements, and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements 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 been materially modified from the original market announcements.

BACKGROUND INFORMATION ON SOUTHERN HEMISPHERE MINING LIMITED:

Southern Hemisphere Mining Limited is an experienced minerals explorer in Chile, South America. Chile is the world's leading copper-producing country and one of the most prospective regions of the world for major new copper discoveries. The Company's projects include the Llahuin Porphyry Copper-Gold-Moly Project and the Los Pumas Battery Metals Manganese Project, both of which were discovered by the Company.

Llahuin Copper/Gold/Moly Project: Total Measured and Indicated Resources - JORC (2004) Compliant. As announced to the market on 18 August 2013.

Resource (at 0.28% Cu Equiv cut-off)	Tonnes Millions	Cu %	Au g/t	Mo %	Cu Equiv*
Measured	112	0.31	0.12	0.008	0.42
Indicated	37	0.23	0.14	0.007	0.37
Measured plus Indicated	149	0.29	0.12	0.008	0.41
Inferred	20	0.20	0.19	0.005	0.36
Total M+I+I	169	0.28	0.128	0.008	0.40

Note: *Copper Equivalent ("Cu Equiv"): The copper equivalent calculations represent the total metal value for each metal, multiplied by the conversion factor, summed and expressed in equivalent copper percentage. These results are exploration results only and no allowance is made for recovery losses that may occur should mining eventually result. It is the Company's opinion that elements considered have a reasonable potential to be recovered as evidenced in similar multi-commodity natured mines. Copper equivalent conversion factors and long-term price assumptions used are stated below:

Notes on copper recovery from historical testwork

- "Recoveries of copper vary between 75% Cu and 91% Cu with the weighted average of the results being 84% Cu, which is a typically acceptable commercial level";
 - "Recoveries of gold vary between 41% Au and 57% Au, which is in line with expectations given the relatively low gold grades within the deposit"; and
 - "Flotation concentrates produced during testing contained the resource weighted average copper grade of 28% Cu and 4.9g/t Au. They also contained low levels of deleterious materials in the concentrate. Given that these tests were designed to set parameters and were not optimized, the results indicated good flotation process characteristics".
- Copper Equivalent Formula= Cu % + Au (g/t) x 0.72662 + Mo % x 4.412 Price Assumptions- Cu (\$3.20/lb), Au (\$1,700/oz), Mo (\$12.50/lb)

Los Pumas Manganese Project: Total Measured and Indicated Resources - JORC (2012) Compliant. As announced to the market on 3 May 2023.

Resource (at 2.5% Mn cut-off)	Tonnes	Mn %	Al%	Fe2O3%	K%	P%	SiO2%	SG%
Indicated	23,324,038	6.21	5.71	2.78	2.98	0.05	57.07	2.15
Inferred	6,940,715	6.34	5.85	3.05	2.83	0.05	54.61	2.14
Indicated plus Inferred	30,264,753	6.24	5.74	2.84	2.95	0.05	56.50	2.15

Total JORC Resources for the Los Pumas Manganese Project at a 2.5% Mn cut-off.

In relation to the above resources, the Company confirms that it is not aware of any new information or data that materially affects the information in the announcements, and all material assumptions and technical parameters in the announcements underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

COMPETENT PERSON / QUALIFIED PERSON STATEMENT:

The information in this report that relates to copper and gold exploration results for the Company's Projects is based on information compiled by Mr Adam Anderson, who is a Member of The Australasian Institute of Mining and Metallurgy and The Australian Institute of Geoscientists. Mr Anderson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Anderson is a consultant for the Company and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Tenement List

Project	Tenement	Interest Acquired during the Qtr	Interest Disposed of during the Qtr	Interest Held at the end of the Qtr
Chile				
Llahuin	AMAPOLA 1 1 AL 20	-	-	100%
Llahuin	AMAPOLA 2 1 AL 20	-	-	100%
Llahuin	AMAPOLA 3 1 AL 20	-	-	100%
Llahuin	AMAPOLA 4 1 AL 20 - RED 1/18	-	-	100%
Llahuin	AMAPOLA I 1 AL 300 RED 1/228	-	-	100%
Llahuin	AMAPOLA II 1 AL 300 RED 1/256	-	-	100%
Llahuin	AMAPOLA 5	-	-	100%
Llahuin*	AMAPOLA 6 1 AL 4	-	-	-
Llahuin*	AMAPOLA 7 1 AL 80	-	-	-
Los Pumas	AWAHOU 1 AL 20	-	-	100%
Los Pumas	EMANUEL 1 AL 20	-	-	100%
Los Pumas	PUTRE I AL 20	-	-	100%
Los Pumas	PUTRE II AL 20	-	-	100%
Los Pumas	LLUTA I 1 AL 60 RED 1/54	-	-	100%
Los Pumas	LLUTA II 1 AL 300 RED 1/285	-	-	100%
Los Pumas	PUTRE 6, 1 AL 20 RED 1/11	-	-	100%
Los Pumas*	PUTRE 5	-	-	-
Lago**	SOCAIRE 1	-	-	-
Lago**	SOCAIRE 2	-	-	-
Lago**	SOCAIRE 3	-	-	-
Lago**	SOCAIRE 4	-	-	-
Lago**	SOCAIRE 5	-	-	-
Lago**	SOCAIRE 6	-	-	-
Lago**	SOCAIRE 7	-	-	-
Lago**	SOCAIRE 8	-	-	-
Lago**	SOCAIRE 9	-	-	-
Colina	COLINA2 1 AL 30	-	-	100%
Australia				
Cardawan*	E52/4433	-	-	-
Cardawan*	E52/4434	-	-	-

* Applications in progress

** Applications relinquished

Appendix 5B

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

Name of entity

SOUTHERN HEMISPHERE MINING LIMITED

ABN

17 140 494 784

Quarter ended ("current quarter")

31 MARCH 2025

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	(605)	(1,531)
(b) development	-	-
(c) production	-	-
(d) staff costs	(210)	(692)
(e) administration and corporate costs	(85)	(403)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	63	80
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(837)	(2,546)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	(33)	(33)
(c) property, plant and equipment	-	-
(d) exploration & evaluation	-	-
(e) investments	-	-
(f) other non-current assets	-	-

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	-	10
(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	(33)	(23)

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	-	-
3.6 Repayment of borrowings	(364)	(364)
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	(364)	(364)

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	2,949	4,663
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(837)	(2,546)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(33)	(23)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	(364)	(364)

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
4.5	Effect of movement in exchange rates on cash held	5	(10)
4.6	Cash and cash equivalents at end of period	1,720	1,720

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	220	449
5.2	Call deposits	1,500	2,500
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)	1,720	2,949

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	103
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..

7.	Financing facilities <i>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.</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)	(837)
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)	(837)
8.4 Cash and cash equivalents at quarter end (item 4.6)	1,720
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	1,720
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	2.05
<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?	
N/A	
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?	
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?	
N/A	
<i>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.</i>	

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 2025

Authorised by: By the Board
(Name of body or officer authorising release – see note 4)

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

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.