Quarterly Activities Report

CobaltBlue
green energy technology

27 April 2023

Cobalt Blue Holdings Limited

A Green Energy Exploration Company

ASX Code: **COB**

Commodity Exposure:

Cobalt & **Sulphur**

Directors & Management:

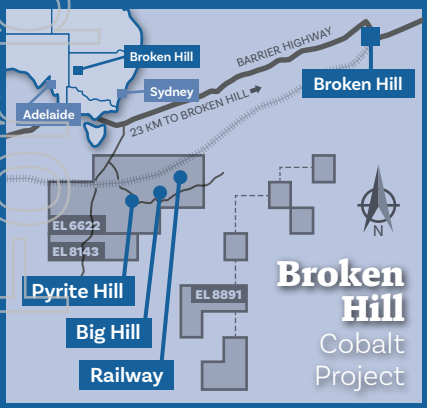
Robert Biancardi	Non-Exec Chairman
Hugh Keller	Non-Exec Director
Robert McDonald	Non-Exec Director
Joe Kaderavek	CEO & Exec Director
Danny Morgan	CFO & Company Secretary

Capital Structure:

Ordinary Shares at 27/04/2023:	**370.1m**
Unlisted Options/Rights:	**9.5m**
Market Cap (undiluted):	**$122m**

Share Price:

Share Price at 27/04/2023:	**$0.33**



Cobalt Blue Holdings Limited

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Highlights

March 2023 Quarterly Activities Report

BROKEN HILL COBALT PROJECT (BHCP)

- Definitive Feasibility Study update
- Demonstration Plant operations
- Resource Definition, Geotechnical and Waste Rock Characterisation Drilling
- Permitting
- Government grants

COBALT TRENDS

- Prices finding a cyclical bottom
- Tenke Fungurume to resume copper and cobalt exports.
- Indonesia proposes limited FTA with the US to attain IRA-compliance

COBALT IN WASTE STREAMS PROJECT UPDATE

- Testwork and commercial discussions continuing

CORPORATE

- Commercial Partner Update
- Investor webinars
- Expenditure
- Other

Broken Hill Cobalt Project (BHCP)

Definitive Feasibility Study (DFS) update

Work on the DFS continued during the quarter. Activities included:

- Demonstration Plant operations
- Resource Definition, Geotechnical and Waste Rock Characterisation Drilling
- Permitting work

Demonstration Plant operations

During the quarter, COB continued concentrate operations at the Demonstration Plant.

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The treatment of cobalt-pyrite concentrate involves two key steps – (1) conversion of pyrite into pyrrhotite and elemental sulphur and (2) leaching of the pyrrhotite. The solubilised cobalt is then recovered by precipitation as a mixed hydroxide with grades of 30% cobalt and 7% nickel (typical Pilot Plant results from 2021).

Following initial commissioning in September 2022, the kiln continued operations during the quarter with operating parameters optimised to maximise pyrite to pyrrhotite conversion. The typical feed rate was approximately 150–300 kg/hr. Ongoing optimisation of the kiln operations has included changing temperature, feed rate, nitrogen flow rate, and residence time. Analysis of the samples by x-ray diffraction has confirmed the conversion of pyrite to pyrrhotite across the particle size range. Elemental sulphur is being stored, ahead of bulk processing into commercial prill form at a later time.

Figure 1 – **Demonstration Plant Kiln to convert pyrite into pyrrhotite and elemental sulphur**

Figure 2 – **Comparison of BHCP dry concentrate (grey) and magnetic fraction of the calcine (black)**

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Figure 3 – **Elemental sulphur produced from the calcining of concentrate in the kiln**

Approximately 5 t of kiln calcine has been leached through to the end of March 2023. The pilot plant leach size has been significantly upgraded from 200 L to 450 L, thereby increasing the throughput rate from 35 kg/hr to 100 kg/hr. Additional upgrades included modifications to the feed pumping system, and the flash let-down system to improve reliability and continuity of operations. The circuit is now being geared to complete dedicated trials for the DFS detailed engineering requirements.

Figure 4 – **Horizontal vacuum filter belt and Pressure oxidation leach circuit**

The leach liquor is treated for iron removal, ahead of cobalt and nickel recovery as a mixed hydroxide precipitate (MHP). The first large-scale MHP production from the Demonstration Plant was achieved during the March 2023 quarter. Expected production rates are approximately 100kg/48 hours (based on a 100 kg/hr leach feed rate).

Figure 5 – **First batches of Mixed Hydroxide Precipitate (MHP) from the BHCP Demonstration Plant**

The Demonstration Plant operations are on track to deliver the initial 'process plant design criteria' for the DFS. The Plant will continue to run through 1H 2023, to produce large samples of cobalt and sulphur products for market acceptance in addition to obtaining DFS engineering data.

Resource Definition, Geotechnical and Waste Rock Characterisation Drilling

A resource definition, geotechnical and waste rock characterisation drilling program was completed in February 2023. The program included:

- Dedicated geotechnical drilling to inform pit slope stability analysis for mine design and optimisation at the Big Hill and Railway deposits;
- Investigation of zones of potential resource extension at the Big Hill and Railway deposits;
- Infill drilling targeting improved resource classification at the Big Hill deposit; and
- Drilling for waste rock characterisation at the Pyrite Hill, Big Hill and Railway deposits, to inform detailed design criteria for the Integrated Waste Landforms.

Seventy-eight (78) drill holes were completed for 12,281.25m, inclusive of 8,738m reverse circulation and 3,543.25m diamond core. Sample processing is continuing with final assays expected to be received during April for the commencement of geological modelling and resource estimation.

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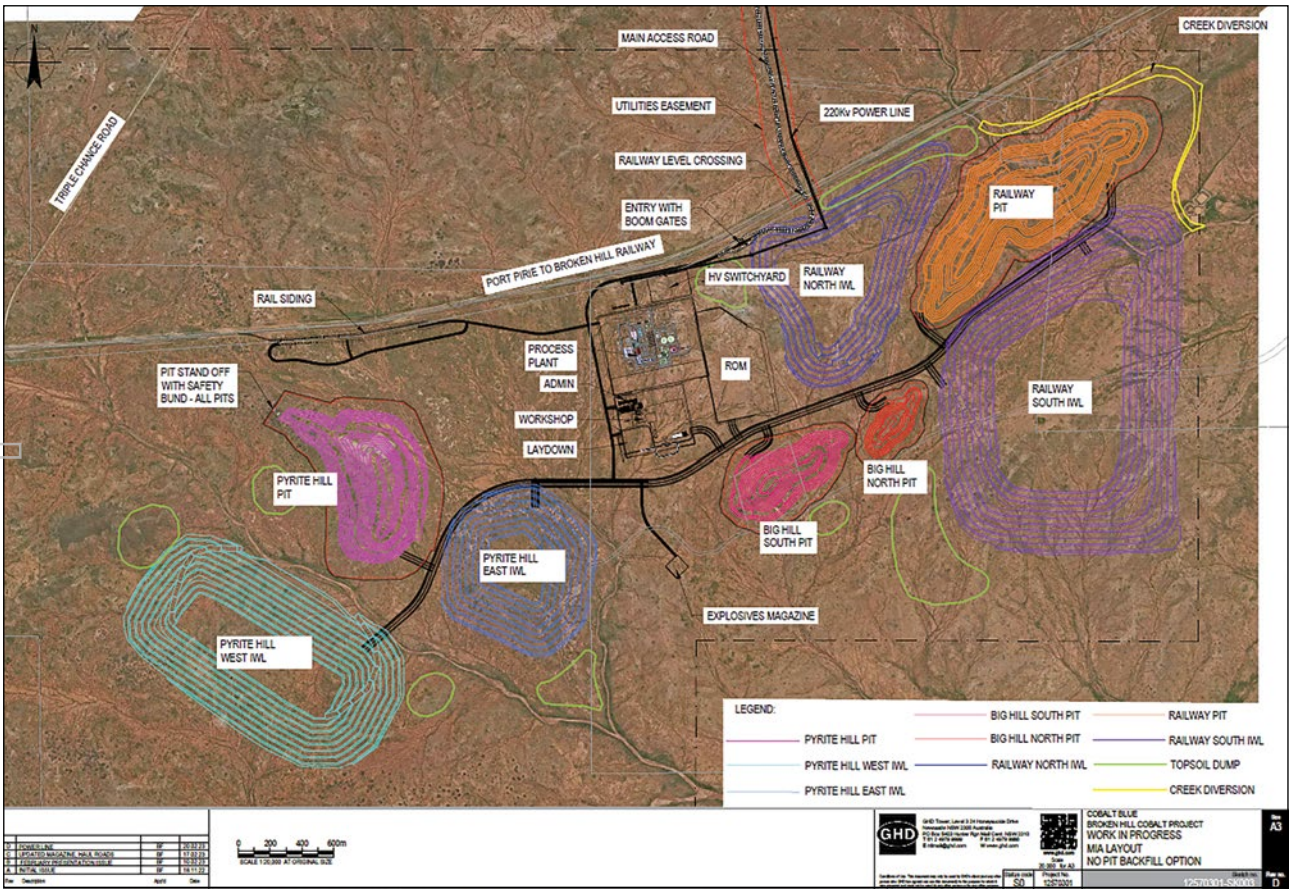
Figure 6 – **Reverse circulation drilling operations**

Permitting

Substantial progress has been made in defining the disturbance footprint for the BHCP. Our DFS mining consultant, SRK, has completed the "Approvals Case" mining study which in turn has largely determined the scope and scale of the Project. A map of the Project layout is shown below, with the location of open cut pits, Integrated Waste Landforms, processing plant and non-process infrastructure all having been determined.

Figure 7 – **Project layout**



Additional site-based surveys continue, assessing the Project footprint, including soils, ecology and Aboriginal heritage surveys.

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Figure 8 – **Soils Scientists undertaking a detailed soil profile description in the new access road**

The additional surveys include land associated with the access road to the site from the Barrier Highway, the utilities corridor from Broken Hill to the site, and revised locations of site infrastructure and Integrated Waste Landforms.

As referred to above, the significant drilling campaign recently completed will provide samples of waste rock for determining acid and metal leachate generation characteristics of the waste rock and tailings, as well as 19 new piezometers to measure groundwater characteristics at the site. These results will be used to design the Integrated Waste Landforms (and in-pit backfill options) and to assess the potential groundwater impacts of both the open-cut pit and waste management strategies.

Figure 9 – **BHCP geologist undertaking groundwater measurements**

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A site inspection with officers from a number of NSW Government departments and Broken Hill City Council was held on 21 February 2023. The inspection included a comprehensive tour of the BHCP site as well as the Demonstration Plant. This inspection provided the opportunity for government agencies to gain a first-hand appreciation of the scope and scale of the Project, as well as the environmental, social and economic aspects of the Project.

Figure 10 – **Officers from the NSW Government and Broken Hill City Council with the BHCP Approvals Manager**

Government grants

In December 2022, COB executed the Critical Minerals Accelerator Initiative (CMAI) grant agreement for the BHCP with the Australian Government. The grant totals $15m and is payable over time – instalments are to be made between December 2022 and March 2025. In December 2022, COB received the initial grant instalment of $1.5m. The next grant instalment ($6m) is expected in June 2023.

During the March 2023 quarter, COB executed the NSW Government's Critical Minerals and High-Tech Metals Activation Fund agreement (CMAF). The CMAF grant monies will be used for environmental studies required in the Environmental Impact Statement. The grant provides up to $0.5m, of which $0.25m was received during the quarter.

COB was also awarded $20,000 from Austrade's Export Market Development Grant, a program that helps Australian businesses grow their exports in international markets.

Cobalt Trends

Prices finding a cyclical bottom

Cobalt prices have been mixed over the March 2023 quarter, with sulphate and hydroxide prices declining after rebounding in February 2023. EV sales and battery demand had a rocky start at the beginning of the year, particularly in China following the end of EV subsidies. While sales data began to pick up in March, the unexpected market weakness resulted in inventory accumulation across the supply chain. This trend predominately impacts cobalt intermediate pricing, which tends to remain subdued until battery demand improves and depletes inventory. Meanwhile, cobalt metal prices have not been under the same pressure, with strong aerospace sector and other industrial demand in Europe and the US lending support, according to Benchmark Minerals. There have also been reports of investment demand from hedge funds, investors and banks looking for value in storage.

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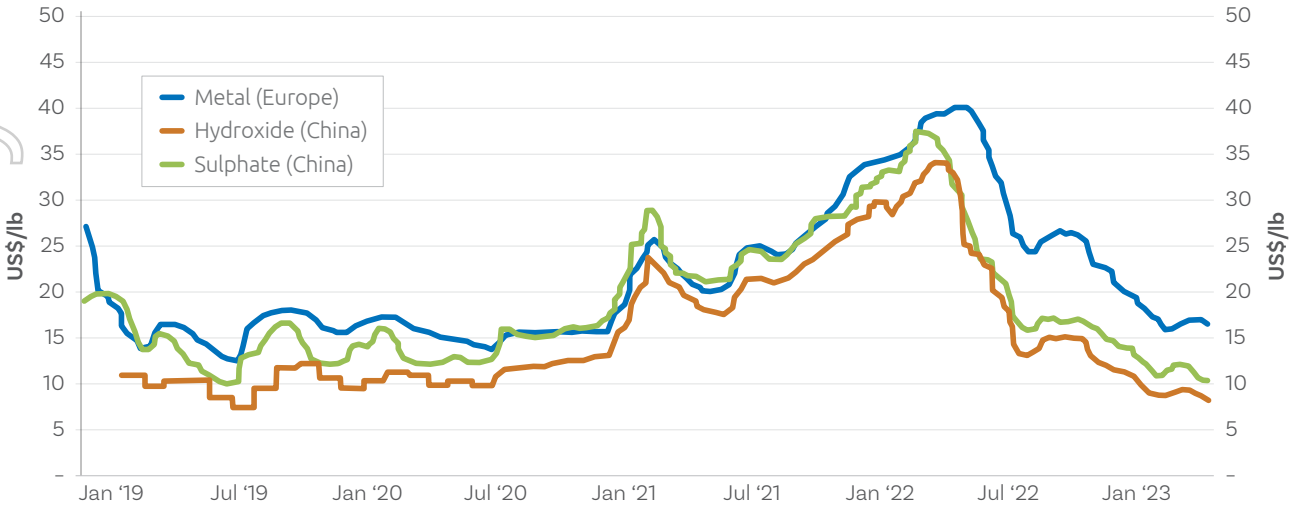
Figure 11 – **Cobalt prices bounced in March 2023 Quarter**



Source: Fastmarkets, Cobalt Blue Holdings Limited

Tenke Fungurume to resume copper and cobalt exports

China Moly (CMOC) and the DRC government have reportedly resolved their dispute. Exports from the large-scale Tenke Fungurume copper and cobalt mine will resume after ceasing in July 2022. CMOC has kept the mine in operation through this period, but the DRC government banned CMOC from exporting product. As a result, a large stockpile of copper and cobalt has accumulated, prompting questions about the market impact of this material.

Although an influx of material in an already saturated market can have a negative impact on prices, it should be noted that this is not 'new' to the market. CMOC has continually guided Tenke's output, meaning market participants have known the material would eventually enter the market, suggesting this event has already been priced in. It is also important to understand that the logistics of moving material from the DRC to the market has constraints that cannot be suddenly expanded. According to Benchmark Minerals, it will take a least a year to logistically ship the cobalt and copper out of the DRC, once exports resume. Furthermore, it is likely CMOC will prioritise shipping copper ahead of cobalt, given more favourable pricing.

Indonesia proposes limited FTA with the US to attain IRA-compliance

The Indonesian government in April 2023 announced it would propose a limited free trade agreement (FTA) for nickel and cobalt exported to the USA. This would enable companies involved to comply with the US IRA, and benefit from tax credits associated with the legislation. The IRA requires a certain proportion of materials used in batteries to be produced or assembled in North America or by a free trade partner. The US has announced similar proposals with Japan and the EU, who also do not have bilateral FTAs.

Over the past decade, Indonesia has become the world's largest nickel intermediate producer and is now investing in several high-pressure acid leach (HPAL) projects, with the aim to become a large-scale producer of battery-grade nickel and, by association, cobalt for batteries. As a result, automotive companies have commenced establishing relationships with these producers. Given the projections for the significant increase in Indonesian output for battery-grade nickel and cobalt, which is required to help fill the impending market deficits, the outcome of these plans will have important implications for the future of the battery raw materials supply chain.

Cobalt in Waste Streams Project (CWSP) update

COB is continuing to engage with the Queensland Department of Resources on results of test work completed on the first sample to determine next steps. In the interim, test work on the second sample is well advanced and commercial discussions with prospective partners are continuing.

Corporate

Commercial Partner Update

Multiple project partner and offtake discussions continue, with the BHCP seen as both commercially attractive and compliant with the respective Inflation Reduction Act (US) and Critical Raw Material (CRM) Acts (EU). The recent market guidance from US Treasury and EU Commission, respectively (delivered March 2023), is highly supportive of Australian extracted and processed cobalt.

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The sheer commercial and financial scale of these US and EU-focused global policies will likely shape significant industry responses. It remains our belief that geopolitical legalisation backed by strong financial incentives will build out entire integrated and sustainable production chains, including critical minerals extracted and processed in Australia. Whilst the battery industry digests these recent guidelines, project partner negotiations will continue into the June 2023 Quarter.

Investor webinars

COB conducted two investor webinars during the quarter. The webinars provided a business/BHCP update and a joint presentation with Rho Motion (energy transition consultants). The webinars were well attended. A copy of the webinar presentations can be found on COB's website.

Expenditure

COB's activities primarily relate to the exploration and evaluation of the BHCP. There were no activities related to production or development. During the quarter, COB incurred[1] $6.7m on exploration and evaluation activities, primarily relating to technical services, including drilling programs, demonstration plant operations and other Definitive Feasibility Study works.

COB's accompanying Appendix 5B (Quarterly Cashflow Report) includes an amount in item 6.1 which constitutes directors' fees and salaries.

Other

During the quarter COB's share price fluctuated between 32.5 cents and 67 cents.

Previously Released Information

This ASX announcement refers to information extracted from the following announcements, which are available for viewing on COB's website http://www.cobaltblueholdings.com

- 22 March 2023: Definitive Feasibility Study Update

COB confirms it is not aware of any new information or data that materially affects the information included in the original market announcements and, where applicable in the case of estimates of Mineral Resources or Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. COB confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

Tenement Holding

The COB Group held the following mining tenements at the end of the quarter:

Broken Hill Cobalt Project

Tenement	Location	Interest at end of quarter
EL 8891	Broken Hill Region, New South Wales	100% legal and beneficial interest
EL 6622	Broken Hill Region, New South Wales	100% legal and beneficial interest
EL 9254	Broken Hill Region, New South Wales	100% legal and beneficial interest
EL 8143	Broken Hill Region, New South Wales	100% legal and beneficial interest
EL 9139	Broken Hill Region, New South Wales	100% legal and beneficial interest
ML 86	Broken Hill Region, New South Wales	100% legal and beneficial interest
ML 87	Broken Hill Region, New South Wales	100% legal and beneficial interest

No tenements or farm-in or farm-out agreements were disposed of during the quarter.

1 *Refers to expenditure incurred on an accounting accruals basis as distinct from expenditure reported in the Appendix 5B, which refers to expenditure on a cash basis. The amounts were extracted from the unaudited records of the COB Group.*

Cobalt Blue Background

Cobalt Blue (ASX: COB) is a mining and mineral processing company focussed on the development of the Broken Hill Cobalt Project in New South Wales, Australia. The portfolio of three granted tenements in a total area of 49 km^2 containing large-tonnage cobalt-bearing pyrite deposits are located 23 km west of Broken Hill. COB has developed a patented minerals processing technology for treating pyrite feedstocks targeting 85–95% recovery of cobalt from ore to product (as Mixed Hydroxide Precipitate or Cobalt Sulphate). The Broken Hill Cobalt Project has a targeted project life of +20 years and is expected to be a significant employer in Regional NSW, with around 400 full-time jobs generated. COB will become a global top 5 supplier of battery-grade cobalt (ex-China).

This announcement contains "forward-looking statements". All statements other than those of historical facts included in this announcement are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include but are not limited to cobalt metal price volatility, timely completion of project milestones, funding availability, government and other third-party approvals. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement".

Looking forward, we would like our shareholders to keep in touch with COB updates and related news items, which we will post on our website, the ASX announcements platform, as well as social media such as Facebook (f) and LinkedIn (in). Please don't hesitate to join the 'COB friends' on social media and to join our newsletter mailing list at our website.

This announcement was approved by the Board of Directors.

For more information, please contact:

Joel Crane
Investor Relations/Commercial Manager
joel.crane@cobaltblueholdings.com

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Rule 5.5

Appendix 5B

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

Name of entity

COBALT BLUE HOLDINGS LIMITED

ABN	Quarter ended ("current quarter")
90 614 466 607	March 2023

Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(374)	(1,245)
	(e) administration and corporate costs	(484)	(2,091)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	101	116
1.5	Interest and other costs of finance paid	(2)	(3)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (GST received/(paid))	(201)	(121)
1.9	**Net cash from / (used in) operating activities**	**(960)**	**(3,344)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(4)	(897)
	(d) exploration & evaluation	(5,902)	(19,047)
	(e) investments	-	-
	(f) other non-current assets	(5)	(57)

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Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (Research and development incentive refund & government grants)	250	2,399
2.6	**Net cash from / (used in) investing activities**	**(5,661)**	**(17,602)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	22,312
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	3,750
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(59)	(415)
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 (payment of lease liabilities)	(58)	(200)
3.10	**Net cash from / (used in) financing activities**	**(117)**	**25,447**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	21,769	10,530
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(960)	(3,344)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(5,661)	(17,602)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(117)	25,447

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Consolidated statement of cash flows		Current quarter $A'000	Year to date (9 months) $A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**15,031**	**15,031**

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	109	359
5.2	Call deposits	3,122	3,210
5.3	Bank overdrafts	-	-
5.4	Other (Term deposits)	11,800	18,200
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**15,031**	**21,769**

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	159
6.2	Aggregate amount of payments to related parties and their associates included in item 2	

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

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7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	-	-
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.

On 17 January 2020 the Company executed agreements with American Rare Earths Limited (ASX: ARR) to acquire 100% ownership and legal title of the Broken Hill Cobalt Project (including all tenements). The consideration included a five-year $3,000,000 secured promissory note (PN) issued to ARR, with interest of 6% per annum payable in years 4 and 5. The PN can be repaid by the Company at any time in whole or in part without penalty. Once the PN is repaid in full, the security will be extinguished.

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(960)
8.2	Payments for exploration & evaluation classified as investing activities) (item 2.1(d)	(5,902)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(6,862)
8.4	Cash and cash equivalents at quarter end (item 4.6)	15,031
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	15,031
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	2.19

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

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

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Not applicable

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: Not applicable

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8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer: Not applicable	

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: 27 April 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.

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