

# EQ Resources Limited

# Quarterly Activities Report Quarter ended 30 June 2023

EQ Resources Limited (EQR) is the 100% owner of the Mt Carbine Tungsten Mine near Cairns, a critical metal. Production recommenced in 2020 with dual product streams of tungsten concentrate and by-product high-quality specialised aggregate and road-making materials. Re-Opening and mining of the historical Andy White Open Pit commenced in June 2023.

# **HIGHLIGHTS**

### **MT CARBINE OPERATIONS**

- Open Pit dewatering completed, grade control drilling ongoing.
- Open cut mining restarted at the end of the quarter with the first blast and pit ore processed at the end of June.
- Phase 2 expansion and plant upgrade is underway.
- EQR purchased, installed, and commissioned its third TOMRA XRT ore sorter.
- Concentrate production more than doubled month-on-month (June vs July) to >100 tonnes in July, in line with the ramp-up schedule.

## **MT CARBINE DEVELOPMENT & FUNDING**

- Strong BFS update delivered a 47% increase in NPV.
- EQR & Golding executed a mining contract for Mt Carbine.
- EQR received \$2.3m through R&D tax refund.
- EQR completed second drawdown from \$6m federal grant.
- EQR collaboration with the European Raw Materials Alliance.

## **EXPLORATION**

- 43% increase in Mt Carbine Ore Reserves from Western Pit.
- EQR undertakes grade control drilling with the open pit restart with positive results from infill grade control drilling confirming initial ore reserve section.



# **MT CARBINE OPERATIONS**

Pit dewatering was completed during the Quarter with Golding Contractors Pty Ltd ("Golding") arriving on site and beginning pit and site preparations for Open Pit mining. The first blast took place on the 25<sup>th</sup> of June, with ore deliveries to the crusher station starting on the 27<sup>th</sup> of June. Golding and EQR are working closely to ramp-up operations in line with forecast expectations in an accretive and sustainable manner for the operation. Grade control drilling over the period has been ongoing with certain results released to market in July. In relation to the grade control drilling in the Open Pit, the Company is pleased that results returned for the current Reserve section has been higher than anticipated. Orana Drilling Pty Ltd ("Orana"), the drill and blast contractor was awarded the grade control drilling program and have been delivering on both the grade control drilling and their drill and blast targets, making this arrangement a very efficient solution for the Company.

Orana has two drill rigs on site, these two rigs will focus on the blast hole drill out expected over the next 12-months and are planned to drill approximately 12,790 holes for 134,000m of blast hole drilling to load 1,010t of emulsion explosives. Typically, a full blast will be a 325-hole and 2.5m x 2.5m pattern for approximately 60,000t per blast. The Company is sampling and assaying the vertical drill and blast holes as well as the angled RC holes to provide as much information as possible to the geology team to mark-up the ore zones accurately minimising dilution and making ore/waste movements as efficient as possible.



Figure 1: 2021 vs 2023 - EQ Resources has transformed the historical Mt Carbine Tungsten Mine by bringing it back into hard rock production, solidifying its role as a critical mineral producer.



Figure 2: Golding mining contractors are maintaining a clean and neat open pit operation.





Figure 3: The Mt Carbine and Golding team have optimised the site layout to facilitate increased production and workflow activity.



Figure 4: A streamlined delivery schedule for additional equipment facilitates the acceleration of production ramp-up.



Figure 5: Orana Drill and Blast Rigs



# MT CARBINE PROCESSING PLANT OPERATIONS

Overall, the operation prepared to transition from primarily feeding material from the Low-Grade Stockpile ("LGS") to Open Pit Ore during the quarter. The transition from the end of June through to July has been positive for the operations team, with a focus recovery rates of the ore fed through the plant. A gradual production ramp up is scheduled in line with mining production so as not to pressurise any of the circuits at the mine, from mining through to the gravity processing plant. During July, a mobile jaw crusher was added to the crushing circuit as planned to crush the -700mm ore coming from the blasting in the Open Pit. This was implemented in July and to date is working well and giving the rest of the production circuit the feed required.

# **XRT SORTER & GRAVITY PLANT PRODUCTION**

### PHASE 2 EXPANSION AND PLANT UPGRADE UNDERWAY

The Gravity Plant area has seen major changes this quarter with a lot of earthmoving works needing to be done to prepare concrete pads for the ongoing Phase 2 Expansion. A larger entrance to the Gravity Plant and carport was completed, a new and improved service area for heavy machinery, fitting and turning has been set up in both the Gravity Plant and the Quarry Operations with a new fabrication workshop set for construction in the coming quarter. A new inventory warehouse, housing all the spare parts is being installed with the rollout of a new inventory management system set for implementation from July to December 2023.

A new electricians office and electrical stores area has been installed. The relocation of the core shed utilised as part of the setup of the new laboratory will be completed in July. All expansion works require the help of local contractors specialised in electrical engineering, civil construction, fabrication, concreting, crane operations, and other engineering services and is providing a strong boost to the local economy. The new Sandvik Crushing Plant detailed design is underway against the feasibility program which is set for commissioning in early 2024.



Figure 6: Eight additional shaker tables have been installed and commissioned to increase processing capacity.

This quarter has seen the Gravity Plant take another step forward, achieving positive performance metrics. Notably, tungsten concentrate production rose to 150 tons of 50% WO<sub>3</sub> equivalent for the quarter, an increase compared to the 136 tons generated in Q3 2023 while having a relatively stable head feed throughput. To be noted for July while ramping-up production, concentrate forecast is set at >100 tonnes. This is largely attributed to the plant's record runtime averaging 81.32% over the quarter, building on the positive gains from the previous quarter's 79.59%, demonstrating enhanced efficiency and commitment from the team.



A significant development to note is the initiation of ore deliveries from the Open Pit, which are now being processed through the plant. This major transition started towards the end of June and continued into July, marking an exciting chapter for the Mt Carbine operations. The successful integration of this new source signifies the plant's adaptability and readiness to handle shifts in operations, promising further increases in production for upcoming quarters. The month of July is the first month which has the benefit of the Open Pit Ore with the Company forecasting 110t of 50% WO<sub>3</sub> concentrate for the month.

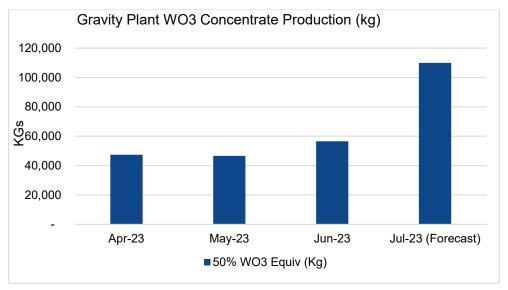


Figure 7: Gravity Plant Concentrate Production Q4 2023 with July forecast

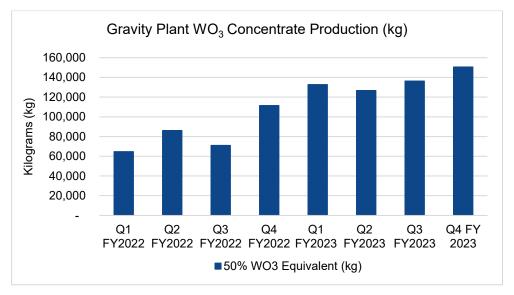


Figure 8: Gravity Plant Concentrate production FY 2022 vs FY 2023

### COMMISSIONING OF THE THIRD XRT ORE SORTER

Subsequent to the quarter end, the XRT Sorter plant has received and successfully installed its third TOMRA XRT Ore Sorter ("TOMRA 3"). Over the past 12-months of operating and sorting the LGS the Company has seen an average 10-12% mass yield from the feed to concentrate and has optimised the processing parameters to maximise tungsten recoveries. Since starting to process the primary ore from the Andy White Open Pit an increased mass yield ranging between 15-18% have been achieved, with stable WO<sub>3</sub> recoveries above 95%. TOMRA 3 was fully commissioned in July and is in full operation at the time of reporting.

With the open pit ore deliveries, the operations have experienced a higher proportion of material in the sortable fraction, which is an overall benefit to the operation due to the low-cost nature of XRT Ore Sorting. The new TOMRA 3 will be put in place of the original Pilot XRT Sorter ("TOMRA 1") that is on site and which will undergo refurbishment works. TOMRA 3 has newer programming and increased efficiencies, therefore the operation is expecting to see immediate benefits to production.

The preparation, receipt, and installation of TOMRA 3 and replacement of TOMRA 1 led to planned downtime over the quarter on the sorting circuit but will lead to increased concentrate outputs going forward. Therefore, lower sorter concentrates were produced over the period with lower throughputs, however, feed material has been stockpiled ahead of the sorters to allow minimal downtimes going forward with TOMRA 2 and TOMRA 3 running in parallel.



Figure 9: The New TOMRA 3 XRT Sorter is installed and being commissioned.

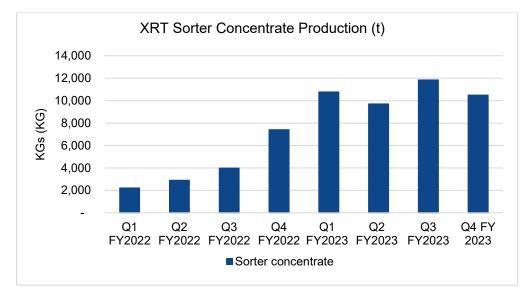


Figure 10: XRT Sorter Concentrate production FY 2022 vs FY 2023



## **QUARRY OPERATIONS**

The quarter saw contracts pick-up on the back of the wet season with both local and regional contracts being executed. The regional contracts focused on the provision of pre-coat material while the local contracts mainly focused on the provision of road bases, select fill and gabion materials. The quarter overall has seen tendering opportunities increase for the quarry with the quarry waiting on feedback from multiple tenders at present.

The quarry has also been producing and supplying various aggregates such as road sheeting materials for the open pit mining area as well as construction materials where required around site. With the expansion of Phase 2 underway, the quarry is currently undertaking a program to understand the various aggregates required for the upcoming construction and earthworks, mainly in relation to the civil work set to be undertaken in the construction of the Phase 2 Sandvik crushing plant.

Focus continues on the growth plan for the quarry business. The building and launching of a separate quarry website to aid promotion has progressed from content creation and population phase. Testing and quality assurance will commence shortly before deployment and then promotion.

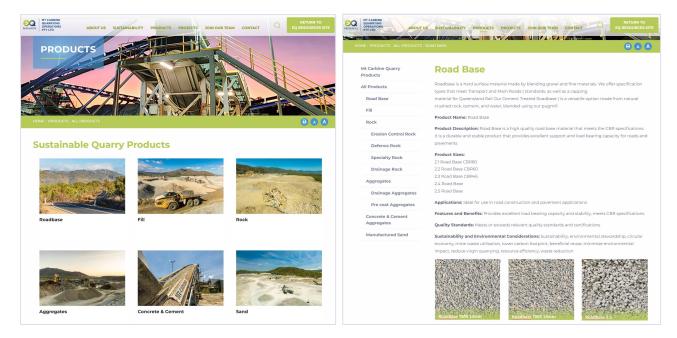


Figure 7: Mt Carbine Quarrying set to receive its own dedicated website.

## **ESG PROGRAM OVERVIEW**

The Company has significantly built on its ESG position in the last quarter and continues to build a workplace culture that embodies its values as its mining operations expand. It continues to action a proactive ESG program delivering tangible outcomes against its documented commitments. The Company is encouraged to see increasing proactive employee involvement in monthly committee meetings and community centred initiatives.

Utilising the Turner & Townsend JukesTodd ESG Categorisation framework to manage its ESG program, the Company's ESG program and Foundational Commitments align to its values and purpose, and where possible, include metrics for reporting (see: <u>Quarterly Activities Report, page 7. Dated 31 January 2023</u>).

The program incorporates the environmental and social aspects most material to its stakeholders as identified in EQR's 2021 Stakeholder Sentiment Survey. It includes a governance framework and a program workbook which underpins how the Company measures, tracks and reports on the program's objectives. An updated Stakeholder Sentiment Survey, and gap analysis is currently being planned as the Company prepares to align with the new ISSB reporting standards which are set to form a global baseline in sustainability and climate reporting. Although not mandatory yet in Australia, EQR plans to embed best practice into its frameworks as the Company grows so that it is well prepared to meet requirements as it reaches required thresholds.

A series of policies have been reviewed, and or developed and updated both internally and by the Turner & Townsend JukesTodd ESG consultancy team which is ensuring practical application and implementation in line with the Company's values and Shareholder requirements.

A Sustainability section on the EQ Resources website is undergoing construction. This will include accessible information communicating EQR's framework behind its initiatives as it works towards future outward reporting. Additionally, it includes a showcase of the Company's main ESG initiatives and transparent information speaking to each of the sections outlined in the image below.



Figure 8: EQR's Sustainability tab on its website will have 7 subsections.









### **ENVIRONMENTAL ACTIVITIES AT MT CARBINE**

During the quarter, the Company has continued its pro-active work on environmental activities. As per the ongoing monitoring, revision and update list as follows:

- Noise, air & vibration studies.
- Environmental Management Plan revision and update.
- Siam Weed Infestation management.
- Water management plan update including ICMM alignment.
- Updated hydrogeological study based on new shallow and deep monitoring water wells.
- Blast management plan.
- Waste rock & tailings management plan.
- Flora and fauna studies.
- Water engineering works by strategic engineering consulting firm ATC Williams Pty Ltd, a recognised leader in tailings and water management, who updated water balances and designed the upgrade of the Mt Carbine water dam.
- Updated stakeholder engagement program (based on a detailed review of heritage sites around Mt Carbine).
- Controlled burning.

Two main bodies of work came out of the previous quarter, mainly being an update and revision of the Environmental Management Plan, Siam Weed infestation identification and management and material management for PAF. With the restart of the open pit mining, the Company has continued its engagement with local Cairns firm, Natural Resource Assessments Pty Ltd ("NRA"), to work with the operations team on site to revise and define specific work packages with monthly and quarterly reporting requirements making the tracking and execution of these tasks more streamlined.

In addition to this, during routine water sampling, the Company identified that there was Siam Weed on portions of the property which the Mareeba Shire thought it had eradicated in this regional area. This is an invasive species and therefore, the relevant authorities were contacted. Their procedural guidance was followed, and eradication action taken under the guidance of NRA.

As listed above, there is a list of ongoing works, monitoring, and sampling that the Company completes throughout the year, this is completed in line with the Environmental Authority conditions and in line with guidance received from NRA.



Figure 13: EQR employees actively participate in consistent ecological health monitoring initiatives in the area.



Figure 14: Controlled burning in the local region. Conducted by Mitchell River Watershed Management Group, a conservation initiative supported by EQR.



## SAFETY PERFORMANCE AT MT CARBINE

EQR and its employees remain focused on embedding an authentic safety culture into its operations. The past quarter has seen a drive to increase workplace safety awareness, training, and implementation.

Employees at Mt Carbine are being trained to actively look to reduce the risk to themselves and others by identifying hazards and addressing them before they conduct work activities. During this time numerous contractors and employees have been working side by side with only 1 minor lost time injury recorded in May of this quarter.

A total of 2,147 positive safety indicators have been recorded for this quarter. Area Foreman and Supervisors have increased workplace inspections which will help the overall safety onsite by ensuring the areas they are responsible for are being maintained & kept to the appropriate standard as required by the Company.

Take 5's being completed sit at 500-600 per month and remain well above the industry requirement of 300. Although the Take 5 frequency has decreased from Q3 to Q4, focus has been to remain above required levels while emphasising an increase in workplace inspections and VOC's, to ensure a safe work environment and core competencies are in place prior to the commencement of work activities.



# MT CARBINE DEVELOPMENT AND FUNDING

### STRONG BFS UPDATE DELIVERS 47% INCREASE IN NPV

Based on the Company's recent upgrade of the Mt Carbine Ore Reserves (see ASX announcement 43% Increase in Mt Carbine Ore Reserves from Open Pit' dated 18 May 2023) a detailed review of the Project Economics has been performed, with consideration of changing underlying cost and revenue assumptions.

The BFS Economic Update supported by a 43% increase in open pit Ore Reserves upgrade, and doubling of plant capacity from 2025, resulted in a 25% higher tungsten concentrate (50% WO<sub>3</sub> content) output, and over a shorter period (due to doubling capacity), thus bringing revenue forward.

The Project delivers strong Pre-Tax Economics\* including:

- NPV8\*\* of \$307.1 million\*\*\* (47% increase compared to the November 2022 BFS update of \$209 million);
- IRR of 477%;
- Life of Mine EBITDA of \$450 million.
- Low capital cost of \$21.4 million has been further optimised to \$18.5m (a decrease of \$2.9m) as an effect of scope changes and defined costing. \$7.8m has been added to reflect doubling of plant capacity, resulting in total Capex over Project life of \$26.3m.
- Tungsten concentrate production C1 Cash Cost\*\*\*\* remains amongst lowest in industry with an equivalent of US\$104/mtu once full capacity has been reached.



\* Concentrate sales price basis US\$340/mtu (mtu = metric tonne unit, 10kg) in 2023, with a long-term forecast average of US\$369/mtu (2024-2040) calculated using the average of the Roskill Base Case and High Case price level scenarios (see Chapter 16 of 2021 BFS) \*\* 8% discount rate applied

\*\*\* \$307M NPV is Project NPV; NPV attributable to EQR as 50% portion of LGS Joint Venture and 100% of Open Pit results to \$270M \*\*\*\* C1 Cash Cost: Direct costs (mining and processing cost), plus local G&A and by-product credits from sale of aggregate through quarry, but excluding royalty; Exchange rate AUD/USD 0.688

Parameter	Unit	BFS Pit Optimisation (November 2022)	BFS Western Extension (May 2023)
Total Cash Cost (FCA)	US\$/mtu	118	104 🕓
Capital Cost (Project life)	A\$m	21.4	26.3*
Pre-tax NPV <sub>8, real</sub>	A\$m	210*	307** 🕗
NPV / Capex Ratio	х	9.8	11.7 🕗
Payback Period	years	1.5	<1 🕥
Strip Ratio	(Waste:Ore)	3.1:1	3.9:1
Concentrate Produced	(t / 50% WO <sub>3</sub> )	30,960	38,570

#### Table 1 - Comparison of Consolidated Project Economics

Capex over the entire Project life has increased due to \$7.7m added to double plant capacity (without this, capex forecast is lower than last BFS)

\*\* NPV shown as Project NPV; NPV attributable to EQR as 50% portion of Joint Venture Scope and 100% of additional ore recovered from Open Pit results to \$270 million

Notes: • The BFS has been prepared to a -20% to +20% level of accuracy. The production target and financial information in this table must be read in conjunction

with the cautionary statement in the relevant ASX Release AUD:USD average exchange rate of 0.688 over the life of Project was used for currency conversions

The BFS Update now contemplates a 10-year production schedule with the Project delivering impressive economics including a NPV8 of \$307 million and an IRR of 477%.

The BFS Update covers total concentrate production of approximately 38,570 tonnes (50% WO<sub>3</sub> content), an increase of 25% over the last BFS output. The Project implementation was split into two phases, with the Company having successfully completed Phase 1 Scope as per the initial BFS (December 2021). The BFS Update highlights that scope changes and cost updates have resulted in a positive net effect of approximately \$2.9 million in total Capex savings. An additional \$7.8m has been added to capital expenses to account for doubling of plant capacity in 2025.

The BFS Update had been prepared by independent lead study manager Turner & Townsend JukesTodd Pty Ltd. The full BFS report is available on the Company's webpage.

### EQR & GOLDING EXECUTE MINING CONTRACT FOR MT CARBINE

The two Parties have agreed to the first 12-18 months to be completed on a rates and cost-plus basis to establish a sitespecific baseline cost, thereafter, the Parties intend to transition to rise and run matrix rates, on fleet composition and material type basis. The committed Contract period is 70 months and represents an estimated Contract value of \$179 million. The estimated material movement over the Contract period includes:

- Approx. 16.3 million tonnes mine waste material;
- Approx. 6.0 million tonnes mined Ore;
- Approx. 2.9 million tonnes low-grade stockpile material.

The Parties agreed to split the Contract into two phases to ensure a refined understanding of the schedule of costs regarding the unique nature of mining hard rock tungsten. This was done to help de-risk the Project and ensure scope delivery without having to build significant risk pricing upside into the Contract.





Figure 9: EQR and Golding representatives inspecting the Open Pit walls.



Figure 10: Goldings Contractors and some of their new mining equipment.

#### EQR RECEIVES \$2.3M THROUGH R&D TAX REFUND

The Company received a \$2.3 million tax refund in support of the Company's extensive R&D programs conducted at its Mt Carbine Tungsten Mine, in preparation for the Open Pit restart. The various optimisation trials, comparisons of different technologies and equipment, and selected modifications in the process flowsheet, have proven very effective over the past 12 months with the main process Key Performance Indicators improving month by month.



100.0% 75.0% 50.0% 25.0% 0.0% 100.0% 75.0% 50.0% 25.0% 0.0%



Figure 12: Plot Logic sensor, scanning drill core.

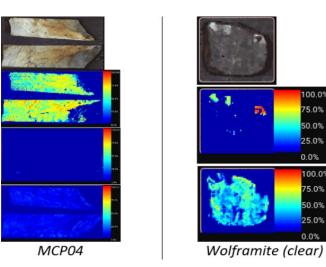


Figure 11: Sample scan for Quartz vein and Wolframite rich ore

#### EQR COMPLETES SECOND DRAWDOWN FROM \$6M FEDERAL GRANT

The Company received the \$3.96 million second tranche payment from the Federal Government \$6 million grant under the Critical Mineral Accelerator Initiative (CMAI). The co-investment received from the CMAI will be utilised to support implementation of the scope defined in the Company's recently updated Bankable Feasibility Study (see ASX announcement 'Strong BFS Update Delivers 47% Increase In NPV' dated 22 May 2023) for a large-scale, sustainable source of the globally recognised critical mineral.

The \$3.96 million drawdown will contribute towards the further upgrade of the gravity plant and additional drilling. These efforts will encompass processing relatively low-grade ore stockpiled above ground and high-grade resources identified in the Andy White Open Pit.



Figure 19: Tungsten bags ready to ship.

Figure 20: Previous CMAI site tour showcased the successful acceleration of the Mt Carbine Tungsten Project.





### EQR COLLABORATION WITH THE EUROPEAN RAW MATERIALS ALLIANCE

The Company has entered into a collaboration agreement with the European Raw Materials Alliance ("ERMA") and the ERMA has referred to the Company in the 'European Call for Action' report published on 16 May 2023 during the EU Raw Materials Week held in Brussels, Belgium.

ERMA was launched on 29 September 2020 as part of an Action Plan on Critical Raw Materials by the European Commission and is a body corporate supported by the European Institute of Innovation and Technology ("EIT RawMaterials"). EIT RawMaterials and ERMA are co-funded by the European Commission, comprising more than 350 partners from all areas of the knowledge triangle of industry, universities and research and development in the raw materials sector. The collaboration agreement has been signed after an initial assessment by ERMA of EQR's capabilities and recent successes with the development and reactivation of the Mt Carbine tungsten mine.

The aim of the agreement is to explore a potential participation by EQR in the European tungsten mining sector. ERMA provides EQR access to its wide network of public and private institutions in the raw materials sector, including financing structures to support any potential project investment in the future. This entry point to get in touch with European parties exploring tungsten mining production is highlighting the significant experience gained from the recent development at Mt Carbine and could be a good common ground to share with mine owners in Europe (See ASX Announcement 'EQR Collaboration with the European Raw Materials Alliance' dated 17 May 2023).

### EQR SIGNS PARTNERSHIP MOU WITH MASAN HIGH-TECH MATERIALS

EQR signed a Memorandum of Understanding ("MOU") with its existing joint venture partner, CRONIMET Australia Pty Ltd ("Cronimet"), and Masan High-Tech Materials Corporation ("Masan") related to the Mt Carbine Tungsten Project. The MOU will establish a working relationship based on reciprocity and mutual benefit, exchanging knowledge and experiences around tungsten exploration, mining, and processing, potentially assessing new project opportunities, and new product applications. The MOU is augmented by an existing long-term offtake agreement Cronimet Group has signed with Masan, which will see approximately 70% of Mt Carbine's production for the next four years allocated to Masan. The proposed strategic partnership between EQR, Cronimet and Masan aims to continue Mt Carbine's growth into a world-class sustainable tungsten operation.



Figure 21: Dr. Franziska Brantner and Dr. Markus Ederer in back row, company representatives of EQ Resources, Cronimet and Masan in front row.



# **EXPLORATION ACTIVITIES**

During this quarter, the Company released an updated Resource Statement (see ASX Announcement '<u>64% Increase of</u> <u>Mt Carbine Indicated Resources (In-Situ)</u>' dated 4 April 2023) followed by an updated Reserve Statement (see ASX Announcement '<u>43% Increase in Mt Carbine Ore Reserves From Western Pit</u>' dated 18 May 2023). This culminated in an updated Bankable Feasibility study ( see ASX Announcement '<u>Strong BFS Update Delivers 47% Increase In NPV</u>' dated 22 May 2023). The documents can be found on the Company's Website under <u>Technical Reports</u>.

## **RESOURCE UPDATE**

With the addition of a further 7 holes reported in the last quarter the Company undertook a reassessment of the resources. There was sufficient increase in the indicated resource to complete an update to the Mineral Resource Estimation (MRE) to show the results of extension work immediately west of the BFS pit design (December 2022). The total drilling to date at Mt Carbine used for this updated MRE now comprises 96 holes for 24,337m of diamond drilling. Highlights of the updated resource are as follows:

- The increase in the latest resource 'Mt Carbine Mineral Resource Estimate\* ("MRE") Dated 4<sup>th</sup> April was a 64% increase of the metal contained in Indicated Resources (In-situ), adding ~2.11 million mtu\*\*.
- The Global MRE (Inferred- & Indicated category) increases by 28.6% to ~9.61 million mtu\*\*.
- Indicated Resources (In-situ) expanded from 12Mt @ 0.27% WO<sub>3</sub> to 18.1Mt @ 0.30% WO<sub>3</sub>, adding significant metal value to the Company's inventories.
- The additional high-grade mineralisation was located in the Dyke West Zone and the Northern Iron Duke Zone.
- Model shows the mineralisation remaining open at depth and along strike.

#### \* 0.05% WO3 cut-off grade

\*\* mtu = metric ton unit, equals 10kg WO<sub>3</sub>

Orebody	Resource Classification	Tonnes (Mt)	Grade (%WO3)	WO₃ (mtu)
	Indicated	10.126	0.075	759,450
Low Crade Stockaile	Indicated	2.75	0.07	178,517
Low-Grade Stockpile	Inferred	0.83	0.06	53,789
	Subtotal	13.71	0.07	991,756
	Indicated	18.06	0.30	5,405,901
In-Situ	Inferred	10.68	0.30	3,217,311
	Subtotal	28.74	0.30	8,623,212
All	Total	42.45		9,614,968

#### Table 2: Mt Carbine Mineral Resources Estimate as of April 2023

#### Notes:

1. Total Estimates are rounded to reflect confidence and resource categorisation

 Classification of Mineral Resources incorporates the terms and definitions from the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012) published by the Joint Ore Reserve Committee (JORC)
 No uppercut was applied to individual assays for this resource; lower cuts of 0.05% & 0.08% WO3 were applied to the resource

and reported as Low Grade Insitu and In Situ respectively. These cuts are where mineralisation forms distinct vein zones. 4. Drilling used in this methodology was all diamond drilling with 1/2 core sent according to geological intervals to ALS for XRF-15b

 Drilling used in this methodology was all diamond drilling with 1/2 core sent according to geological intervals to ALS for XRF-150 analysis

5. Resource estiamtation was completed using the Kriging Variable Orientation Estimation Methodology

6. Indicated spacing is approximatley 30 x30m inferred is approximatley 60 x 60m.

7. The deposit is sheeted vein system with subparrallel zones of quartz tungsten mineralisation that extends for >1.2km in length and remains open to the west and north. At depth the South Wall Fault cuts the Iolanthe to Johnson's veins but the Iron Duke zones remain open to depth.



The Company remodelled this MRE using a similar set of parameters as defined by the Measured Group when calculating the June 2021 and August 2022 Resource Statements with only minor modifications (for details see '<u>Annex 1 - Mineral Resource Statement</u>'). The calculation used a 'Kriged Variable Orientated Estimation' methodology for the model. It was found the single variogram applied in previous estimations was not suitable for the western extensions where changes in vein orientations were observed. The strike changes of the veins in this area moved from grid east-west to grid south-west and was recorded from surface mapping of the veins as well as reflected in the recent orientated drill core.

The updated MRE uses the same 0.05% WO<sub>3</sub> cut-off as defined in our previous Resources and Reserves Statements (see <u>Mt Carbine Expansion Project – Bankable Feasibility Study 2022 Economic Update</u>). The lower grade portion of these Resources is designated for storage into the Company's low-grade stockpiles which are currently being mined at a grade of 0.075% WO<sub>3</sub>, whilst the >0.08% WO<sub>3</sub> portion is marked into the Company's In-situ Resources.

The updated resources allowed the Company to model a larger pit to expand from the current 4-year BFS pit as per the revised BFS Economic Update of November 2022. The high-grade mineralisation recently intersected still remains open further to the west, north and to depth. The Company flags it will continue to drill this year to further expand this world-class tungsten resource.

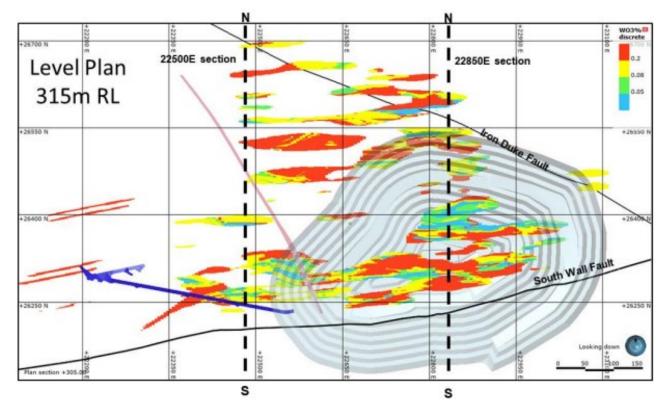


Figure 22: Plan view of defined resources and the previous BFS study pit design.



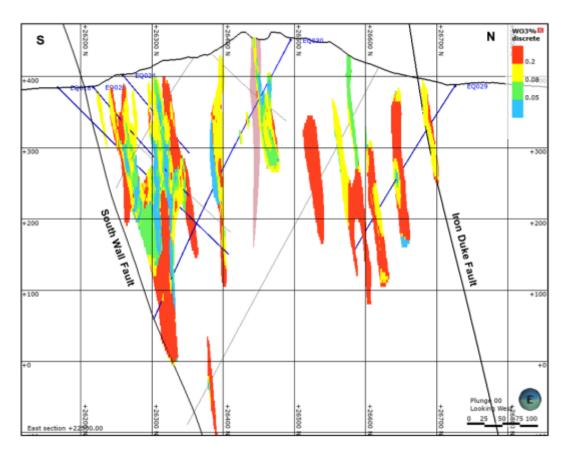


Figure 23: Cross Section 22500E with WO $_3$  Grade Indication. Recent EQR drill holes shown in dark blue.

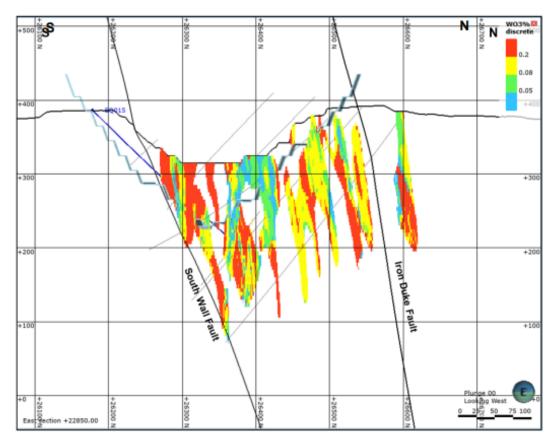


Figure 24: Cross Section 22850E with WO $_3$  Grade Indication. BFS Pit shown in light blue.



The following table highlights selected cut-off grades with corresponding metal contained (in WO<sub>3</sub>):

Cut-off	Tonnes	Grade	WO₃			
(% WO₃)	(Mt)	(% WO₃)	(mtu)			
0	35.83	0.25	8,957,737			
0.05*	32.33	0.27	8,855,518			
0.08**	28.74	0.30	8,623,212			
0.1	26.53	0.32	8,423,949			
0.15	21.32	0.36	7,774,790			
0.2	16.61	0.42	6,952,182			
0.25	12.72	0.48	6,079,893			
0.5	3.37	0.85	2,878,938			
0.75	1.30	1.25	1,634,882			
	* Cut-off used to define Low Grade Stockpile (0.05-0.08% interval) ** Cut-off used to define ROM Stockpile (>0.08% WO <sub>3</sub> )					

 Table 3: Variable cut-off grades for Mineral Resource Estimate (In-situ)

#### **IN-SITU LOW-GRADE STOCKPILE**

The resources in the Low-Grade Stockpile were reduced to 10.126Mt reflecting a new topographic survey and the processing of some of the material through the plant.

### RESERVES

Based on the significant increases in Indicated Resources, the Company undertook to update the Reserves and released a new statement (see ASX Announcement '<u>43% Increase in Mt Carbine Ore Reserves From Western Pit</u>' dated 18 May 2023). The re-modelling was undertaken by Optimal Mining Group who completed the previous Reserve Statements of 31<sup>st</sup> December, 2021 & 16<sup>th</sup> September, 2022. The consultants use the Spry Optimizer and have each time updated parameters to reflect changing labour, fuel and operating costs etc. The highlights of the Reserve Statement is summarized here:

- Open cut Ore Reserves tonnage increases from 3.54mt to 5.93mt.
- 43% increase in contained WO<sub>3</sub> in open cut Ore Reserves to 1.66m mtu.
- Additional Ore Reserves extend the open cut life-of-mine (excl. low-grade stockpile) to a total of 7 years, with the west and north remaining open for potential further extensions.
- Only 19% of the In-Situ Mt Carbine Mineral Resources are currently in open cut Ore Reserves with drilling to continue to bring Inferred to Indicated Resources for further expansion.

The Low-Grade Stockpile ("LGS") has been partially depleted since the previous Ore Reserves update from September 2022. The Ore Reserves are current as of 15 May 2023 and account for all mining activities undertaken to this date.

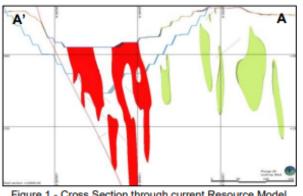
Reserve Category	ROM Tonnes (mt)	WO3 (%)	Contained WO <sub>3</sub> (mtu)
Open Cut - Proven	-	-	-
Open Cut - Probable	5.93	0.28%	1,660,400
Open Cut – Total	5.93	0.28%	1,660,400
LGS - Proven	-	-	-
LGS - Probable	9.77	0.075%	732,750
LGS - Total	9.77	0.075%	732,750

Table 4: Mt Carbine Ore Reserves at 15th May 2023



The increase in the open cut Ore Reserves is predominantly driven by the western extension of the open cut by 150m. No changes occurred in the centre area of the historical pit as outlined in the December 2022 BFS.

With the increase in Ore Reserves, the ROM strip ratio within the open cut changed from 3.1:1 (waste t : ore t) to 3.9:1.



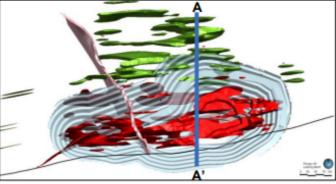


Figure 1 - Cross Section through current Resource Model (Indicated Resources are red, Inferred Resources are green)

Figure 2 - Plan view showing Indicated Resources (in red) and Inferred Resources (in green)

Figure 25: Update as shown in cross section A' - A

The Ore Reserves have been limited to a practical pit shell based on the current economic limits of the deposit. The updated mine plan considers the utilisation of larger mining equipment and a reduction in the amount of costly selective ore mining, which supports a further improvement of the project economics. An isometric view of the Ore Reserves pit shell is shown in the figure below.



Figure 26: Isometric view of Ore Reserves Pit Shell (Blue) compared with previous BFS Pit Shell designed in December 2022.

Ramps were designed into the pit shell using suitable widths and grades to accommodate the planned open cut mining fleet. The open cut shell and the LGS were subdivided into detailed mining blocks which were then fully scheduled, including haulage modelling, for the planned life-of-mine. The results of the schedule were then assessed in a financial model to determine the overall economic viability of the project. Only Ore Reserves, including the LGS, were used to generate revenue, with all other materials classified as waste.

#### **OTHER WORKS**

Both Orana Drill and Blast Pty Ltd ("Orana") group and Golding Contractors Pty Ltd ("Golding") began mobilisation to site this period. The first blast has occurred on 25<sup>th</sup> June, 2023. The blast was planned on a 228 -hole pattern for 42,000t, which was a small blast for calibration of blasting parameters in the restart of open pit mining operations.

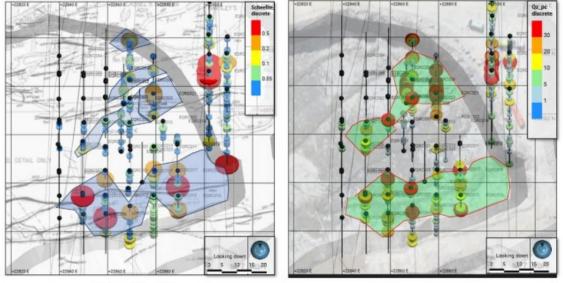


The Blast Hole Drill Program will use two rigs and over the first 12 months of operations it is planned to drill approximately 12,790 holes for 134,000m of blast hole drilling and load 1,010t of emulsion explosives. Typically, a full blast will be a 325-hole and 2.5m x 2.5m pattern for approximately 60,000t per blast. Currently EQR has booked a regular weekly blast with Orica Ltd who will supply the explosives to site.



Figure 27: Orana Drill and Blast Rigs working on the holes for the first calibration blast.

The Company intends to sample and assay the vertical drill and blast holes as well as the angled RC holes to provide as much information as possible to mark-up the ore zones accurately. A grade control model has been commenced and to date is showing good correlation to the resource model, with expected ore grade being defined in the current zones drilled. This is a huge positive to see these extending upward to surface from the original diamond hole drill programs and continues to help better define our geological models.



Scheelite %

Quartz %

Figure 28: Scheelite Ore (blue) overlaying Quartz Veins (green), highlighted blast zones of first two weeks

Over the next quarter, mining will ramp up to the long-term 80,000 tonnes per month of ore. Barren rock will be transported to engineered stockpiles for quarry material production.

The Company has commenced a grade control drill out of the first year's ore at a 10 x 10m pattern to infill the 30x30m Diamond Drill Resource work. This level of detail is required to mark out on daily basis the ore zones for mining.



## **EXPLORATION TENEMENTS**

#### NSW GOLD EXPLORATION TENMENTS

Sozo Resources has successfully completed Stage 1 Farm-In Conditions and has elected to proceed to Stage 2 Farm-In, providing Sozo the exclusive right to earn a 49% legal and beneficial interest in the Joint Venture Gold Property subject to conditions of expenditure of \$750,000 in exploration spent by 3 August 2024.

Planned exploration activities include drilling beneath historic workings at the Telephone Line Prospect and exploring a newly identified gold in soil anomaly along strike from Telephone Line (Panama Hat Project).

Historic rock chip samples at the Telephone Line Prospect returned high-grade gold, including sample PH0018 with 22.1g/t gold from ferruginous quartz vein mine spoils.

At the Crow Mountain Project, the focus will be on drilling IP chargeability anomalies near the Peel Fault and the Princess Mine area.

A recent rock chip sample CMRC025 at Crow Mountain returned 4.9g/t gold on the eastern margin of an IP chargeability anomaly.

Further analysis of 23 drill pulps from the historic ICK001 drillhole has been submitted for a complete Rare Earth Element analysis.

The achievement strengthens the partnership between EQR and Sozo and signifies their shared commitment to exploration and value creation in the NSW gold tenements.

No extensive work was completed, rather planning of Stage II exploration to commence later this year. An update on the projects remains the same as follows.

#### **Crow Mountain**

A further 20 rock chip samples were taken across the project area, predominantly targeting surface expressions of historic Induced Polarisation (IP) Chargeability anomalies. Of note is rock chip sample CMRC025 which returned 4.9g/t gold on the eastern margin of an IP chargeability anomaly and approximately 1,000m south-east of the Magnesite Hill gold discovery. CMRC025 is located in the Woolowin Group cherts and thereby provides strong support for a drillhole testing an IP target east of the Peel Fault.

In addition to the grab sampling, 23 drill pulps from the historic ICK001 drillhole were selected and have been submitted for a complete Rare Earth Element analysis.



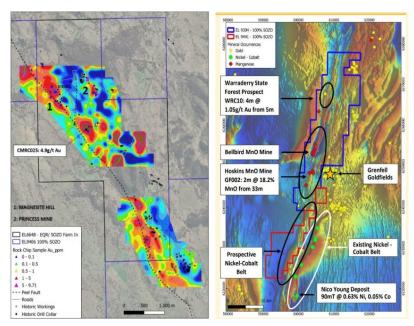


Figure 13: Crow mountain

#### Panama Hat

Exploration focused on the Telephone Line Prospect, where historic artisanal mine workings lie within a structural corridor of over 300m in length. Previous SOZO rock chip samples from these workings have returned high grade gold as evidenced in sample PH0018, which contains 22.1g/t gold from ferruginous quartz vein mine spoils.

The corridor was targeted with detailed geological mapping and soil samples. The mapping shows the target corridor is associated with a sub vertical shear zone trending to the north-east, while gold bearing structures, commonly associated with quartz veins, are located orthogonal and dip steeply back to the south west. 277 soil samples (-2mm fraction) were also collected at a combination of 50m x 50m and 25m x 25m centres. As expected, a subtle gold response was detected across the historic workings, however, a stronger gold response has been located distal to the workings. Further soil sampling is currently underway to validate this distal gold anomaly

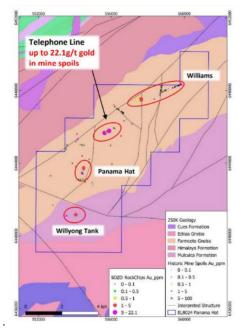


Figure 30: Panama Hat





# **TENEMENT INTERESTS**

In accordance with ASX Listing Rule 5.3.3, the following table is submitted with respect to tenements held by the Company and its controlled entities:

Location	Holding Entity	Beneficial Interest	Interest Acquired / Farm-in or Disposed / Farm- out	Area	Expiry Date	
Queensland, Au	stralia	30 Jun 23	30 Jun 23			
ML 4867	Mt Carbine Quarries Pty Ltd	100%	-	358.5 ha	31/07/2041	
ML 4919	Mt Carbine Quarries Pty Ltd	100%	-	7.891 ha	31/08/2041	
EPM 14871	Company	100%	-	10 sub-blocks	12/12/2025	
EPM 14872	Company	100%	-	21 sub-blocks	11/12/2025	
EPM 27394	Company	100%	-	4 sub-blocks	01/06/2025	
New South Wale	es, Australia					
EL 6648	Company	100%	-	4 Units	19/10/2026 <sup>1)</sup>	
EL 8024	Company	100%	-	19 Units	29/11/2024 <sup>1)</sup>	
ML = Mining Lea	<i>ML</i> = Mining Lease; <i>EPM</i> = Exploration Permit for Minerals (Qld); <i>EL</i> = Exploration Licence (NSW)					
1) Sozo farm-	in arrangement.					

No farm-in or farm-out agreements were entered into during the period.



## **FINANCIAL PERFORMANCE**

EQR's cash balance as at 30 June 2023 was \$5.336 million (compared with \$5.930 million for the quarter ended 31 March 2023), representing a net decrease of \$0.594 million for the quarter.

Cash receipts from customers totalled \$1.076 million (compared with \$0.772 million in the previous quarter) representing about 39% increase from previous quarter mainly due to 50% share of increase Tungsten concentrate sales from the unincorporated joint-venture in this quarter.

The decrease in production costs to \$1.274 million is in line with the production activities in the quarter and timing effect on payment terms on supplier invoices.

The cash flows from operating activities were boosted by the inflows of CMAI grant \$3.960 million (refer to ASX announcement - <u>EQR Completes Second Drawdown From \$6m Federal Grant</u>, dated 2 June 2023) and R&D tax refund of \$2.347 million (refer to ASX announcement - <u>EQR receives \$2.3m through R&D Tax Refund</u>, dated 20 June 2023) received in this quarter.

The Company continues its investment of \$2.564 million on property, plant and equipment with an additional \$1.222 million being expended on capitalised exploration and evaluation activities.

The cash flows from financing activities were improved with proceeds of \$0.520 million from exercise of options in this quarter.

The Company continues to increase its quarry inventory stockpiles generated from the XRT Sorter waste stream and maintains a strong focus on cost control across its operating and corporate activities.

# CORPORATE

#### **CHANGES IN EQR BOARD & LEADERSHIP TEAM**

There have been no changes in the EQR Board and leadership team during this quarter.

#### **RELATED PARTY PAYMENTS**

In line with its obligations under ASX Listing Rule 5.3.5, the Company has advised in the Appendix 5B for the period ended 30 June 2023, that the only payments to related parties of the Company pertain to payments to Directors and Senior Executives for salaries, fees and consultancy including expense reimbursements.

Released on behalf of the Board by: Kevin MacNeill Chief Executive Officer EQ Resources Limited Further Enquiries: **Peter Taylor Investor Relations** 0412 036 231 <u>peter@nwrcommuniciations.com.au</u>

### About the Company

EQ Resources Limited is an ASX-listed company transforming its world-class tungsten assets at Mt Carbine in North Queensland; leveraging advanced technology, historical stockpiles and unexploited resource with the aim of being the preeminent tungsten producer in Australia. The Company also holds gold exploration licences in New South Wales. The Company aims to create shareholder value through the exploration and development of its current portfolio whilst continuing to evaluate corporate and exploration opportunities within the new economy and critical minerals sector.

Follow us:



# Appendix 5B

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

Name of entity

EQ RESOURCES LIMITED

ABN

77 115 009 106

Quarter ended ("current quarter")

30 June 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	1,076	5,554
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	(126)	(293)
	(c) production	(1,274)	(8,191)
	(d) staff costs	(1,329)	(5,428)
	(e) administration and corporate costs	(337)	(1,272)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	10	17
1.5	Interest and other costs of finance paid	(21)	(55)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other		
	- Diesel Fuel Tax Credits	105	272
	- AMGC Grant	-	209
	- CMAI Grant	3,327	5,127
	- Traineeship Subsidies	41	307
	- R&D Tax Refund	2,347	2,347
	- Other (provide details if material)	-	14
1.9	Net cash from / (used in) operating activities	3,819	(1,392)

2.	Cash flows from investing activities	
2.1	Payments to acquire or for:	
	(a) entities	-
	(b) tenements	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
	(c) property, plant and equipment	(2,564)	(4,293)
	(d) exploration & evaluation	(1,222)	(3,085)
	(e) investments	-	-
	(f) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	117
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	(995)	(3,695)
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(4,781)	(10,956)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	4,812
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	520	520
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(296)
3.5	Proceeds from Borrowings		
	- Offtake Advance Extension	-	1,483
	- Other Working Capital Loans (unincorporated joint venture)	100	525
	-Regal Royalty Fund Financing	-	10,000
3.6	Repayment of borrowings	-	(425)
3.7	Transaction costs related to loans and borrowings	(113)	(318)
3.8	Dividends paid	-	-
3.9	Other		
	-Lease Repayments	(135)	(289)
3.10	Net cash from / (used in) financing activities	372	16,012

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,930	1,723
4.2	Net cash from / (used in) operating activities (item 1.9 above)	3,819	(1,392)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(4,781)	(10,956)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	372	16,012
4.5	Effect of movement in exchange rates on cash held	(4)	(51)
4.6	Cash and cash equivalents at end of period	5,336	5,336

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	5,336	5,930
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	5,336	5,930

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	141
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.

Payments to Directors and Senior Executives for salaries (including superannuation), fees, consultancy, and expense reimbursements.

7.	<b>Financing facilities</b> 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	Shareholder Loan	1,500	1,500	
7.3	Convertibles Notes	4,000	4,000	
7.4	Total financing facilities	5,500	5,500	
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.			
	7.2 Unsecured 15-month Loan at an interest rate of 8.00% p.a.			

7.3 Unsecured 2-year convertible notes with a coupon rate of 7.00% p.a. payable in shares or cash at the election of the note holders.

8.	Estim	nated cash available for future operating activities	\$A'000
8.1	Net ca	sh from / (used in) operating activities (item 1.9)	3,819
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))		(1,222)
8.3	Total r	Total relevant outgoings (item 8.1 + item 8.2)2,5	
8.4	Cash and cash equivalents at quarter end (item 4.6) 5,3		5,336
8.5	Unused finance facilities available at quarter end (item 7.5)		
8.6	Total available funding (item 8.4 + item 8.5) 5,3		5,336
8.7	item 8.3)		2.1
	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?		
	Answe	er: 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?		
	Answer: N/A		
	<u> </u>		

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

## **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 July 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.