



09th November 2022

STRONG BFS UPDATE DELIVERS 59% INCREASE IN NPV

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

EQ Resources Limited ("EQR" or "the Company") is pleased to announce positive results from the November 2022 Update of its Bankable Feasibility Study ("BFS Update") for the Mt Carbine Expansion Project ("Project").

Based on the Company's recent upgrade of the Mt Carbine Ore Reserves (see ASX announcement <u>'Material</u> <u>Increase in Mount Carbine Ore Reserve'</u> dated 16 September 2022) a detailed review of the Project Economics has been performed, with consideration of changing underlying cost and revenue assumptions.

Highlights:

- BFS Update enhanced by recently announced 29% Open Pit Ore Reserves upgrade resulting in a 15% higher tungsten concentrate (50% WO₃ content) output over an expanded 14 years production schedule.
- Project delivers strong Pre-Tax Economics* including:
 - NPV₈** of \$209.6 million*** (59% increase compared to initial BFS, December 2021);
 - o IRR of 397%;
 - Payback period of 1.5 years; and
 - Life of Mine EBITDA of \$324 million.
- Initial low capital cost of \$22.9 million has been further optimised to \$21.4 million as an effect of scope changes and defined costing, out of which approximately \$5 million has been expensed and installed by October 2022.
- Successful implementation of the Phase 1 Scope provided invaluable data for further expansion works, with the process plant already achieving target recoveries.
- Tungsten concentrate production C1 Cash Cost**** remains amongst lowest in industry with an equivalent of US\$118/mtu.
- Upcoming infill drilling around Western Extension as upside opportunity and to provide continuity in further resource development at and near Mt Carbine.

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

** \$209.6M NPV is Project NPV; NPV attributable to EQR as 50% portion of LGS Joint Venture and 100% of Open Pit results to \$172.5M

^{****} 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



The BFS Update now contemplates a 14-year production schedule with the Project delivering impressive economics including a NPV₈ of \$210 million and an IRR of 397%. The BFS Update covers total concentrate production of approximately 31,000 tonnes (50% WO₃ content), an increase of 15% over the initial BFS output.

The Project implementation was split into two phases, with the Company having successfully completed Phase 1 Scope as per the initial BFS. The BFS Update highlights that scope changes and cost updates have resulted in a positive net effect of approximately \$1.5 million in total Capex savings. Of the revised Capex of \$21.4 million approximately \$5 million has been expensed and installed by end of October 2022.

Comparison of Consolidated Project Economics			
Parameter	Unit	Initial BFS (December 2021)	Updated BFS (November 2022)
Capital Cost	A\$m	22.9	21.4 🕓
Pre-tax NPV _{8, real}	A\$m	131	210* 🕗
IRR _{Project}	%	154	397** 🕗
Total Cash Cost (FCA)	US\$/mtu	113	118*** 🖒
NPV / Capex Ratio	х	5.7	9.8
Payback Period	years	2.25	1.5 🕥
Strip Ratio	(Waste:Ore)	11.1:1	3.1:1
Concentrate Produced	(t / 50% WO ₃)	26,680	30,960 🕗

Comparison of Consolidated Project Economics

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 \$173 million

** Driven by the CMAI \$6 million grant, lowering baseline investment amount for the Company *** AUD/USD average exchange rate of \$0.688 over the life of project was used for currency conversions

EQR Chief Executive Officer, Kevin MacNeill, commented: "The Mt Carbine planning process continues to deliver strong outcomes in terms of robust economics and extended mine life."

"The continuous operations and completion of the Phase 1 plant upgrades through the Early Works Program have provided invaluable data and project development insights. The successful funding of the Project allows the continued execution of the development schedule for the Phase 2 expansion."

"As we are already in production and have had the chance to optimise the processing plant, we can say that target recoveries of 79.5% have been achieved on an ongoing basis."

"We are now prioritising further resource drilling on the projected Western Extension of the Mt Carbine orebody with a view to expanding the near-pit mine Reserves. Any successful results from the drill campaign could be quickly brought into life of mine planning."

"This BFS Update proves the continuity we set ourselves as a target in developing a regional critical minerals cluster, given there are several other deposits with significant resource potential in our vicinity."

The BFS Update had been prepared by independent lead study manager JukesTodd Pty Ltd. A summary of the BFS Update attached to this release. The full BFS report is available on the Company's webpage (link).

Released on authority of the Board by: Kevin MacNeill **Chief Executive Officer**

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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 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.

Competent Person's Statements

The Ore Reserves Estimate for the Mt Carbine Project has been prepared by a team of consultants under the guidance of Mr Tony O'Connell.

The estimates of Open Cut Ore Reserves for the Mt Carbine Project as at 16 September 2022 presented in the Ore Reserves Estimate have been prepared in accordance with the requirements of the 2012 edition of the Australasian Code for Reporting of Mineral Resources and Ore Reserves (2012 JORC Code).

Mr O'Connell is a qualified Mining Engineer, (BE (Mining), University of Queensland), has over 22 years of experience in the global mining industry and is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr O'Connell has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity being undertaken to qualify as a Competent Person as defined in the JORC Code.

Mr O'Connell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Neither Mr O'Connell, Measured Group Pty Ltd or Optimal Mining Solutions Pty Ltd has any material interest or entitlement, direct or indirect, in the securities of EQ Resources Limited or any associated companies. Fees for the preparation of this report are on a time and materials basis only.

EQ Resources' exploration and resource work is being managed by Mr Tony Bainbridge, AusIMM. 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 mineralisation 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 updated bankable feasibility study results are based on, and fairly represents, information compiled and/or assessed by Mr Bainbridge. Mr Bainbridge has verified and approved the data disclosed in this release, including the analytical and test data underlying the information. 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.





Cautionary Statements

The Bankable Feasibility Study ("BFS") and its recent update ("BFS Update") discussed herein has been undertaken to explore the technical and economic feasibility of expanding the Mt Carbine Tungsten operation, on the basis of an expanded processing plant to process the historic 12 million tonnes of Low Grade Stockpile ("LGS") and higher-grade ore to be mined from the Company's 100% owned Open Pit ("Project").

The production target and financial forecasts presented in the BFS and BFS Update are shown on a 100% Project basis. It has to be noted that the Company has entered into a 50:50 joint venture arrangement with Cronimet Australia Pty Ltd which covers the retreatment of the historic tailings and LGS only. Details on the joint venture structure are provided in the BFS documentation.

The production target covers feedstock from the LGS and defined Ore Reserves as independently validated. The Ore Reserve Estimate underpinning the BFS and BFS Update has been prepared by a Competent Person in accordance with the requirements in the JORC Code 2012.

There is a lower level of geological and grade continuity confidence associated with the Inferred Resources and there is no certainty that further exploration work will result in the conversion of Inferred Resource estimates to Indicated Resource estimates or return the same grade and tonnage distribution.

The stated production targets are based on the Company's current expectations of future results or events and should not be solely relied upon by investors when making investing decisions.

The economic outcomes associated with the BFS and BFS Update are based on certain assumptions made for commodity prices, concentrate payables, exchange rate and other economic variables, which are not within the Company's control and subject to change from time to time. Changes in such assumptions may have a material impact on economic outcomes.

To achieve the range of outcomes indicated in the BFS and BFS Update, completion of funding will be required. Investors should note that there is no certainty that the Company will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.

It is also possible that the Company could pursue other 'value realisation' strategies such as a sale or partial sale of the Company's share of the Project.

This BFS Update announcement contains forward-looking statements. The Company has concluded it has a reasonable basis for providing the forward-looking statements included in this announcement and believes it has a reasonable basis to expect it will be able to fund the further development of the Project.

However, several factors could cause actual results, or future expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the BFS and BFS Update.





MT CARBINE BANKABLE FEASIBILITY STUDY

2022 ECONOMIC UPDATE



NOVEMBER 2022

Document History

REVISION	DATE	AUTHOR	CHANGE DESCRIPTION	APPROVED BY
0	04/11/2022	PJ	Issued for Use	KM

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1. Requirement for Update

EQ Resources Limited (EQR) completed a bankable feasibility study (BFS) in December 2021 for the Mt Carbine Expansion Project.

The BFS was separated into two distinct phases. Phase 1 focused on minimal capital expenditure (capex), incremental improvements to increase the mine's productivity and profitability focusing solely on the mining and processing of the low grade stockpile (LGS).

Phase 2 focused on the activities and works required to dewater and commence mining of the open pit as well as the crushing and screening plant and processing plant to be upgraded to further reduce operating costs and increase the tungsten recovery.

Since the release of the BFS, additional drilling increasing the mine reserves and optimization of the mining methodology combined with significant changes to the underlying market conditions have given rise to the requirement to provide an update to the results of the BFS to provide a more realistic economic outlook of the Mt Carbine Expansion Project.

The key changes and updates to the underlying economic inputs are summarised below and detailed in subsequent sections of this update.

Phase 1 Complete

The Phase 1 activities are now complete and the existing crushing and screening plant throughput capacity has been increased to in excess of 350tph and wet weather performance significantly improved through the introduction of wet screening.

Some Phase 1 scope items have been deferred to Phase 2 and will be included in the updated Phase 2 costs. These include:

- Design and installation of the product dewatering circuit
- A portion of the gravity processing plant controls system upgrade
- Installation of the standby rolls crusher in the gravity processing plant
- Installation of two (2) off containerised workshops
- Purchase of a Komatsu WA500 6.4m³ front end loader

Market Analysis

Since completion of the BFS, the ammonium paratungstate (APT) price has been sustained at a price on the upper end of the forecast range due to the post covid market conditions. The forecast for APT pricing remains high with continued demand coupled with delays in projected projects reducing global supply. On this basis, the underlying pricing assumptions have been adjusted. Market participants generally price tungsten according to metric ton units (MTU) of ammonium para tungstate (APT). This is the primary raw material traded in the market.

As part of the ongoing development of the Mt Carbine Project, the Government has placed its confidence in the development of the project through the allocation of AU\$6M grant funding, significantly lowering the cost of capital and therefore development of Phase 2 of the Project. First drawdowns of funding are anticipated for Q4 2022 with the orders for the Phase 2 expansion ongoing.

Geology

Further resource drilling of 10 holes for 2,121.9m combined with a revised cut-off grade from 0.2% WO₃ to 0.05% WO₃ resulted in a significant increase in the resource. The previous BFS included 9.21Mt at 0.63% WO₃ which has been superseded by 20.32Mt at 0.32% WO₃. The justification for the lower grade cut off has been driven by the continued performance of the TOMRA XRT ore sorters on the low grade stockpile (LGS) feed of an equivalent 0.075% WO₃.

Mining

After completion of the BFS, EQR has engaged Golding Contractors (Golding) on an early contractor involvement (ECI) basis.

Golding have reviewed and updated the pit shell, mine design and fleet selection and provided updated contractor rates based on current market conditions. The notable changes to the mining assumptions from the previous BFS include:

- Strip ratio from open pit mine reduced from 11:1 to 3.1:1 based off the revised cut off grade
- Increase of the open pit area by 12% based off the improved ore reserves
- Increase in mining cost based on updated contractor pricing and significant increase in fuel price, explosives and labour costs since release of the BFS

Processing

The Phase 1 crushing and screening and processing plant upgrades have been completed. The slurry pipeline from the crushing and screening plant feeding directly into the process plant has been successfully commissioned.

Minor updates to the timing of the processing infrastructure have been included in this update. Based on the requirements of EQR customers, the grinding and flotation circuit shall be deferred indefinitely as the concentrate is acceptable to final clients in its current form and product specification.

Additionally based on the continued high performance of the gravity processing plant, the scavenging circuit will be deferred until scale trials are completed to determine whether yield benefits will be achieved beyond current performance. Phase 2 will include upgrades to the front end jig circuit to handle the increase in grade and the tables circuit will also be upgraded to handle resulting increase in concentrate production.

An agreement for the design and supply of the crushing and screening plant front end has been negotiated and executed with Sandvik. Based on the current market supply chain conditions, the design and supply duration for this package has been factored into the updated schedule. The capital cost estimate has been updated to reflect actual pricing.

The commissioning of the Sandvik plant does not impact the commencement of open pit mining as the Phase 1 upgrade has allowed the existing crushing and screening plant to handle the open pit run of mine at the design throughput.

Infrastructure

Based on further assessments of the water infrastructure and water balance by ATC Williams some additional scope has been included in this update to allow for remedial work to be undertaken on the tailings storage facility (TSF) 4 and TSF 3 for inclusion in the site water circuit.

Approvals

The BFS forward work plan outlined water, noise, dust and vibration analysis work that was required to be carried out to facilitate the submission of the Environmental Authority (EA) amendment submission.

This work has been carried out and the EA amendment submission is on track for submission in November 2022.

Timing

The project timing has been updated to reflect the current forecast taking into account higher than average rainfall that has impacted the rate of the open pit dewatering. Supply chain constraints have increased the lead times on the project's long lead items, the execution schedule has been amended to reflect the increased timeframes.

The completion of the Phase 1 upgrade has been instrumental in alleviating schedule pressure on the completion of the new crushing and screening plant. The upgrades to the existing crushing plant in Phase 1 will allow it to handle the full throughput requirements of open pit mining.

A schedule focus on the additional tables in the processing plant has also been included in the update. Based on the revised timing, high grade material will commence prior to the completion of the expanded crushing and screening plant. In order for the processing plant to maintain recoveries, the table circuit upgrade will be prioritised to be completed in time for receipt of high grade ore.

2. Executive Summary

2.1. Overview

Mt Carbine is an operating tungsten mine and rock quarry located 130 km north of the city of Cairns in Far North Queensland, Australia.

The mine is at the northern end of the Atherton Tableland approximately two hours (130 km) by sealed highway from the port and major centre of Cairns and 45 minutes from Port Douglas. There is a small historic hotel and caravan park adjacent to the mine site and a small town. The mine location is shown in Figure 1.

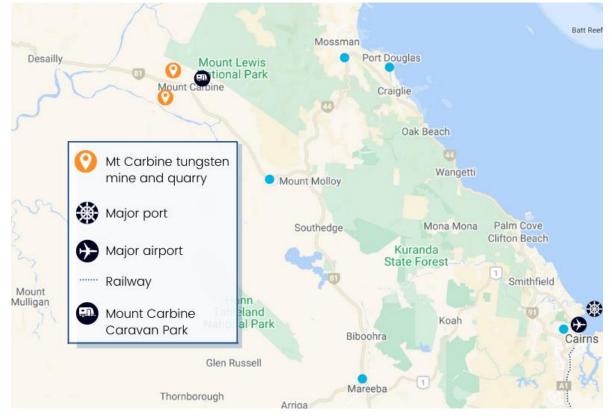


Figure 1: Mine Location

EQ Resources Limited (EQR) acquired a 100% interest in Mt Carbine Quarries Pty Ltd, an entity that owns mining leases ML4867 and ML4919 along with the associated Quarry in June 2019.

EQR has been operating the mine and quarry concurrently, with the mine currently processing tailings and low grade ore stockpiles located on the site that are remnant from previous operations on the site.

The mine is well supported by existing services and infrastructure.

2.2. BFS Purpose and History

The purpose of the Bankable Feasibility Study (feasibility study or study) was to assess the cost and operational benefits of increasing the capacity and throughput of the existing processing plant to support the currently approved 1Mtpa mining rate of the low grade ore stockpiles located on the site.

Subsequently, the study assessed the cost and operational benefits the of recommencement of open pit mining from the existing pit and the introduction of a new stand-alone crushing, screening and x-ray transmission (XRT) sorting plant and additional processing plant upgrades to improve overall concentrate recovery to support the open pit mining and introduction of high grade ore into the processing circuit.

The strategy for the feasibility study was to minimise the capital expenditure of the upgrade where possible and maximise the use of all existing on-site mining, processing and supporting infrastructure.

The low-grade ore stockpiles (LGS) are currently being mined by EQR. The infrastructure supporting the crushing, screening, ore sorting and processing activities already exist on the site and will continue to be used for the upgraded facility.

Phase 1 focused on minimal capital expenditure (capex), incremental improvements to increase the mine's productivity and profitability focusing solely on the mining and processing of the LGS.



Figure 2: Upgraded Crushing and Screening Area - Completed in Phase 1

Phase 2 focused on the activities and works required to dewater and commence mining of the open pit as well as the crushing and screening plant and processing plant to be upgraded to further reduce operating costs, increase the tungsten recovery and overall output.

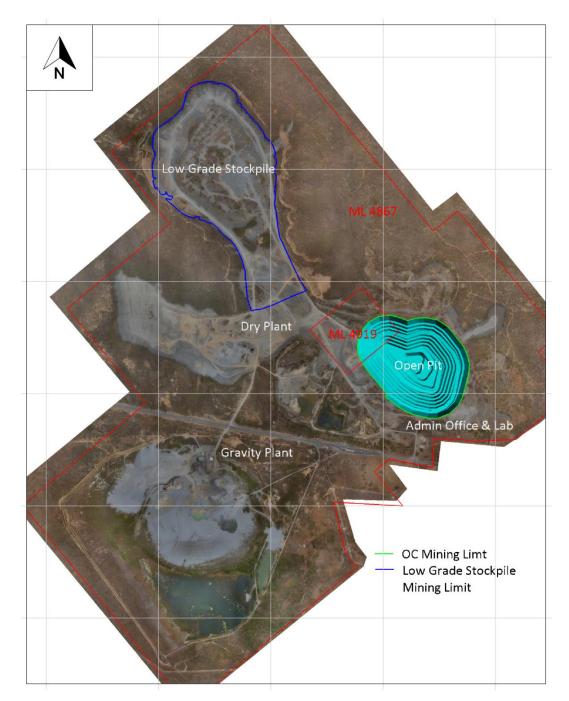


Figure 3: LGS & Open Pit locations relative to the Crushing and Screening Plant and Processing plant

2.3. Material Changes to BFS

Some significant changes to the underlying inputs of the 2021 BFS have occurred during 2022 necessitating this economic update to the BFS. The material changes to the 2021 BFS and outcomes from the work undertaken in 2022 are summarised below.

2.3.1. Investment Evaluation

The BFS update has seen significant improvements to the financial outcome of the project. The key changes to the financial metrics are provided in Table 1. A number of factors drove the improvement in outcome including:

- Completion of Phase 1 and relevant reduction in capital;
- Elimination of stockpiling of low grade halo material but instead processing through successfully ramped up XRT sorters
- Increase in total tungsten tonnes and reduction in mining strip ratio; and
- Deferral of capital items no longer immediately required.

Table 1: Material Updates to Investment Evaluation

Description	Original BFS Value	Updated Value
NPV (pre-tax and ungeared)*	\$131.5M AUD	\$209.5M AUD***
IRR	154%	397%**
Payback Period	2.25 years	1.5 years
Discount Rate	8.00%	8.00%
Cash Cost	113 USD/mtu	118 USD/mtu
Total Concentrate Production	26.680 kt	30.960 kt
NPV:Capex	5.7x	9.8x

*The NPV reported is before tax and financing.

Both the attributable NPV and IRR to EQR have increased significantly since the 2021 BFS. Cronimet Australia Pty Ltd has an ownership stake in the concentrate produced from the LGS, but not the open pit. As the updated mine plan has changed the cut off grade, the mining of the LGS is deferred for the duration of open pit mining which significantly increases the proportion of NPV that is attributable to EQR. Further details Cronimet Australia Pty Ltd's stake in the LGS treatment is included in Section 16.

** The significant increase in IRR from the original BFS is caused by a number of factors including:

- EQR has secured \$6M AUD of grant funding from the Federal Government (as a grant no repayment is required and therefore not treated as financing);
- 15% increase in total concentrate sold
- Weaker Australian Dollar against the US Dollar exchange rate (average exchange rate of 0.70 long term used in update compared to 0.73 used in the original BFS); and
- The Project is now 12 months closer to steady-state operations, and in particular, closer to the 4 years of much higher revenue from Open-pit, compared to the BFS, therefore the time value of money has a positive effect (less time until strong revenue is achieved through open pit mining).

*** \$209.6M NPV is Project NPV; NPV attributable to EQR as 50% portion of LGS Joint Venture and 100% of Open Pit results to \$172.5M.

2.3.2. Market Analysis

Since completion of the BFS, the ammonium paratungstate (APT) price has been sustained at a price on the upper end of the of the forecast range due to the post covid market conditions. The forecast for APT pricing remains high with continued demand coupled with delays in projected projects reducing global supply. On this basis, the underlying pricing assumptions have been adjusted.

Th Australian dollar has also performed weaker than was forecast and the foreign exchange assumptions have been modified to reflect this.

2.3.3. Geology and Resources

The material changes to the geology and resource results from the BFS are included in Table 2.

Table 2: Material Updates	to Geology and Resources
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Description	Original BFS Value	Updated Value
LGS Resource (Indicated)	900,000 WO ₃ (mtu)	900,000 WO₃ (mtu)
Open Pit Resource (Indicated)	1,776,000 WO ₃ (mtu)	3,296,800 WO ₃ (mtu)
Open Pit Resource (Inferred)	4,017,900 WO ₃ (mtu)	3,281,500 WO₃ (mtu)
Total Resource	6,693,900 WO₃ (mtu)	7,478,300 WO ₃ (mtu)

The resources above do not include any tungsten from an identified opportunity adjacent to the current open pit. Addition drilling is planned for early 2023 to further define the resource that may form part of a western pit extension which has the potential further increase the life of the open pit beyond the current resource.

2.3.4. Mining

The material changes to mining values from the BFS are included in Table 3. Note the LGS reserves have depleted slightly from the BFS as a result of mining of the LGS.

Table 3: Material Updates to Mining Values

Description	Original BFS Value	Updated Value
Strip Ratio	11:1	3.1:1
Average Mining Cost	\$4.50/t	\$6.00/t
LGS Reserve (Probable)	759,750 WO₃ (mtu)	750,000 WO ₃ (mtu)
Open Pit Reserve (Probable)	898,380 WO ₃ (mtu)	1,161,693 WO₃ (mtu)

The updated drilling results and mine planning has resulted in an increase to the open pit reserves of 29.3% which is being delivered from a slightly smaller pit than the BFS mine design.

The Phase 1 crushing and screening and processing plant upgrades have been completed. The slurry pipeline from the crushing and screening plant feeding directly into the process plant has been successfully commissioned.

Minor updates to the timing of the processing infrastructure have been included in this update. Based on the debottlenecking upgrades that have been delivered on site already and requirements of EQR customers, portions of the grinding and flotation circuit are no longer required.

Additionally based on the continued high performance of the gravity processing plant, the scavenging circuit will be deferred until scale trials are completed to determine whether yield benefits will be achieved beyond current performance. The Phase 2 upgrades will include upgrades to the front end jig circuit to handle the increase in grade and the tables circuit will also be upgraded to resulting increase in concentrate.

An agreement for the design and supply of the crushing and screening plant front end has been negotiated and executed with Sandvik. Based on the current market supply chain conditions, the design and supply duration for this package has been factored into the updated schedule. The capital cost estimate has been updated to reflect actual pricing.

The commissioning of the Sandvik plant does not impact the commencement of open pit mining as the Phase 1 upgrade has allowed the existing crushing and screening plant to handle the open pit run of mine at the design throughput. A temporary jaw crusher is required on the front end of the existing crushing and screening plant to handle >600mm feed material.

2.3.5. Infrastructure

Based on further assessments of the water infrastructure and water balance by ATC Williams some additional scope has been included in this update to allow for remedial work to be undertaken on the tailings storage facility (TSF) 4 and TSF 3 for inclusion in the site water circuit.

2.3.6. Project Execution

The key dates for project execution have been updated to reflect the current project timing due to pit dewatering and approvals. The project execution timing has also been modified to allow for the commencement of open pit mining prior to commissioning of the expanded crushing and screening facility.

2.3.7. Capital Cost Estimate

The updated capital cost required to complete the Mt Carbine Project is \$16.5M AUD. This is \$6.5M AUD less than the BFS capital cost estimate. This is due to the Phase 1 and portions of Phase 2 scope having been completed. It also allows for the cost reductions based on the optimisation and deferral of grinding and flotation circuit scope, as well as cost and scope increases identified post completion of the BFS.

The changes to the total Project capex as well as completed scope and costs to go are shown in Figure 4.

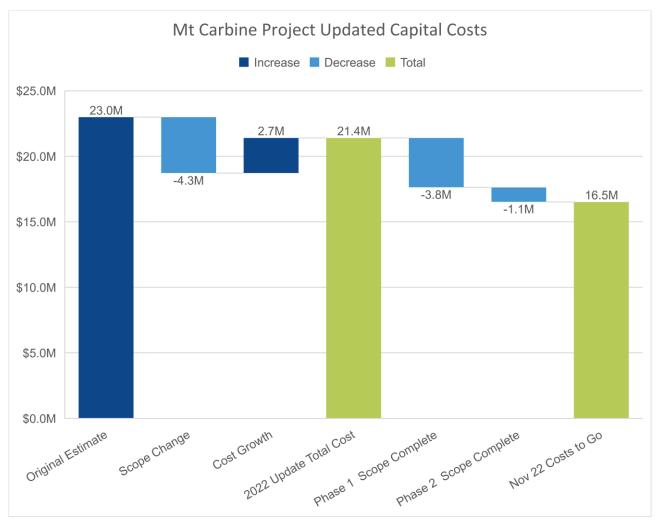


Figure 4: Updated Capital Cost and Cost to Go

Table 4 summarises the Project costs to go by the work breakdown structure (WBS).

Table 4: Capital Costs to Go by WBS

WBS	Updated Capital Cost (AUD M)
10000 – Mining	2.4
20000 – Processing	10.2
30000 – On-site Infrastructure	0.7
70000 – Project Indirects	0.8
80000 – Owner's Costs	0.9
90000 – Escalation and Contingency	1.5
Total	16.5

2.3.8. Operating Cost Estimate

The material changes to the operating costs from the BFS are included in Table 5. The cost increase was largely driven by the increase in diesel fuel, explosives and other consumable costs as well as increased labour costs. The mining contractor operating costs for the BFS update have been provided by Golding Contractors who have been engaged on an ECI basis.

Table 5: Material Updates to Operating Cost Values

Description	Original BFS Value	Updated Value	
Mining Contractor Operating Costs	\$4.50/t	\$6.00/t	

2.4. Environment Social Governance (ESG)

No material changes occurred to the approach to ESG. The ESG outcomes from the BFS are provided below.

2.4.1. Current Perspective

ESG has grown in prominence thanks to capital investment pressures, heightened consumer and stakeholder expectations, and global regulatory pressures for greater ESG reporting disclosures. Underpinning this is the broad realisation that its relevance in not only about addressing climate change, but also providing organisational long-term performance insights, both operationally and financially. ESG is not a separate business strategy, but the application of shared values and principles that realise commercial benefit whilst achieving positive social and environmental outcomes.

2.4.2. ESG Maturity

EQR appreciates the opportunities that an ESG focus can provide. As a resource efficient, value-oriented and resource critical mining company of the future, EQR has already aligned its purpose, mission, and values with some high level ESG objectives. The Company aims to contribute to sustainable development and align to United Nations Sustainable Development Goals, refer Table 6.

EQR defines their ESG adoption profile as an 'early adopter'. Existing ESG environmental initiatives include:

- The implementation of a new waste sorting technology;
- A review of pollution prevention treatment options; and
- Ongoing participation in a pilot greenhouse gas (GHG) emissions tracking scheme in partnership with the University of Queensland.

They also have several 'S' centric employee attraction and retention programs underway centering on improving employee diversity and capability within the organisation. Additionally, EQR sponsor a range of community programs and events, engaging regularly and collaboratively with the community to develop initiatives that positively impact employees and the local community.

ESG Fra	SUSTAINABLE DEVELOPMENT GCALS	
Environment	We are committed to embedding and embracing resource efficiency in our operations. As a producer of a new economy critical mineral, we aim to minimize our impacts on the environment and prevent degradation through the optimal extraction of tungsten from a secondary source and through the integration of advanced processing technology.	6 ADD KARTA STATUS CONSTRUCTOR 12 Stratt CONSTRUCTOR CONSTRUCTOR 13 JUNE CONSTRUCTOR CON
Social	Safety is a core value and a strategic priority, and we are committed to promoting and enhancing a safety culture in our operations. Our commitment to society includes promoting workforce diversity and inclusion, empowering local communities through creating employment opportunities, sourcing materials locally where possible and investing in our employees and communities for social development.	3 ADDREAMANT ADDR
Governance	As a value-oriented resources company, we are committed to acting in a transparent, accountable, and responsible manner in all our business dealings and operations.	3 Addeminant

Table 6: EQR ESG Alignment with United Nations Sustainable Development Goals (SDG)

Through active engagement with local communities, environmental experts, and supply chains, EQR is building solid credentials for the future. Underpinning a philosophy of pragmatism and effectiveness, EQR has taken a multi-process approach including:

- Working sessions with the Leadership Team on purpose, core values and key principles;
- Revision of the Risk Management Policy; and
- The completion of an independent ESG Stakeholder Sentiment Survey and ESG status report.

2.4.3. Stakeholder Sentiment

An ESG Stakeholder Sentiment Survey was disseminated to 22 EQR stakeholders, with 19 respondents. The survey consisted of 56 questions and took approximately 10 minutes to complete.

Survey questions were broken into 12 themes aligning to the three Environment, Social, and Governance pillars. The purpose of the survey was to gather information on which ESG themes that stakeholders felt are of material importance to EQR.

Survey respondents were a mix of internal and external stakeholders including representation from the senior leadership team, shareholders, employees as well as external stakeholders such as local community members, suppliers, and financial service providers.

Stakeholders were asked to rate whether the organisation was perceived to be leading or lagging across each of the 12 ESG themes. They were asked to do this for both the current state of the business, as well as for where they felt the organisation should be positioned / aiming to be.

The results are in included in Figure 5.

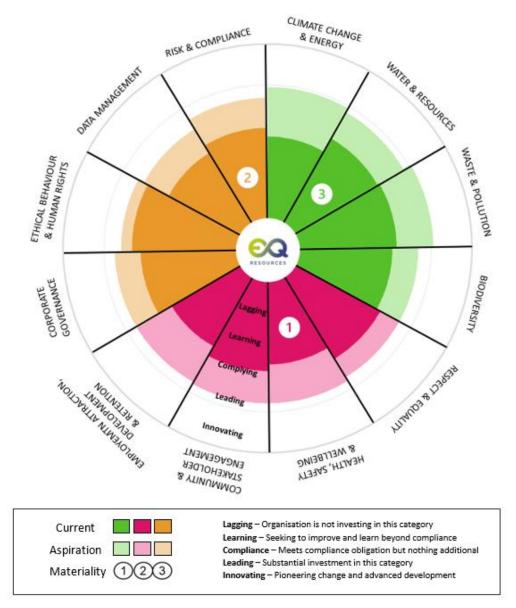


Figure 5: Stakeholder Sentiment and Materiality Survey Summary

2.4.4. Material Themes

Across the EQR leadership team and stakeholders surveyed, shared perceptions and aspirational goals were prevalent. The close alignment between stakeholder feedback and current ESG positioning and intentions reinforces EQR's high degree of confidence in its evolving ESG program. Multiple threads were identified, with five material themes highlighted:

- Employee and contractor health, safety, and wellness (Social);
- Proactive management of risk and compliance management (Governance);
- Creation of meaningful jobs and the creation of local talent pipelines (Social);
- Water, energy, and resources management and efficiency (Environmental); and
- Commitment to the accelerated transition to a low carbon future (Environmental).

Societal Challenges:

When applying a societal lens, additional opportunities were uncovered, including:

- Reducing site environmental impacts especially noise and dust;
- Reduce, recycle or repurposing waste;
- Provide local and regional employment especially for disadvantaged and minority groups;
- Maximise the opportunity for female participation in non-traditional work areas (currently at 25%);
- Stimulate a sustainable local supply chain including accommodation and essential services; and
- Support community health, wellbeing and resilience through sponsorships and volunteer work.

Strategic Positioning:

The outputs from the leadership workshops and a sentiment survey provided both insight and foresight. Recognising that ESG is a tightly intertwined series of process and practices across all business operations, EQR has adopted the following approach:

- Be an early adopter of 'Environmental' opportunities using technology and robust systems that deliver highly efficient extraction processes, minimising its physical footprint, developing low carbon operations, and minimising waste and consumables such as water, energy, explosives;
- Lead across a range of 'Social' opportunities especially, supporting sustainable communities and local supply chains, driving diversity and inclusion, preferencing local employment and developing a longterm pipeline of regional talent; and
- Deliver transparency and compliance regarding 'Governance', reporting and public disclosures, recognising that compliance is the floor not the ceiling of its obligations.

2.4.5. Strategic Direction

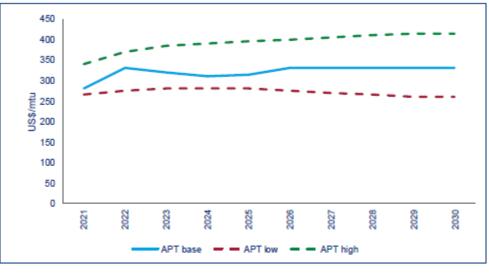
An ESG focus affords the Mt Carbine mine with significant opportunities to maximise positive environmental and social impacts both now and into the future. The EQR leadership team are committed to advancing their current ESG program with material consideration being given to both immediate opportunities and those longer term. From prospects for employment and industry expansion created within the local community, to the potential for a development of green energy via solar powered farms on rehabilitated stockpile and tailing areas, there are many areas under consideration for future incorporation.

Insight into current stakeholder priorities and suggestions will shape the future direction of the EQ Resources ESG program, with a particular focus on further developing a robust ESG framework that delivers environmental and social benefit with a positive and sustainable commercial return.

3. Strategy and Market Analysis

3.1. Update to BFS Market Assumptions

The APT price forecast utilised in the BFS is shown in Figure 6. The BFS used the APT base price for the APT pricing assumptions.



Source: Wood Mackenzle

Figure 6: APT Price Forecasts

Based on the high performance of the APT price relative to the Wood Mackenzie forecast to date since the release of the BFS, combined with the softening Australian Dollar against the US Dollar, the approach taken with the updated economics was to apply the straight average of the Base and High price trends of the Wood Mackenzie forecast.

This position was justified by the tungsten price performance to date combined with delays to projects assumed in the forecast to supply global demand since it was commissioned in 2021.

There has been positive pricing pressure in the current market due to supply constraints and increasing demand metrics which further reinforces the update to the BFS APT pricing assumptions.

Note on Tungsten Concentrate Price Forecast

In consideration to the above-mentioned APT price forecast, it must be noted that the above discussed prices are all expressed in \$/mtu in APT, where typically tungsten concentrate sells for about 75-77% of the APT price on a FCA basis. This payable factor varies with the product quality (WO₃ grade, but mostly impurities' levels), and its delivery term.

Given the range shown above, applying a 70-75% payable factor on the APT price forecast in the financial model has been deemed to be fair assumption of the tungsten concentrate price forecast.

3.2. Product Specification

Based on the Off-take Agreement in place between CRONIMET Australia Pty Ltd, CRONIMET Asia Pte Ltd and Mt Carbine Retreatment Pty Ltd (a wholly owned subsidiary of EQR) in 2019, the specifications for tungsten concentrate are provided in Table 7.

Name of Element	Specification
WO ₃	50% min
S	1.5% max
Sn	0.50% max
Мо	0.40% max
Sb	1.0% max
As	0.15% max
H ₂ O	1.0% max
Radioactivity: ≤1,000 bq/kg	· · · · ·

Table 7: Tungsten Concentrate Specifications

These specifications are in line with the overall market requirements for tungsten concentrate and shall remain applicable on the new products being defined in the frame of this BFS.

3.3. Customers

Currently CRONIMET is the sole off-taker for the Project from the rights secured through early investment into the Mt Carbine Project. Since the start of the Project, concentrate has been sold to customers in Europe, the United States, Vietnam, and China.

While CRONIMET will retain a portion of the off-take at least equivalent to the existing deliveries, new off-takers might be considered as strategic project partners.

In addition, it has to be noted that CRONIMET has also a specific interest in off-taking part of the wolframite concentrate for its "in-house" conversion into ferrotungsten, which shall then be marketed to its existing steel clients.

Going forward, should CRONIMET no longer wish to trade the concentrates from the Mt Carbine operation, several other large commodity trading companies have verbally expressed interest in the concentrate being produced at Mt Carbine and therefore could be engaged if required.

4. Geology and Resources

The Mt Carbine mining area is confined within two Mining Leases (ML), ML4867 and ML 4919 totalling 366.39 hectares. The mining licenses are surrounded by EQR's Exploration Tenements (EPM) EPM 14872, EPM 14871 and EPM 27394 covering an additional 115 km².

A map of the tenure boundaries is shown in Figure 7.

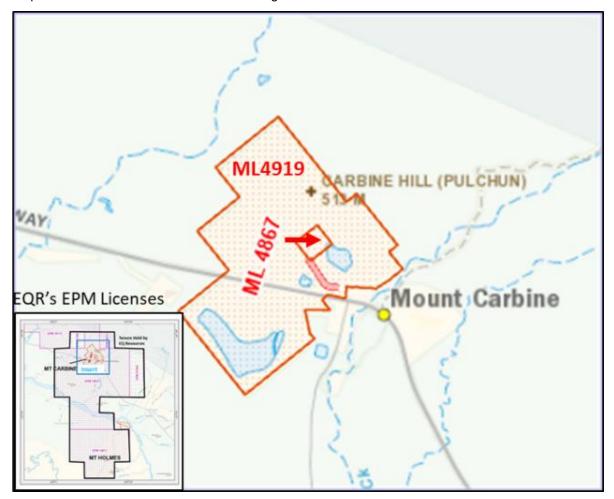


Figure 7: Mt Carbine Lease Boundaries and Surrounding Exploration Tenements

ML4867 (358.5 Ha) was first granted on 25 July 1974 and has been continually renewed until today. The latest renewal of 19 years expired on 31 July 2022, upon which time EQR has submitted a renewal application for a further 19 years. The renewal is based on the new resources / reserves and the Mt Carbine Bankable Feasibility Study that outlines the planned future mining activity. ML4919 (7.891 Ha) was first granted on 24 August 1974 and has been continually renewed with the latest 19 year renewal expiring on 23 August 2023 and likewise a renewal application will be submitted in Q1, 2023.

A summary of the current licenses and status is provided in Table 8.

State	Ownership	Area	Status	Interest Held at Year End	Expiry Date
Queensland, A	ustralia				
ML 4867	Mt Carbine Quarries Pty Ltd (wholly owned subsidiary of the Company)	358.5 ha	Granted	100%	31/07/2022 13
ML 4919	Mt Carbine Quarries Pty Ltd (wholly owned subsidiary of the Company)	7.891 ha	Granted	100%	31/08/2023
EPM 14871	EQ Resources Limited	10 sub-blocks	Granted	100%	12/12/2025
EPM 14872	EQ Resources Limited	21 sub-blocks	Granted	100%	11/12/2025
EPM 27394	EQ Resources Limited	4 sub-blocks	Granted	100%	01/06/2025
ML = Mining Lease; EPM = Exploration EL = Exploration Li	Permit for Minerals (QLD);				
renewal proces	s is advancing smoothly with t's review of the Company's	n good communication	between all par		

Table 8: Mt Carbine License Register

4.1. Regional Geology

The Mt Carbine mine site is located within the Siluro-Devonian Hodgkinson sedimentary province. The thick sedimentary sequence was complexly folded and regionally metamorphosed prior to and during extensive granitic intrusions in the Carboniferous and Permian. The regional geology is shown in Figure 8.

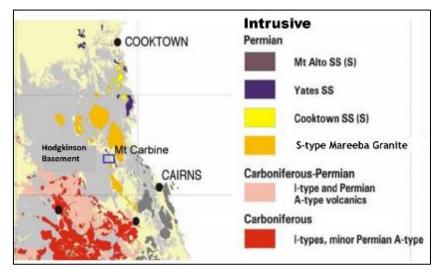


Figure 8: Regional Geological Setting of Mt Carbine

Within the permit north-north-west trending Hodgkinson Formation turbidite and siltstones are intruded by the Mareeba Granite dated at 277My, and the Mt Alto Granite, dated at 271±5My (Bultitude et al., 1999). Contact metamorphic aureoles marked by formation of cordierite Hornfels surround the granite intrusive and numerous acid to intermediate dykes intrude the metasediments. In the western portion of the tenement, a prominent metabasalt-chert ridge is a significant Hodgkinson formation stratigraphic component.

4.2. Mineralisation

The Mt Carbine tungsten deposit consists of a number of vertical to sub vertical sheeted quartz veins ranging in width up to 7m but averaging around 50cm. Only about 20% of the quartz veins are mineralised due to an early barren quartz event and a later mineralising quartz event. Economic minerals are the tungsten minerals of scheelite and wolframite mineralisation that occur in the ratio of 1:4 respectively.

A typical section through the canter of the deposit has over 35 quartz veins ranging from 10cm to 7m in width with 5-8 zones of overprinting mineralised quartz veins of 10 -150cm widths. These high grade veins containing rich quartz - feldspar tungsten minerals and have been designated as "King Veins".

The tungsten occurs as coarse crystalline varieties of Wolframite up to 10cm crystal size and with varying degrees of intergrown scheelite that is volumetrically less significant. Tungsten minerals can form up to 50% of the quartz vein zone, as intersected and with such a coarse nature to the mineralisation causes a nugget effect to the mineralisation. In a later retrograde stage a scheelite overprinting event occurs that is represented mostly as fine scheelite replacing wolframite on fractures and progressive wholesale replacement.

The Scheelite-Wolframite ratio is seen to increase to the grid north and grid east of the deposit and this mostly reflects the host rocks change to a more calcareous metavolcanic-chert horizon. In general the veins are persistent and strong and cross all rock types. The occurrence of the veins is thought to be a conjugate veins set as the result of movement on faults occurring on the fold nose of an isoclinal fold. The sheeted parallel nature to the veins locally have jogs along strike resulting in movement of local structures during tungsten deposition. Examples of mineralisation in core samples are shown in Figure 9 and Figure 10.



Figure 9: King Veins Showing Coarse Vein Textures of Wolframite Crystals



Figure 10: Core Showing Late Replacement of Wolframite by Fine Network Retrograde Scheelite

The mineralisation interpretation is that there are two primary mineralising events with the first phase being a pervasive gaseous front that forms broader scale silicification / veining and deposits a lower grade background level of tungsten mineralisation. A rich brine fluid then entered later through later fracturing of the now silicified host rock. These brine veins (king veins shown above) are recognised to have higher temperature and higher salinities in fluid inclusion work attesting to their direct magmatic origin. Conversely the gaseous veins result in fluid inclusions with more gases and a composition showing mixing with groundwater has occurred. The king veins can be as high as 50% WO₃ but typically are in the 1-2% WO₃ range.

Along the grid E-W strike to the mineralisation, the veins have been grouped into lenses, where one or more of the high-grade king veins are close enough to define a composite value above a cut off of 2m 0.25% WO₃.

An indicative cross section through the open pit indicating vein locations is shown in Figure 11 and Figure 12 showing Indicated Resources in red and Inferred Resources in green. Note position of new pit outline in blue relative to current pit outline in red.

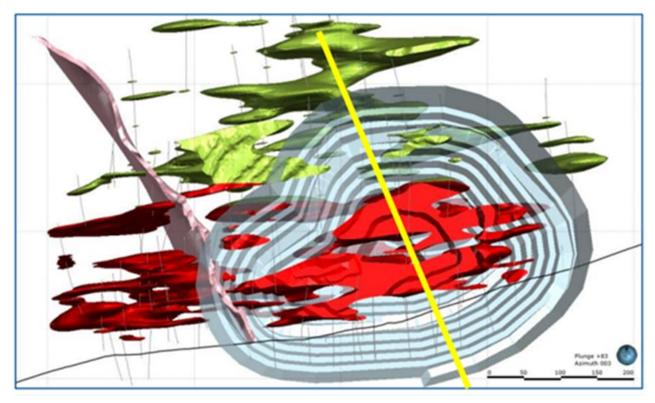


Figure 11: Open Pit Cross Section Location

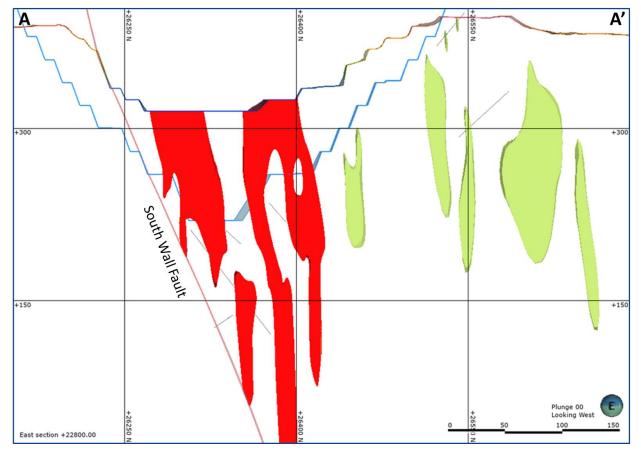


Figure 12: Typical Ore Section Through Open Pit

4.3. Resource Estimation

EQR engaged Brisbane-based consultancy, Measured Group, to complete the independent resource recalculation. The re-assessment of the resource was seen as the priority and work was supported by a 2021 program of 4,074m of diamond drilling and a successful completion of a METS Ignited Grant funded trial operation campaign for the material from the LGS. This maiden resource was followed up with further drilling in March 2022 for 10 holes for 2,121.9m and a lowering of the cut-off grade from 0.15% to 0.05% to give an new updated resource & reserve as highlighted in Table 9.

Cut-off (%WO ₃)	Tonnes (million)	Grade (% WO ₃)	WO₃ (mtu)
0.05*	20.32	0.32	6,578,300
0.1	15.9	0.39	6,246,300
0.15	12.6	0.46	5,792,270
0.2	10.6	0.52	5,522,540
0.25	8.1	0.61	4,941,960
0.5	3.6	0.95	3,364,790
0.75	1.7	1.30	2,235,490

Table 9: Mt Carbine Mineral Resource - August 2022

NOTES:

* Cut-off used in resource statement

The decision to lower the cut-off grade to include more tungsten metal recovered, albeit at a lower grade, is off the back of excellent results of the ore sorting operations and corresponding upgrade of the LGS where the grade is only 0.075% WO₃. Being able to mine larger ore zones typically results in lower mining costs, as larger equipment can be used, and drastically will reduce the strip ratio for the mine.

Various cut-off grades were examined with the maximum contained metal chosen. Given the experience of the low grade stockpiles discussed above it is clear that the optimizer should have access to the entire mineralization potential of the pit area when computing the Reserves. The lower cut of 0.05% WO₃ gives a resource of 20.32Mt at 0.32% WO₃. A large portion of the indicated category of this resource proves to be economic in the redesigned pit shell.

The updated Resources and Reserves as published in August 2022 and September 2022 respectively is summarised in Table 10.

Table 10: Updated Resource and Reserves

Mt Carbine Mineral Resources				
Orebody	Resource Classification	Tonnes (mt)	Grade (WO ₃ %)	WO₃ (mtu)
Low Grade Stockpile				
	Indicated	12.00	0.075%	900.000
In Situ				
	Indicated	12.04	0.27	3,296,800
	Inferred	8.28	0.40	3,281,500
	Total	20.32	0.32	6,578,300
All	Total	32.32		7,478,300

Table 11: Mt Carbine Ore Reserve Estimate at September 2022

Mt Carbine Ore Reserves			
Reserve Category	ROM Tonnes (mt)	W0 ₃ %	Contained WO ₃ (mtu)
Open Cut - Proved	_	-	-
Open Cut - Probable	3.54	0.33%	1,161,693
Open Cut - Total	3.54	0.33%	1,161,693
LGS - Proved	-	-	-
LGS - Probable	10.00	0.075%	750,000
LGS - Total	10.00	0.075%	750,000
Total - Proved	-	-	-
Total - Probable	13.54	0.142%	1,911,693
Total	13.54	0.142%	1,911,693

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 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, a lower cut of 0.05% was applied to the Southern Domain 1 block and 0.15% WO₃ to the area outside of this area was applied, which is the grade where the mineralisation forms distinct veins.

4. Drilling used in this methodology was all diamond drilling with 1/2 core sent according to geological intervals to ALS for XRF15b analysis.

5. Resource estimation was completed using the Kriging Methodology.

6. Indicated spacing is approximately 30m x 30m; Inferred in approximately 60m x 60m.

A comparison to the previous Ore Reserve estimate (as of 31st Dec, 2021) is summarised below:

- The Indicated Resources have grown significantly from a contained 1,776,000 mtu to 3,296,800 mtu, an increase of 85.6%
- Open pit ROM tonnes increased from 1.26Mt to 3.54Mt
- Open pit ROM WO₃ grade decreased from 0.71% to 0.33% due to lowering the cutoff grade
- Open pit contained WO₃ increased from 900,000 to 1.16 M mtu (1 mtu =10kg WO₃)

This significant increase in tungsten within the updated reserves has led to a one year extension to mine life from three to four years in addition to deferring the mining of the LGS.

4.4. QAQC

EQR continued its rigorous QAQC program with >10% of its sampling being blanks, standards or duplicates. ALS Laboratory in Brisbane completed all the assaying using the analysis method of ME-XRF15b for tungsten and associated minerals with results shown in Figure 13.

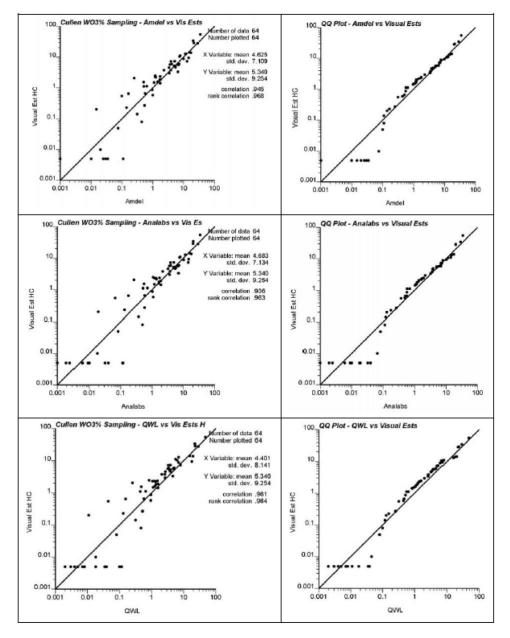


Figure 13: QAQC Results

A review of the QAQC protocol by the Measured Group had the following conclusion. (Extract 5.3 from Reserve Statement Published in September, 2022).

The laboratory employed the required industry standards for sample preparation and the techniques of analyses were appropriate for the level of tungsten mineralisation. The results of the QA/QC study verified that no systematic assay bias was present in the samples supporting the resource estimate. Extensive QA/QC analyses involving comparisons of visual estimates against XRF WO₃% assay results over the same sample intervals have shown a consistent linear relationship with no issues that would impact resource estimation.

5. Mining

5.1. Operational Overview

The Mt Carbine mine is a surface operation, with two sources of tungsten ore available – an in-situ open pit resource and a historical low-grade stockpile, locations as shown in Figure 14. Ore Reserves are 3.54Mt at 0.33% WO₃ and 10.0Mt at 0.075% WO₃ for open Pit and LGS respectively.

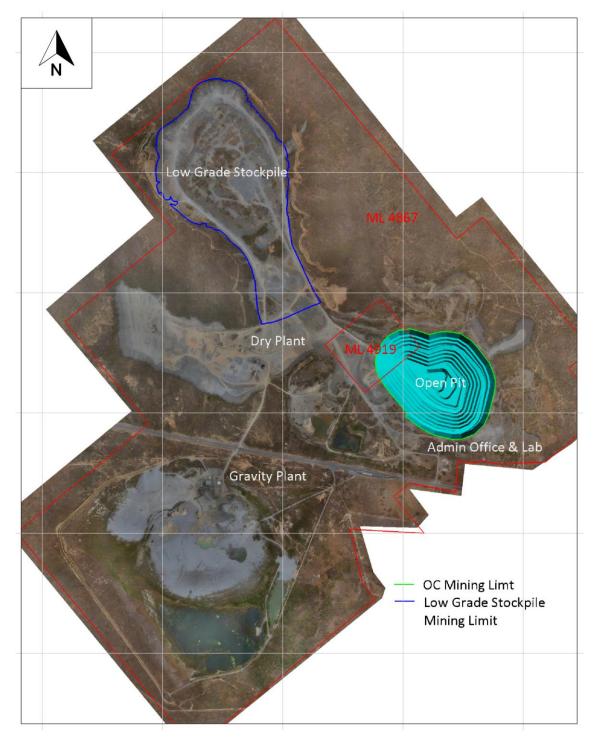


Figure 14: OC and LGS Mining Limits

The increase to Ore Reserves has reduced the ROM strip ratio within the open pit from 11.1:1 (waste to ore tonnes) to 3.1:1

The updated Ore Reserve estimated was used to inform the optimisation process using an updated set of criteria to account for rising tungsten price as well as rising costs. The Ore Reserves are limited to a practical pit shell based on current economic limits using ramps of suitable widths and gradient.

The planned open pit is essentially a deepening by 95m of the current historical open pit from a 315m RL down to a 220m RL pit floor. The footprint of the new pit is an increase by 12% in size. The extension will extract a total of 14.4Mt of rock in the current design. The design of the new pit is shown in Figure 15.

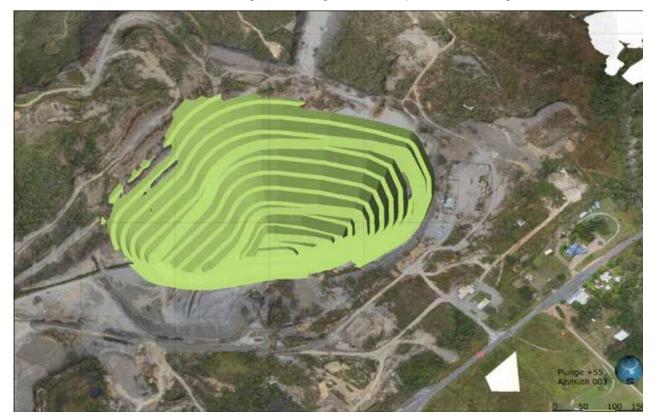


Figure 15: Isometric View of Ore Reserves Pit Shell

Extraction from both sources will be undertaken by conventional excavator and truck fleets. Selective ore mining practices will be employed in the in-situ open pit, with bulk ore mining of the LGS occurring due to local grade variability and lack of historical records.

Ore from both sources will be treated at a dry processing plant prior to concentrate production at the gravity plant. Through this process, ore grade to the gravity plant is significantly improved, with an associated reduction in mass.

The primary operational constraints are as follows:

- Processing plant capacity of ~408kt per annum;
- Mobile fleet capacity of ~4.9Mt per annum total material movement.

Based on these constraints a life of mine (LOM) schedule has been developed. Following regulatory approvals, a four-year contract mining operation of the in-situ reserves will be undertaken, with supplementary LGS feed for a further ten years. Upon depletion of the in-situ reserves, ore feed will revert solely to the LGS.

It is planned to complete further drilling to evaluate a Stage 3 Pit extension to the west as well as evaluate underground mining to supplement the depletion of the open pit in-situ ore. This will be the subject of further study and is not considered in this mine schedule.

Table 11 includes the primary physical metrics of the LOM schedule.

Variable	Unit	Annual Minimum*	Annual Maximum	LOM
Total Mined Tonnes	Т	1,000,000	4,900,000	
				24,517,791
Mined Ore Tonnes	Т	1,000,000	1,020,000	13,935,932
Mined Waste Tonnes	Т	629,700	4,233,207	10,581,859
Gravity Wet Plant Feed	Т	424,000	408,000	1,200,000
Gravity Plant Head Grade	%	0.18	0.44	0.32
Produced Concentrate	Т	921	5,707	30,963

Table 11: LOM Primary Physical Metrics

*Annual minimum excludes 2022, as production will not be in place for the full year duration as calculated in the updated financial model,

Operations of the open pit mining will comprise the following:

• A primary fleet of 1 x 190t class excavator and 13 x 55t articulated dump trucks. The focus of this fleet will be open pit waste movement and some LGS ore mining depending on scheduling

The operation will undertake mining on a 12hr x 7-day a week basis, with processing to be operated on a 24hr x 7-day a week operation. Management personnel will be on a standard 5-day work week.

5.2. Material Characterisation

Material to be extracted at Mt Carbine can be divided into two main lithologies – hornfels and metasediments. The weathered profile of the two rock types varies considerably, the hornfels is ~2-4 metres, whilst the metasediments have a deep (up to 30 metres) weathered profile, particularly adjacent to the South Wall and Iron Duke Faults. As such, weathered metasediments can be classified as a separate 'material type'.

Characteristics of the material types is detailed in Table 12.

Material	Estimated Hardness	Unconfined Compress- ive Strength (MPa)	Insitu Density	Loose Density	Swell Fac- tor (%)	Contam- inants (PAF/NAF)	Comments
Hornfels	R4 to R5	62.5 to 91	2.74	2.28	20	8% of Material has >3% sulphides	Waste Storage Facility needed for 0.1Mt of material
Meta- sediment	R3 to R4	4 to 91	2.74	2.28	20	Low sulphide content with no contaminant s	Likely to slake and desiccate based on field observations

Table 12: Material Characteristics

Figure 16 outlines of material within the open pit. Light Green indicates Metavolcanics, Grey indicates Metasediments, Red, Yellow, Dark Green indicates high grade lenses.

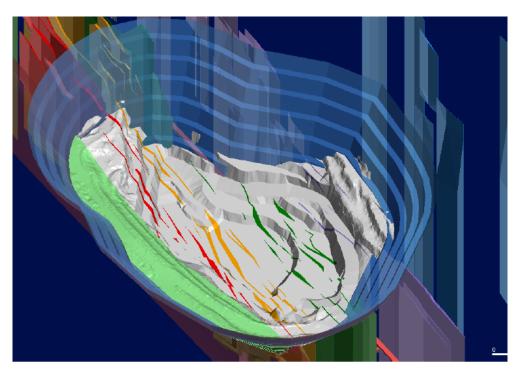


Figure 16: Open Pit Material Characterisation

The other material characteristic of note is the high quartz content of the tungsten bearing veins. The prevention of silicosis (a lung disease caused by inhaling large amounts of crystalline silica dust) has become a priority of QLD regulatory bodies and the operational management plan includes respirable dust controls. These controls include specific drill and blast practices and dust suppression through water spraying.

5.3. Hydrogeology

A series of groundwater bores were drilled around the Mt Carbine local area in 2011, providing a good groundwater monitoring network for the mining operation. Sampling and analysis of the network was undertaken by hydrogeological consultants Rob Lait & Associates, with a report *"Report on Carbine Tungsten Groundwater Study"* delivered in December 2012.

The findings of the report are as follows:

- There is low hydraulic conductivity within the Hodgkinson Formation aquifers and minimal groundwater inflow is expected into the open pit.
- Testing of groundwater samples indicates the open pit water is better quality than the surrounding groundwater aquifers.

Based on these findings, groundwater is not considered a major risk from either a ground stability or contamination perspective and will be managed via a typical suite of operational controls – pumping, sediment settling dams, dilution, reuse, and approved discharge if necessary.

5.4. Geotechnical

The current pit excavation provides a good opportunity for understanding the future open pit geotechnical performance for the area. Additionally, the underground development has provided further insight into the rockmass condition and has several consultant investigations completed over the years. The previous work has developed a broad understanding, albeit over many decades, during which time changes in geotechnical data collection methodologies and evaluation techniques have evolved.

The geotechnical dataset supporting the basis of the open pit pit shell is as follows:

• RQD and defect information from 79 diamond drill holes across deposit;

- Two images and a PowerPoint presentation of the above drill hole information; and
- Four geotechnical reports, entitled as follows:
 - GCPL MC 160421 Preliminary Geotechnical Assessment of Ground Conditions & Remedial Support (2021);
 - HCOVGlobal Brief Review & Structural Assessment/Scoping of Iron Duke Petersens Mt Carbine EPM 14872 (2020);
 - Golder Associates Report to R.B Mining Pty. Ltd. On Mt Carbine Mine Review of Rock Mechanics (1984); and
 - HD042 Piteau & Associates Slope Stability Analysis & Design of the Open Pit Slopes (1982).

5.4.1. Current Data Evaluation

Defect and RQD logging of the 79 diamond drill holes (over 20,000 metres of core) was completed by EQ Resources geological personnel. The data was compiled into a three-dimensional model in Leapfrog software and corresponds well with historical fault, shear and fractured zones.

The majority of the fractures observed are associated with the South Wall Fault, being found in the 10-15m zone of foot wall. The South Wall Fault is well exposed in the existing pit and has over eighty intersections recorded in exploration drilling to date. It varies from 0.5 to 2.0m in thickness and is marked by a clay filled fault gouge.

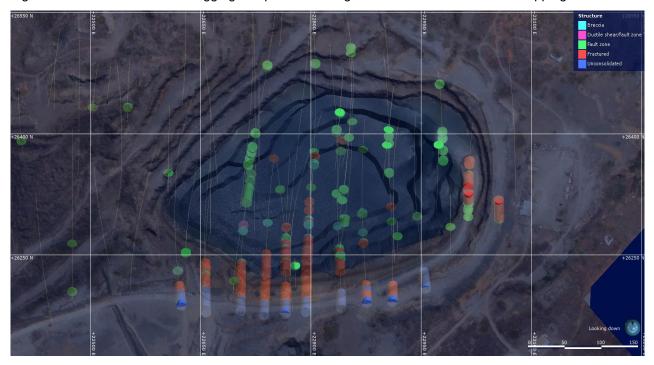


Figure 17 illustrates the defect logging completed and alignment with historical defect mapping.

Figure 17: Defect Logging and Structural Model of Exploration Drill Holes (plan view)

5.4.2. Current Pit Design

Geotechnical parameters of the current pit design and ground stabilisation requirements are included in Table 13 and Table 14.

Parameter	Value	Comment
Bench Height (m)	20	
Bench batter angle (⁰)	70	Suitable in hornfels material north of the South
Bench width (m)	8	Wall Fault, see Table 9 for mechanical ground
Ramp angle (%)	10	stabilisation requirements south of the fault.
Inter-ramp slope angle (0)	70	

Table 13: Geotechnical Parameters of Open Pit Pit Design

Table 14: Ground Stabilisation Requirements for Southern Pit Wall

Toe Elevation (m)	Length of pit wall (m)	Area (m²)	Horizontal Spacing	No. of Rows	Min. bolt length (m)	No. of bolts	Bolting metres (m)
380	261	2463	3	2	10	174	1740
360	491	9820	3	4	10	655	6547
340	453	9060	3	6	10	906	9060
320	413	8260	3	5	10	688	6883
300	349	6980	3	5	10	582	5817
280	333	6660	3	5	10	555	5550
260	270	5400	3	5	10	450	4500
240	211	4220	3	5	10	352	3517
220	51	1020	3	5	10	85	850
Total	2832	53,883				4446	44,463

The key element of the current pit design is the requirement for mechanical ground stabilisation on the southern wall, behind the South Wall Fault. The ground stabilisation is based off the work completed by Piteau (1982) and comprises the following:

- Horizontal groundwater drainage holes (up to 20m long) at the base of each bench, with associated drainage channel.
- Vertical 10m twin strand cable bolts, two rows at 3 metres spacing, above the 380RL.
- Inclined (-10⁰) 10m twin strand cable bolts, four rows at 3 metres spacing, above the 360RL.
- Inclined (-10⁰) 10m twin strand cable bolts, six rows at 3 metres spacing, above the 340RL
- Below the 340RL, 10m twin strand cable bolts, five rows at 3 metres spacing for all benches
- Cable bolt loading above the 340RL is 20 tonne, below the 340RL is 50 tonne.

5.5. Mine Production

A LOM mining schedule was developed on the existing Joint Ore Reserves Committee (JORC) Reserves from the LGS and in-situ orebody. The considerable inferred resources in the in-situ orebody were excluded from the schedule.

Key drivers for mining schedule development were:

- Utilising all the gravity plant annual capacity to realize maximum revenue for the project
- Optimising the volume and timing of high-grade ore from the in-situ orebody to the processing plant

A number of scenarios with ranged input variables were analysed to deliver an optimized LOM mining schedule.

The LOM schedule consists of three main components:

- 2022 continued mining from the LGS, allowing for open pit regulatory approvals, infrastructure upgrades. The mining contractor Golding Contractors has been awarded the mining contract with mobilisation planned for Q1, 2023.
- Four years of in-situ open pit mining to deplete the current JORC Reserves, with supplementary feed from the LGS to maximize gravity processing plant throughput.
- Approximately ten years of mining to deplete the remaining LGS reserves.

A pit optimisation model was established in the Deswik mine planning software package. The package utilises pseudo flow algorithms to determine the economic pit limit based on several input parameters, including:

- Operational parameters such as loss, dilution, recovery,
- Processing parameters such as recovery, moisture adjustments, grade adjustments, etc.
- Geotechnical parameters to define the overall pit wall angles,
- Unit cost rates for all processes,
- Revenue assumptions.

Mining shall occur on day shift only delivering a maximum of 4.9Mt per annum from the open pit operation. The annual mine production schedule is shown in Table 15.

Table 15: Annual Production Schedule

Year	Waste (t)	Ore (t)	Waste and Ore (t)	Mtu (insitu)	Concentrate (t)
2022	0	166,000	166,000	12,450	198
2023	2,957,512	1,000,000	3,953,512	303,325	4,818
2024	4,407,917	1,027,000	5,435,182	174,194	2,770
2025	1,566,325	1,057,000	2,616,325	280,278	4,456
2026	1,020,405	1,020,000	2,040,405	360,895	5,738
2027	629,700	1,008,000	1,723,033	196,174	2,738
2028	-	1,000,000	1,000,000	75,000	1,193
2029	-	1,000,000	1,000,000	75,000	1,193
2030	-	1,000,000	1,000,000	75,000	1,193
2031	-	1,000,000	1,000,000	75,000	1,193

Year	Waste (t)	Ore (t)	Waste and Ore (t)	Mtu (insitu)	Concentrate (t)
2032	-	1,000,000	1,000,000	75,000	1,193
2033	-	1,000,000	1,000,000	75,000	1,193
2034	-	1,000,000	1,000,000	75,000	1,193
2035	-	1,000,000	1,000,000	75,000	1,193
2036	-	583,333	583,333	43,167	696
Total	10,581,859	13,935,932	24,517,791	1,970,483	30,963

The economic pit limit shells generated by the pit optimisation model were then converted into practical pit shells and stages. Each stage was designed to BFS level of detail using the parameters shown in

Table 16.

Table 16: Open Pit Design Parameters

Item	Value	Units
Final Wall Batter Angle	70	degrees
Final Wall Bench Height	20	m
Final Wall Bench Width	8	m
Access Ramp Width	20	m
Access Ramp Maximum Grade	10	%

Internal dig solids were created in Deswik and then imported into a BFS level of detail schedule in the Spry scheduling package. All LGS dig solids plus the out-of-pit dump solids were created and imported into the schedule. The Spry scheduling model including all dig scheduling, dumping and haulage modelling which provided accurate truck hours and numbers as the pit progressed.

Cut off parameters Ore Reserves for the Mt Carbine open pit are reported using a ROM cut-off grade of 0.08% WO₃. The cut off was based on the lowest grade ore that still generated a positive cash flow from the pit optimisation calculations using a WO₃ APT sales price of US\$340/mtu and BFS level cost inputs.

The monthly concentrate production profile from the gravity processing plant is shown in Figure 18.

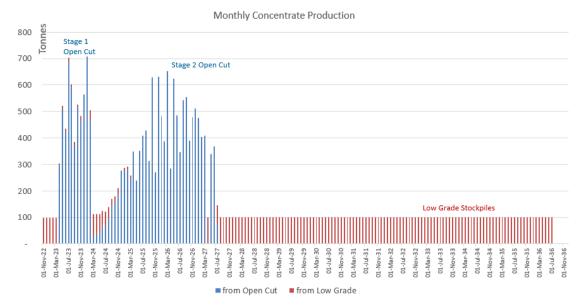


Figure 18: Concentrate Production Profile

Geotechnical reports and the existing open pit walls have guided the overall final pit wall design parameters for 20m high benches with a 70-degree batter and 8m wide catch benches. Haul ramps have been designed for the 55t trucks at a maximum gradient of 10% with dual lane ramps being 20m wide and single lane ramps 14m wide. All material mined is hauled out of the pit with ore trucked to the ROM stockpile or direct fed to the crusher and waste trucked to the out of pit dumps.

Due to the resource model including a lower grade halo around higher grade mineralised veins, a minimum width of 2m was applied to determine if ore blocks could be recovered. Any blocks that did not pass this assessment were converted to waste and regarded as losses. Any remaining ore blocks that were adjacent to a waste block had an edge loss and dilution width of 0.36m applied along the ore/waste boundary.

5.6. Waste Dumps

Due to the in-situ orebody shape (tungsten grade and width increasing with depth), the initial mining Stage 1 (year 1) has an extraction of 776,000t of ore from the bottom of the pit whilst completing approximately 4.62Mt of waste stripping on the perimeter of the pit. This is followed by three years of Stage 2 mining where 3.32Mt of waste is extracted for 3.75Mt of ore.

Total rock extracted from the pit in the Stage 1 and 2 pits is 14.4Mt of which 3.54Mt will be run through the beneficiation plant to reduce the material to 1.2Mt of ore for wet processing. Of the 14.4Mt 91.6% of the material (13.2Mt) is quarry suitable material and will be stored at site, within the quarry approved boundary for future feed stock material.

The dump locations are illustrated in Figure 19.



Figure 19: Dump Locations

5.7. Mining Method

Following early extraction of the Stage 1 high grade zone at the bottom of the pit further pit development adheres to a conventional top-down approach, with pit floor reached at 220RL.

Production scenarios were developed using Spry value optimisation software, with the main constraints being mobile fleet capacity, particle ore sorting capacity and gravity plant capacity. No constraint on the gravity plant head grade was applied.

As the open pit mining will be a contract mining operation, particular emphasis is placed on delivering a schedule with consistent year-on-year physical metrics. Scenarios with varying mobile fleet capacities (2-4Mtpa) were scheduled and analysed against the following criteria:

- Overall project cash flow;
- Volume and year on year consistency of ore flow to the gravity plant; and

Year on year consistency of total material movement.

The base case for equipment selection was the existing EQR mobile fleet of 90t excavator and 50t articulated dump trucks for the following reasons:

- Small footprint and good performance in tighter working areas;
- Utilisation flexibility between the LGS and open pit; and
- Simplification of fleet maintenance (and associated infrastructure) requirements.

A mining method assessment determined that medium sized excavators and accompanying trucks are the most optimal fleet for restarting the existing open pit. Benches will be blasted in 10m heights and mined off in 3.5m flitches by a 190t class excavator loading 55t rigid rear dump trucks. The mine fleet used as the basis of the design is shown in Table 17.

Machine	Туре	Qty	Annualised Hours	Comments
Excavator	EX1900	1	2960	Day shift only. Maintenance on night shift where possible
Excavator	ZX450	1	As required	Production assistance for tight spots or small ore bands
Loader	LH980	2	As required	Used for LG stockpile rehandle to ROM with CAT773 trucks. Second for redundancy
Truck	CAT773	13	2960	Main pit production 7-8 truck limited. 2 trucks from LG rehandle and ROM activities
Dozer	D9	2	As required	1 dump and 1 pit dozer. Dump dozer covers LG if required
Drill	ROC F9	1	As required	Top hammer drill rig or similar

Table 17: Contractor Mining Fleet Details

The equipment productivities assumed are included in Table 18.

Table 18: Equipment Productivities

Component	Productivity rate per hour (t)	Operating hours (hr)	Annual capacity (t)
LGS Mining fleet	331	3024	1,000,000
OC Mining fleet	824	6048	5,000,000
Crushing & Screening	200	6804	1,500,000
Ore Sorting	120	6804	648,000
Gravity Plant	60	6804	408,000
Front End Loaders	350	6048	2,110,000

Mining of both the LGS and open pit shall be performed using conventional excavator and truck operations. Similar sized fleets are utilised in both areas, providing flexibility for mine design, scheduling and operational execution.

Extraction from the LGS is a straightforward load and haul process. Mining will be completed by a 190t excavator working on four metre flitches, with a fleet of Cat773 rigid dump trucks hauling material to the crushing and screening plant.

After year 1, mining will be undertaken from top to bottom on 20m metre benches, commencing in the southeastern section of the LGS and progressing to the north-west. As the LGS thickens, multiple benches will be excavated producing a conventional strip-mining arrangement.

Similarly, open pit mining will be undertaken in a standard drill and blast, load and haul configuration.

Bench geometry will be slightly smaller than the LGS, with a 4-metre height and minimum 20-metre width.

Approximately 8.62 million tonnes of material require blasting in 2023 and 2024, tapering off to 5.6 million tonnes in 2025-27. To maintain sufficient blasted inventory, a minimum 100kt of blasted material is required on a weekly basis. Mining blocks will be a minimum 20x20x30 metres in size, equating to 12,000bcm or 33,000 tonnes. Accordingly, at least 3 blocks will be blasted weekly to maintain the required inventory.

6. Processing

6.1. Overview

The site processing infrastructure is split into two distinct areas on the site. Adjacent to the LGS is the crushing, screening and sorting area, where ROM material is screened and sized. +6,-40mm material is sorted using XRT sorting equipment where approximately 10% of the XRT sorter feed is then crushed and stockpiled for feeding into the processing plant. The remaining 90% of material is barren of tungsten and utilized as quarry material.

-6mm material and the XRT sorter concentrate are then trucked and fed into the processing plant located on the opposite side of the Mulligan Highway. The processing plant is dry fed and produces a tungsten product and waste tailings material.

The locations of the crushing, screening and sorting area, and processing area is shown in Figure 20.

The details of the current and future processing infrastructure is detailed further in Chapter 5: Processing.

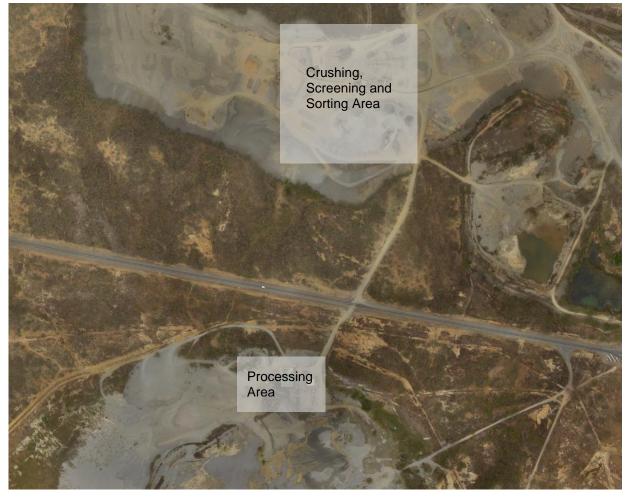


Figure 20: Processing Infrastructure Locations

The scope of the processing infrastructure modernisation and expansion for each of the is split into two distinct phases, these are summarised below.

6.2. Crushing Screening and Sorting Area

6.2.1. Phase 1 Overview

The Phase 1 upgrade of the existing crushing and screening plant has been completed. The scope of these upgrades included:

- Modify the existing crushing and screening infrastructure
- Increase ROM throughput to a nominal 350tph of -700mm material
- Introduce wet screening of -6mm material to improve screening efficiencies during the wet season
- Introduce direct process plant feed of -6mm material to reduce materials rehandling requirements

The existing ore sorter circuit will be utilised for Phase 1. The existing ore sorter is shown in Figure 21.



Figure 21: Existing Ore Sorters

The Phase 1 modifications for the crushing, screening and rehandling circuits are shown in Figure 22 and Figure 23.

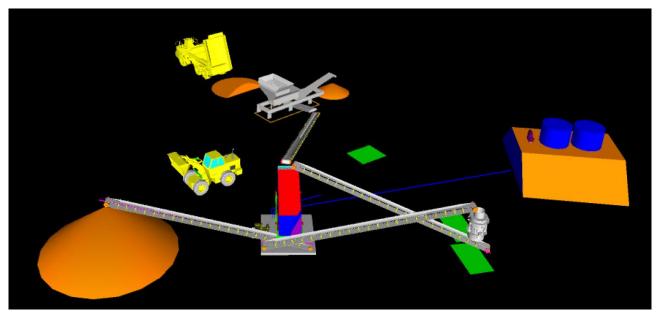


Figure 22: Phase 1 Crushing and Screening Circuit



Figure 23: Phase 1 Rehandling Circuit

6.2.2. Phase 2 Overview

The process design philosophy for Phase 2 for the crushing, screening and sorting plant was to achieve the following process outcomes:

• Construct a new crushing, screening and sorting plant adjacent to the existing plant

- Increase ROM throughput to a nominal 350tph to allow day shift only operations (ore sorter circuit and processing plant to operate 24/7) to reduce the overall operating costs of the operation
- Reduce material rehandling through combining the crushing and screening circuit with the ore sorting circuit
- Increase maximum feed size from 700mm to 1000mm through introduction of a jaw crusher

The Phase 2 crushing, screening and sorting circuits were designed in accordance with the design criteria in Table 19.

Table 19: Phase 2 Crushing, Screening and Sorting Design Criteria

Description	Criteria	Unit
General		
Оге Туре	Dry and clean ore	
Ore Hardness	7	Мра
Ore Abrasiveness	0.79	Ai
Maximum Lump Size	750	mm
Design Life	20	Years
Plant Size	1,000,000	tpa

The Phase 2 crushing, screening and sorting plant is shown in Figure 24.

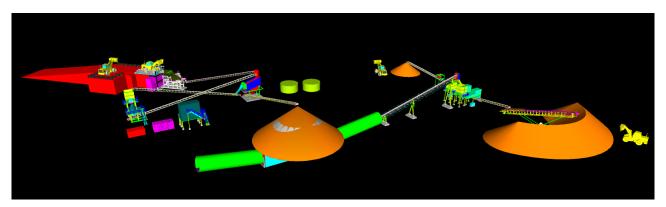


Figure 24: Phase 2 Crushing and Screening and Sorting Circuit

6.3. Processing Area

6.3.1. Phase 1 Overview

The existing processing plant at Mt Carbine is currently operating and successfully treating low grade stockpile and tailings material at a rate of approximately 60tph. EQR has an in-depth knowledge of the processing plant as an owner operator that has treated significant material volumes.

The processing plant is currently achieving the desired plant performance requirements for the feasibility study. Since commencing operations and the treatment of the low-grade stockpiles, EQR has achieved significant plant performance improvements over time by modifying the plant and feed conditions to maximise performance and yield.

Ausenco was engaged as a process plant specialist to review and audit the existing processing plant and identify and prioritise a range of upgrade options to further improve the plant performance for Phase 1.

Scope

The Phase 1 upgrade of the existing gravity processing plant has been completed. The scope of these upgrades included:

- · Pump change outs required to improve the pump reliability and availability; and
- Control room and SCADA replacement as existing components are aged and have been discontinued by the vendor.

Layout drawings of the processing plant are shown below in Figure 25 and Figure 26.

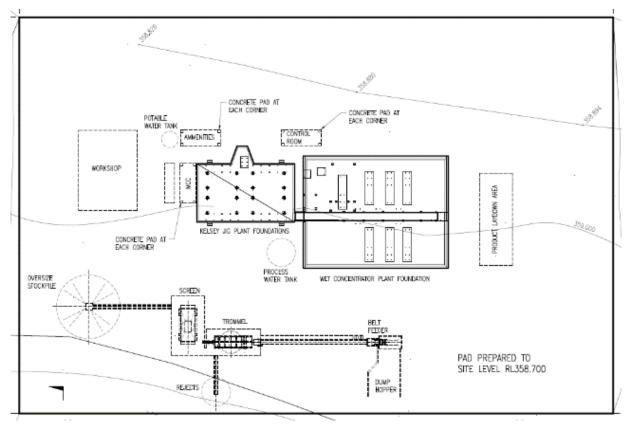


Figure 25: Processing Plant Site Layout

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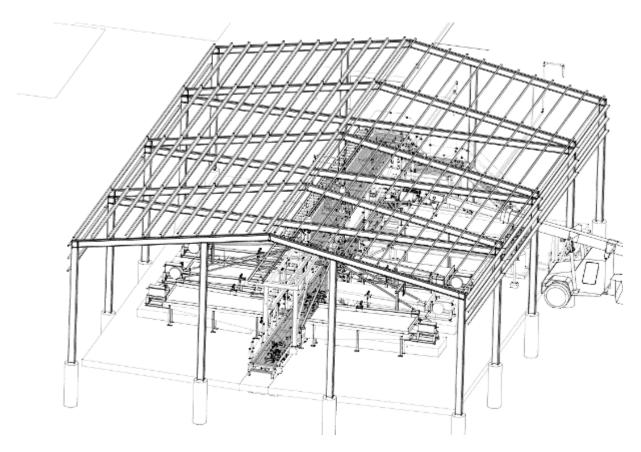


Figure 26: Wet Concentrator Plant

6.3.2. Phase 2

Overview

Based on the current recovery data, the existing processing plant is performing well and the approach to the plant upgrades was to maintain the plant circuitry and process as much as possible while improving the plant recovery performance to support the higher grade feed through the introduction of a scavenging circuit and additional tables capacity.

Operational Review

Ausenco attended the Mt Carbine site on two occasions. The first visit was in May 2021, where preliminary review of operating data and circuit configuration was conducted. Following the site visit several recommendations were made to improve the reliability and recovery of the operation and to collect data to confirm the tungsten losses and flowrates through the circuit.

A second site visit was performed at the beginning of September to further review the operation and to perform a plant sample campaign to confirm the operating parameters and performance for the plant. Two plant surveys were performed by Ausenco personnel during the visit to provide a snapshot of operational performance and to form the basis of engineering work.

Initial review of the site operating data showed that the Mt Carbine plant had an average tungsten shift recovery of approximately 47% between January and May 2021 producing a concentrate grade of 49% WO_3 during the same period.

Analysis of the operating and shift samples showed that the key issue in the plant recovery was in the jigging circuit, associated with high losses from lower grade material. This data is shown in Figure 27.



Figure 27: Jig Recovery vs Feed Grade by Feed Type

A subsequent review of overall plant recovery by ore feed showed two distinct periods of performance. Since the decision not to retreat tailings was made, plant recovery has increased and the range of performance outcomes has also decreased.

Based on the data below recoveries on 'fresh' ore are ~25% higher than those with tailings mixed, averaging 85% WO₃ recovery vs 60% which is clearly shown in Figure 28. The goal of the upgrades is to consistently produce above 80% recovery from the plant through scavenging the jig tailings and increasing the capacity of the table recovery circuit.

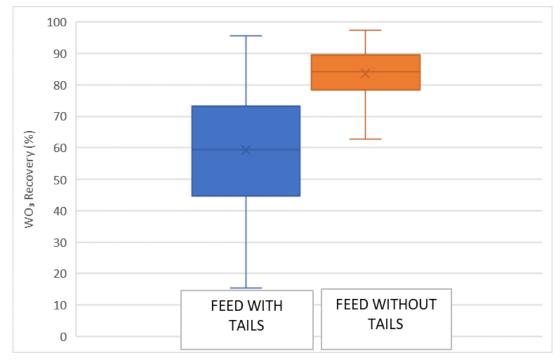


Figure 28: Plant Recovery Comparison with Tails and without Tails

Planned Improvements

The Phase 2 scope has been designed to ensure that the plant recovery does not reduce through the introduction of high grade ore from the open pit.

To support the higher head grade, a scavenging circuit will be introduced to minimise potential losses from the jig circuit. Additional tables will be included to account for the increased WO₃ grade in the feed.

Upgrades to the circuit have been developed based on an incremental and modular approach to design, with the additional facilities targeting the areas of major losses from the existing circuit. Where possible, changes to existing equipment have been minimised to reduce interruption to the existing operation, however due to capacity constraints upgrades to some equipment and pumps are required.

The basis for design (Table 20) for the process plant is summarised below:

- Plant nominal capacity of 60 t/h treating ore with a feed size of P95 -6mm
- Capacity to treat ore with feed grades into the front end of the circuit (jigs) of up to 0.5% WO₃
- Capacity to treat 16 t/h of ore sorter product at 0.85% WO₃ into the table circuit, with the balance of feed from the jigging circuit.
- Operate at average tungsten recovery of 77% from ROM feed to the Jig,
- Design flexibility to process 16 t/h of ore sorter product direct to the table circuit. Under this case, the circuit has been designed for 92% overall recovery which represents the maximum for design case.

Table 20: Design Basis

Criteria	Units	Design
Plant Throughput	t/h	60
Feed Size (P95)	mm	6
Design Feed Grade	% WO ₃	0.5
Overall Recovery (nominal)	%	79.5
Overall Recovery (max for design for table circuit)	%	92%

The main strategy to improve recovery through the circuit is based in increasing current jig capacity to reduce increase jig residence time. Review of the operating parameters and flow through the jigs highlighted that losses in the coarse fraction are most likely due to the low residence time in the jig and also due to the interstitial void of the ragging used.

As an additional means of recovery improvement, the two jigs will treat different size fractions (coarse and fine) which allows individual operating parameters and ragging to be optimised for each size fraction, being:

- Jig Duplication
- Jig Scavenging

In addition to recovery improvements, equipment was checked for capacity constraints. At higher head grades, the table circuit will become overloaded and require additional tables to remain within design loading rates.

6.3.3. Timing and Deferred Scope

Since the completion of the BFS, the timing of the implementation of the gravity processing plant has been updated. The deferred components of the scope are described below.

Jig Scavenging Circuit

EQR plans to undertake onsite trials of the scavenging process using spirals and reflux classifiers with implementation of the additional jig to better understand the circuit recovery and optimise the plant yield. The scavenging circuit is not deemed a critical requirement given the current plant performance of ~85% yield from the current jig configuration which is comfortably above the nominal 79.5% recovery. The scavenging circuit is likely to provide additional yield improvements, and this circuit will be optimised based off scale testing on site, and any capital upgrades will be justified accordingly based off real site data.

Flotation Circuit Removal

The original BFS identified the need for the removal of certain impurities in the concentrate that were originally anticipated to be deleterious to off-take arrangements.

This risk has been mitigated through current sales agreements that will accept the current concentrate elements, this circuit has therefore been deferred indefinitely.

7. Infrastructure

7.1. On Site Infrastructure

7.1.1. Overview

Mt Carbine is currently operating and is well serviced with existing on-site infrastructure to support its operations.

The site infrastructure strategy for the project is to utilise as much as possible the existing site infrastructure and only construct new infrastructure if required to support new or upgraded facilities.

As the overall changes to the footprint and capacity of the mining and associated crushing, screening, XRT sorting and processing infrastructure is minimal, there are only minor site infrastructure modifications required to support the upgraded facility.

7.1.2. Existing Site Infrastructure

The site is already supported by well-established infrastructure supporting the current mine and quarry operations. The facilities include:

- Site access roads;
- Office buildings;
- Car park;
- Laboratory;
- Ablutions facilities;
- Crib areas;
- Power;
- Workshops;
- Site dams & drainage;
- Water supply pipelines;
- Safety and first aid equipment and
- Phone and internet connectivity.

7.1.3. Site Infrastructure Scope (Phase 1)

The scope for the on-site infrastructure work for Phase 1 have been completed and included:

- High voltage power supply and reticulation upgrades (sufficient for Phase 1 and 2);
- Fuel storage tank capacity increase (additional 12,000L) for mining operations; and
- Workshop and warehouse upgrades to store equipment spares and tools etc (containers).

In addition to the planned Phase 1 activities, the following Phase 2 scope items were accelerated and have been completed:

- Water production bore prior to pit depletion to supply the sites raw water requirements and
- Existing site offices will be refurbished to improve general amenities.

7.1.4. Site Infrastructure Scope (Phase 2)

The scope for the on-site infrastructure work for Phase 2 that was included in the original BFS includes:

• Containerised igloo workshops will be constructed for use at the crushing and screening plant and for the mining contractor.

The following Phase 2 scope of work has been deferred based on the elimination of the grinding and flotation circuit:

• Waste management facilities at the wet processing plant;

The following scope for Phase 2 has been identified post completion of the BFS and included in the updated scope and costs.

Dams – TSF4 and TSF3

Phase 2 will include some minor civil remedial works of the TSF4 and TSF3. This work will be undertaken to reinforce the existing dams walls and allow for the proper management of the water circuit. The water circuit and TSF design will be guided by ATC Williams.

The remedial work on TSF3 will allow it to be included as an intermediate component of the site water circuit.

8. Project Execution

8.1. Schedule and Milestones

The key Project execution milestones forecast dates are summarised in Table 21.

Table 21: Key Milestones

Milestone	Forecast Date
Phase 1	
Complete	
Phase 2	
Submit EA Amendment	November 2022
Commence Engineering and Procurement	November 2022
Commence Mining Contractor Mobilisation	February 2023
Approvals Received	March 2023
Commence Construction	April 2023
Open Pit Mining Commencement	April 2023
Construction Complete	December 2023
Commissioning Complete	December 2023
Phase 2 Complete	December 2023

8.2. Project Management

The Project and construction management approach has been determined by the Project's procurement and contracting strategy summarised in Section 8.6.

EQR will engage a project management firm to lead the project management of the Project and operate on its behalf in the management of the services, while incorporating relevant existing site personnel where necessary to provide input and management support.

The integrated management model is presented as a simplified chart below in Figure 29 where dotted line connectors reflect contract agreements while solid lines represent reporting and management responsibilities.

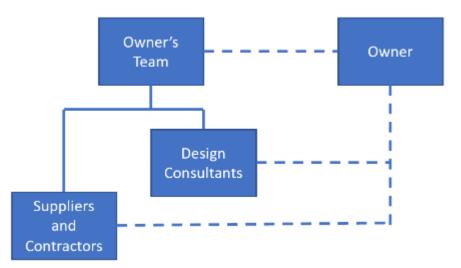


Figure 29: Owner's Team Contracting Structure

The benefits of executing the Project in an integrated owner's team capacity over a traditional engineer, procure, construct (EPC) approach include:

- Elimination of margin duplication (EPC contractor margin on subcontractor margin);
- Greater control of scope packaging and contractor selection;
- Enhanced ability to utilise local labour and contractors; and
- Greater ability to utilise and leverage operations personnel and experience in the management and delivery of the works.

The Owners' Team will coordinate and manage the execution of the delivery packages in accordance with the endorsed contracting strategy. Recognising the brownfield nature of the works and EQR's knowledge of the site, the project management partner will work closely with EQR and its preferred contractors, where appropriate, to maximise the existing knowledge and understanding of the site and existing infrastructure.

8.3. Construction Safety Approach

EQR's policies, procedures and legislative requirements establishes the minimum standards for safe work practices on the site. EQR's execution strategy will develop a culture where leadership is by example. EQR will demonstrate care and ensure an ongoing process of continuous improvement in this model. This will involve everyone, and the ultimate accountability will be by all.

The Project health and safety strategy will include:

- The safety and health management system (SHMS) will be fully integrated into the Project's delivery;
- Construction contractor's construction safety management plans will be assessed to ensure that at a
 minimum they meet the requirements of the site's SHMS prior to mobilisation. Where contractor
 specific procedures and instructions are missing, these will be developed by the contractor, approved
 by the Owners' Team and incorporated into the sitewide SHMS;
- Statutory requirements as per the Mining and Quarrying Safety and Health Act 1999; and
- Aim to reduce employee risk by minimising high risk activities and reducing the labour requirements on site through the use of off site works, pre-assembly, modularisation and lower labour installation methodologies.

In accordance with the Mining and Quarrying Safety and Health Act 1999, the SSE will be the statutory safety authority over all activities on the mining leases. Once construction commences, the construction team will be required to liaise with the Site Senior Executive (SSE).

The SSE will appoint in writing suitable parties to fulfill electrical obligations for the execution and operations in accordance with the Mining and Quarrying Safety and Health Regulation 2017.

Leadership of safety will be at all levels and a key criteria of individuals' site performance and position descriptions.

8.4. Construction Risk

The Owners' Team will actively manage construction risks and work closely with all contractors involved with construction on a regular basis. The Owners' Team will routinely audit the safety performance and risk management activities of its contractors utilising the site's existing risk management platform.

The Project's approach to risk management is detailed in Chapter 14: Risk and Opportunity.

8.5. Construction Surface Water Management

There is no requirement to substantially alter the existing drainage infrastructure currently supporting the site and its operations. As far as construction activities are concerned, the only surface water management requirement is to ensure that all local runoff from the contractor's site is captured and directed into the site's existing drainage system.

Figure 30 below illustrates the site's drainage system.

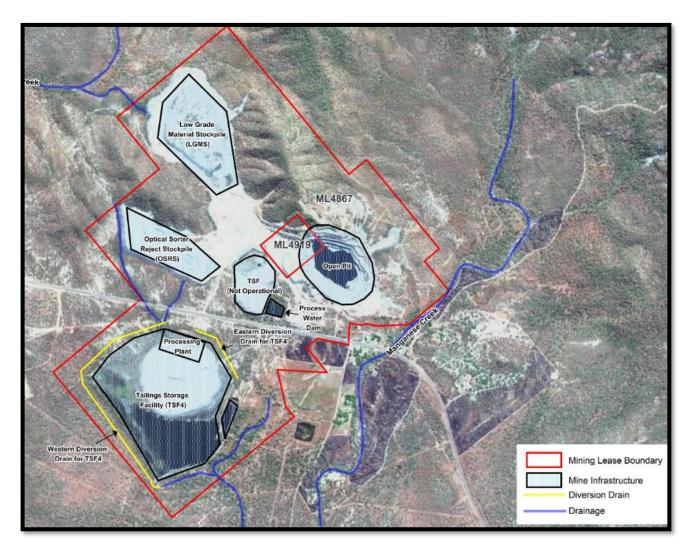


Figure 30: Sitewide Drainage

8.6. Contracting Strategy – Phase 2

The scope of Phase 2 has been assessed and split into contract packages for the procurement and implementation management by the Owner's Team. The major packages are summarised in Table 22.

Package Type	Description
Decim	Crushing, Screening and Sorting Plant
Design	Process Plant Upgrade
	Structural Steel and Platework
	Pipework
	Valves
Supply	Conveyors
	Crushing and Screening Equipment
	Process Equipment
	Electrical and Instrumentation
	Core Shed

Table 22: Major Contract Packages

Package Type	Description
	Water tanks
	Workshop
Construct	Concrete
	Structural, Mechanical and Piping
	Electrical
	Electrical and Instrumentation
	Workshop
	Core Shed

At the commencement of detailed design, long lead items will be identified and procured as a priority to ensure the schedule.

A decision will be made during the procurement phase as to whether any or all of the concrete, structural, mechanical, piping (SMP) and electrical and instrumentation (E&I) packages are split between the crushing screening and XRT sorting plant or combined into sitewide packages.

8.7. Shut Downs and Tie Ins

Whilst the Project is by nature a brownfield upgrade, a large proportion of the scope can be constructed effectively with minimal interface with the ongoing operations.

8.7.1. Phase 2

Crushing Screening and Sorting Plant

The new crushing, screening and XRT sorting plant is physically separated from the existing crushing plant, so its construction can occur with minimal interference to existing operations.

The XRT ore sorters will be relocated at the latest possible time, after no load commissioning of the feed and discharge conveyors is completed to minimise the down time in XRT sorter operations.

The electrical tie in to the 500kVA substation will be completed during operational down time.

Gravity Processing Plant

The gravity processing plant requires a significant number of tie ins to allow for the installation of new additional process equipment.

The equipment will largely be installed in and around the existing plant equipment. The tie in strategy for the new equipment to minimise the impacts on the existing operations involves the installation of a new motor control centre (MCC) for all new equipment. This allows for the electrical wiring of the equipment to be done to an MCC that is not live and mitigates the risk of incorrect electrical isolation when installing the equipment.

Where pipes and equipment tie into the existing gravity processing plant, as much will be installed as possible prior to a plant shut down to install the tie ins. These may be done on a circuit-by-circuit basis to minimise the length of each shut down. A detailed shut down and tie in philosophy and plan will be developed in the execution phase.

9. Operations Management

9.1. Operating Philosophy

The Mt Carbine site is a mature operating site that has been running since the gravity plant started hot commissioning in February 2020. The EQR CEO is involved through strategically guiding the operation and Company from an explorer to a fully-fledged operation. The EQR CEO has over 30 years' of experience in managing mining operations through North America, Europe, and Africa. This experience has aided the development of a cohesive hands-on management approach and operations team development and restricted the reporting chain to ensure employees are empowered in their roles for efficient decision making and optimal outcomes.

EQR is an equal opportunity employer with support for bullying and harassment in the workplace as it works to build a team of skilled individuals from surrounding communities. The operation has an extensive Health and Safety Management system that protects employee's physical safety.

The operations are guided by the Integrated Management System (IMS) which addresses the intended outcomes of ISO 9001:2015 Quality Management Systems, ISO 14001:2015 Environmental Management Systems and IOS 45001:2018 Occupational Health and Safety Management Systems. The application of the Integrated Management System Manual (IMSM) will:

- Demonstrate EQR's ability to consistently provide quality quarry products that meets customer requirements and tungsten concentrate to meet the requirements of CRONIMET Australia and its downstream customers;
- Enhance customer satisfaction;
- Enhance environmental performance;
- Continually improve occupational safety and health;
- Achieve legal and other requirements; and
- Deliver on quality, environment, safety, and health objectives.

9.1.1. Operations Roster

The Operations Roster states the shift and leave cycles and demonstrate the impact of the cycles on productivity, ability to attract the required workforce, lost time, and costs. The operating cycles should be benchmarked against current local practice and international best practice.

9.1.2. Operational Approach (Phase 2)

The operating philosophy for Mt Carbine at completion of the Project will split between owner-operated and contract operated.

The open pit mining inclusive of drill and blast will be contract mined. The reasoning for this is that the skill requirement for the mining is outside of EQR's core capability, and to retain a lean organisational chart, contract mining was deemed to be the most sensible approach for the operations.

Given the inherent interrelation between the open pit mining and the LGS mining (a constant feed to the crushing and screening plant is required, though the source between the LGS and the open pit will alternate to suit the mine plan), the mining of the low-grade stockpiles will also be included in the open pit contract miner's responsibilities.

The battery limit for the contract mining will be the discharge of the run of mine (ROM) material either in the crushing and screening plant feed bin or adjacent. The basis of the feasibility study has allowed for the crushing and screening plant to be owner operated. If commercial benefits are identified in shifting to a contracting crushing and screening operation this option may be pursued in the future.

The gravity processing plant circuitry and operating philosophy remains largely unchanged and the operating philosophy for this reason will also remain unchanged. The gravity processing plant operating time will increase from week on-week off to full time operations, so the manning will increase, but the operating philosophy and shift and management structure will remain the same.

EQR will retain responsibility for the overall safety of the site through the SSE and the IMS as a guiding document for the site. EQR will also be responsible for the development of the quarterly mine and production planning along with the ore quality management. All these costs have been accounted for in the EQR financial modelling. More detailed mine planning will be the responsibility of the contract miner appointed at the relevant time in the future.

9.2. Maintenance

The full-time maintenance team will comprise of the following positions:

- 1 x Maintenance Superintendent;
- 1 x Maintenance Foreman;
- 2 x Fitter;
- 1 x Boiler Maker;
- 1 x Boiler Maker Apprentice; and
- 2 x Electricians.

9.2.1. Mining

All maintenance on the mining equipment shall be the responsibility of the mining contractor. Mining equipment owned by EQR shall be provided for use free of charge to the contractor. The contractor shall be responsible for the maintenance of the free issued equipment in accordance with an approved maintenance schedule.

Until the mining contractor takes on the maintenance of the heavy earth moving equipment, a maintenance contractor will continue to complete heavy vehicle maintenance at site, working 2-3 days at site each week while the LGS mining is ongoing. This arrangement has been proven to work as it is currently being used on site.

9.2.2. Crushing, Screening and Processing

The day-to-day maintenance of the crushing and screening plant and the gravity processing plant will largely be undertaken by the maintenance team that is on site on a full-time basis. The team is highly skilled in the repair and maintenance of the plant and equipment and are currently providing all standard maintenance for the crushing, screening, and gravity processing plant.

Preventative Maintenance will be completed on an ongoing basis with each section of the processing plants, crushing and screening, sorting and the gravity plant receiving a planned 12hr shut down weekly to undertake required maintenance tasks. Any specialty jobs will have the relevant contractor brought in to complete the work. Capital projects will be outsourced to contractors as and when required to ensure the maintenance team stay focused on the maintenance of the crushing and screening plant.

To manage the maintenance at the Mt Carbine operations, EQR has taken out a subscription on the FIIX Maintenance Management software, this provides for the detailed tracking of maintenance and inventory for the site along with cost allocations to the plant and equipment used by the mine and associated analysis and reporting.

9.2.3. Mobile Machinery

Mobile machinery will be serviced at regular hour service intervals of 250, 500, 1,000, 2,000, 3,000, 5,000 and 6,000. This will be completed by an external service provider such as Toddy's Machinery Maintenance that

specialises in work of this nature. A service schedule will be put in place to ensure work is completed according to required scheduled service intervals to maximise life of machines and their continued operational capabilities.

9.3. Transport and Logistics

The mine is located at 6888 Mulligan Highway, Mt Carbine which is easily accessible from all main ports, rail heads and cities in Far North Queensland. The highway is completely sealed and in good condition. As the mine is currently operational, supply chains and strong relationships have been setup with all major suppliers for equipment on site and ongoing spares required.

Transport of oversize equipment to site is easily achievable as evidenced by the delivery of the earth moving fleet delivered by CRONIMET in September 2021.

The concentrate is then transported via truck, by others, to the Townsville Port for export. Other Ports available for use are the Port in Mackay and Brisbane. Therefore, there are several major ports available to use for any international shipments.

The Cairns airport is approximately a 2-hour drive from site and is easily accessible for either people or freight deliveries. Due to the site being in Far North Queensland, spares are often flown into Cairns or Townsville and trucked to Mareeba as a central distribution point.

9.4. Procurement and Supply

Accounts have been setup with all major suppliers as the operation has been running for nearly two years through its pilot phase operations. Relationships and supply chains required for the operation have been established with a secure supply of parts and consumables required for ongoing operations.

The operation is relatively simplistic in nature and therefore no complicated sourcing of materials is foreseen by the operations team. The site is seen as semi-remote as it is approximately a 1-hour drive from a major township, therefore, planning is required for some of the more mine specific items as major transporters only deliver 3-days per week or for the items that are not be held in stock in Mareeba or Cairns.

With the industrial support base of Far North Queensland industry, it has been found that operationally, most spare parts can be delivered within a 24-hour period should a rush order be required. All deliveries are made via sealed highway, with no access issues to the site for oversized deliveries.

9.5. Administration

The administration for the project will continue to operate under the Corporate Services team led by the Administration Manager in a holistically similar manner regarding the current systems and protocols in place for ongoing operations. Going forward, EQR will employ an additional accountant to support the current staff contingent with the Corporate Services team operating on an 8hr per day, 5-days per week basis. EQR has established accounting and procurement systems and service providers to satisfy all requirements.

9.6. Health and Safety

9.6.1. Eliminating Hazards & Reducing Risks

Risk planning and management is central to the Company's activities, EQR's operations are only conducted when the risk is within acceptable limits and as low as reasonably practicable (ALARP).

The risk planning and management processes developed and implemented at the Mt Carbine site aim to provide a logical and systematic method of identifying, analysing, evaluating, treating, monitoring, and communicating risks.

The following hierarchy of controls is applied to mitigate risk to a level which is ALARP:

- Elimination/Removal;
- Substitution;
- Engineering/Isolation Control;
- Administration;
- Personal Protective Equipment; and
- Human Behaviour.

The hierarchy of control is to be used to control hazards identified for all risk management processes. Less reliable control measure (e.g., administrative, PPE or safe behaviour controls) should only be implemented as part of a holistic control strategy in addition to controls from the other, more effective categories, or on their own where the level of current risk is ALARP.

9.6.2. Risk Management – Principles and Guidelines

EQR's risk management is developed to comply with the requirements of AS/NZ ISO 31000:2009 Risk Management – Principles and Guidelines.

9.6.3. Management of Change

EQR Change Management (EQ RESOURCES-SAF-PRO-0034) procedure outlines processes for the prevention of non-compliances resulting from changes in the workplace at the Mt Carbine operations.

9.6.4. Procurement

All purchasing of materials, equipment and services are undertaken to ensure that any safety and health considerations are considered. Hazards are to be identified and assessed prior to the hire or lease of equipment or the supply of services or goods. Verification must be supplied that the delivery of equipment or supply of services complies with appropriate safety and health specifications, the Procurement Officer on site is responsible for this task.

9.6.5. Contractor Management

Contractors are pre-approved according to Contractor Management Procedure (EQ RESOURCES-SAF-PRO-0017) prior to attending site. Contractors approved by the SSE receive an induction before working on site. The induction covers site procedures necessary for that contractor's role.

If a contractor is required for a short-term emergency task on the mine site (such as repairs to phone lines) then that contractor will receive the visitor's induction and remain under the supervision of a fully inducted person during their time on site.

All contractors are required to provide and maintain a safe and healthy work environment and are responsible, as a minimum, for performing work to EQR safety and health standards.

9.6.6. Safety and Health Monitoring

It is essential to assess performance to evaluate progress against the requirements, targets, objectives, and to establish plans for continuous improvement.

To properly assess needs EQR:

- Conducts a systematic review of the corporate guidelines, standards, systems, and processes to verify the current standards and controls in place;
- Conducts audits and assessments at determined frequencies to measure the level of compliance and progress to the standards, and assist in the correction and prevention of any systemic issues;

- Reviews performance and accountability processes to indicate progress or deviations for early corrections; and
- Ensure procedures for Management Review and Health and Safety Objectives detail the processes to be applied.

9.6.7. Safety and Health Compliance

Periodic, at least annual, evaluation of compliance with applicable legal and other requirements will be planned to use the EQR internal and external audit schedule, in addition, legal compliance system Safety Law provides regular updates (at least monthly) to legal and other requirements.

9.6.8. Environment

The Environmental Programs (EPs) (maintained by EQR) are used to establish, implement, control, and maintain processes to meet the requirements of the IMS and implement the environmental objectives identified by the Company. The Environmental Monitoring and Reporting System (EMRS) records information pertinent to the implementation of the IMS governing the operations. The data is used to identify potential environmental risks that require management to assess achievement of the environmental objectives.

9.6.9. Roles, Responsibilities and Authorities

EQR's SSE has responsibility to ensure that the IMS is implemented. Tasks have been assigned by the SSE to Department Managers. The Department Managers may delegate the task to other personnel; however, the responsibility remains with the Department Manager. Safety, Health, Environmental & Training Manager supports the SSE and other managers in meeting the quality, environment, safety, and health objectives, and have responsibility for monitoring the implementation of the quality, environment, safety and health procedures.

Roles	IMS Responsibilities
Site Senior Executive	Establish and communicate overall direction.
	• Develop quality, environment, safety and health policies.
	• Consider quality, environment, safety, and health requirements.
	• Develop quality, environment, safety, and health objectives.
	 Appropriately resource quality, environment, safety, and health management.
	• Ensure quality, environment, safety, and health compliance.
	Promote continual improvement.
	 Identify interested party needs and expectations.
	Review the operation of the IMS.
	Conform to IMS requirements.
	Promote customer focus throughout the Company.
Operations Manager	• Consider quality, environment, safety, and health requirements.
	• Develop quality, environment, safety, and health objectives.
	 Appropriately resource quality, environment, safety, and health management.

Table 23: Roles and Responsibilities

Roles	IMS Responsibilities							
	• Ensure quality, environment, safety, and health compliance							
	 Promote continual improvement. Identify interested party needs and expectations. Review the operation of the IMS. Conform to IMS requirements. 							
	Promote customer focus throughout the Company.							
Department Foreman	Implement quality, environment, safety, and health proced							
	Review the operation of the IMS.							
	Conform to IMS requirements.							
	Participate in Management reviews.							
	Ensure loaded product meets physical and chemical specifications.							
Safety, Health, Environment &	Monitor and report on overall IMS performance .							
Training Manager	Review the operation of the IMS.							
	Identify and deliver training requirements.							
	Communicate and correspond with relevant regulators/local government regarding quality and environmental management.							
	Conform to IMS requirements.Develop quality and environmental policy.							
	• Ensure the IMS conforms to the relevant ISO Standards.							
	 Maintain quality and environmental management system changes. 							
	Ensure loaded product meets physical and chemical specification.							
	Develop safety and health policy.							
	Maintain safety and health management system changes.							
	Report on the performance of the safety and health management system to management.							
All Personnel	Conform to IMS requirements.							
	• Discuss quality, environment, safety, and health improveme ideas with management.							
	• Stop the process when the quality of the product is compromised, the environment has or can be affected, or the safety and health of workers is at risk.							
	Participate in quality, environment, safety, and health improvement programs.							

9.7. Control of Records

Records shall be kept of all tasks and activities which relate to the IMS and to operational aspects which have the potential to affect the quality of the product, safety and health of people or the environment.

The records to be kept, shall include records required by acts, regulations, statutory codes of practice, and required by Australian Standards referenced in acts, regulations, and statutory codes of practice.

9.8. Accommodation

Employment will continue from the local region, so that the employees can work on a drive in, drive out (DIDO) basis. Employees are currently doing this, and it has worked fine for all parties involved. Certain personnel that live in more distant locations, for example Cairns, rent a space at the Mt Carbine Caravan Park, next to the mine site, for the duration of their shift and commute to their place of residence at the conclusion of their swing. The Mt Carbine Motel also offers operators and contractors nightly rates with meals included for those working on shift or performing contracts in the area.

9.9. Emergency Response Plans

EQR's Emergency Response Management Plan (EQ RESOURCES-SAF-PLN-0003) minimises the level of risk to life, property, and the environment due to an emergency situation.

The EQR Emergency Response Management Plan describes the immediate actions required by designated site personnel.

All personnel are required to undergo site and specific area inductions to familiarise themselves with locations of emergency equipment and evacuation points. Emergency contact details and procedures are provided during their induction.

10. Closure and Rehabilitation

10.1. Approach

The closure strategy encompasses a staged approach to rationalising land and water management, environmental monitoring and compliance.

- Stage 1 includes a review of existing site conditions and the Environmental Authorities (EAs); identifying necessary modifications as relevant and developing a plan to affect change.
- Stage 2 is the development of an optimisation plan for the land and water management and monitoring across the Project site.
- Stage 3 involves updating supporting regulatory and management documentation and implementation.

Although a source of licensing complexity, the co-existence of the quarry and mining activities results in the beneficial re-use of tailings and low-grade ore stockpiles located on the site that are remnant from previous operations on the site; as well as the use of non-mineralised material and reuse of process residues associated with the renewed open pit mining. This is a significant outcome for rehabilitation and closure considerations *ie* the solid wastes (process residue and waste rock materials) associated with mining are inventory for the quarry.

10.2. Risk

The Risk Assessment for the Project is presented in the BFS and have not materially changed in this update. From a closure perspective, failure to achieve the intended outcome, expressed as being the successful surrender of the EAs that apply to the land on which quarry and mining activities occur, is the risk. The reason for failure may be technical or regulatory and are not necessarily independent. Technical reasons for failure broadly concern environmental values such as land and water; whereas the regulatory reasons pertain to, for example, license conditions and overarching legislation.

11. Environment and Approvals

11.1. Current Status

The land relevant to the Project site is used for quarry and mining activities as per the respective licenses (EA EPPR00438313, dated 16 March 2021 for the quarry and EA EPML00956913, dated 1 December 2020 for the mine). Notifiable activities are defined in Schedule 3 of the Environmental Protection Act 1994 (EP Act). No notifiable activities are planned to occur as part of the quarry activities under EA EPPR00438313. Lot 13 on Plan SP254833 is included on the Environmental Management Register (EMR) as the site has been subject to the following notifications associated with the mining activity undertaken pursuant to EA EPML00956913: Mine Waste, Mineral Processing, Petroleum Product or Oil Storage. Environmentally relevant activities (ERAs) are defined in the Environmental Protection Regulation 2019 (EP Reg). The ERAs listed in Table 24 are licenced under EA EPPR00438313 for the quarry and under EA EPML00956913 for the mine.

Table 24: Existing ERAs for the Project Site

ERA No.	Activity	Threshold					
EA EPPR00438313 for the quarry activity							
16	Extractive and Screening	Extraction and Screening 3: Screening, in a year, the following quantity of material (b) more than 100,000t but not more than 1,000,000t					
16	Extractive and Screening	Extraction and Screening 2: Extracting, other than by dredging, in a year, the following quantity of material (b) more than 100,000t but not more than 1,000,000t					
EA EPML009	EA EPML00956913 for the mine activity						
14	Electricity Generation	Ancillary 14 - Electricity Generation 2: Generating electricity by using a fuel, other than gas, at a rated capacity of (a) 10MW electrical to 150MW electrical					
8	Chemical Storage	Ancillary 08 - Chemical Storage 4: storing 200t or more of chemicals that are solids or gases, other than chemicals mentioned in items 1 to 3, under subsection (1)(d)					
15	Fuel Burning	Ancillary 15 - Fuel burning: Using fuel burning equipment that is capable of burning at least 500kg of fuel in an hour					
31	Mineral Processing	Ancillary 31 - Mineral processing 2: Processing, in a year, the following quantities of mineral products, other than coke (a) 1000t to 100,000t					
8	Chemical Storage	Ancillary 08 - Chemical Storage 3: Storing more than 500 cubic metres of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3 under subsection (1)(c)					
8	Chemical Storage	Ancillary 08 - Chemical Storage 5: storing 200 cubic metres or more of chemicals that are liquids, other than chemicals mentioned in items 1 to 3, under subsection (1)(d)					
8	Chemical Storage	Ancillary 08 - Chemical Storage 1: Storing a total of 50t or more of chemicals of dangerous goods class 1 or class 2, division 2.3 under subsection (1)(a)					
Schedule 3 19	Mining	Schedule 3 19: Mining metal ore, other than a metal ore mentioned in items 11, 12, 14, 15, 16,17 or 18					

In regard to the requirement for an End Of Waste (EOW) code for the Mt Carbine Project, the Administering Authority has determined that an EOW approval or code is not required.

11.2. Relevant Environmental Legislation

There are Commonwealth, Queensland and local government legislation that are relevant to the broad topic of management of values, a list of legislation is provided below. The Project is an existing activity and is licensed to operate. For the proposed renewal of open pit mining an application to amend the existing EA will be necessary and is discussed in Chapter 10.

Commonwealth legislation:

- Environmental Protection and Biodiversity Conservation Act 1999
- Native Title Act 1993
- National Environmental Protection Council Act 1994
- National Greenhouse and Energy Reporting Act 2007
- Energy Efficiency Opportunities Act 2006
- Clean Energy Act 2011

Queensland legislation:

- Environmental Protection Act 1994
- Mineral and Energy Resources (Financial Provisioning) Act 2018
- Mineral Resources Act 1989
- Aboriginal Cultural Heritage Act 2003
- Queensland Heritage Act 1992
- Water Act 2000
- Planning Act 2016
- Transport Infrastructure Act 1994
- State Development and Public Works Organisation Act 1971
- Nature Conservation Act 1992
- Environmental Offsets Act 2014
- Vegetation Management Act 1999
- Biosecurity Act 2014
- Waste Reduction and Recycling Act 2011
- Local Government Act 2009

Local Government – Mareeba Shire Council

- Local Government is not recognised in the nation's constitution and owes its existence to State Government legislation (Local Government Act 2009). The role, functions and boundaries of Local Governments are subject to the discretion of the State Government.
- Mareeba Shire Council Planning Scheme 2016.

11.3. Required Approvals

The EA for the mining activity i.e. EA EPML00956913, dated 1 December 2020, permits mineral processing at an annual rate of 1,000t to 100,000t. An application for an increased rate of mineral processing to an annual rate of 500,000t was submitted on 1 December 2021.

Notwithstanding that the renewed activities:

- will be limited to the existing bounds of the MLs;
- occur on land areas that have been disturbed by previous mining activities; and
- the existing EA EPML00956913 includes conditions relevant to these impacts;

it will be necessary to apply for an EA amendment for the mining activity ie EA EPML00956913.

A register of the required approvals in included in Table 25.

Table 25: Approvals Register

Application Path	Permit	Legislation	Agency/ Assessment Manager	Project Aspect	Required to commence construction or to commence operation	Comments
EA amendment application	EA EPML00956913	EP Act	Department of Environment and Science	Mine	Necessary for increased rate of production through the process plant.	Complete
EA amendment application	EA EPML00956913	EP Act	Department of Environment and Science	Mine	Necessary for renewal of open pit mining.	Required for Phase 2.
Application	Water Licence	Water Act 2000	Department of Regional Development, Manufacturing and Water	Mine	Not expected to be required.	There is no moratorium over the area, or a groundwater management plan, and no requirement for development approval for drilling. It is not expected that a licence will be required.
Application	Road Corridor Permit	Transport Infrastructure Act 1994	Department of Transport and Main Roads (TMR)	Mine	Not expected to be required.	The Project area has been dissected by the State Road since grant of title. It is expected that the Blast Management Plan, developed with stakeholder engagement, will address TMR's requirements

11.4. Environmental Management and Monitoring

As detailed in Chapter 9: Closure and Rehabilitation, a strategic approach has been adopted to monitoring and reporting. The overarching intent is for all environmental monitoring and compliance programs, together with all associated reporting prepared under the auspices of the EAs, Progressive Rehabilitation & Closure Plan (PRCP) and PRCP schedule and similarly for future regulatory tools, to serve not only the purpose of compliance but to ultimately provide evidence for successful closure and final relinquishment.

12. Community and Stakeholders

12.1. Guiding Principles to Community and Stakeholders

EQR is a value-oriented resource company, sustainably producing and managing new economy minerals and metals. Embedded in our philosophy is minimising our footprint where possible. The guiding principles for community and stakeholder engagement are summarised in Table 26.

Table 26: Guiding Principles

	Guiding principles						
			(¹⁷ Shad the sector birth from the barbar states -				
We will be	Proactive	Flexible and inclusive	Genuine	Respectful	Responsive		
This means	We will engage with communities early and often, so that we understand and respond to their interests and concerns.	We will offer a range of engagement opportunities that are tailored to the variety of needs and preferences of the community.	We will have authentic conversations with the community, clearly explaining what can and can't be influenced.	We understand that not everyone will support our projects. We will create an environment to have professional conversations.	We will close the loop, providing feedback to the community on how input has been taken into consideration.		

12.2. Engagement Approach

The focus for EQR is delivering value for investors and sustainably producing new economy minerals and metals, while minimising its footprint where possible. This including in the communities in which it operates. The Community and Stakeholder Engagement Plan (CSEP) sets out the framework for effective consultation and engagement. While the implementation plan uses a broad range of tools and techniques to ensure we are meeting the needs of stakeholders and delivering consistent messages in a timely manner.

Gathering different views contributes to a richer understanding of how to effectively meet the organisation's goals and inform the engagement or communication that needs to take place. It is important for EQR because:

- Support It will support its operations and help new growth projects in the region.
- Social licence Maintain and improve its social licence, supporting current and future opportunities in the region.
- **Trust** Lead the conversation about change, creating trust, and open communication with the community and all stakeholders.

The focus of engagement activities is to work with those most impacted by the Project's operations or who have a high level of influence on the Project at each phase.

12.3. Stakeholders

A stakeholder risk assessment was carried out to map relevant stakeholders in terms of their interest in potential sites for different option types and their potential to influence Project outcomes. The analysis identified four overarching stakeholder categories, defined in the Stakeholder Mapping and Consultation Register (the

Register). The Register is a living document and to be updated as interactions with stakeholder occur. The Register will help identify trends, monitor activities for which reporting metrics can be extracted.

Figure 31: Stakeholder Matrix (Source: Mara Consulting)

(High influence/Low impact)	Dialogue (High influence/High impact)
Stakeholders have a high degree of influence but will not feel a direct impact from the decisions. Make sure they have the right information. Keep satisfied	Stakeholders have high influence and will feel the impact of decisions. Make sure they understand the project, impacts, opportunities and how they are being managed. Engage
Information giving (Low influence/Low impact)	Consultation (Low influence/High impact)
These stakeholders have little influence and will not feel a direct impact from the decisions. They will have views to consider as part of decisions. Keep informed	These stakeholders are likely to be directly impacted by the project but can't influence decisions. It is important to understand their needs and gather feedback. Consult

12.4. Potential Issues and Mitigations

During the planning and research of developing the plan, a SWOT analysis was completed. This assisted in the evaluation of the Project, including identifying internal and external factors, that may impact the Project in both positive and negative ways. Each statement was examined with appropriate actions identified to capitalise on strengths and opportunities and mitigate weaknesses and threats. An analysis of the items raised helped to set clear priorities for the engagement.

Pre-empting and proactively managing stakeholder issues is crucial to the overall success of the Project. Given the nature and profile of the Project, stakeholder expectations require careful management.

Table 27 identifies risk considerations related to the Project.

Table 27: Risk Considerations

Risk Considerations*	Yes	No	Potentially
Is the Project politically sensitive (either local or state government level)?		✓	
Is the Project likely to cause disruption to essential community services?		V	
Is the Project likely to impact on environmentally sensitive areas?			✓

Risk Considerations*	Yes	No	Potentially
Is the Project likely to cause disruption to local residents or businesses?	1		
Is the Project likely to be opposed by any groups or individuals within the community?			~
Does the Project deal with issues or decisions that are likely to be controversial or divisive?			~
Is the Project likely to attract a media attention (either positive or negative)?			~

* Note – the risk considerations will be regularly updated as the Project progresses. This is an overview of potential risks.

12.5. Communication and Engagement

Underpinning the Project team's commitment to effective engagement is mutual respect. The team is committed to:

- Honest and straightforward dealings with stakeholders;
- Providing accurate and timely information to stakeholders;
- Using plain language to describe Project activities;
- Actively listening and acknowledging other points of view; and
- Respecting individual and cultural differences always.

Engagement methods will vary depending on the purpose and expectations of the engagement. Selecting the right tool and taking time to plan the engagement process will help build trust and buy-in from stakeholders.

12.6. Complaints and Enquires Management

EQR (or designated contractor) will receive Project enquiries and complaints via a dedicated Project hotline and Project specific email. This contact information will be included on all communications materials related to the Project. The Consultation Register will be used for the duration of the Project. EQR (or designated contractor) will:

- Record details of every complaint or enquiry in the Consultation Register including date and time of complaint and how the complaint was received;
- Record full name, address and preferred method of contact for the complainant;
- Record how the complaint or enquiry was managed and closed out;
- Investigate and determine the source of the complaint;
- Record action taken, officers involved, details of resolution and response times;
- Refer misdirected complaints or enquiries to the appropriate authority; and
- Produce monthly reports to ensure complaints are managed effectively.

12.7. Timing

Engagement and communication are a cradle to grave approach, that is it is ongoing through the operations of the Mt Carbine facility. During operations, there will be a need to increase activities to support the Project's lifecycle phase. Specifically, between late 2021 and early 2023 two environmental approvals will be sought.

Phase 1 EA to increase processing of current stockpiles to 500,000 tpa was received in early 2022.

Phase 2 EA is seeking to dewater and recommence mining tungsten in the existing pit area. The crushing and screening plant and processing plant will be upgraded to further reduce operating costs and increase the tungsten recovery. The Project timeline is summarised in Section 8.1.

Consultation will support the technical studies, with targeted engagement with affected stakeholders. An implementation plan will guide communication and engagement tided to the Project timeline. Initially, the focus will be to introduce the operation and amendments to stakeholders, followed by gathering feedback on the Phase 2 proposal, particularly with directly impacted stakeholders.

Communication and engagement are rarely static, and they are likely to change on a regular basis. Mt Carbine will change and have different stakeholder requirements at each stage of the Project. Each stage of the Project will be an opportunity to gather feedback and support the Project. At each point in preparing engagement activities, we follow four general phases: preparation, planning, delivery, and review.

13. Capital Cost Estimate

13.1. Accuracy of Estimate

The accuracy of the capital cost estimate is considered to be in accordance with Budget / Authorisation Estimate as defined by AACE 47R-11 Standard: Cost Estimate Classification System – As Applied in Engineering, Procurement, and Construction for the Mining and Mineral Processing Industries.

Updates to the BFS estimate have been included when more accurate pricing has been obtained post BFS closure.

13.2. Estimate Basis

13.2.1. Direct Costs

Consultants were engaged to provide engineering and estimating services for their relevant scopes in accordance with a AACE 47R-11 Class 3 estimate.

The consultants engaged to provide input into the estimate are listed in Table 28.

Table 28: Estimate Contributors

Estimate Scope	Consultant
Crushing and Screening Plant Sorting Plant Tailings Dewatering Plant	Mincore
Processing Plant	Ausenco
High Voltage Power Upgrade	Woodburn Electrical
Site Infrastructure Project Management	JukesTodd
Approvals and Rehabilitation	NRA Environmental Consultants

The basis of the estimating methodologies for the various scope components are summarised below in Table 29.

 Table 29: Direct Cost Estimate Methodology

Description	Base Case
Earthworks	Consultant in-house database of costs for recently completed projects.
Buildings	Recent historic equivalent purchases by EQR.
Concrete Works	Priced from consultant in-house database and compared to previous Mt Carbine project actual costs.
Major Mechanical Equipment (packages over \$10k)	Budget quotes from OEMs based on equipment datasheets.
Minor Mechanical Equipment (packages under \$10k)	Consultant in-house database of costs for recently completed projects.
Structural Steel Supply	Consultant in-house database of costs for recently completed projects.

Description	Base Case
Platework	Consultant in-house database of costs for recently completed projects.
Structural, Mechanical and Plate Work Installation Costs	Unit man-hours per tonne of steel and equipment.
Piping	Consultant in-house database of costs for recently completed projects.
Electrical Control and Instrumentation supply	Factored from historic projects and checked using reference projects.
First Fills and Spares	Factored from historic projects and checked using reference projects.
HV Upgrade	Firm quote from local contractor familiar with the site and project.
SCADA Replacement	Firm quote from local contractor familiar with the site and project.
Container Workshops	Consultant in-house database of costs for recently completed projects.
Engineering	Budget estimates provided by engineering consultants delivering the relevant study scope.
Mobile Equipment	Firm pricing from OEM suppliers or advertised available second hand prices.

13.2.2. Indirect Costs

The basis of the estimating methodologies for the indirect cost components are summarised below in Table 30.

Table 30: Indirect Cost Estimate Methodology

Description	Base Case
Approvals	Known government fees and budget pricing for consultant activities.
Project Management	First principles manhour build-up against the execution schedule.
Contingency	Risk ranging was performed on the capex items and a Monte Carlo simulation was performed to develop a P90 contingency estimate.
Escalation	Given the short duration of the Project, escalation was not included in the capital estimate.

13.3. Estimate Summary

Estimate summaries at WBS level 1 are provided in Table 31 for the Phase 2 project costs to go.

Table 31: Estimate Summary

WBS Code	WBS Descriptions	Cost (AUD)
10000	Mining	2,401,000
20000	Processing	10,198,531

WBS Code	WBS Descriptions	Cost (AUD)
30000	On-site Infrastructure	746,676
70000	Project Indirects	773,024
80000	Owner's Costs	879,786
90000	Contingency	1,516,591
	Total	16,515,608

14. Operating Cost Estimate

14.1. Basis of Estimate

14.1.1. Accuracy of Estimate

All operating costs are presented in real terms as of 15 October 2022. All cost assumptions were derived from cost data from varying sources:

- Mining costs were developed using a combination of existing real mining cost data combined with contractor pricing (Golding Contractors);
- Crushing screening and sorting pricing from existing data combined with consultant pricing (Mincore); and
- Processing plant pricing from existing data combined with consultant pricing (Ausenco).

Based on the alignment between contract data, and DAS Mining Solutions equipment data base, the order of accuracy for mining equipment has been determined to be between -10%/+15%. This order of accuracy also applies to the crushing, screening, sorting, and processing opex costs based on current expenditure at Mt Carbine.

14.1.2. Source Documentation

For the compilation of the operating cost estimate, all activities were identified relating to the extraction of ore from the open pit mine and LGS to loading of trucks at the mine gate. Cost estimates were then developed for each activity benchmarked against the following:

- First principles estimates;
- Consultants' data derived from similar external projects;
- Use of actual costs from the existing operation; and
- Contracts currently in place at Mt Carbine.

The activities were separated into:

- Mining activities to deliver ore to the ROM pad;
- Crushing, screening, and sorting;
- Processing; and
- Other site related costs.

14.2. Key Assumptions

The key assumptions utilised in the operating cost estimate are included in Table 32.

Table 32: Operating Cost Estimate Key Assumptions

ltem	Assumption
Base Data	Products or services used in more than one function of the operation were identified and used as standard cost assumptions. These items include diesel fuel, explosives, and electricity.
Diesel Fuel Prices	The fuel price is based on the current average prices of existing operations at Mt Carbine. The wholesale cost of diesel fuel was estimated at AUD2.101. Upon application of the diesel rebate (after GST removal) of AUD0.401/L, the diesel price used for opex costs was AUD1.70.

ltem	Assumption
Explosives Costs	Estimates were provided for drill and blast costs by Golding. to include drilling, emulsion supply, loading, stemming, and shot firing and included in the all in \$6.00/t rate.
Electricity	The electricity price is based on the forecast provided by the current mine supplier (Ergon). Forecasted data is based on recent historical usage and was considered the most accurate. The electricity price used for opex costs was AUD0.19 per kWh.
Exchange Rates	The base case AUD/USD foreign exchange forecasts assumed, for the duration of the operations is an average of 0.68.

14.3. Operating Cost Summary

All operating costs are presented in real terms as of 15 October 2022 in Table 33. Further details pertaining to the development of the mining and processing scope and costs can be found in Chapter 4: Mining and Chapter 5: Processing.

Table 33: Summary of Operating Costs per Tonne

Operating Cost Item	Cost (USD)
Operating costs of FCA (real) steady state life of mine (C1 cash cost)	118/mtu
Operating Cost Components	Cost (AUD)
Mining Costs	
• Open pit mining costs of for mining of the open pit by a contractor	6.00/t
LGS Mining for 24/hr operations (Phase 1)	2.48/t
LGS Mining for 12/hr operations (Phase 2)	1.69/t
Mine Closure/Rehabilitation & Ancillary Equipment	0.26/t
Dry processing costs	2.00/t (feed)
Ore Sorting costs	1.30/t (feed)
Gravity processing plant costs incl. by-product management	12.15/t (feed)
Other costs based on internal estimates, lease vehicles, grade control, sampling, drilling and lab testing, contractor mobilisation to site, maintenance facility cost and contractor demobilisation.	1.671/t

15. Risk and Opportunity

15.1. Scope

The risk management activities which were conducted to support the development of the feasibility study and prepare for the execution phase of the project include:

- Completion of initial Project risk assessments and identification;
- Establishment of the Project Risk & Opportunity Register;
- Identification of Project related compliance obligations, including any risks of non-compliance; and
- Ongoing management of risks, compliance obligations and actions.

15.2. Risk Assessment Process

The risk assessment process has to date and will in future continue to involve desktop reviews, interviews with key EQR personnel and stakeholders, and subject specific workshops. The consolidated product of that assessment process is presented to the EQR management team to validate.

All risks are captured in the Project Risk & Opportunity Register.

Risk management involves identification, assessment and management of risks and opportunities with the ability to impact on:

- Health and Safety
- Security
- Natural environment
- Assets
- Project cost / schedule
- Schedule / production
- Project return
- Compliance / governance
- Community
- Reputation
- Shareholder value

15.3. Risks

The key risks identified during the feasibility study are summarised in Table 34.

Table 34: Key Risks

Risk ID	Risk	Cause	Impact	Current Controls	Current Rating
2	HV / LV interaction	Poor traffic management Fatigue	Injury, vehicle damage	Installation of berms on the haul road (divided road) LV to have separate roads Radio protocols Fatigue Management Plan	High

Risk ID	Risk	Cause	Impact	Current Controls	Current Rating
5	Noise and dust pollution	High silica content in dustHealth impact on site personnelWater trucks Water added to crusher PPEOlder equipment First crusher (rock) screen has no dust controlImpact on neighbours 		Water added to crusher PPE Wet screen being added to crusher Good stakeholder	High
7	Loss of production	Poor mining productivity Wet season impact	Failure to achieve financial targets	Mine planning Redundancy in mining equipment Addition of wet screening Increased equipment sizing	High
10	HV / LV accident on the Mulligan Highway crossing	No controls on the road HV operator not stopping before crossing highway	Fatality	Traffic speed control on both sides of the highway installed. Phase 1 design includes slurry of fines to reduce number of crossings required.	High
11	Personal injury	Heavy equipment impacting on OH HV power lines Increased site traffic Energy sources - electrical, air, hydraulic	Fatality	High vis signage around electrical equipment Operators trained in lockout / tagout procedures	High
15	Increased rehabilitation obligations	Application for new EA due to increased production plan	Delays in approvals Increased ERC bonding	Maintaining current disturbance footprints under both EAs	High
17	Pit retains mine affected water at the time of commencing the cutback	Big wet season	Delay in commencement of mining	Current dewatering process, readily escalated in need	High
20	Unknown pit stability on completion of dewatering and on cut into South Wall Fault	Unknown deterioration of rock face and geotechnical conditions	Potential safety incidents Pit wall failure	Plan for detailed geotech assessment before introductioin of people and equipment into the pit. Conservative rock bolting and face stability design included in operating costs.	High
22	Blasting impact on local community	Proximity to local community Location of magazine	Fly rock, dust, fumes, vibrations, etc Delays in approvals	Comprehensive Blast Management Plan to be developed, following detailed risk assessment	High
25	Waste rock may prove to not meet quarry rock spec	Higher sulphate	Additional areas required to separate mine waste from quarry waste rock Increased ERC	Planned geochemistry testwork and geological testing to ensure compliance with licensing requirements	High
26	Beneficial reuse comes into question	Policy change	Increased ERC	Received written direction from the State	High

A number of Medium and Low Risks have also been identified and included in the Project Risk Register and will be carried forward for consideration during subsequent stages of the Project. The Project Risk Register is a dynamic document, revised as appropriate to reflect changes as the project develops.

The key opportunities identified during the study are summarised in Table 35.

Table 35: Key Opportunities

Risk ID	Risk	Cause	Impact	Current Controls	Current Rating
29	Increased quarry revenue	Increased marketing By-products from process plant Large volumes of quarry inventory	Increase production revenue	Test work and R&D under way - suitable for road construction materials EOIs released	Significant
32	Potential reduction in the cost of funding	Potential NAIF and the Critical Minerals Fund	Lowest interest rate on debt	Meeting with Critical Minerals Facilitation Office planned for early October NAIF application process underway	Significant
35	Additional resource identification	Current cut off grade of resource model is 0.2%, changing cut off grade to 0.7% for a low grade feed similar to LGS could increase revenue and ore significantly	Increase in resource quantity and overall tungsten production from open pit	Plan to redo resource model with additional drill data to be obtained early 2022	Significant
37	Favourable geotechnical conditions on South Wall Fault found during future geotechnical investigation	A rock wall stabilising cost has been included in the operating estimate. Future geotechnical data may indicate a lower level of reinforcement is required to maintain wall stability.	Operating cost savings for pit wall stabilising.	A conservative design and costing is in place in the event that significant reinforcement is required.	Significant

A number of Medium and High Opportunities have also been identified and included in the Project Risk Register and will be carried forward for consideration during subsequent stages of the Project.

16. Ownership, Legal and Contractual

16.1. Tenure

Mt Carbine Quarries Pty Ltd, a wholly owned subsidiary of EQR, is the authorised holder of mining leases ML 4867 and ML 4919, with the boundaries shown in Figure 32 in relation to the existing site infrastructure. All operations on the Mt Carbine site are carried out by either Mt Carbine Quarrying Operations Pty Ltd or Mt Carbine Retreatment Management Pty Ltd (MTCRM) based on their operational areas. Mt Carbine Quarrying Operations Pty Ltd is 100% owned by EQR. Mt Carbine Retreatment Management Pty Ltd which is an unincorporated Joint Venture (JV) between EQR and CRONIMET Australia (Pty) Ltd (CRONIMET).



Figure 32: Mining Lease Boundaries

MTCRM is the operating company for the unincorporated JV between EQR and CRONIMET Australia. The JV was established for the funding and processing of the historic tailings at Mt Carbine and the 12,000,000t Low Grade Stockpile (LGS) and the recovery of the tungsten contained therein. As it is a 50/50 JV, funding for the establishment of the gravity processing plant, XRT Sorting Plant, earth moving fleet and ongoing operational costs have been carried by the JV since 2019 on an equal basis. Where either of the parties have carried additional costs, this has been accounted for in the accounts of the JV.

17. Investment Evaluation

17.1. Summary

Investment evaluation of the Project has been undertaken to support EQR in the determination of the viability of the Mt Carbine Expansion Project.

The overall valuation has been completed to the standard required by EQR to put forward the business case for an investment approval request and support the necessary project financing required to deliver the project.

A financial model for evaluating the Project has been created by Rock Financial Advisory (Rock), where the key outputs examined are net present value (NPV) and internal rate of return (IRR).

Since the original model, the latest model has been refined further to incorporate the new mining schedule as defined in EQR's most recent Mineral Reserve Estimate. This has replaced the original mine scheduling for the open pit with the methodology of using the LGS to top up crushing/screening and gravity processing plant should there be additional capacity available. All other fundamentals and principles have been held across the models with certain parameters being upgraded as set out in Section 14 – Operating Costs.

The financial model was created using inputs based on both, actual operating history of the project over 2022, as well as forecasts from site-staff and consultants.

The financial model reflects only the activity in this feasibility study, and does not include any underground mining which there is potential for

The key outputs from the model can be seen in Table 36 below, and please note that this document presents only pre-tax and ungeared returns (NPV and IRR).

Description	Financial Model
NPV (pre-tax and ungeared)	\$209.5 million
IRR	397%
Payback Period	1.5 years
Discount Rate	8.00%

Table 36: Investment Evaluation Key Outputs

The NPV has increased by circa AUD\$80 million since the last BFS released nearly 12 months ago (December 2021), which reported an NPV of \$131 (using the same 8% discount rate).

The macroeconomic, operational, and strategic factors presented in this section underpin the comprehensive financial model analysis completed for the basis of this economic study.

The economic model was developed to incorporate critical financial impacts required to undertake the development and operation of the project including estimated capital expenditures and deferred capital, revenues generated, and operational expenditures. Tax payable and funding options are contained in the financial model, but not included in the NPV and IRR reported.

Based on current assumptions data the project is estimated to generate cashflows, starting 1 November 2022 of:

- \$324M before any capex, tax or financing;
- \$299M after adding on capex, and GST and equipment finance costs (which are akin to operating costs);
- Pre-tax, pre-financing NPV of \$209.5M
- IRR of 397%. The IRR is substantial, due to the double benefits of:

- Some of the capex has now been spent (versus at time of writing the original BFS in December 2021)
- The Project is now nearer to steady state production and also closer to the five years of larger open-pit revenues (versus where the Project was last year)
- Expected payback is June 2023, being 18 months from the Project start date of January 2022 (when capital first started to be spent) calculated via:
 - Taking the Capex of \$20.6M, being the total capex of the Project (approximately \$4.9M already spent)
 - And calculating when cumulative forecast cashflow (starting 1 November 2022) exceeds the capex amount of \$20.6m - and this occurs in July 2023

The strong cash flow is driven by the cut back of the historic open pit and the ramp-up of mining and ore delivery from the open pit to the crushing and screening plant. It is noted that tax is not payable until mid 2025-thus further increasing early post-tax cashflows.

Based on current modelling, the economics of the open pit peak is in 2026, delivering a pre-tax cash flow of \$81M, this is due to:

- The low strip ratio is the lowest of any year;
- The highest grade open pit of any year at 0.35% (LGS grade is constant at 0.075% every year); and
- APT payable increases to 72.5% from 72% in the previous year.

On depletion of the current ore reserve accessible through open pit mining, that has been modelled for the purposes of this document, the intention is to extract additional ore from pit extensions that will be firmed up by additional drilling and underground mining activities. A scoping study on the underground mining option was completed April 2022 with a positive outlook on the underground potential and further definition will be undertaken in the future. Should an economic solution be defined for the potential underground ore reserves, the positive economics and strong cash flow is expected to continue.

17.2. Methodology

The financial model was built on the various inputs as described above. The valuation and the design were based on a 15-year life of mine, from 2022 to 2036.

Typical finance calculations have been added to arrive at a range of valuation measures as well as being a cashflow forecasting tool, which can show cash balances out to 2036. The parameters used in the financial model are summarised in Table 37 and Table 38.

Calendar Year	Price USD/ t	AUD/USD	Price	e AUD\$/t	APT Payable
2022	\$ 34,000	0.620	\$	54,798	0.700
2023	\$ 34,000	0.652	\$	52,147	0.700
2024	\$ 35,000	0.670	\$	52,239	0.700
2025	\$ 35,500	0.670	\$	52,985	0.700
2026	\$ 36,500	0.670	\$	54,478	0.725
2027	\$ 36,750	0.700	\$	52,500	0.750
2028	\$ 37,000	0.700	\$	52,857	0.750
2029	\$ 37,250	0.700	\$	53,214	0.750
2030	\$ 37,250	0.700	\$	53,214	0.750
2031	\$ 37,250	0.700	\$	53,214	0.750
2032	\$ 37,250	0.700	\$	53,214	0.750
2033	\$ 37,250	0.700	\$	53,214	0.750
2034	\$ 37,250	0.700	\$	53,214	0.750
2035	\$ 37,250	0.700	\$	53,214	0.750
2036	\$ 37,250	0.700	\$	53,214	0.750

Table 37: Financial Model Revenue Parameters

Table 38: Financial Model Parameters

Item	Assumption
Valuation date	A valuation date of 1 November 2022 has been used.
Inflation Rates	All data is in real dollars as at October 2022 i.e. no inflation has not been applied, thus no CPI index used
Discount Rate	The pre-tax NPV uses a discount of 8.00%
Discount Period	Over the LOM of 15 years i.e., 1 November 2022 to 31 December 2036
Other Revenue Parameters	 Concentrate production with a minimum of 50% WO₃, within product specifications. As the project progresses and higher-grade ores are accessed, higher grade concentrates will be produced;
	 Base Price: calculated on a metric tonne unit (mtu) of WO₃ contained in a dry metric tonne delivered FCA Mt Carbine (INCOTERMS 2010);
	Index: London Metal Bulletin (LMB) European APT;
	 Payment terms: 95% payment upon delivery of product and 5% balance payment upon final settlement based on weighing and assay results.
	Recovery through plant:
	 Ore sorter product - 90%
	 Gravity processing plant - 79.5%
Royalty Payable	2.7% of gross Tungsten revenue to Queensland State Government
	Paid to Traditional Owners: Nil
	Paid to other parties: Nil
Timing1 November 2022- 31 December 2036 (14.1 years), with open pit mining years and thereafter LGS mining and quarry revenue continue	
	All key capex spent over 2022 and 2023 (with some already spent in 2022)
Native Title Compensation	No payments are applicable

ltem	Assumption
Rehabilitation	A cost of \$0.20/tonne of open pit ore mined has been included

As this document reports only a pre-tax and pre-funding NPV, assumptions with regards to debt, interest rate, depreciation, and income tax rate (which all feed into tax payable), do not affect the NPV reported. However, for information, basic details are shown in Table 39.

Table 39: Tax Assumptions

Item	Details
Debt	 \$10M of funding via a royalty has been modelled, with \$5M received in CY2022, and \$5M received in early CY2023
	 Approximately \$4M of yellow goods and XRT Sorter under equipment finance at 5% over 3 to 5 years
Depreciation	Depreciation has been calculated as follows:
	 Accumulated depreciation and amortization at time of writing of \$13.4m, which is further depreciated/amortized over 10 years
	 All other capex that is yet to be spent is depreciated on a linear basis over 10 years
Corporate Income	Corporate Income tax of 25%
Тах	Carry forward tax losses as at time of writing of \$30M

17.3. Taxation

The Project falls under the Australian taxation system and is an incorporated Australian legal entity that is taxed as part of the EQR consolidated group.

For simplicity, the financial analysis in this chapter utilises stylised Australian tax rules to estimate tax payable:

- Capital costs and certain expenses are capitalised during construction as assets and depreciated for tax using a straight-line depreciation over a 10-year period;
- All expenses incurred by the project during operations are assumed to be tax deductible, with capital costs depreciable;
- All interest expenses incurred in financing the project have been assumed to be tax deductible.
- As EQR has significant tax losses, this analysis includes those losses and has modelled them accordingly;
- The impact of GST has been included in the economic evaluation.

17.4. Financial Analysis

The Project Base Case is premised on a stand-alone project with a mine life of approximately 14 years. EQR will design, construct, finance and manage the project. The open pit mining is expected to be operated via a mining contractor who will provide all mining equipment and with the Company's current earth moving fleet used for mining of the LGS and the removal of wastes. The dry and wet processing plants will be operated by the Company and will be a scale-up of ongoing operations with general site infrastructure being upgraded as required. Capital costs for the project will therefore be limited with ample capacity to support a feed processing rate of 1 Mtpa, split between the LGS and the open pit mining operations.

The project is currently operating and going through the early works expansion to increase production outputs. FY2022, is planned to produce 1,203t of concentrate, with the next four years producing between 2,764 to 5,783t of concentrate per annum, before reducing to an average of 1,193 tonnes of concentrate produced yearly for the remainder of the project.

This analysis has been based on the assumptions listed in the previous sub-sections and the following:

- Mining method which operates open pit mining and low-grade stockpile mining;
- Average of 2,063 tpa of minimum 50% WO₃ concentrate sold on a FCA basis;
- Capital costs to go of \$16.5M (real) (including contingency of \$1.5M);
- Tungsten concentrate production has an estimated C1 Cash Cost of AUD\$174/mtu (US\$118/mtu) (real) steady state life of mine;
- Mining costs broken down as follows:
 - Mining costs of \$6.00/t (real), for mining of the open pit by a contractor;
 - LGS Mining for 24/hr operations at \$2.48/t;
 - LGS Mining for 12/hr operations at \$1.69/t;
- Mine closure and ancillary equipment at \$0.20/t;
- Dry processing costs of \$2.00/t (real) based on estimates provided as detailed in Section 14;
- Ore sorting costs of A\$1.30/t to ore sorters (real) based on estimates provided as detailed in Section 14;
- Gravity processing plant costs of \$12.15/t of feed (real) based on estimates provided in Section 14 with \$0.34/t for tailings management;
- Other costs of \$1.67/t (real) based on internal estimates, lease vehicles, grade control, sampling, drilling and lab testing, contractor mobilisation to site, maintenance facility cost and contractor demobilisation;
- Logistics and marketing costs are for the CRONIMET account and are reflected in the APT payable received for concentrates sold from the Project.

17.5. Sensitivity Analysis

17.5.1. NPV Sensitivity

The base case NPV is \$209.5m.

The figure below illustrates the Project's NPV is most sensitive to the FX rate, and the tungsten price

The results were as follows:

- The AUD / USD exchange rate has the most positive effect on the NPV, producing the highest NPV on the graph below of \$383 million, when it is decreased by 20% (i.e. a weak AUD increases the AUD revenue). The weighted average FX rate across LOM = 0.68, and a 20% decrease = 0.55.
- The AUD/ USD also had the highest negative effect as well, with the NPV decreasing to \$115m, from a 20% increase in the AUD/USD exchange rate.

Changes in capex have the least effect on the IRR, which is logical as capex is small at circa \$16M (remaining to be spent), versus Revenue of \$596M, thus percentage changes in assumptions that affect revenue will have a higher effect.

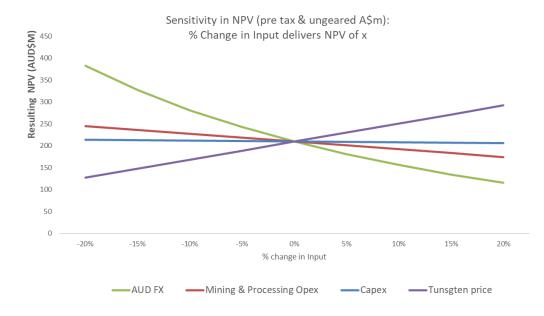


Figure 33: Sensitivity of the NPV to Changes in Key Assumptions

17.5.2. IRR Sensitivity

The base case IRR is 397%.

Changes in the NPV sensitivity inputs, had the same effect on the IRR, in that changes in the AUD/ USD have the most effect on IRR, and changes in the four inputs to revenue, all have equal second highest effect.

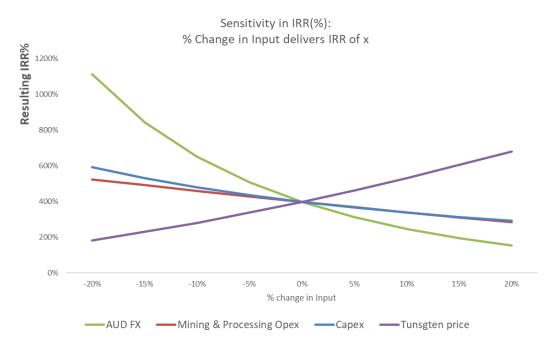


Figure 34: Sensitivity of the IRR to Changes in Key Assumptions

17.5.3. Breakeven Analysis

The model has been tested to determine the change required in key inputs to reach a "breakeven" level, by flexing / changing one input at a time.

A breakeven level can be defined numerous ways but for the purpose of this analysis, it's defined as an IRR of 0% return.

In this testing, the four revenue inputs would require the least change to deliver an IRR of zero thereafter, the AUD / USD would require the least change to reduce the IRR to zero.

The findings of the breakeven analysis were:

- The AUD would have to increase by 74% across all years. This would mean the AUD increasing from base case (average LOM) level of 0.68 to 1.14 (a level that has not been seen in 30 years);
- Conversely, the capex would have to increase by 1469% (capex is a small contributor to cashflow thus can withstand much larger increases before the revenue could not "cover" it).

The breakeven analysis is summarised in Table 40.

Table 40: Breakeven Analysis

Assumption	Change Required to reach IRR of Zero
Сарех	1469%
Mining & Processing Opex	126%
AUD	74%
Tungsten Price	-52%

18. List of Abbreviations

Abbreviation	Description
ADT	Articulated dump truck
ALARP	As low as reasonably practicable
APT	Ammonium paratungstate
AUD	Australian dollar
Capex	Capital expenditure
CEO	Chief Executive Officer
СМОС	China Molybdenum Co Ltd
CPI	Consumer Price Index
CRONIMET	CRONIMET Australia Pty Ltd
CSEP	Community and Stakeholder Engagement Plan
E&I	Electrical and instrumentation
EMRS	Environmental Monitoring and Reporting System
EOW	End of waste
EP	Environmental Program
EPC	Engineer, procure, construct
EQR	EQ Resources Limited
ESG	Environment, Social Governance
FCA	Free carrier
FEL	Front end loader
FX	Foreign exchange
GHG	Greenhouse gas
GST	Goods and services tax
HGZ	High-grade ore zone
IMS	Integrated Management System
IMSM	Integrated Management System Manual
IRR	Internal rate of return
JORC	Joint Ore Reserves Committee
JT	JukesTodd
JV	Joint venture
LGS	Low grade ore stockpiles
LMB	London Metal Bulletin

Abbreviation	Description
LOM	Life of mine
ML	Mining Lease
MTCRM	Mt Carbine Retreatment Management Pty Ltd
MTU	Metric tonne unit - one mtu equates to 10kg. The term is used as the pricing basis for APT
OC	Open pit
Opex	Operating expenditure
RL	Relative level
Rock	Rock Financial Advisory
ROM	Run of mine
SCADA	Supervisory control and data acquisition
SDG	Sustainable Development Goals
SHMS	Safety and health management system
SMP	Structural, mechanical, piping
SSE	Site Senior Executive
W	Tungsten
XRT	X-ray transmission



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SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES SEPTEMBER, 2022

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	 Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	 The Ore Reserves have been based on two separate block models, one for the low-grade stockpile and the other for the open pit operation. The geological model used to develop the final low-grade stockpile resource model was generated by Measured Group Pty Ltd in August 2021 and is titled 'Mt_Carbine_LGS_20210820.bmf'. The geological model used for the open pit operation was developed by Measured Group in July 2022. The Mineral Resources are inclusive of the Ore Reserves.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	The competent persons visited site on 6 th September 2022 and was provided access to all areas to see how the LGS stockpile reclaim works were progressing along with the processing infrastructure upgrades.
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered. 	 Mining studies have been completed to a Suitable level of detail, with a detailed mine design cut into two phases and subdivided into 3.5m high benches. The designed pit solids were intersected with the latest geological model and then adjusted for loss and dilution. A bench-by-bench schedule was compiled with the in situ, ROM and product information for each dig solid analysed in a financial model. Upgrades to the processing equipment have been completed to a Suitable level of detail (+/-25%) by Ausenco. Key performance parameters such as unit operating costs, metallurgical parameters, etc. have been based on historical performance at site where practical.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	 A cut-off grade of 0.075% WO₃ has been applied for calculation of the Reserve within the low-grade stockpile. A cut-off grade of 0.05% WO₃ has been applied in the open pit geological model, however after loss and dilution calculations are completed, the final feed grade to the processing plant is as low as 0.08%. A cut-off grade analysis has indicated that these two parameters are conservative and generate sufficient cash flows.
Mining factors or assumptions	 The method and assumptions used as reported in the Pre- Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). 	 Mining of the low-grade stockpile is currently being undertaken by a 50t excavator and fleet of 45t articulated dump trucks. Front end loaders with, ~6m³ buckets, will be used around the crushers, screens, ore sorters and for general clean up. Mining of the open cut operation will be completed in two phases: completion of the current pit design down to RL300 completion of a new phase which widens most of the current pit, with the exception of the north-west corner, down to RL225. The open pit will be mined with 1 x 190t class excavator, with a 11m³ bucket and a fleet of 55t rigid rear dump trucks. A secondary 50t excavator, fitted with a ~3m³ bucket, will also be used where required. The fleet will move up to 5.5Mt of waste and ore annually.





Criteria	JORC Code explanation	Commentary
	 The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. The infrastructure requirements of the selected mining methods. 	 The open pit operations will be supported by ancillary equipment including a grader, water cart and dozers. A 3m³ bucket on the secondary excavator will allow the excavator to selectively mine the relatively thin orebodies and keep dilution quantities to a minimum. All waste and ore will be drilled and blasted at a powder factor of approximately 0.8 kg/bcm of material. Due to the vertical nature of the orebodies, grade control will be paramount. It is proposed to complete grade control via a combination of mapping, face sampling and grade control drilling, utilizing mostly angled holes. Open-pit ramps have been designed at 10% maximum gradient at a width of 20m. Geotechnical parameters for the majority of the open pit are based on the existing pit's design which has performed well and remained relatively unchanged since mining stopped in the 1980s. The key geotechnical parameters for the open pit wall are: Batter height - 20m Batter height - 8m Currently, the only known area of geotechnical risk exists on the southern wall near the south wall fault. A geotechnical analysis of this wall indicates that the current pit design will require rock bolting at close intervals to minimise the probability of this wall causing geotechnical disruptions. Capital and operating cost allowances have been made in the financial assessment to monitor and treat this wall as it is exposed in the final wall. The two upper benches in the south wall, which are located in weathered material, have been excavated at 50 degrees and 57 degrees as specified by the geotechnical assessment.
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	 The low-grade stockpile at Mt Carbine is processed through a combination of crushers, screens, an ore sorter and wet plant circuits to generate a concentrate containing approximately 50% WO₃. Existing Infrastructure The existing crushing and screening flowsheet consists of two stages crushing and dry screening circuits to produce two products: -6mm wet plant feed +6mm, -40mm ore sorter feed Run of mine (ROM) ore (-700mm) is reclaimed from the low-grade waste stockpile and is delivered to the fixed jaw crusher. The jaw crusher has a closed side setting of -75mm. The jaw crusher discharge belt transfers primary crushed ore onto a 900mm wide screen feed conveyor. The screening plant consists of a mobile fitted with two decks to split the feed into two streams: Oversize (+40mm) to the cone crusher circuit Undersize (-6mm) to the -6mm stockpile The secondary cone crusher discharge is fed onto a belt conveyor and recirculates back to the sizing screen for separation into product sizes. The existing ore sorter consists of a single hopper feed point, dry screen to dress ore before the ore sorter and a single ore sorter. The ore sorter circuit produces two products: Rejects +6mm, -40mm ore sorter oversize that is crushed by a cone crusher to -6mm for feed





Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	 into the processing plant. Ore is fed into the existing processing plant and onto a wet screen which separates the - 6mm material and the +6mm material. The +6mm material is sent back to the ore sorter for processing. The -6mm particles are pumped to a pulse jig where the high density, tungsten bearing particles are concentrated and pumped to a secondary wet screen with 0.8mm panels on the screen. The +0.8mm particles are fed to a rolls crusher and then pumped back to the front of the screen while the -0.8mm sized material is dewatered and sent to six shaking tables. The shaking tables produce a rougher concentrate which is pumped to a final cleaner table.
		 The tailings from the rougher tables are pumped back to the screen, to be jigged once more to minimise losses and increase recovery. The cleaner table produces a final concentrate which is bagged immediately. The tailings from the cleaner table are pumped back to the secondary screen, to undergo sizing and crushing once more to ensure minimal losses. A significant amount of data is available on the metallurgical performance of the existing processing infrastructure.
		 New Infrastructure The existing ore sorter will be upgraded to accommodate the proposed increase in annual ore tonnage. The treatment rate will be 80 tph to achieve an annualised throughput of 525,600 tonnes.
		 The upgraded ore sorter circuit flowsheet has been prepared by Mincore, a minerals processing and engineering consultancy. Additional processing infrastructure, which will allow the site to mine up to 1mtpa of ore, has
		been designed and costed (both capital and operating) by Ausenco in 2021, a multinational engineering consultancy firm, to Suitable-level of detail.The proposed additional processing infrastructure will process ore at a rate of 60tph.
		 Historical performance data plus results of metallurgical test work completed by the Sustainable Minerals Institute in 2021 has been referenced when analysing the performance of the ore sorter.
		 Historical performance data plus results of laboratory metallurgical testing completed by Ausenco as part of the plant expansion project has been referenced when analysing the performance of the processing plant.
		 Current off-take agreements consider the following potential deleterious elements: Sulphur Tin Molybdenum Lead Arsenic
		 Water None of the above elements have been modelled in either the low-grade stockpile or open- pit geological models. However, forecast sale prices, which align with current off-take agreements, apply a substantial penalty to the benchmark tungsten concentrate price reflecting the presence of deleterious elements which Mt Carbine concentrate may contain. Historically, Mt Carbine has relatively high levels of arsenic and the processing plant proposed by Ausenco contains an arsenic removal module which will be used when levels of this element become too high.



Criteria	JORC Code explanation	Commentary
		Historically, Mt Carbine concentrate has been sold to customers in several locations including Europe, the United States, Vietnam, and China reflecting the acceptance of the product in the open market.
Environmen-tal	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 The site currently has all required environmental approvals to mine, crush and screen material from the pit. The mine and quarry activities occur on previously disturbed lands. The surrounding land use is rural-urban (Mount Carbine township), low-intensity cattle grazing, mining and exploration, and conservation (the Brooklyn Nature Refuge). The background land tenure (Lot 13 on SP254833) is Brooklyn Nature Refuge, which is held by the Australian Wildlife Conservancy as a rolling term lease – pastoral (Title Reference 17664140); a special condition of this lease is to allow quarry material to be removed. There are no wetlands of national or international significance mapped in the project site or the receiving environment. There are no High Ecological Value Waters (watercourses), High Ecological Value Waters (wetlands) or Wetlands of High Ecological Significance mapped in the project site or the receiving environment. Waste rock has historically shown minimal to no acid producing potential. Waste rock characterization has not been completed at Mt Carbine, therefore selective placement of this material has not been included as part of the scheduling and haulage modelling work.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	 Mt Carbine is an operational site and is supported by well-established infrastructure for the current mine and quarrying operations. Current facilities include offices, laboratory, ablutions as well as crushing, screening and processing facilities. Mt Carbine's current processing facilities can process ore at approximately 60tph, however this will be increased to accommodate the planned 1Mt of ore mined annually. Capital costs for the required crushing, screening and processing infrastructure have been estimated to a Suitable level of detail and included in the overall economic evaluation of the site. The competent persons are satisfied that enough detail has been included in the capital cost estimate for the new processing facilities. Access to site has already been established via the Mulligan Highway which runs through the operation. Power to the site is currently supplied via two supplies segregated by the Mulligan highway into east and west. The eastern side is supplied by a 315 kVA overhead transformer whilst the western side is supplied by a 1000 kVA pad mounted transformer. Power is distributed across the site by 22kV above-ground power lines. Raw water for processing and operational activities is currently sourced from the open-pit. An alternate raw water storage will be confirmed in upcoming studies. A capital allowance for the establishment of a new raw water storage facility has been applied in the financial model. Potable water is trucked to Mt Carbine and stored onsite in storage tanks for use at the site facilities.
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. 	Capital costs have been estimated at a Suitable level of detail for all required infrastructure for a 1mtpa ore operation. Capital costs allocations include: Crushing and screening upgrades, Processing facilities upgrades, Raw water facility construction, Contractor facilities,



Criteria	JORC Code explanation	Commentary
	 The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Contractor mobilization and demobilization, Future studies, Ongoing exploration. Operating costs have been estimated based on a contractor-based operation with 1 x 190t class excavator, 1 x 50t excavator, a fleet of 55t rigid dump trucks and supporting ancillary equipment. All waste will be drilled and blasted by a down-the-hole service drill and blast contractor. Processing costs have been estimated based on current operational costs for existing equipment and processes, such as tailings disposal, plus Suitable-level estimates for new processing infrastructure. A state government royalty equal to 2.7% of generated revenue has been included in the cost structure.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 The Reserves are based on a WO₃ APT price of US\$340 per mtu with a AUD:USD exchange rate of 0.73 applied. Historical realized price adjustment factors were then applied as well as discounts for producing a concentrate with 50% WO₃. Despite currently generating income from quarry material, no revenue has been generated from this procedure as part of the economic evaluation of the Reserves.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	 Tungsten carbide, which has hardness close to diamond, is the most popular form of tungsten. It is denser than steel and titanium, twice as hard as any steel grade, and has extremely high wear resistance. The product is widely used in construction, mining, and metal working applications and is forecast to continue to perform strongly on the global market. Mt Carbine currently produces concentrate which is sold to multiple locations around the world. In 2020, approximately 84,000 metric tonnes of tungsten was produced globally with 69,000 metric tonnes sourced from China. Mt Carbine is forecast to product only 2-3 metric tonnes of tungsten annually which will not affect the global market.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	 All costs and revenues which have been used in the financial model are in nominal terms and have been discounted by 8% to generate the overall net present value of the project. As Mt Carbine is an operating mine/quarry with significant existing infrastructure, capital expenditure is minimal and therefore the project is not sensitive to NPV discount rate. The competent persons are confident that Mt Carbine will generate positive cash flows once the initial capital outlays are undertaken early in the schedule. The subsequent years generate enough free cash to adequately pay for the capital costs incurred in 2022/3.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	 The project has good community engagement and has been discussed verbally with the local stakeholders, particularly the Mt Carbine Caravan Park, which stands to be the most impacted, and the response has been positive. EQ Resources in accordance with its requirements pays Native Title Administration Fees to the Nguddaboolgan Native Title Aboriginal Corporation (NNTAC) and maintains regular dialogue and communication with any relevant information pertaining to its activities. The underlying pastoral leases on which Mt Carbine is located are held by Australian Wildlife



Criteria	JORC Code explanation	Commentary
		 Conservancy on a parcel of land known as Brooklyn Wildlife Sanctuary. A positive relationship exists between EQR and Australian Wildlife Conservancy. There are no anticipated issues with the landholder in relation to the project. The project does not involve any new significant infrastructure, and changes to the current mining methods or other activities that could otherwise have a negative impact on the local community and stakeholders.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	 The operation is contained within two mining leases: ML4867 & ML4919. Both mining leases expire within the planned duration of the mine plan. ML4867 expired on 31st July 2022 whilst ML4919 expires on 31st August 2023. EQR has commenced the process for acquiring a new mining lease over the Mt. Carbine area. The competent person believes that it can be expected that the company will gain the required mining leases and environmental authorities to allow for extraction and processing of the open pit and low-grade stockpile as planned. The mine is critical to the livelihood of the township and has a positive effect on the surrounding areas. Tungsten is seen as a key future element and part of the state government's plan to develop the northern regions of the state. The land relevant to the project site is used for quarry operations and mining activities as per the respective licenses - EA EPPR00438313 for the quarry and EA EPML00956913 for the mine. All environmental, surface access and operating licenses have been acquired to allow for between 100,000 and 1,000,000 tonnes to be mined, crushed and screened per annum. Processing through the existing proposed plant is approved for over 100,000 tonnes per annum. The required water and solids circuit will remain within the existing disturbance areas accounted for in the ERC for the project, therefore it is unlikely that additional amendments to the EA for mining activities will be required. Given that the EA amendment relates to a change in annual throughput with no material changes to the mining activities will be required EA amendment to be approved.
Classification	 The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	All Reserves have been classified as Probable as the Resources have been fully categorized as Indicated. There are no Measured Resources.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	 The Reserve assumptions, calculations and financial modelling has been internally reviewed by a team of experts. No external audits of the estimate have been completed.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could 	 The estimate of the Reserves at Mt Carbine has been derived from local assumptions based on historical and current performance indices at the site. The cost of operating the open pit has been calculated from contractor quoted rates at the site.



Criteria	JORC Code explanation	Commentary
	 affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	