

EQ Resources Limited

Quarterly Activities Report

Quarter ended 30 September 2021

EQ Resources Limited is the 100% owner of the Mt Carbine Tungsten Mine near Cairns, Australia's only primary producer of tungsten, 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.

HIGHLIGHTS

MT CARBINE OPERATIONS

- Results further support the consideration of a first phase open pit operation as part of the ongoing Bankable Feasibility Study (BFS).
- Funding of Early Works for the Mt Carbine expansion program well supported ahead of the release of the Company's BFS.
- BFS comprises the expansion of tungsten operations from the Company's 12m tonne low-grade ore stockpile and the reactivation of open pit mining from the Andy White pit.
- BFS progressing as planned, supported by a strengthening tungsten price environment (US\$315/mtu** at the date of this release vs US\$235/mtu in January 2021).

EXPLORATION

- Bonanza grade tungsten ore intercepts from final round of assays of the 16-hole drill program (incl. 70m extension drilled at hole EQ012) continue to significantly exceed previously reported resource grade; Remodelling of resource provides benefit of reduced mining tonnage reporting into BFS.
- Mt Carbine High-Grade Zones include:
 - 9.11m @ 1.88% WO₃ from 138.79m, incl. 0.37m @ 20.0% WO₃* (32m below pit floor)
 - 12.92m @ 0.59% WO₃ from 135.95m, incl. 0.48m @ 12.4% WO₃* (22m below pit floor)
 - 5.09m @ 1.14% WO₃ from 165.76m, incl. 0.18m @ 15.5% WO₃* (40m below pit floor)
 - 7.18m @ 1.42% WO₃ from 277.00m, incl. 1.28m @ 7.0% WO₃* (95m below pit floor)
 - 4.05m @ 1.41% WO₃ from 146.35m, incl. 0.32m @ 16.1% WO₃* (45m below pit floor)
 - 4.45m @ 5.09% WO₃ from 156.35m, incl. 1.06m @ 13.9% WO₃* (38m below pit floor)
 - 10.70m @ 0.93% WO₃ from 199.29m, incl. 0.57m @ 14.2% WO₃* (65m below pit floor)
 - 5.16m @ 1.18% WO₃ from 263.74m, incl. 0.70m @ 7.0% WO₃* (90m below pit floor)
- Total In-Situ Hard-Rock Resource covering 9.21 million tonnes at 0.63% WO₃, contained in only 60% of the previous block model area providing potential for further resource growth with further drilling.
- Indicated Resource at 0.74% WO₃ has 5-times the historical bulk grade of 0.14% WO₃.
- Further exploration and drill targets identified in proximity to the historic open pit.

* Individually assayed intervals / ** mtu (metric ton unit; equal 10kg)

MT CARBINE OPERATIONS

MT CARBINE EXPANSION

The expansion comes as a logical next step to the 12-month trial mining and test work program performed under the recently completed METS Ignited Program, which has seen a successful ramp-up of the Company's XRT ore sorting operation to treat the 12m tonne low-grade ore stockpile (**LGS**) sitting on surface as historical waste rock.



Figure 1 - XRT Pilot Sorter

A key feature of the long-running trial was the consistent tenfold upgrade of the low-grade crushed and sorted ore producing two product streams. The beneficiated ore has become an excellent feedstock into the existing Gravity Plant while sorter waste has become a highly saleable aggregate material and road base ingredient. On the basis of a consistent ramp-up of the Tomra XRT Sorter Pilot Plant and further debottlenecking of the Gravity Plant, daily production levels of up to 3 tonnes of tungsten concentrate have been achieved in the recent weeks.

To sustain higher throughput levels and progress towards the already permitted 1 MTPA operation, the Company has commenced Early Works investments

with a capacity upgrade of the power network at its Mt Carbine site, as well as doubling its screening and material handling capacity.

Our mining team has developed a high degree of confidence in the LGS ore resource after many months of trialing the high technology ore sorter. A new \$1.7m mining fleet has arrived at site, while the required power and screening upgrades shall be completed by the end of the year allowing us to take advantage of strengthening tungsten prices which have increased US\$80 (35%+) per mtu since January 2021.

The additional mining fleet (in total three 50 tonne dump trucks, two front end loaders, one excavator and one dozer) and the above-mentioned Early Works will allow for 24/7 operation of the crushing and XRT sorting operation, at daily crushing throughput of up to 3,000 tonnes of LGS ore.

The expansion comes as the Company is finalising its BFS for the LGS, as well as for the reactivation of open pit mining from the Andy White pit.

XRT SORTER PILOT PLANT

The XRT Sorter Pilot Plant (**XRT Sorter**) continues to complete pilot campaigns across the LGS and operate on a consistent basis, processing 19,500 tonnes of sorter feed material during the quarter. This material was mainly drawn from a large, centralised pit on the LGS. The ongoing production has shown the consistency of the material in the central portion of the LGS and the ongoing results continue to be in line with the results achieved through the METS Ignited Program which was successfully completed during the quarter.

The increased focus on mining, crushing and screening of the LGS in preparation for the Gravity Plant and the XRT Sorter has seen production outputs at both the mining / crushing / screening plant and Gravity Plant increasing, using the quarry equipment available until the Early Works program is completed.

Sorting operations were run mainly on night shift with crushing and screening taking place during the day, thus allowing for more consistent operation of the XRT Sorter. The concentrate produced from the feed to the XRT Sorter continues to have a consistent +/-10x upgrade and as the mining team progress through various areas of the LGS showing the consistent nature and inherent grade of the LGS.

GRAVITY PLANT

The Gravity Plant continued to process primarily LGS fines and sorter concentrate on an ongoing basis, seeing positive continuous grade coming from the LGS and consistent grade being received from the XRT Sorter concentrate. This has led once again to an increased ratio of feed-to-concentrate produced and continues to feed critical production data into the ongoing BFS work.

Operational structure at the Gravity Plant has been on a 7-days-on and 7-days-off schedule since June 2021 and will move back to a consolidated roster structure in preparation for the operational team running both the crushing, screening and sorting plant as well as the Gravity Plant on a 24/7 basis once the power upgrade is completed toward the end of the year. The Gravity Plant continues to have a +85% availability during operation and is achieving targeted throughput rates for the post BFS operation.

The Company, via its offtake partner CRONIMET Asia Pte Ltd, has continued to make monthly shipments of +/-20 metric tonnes of concentrate during the current quarter. Concentrate shipments have gone to leading tungsten manufacturers on a repeat order basis.

APT (ammonium paratungstate; as the underlying price reference for tungsten concentrate) price improvements seen during the previous quarter once again continued throughout this quarter, with prices of approximately US\$315/mtu as at the release of this report. This continues to have a positive impact on the Mt Carbine operation and due to the world demand for tungsten concentrates and limited supply and high barriers to entry for concentrate producers, the Company continues to believe that price fundamentals remain favourable in the months ahead, as global manufacturing sectors continue to recover from the disruptions caused by the pandemic and industrial activities in leading economies start to benefit from the large stimulus packages rolled out by various governments.

QUARRY OPERATIONS

With the Company successfully completing the Bama contract, several other large tenders have been submitted and are being viewed positively by the downstream civil contractors with Mt Carbine Quarry shortlisted for two large contracts in the region. These contracts all use the by-product rock from the LGS operations with tender submissions being focused on the supply of armour rock into the local civil marine industry due to the large supply available at Mt Carbine and the ability to extract / produce the armour rock without the need for blasting.



Figure 2 - Dump Truck as part of New Mining Fleet

The installation and commissioning of “Big Kev” was completed during the Quarter with the unit debottlenecking a significant portion of the crushing and screening by simplifying the mining process and removing a mobile scalping screen previously being used at the LGS face with material now carted down and loaded directly into the electric rock screen. Throughput capacities have increased by +/-20% since its installation having a positive impact on overall production.

The quarry operations continue to produce value add aggregates from the XRT Sorter barren waste material, streamlining production and minimising operational costs.

A quarter-by-quarter comparison of operational key performance indicators, such as feed grade, operational availability and throughputs, can be found in the recently published [Annual Report 2021](#) of EQR.

SAFETY PERFORMANCE AT MT CARBINE

The Company continues to focus on enhancing safety culture and plant upgrades at its multi-site operations at Mt Carbine. The Company continues to engage with mining safety consultancy, Impress Solutions Pty Ltd, on an ad hoc basis and receiving support where required in HSE training preparation.

To determine the safety performance of Mt Carbine Operations the Company looks at the positive & negative safety performance data i.e. Lead & Lag Indicators.

As part of the Company's continued commitment to upskill its employees, 34 employees gained RII Competencies through our affiliate agreement with Worksafe connect Units of competency included Front-end Loader, Telescopic Handler, confined space & gas test atmosphere.

ENVIRONMENTAL ACTIVITIES AT MT CARBINE

The Company has had no environmental incidents during the period.

The Company is currently working under the BFS on the targeted critical path outcomes for upcoming approvals required for increases in production for the Gravity Plant operations and the future open pit mining operations as anticipated from the recent drilling completed. This is all being completed in line with the BFS project schedule and the relevant authorities are being engaged accordingly.

EXPLORATION ACTIVITIES

MT CARBINE, QLD - MINING LEASES

On 5 August 2021, the Company reported bonanza grade tungsten ore intercepts in the final assays of the 16-hole resource drilling program (incl. 70m extension drilled at hole EQ012). The results are potentially game changers for the potential near-term re-opening of the old mine, as selected high-grade intercepts are in a zone less than 40 meters below the floor of the existing Andy White open pit.

The updated resource statement from EQR's 2nd quarter drilling campaign was released during the quarter. Remodelling of the resource at the historic Mt Carbine Tungsten Mine resulted in significantly higher-grade ore blocks, with recent drilling focusing on shallow areas immediately below the Andy White pit floor reducing the overall mining tonnage reporting into the ongoing BFS.

EQR in association with Brisbane-based consultants, Measured Group, completed the resource recalculation as the first stage of the BFS aimed at re-opening Mt Carbine's hard-rock operations, which has been largely dormant since the 1980s.

The work was supported by last quarter's 4,074 meter diamond drill program and the successful completion of the METS Ignited Program which co-funded the trial operation campaign for material from the LGS. The revised In-Situ Hard-Rock Resource of 9.21 million tonnes at 0.63% WO₃ replaces the previous resource estimate published by the Company (by GeoSun, dated 2013).

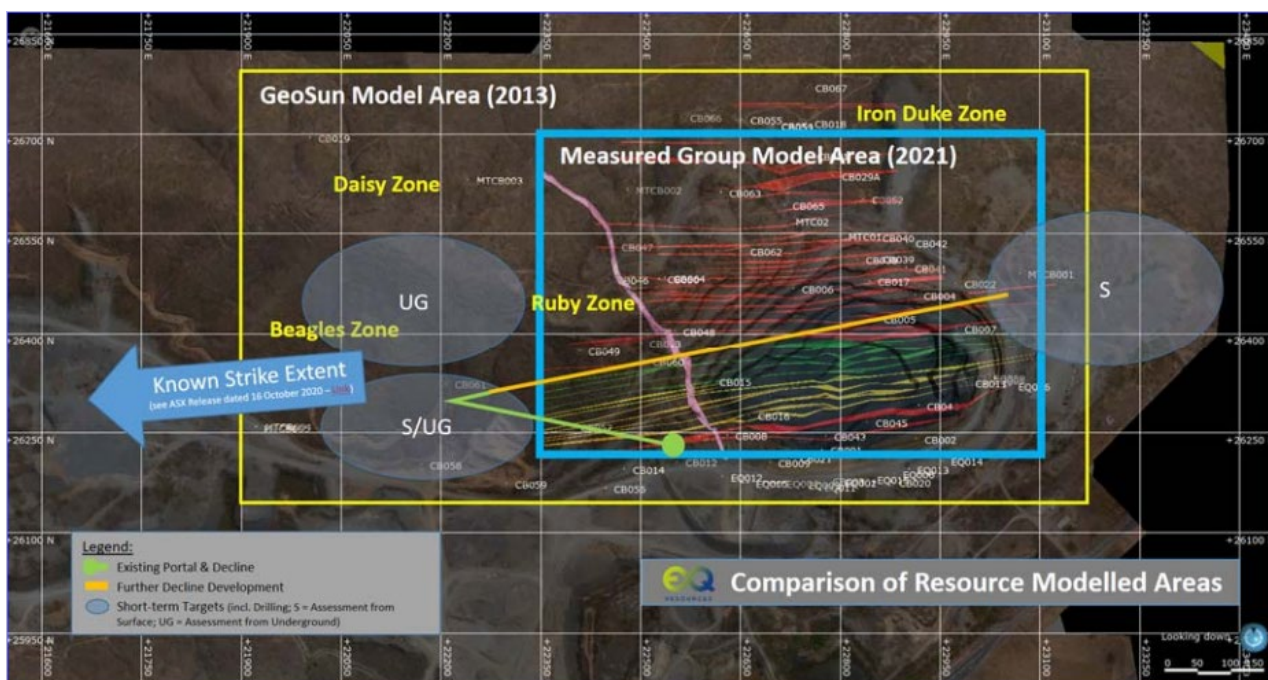
With the addition of the 12 million tonne LGS grading at 0.075% WO₃, the total metal contained (in the form of WO₃) is approximately 6.7 million mtu (metric ton unit, equal 10 kg).

The Indicated Resource at 0.74% WO₃ has 5-times the historical bulk grade of 0.14% WO₃, meaning superior economics. Very few tungsten mines achieve such high mineable grades. With these high grades, the Company anticipates most of the Indicated Resources will make their way into reserves.

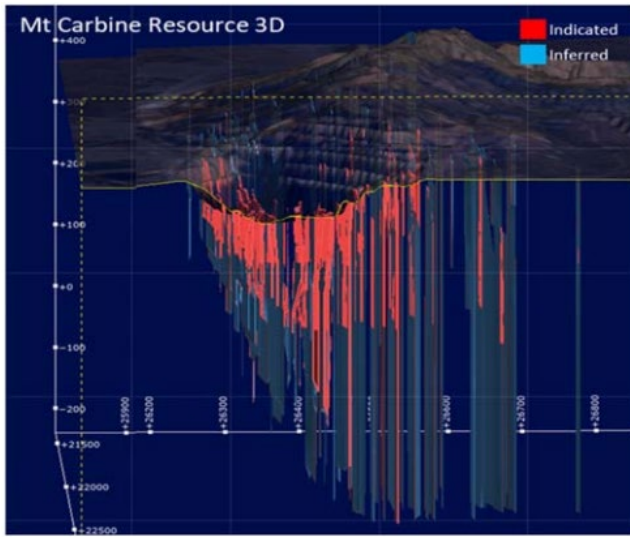
The Mt Carbine mineral resource has been upgraded as follows:

Mt Carbine Mineral Resources				
September 2021				
Resource	Classification	Tonnes (Mt)	Grade (% WO ₃)	WO ₃ (mtu)
Low Grade Stockpile Resources				
	Indicated	12.00	0.075	900,000
In-Situ Hard Rock Resources				
	Indicated	2.40	0.74	1,776,000
	Inferred	6.81	0.59	4,017,900
	Sub-total	9.21	0.63	5,793,900
	Total	21.21		6,693,900

1. Total estimates are rounded to reflect confidence and resource categorisation. 2. 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) 3. No upper cut was applied to individual assays for this resource, a lower cut of 0.15% WO₃ was applied, which is the grade where the mineralization forms distinct veins. 4. Drilling used in this methodology was all diamond drilling with ½ core sent according to geological intervals to ALS for XRF15b analysis. 5. Resource estimated was completed using Kriging Methodology. 6. Indicated spacing is approximately 30 m x 30 m; Inferred is approximately 60 m x 60 m. 7. The deposit is a sheeted vein system with subparallel zones of quartz tungsten mineralization that extend for >1.2km in length and remain open. At depth, the South Wall Fault cuts the Iolanthe to Johnson veins but the Iron Duke zones remain open to depth.



Most of the previously Inferred Resources around the open pit have now been converted to Indicated Resources, with the Company being confident that further drilling will continue to also convert the Inferred Iron Duke Zone (see ASX announcement dated 13th July 2021, [‘Drilling at Mt Carbine hits Iron Duke Extensions’](#)) into Indicated Resources.



3D Block Model with Indicated & Inferred Resources cut thru at 22,900E

The bulk of the Indicated Resources are located immediately beneath the existing pit. These resources are well situated to be reached by a pit expansion that benefits from the fact that a lot of high-grade mineralisation lies along the lower easy strip side of the old pit. The current BFS reserve modelling due for completion in Quarter 4 2021 will further determine the extent of the pit expansion.

Given the large inventory of Inferred Resources and the excellent conversion factors into Indicated Resources, this remains the focus of site activity with further drilling targeted for Quarter 1 2022. The Company is committed to commencing mining in the short term to benefit from the high tungsten prices and high-grade mineralisation at Mt Carbine.

PANAMA HAT – BROKEN HILL, NSW

No work was completed this period at Panama Hat due to Covid related travel restrictions.

CROW MOUNTAIN – NEW ENGLAND, NSW

During this period the Company submitted to the Mines Department a 50% reduction as required for the renewal on the Crow Mountain License area. The license application was reduced from 9 sub-blocks to 4 sub-blocks. A renewed work plan will be submitted shortly. The prospective Peel Fault remains inside this license area with peripheral areas of low potential being dropped.

The Company received further Expressions of Interest looking to exploit both these historic high-grade gold fields in New South Wales. The Board continues to assess these enquiries and its strategic options.

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	Area	Expiry Date
Queensland, Australia			
ML 4867	Mt Carbine Quarries Pty Ltd	358.5 ha	31/07/2022
ML 4919	Mt Carbine Quarries Pty Ltd	7.891 ha	31/08/2023
EPM 14871	Company	10 sub-blocks	12/12/2025
EPM 14872	Company	21 sub-blocks	11/12/2025
EPM 27394	Company	4 sub-blocks	01/06/2025

New South Wales, Australia			
EL 6648	Company	9 Units	19/10/2020 ¹⁾
EL 8024	Company	19 Units	29/11/2024
ML = Mining Lease; EPM = Exploration Permit for Minerals (Qld); EL = Exploration Licence (NSW)			
1) Renewal application submitted and acknowledgement letter dated 19 October 2020 has been received from Regional NSW – Mining, Exploration and Geoscience (Division).			

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

FINANCIAL PERFORMANCE

EQR's cash balance as at 30 September 2021 was \$6.991 million (compared with \$3.504 million for the quarter ended 30 June 2021), representing a net increase of \$3.487 million for the quarter. The main contributor to this increase was the inflow of \$6 million (before costs) from the issuance of 2-year Convertible Notes to institutional and sophisticated investors in September 2021 (see ASX announcement dated 13th September 2021 "[Early Works Expansion Funding ahead of BFS](#)"). Cash receipts from customers also increased to \$1.802 million (compared with \$0.615 million in the previous quarter) as a direct result of the successful completion of the Bama contract along with a modest increase in tungsten concentrate sale revenues from the unincorporated joint venture.

In-line with the Group's development strategy for the Mt Carbine Tungsten Project investment in property, plant and equipment at both the Quarry and Gravity Plant continued with \$0.166 million being expended during the quarter. A further \$1.093 million was expended on exploration and evaluation activities associated with the Bankable Feasibility Study (see ASX announcement dated 18th May 2021 "[EQR Extends Resource Drilling at Mt Carbine](#)" and ASX announcement dated 25th May 2021 "[EQR Appoints Bankable Feasibility Study Lead](#)").

The increase in production costs is directly attributable to the cash outflows associated with the finalisation of the Bama contract falling into the current quarter whilst the payment of the Mt Carbine annual Environmental Authority fees and Mining Lease rents were the main drivers for the higher than usual expenditure of development activities. The Group also continues to increase its quarry inventory stockpiles generated from the XRT Sorter waste stream.

The Group continues to maintain a strong focus on cost control across its operating and corporate activities.

CORPORATE

CAPITAL RAISING

EQR raised \$6 million by the issuance of 2-year convertible notes with a conversion price of 6.5 cents per Share, a ~45% premium to the last price of 4.5 cents per Share. The funds will be used to commence Early Works for the Company's Mt Carbine tungsten mine expansion, well ahead of the release of the BFS.

Convertible Notes details

Amount:	A\$6 million
Term:	Two years with the ability to be converted early by the Note Holders
Coupon:	7% per annum; Coupon payable in Shares or cash at the election of the Note Holders

Conversion Price: \$0.065 per Share, a 44% premium to the last close of 8 September 2021.

Conversion Terms: Converted into new ordinary Shares or repayment of the loan at the Note Holders election; The Note Holders may elect to convert the Convertible Notes into new Shares early during the term.

CHANGES IN EQR BOARD & LEADERSHIP TEAM

There have been no changes in the EQR Board or Management during the period.

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 September 2021, 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:

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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 pre-eminent 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.

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Competent Person's Statements

EQ Resources' exploration and resource work is being managed by Mr Tony Bainbridge, AusIMM, AIG. Mr Bainbridge is engaged as a contractor by the Company and is not "independent" within the meaning of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr Bainbridge has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in JORC Code 2012.

The technical information contained in this announcement relating exploration results are based on, and fairly represents, information compiled by Mr Bainbridge. Mr Bainbridge has verified and approved the data disclosed in this release, including the sampling, analytical and test data underlying the information. The diamond core samples are assayed at the ALS Laboratory in Brisbane, Australia. Mr Bainbridge has consented to the inclusion in this release of the matters based on his compiled information in the form and context in which it appears in this announcement.

Forward-looking Statements

This announcement may contain forward-looking statements. Forward-looking statements address future events and conditions and therefore involve inherent risks and uncertainties. Actual results may differ materially from those currently anticipated in such statements. Particular risks applicable to this announcement include risks associated with planned production, including the ability of the Company to achieve its targeted production outline due to regulatory, technical or economic factors. In addition, there are risks associated with estimates of resources, and there is no guarantee that a resource will have demonstrated economic viability as necessary to be classified as a reserve. There is no guarantee that additional exploration work will result in significant increases to resource estimates. Neither the Australian Securities Exchange nor its Regulation Services Provider (as that term is defined in policies of the Australian Securities Exchange) accepts responsibility for the adequacy or accuracy of this announcement.