

**QUARTERLY ACTIVITY REPORT
FOR THE PERIOD ENDED 30 SEPTEMBER 2023**

Highlights:

- **Diamond and RC drilling to commence at Llahuin Copper-Gold Project to test multiple targets generated from soil geochemistry sampling programs and downdip zones from previous drilling programs**
- **Recent rock chip sampling highlight grades of up to 7.28% Cu, 18.65g/t Au, 55g/t Ag**
- **Titan Battery Minerals Technology Pty Ltd incorporated to demerge the Los Pumas Battery Metals Manganese Project into a dedicated globally focused battery minerals and technology company**
- **The Lago Lithium Brine Project includes nine new concessions, covering an area of approximately 27km² and located near two of the largest lithium operators, SQM and Albemarle, in the widely renowned lithium rich Atacama region of Chile**

Southern Hemisphere Mining Limited (“Southern Hemisphere” or “the Company”) (ASX: SUH, FWB: NK4) reports the quarterly activity report for the period ended 30 September 2023.

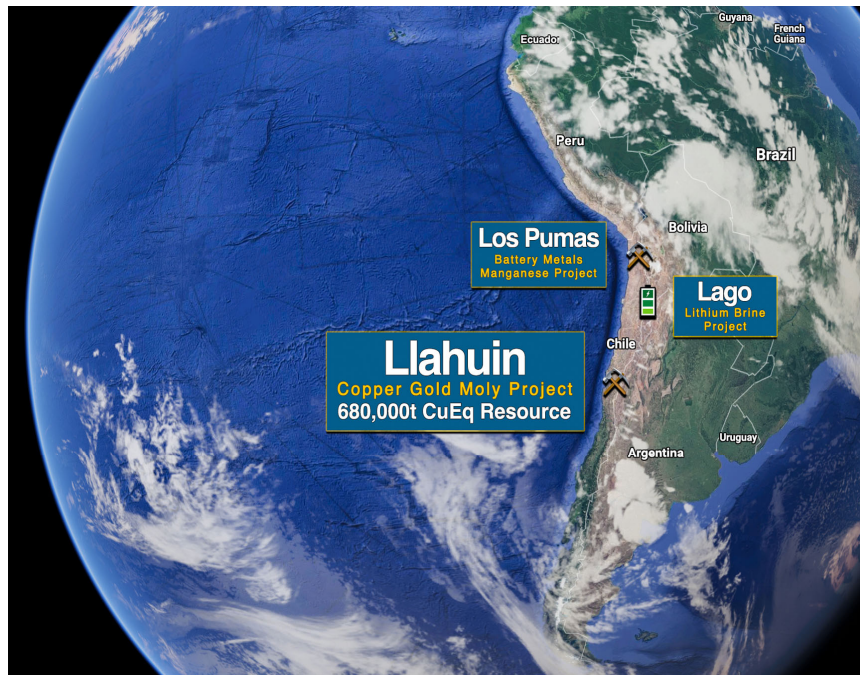


Figure 1 Location Map of Southern Hemisphere Mining's Projects - Chile

EXPLORATION ACTIVITIES

Llahuin Copper-Gold-Moly Porphyry Project 100%

The Company contracted DV Drilling from La Serena, Chile to complete a 2,500m diamond and RC drilling program at its Llahuin Copper-Gold-Moly Porphyry Project in Chile.

The drilling program at the Cerro de Oro deposit will test downdip extensions from the previous drilling program and the area between the Cerro de Oro and Ferrocarril sectors where recent soil geochemistry demonstrates a significant copper and gold anomaly.

A recent rock chip sampling program as part of mapping and refining drill targets returned a number of significant results including, copper to 7.28%, gold to 18.65g/t and silver to 55g/t.

Regular updates will be provided during the drilling and as assay results are received from the ALS laboratory in La Serena with first results expected mid-November 2023. ([Refer ASX Announcement, dated 18 October 2023 – Drilling Commenced at Llahuin Copper-Gold Project, Chile](#)).

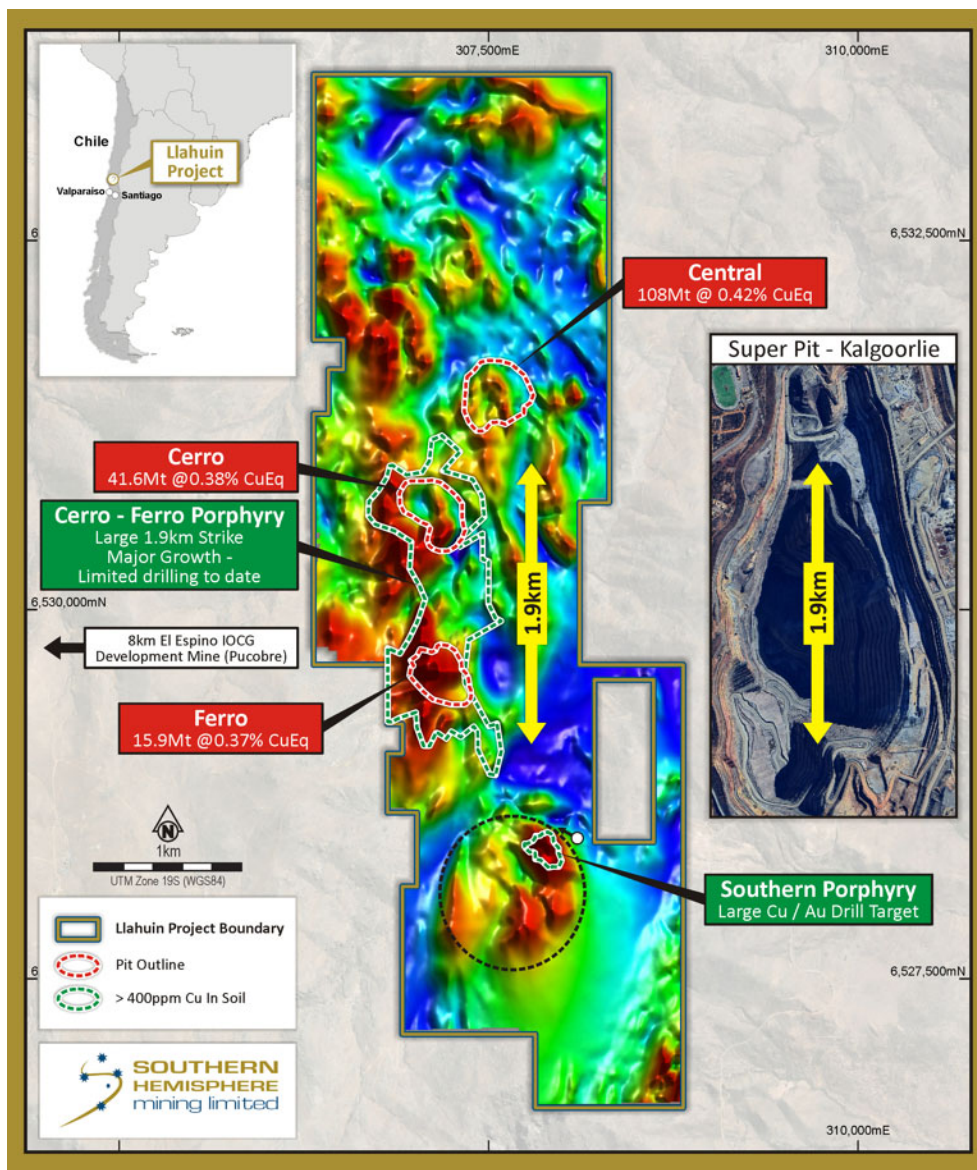


Figure 2 Project map showing the large growth target at Cerro-Ferro deposits link and comparative scale to the Kalgoorlie Super-Pit

Los Pumas Battery Metals Manganese Project 100%

During the quarter under review, the Company reported that Titan Battery Minerals Technology Pty Ltd (“Titan BMT”) (100% owned by Southern Hemisphere) was incorporated with the intention of acquiring 100% of the shares in Minera Panamericana SCM, a wholly owned subsidiary of Southern Hemisphere, which holds 100% of the Los Pumas Battery Metals Manganese Project.

The demerger will create a dedicated, globally focused battery minerals and technology company. The Los Pumas Project is the flagship project to convert high-quality manganese mineral resources into High-Purity Manganese Sulphate Monohydrate (“HPMSM”) to supply the Electric Vehicle (“EV”) and battery energy storage markets. Other advancing projects and technologies in lithium, manganese and cobalt are key areas for business growth as the Los Pumas Project moves through the feasibility stage. [\(Refer ASX Announcement, dated 5 July 2023 – Titan Battery Minerals Technology Pty Ltd Incorporated to Demerge the Los Pumas Battery Metals Manganese Project\).](#)

Lago Lithium Brine Project 100%

The Company submitted the application for the Lago Lithium Brine Project located in the renowned lithium-rich Atacama region of Chile and covering an area of approximately 27km². The Salar de Atacama is widely recognised for its exceptional lithium deposits operated by the world’s largest lithium brine producers, SQM and Albemarle. [\(Refer ASX Announcement, dated 10 July 2023 – Application for the Lago Lithium Brine Concessions in Chile\).](#)

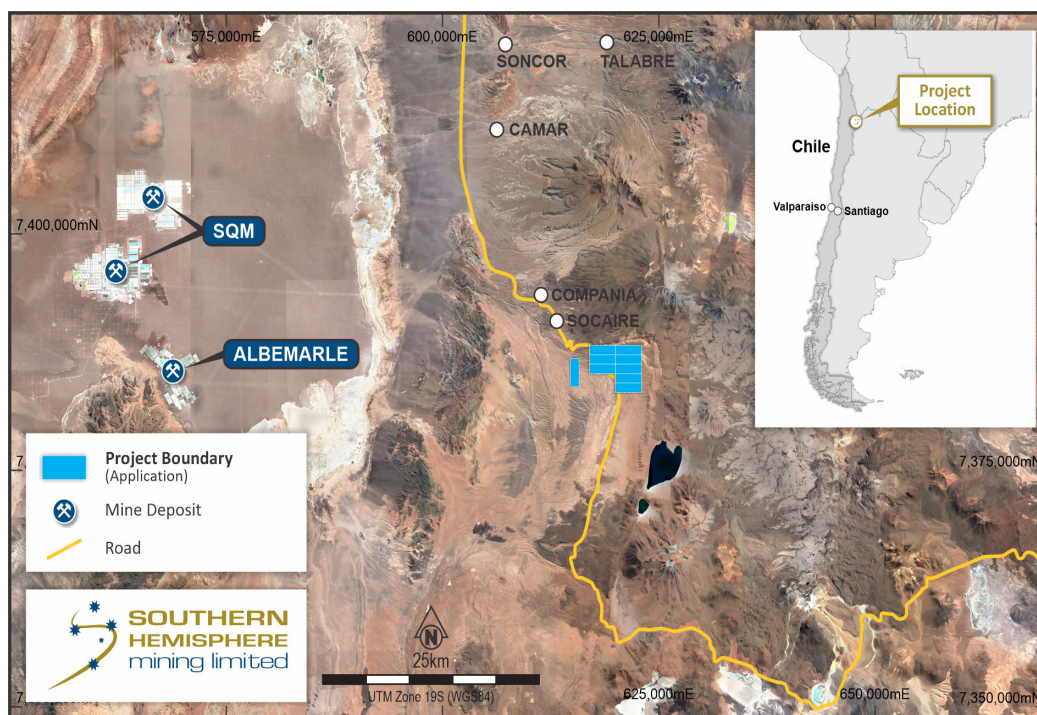


Figure 3 Location of the nine new lithium brine concessions

CORPORATE ACTIVITIES

The Company successfully raised the full amount of \$2.36m offered under a pro-rata non-renounceable entitlement offer, pursuant to the prospectus dated 17 July 2023.

Payments to related parties during the quarter totalled \$39,971 which included directors fees, superannuation, consulting fees, reimbursements, office lease and equipment rental.

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.

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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 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 (\$3.40/lb), Au (\$1,700/oz), Mo (\$15/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.

Metallurgical studies have demonstrated greater than 38% Mn concentrates are achievable by DMS with low impurities and high silica product.

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
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	100%	-	100%
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	100%	-	100%
Lago*	SOCAIRE 1	100%	-	100%
Lago*	SOCAIRE 2	100%	-	100%
Lago*	SOCAIRE 3	100%	-	100%
Lago*	SOCAIRE 4	100%	-	100%
Lago*	SOCAIRE 5	100%	-	100%
Lago*	SOCAIRE 6	100%	-	100%
Lago*	SOCAIRE 7	100%	-	100%
Lago*	SOCAIRE 8	100%	-	100%
Lago*	SOCAIRE 9	100%	-	100%
Colina	COLINA2 1 AL 30	-	-	100%
Colina*	COLINA A03, 1 AL 100	-	-	100%
Colina*	COLINA A07, 1 AL 100	-	-	100%
Colina*	COLINA A08, 1 AL 100	-	-	100%
Colina*	COLINA A09, 1 AL 100	-	-	100%
Colina*	COLINA A11, 1 AL 100	-	-	100%
Colina*	COLINA A12, 1 AL 100	-	-	100%
Colina	COLINA A14	-	-	100%
Colina	COLINA A15	-	-	100%
Colina	COLINA A16	-	-	100%
Colina	COLINA B01	-	-	100%
Colina	COLINA B02	-	-	100%
Colina	COLINA B03	-	-	100%
Colina	COLINA B04	-	-	100%
Colina	COLINA B05	-	-	100%
Colina	COLINA B06	-	-	100%
Colina	COLINA B07	-	-	100%
Colina	COLINA B10	-	-	100%
Colina	COLINA B13	-	-	100%

* Applications in progress

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")

30 SEPTEMBER 2023

Consolidated statement of cash flows	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	(365)	(365)
(b) development	-	-
(c) production	-	-
(d) staff costs	(77)	(77)
(e) administration and corporate costs	(120)	(120)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
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	(562)	(562)
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	-	-
(e) investments	-	-
(f) other non-current assets	-	-

Consolidated statement of cash flows	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	-	-

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	2,185	2,185
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	(51)	(51)
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	2,134	2,134

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	612	612
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(562)	(562)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4 Net cash from / (used in) financing activities (item 3.10 above)	2,134	2,134

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 (3 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	1	1
4.6	Cash and cash equivalents at end of period	2,185	2,185

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	2,170	597
5.2	Call deposits	15	15
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)	2,185	612

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	40
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)	(562)
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)	(562)
8.4 Cash and cash equivalents at quarter end (item 4.6)	2,185
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	2,185
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	3.89
<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: 24 October 2023

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.