



A REPORT BY MEASURED GROUP PTY LTD

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# **GEOLOGY AND MINERAL RESOURCE ESTIMATE**

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**MT CARBINE TUNGSTEN PROJECT**

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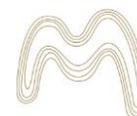
**EQ RESOURCES PTY LTD**

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29 July 2022

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REPORT NO: **MG1000**\_MT CARBINE GEOLOGY AND MINERAL RESOURCES\_20220729



## DOCUMENT ISSUES AND APPROVALS

### DOCUMENT INFORMATION

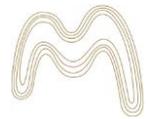
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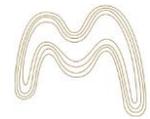
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## PURPOSE OF REPORT

Measured Group Pty Ltd (MG) has prepared this report for the management of EQ Resources Pty Ltd (EQR). The purpose of the report is to provide EQR with an objective assessment, estimation and statement of Mineral Resources that is consistent with the Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves, 2012 edition (The JORC Code).

The report includes a summary of steps taken to verify and validate all available geoscience data used to build geoscience models for the Mt Carbine orebodies that will be used as the basis for feasibility studies and mine design activities. The report also includes a Mineral Resource estimate for Insitu orebody and the Low-Grade Stockpile (LGS).



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- For these reasons, the reader must make their own assumptions and their own assessments of the subject matter of this report.
- Opinions presented in this report apply to the site's conditions and features as they existed at the time of Measured Group's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this report, about which Measured Group have had no prior knowledge nor had the opportunity to evaluate.

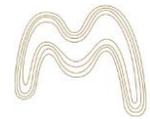
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## COMPETENT PERSONS STATEMENT

I, Chris Grove, confirm that I am the Competent Person for this Report and:

- I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
- I am a Competent Person as defined by the JORC Code 2012 Edition, having at least five years of experience that is relevant to the style of mineralisation and type of deposit described in this Report, and to the activity for which I am accepting responsibility.
- I am a Member of The Australasian Institute of Mining and Metallurgy (AusIMM).
- I am the author of the Report to which this Consent Statement applies.

I am a full-time employee of Measured Group Pty Ltd and have been engaged by EQR to prepare the documentation for the Mt Carbine Tungsten Project on which the Report is based, for the period ended July 2022.

I have more than 25 years of experience in the estimation of Mineral Resources both in Australia and overseas. This expertise has been acquired principally through exploration and evaluation assignments at operating mines and exploration areas.

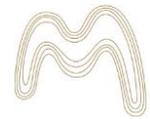
I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.

Pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and Clause 9 of the JORC Code 2012 Edition, I consent to the release of this Report and this Consent Statement by EQR.

.....  
Chris Grove B. App Sci.(Geol), MAusIMM

Member AusIMM - 310106



## EXECUTIVE SUMMARY

Measured Group Pty Ltd (MG) has prepared this report for the management of EQ Resources Pty Ltd (EQR). The purpose of the report is to provide EQR with an objective assessment, estimation and statement of Mineral Resources that is consistent with the Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves, 2012 edition (The JORC Code).

The report includes a summary of steps taken to verify and validate all available geoscience data used to build geoscience models for the Mt Carbine orebodies that will be used as the basis for feasibility studies and mine design activities. The report also includes a Mineral Resource estimate for Insitu orebody and the Low-Grade Stockpile (LGS).

The Mt Carbine Mine is located 130 km north of the city of Cairns in Far North Queensland, Australia. EQR acquired the mine and associated quarry in July 2019 and has been operating the mine and quarry concurrently, with the mine currently processing tailings and low-grade ore stockpiles located on-site that are remnants from previous operations on the site.

The Mt Carbine mining area is contained in two Mining Leases - ML 4867, and ML 4919 and three Exploration Permit for Minerals - EPM 14872, EPM 14871, and EPM 27394.

The Mt Carbine project is located within the Siluro-Devonian Hodgkinson sedimentary province. The thick sedimentary sequence was complexly folded and regionally metamorphosed before and during extensive granitic intrusions in the Carboniferous and Permian.

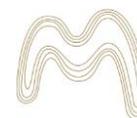
The Mt Carbine tungsten deposit consists of several vertical to sub-vertical sheeted quartz veins ranging in width up to 7 metres but averaging around 50 cm. Economic minerals are the tungsten minerals of wolframite and scheelite mineralisation.

A typical section through the centre of the deposit shows quartz veins ranging from 10 cm to 6 m in width with 5-8 zones of secondary narrow mineralised quartz veins of 10 cm to 150 cm in width. These high-grade veins contain rich quartz-feldspar tungsten minerals and have been designated as "King Veins".

The Mt Carbine tungsten deposit was discovered in 1883 by prospectors following on from the discovery of tungsten located in Manganese Creek south of the deposit. The area was mined sporadically until Queensland Wolfram Limited systematically mined the deposit from 1972 to 1987 and extracted approximately 22 Mt via open-pit mining at a rate of 1.5 Mt per annum. As a result of the previous mining 12 Mt of low-grade material was wasted directly to what is now referred to as the Low-Grade Stockpile (LGS).

Since its closure, the mine has changed hands and additional exploration and study activities have been conducted to reopen the mine. Limited exploration drilling was completed in 2011 and 2012, with two Mineral Resource estimates in 2010 and 2013 respectively.

Recently 26 oriented drilling holes (EQ001 - EQ026) were completed totalling 6,190 metres of diamond drilling. These drill holes and the historical data have enabled an updated geological interpretation and model to be developed to support an estimate of Mineral Resources for the insitu orebody.



In addition, recent sampling and investigation into the tonnage and grade of the Low-Grade Stockpile (LGS) have enabled an estimate of Mineral Resources for the LGS orebody.

The following is a summary of the Mineral Resource estimate for the insitu and Low-Grade Stockpiles, as of 29 July 2022:

Table 1-1: Mt Carbine Resource Estimate, as of July 2022

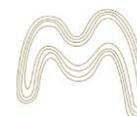
Orebody	Resource Classification	Tonnes (Mt)	Grade (WO <sub>3</sub> %)	WO <sub>3</sub> (mtu)
Low-Grade Stockpile	Indicated	12	0.075	900,000
In Situ	Indicated	12.04	0.27	3,296,800
	Inferred	8.28	0.40	3,281,500
	<i>Total</i>	<i>20.32</i>	<i>0.32</i>	<i>6,578,300</i>
<b>All</b>	<b>Total</b>	<b>32.32</b>		<b>7,478,300</b>

Notes:

1. Total estimates are rounded to reflect confidence and resource categorisation.
2. Classification of Mineral Resources incorporates the terms and definitions from the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012) published by the Joint Ore Reserve Committee (JORC)
3. No uppercut was applied to individual assays for this resource, a lower cut of 0.05% was applied to Southern Domain 1 block and 0.15% WO<sub>3</sub> 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 ½ 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 30 m x 30 m; Inferred is approximately 60 m x 60 m.
7. The deposit is a sheeted vein system with subparallel zones of quartz tungsten mineralisation that extend for >1.2 km in length and remain open. At depth, the South Wall Fault cuts the Iolanthe to Johnson's veins but the Iron Duke zones remain open to depth.

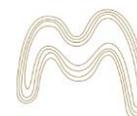
EQR is completing various studies on the Mt Carbine orebodies to assess the viability and economics of maintaining the current operations and developing future mining domains in the deeper orebodies. The results of work completed for Mt Carbine are assisting EQR in refining the current plan for the ongoing studies for the Mt Carbine Open cut and Underground project. EQR has multiple paths to continue to mine and develop future mining domains in the various orebodies at Mt Carbine.

Measured Group is satisfied that there has been sufficient study, economic analysis, and the opportunity to apply technological developments in mining methods to meet the reasonable prospects for the eventual economic extraction ("RPEEE") test. Currently, there is a reasonable basis to assume the Mineral Resource estimated for Mt Carbine orebodies will be mined in future.

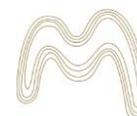


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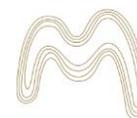
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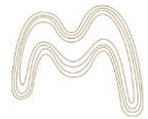


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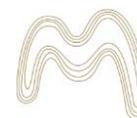
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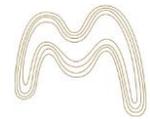
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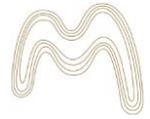
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## 1. SCOPE OF WORK

The geological review of the Mt Carbine region and geoscience data verification, modelling and resource estimation for the Mt Carbine Project ("the project") commenced on 2 July 2022. The following is a summary of the agreed scope:

1. Data receipt, validation, and database build:
  - a). Access, retrieve and collate critical data within the priority ore deposit.
  - b). Process, Validate and Develop Database;
    - i). Validate drilling, and update as required.
    - ii). Accurately correct orebody contact depths using both historical data and recent data/core photography.
    - iii). Review and correct downhole Azimuth surveys.
    - iv). Review, validate and correct Assay Data against original laboratory reports.
    - v). Review, collate and validate any other data/reports considered pertinent by MG to the accuracy of the final model build.
  - c). Complete QA/QC of final database and test database for accuracy and error validation.
2. Geoscience modelling:
  - a). Model Validation (wireframe checks).
  - b). Grade Estimation.
  - c). Block modelling.
  - d). Geostatistical review.
  - e). Interpolation.
  - f). Model Validation.
3. Resource Estimate and reporting:
  - a). Resource Classification and Reporting.
  - b). Points of observations/classification pass.
  - c). Reporting tonnage and grades.
  - d). Resource estimation; and,
  - e). Final Report and Model Delivery.



## 2. INTRODUCTION

### 2.1 LOCATION

Mt Carbine Mine is located at the northern end of the Atherton Tablelands approximately 130 km northwest of Cairns and 40 km west of Port Douglas in Far North Queensland (see

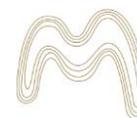


Figure 2-1). There is a small town, historic hotel and caravan park located adjacent to the mine site.

## 2.2 TENURE

EQR acquired the mine and associated quarry in July 2019 from Mt Carbine Quarries Pty Ltd and retains 100% ownership of two Mining Leases (ML) and three Exploration Permits for Minerals (EPM). EQR have recently been operating the mine and quarry concurrently. The mine is currently processing tailings and low-grade ore stockpiles located on the site, which are remnants from previous mining operations.

The Mt Carbine mining area is contained within two Mining Leases (ML) - ML 4867 and ML 4919, which cover 366.39 hectares. The mining leases are surrounded by Exploration Permit for Minerals (EPM) - EPM 14872, EPM 14871, and EPM 27394 that are held by EQR and cover an additional 115 km<sup>2</sup>. A summary of the tenements held by EQR is provided in Table 2-1, and a map of the Mt Carbine Mining Lease boundaries is shown in Figure 2-2.

ML 4867 and ML 4919 have both been renewed continually since their grant date and both tenements are due to expire within the next two years. EQR has advised MG that they will submit applications to renew both tenements for a further 19 years at the appropriate time before the expiry of the tenements. A renewal application for ML4867 was submitted on 31 January 2022. The renewal applications will be supported by MG's Mineral Resource estimate and the updated Mt Carbine feasibility studies, which sets out the company's planned future mining activities.

Table 2-1: Tenure Summary

Tenement	Name	Area	Grant Date	Expiry Date
ML4919	Mt Carbine Open Pit	7.891 Ha	24/08/1974	31/8/2023
ML4867	Mt Carbine Tailings Project	358.5 Ha	25/07/1974	31/7/2022
EPM 14871	Mt Holmes	10 Sub-Blocks	12/12/2020	12/12/2025
EPM 14872	Mt Carbine	21 Sub-Blocks	11/12/2020	11/12/2025
EPM 27394	Mary	4 Sub-Blocks	01/06/2020	01/06/2025

Mt Carbine currently has the approval to mine up to 1 Mtpa of ore from two Mining Leases. In addition to mining, the operation crushes rock from mine waste stockpiles to make various grades of road metal and construction materials. Mt Carbine operates the quarry and mining activities under Environmental Authority permits EPPR00438313 and EPML00956913 (respectively).

The operation is situated on the Brooklyn Pastoral Holding and is subject to a compensation agreement that requires Mt Carbine to supply 500 m<sup>3</sup> of gravel per year. Mt Carbine's mining licenses are free and clear of Native Title, having been granted before 1 September 1994.

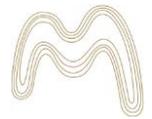
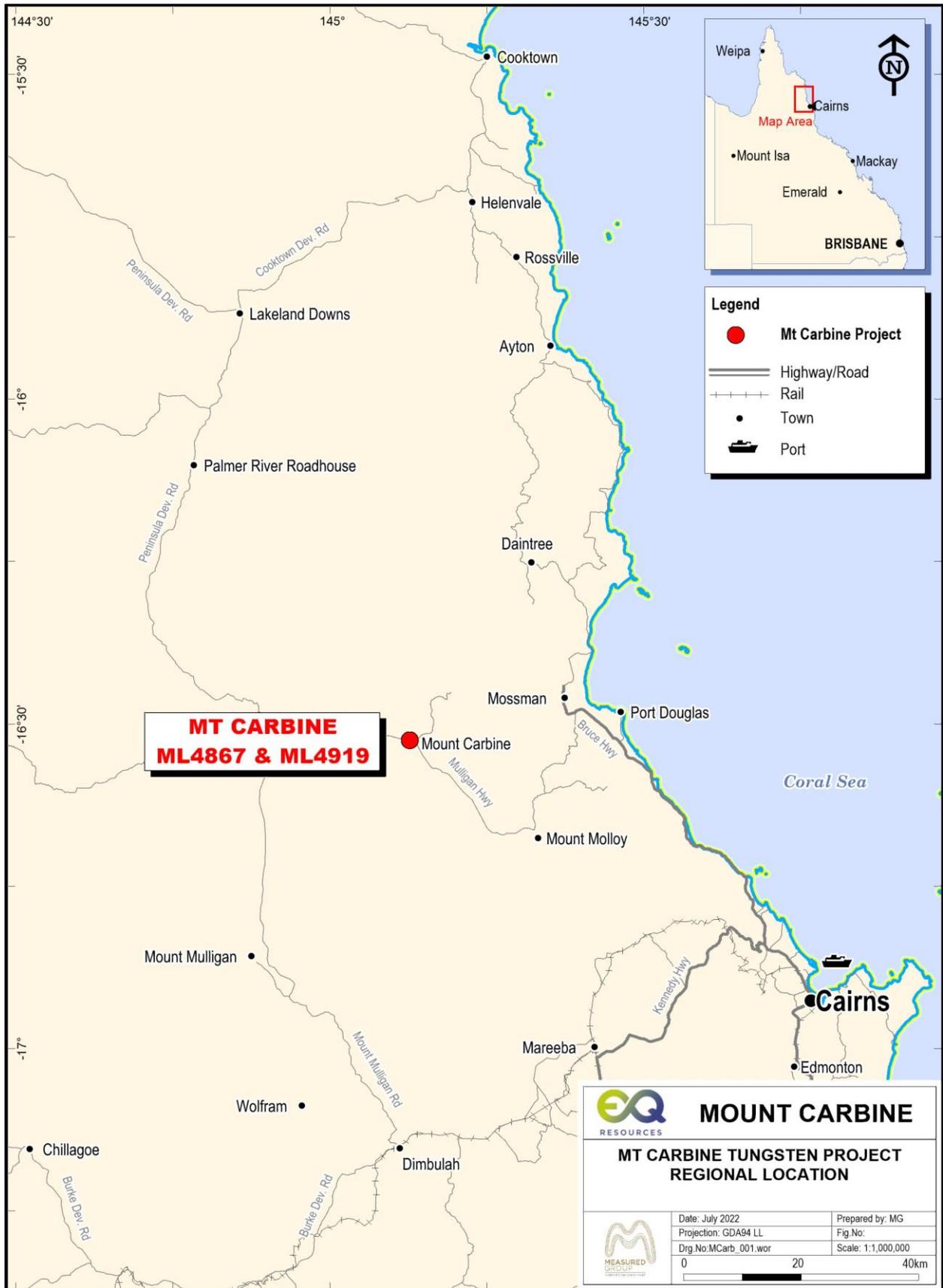
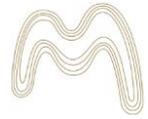


Figure 2-1: Mt Carbine Location

# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE

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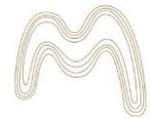
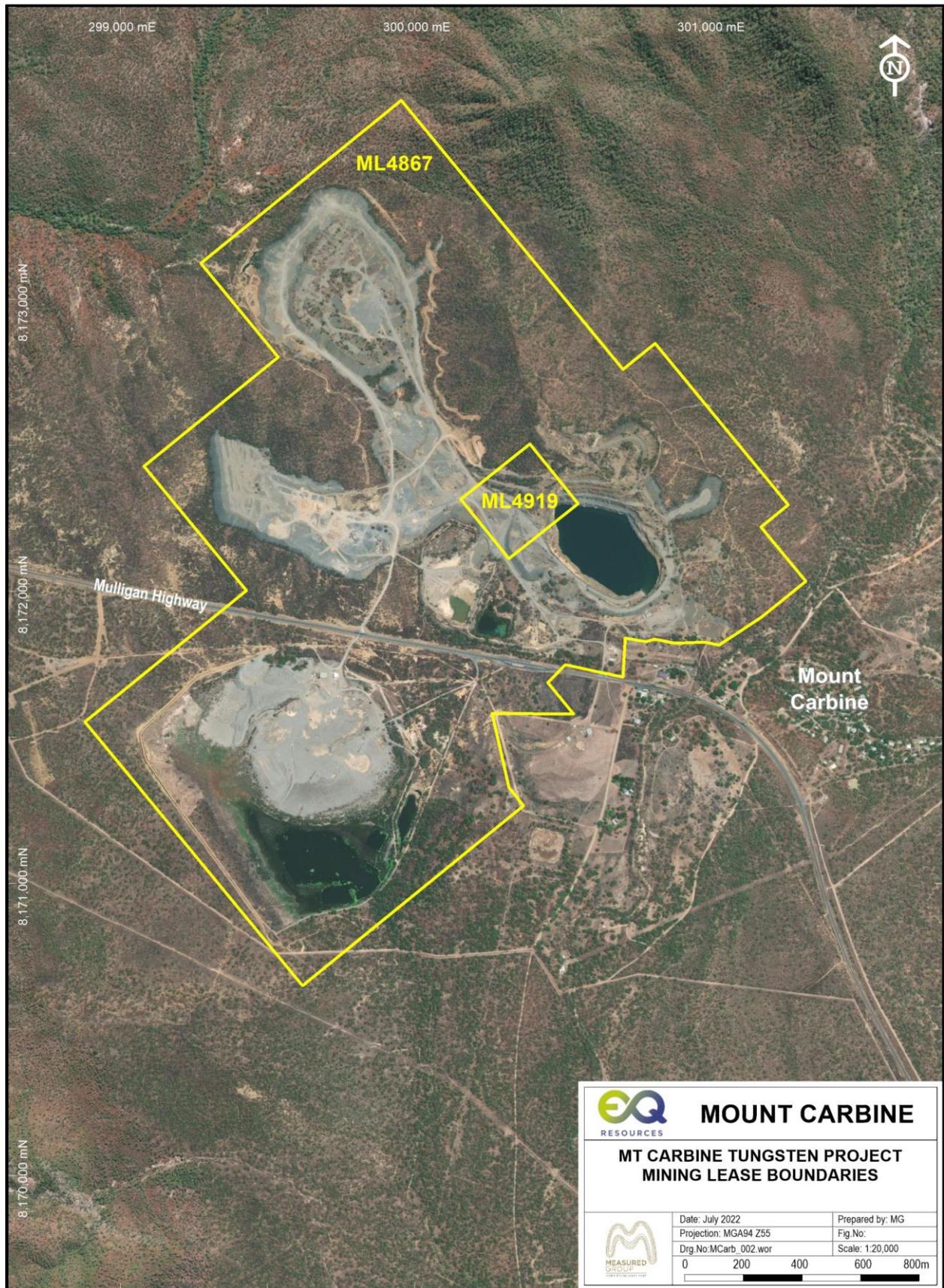
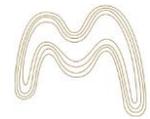


Figure 2-2: Mt Carbine Tenements





## 2.3 SITE INFRASTRUCTURE

Mt Carbine is currently operating as a quarry and mine and is well serviced with existing on-site infrastructure to support the operations. EQR will continue to utilise as much of the existing site infrastructure as possible, and only construct new infrastructure as required to support new or upgraded facilities. A plan of the site infrastructure is shown in Figure 2-3.

### 2.3.1 DAMS

No new dams are required for the project. A site water balance was developed for the project which has determined that the existing site dams are capable of servicing the operational requirements and are capable of containing rainfall and runoff under typical rainfall events.

The site's main dams that will be used for the storage of water are the tailings dam (TSF4, 417.3 ML capacity) and the process water dam near TSF4 (20 ML capacity) which can be seen in Figure 2-3.

### 2.3.2 DRAINAGE

There are no proposed changes to the existing site drainage system that exists on the site. Water that flows into the open pit will be transported via pump and pipeline to the TSF4. The open-pit dewatering pump is diesel-powered due to the need to continually relocate it with the pit development and the risk of trailing cables around operating heavy vehicles. Supply and maintenance of the open pit dewatering pump are included in the mining contractor's scope of services.

## 2.4 CLIMATE

The Far North Queensland climate is generally hot and humid. The region is characterised by two distinct seasons, with warm temperatures and low rainfall during the winter period while summer sees higher rainfall and warmer, balmy temperatures. The average temperature is approximately 27°C, with highs of ~30°C and lows of ~18°C. Winter is more commonly known as the 'dry' season and runs from May to October enjoying low humidity and generally clear conditions. Conversely, summer is therefore known as the 'wet' season and experiences tropical downpours later in the day with the occasional storm activity from November to April. Annual rainfall averages 300 mm/annum.

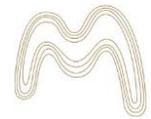
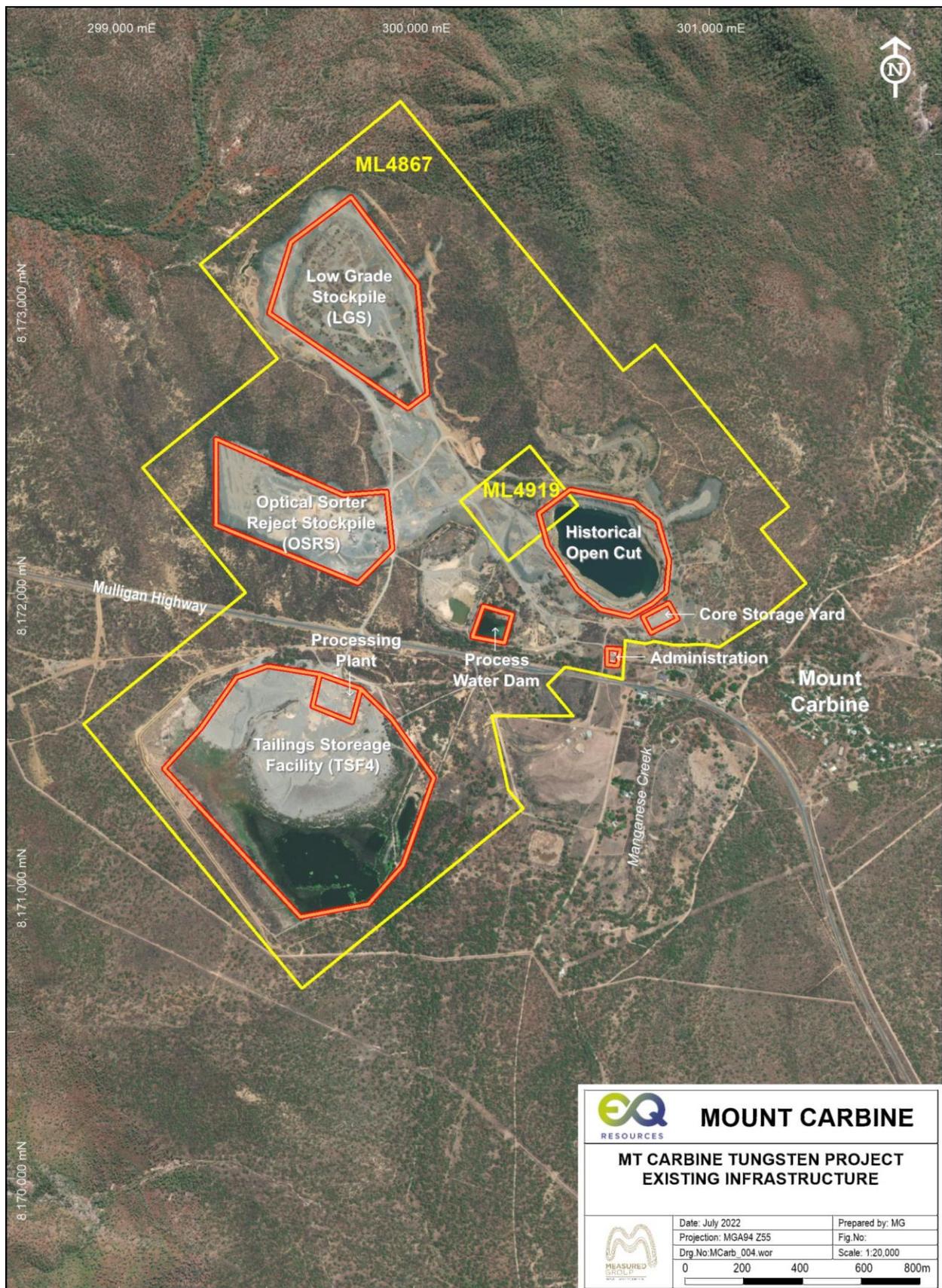
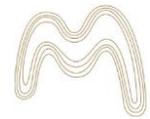


Figure 2-3: Mt Carbine Site Layout



	<b>MOUNT CARBINE</b>	
	<b>MT CARBINE TUNGSTEN PROJECT EXISTING INFRASTRUCTURE</b>	
	Date: July 2022	Prepared by: MG
	Projection: MGA94 Z55	Fig.No:
	Dwg.No: MCarb_004.wor	Scale: 1:20,000



### 3. HISTORICAL EXPLORATION AND MINING

The Mt Carbine tungsten deposit was discovered in 1883 by prospectors after the discovery of tungsten at Manganese Creek located to the south of Mt Carbine. Up to 150 miners occupied the site after its discovery and mined approximately 30 small open-cut and underground adits/shafts. Each group hand-mined ore on rich veins, some of which were reported to be extended for over 300 m strike distance and 60 m vertical distance.

A major shaft was mined down into the Bluff zone, an area where the mineralised veins widened to over 10 m, and this became the central point for mining activity at Mt Carbine. A gravity plant with a 10-head stamper was built on a cooperative basis, where ore was treated and concentrates returned to the miner.

North Broken Hill Ltd held the area and completed basic exploration work up until 1966. Queensland Wolfram Limited mined the deposit from 1972 to 1987 and extracted approximately 22 Mt via open-pit mining at a rate of 1.5 Mt per annum.

During this period, the mine produced an average of 1,100 tonnes per annum of high-grade wolframite (72%  $WO_3$ ) and scheelite (68%  $WO_3$ ) concentrates in the ratio of approximately 4 tonnes of wolframite to 1 tonne of scheelite. The impurities in the products were low, with a recovered grade of ore at approximately 0.10%  $WO_3$ .

Before the mine closed in 1987, Queensland Wolfram Limited entered a joint venture with Poseidon Ltd, whereby Poseidon Ltd funded the proposed underground development and was targeting an underground mine by sub-level cave retreat for extraction of 7.5 Mt @ >0.3%  $WO_3$  (QWL, 1983). Four hundred metres of a 6 x 4.5-metre decline was developed with an underground conveyor system installed. The mine closed in 1988 and has remained closed until the present day. Figure 3-1 shows the current pit layout, with historical 20 m benches.

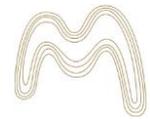
Since its closure, the mine has changed hands and additional exploration and study activities have been conducted to reopen the mine. Limited exploration drilling was completed in 2011 and 2012, with two Mineral Resource estimates in 2010 and 2013 respectively.

A summary of the recent holders of tenements at Mt Carbine is shown in Table 3-1, a summary of the major work completed by previous holders is shown in Table 3-2 and a summary of the drilling campaigns is presented in Table 3-3.

#### 3.1.1 LOW-GRADE STOCKPILE

During mining operations undertaken by Queensland Wolfram Limited, 22 Mt was mined from the pit. 12 Mt of low-grade material was sent directly to the Low-Grade Stockpile (LGS), and 10 Mt was optically sorted to extract white quartz from the ore, which resulted in 6 Mt of reject material (now since disposed of) and 4 Mt of higher-grade ore that was processed.

A nearly complete record of mine production, including the amounts of mined rock consigned to the LGS, has been compiled by EQR using published and unpublished archives, including using reports for State Royalty returns. Head grades were not recorded, rather they were calculated from the recovered grade using a nominal 70% recovery. The calculated head grade for the mine



using this method was 0.14%  $WO_3$ . Several authors (e.g. White. A, 2006) have subsequently postulated a higher feed grade based on a lower recovery at the processing plant with the head grade being as high as 0.16%  $WO_3$ .

During mining, grade control in the pit was difficult since the mining process focused on quartz vein content, with the percentage of quartz used to decide whether the material was ore or waste. Since the completion of mining, geological interpretations have suggested that an early major barren quartz vein intrusion event occurred. This resulted in the processing of increased amounts of barren quartz, and the wasting of mineralised material to the LGS. The lack of an effective grade control system was instrumental in allowing higher-grade material to be dumped onto the LGS.

The LGS consists of materials ranging from fines to large boulders. It is largely heterogeneous and consists of layers of similarly sized material, which reflects the position of the mine at the time of emplacement. Cross sections through the LGS confirm the cyclic nature of the emplacement of material, with layers of similar-sized material observed.

Significant work has been completed to understand the size distribution of the LGS and Table 3-4 provides a summary of the Particle Size Distribution and grade for the LGS.

Figure 3-1: Current Pit Showing Historical 20 m Benches



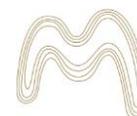


Table 3-1: Recent Holders of Mt Carbine Tenements

Holder	Date Held From	Date Held To
Specialty Metals International Limited	21/05/2014	12/01/2021
Tungsten Resources Pty Ltd	13/12/2011	21/05/2014
Kangaroo Minerals Pty Ltd	24/09/2006	13/12/2011
Stonebase Pty Ltd	27/11/2006	24/09/2006
Conquest Mining Limited	27/06/2006	27/11/2006
Lightstar Pty Ltd	16/11/2004	27/06/2006

Table 3-2: Historical Mt Carbine Exploration/Study

Type of Work Completed	Date	Author
Ore Reserve Assessment	2011	Icon Resources
Resource Estimate	2010	Geostat P/L
Resource Estimate	2012	Geostat P/L
Feasibility Study - Underground	1983	S.B. Management Pty. Ltd.
Scoping Study - Mt Carbine	2009	Icon Resources Pty Ltd
Preliminary Mine Design	2012	Mine One
Ore Sorter Mass Balances	2012	John McIntyre & Assoc
Environmental Impact Study - Stage 1	2010	Landline
Test work: Comminution Testing	2012	JK Tech

Table 3-3: History of Drilling Campaigns

Diamond Drilling	Total holes	Total metres
Pre-2021 Drilling	63 Holes	16,355.55 m
2021 Drilling	16 Holes	4,068.30 m
2022 Drilling	10 Holes	2,121.9 m
Total	89 Holes	22,545.75 m

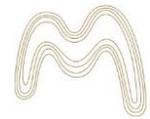
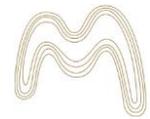


Figure 3-2: Aerial Photo of Low-Grade Stockpile



Table 3-4: Particle Size Distribution for Low-Grade Stockpile

Particle Size Fraction (mm)	Grade (%WO <sub>3</sub> )	Particle size distribution (%)
+170	0.043	30
-170 x 100	0.050	14
-100 x 30	0.077	14
-30 x 6	0.095	20
-6 x 0	0.110	22



## 4. GEOLOGY

### 4.1 REGIONAL GEOLOGY

Mt Carbine is located within the Siluro-Devonian Hodgkinson sedimentary province. The thick sedimentary sequence was subjected to complex folding and regional metamorphism before, and during, extensive granitic intrusions in the Carboniferous and Permian. Figure 4-1 shows the regional geology of the area.

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

Fluids from the large granite batholith ( $>400 \text{ km}^2$ ) were the source of hydrothermal fluids for mineral deposition around the margins of the intrusive. The Mt Carbine deposit is a direct result of these fluids travelling out from the granite into the surrounding structured ground.

There appears to be a preference for the higher grade tungsten mineralisation to be located on failed fold hinges, associated with the isoclinal folding of the Hodgkinson Formation. These locations have the highest structural deformation and have allowed these fluids to penetrate structures and deposit quartz and minerals. The granites associated with Mt Carbine are 'S' Type Granites, which can mobilise tin, tungsten, molybdenum and rare earth elements in fluids and deposit these as the main economic minerals. Figure 4-2 shows the local geology of the Mt Carbine area, with the relationships between intrusions and sediments of the Hodgkinson Formation.

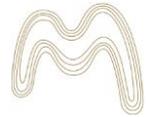
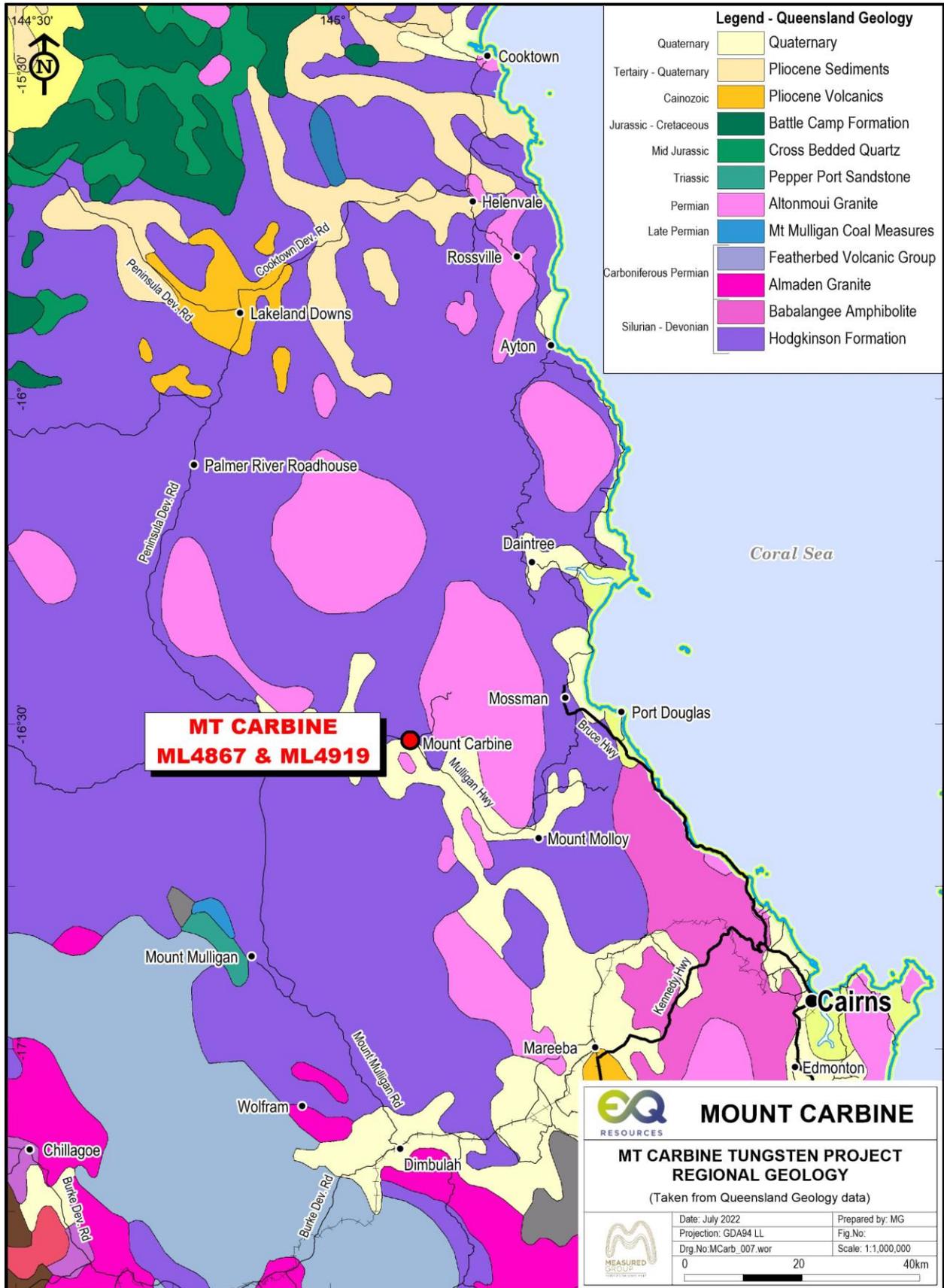


Figure 4-1: Regional Geological



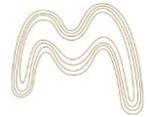
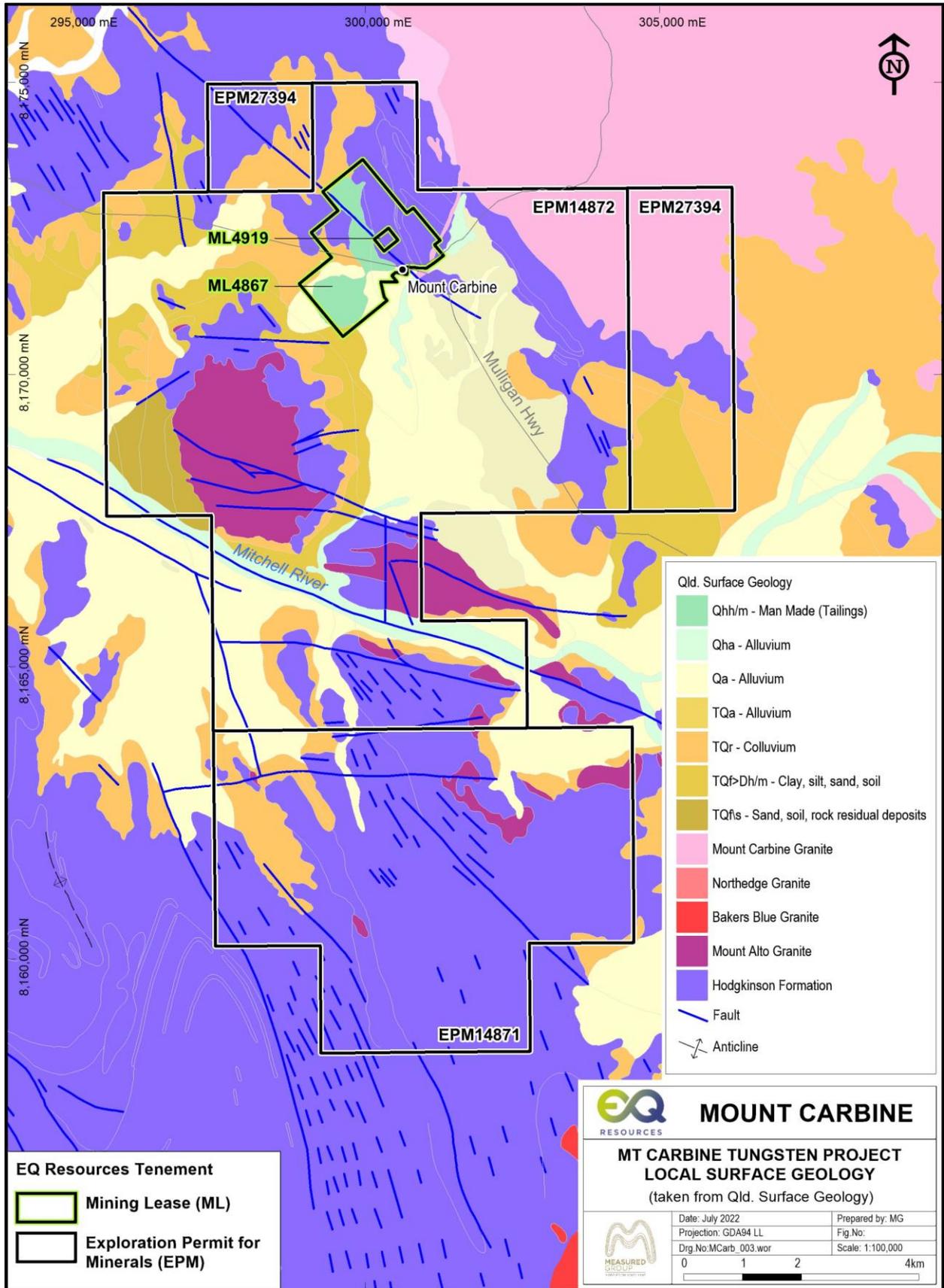
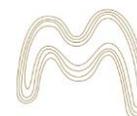


Figure 4-2: Local Geology





## 4.2 DEPOSIT GEOLOGY

The Mt Carbine tungsten deposit is similar to sheeted vein-type tungsten deposits in South China and these are divided into endo-contact (granite hosted) and exo-contact (wall-rock hosted) types - Mt Carbine is interpreted to be an exo-contact type.

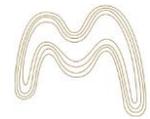
The vertical structural zoning model for vein-type exo-contact tungsten deposits observed in China (Yidou, 1993) directly applies to the Mt Carbine vein system. The model is being incorporated in an evolving exploration model for the Mt Carbine and Mt Holmes vein systems, with Mt Holmes considered to be situated closer to the underlying mineralising granite than Mt Carbine (Figure 4-3).

The simplified conceptual geological model of the Mt Carbine area is based on that of Mt Holmes (Forsythe and Higgins, 1990):

- Deposition of the Siluro-Devonian Hodgkinson Formation sequence.
- Several stages of complex folding and faulting of the Hodgkinson Formation.
- The intrusion of minor andesite and dolerite dykes.
- The intrusion of mineralising granite plutons with associated hornfels in the country rock.
- Emplacement of major sheeted quartz-wolframite-tin veining and hydrothermal alteration of wall-rock.
- The intrusion of post mineralisation dykes.

Figure 4-3: Tungsten Conceptual Deposit Models (after Yidou, 1993)

Zone	Vertical Extent	Vein Width		Wolframite	Cassiterite	Chalcopyrite	Sphalerite	Molybdenite
I	100-200 m	<1 cm						
II	50-150 m	1-10 cm	<b>Mt Carbine Hill</b>					
III	150-250 m	10-50 cm	<b>Mt Carbine Pit</b>					
IV	200-450 m	>50 cm	<b>EQR Extension</b>					
V	>50 m	1-50 cm						



Essentially, in the open-cut pit, the following rock types are observed in the order of abundance:

**Metasediments** - a range of hornfelsed mudstones and interbedded rudites. The major rock unit in the pit can look similar to a slate with prominent cleavage. Various alterations from pervasive silicification are present, represented as a hornfelsed cordierite chloritic rock. Typically breakage planes are along cleavage and schistosity planes.

**Metavolcanics** - located on the eastern end of the pit and the south side of the Southwest Fault (SWF) this unit is pale green with greenschist facies alteration. It forms about 20% of waste material and is less likely to contain mineralisation as it is a peripheral unit. It contains locally hard siliceous chert bands that form some of the larger rocks on the waste dump

**Quartz Veins** - this rock type makes up to 10% by volume of the waste material and is found in all sizes but typically less than 20 cm. It presents as powder and shards throughout much of the dump material, which is interpreted to be a product of shattering during blasting. As previously discussed, quartz veins can be barren or can contain tungsten mineralisation.

**Dyke Material** - two types of dykes are observed:

1. Pale uniform fine-grained felsic dyke that is exposed as a 10-15 m wide dyke at the western end of the pit; and
2. Dark green/grey basic dyke that is present on most benches as a 0.5-1 m dyke cross-cutting the open pit.

## 4.3 STRUCTURE

Mt Carbine sits at a spur on a major arc parallel fault called the South Wall Fault (SWF), along with the Mossman Orogeny trend, which can be traced through the Hodgkinson formation for over 100 km in strike length (Figure 4-4). The inflection point is likely due to a change in compressional regime due to oblique pressures present at an intersection of a major fault junction, the South West Fault (SWF). The SWF is a thrust fault formed at the time of compression and development of regional isoclinal folding of the basement rock, remaining active through to post tungsten mineralisation movement.

This terminology on the local scale with this thrust also called the 'South Wall Fault' (SWF) at Mt Carbine was kept. The SWF truncates the tungsten orebody at an angle of 70 degrees to the grid north. It forms a boundary fault on the southwest side of the mineralisation. Evidence suggests it is a reverse thrust fault (Oliver, 2021), and by studying stratigraphic marker beds (chert-metabasalt unit) it is postulated that the throw is of the order of 200-300 m. The truncated parts of the Mt Carbine Tungsten mineralisation should still be open at depth in the footwall region of this fault. Figure 4-5 shows the location of the SWF in the open pit.

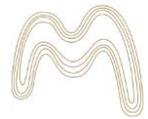
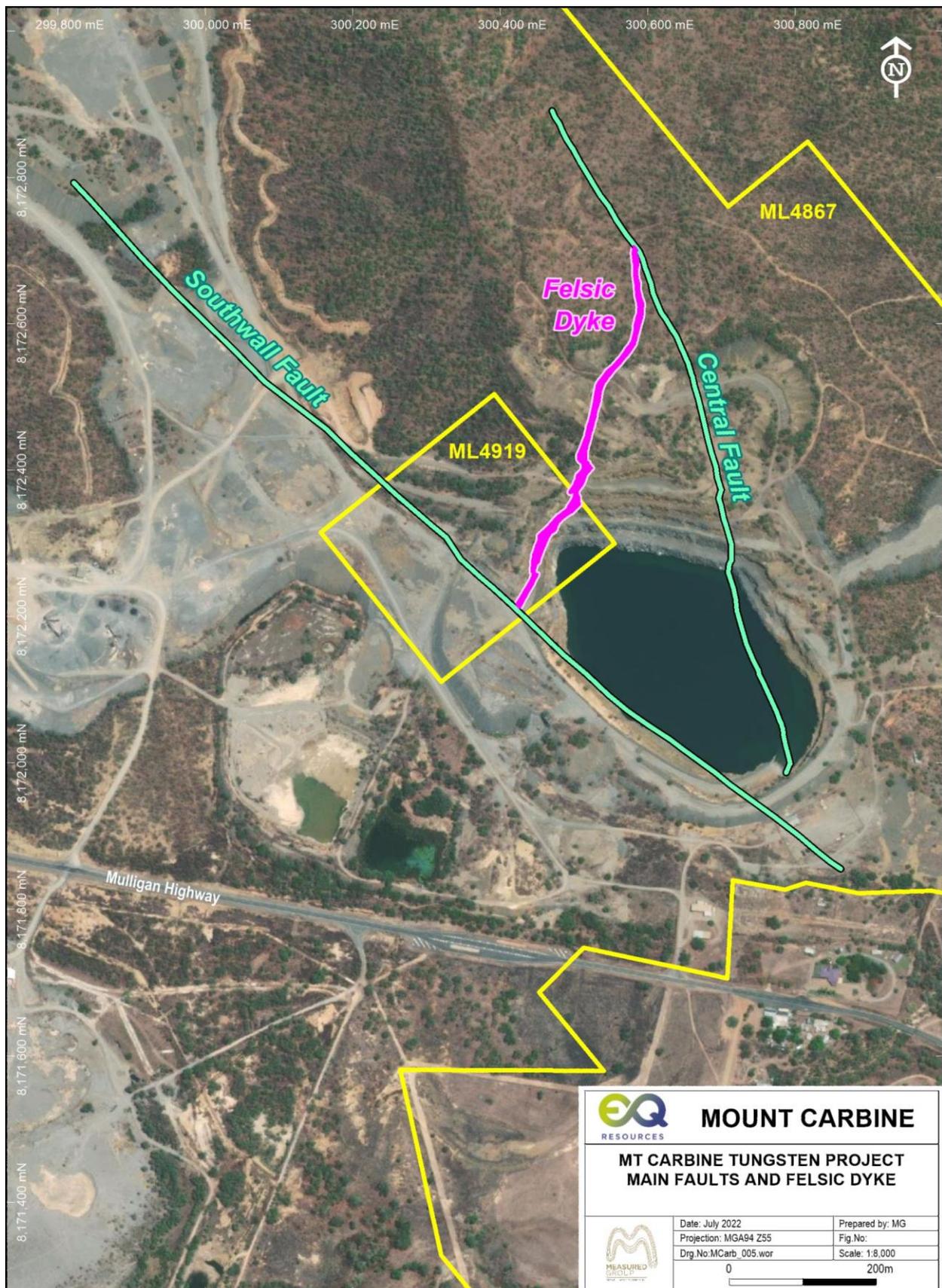


Figure 4-4: Main Faults of Mt Carbine



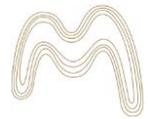
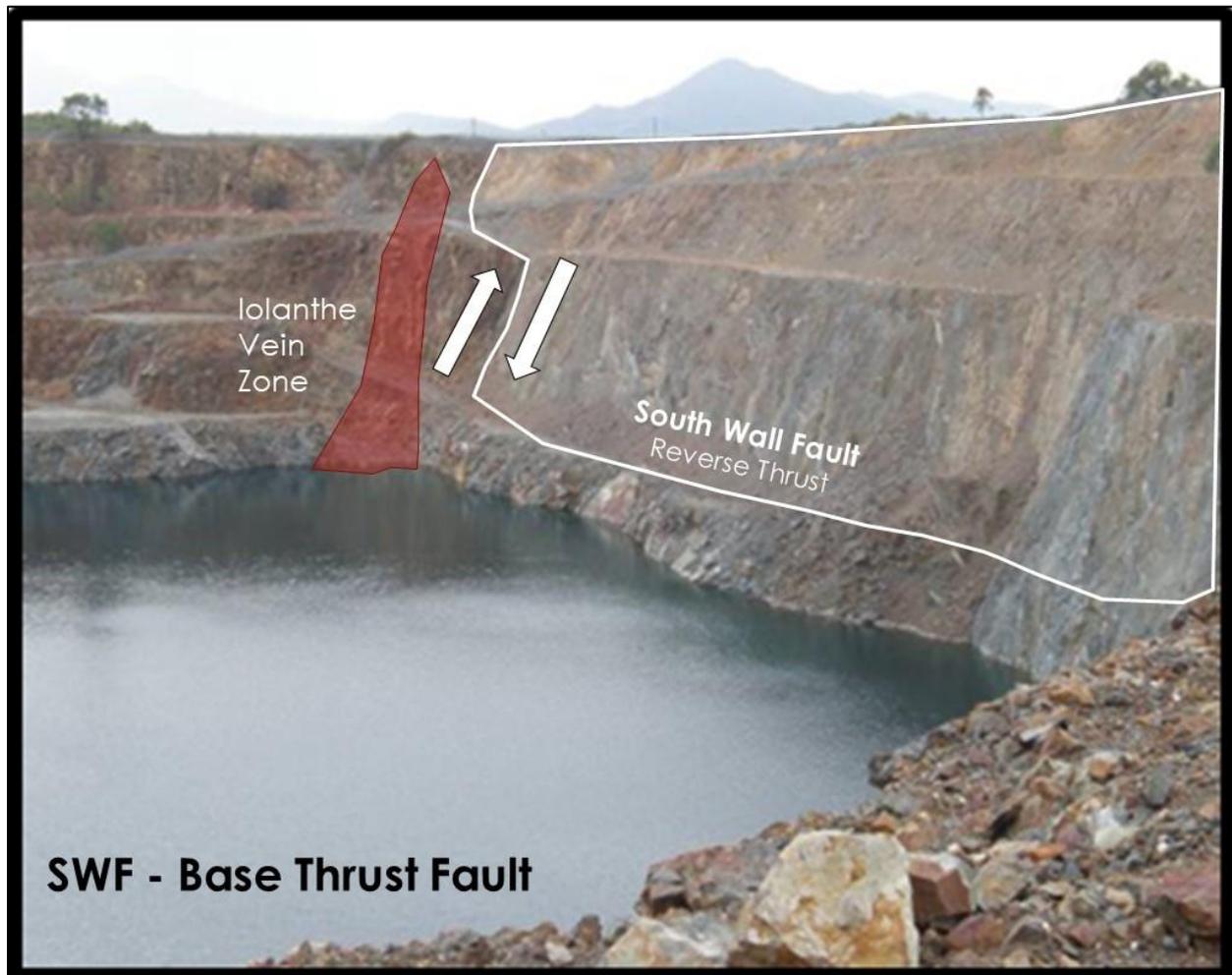


Figure 4-5: South Wall Fault in Open Pit



Other minor faults are typically orientated in a north-south strike direction and exhibit localised movement. The Central / Iron Duke and Christmas Faults both show strike-slip movement and in the case of the central fault, there is strike-slip movement across a dyke of 120 m in a left lateral direction. Whereas minimal throw is noted on the Christmas fault.

Within the confines of the pit, the rocks have been hornfelsed but several deformation lineations can still be seen i.e. S0 (bedding), S1 minor folding and S2 isoclinal folding planes. The mineralised veins postdate this basement deformation, and there is little or no movement on the pit scale.

Veins can be traced over vertical distances of 300-400 m and strike distances of over 1,200 m with very few offsets. Occasionally in the pit, a regular low-angle fault occurs that locally shifts the veins up to 3-4 metres. This low-angle fracture regime tends to form blocks that will require geotechnical considerations for underground mining.

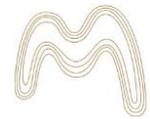
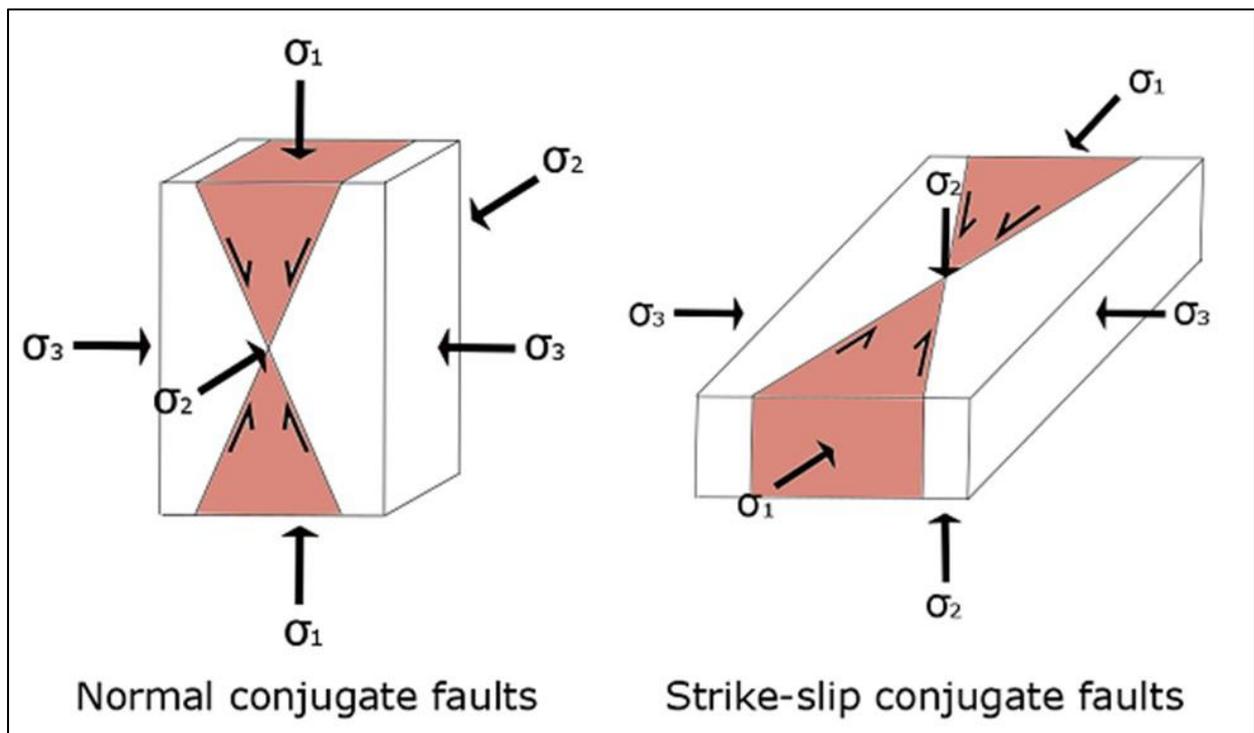


Figure 4-6 illustrates the formation of veins at Mt Carbine outlining the structural stress at the time (Oliver, 2021). The veins are tensile veins with two general environments:

1. Bulk N-S extension (and potentially related normal faults (left)); and
2. A N-S extension component within a transpressional or transtensional (strike-slip) environment (right).

Figure 4-6: Vein Formation at Mt Carbine outlining the structural stress (after Oliver, 2021)



The Mt Carbine tungsten deposit is similar to sheeted vein-type tungsten deposits in South China and these are divided into endo-contact (granite hosted) and exo-contact (wall-rock hosted) types. Mt Carbine is an exo-contact type.

The vertical structural zoning model for vein-type exo-contact tungsten deposits observed in China (Yidou, 1993) directly applies to the Mt Carbine vein system. Figure 4-7 shows a stereonet illustrating the orientation of veins at Mt Carbine outlining the structural stress at the time (Oliver, 2021).

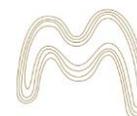
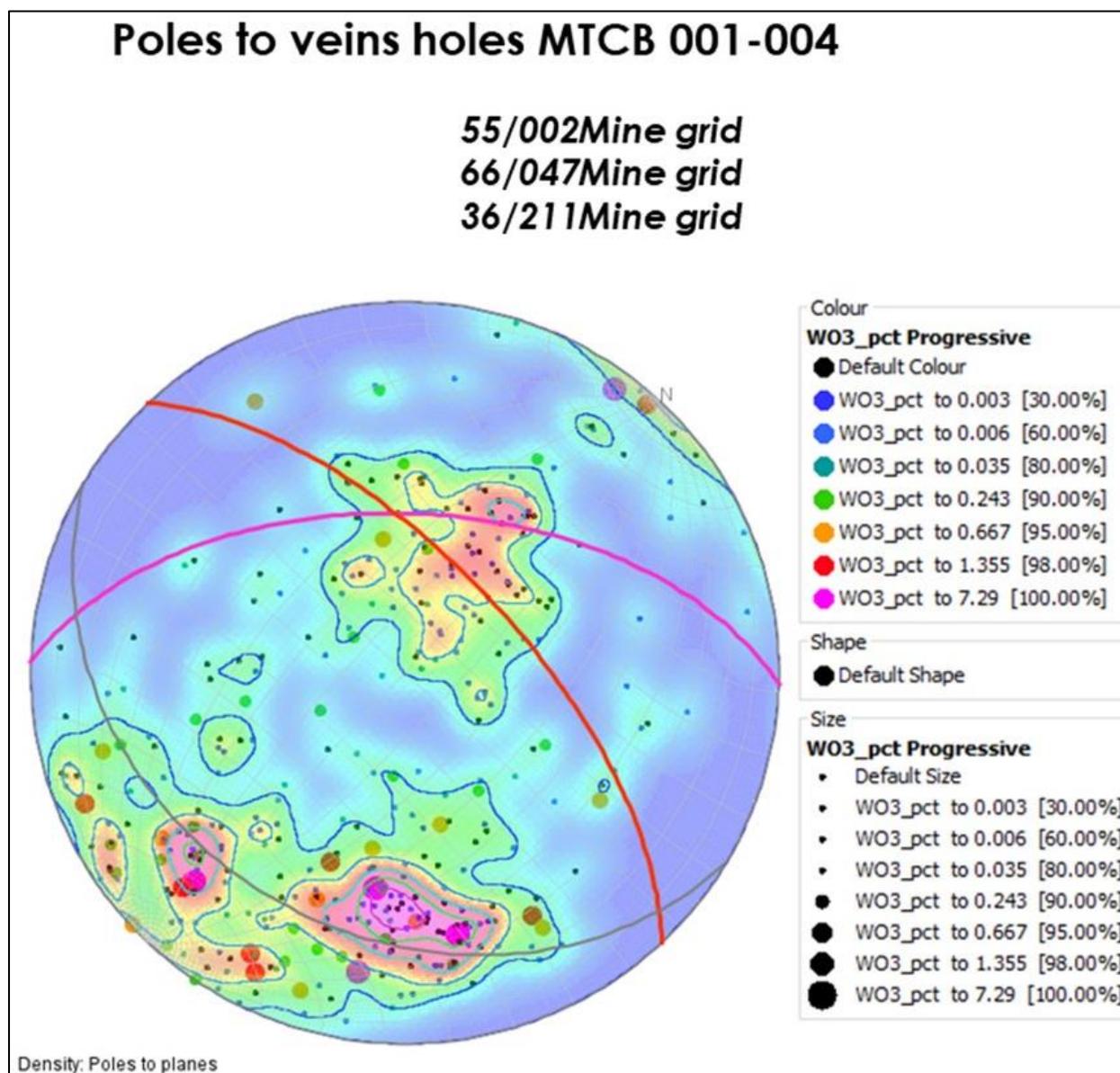


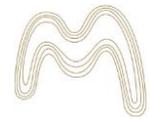
Figure 4-7: Stereonet Illustrating the Orientation of Veins with Structural Stress (after Oliver, 2021)



#### 4.4 MINERALISATION

The Mt Carbine tungsten deposit consists of numerous vertical to sub-vertical sheeted quartz veins ranging in width up to 7 m but averaging around 50 cm. Approximately 20% of the quartz veins are mineralised due to an early barren quartz event and a later high-grade quartz event. Economic minerals are the tungsten minerals of wolframite and scheelite mineralisation.

A typical section through the centre of the deposit shows quartz veins ranging from 10 cm to 6 m in width with 5-8 zones of secondary narrow mineralised quartz veins of 10 cm to 150 cm in width. These high-grade veins contain rich quartz-feldspar tungsten minerals and have been designated as “King Veins”.



The tungsten occurs as a coarse crystalline variety of wolframite with up to 10 cm crystals and varying degrees of intergrown scheelite that is volumetrically less significant. Tungsten minerals can form up to 50% of the quartz vein zone, and because of the coarse crystalline nature, has the potential to cause a nugget effect to the mineralisation.

In later retrograde stages of the mineral deposition, a secondary scheelite overprinting event occurred that is represented mostly as fine scheelite fractures and replacement over wolframite. The scheelite-wolframite ratio is seen to increase to the grid north and grid east of the deposit and this mostly appears to be a local effect due to the host rocks becoming more calcareous. In general, the veins are persistent, widespread and are a product of structural control.

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. This was followed by a rich brine incursion and fracturing of the now silicified rock. These brine veins are recognized 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 increased gas and a composition suggesting interaction with groundwater occurred. The King Veins can be as high as 50%  $WO_3$  but typically are in the 1-2%  $WO_3$  range.

Figure 4-8 shows King Veins with various coarse vein textures of the large wolframite crystals. The matrix has about 10% scheelite and the cream gangue mineral is feldspar. Figure 4-9 shows King Veins in Drill Core with late replacement of coarse wolframite by fine network retrograde scheelite.

Minor Molybdenum is found in the deeper parts of the system and the western parts of the vein zones. Molybdenum generally deposits before tungsten, and this gives a rough fluid outflow direction. Mineralisation at Mt Carbine (except Johnson's vein) demonstrates a localized level of control, with the bulk of the tungsten occurring in the 200-350 m RL zone. At these RL's the veins are 10-50 cm thick but as the same veins go deeper below 200 m RL the vein width increases dramatically and a decrease in tungsten content is noted. Similarly, at higher elevations, the veining also changes dramatically, thinning down to 1-10 cm veins/ stringers with low and variable amounts of wolframite present.

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 2 m at 0.25%  $WO_3$  it has been recorded as a lens. It should be noted that these King Veins often form on the margins of silicified zones or the margins of pre-existing barren quartz veins.

Typically, an "ore zone" or lens is 3-5 m in width and will contain one or more King Veins. Widths of high grade can occur up to 15 m wide where 5 or 6 King Veins are seen close together. Figure 4-10 illustrates sheeted veins at the base of the pit that narrow towards the top and widen as going deeper into the system and wolframite on the left side from drilling.

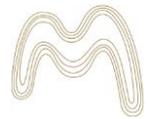


Figure 4-8: King Veins with Various Coarse Vein Textures of Wolframite Crystals



Figure 4-9: Late Replacement of Coarse wolframite by Fine Scheelite



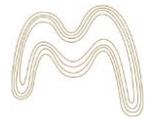


Figure 4-10: Sheeted Veins at the Base of the Pit and wolframite on the Left Side.



A typical ore section through the middle of the open pit is presented in Figure 4-11. The sheeted vein nature of the deposit is clearly shown.

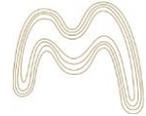
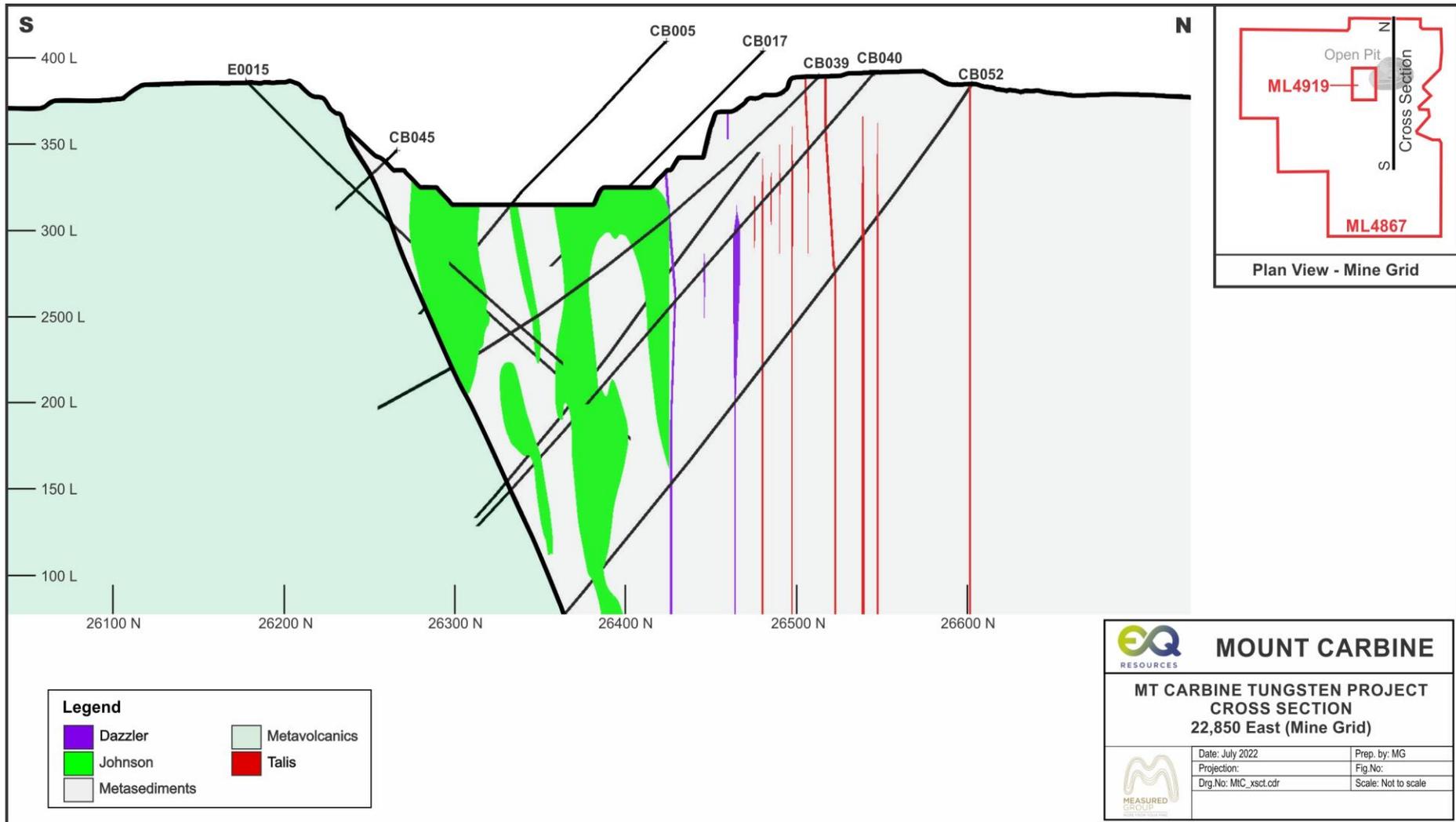


Figure 4-11: Cross Section at 22850E



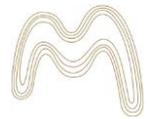
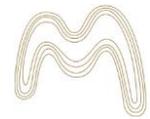


Figure 4-12: Core with Mineralisation Zones (Highlighted)



## 4.5 WEATHERING

Examination of the historical data concluded that in the initial 30 m of the surface the rock mass appears to be moderately weathered with an estimated intact rock strength of 10 to 30 MPa. Weathering surfaces were constructed from drill hole information.



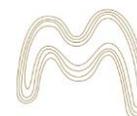
## 4.6 ALTERATION

Alteration minerals associated with the wolframite mineralisation consist of brown tourmaline, biotite-muscovite, apatite, clinopyroxene and silicification. Very minor molybdenite and bismuthinite occur with the wolframite. Minor fluorite-chlorite-cassiterite-pyrite/arsenopyrite and calcite are randomly present.

There is only mild marginal vein alteration typically of sericite-clay-chlorite for only a few centimetres if at all. The mineralised veins appear to have had little effect on the host rocks with the fluids entering hot rocks at depth.

The observed fact that Mt Carbine is a Boron System (significant tourmaline) as compared to a Fluorine System (little fluorite) would suggest that the deposit occurred in hydrostatic equilibrium with the rising brine fluids with little or no pressure build-up occurring. Fluorine-rich deposits are more volatile and typically form breccia pipes, stock working and large intensive alteration systems e.g., Wolfram Camp, Tommy Burns etc.

Alteration minerals are minor other than pervasive early-stage greenschist facies, which have replaced the pelitic mudstones with fine chlorite.



## 5. DATA ACQUISITION

### 5.1 RECENT EXPLORATION DRILLING

EQR completed 26 angled diamond drill holes (EQ001 - EQ026) in 2021/2022, for a total of 6,190.2 m. The drill holes targeted high-grade ore shoots below the current pit, to improve confidence in the lithology, structural interpretations, and mineralisation limits and to improve the resolution of geological models.

A summary of the drilling completed in 2021/2022 is presented in Table 5-1 below and Figure 5-1 shows the drill hole location map relative to the historical pit.

Table 5-1: EQR Drill Hole Details

HOLE	LOCAL GRID EAST	LOCAL GRID NORTH	RL	EOH	SURVEY	X GPS	Y GPS	Z GPS
EQ001	22,793.34	26,175.88	389.44	309.1	MGA94_55	300,503.0	8,172,065.3	389.44
EQ002	22,793.46	26,175.45	389.48	341.8	MGA94_55	300,502.7	8,172,064.9	389.48
EQ003	22,735.72	26,170.54	387.45	299.0	MGA94_55	300,462.3	8,172,106.5	387.45
EQ004	22,704.43	26,174.98	386.27	327.3	MGA94_55	300,445.8	8,172,133.4	386.27
EQ005	22,657.49	26,173.73	386.84	312.3	MGA94_55	300,415.1	8,172,168.9	386.84
EQ006	22,876.24	26,188.65	383.63	309.3	MGA94_55	300,565.4	8,172,009.4	383.63
EQ007	23,014.34	26,328.21	364.19	48.0	MGA94_55	300,760.9	8,171,991.2	364.19
EQ008	23,014.32	26,329.36	364.09	60.5	MGA94_55	300,761.8	8,171,992.0	364.09
EQ009	23,013.89	26,331.01	364.15	171.5	MGA94_55	300,762.8	8,171,993.4	364.15
EQ010	22,656.89	26,177.07	386.88	243.3	MGA94_55	300,417.3	8,172,171.5	386.88
EQ011	22,765.40	26,173.43	388.70	285.3	MGA94_55	300,483.3	8,172,085.3	388.70
EQ012	22,624.14	26,185.84	387.84	411.6	MGA94_55	300,403.3	8,172,202.4	387.84
EQ013	22,910.82	26,189.74	382.76	294.2	MGA94_55	300,588.2	8,171,983.3	382.76
EQ014	22,957.04	26,203.66	382.72	300.4	MGA94_55	300,628.3	8,171,956.4	382.72
EQ015	22,841.12	26,177.67	386.78	306.3	MGA94_55	300,534.7	8,172,029.5	386.78
EQ016	23,055.61	26,321.32	380.38	48.4	MGA94_55	300,781.8	8,171,955.0	380.38
EQ017	23,049.90	26,422.15	380.19	345.4	MGA94_55	300,856.1	8,172,023.4	380.19
EQ018	22,483.17	26,167.92	384.38	465.2	MGA94_55	300,299.9	8,172,299.9	384.38
EQ019	22,460.63	26,159.36	384.36	249.3	MGA94_55	300,279.0	8,172,311.9	384.36
EQ020	22,513.20	26,217.40	385.12	204.0	MGA94_55	300,357.2	8,172,308.1	385.12
EQ021	22,566.84	26,232.40	384.90	140.4	MGA94_55	300,402.9	8,172,276.2	384.90
EQ022	22,612.55	26,227.23	385.04	147.0	MGA94_55	300,427.9	8,172,237.6	385.04
EQ023	22,603.98	26,258.85	379.42	120.0	MGA94_55	300,446.9	8,172,264.3	379.42
EQ024	22,492.58	26,258.76	402.31	144.4	MGA94_55	300,376.1	8,172,350.3	402.31
EQ025	22,455.72	26,231.95	397.94	156.0	MGA94_55	300,332.0	8,172,361.8	397.94
EQ026	22,424.27	26,209.50	394.33	150.2	MGA94_55	300,294.7	8,172,371.8	394.33
		<b>TOTAL DRILLING</b>		<b>6,190.20</b>				

Drill holes were surveyed using the mine's local grid, which is laid out on a 51-degree rotation to the west from true north.

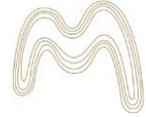
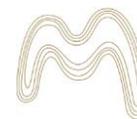


Figure 5-1: Drill Hole Locations





## 5.2 COLLAR AND TOPOGRAPHY SURVEYS

Brazzier Motti Surveying Consultancy was engaged to re-establish the local grid and survey the collars of previous drill holes and the drill holes completed in 2021 and 2022. In addition, all key survey markers around the open cut were re-surveyed (see APPENDIX F: ).

Surveying of drill holes was completed using a Garmin GPS61 model GPS for locating the collar coordinates in the WGS84 Datum system. A LIDAR survey was flown over the mining license using a Drone with a 10 cm resolution accuracy on topography. This was important to establish the accuracy of historical contour maps for the pit and Low-grade Stockpiles (see APPENDIX F: ).

Given there is currently 35 metres of water in the open cut, it was deemed that it was necessary to establish controls on the bottom of the historical pit. This was completed using a marine sonar survey in August 2021. The sonar survey confirmed the pit floor contours were the same as the digital survey pit shape on file from the end of the mining in 1987, ie the pit shell wireframe was accurate and no further disturbance to the pit had occurred.

## 5.3 DOWNHOLE SURVEY

Downhole surveys were conducted every 30 m downhole except for the pre-collar zones. Pre-collars were up to 120 m in depth with HW casing being installed before continuing drilling using NQ coring equipment. The core was oriented using a digital orientation method called the Reflex Act III tool system, which recorded hole orientation and downhole survey by wirelessly transmitting data back to the surface for recording. All survey data were input into the database and then plotted using Leapfrog Mining Software to check deviation in drill holes.

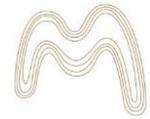
## 5.4 DRILL HOLE DATA

Drill holes completed in 2021 and 2022 were collared perpendicular to the strike of the tungsten mineralisation. Drilling utilised HQ and NQ-sized diamond core equipment (with double and triple tube-drilling techniques). HQ diamond core was drilled down to the South Wall Fault (SWF), which was then cased off before continuing with NQ diamond drilling equipment.

The full core was collected and marked up for depth and orientation. Core was marked with core blocks typically at 1.5 m and 3.0 m intervals by the drilling company using stick-up techniques that ensure measurement to 1 cm accuracy.

Core recovery was consistently high, with 99% of core recovered for the entire campaign. As a result of the hardness of the quartz zones, minimal loss from drilling was recorded in these zones. Generally, the core was found to be competent and hard, with all assay samples located below the base of oxidation.

Host rocks were logged as metasediments that have been silicified and crosscut by sheeted white quartz veins. Core logging was semi-quantitative in its description of alteration intensity, and mineral types in percentages using geological percentage charts. Each mineralised interval was recorded by the Site Geologist and checked for accuracy by the company's Chief Geologist before



cutting and sampling. Post sampling, the core was selected for alteration mapping and petrographic studies.

The drill core was transported daily to a secure storage facility on-site. The core storage facility remains locked after work hours and contains a shed with core racks installed to house the drill core. For longer-term storage, the drill core is cling-wrapped for preservation and archived at this facility.

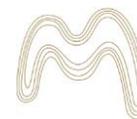
Data was collected using a paper log sheet with the information and then transferred to a digital database, which holds all drill holes, drilling, survey, sample, assay, recovery, geotechnical data and information. All data was validated before being entered into EQR's final geoscience database.

## 5.5 CORE PHOTOGRAPHY

Core was re-joined into longer sticks and photographed in core boxes using a high-resolution camera for both dry and wet images. The core was marked up and measured for recovery and the orientation line was marked down the full length of the core. Figure 5-2 shows an example of the core photographs taken of Mt Carbine core.

Figure 5-2: Example of Core Photography





## 6. SAMPLE PREPARATION, ANALYSES AND SECURITY

### 6.1 INSITU OREBODY

All zones of potential mineralisation were logged and sampled by cutting the selected core interval in half using a diamond saw along the centre core orientation line mark. Before cutting and sampling, the core was logged for zones of visual mineralisation, with wolframite and scheelite recorded by their visual contained percentage.

Scheelite glows under ultraviolet light, and although difficult to distinguish under ordinary light from quartz-carbonate, it is visual under the shortwave 254 nm UV light. A common technique to estimate grade in the core is to trace out individual crystals to determine the overall percentage shown on the face of the core. The mineralisation was often observed as very coarse tungsten mineral crystals of up to 10 cm in size.

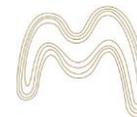
All quartz veins intersected in the drill core were assayed as separate samples. Where the veins were more than 1 m in downhole length, the sample was broken into two or more samples - each with a maximum of 1 m interval. The minimum vein assayed was 5 cm in width, because the mineralisation often occurs in narrow widths of 5 cm to 500 cm and it is important to assay each narrow mineralised zone. On either side of the mineralised zone, samples were taken of the host rock at intervals of 1 m to ascertain whether the mineralisation had disseminated into the host rock.

X-ray fluorescence assay techniques were used to determine the tungsten grade (ME-XRF15b). Using this technique, a fusion disk is created for the representative sample of the core sample, it is created by grinding the sample to achieve a homogenous sample (<200 microns). The sample is then melted in an arc furnace to produce a clear fused disc, which is then x-rayed with the fluorescence recording spectral peaks.

The instrument used to determine the tungsten grade is a Bruker multi-shot XRF machine with an X-ray scan of 1 minute applied to each disk to ascertain the light and heavy elements. The XRF machine is calibrated by the laboratory to maintain reliable and repeatable results.

Approximately 10% of each batch that is sent to the laboratory includes check samples, which are submitted alternatively as being either a blank, a tungsten standard or a repeat sample with a known grade. This process was successfully used to resolve an issue with samples 100216 and 100217, which are samples vein and host rock (respectively). The results for these samples did not match the visual grade determination or the weights of the samples and it was established that the grade of 0.72% was in the vein, not the host rock. It was concluded that samples were mistakenly switched at the laboratory, and this was rectified before loading into the assay database.

ALS was used for assaying samples. ALS is a NATA accredited laboratory that conducts internal and external round-robin analysis to maintain its certification and to ensure its equipment is correctly calibrated and reliable.



Final samples were bagged and prepared for transport to Brisbane via road or rail. Reserves from the assayed samples have been archived for future re-sampling. Chain of custody between EQR and ALS requires both parties to record and check sample and/or batch numbers on dispatch/receipt of sample shipments and check for any signs of tampering or damage.

## 6.1.1 LOW-GRADE STOCKPILE

Bulk sampling was completed by excavating 8 costeans around the perimeter of the historical stockpile, costeans ranging up to 10 m deep and 50 m long were completed. The bulk sample was coned and quartered with the excavator to 2,000 tonnes. This sub-sample was crushed to minus 50 mm and screened into three size ranges: 20 mm to 50 mm, 10 mm to 20 mm and minus 10 mm. Each size fraction was sampled by channel sampling. The bulk samples were analysed by fused disk methods and check analyses were carried out on-site with a Niton portable XRF analyser (after calibration of this instrument).

Grab sampling was completed on 80 locations (samples approximately 20 kg each of minus 100 mm material) for mineralogical and chemical characterisation of mineralised rock for environmental permitting purposes. The grab samples were crushed to a minus 3 mm split and sub-samples were pulverised and assayed for a range of elements including tungsten.

The bulk sample crushed, and screened size splits are stored on-site, and the crushed grab samples and pulverized splits are stored in the mine's core storage facility.

## 6.2 PETROLOGY

Petrology tests were carried out during the study by Pterosaur Petrology. Appendix D describes the petrology of the major rock types at Mt Carbine. The rocks hosting the ore are predominantly Pelitic Schists, Metavolcanics and minor cherts. Quartz content can reach as high as 20% of the total rock content and mineralisation is less than 1% by volume.

Alteration minerals are minor, other than pervasive early-stage greenschist facies, which have replaced the pelitic mudstones with fine chlorite.

Gangue or host rock of the mineralised lenses includes quartz, feldspar, tourmaline, muscovite (Biotite) with minor amounts of apatite, calcite, pyrite-arsenopyrite, magnetite and zircon. In places in the host rock, cordierite is developed. Only arsenopyrite and apatite concentrate alongside wolframite-scheelite with Arsenic reaching up to 1-2% in concentrate samples from a low base of 300 ppm.

Economic tungsten minerals are wolframite and scheelite with a typical ratio of 4:1 in the deposit. Each of these minerals contains different tungsten percentages and has different properties. The overriding property that assists in the processing of these minerals is their specific density being high in the 6-7 gm/cm<sup>3</sup> range compared to the host quartz-mudstones at 2-3 gm/cm<sup>3</sup>.

Properties for wolframite are shown in Figure 6-1 and for scheelite in Figure 6-2.

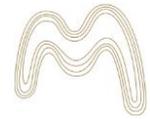


Figure 6-1: Wolframite Minerals (after Pterosaur Petrology, 2021)

<input checked="" type="checkbox"/> <b>Chemical Formula:</b>	(Fe,Mn)WO <sub>4</sub>																									
<input checked="" type="checkbox"/> <b>Composition:</b>	Molecular Weight = 303.24 gm <table border="0"> <tr> <td><a href="#">Manganese</a></td> <td>9.06 %</td> <td>Mn</td> <td>11.70 %</td> <td>MnO</td> </tr> <tr> <td><a href="#">Iron</a></td> <td>9.21 %</td> <td>Fe</td> <td>11.85 %</td> <td>FeO</td> </tr> <tr> <td><a href="#">Tungsten</a></td> <td>60.63 %</td> <td>W</td> <td>76.46 %</td> <td>WO<sub>3</sub></td> </tr> <tr> <td><a href="#">Oxygen</a></td> <td>21.10 %</td> <td>O</td> <td></td> <td></td> </tr> <tr> <td></td> <td>100.00 %</td> <td></td> <td>100.00 %</td> <td>= TOTAL OXIDE</td> </tr> </table>	<a href="#">Manganese</a>	9.06 %	Mn	11.70 %	MnO	<a href="#">Iron</a>	9.21 %	Fe	11.85 %	FeO	<a href="#">Tungsten</a>	60.63 %	W	76.46 %	WO <sub>3</sub>	<a href="#">Oxygen</a>	21.10 %	O				100.00 %		100.00 %	= TOTAL OXIDE
<a href="#">Manganese</a>	9.06 %	Mn	11.70 %	MnO																						
<a href="#">Iron</a>	9.21 %	Fe	11.85 %	FeO																						
<a href="#">Tungsten</a>	60.63 %	W	76.46 %	WO <sub>3</sub>																						
<a href="#">Oxygen</a>	21.10 %	O																								
	100.00 %		100.00 %	= TOTAL OXIDE																						
<input checked="" type="checkbox"/> <b>Empirical Formula:</b>	Fe <sup>2+</sup> <sub>0.5</sub> Mn <sup>2+</sup> <sub>0.5</sub> (WO <sub>4</sub> )																									
<input checked="" type="checkbox"/> <b>Environment:</b>	Group name for the hübnerite - ferberite series.																									
<input checked="" type="checkbox"/> <b>IMA Status:</b>	Not Approved IMA 1863																									
<input checked="" type="checkbox"/> <b>Locality:</b>	Link to <a href="#">MinDat.org</a> Location Data.																									
<input checked="" type="checkbox"/> <b>Name Origin:</b>	From the German, Wolfram, name for tungsten.																									

Figure 6-2: Scheelite Mineral (after Pterosaur Petrology, 2021)

<input checked="" type="checkbox"/> <b>Chemical Formula:</b>	CaWO <sub>4</sub>																				
<input checked="" type="checkbox"/> <b>Composition:</b>	Molecular Weight = 287.93 gm <table border="0"> <tr> <td><a href="#">Calcium</a></td> <td>13.92 %</td> <td>Ca</td> <td>19.48 %</td> <td>CaO</td> </tr> <tr> <td><a href="#">Tungsten</a></td> <td>63.85 %</td> <td>W</td> <td>80.52 %</td> <td>WO<sub>3</sub></td> </tr> <tr> <td><a href="#">Oxygen</a></td> <td>22.23 %</td> <td>O</td> <td></td> <td></td> </tr> <tr> <td></td> <td>100.00 %</td> <td></td> <td>100.00 %</td> <td>= TOTAL OXIDE</td> </tr> </table>	<a href="#">Calcium</a>	13.92 %	Ca	19.48 %	CaO	<a href="#">Tungsten</a>	63.85 %	W	80.52 %	WO <sub>3</sub>	<a href="#">Oxygen</a>	22.23 %	O				100.00 %		100.00 %	= TOTAL OXIDE
<a href="#">Calcium</a>	13.92 %	Ca	19.48 %	CaO																	
<a href="#">Tungsten</a>	63.85 %	W	80.52 %	WO <sub>3</sub>																	
<a href="#">Oxygen</a>	22.23 %	O																			
	100.00 %		100.00 %	= TOTAL OXIDE																	
<input checked="" type="checkbox"/> <b>Empirical Formula:</b>	Ca(WO <sub>4</sub> )																				
<input checked="" type="checkbox"/> <b>Environment:</b>	A primary tungsten ore mineral commonly found in contact-metamorphic deposits.																				
<input checked="" type="checkbox"/> <b>IMA Status:</b>	Valid Species (Pre-IMA) 1821																				
<input checked="" type="checkbox"/> <b>Locality:</b>	Bispberg iron mine, Säter, Dalarna, Sweden Link to <a href="#">MinDat.org</a> Location Data.																				
<input checked="" type="checkbox"/> <b>Name Origin:</b>	Named after the Swedish chemist, Karl Wilhelm Scheele (1742-1786).																				

By the process of rock sorting, In situ ore and material from the LGS are upgraded approximately 10x and significantly reduce the tonnage required to be processed (i.e. < 25% of this material will be processed after the final ore is ground down to <1 mm for gravity processing).

There are no significant sulphides found in the deposit, with an average sulphur level of 0.147% relating to less than 0.3% sulphides in the insitu orebody. No ARD acid-metal issues have been identified in the dumps and it should be noted that the pit has been full of water for 34 years and it has remained clear and is slightly alkaline. Water tests have recorded elevated fluorine levels.

Figure 6-3 shows examples of coarse wolframite (black) with scheelite in quartz - scheelite glows on blue in the right-hand picture. Note that some scheelite is a secondary replacement of wolframite.

A complete analysis for 26 elements has been performed on all core samples submitted to ALS (APPENDIX H: ). As the ore occurs in a quartz vein rather than a silicified host, several key multi-element differences can be noted (Table 6-1).

Figure 6-3: Examples of Coarse Wolframite with Scheelite Quartz



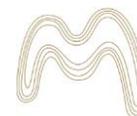


Table 6-1: Key Differences Between Host Rock and Ore

Element	Host Rock	Ore	Comment
Al <sub>2</sub> O <sub>3</sub>	16.30%	4.16%	Low Silicate minerals in Ore
SiO <sub>2</sub>	64.90%	88.40%	Ore is in qtz, the Host rock is highly silicified
K <sub>2</sub> O	3.12%	1.02%	A lot of biotite surrounding alteration
S	0.09%	0.06%	Ore & Host have low sulphide contents
Fe	3.79%	1.61%	Less ferromagnesium minerals in the ore
TiO <sub>2</sub>	0.62%	0.08%	The host has a lot of rutile alteration
MgO	1.78%	0.25%	The host has tourmaline alteration

### 6.3 SAMPLE DATA LOCATION, SPACING AND DISTRIBUTION

Drilling is currently designed to complete the testing of the zone beneath the open-cut pit at a spacing of 50 x 50 m. In several locations, drill spacing was reduced down to 25 m to provide additional data and confirm the grade and widths of mineralised zones.

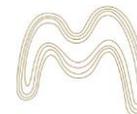
### 6.4 SAMPLE DATA ORIENTATION IN RELATION TO GEOLOGICAL STRUCTURE

The drilling was completed at right angles to the trend of mineralisation, on a localised grid that has been used since the 1960s - the local grid was used to orientate all drill holes to allow for regular spacing and interpretation of the mineralised vein system.

Depending on the hole angle and attitude of the mineralised veins, the actual downhole intervals will report as a longer interval than the true width of the vein. No bias has been observed in the mineralisation. The mineralised veins show consistent parallel zones, and the drilling was completed at the optimum angle to give a true indication of the zones.

### 6.5 SAMPLING AUDIT

An internal audit of sampling techniques was completed to check for sample bias and did not identify any bias. The bulk sampling procedures for the LGS were subject to review by the Competent Person to supervise the X-ray ore sorter trials. The sampling procedures were reviewed by the Competent Person and deemed to be appropriate for estimating a Mineral Resource.



## 7. QA/QC

The results of the QA/QC work confirmed that no systematic bias is present in the assay results used in the Mineral Resource estimate.

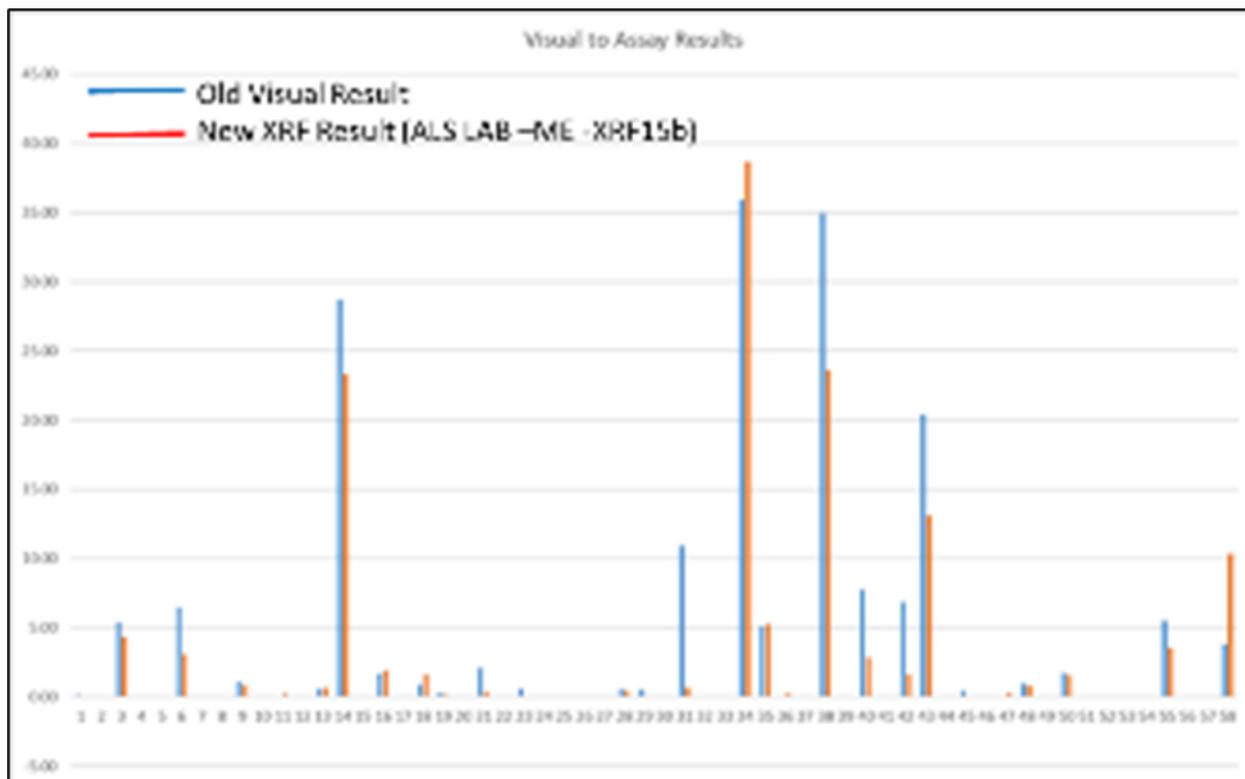
### 7.1 REVIEW OF VISUAL RESULTS

A total of 58 samples, which are contained in the database as visual results, were resampled and laboratory analysis completed. These intervals were resampled using ½ core as per normal sample procedures outlined in Section 6.1.

Comparison results of Laboratory Assays vs Visual Estimates are shown in Figure 7-1, with the low-grade results (below 0.25% WO<sub>3</sub>) showing an increase of 105% in grade for the same intervals but the high-grade ore samples dropped 24% in grade from the visual results.

In the database, only results assayed by the laboratory under QA/QC conditions were used in estimating the Mineral Resource. The relationships between the visual results vs the actual assay results are shown in Figure 7-2.

Figure 7-1: Comparison of Visual vs. Assay Results



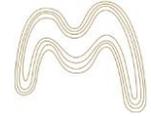
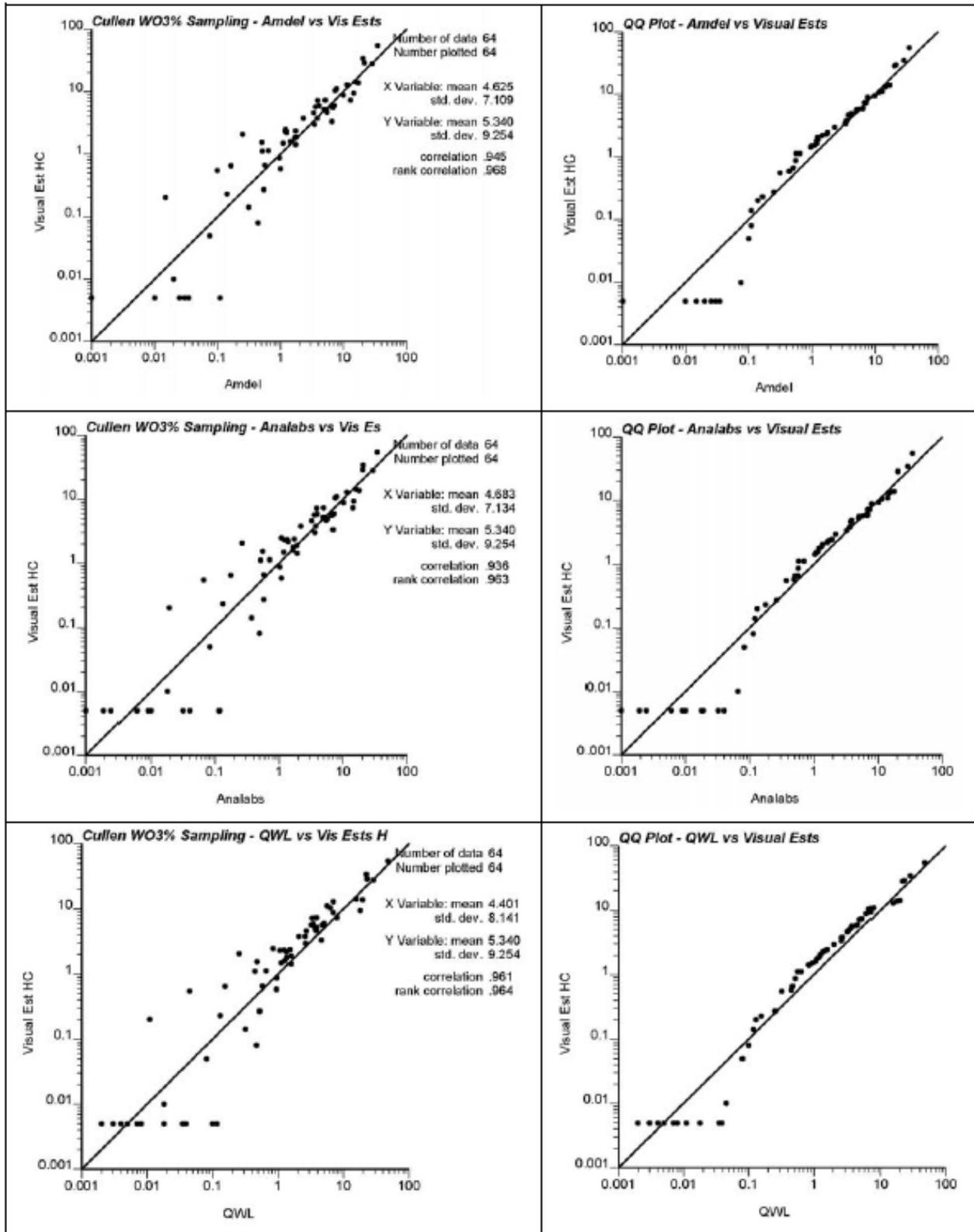
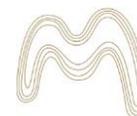


Figure 7-2: Scatterplots (left) and Q-Q Plots (right) of Laboratory Assays vs Visual Estimates (after Bainbridge, 2021)





## 7.2 QA/QC SAMPLES

From the total 6,190.2 m of drilling completed in 2021/2022, 1,812 samples were sent to the ALS laboratory in Brisbane. Standards and blanks were included in all batches sent for assay. The total number of standards and blanks inserted into this assaying programme was 196 samples comprising just over 10.2% of the samples submitted, comprising the following:

- 92 tungsten sample standards were analysed on a 1 in 20 basis; and
- 104 blank samples were tested and inserted on a 1 in 20 basis.

### 7.2.1 STANDARDS

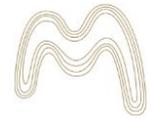
During the 2021/2022 drilling campaign, a total of 13 standards were assayed to assess the reliability of the laboratory. Standards were inserted at random into sample batches using one standard (MC-3), which represented a bulk sample taken from the LGS, with an average grade of 0.225% WO<sub>3</sub>.

The errors were within a 3% margin for all QA/QC standard results with the likely variation being that stated variation within the standard itself. The checks showed there was little drift or error in the results determined by the laboratory. The standards assay results were well within the allowed  $\pm 10\%$  range of the expected values. Table 7-1 shows the Certified Reference Material (CRM) used in the current exploration programmes.

Table 7-1: CRM Used in the 2021/2022 Exploration Programmes.

CRM	Value of CRM	+2SD	-2SD
1003	4.31	4.35	4.27
1016	0.049	0.053	0.046
1023	1.58	1.60	1.56
1024	0.126	0.131	0.121
1026	0.364	0.374	0.355
1038	0.032	0.037	0.028
1043	0.206	0.208	0.204
1052	0.044	0.046	0.042
1099	0.105	0.111	0.098
1122	0.102	0.11	0.095
100138	0.456	0.466	0.447
100186	1.420	1.421	1.419

Appendix G contains the figures for standards against the normalized known value for the 2021/2022 exploration programmes.



7.2.2 BLANKS

The majority of blank samples were less than 0.0055% WO<sub>3</sub>. Slightly higher results were observed only when using blank core samples which, although perceived to be barren by the geologists, had background Tungsten values of up to 0.025% WO<sub>3</sub>. This slight variance in blank sample values was noted in 6 blank samples out of the 67 blank samples used where ½ core showed very low background values encountered. Figure 7-3 illustrates the results of the inserted blank samples with variations shown in Figure 7-4.

Figure 7-3: Plot of Results of Inserted Blank Samples

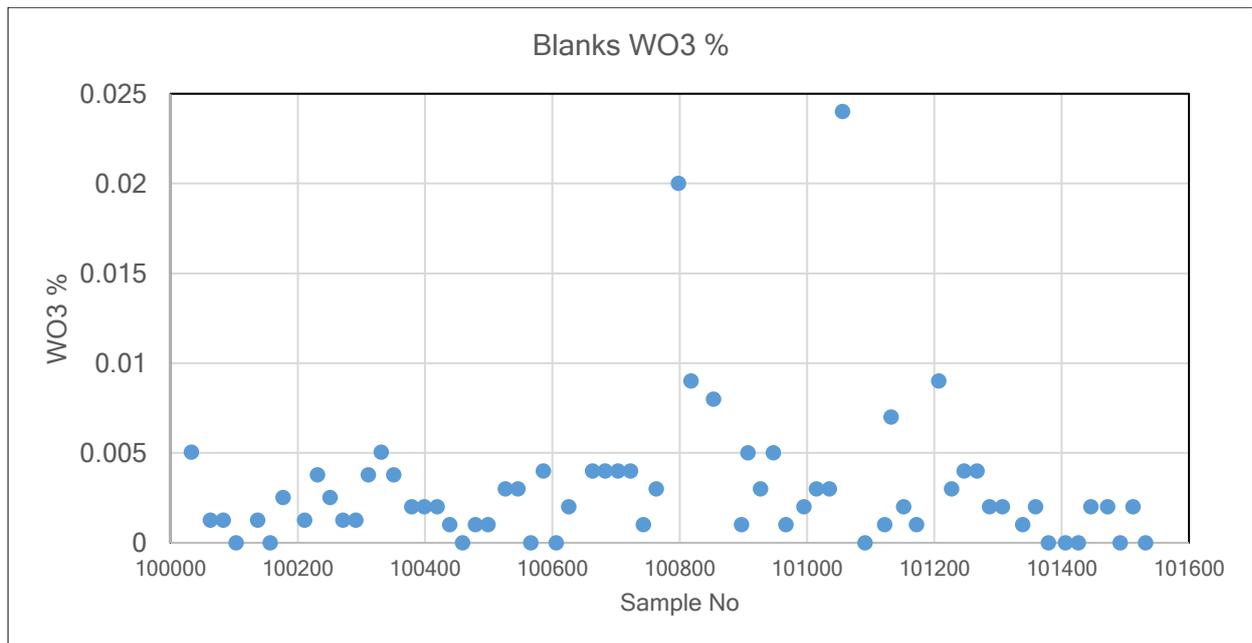
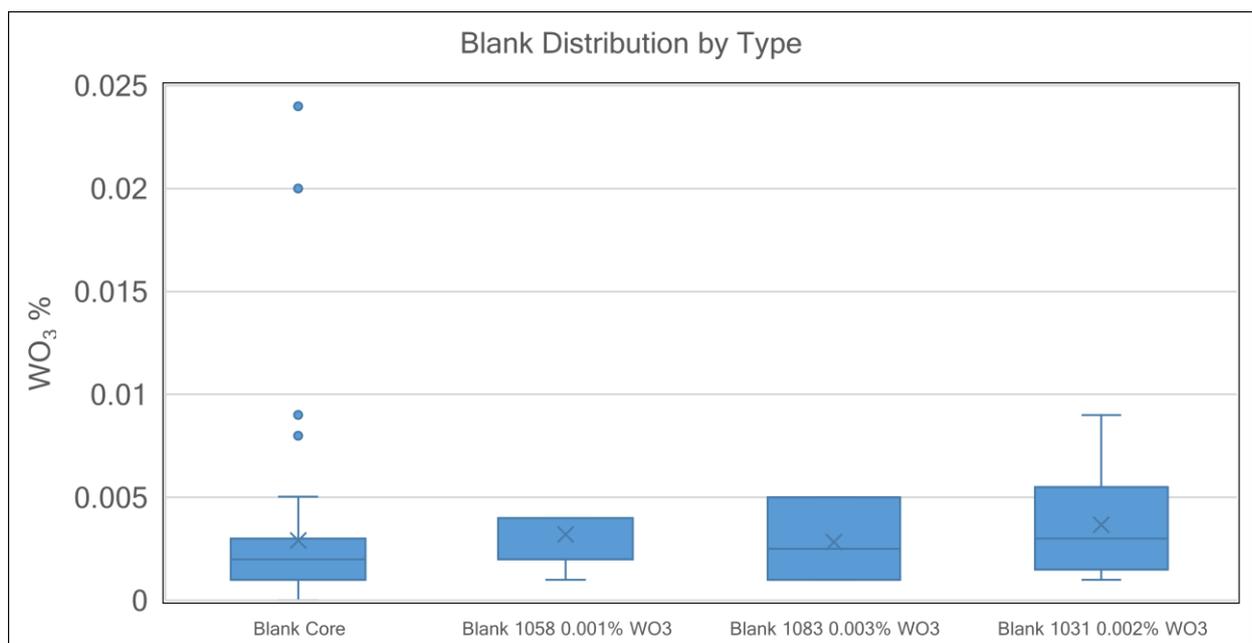
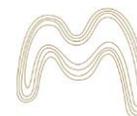


Figure 7-4: Blank Samples Distribution





### 7.2.3 UMPIRE LABORATORY PULP ASSAY VERIFICATION

A total of 116 pulps (5% of the total sample) were submitted to Burnie Labs in Tasmania for re-assay via fused-disk XRF analysis, to test the accuracy of the results from the primary laboratory (ALS in Brisbane). A comparison of these pulp assays with the original pulp assays from ALS Brisbane shows a relative bias of 16% (Table 7-2 and Table 7-3) and an absolute bias of 0.01.

With a very low absolute bias present, the Competent Person’s opinion is that the pulp assays from ALS are acceptable and were endorsed for use in the resource model.

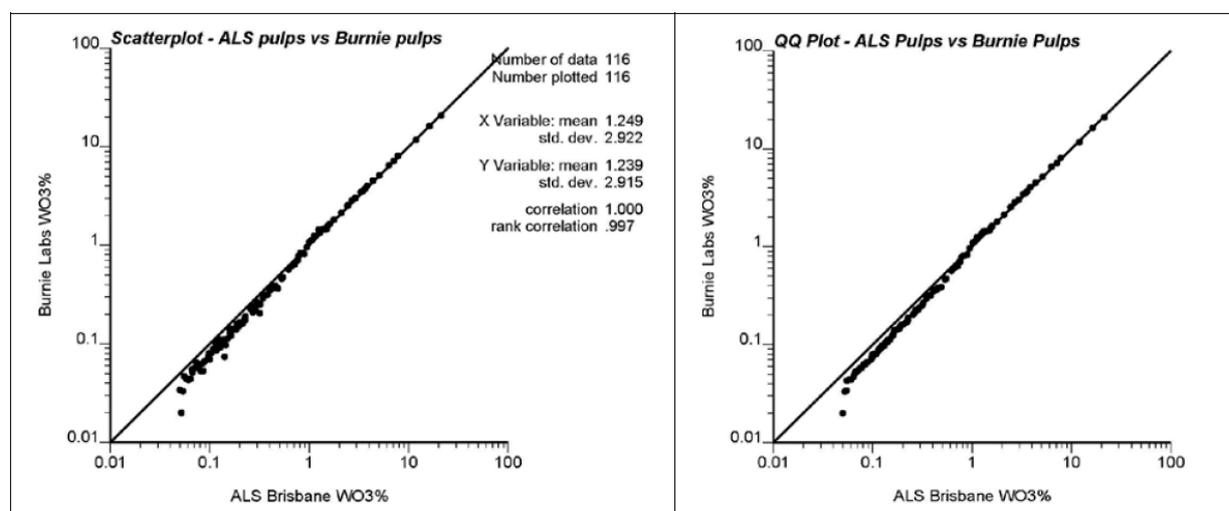
Table 7-2: Univariate Statistics of ALS and Burnie Labs WO<sub>3</sub>%

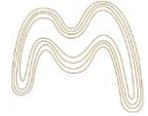
Parameter	ALS	BURNIE
Number	116	116
Minimum	0.05	0.02
Maximum	21.313	20.792
Mean	1.249	1.239
Median	0.255	0.204
Std Dev	2.94	2.93
Variance	8.61	8.57
Coeff Var	2.35	2.36

Table 7-3: Bivariate Statistics of ALS and Burnie Labs WO<sub>3</sub>%

Parameter	ALS vs BURNIE
Covariance	8.52
Correlation Coefficient	1.00
Relative Bias	16%
Absolute Bias	0.01

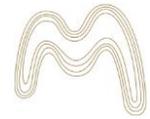
Figure 7-5: Scatterplot (left) and Q-Q Plot (right) of ALS pulps vs Burnie pulps (EQR, 2021)





### 7.3 QA/QC REVIEW CONCLUSIONS

The laboratory employed good 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  $WO_3\%$  assay results over the same sample intervals have shown a consistent linear relationship with no issues that would impact resource estimation



## 8. LOW-GRADE STOCKPILE ASSESSMENT

### 8.1 HISTORICAL 'ORE' EXTRACTION AND WASTE DUMP FORMATION

The LGS is material that has come directly from the open cut during previous mining of the operation. Material distribution is random and unsorted direct from where the mining was occurring. The dumps were deposited in two layers, with mining from years 1978 to 1983 resulting in 8 Mt and mining from 1983 to 1987 resulting in 4 Mt.

### 8.2 GRADE DISTRIBUTION IN LOW-GRADE STOCKPILE

To determine the grade distribution of the LGS, a comprehensive sampling programme was developed to achieve representative sampling of the stockpile material. The sampling that was undertaken to achieve this is summarised below, while Figure 8-1 shows the location of the samples:

**Sites Selection** - The dump was divided into quadrants with a major and minor sample location being marked. In two of the quadrants, two sample sites were selected to see repeatability.

**Sample Size** - 6 trench samples (each trench taken at approximately 10 m wide x 5 m deep x 40 m length) was deemed to be representative of that part of the dump each comprising a 3,500-t sample.

**Method** - The sample was collected using 25 t trucks and a 30 t excavator being careful to load all the material from the sample trench and run over the weighbridge to determine weight before being added to a large stockpile. A total of 22,000 t was collected from the 6 separate locations. This was then cone and quartered down to a subset sample of 2,000 t which was fully crushed to a nominal 40 mm and sampled.

The bulk sample average was determined to be 0.075%  $WO_3$ .

Further sampling of the LGS for environmental permitting purposes involved taking 80 grab samples from the surface of the stockpile. Each sample was approximately 20 kg of minus 100 mm material. The average grade of these samples was 0.088%  $WO_3$ .

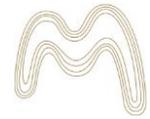
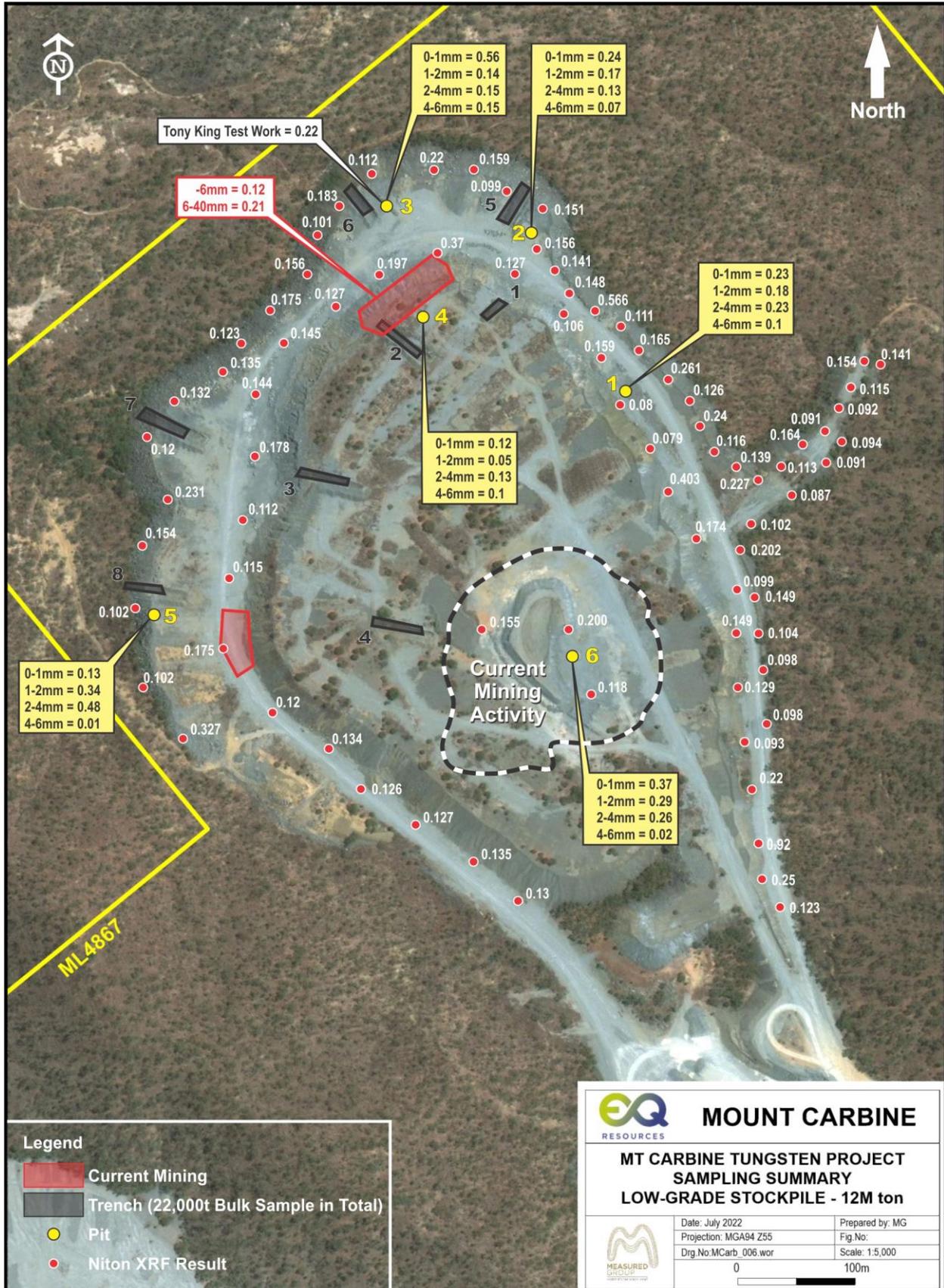
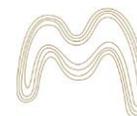


Figure 8-1: Low-Grade Stockpile Sampling Locations





### 8.3 PROCESSING OF LOW-GRADE STOCKPILE MATERIAL

Trials indicated that at optimum settings, the X-ray Sorter could produce a pre-concentrate of approximately 12% of the original feed and has a grade of approximately 0.65% WO<sub>3</sub> at 90% WO<sub>3</sub> recovery. Approximately 88% of the material sent to the sorter was rejected as waste. The local variation in grade distribution within the stockpile is expected to be variable and this has not yet been quantified.

Two pits have been mined, the NE pit and the Central pit, which have had 30,000 t and 86,000 t respectively mined from these locations. The processing methodology involves screening out the minus 6 mm for processing and crushing all the material between 6 mm and 170 mm down to less than 40 mm for XRT sorting.

This test work was designed to mimic the planned flow sheet and to determine the LGS grades based on the fines and XRT sorter product. Both these categories were crushed to various sizes before sampling (Table 8-1). This generated further 0-6 mm fines and although the quantity varies considerably, the total fines that are natural and crushed are approximately 30-35%. +170 mm oversize is returned to the stockpile and is also about 30% of the dump, leaving approximately 40% of the dump that is sorted through the XRT Tomra Sorter.

Table 8-2 shows a summary of the regular sampling in size fractions taken from the 0-6 mm natural fraction at 6 pit site locations separate from the initial 6 trench locations. An example of pit sampling is shown in Figure 8-2.

Table 8-1: X-Ray Sorter fines Samples

<b>Sorter Fines -8mm</b>																
Size (µm)	Head Feed (kg)	% Total HF	Head Grade %	Weight x grade	Con (g)	Con Grade	Mids (g)	% Total Mids	Mids Grade	Weight x grade mids	Tails (kg)	% Total Tails	Tails Grade	Weight x grade tails	Recovered Grade %	
-300	116.20	32.15	0.24	27.89	530	26.4	-	-	-	-	115.67	32.11	0.14	16.19	0.12	
300-850	245.25	67.85	0.21	51.50	440	49	290	100	16.6	4814	244.52	67.89	0.06	14.67	0.09	
<b>Total</b>	<b>361.45</b>	<b>100</b>		<b>79.39</b>	<b>970</b>		<b>290</b>	<b>100</b>		<b>4814</b>	<b>360.19</b>	<b>100</b>		<b>30.87</b>	<b>0.10</b>	
<b>Weighted average</b>				<b>0.22</b>							<b>16.6</b>			<b>0.09</b>		
<b>Sorter Product</b>																
Size (µm)	Head Feed (kg)	% Total HF	Head Grade %	Weight x grade	Con (g)	Con Grade	Mids (g)	% Total Mids	Mids Grade	Weight x grade	Tails (kg)	% Total Tails	Tails Grade	Weight x grade	Recovered Grade %	
-300	72.00	25.00	1.43	102.96	801	64.4	438	19.51	21.8	9548.4	70.76	25.05	0.18	12.74	0.72	
300-850	135.65	47.10	2	271.30	1873	57.9	1497	66.68	25.3	37874.1	132.28	46.82	0.15	19.84	0.80	
850+	80.35	27.90	0.72	57.85	582	48.2	310	13.81	12.75	3952.5	79.46	28.13	0.17	13.51	0.35	
<b>Total</b>	<b>288</b>	<b>100</b>		<b>432.11</b>	<b>3256</b>		<b>2245</b>	<b>100</b>		<b>51375</b>	<b>282.50</b>	<b>100</b>		<b>46.09</b>	<b>0.65</b>	
<b>Weighted average</b>				<b>1.50</b>							<b>22.88</b>			<b>0.16</b>		

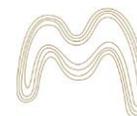


Table 8-2: Summary of the size fractions from the 6 locations (after METS, 2021)

Trench 1						Trench 2					
	0-1mm	1-2mm	2-4mm	4mm+	Total		0-1mm	1-2mm	2-4mm	4mm+	Total
Weight (g)	1494	1194	2038	760	5486.74	Weight (g)	1399	858	1878	1207	5342.61
Grade	0.23	0.18	0.23	0.1		Grade	0.24	0.17	0.13	0.07	
Weight %	27.23	21.76	37.14	13.85	100	Weight %	26.19	16.06	35.15	22.59	100
Weight x grade	343.62	214.92	468.74	76.00	1103.28	Weight x grade	335.76	145.86	244.14	84.49	810.25
Weight x grade %	31.15	19.48	42.49	6.89	100.00	Weight x grade %	41.44	18.00	30.13	10.43	100.00
Weighted Average	0.20					Weighted Average	0.15				
Trench 3						Trench 4					
	0-1mm	1-2mm	2-4mm	4mm+	Total		0-1mm	1-2mm	2-4mm	4mm+	Total
Weight (g)	1415	728	1424	262	3830	Weight (g)	1642	1349	1605	304	4900.4
Grade	0.56	0.14	0.15	0.15		Grade	0.12	0.05	0.13	0.1	
Weight %	36.95	19.01	37.18	6.84	100	Weight %	33.51	27.53	32.75	6.20	100
Weight x grade	792.40	101.97	213.60	39.30	1147.27	Weight x grade	197.04	67.45	208.65	30.40	503.54
Weight x grade %	69.07	8.88	18.62	3.43	100.00	Weight x grade %	39.13	13.40	41.44	6.04	100.00
Weighted Average	0.30					Weighted Average	0.10				
Trench 5						Trench 6					
	0-1mm	1-2mm	2-4mm	4mm+	Total		0-1mm	1-2mm	2-4mm	4mm+	Total
Weight (g)	1086	825	1215	600	3727.26	Weight (g)	895	782	945	139	2761.96
Grade	0.43	0.34	0.48	0.01		Grade	0.37	0.29	0.28	0.02	
Weight %	29.14	22.13	32.60	16.10	100	Weight %	32.40	28.31	34.21	5.03	100
Weight x grade	466.98	280.50	583.20	6.00	1336.68	Weight x grade	331.15	226.78	264.60	2.78	825.31
Weight x grade %	34.94	20.98	43.63	0.45	100.00	Weight x grade %	40.12	27.48	32.06	0.34	100.00
Weighted Average	0.36					Weighted Average	0.30				

Figure 8-2: Example of Pit Sampling



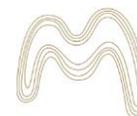
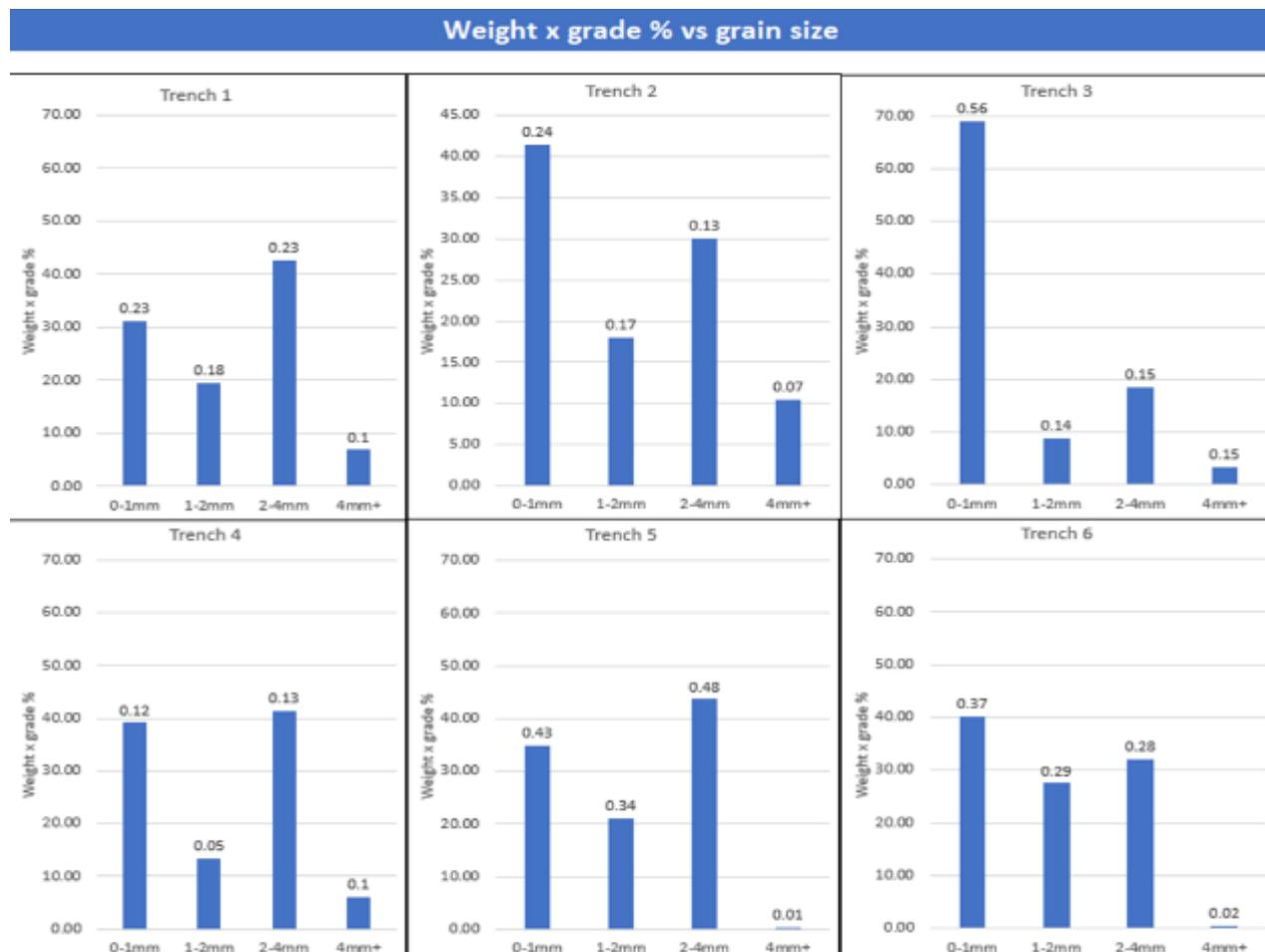


Table 8-3 shows the variation in different size fractions in the 0-6mm material with generally the finer fractures showing slightly higher results.

Table 8-3: Variation in Different Size Fractions for 6 Trenches



## 8.4 RESULTS FROM CURRENT MINING ACTIVITIES

Table 8-4 shows samples of the head feed of 0-8 mm taken during mining of the approximately 100,000 t of LGS material.

This material is elevated from the overall dump grade of 0.075% WO<sub>3</sub> because the tungsten minerals are soft and preferentially break down and end up naturally in the finer fractures. Conversely, the larger rocks have less tungsten. Table 8-4 shows the scalping of the different size fractions.

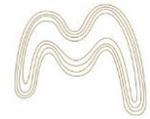
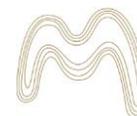


Table 8-4: Samples of the head feed of 0-8 mm

Date	Head Feed
2020-11-27	0.22
2020-11-24	0.18
2020-12-11	0.38
2020-12-22	0.16
2021-01-06	0.27
2020-11-26	0.15
2020-11-28	0.13
2021-01-12	0.11
2021-01-27	0.16
<b>Average</b>	<b>0.20</b>

Figure 8-3: Scalping Out Size Fractions for LGS Test Work





## 9. MINERAL RESOURCE ESTIMATE

### 9.1 SITE VISIT

The Competent Person (Mr Chris Grove) completed a site visit to the Mt Carbine Tungsten Project in April 2021. During the site visit, Mr Grove verified the existence and location of a subset of the historic drill hole collars in the field, inspected the drill core, reviewed the metallurgical and mineralogical test work that was previously completed, and reviewed the extensive geological database.

During the site visit, Mr Grove verified the existence and location of the production history and inspected the LGS to form an opinion of the data retrieved from the historical production data. Mr Grove verified the current drilling practices and procedures and sampling and pre-processing of samples before sending them to the laboratory. Mr Grove considers that the work has been completed to an acceptable industry standard and fit for use in estimating the Mineral Resource.

### 9.2 KEY ASSUMPTIONS

The July 2022 Mineral Resource estimate (MRE) for the insitu orebody is based on a detailed review of the Project completed by the Competent Person. It has incorporated EQR's current view of near and long-term Tungsten prices, cost assumptions, and mining and metallurgy performance to select cut-off grades and physical mining parameters.

The Mineral Resource estimate for the Low-Grade Stockpile is based on the sampling of the LGS and the results of trial mining and processing. No cut-off criteria have been applied to the July 2022 LGS Mineral Resource estimate.

### 9.3 RESOURCE LIMITS

The limits for the insitu orebody and LGS orebody were created to encompass all drill holes, sampling locations and stockpile limits.

Detailed analysis for various cut-offs is effective only in the area that has been well drilled and where the veins are of sufficient spacing to bulk out zones of mineralisation. A domain system was introduced to highlight this area of bulk mineralisation as defined by the existing drilling. As such, each Domain was treated separately with this statement only being an update of Domain 1 area with all other areas remaining the same as the September 2021 statement. The resource cutoff used in this modelling was 0.05% WO<sub>3</sub> although various cutoffs are reported below. This cutoff was applied only to the area that is considered to be the bulk zone of mineralisation as defined by drilling. The remaining resource zones remained unchanged with the 0.15% WO<sub>3</sub> level that was completed in the September 2021 resource statement.

The extent of the insitu geological model is shown in Figure 9-1 and the extent of the LGS model is the physical extent of the LGS.

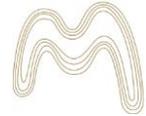
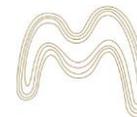


Figure 9-1: Insitu Resource Model Limits





## 9.4 POINTS OF OBSERVATION

Points of observation (POB's) for the In situ Mineral Resource were identified as drill hole intervals where assays contained Tungsten and had been validated and verified as part of the data management process. Reviewing the Tungsten assay data in Vulcan and using the ranges from variography, the POBs were used to create first pass resource classification boundaries (Measured, Indicated, and Inferred) for the Mineral Resource estimate.

The resource classification boundaries were set using the numerical model feature and the distance function to set the ranges for each category and apply the trend of the orebody used in the geological model process.

## 9.5 GEOLOGICAL MODELLING

Geological setting and mineralisation controls of the Mt Carbine Project mineralisation were established from drill hole logging and geological mapping and included in an updated model of the major rock units for the Mt Carbine deposit.

The geological domains are based on a minimum 2 m downhole interval of mineralisation. The composited grades are based on assayed results and barren zones to create a zone of mineralisation for geological modelling and resource estimation based on these composited grades. Due to the confidence in the understanding of mineralisation controls and the robustness of the geological model, investigation of alternative interpretations was deemed unnecessary.

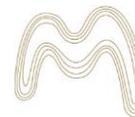
Detailed analysis for various cut-offs is effective only in the area that has been well drilled and where the veins are of sufficient spacing to bulk out zones of mineralisation. A domain system was introduced to highlight this area of bulk mineralisation as defined by the existing drilling. As such, each Domain was treated separately with this statement only being an update of Domain 1 area with all other areas remaining the same as the September 2021 statement. The resource cutoff used in this modelling was 0.05% WO<sub>3</sub>. This cutoff was applied only to the area that is considered to be the bulk zone of mineralisation as defined by drilling. The outer domain remained unchanged with the 0.15% WO<sub>3</sub> level that was used in the September 2021 resource statement.

## 9.6 COMPOSITING

Before the undertaking of a geostatistical analysis, samples were composited into equal lengths to provide a constant sample volume, honouring sample support theories.

The WO<sub>3</sub> grade data at Mt Carbine shows that there are higher and lower grade zones within the deposit, with the preferentially mineralised zones related to coarser-grained hornfels or fracturing localised in areas of rheological contrast at the contacts.

The gradation between zones of higher and lower grade is observed as a lateral zonation rather than a predictable grade trend from top to bottom contact within the stratigraphy. Recognising the absence of grade trends and to overcome the variable number of samples per intersection, the Competent Person elected to create a single composite for each of the drill holes per



intersected horizon ('zone-composites'). This was done to ensure variography and block grade estimation focused on variability along stratigraphy.

## Geostatistics

For the Mt Carbine estimation, the following geostatistical workflow was undertaken:

- Exploratory Data Analysis;
- Spatial Analysis;
- Variography;
- Kriging Neighbourhood Analysis; and
- Estimation;

Exploratory data and spatial analysis were used to analyse the overall deposit data distribution and to investigate the spatial distribution of the  $WO_3$ . Included in this analysis were the assessment outliers and if any potential domains existed within the deposit.

## Spatial Location of Samples Selection

Swath plots of the variables generally show consistent ranges of values across the deposit. In the easterly section, there are broader ranges at the boundaries of the orebody, but this is due to drilling/sampling seeking to define the extent of mineralisation. Overall, there were no observed increasing or decreasing trends.

## Sample Length

The average sample length of the two project areas is 2 m. The sample length and stabilization of the block covariance at around 2 m were the main factors in deciding the discretization distance of 2 m in the ordinary kriging parameters.

## Sample vs. Block Histogram

The following figures show a comparable relationship between the sample data and the estimated block model. The sample histogram of  $WO_3$  (Figure 9-2) and the block model histogram of  $WO_3$  (Figure 9-3) show comparable distributions of grade with the blocks adhering to the local sample intervals. The individual zones reflect the smoothing of the grades during grade estimation.

The Grade distribution for the samples and the block model is presented as Box Plots in Figure 9-4 and Figure 9-5. The minimum and maximum grades have been reproduced and the mean and median grades are comparable. The grade estimation has smoothed the samples to estimate within the individual zones and the model grades reflect the nature of the deposit.

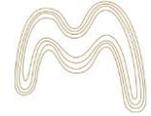


Figure 9-2: Histogram of Sample Grades

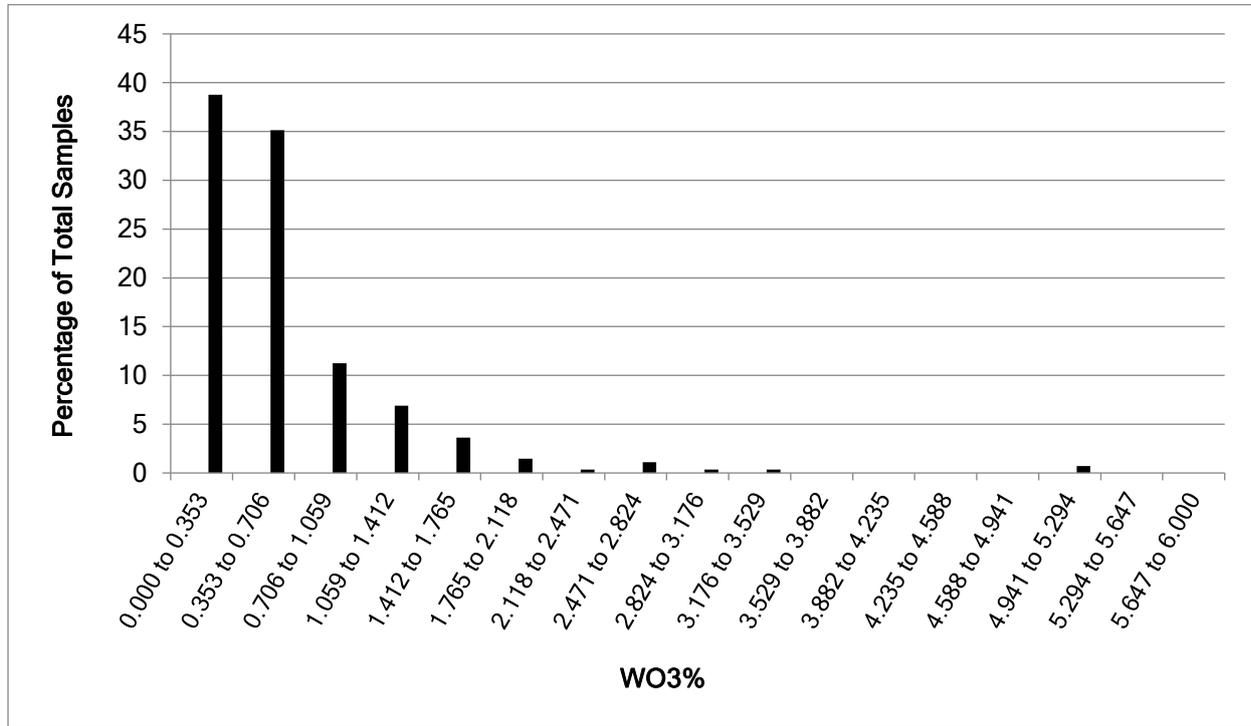
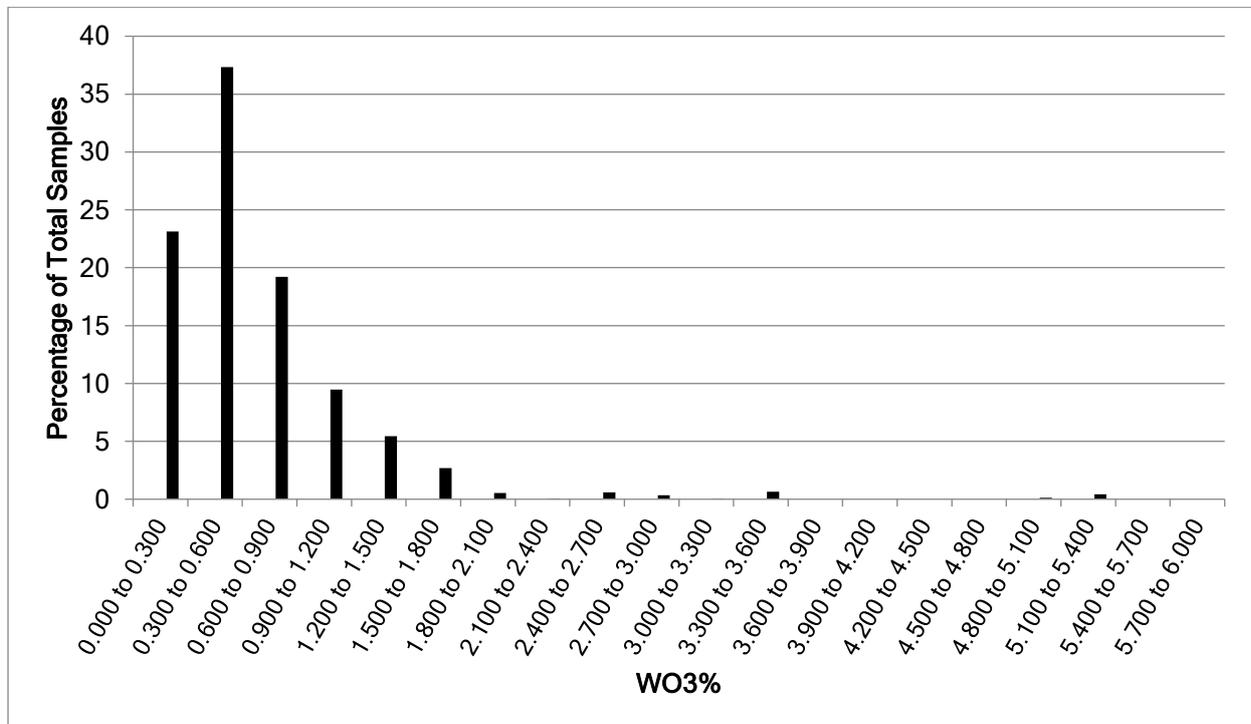


Figure 9-3: Histogram of Block Model Grades



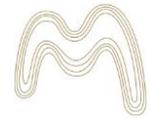


Figure 9-4: Sample Box Plot

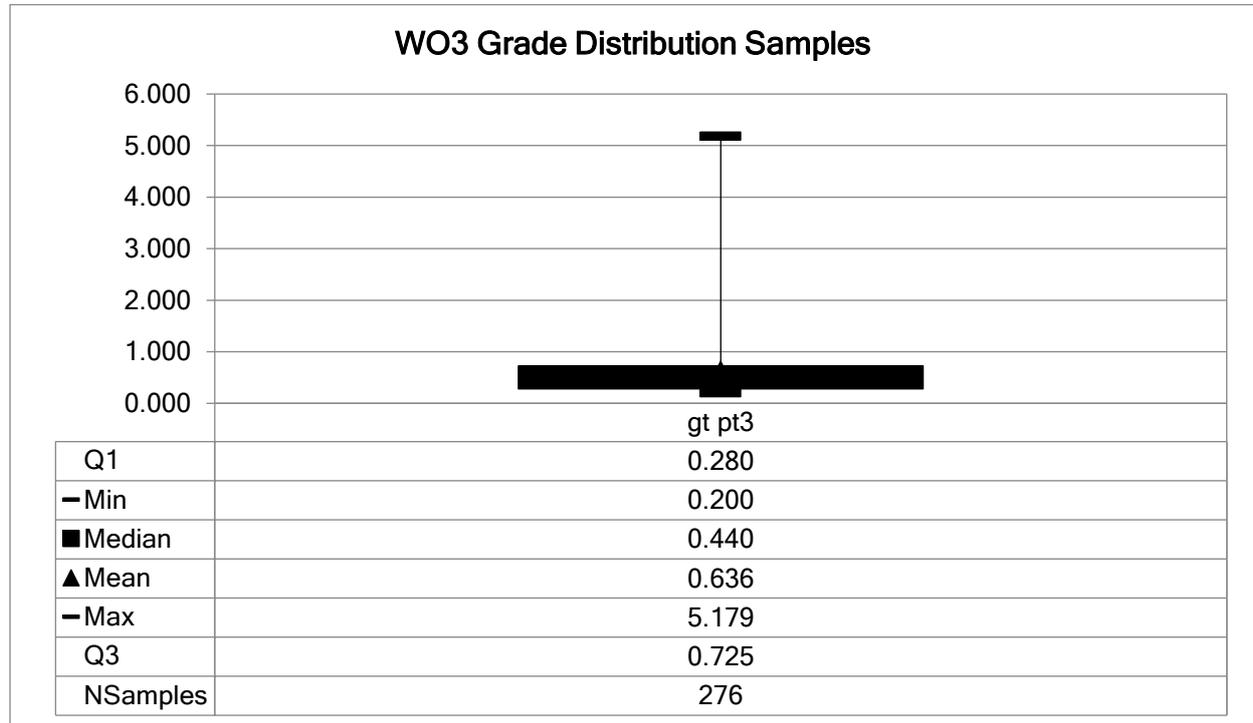
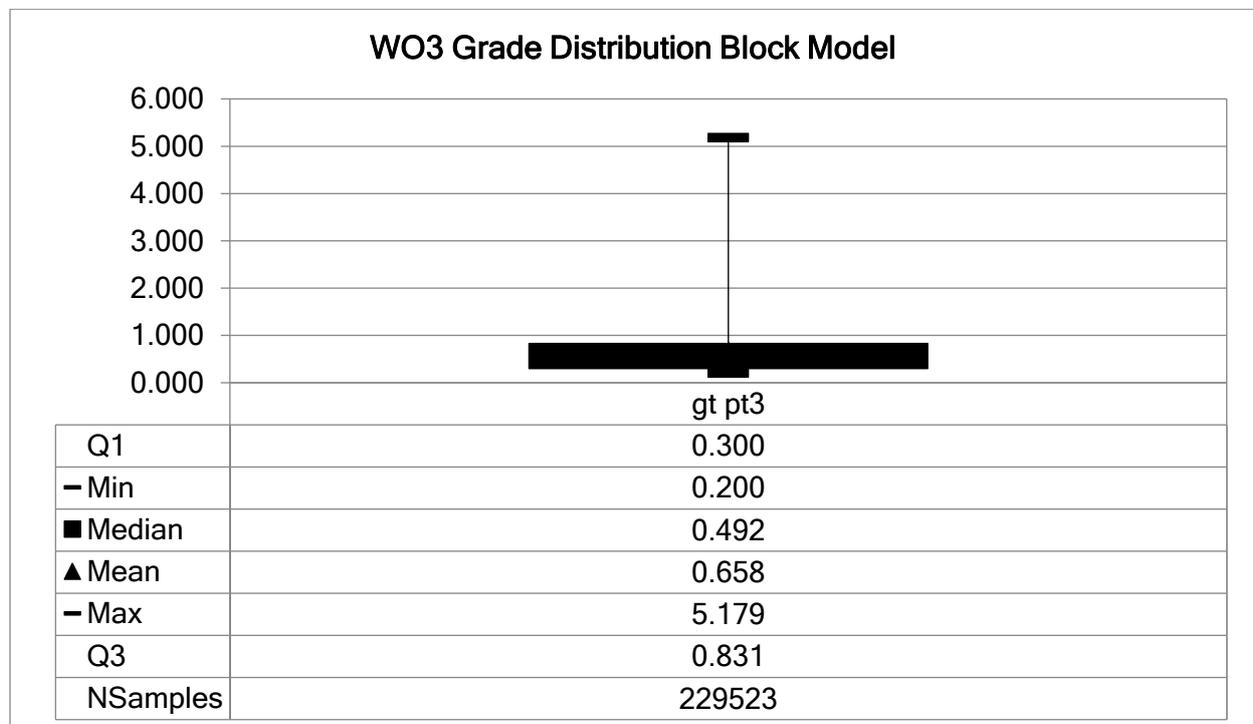


Figure 9-5: Block Model Box Plot





9.6.1 VARIOGRAPHY

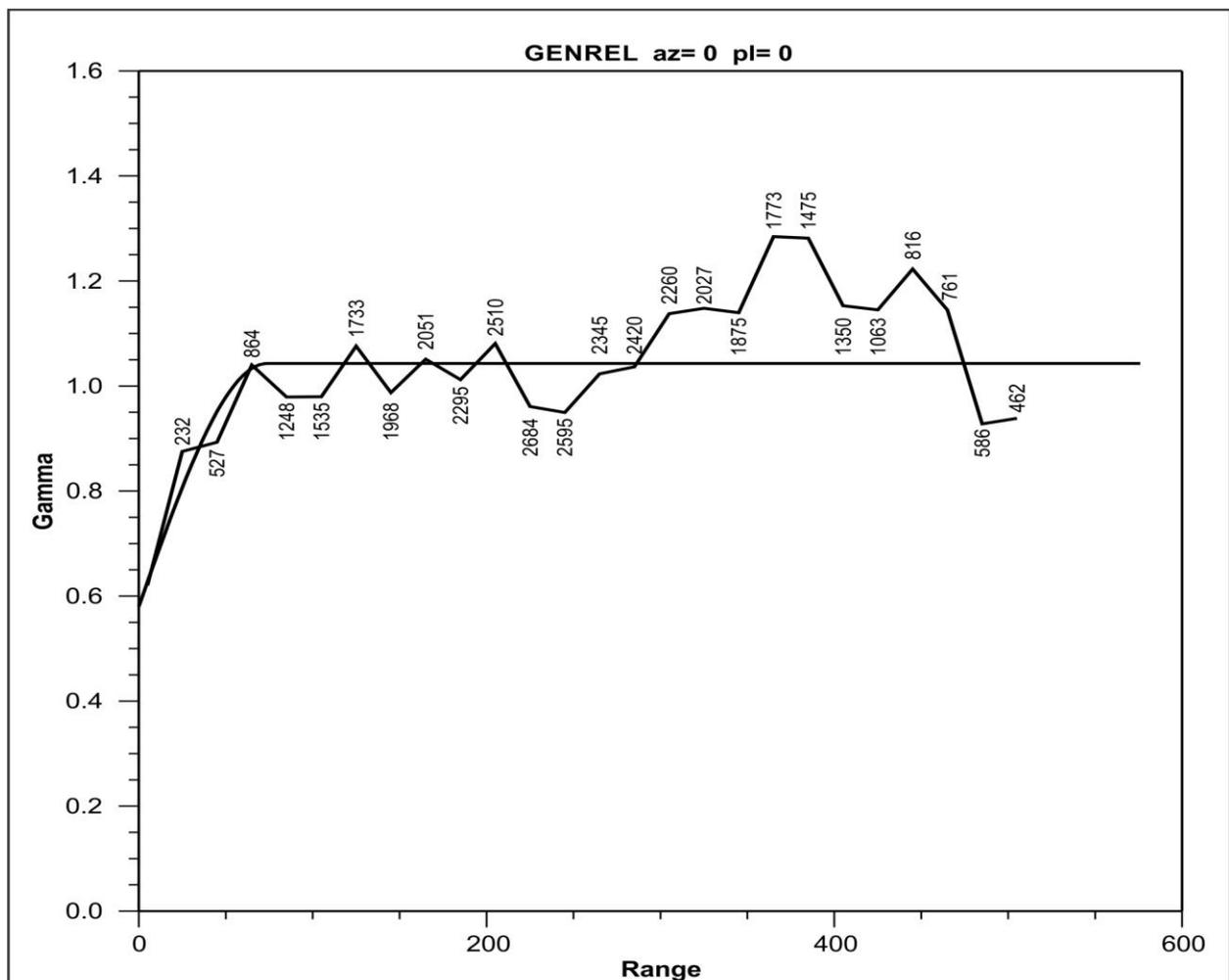
Variography analysis was performed to determine the major directions of grade continuity for  $WO_3$  and an example variogram is presented in Figure 9-6.

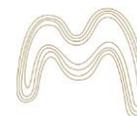
To construct semi-variograms and their resultant models, the following steps were undertaken:

1. Generate Variogram Maps for each variable - check for anisotropy; and
2. Generate experimental variograms and fit semi-variogram models.

Variogram maps for horizontal and vertical directions were interrogated to determine directions of greatest continuity. When viewing the variograms of greatest vs. least directions of continuity, it was found that the resultant variograms were very similar (virtually the same). Therefore, the deposit has been treated as isotropic with no direction of greatest continuity.

Figure 9-6: Example Variogram





## 9.7 ESTIMATION AND MODELLING TECHNIQUES

### 9.7.1 INSITU OREBODY

Creation of the block models were constructed using Maptek’s Vulcan v21.0.1 3D modelling software and Leapfrog Geo and Leapfrog Edge v.2021.2.5; 3D modelling software for Domain 1. The block model for the Insitu Zone was created for the deposit with the extents and block size shown in Table 9-1 and Figure 9-7.

Inputs into the Insitu Zone block model include topography, orebody grade shells, weathering wireframes, estimation data, density, and resource classification. Block sizes were determined from sample length within the assay data set. A list of variables for the Insitu Zone block model is listed in Table 9-2.

Table 9-1: Model Extents and Block Size

Parameter	Origin	Range (m)
X	21850	1300
Y	26100	700
Z	-250	800
Parent block size (m)	10 x 10 x 10	
Subblock size (m)	0.5 x 0.5 x 0.5	

Table 9-2: List of variables for the Insitu Zone block model

Variable Name in Block Model	Description
Rock	Insitu Rock vs Air
Wo3	Tungsten estimation data
Density	Global Density data
Zone	Mineralised domains
Rescat	Resource classification
Mined	Mined out region
Estimflag_wo3	Flag when estimated with WO3
Num_holes	Number of holes used to estimate the block
Num_samples	Number of samples used to estimate the block

Statistical analysis was undertaken on the composited drill hole file to assess the appropriateness of the domaining process and as such, no additional domaining was undertaken. All domains were interpolated using ordinary kriging (“OK”). To maintain the strong correlation between actual drill hole values in the estimated block model, estimated using ordinary kriging, using 3 separate input parameters increasing the search ellipsoid during subsequent passes.

Mineralisation was modelled as three-dimensional blocks of parent size 10 m with sub-celling allowed to 0.5 m. No assumptions were made regarding the modelling of selective mining units.

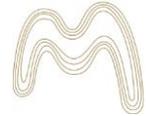
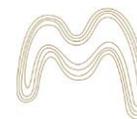


Figure 9-7: Block Model Extents





## 9.7.2 LOW-GRADE STOCKPILE

The detailed distribution of grade through the LGS is not known, as no record was kept of placement of rock consigned to the stockpile, nor was any sampling carried out. The average of assays of the three-size range subsamples of the bulk sample is 0.075%  $WO_3$ . This reconciles well with a calculation from historic mine records of production and mill recovery and is based on the recent resource estimate which took account of the resource mined during the previous open pit operation, of a global average grade of 0.075%  $WO_3$  for the Low-Grade Stockpile.

The samples taken for the LGS average 0.088%  $WO_3$  (fused disk XRF analysis), which suggests that the tungsten grade of the finer fraction (<200 mm) of the stockpile is higher than the global average grade of the bulk sample that included fragments up to 500 mm.

## 9.8 MOISTURE

Tonnages were estimated on a dry basis for the insitu orebody, while tonnages for the LGS are estimated on an air-dried basis.

## 9.9 CUT-OFF PARAMETERS

Composites have been run at various cutoffs from 0.05% to 1% using continuous intervals where the assays themselves are composited over a 1 m liner interval. An internal waste of up to 10 m between grade intervals has been allowed for Domain 1 which is targeted to be open-cut mining. Geological shapes were drawn as hard boundaries and the model interpreted grades within the zones of mineralisation. The model was not allowed to run outside the geological boundaries.

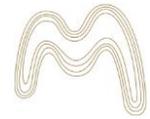
A 0.05%  $WO_3$  grade was applied to the Mt Carbine Resource Estimate. The mineralised material is interpreted to have 'reasonable prospects of eventual economic extraction' by open-pit methods and by underground mining methods.

No top cuts were applied to the drill hole results or the compositing. The contiguous nature of the veins observed, both in the open pit and the underground development, shows that the grade and geometry are consistent and follow the grades intercepted in the drill hole assay results. The lenses can be correlated in the open-pit areas and drilling and are correlated to form modelled veins to provide discreet zones for resource estimation.

No cut-off for the LGS has been applied to the stockpile grade estimation, however, it is planned to screen the stockpiled material at 500 mm and only crush and ore sort the minus 500 mm fraction, since a growing body of data from ongoing tests indicates that this fraction contains the bulk of the tungsten minerals that it is planned to recover.

## 9.10 OREBODY EXTENTS

Drilling indicates that the mineralisation continues up to 1300 m along strike and is up to 600 m wide. The limits of mineralisation have not been completely defined and are open at depth and along strike.



The 12 Mt estimated to be contained in the LGS has been derived from a nearly complete set of historical mining records as well as estimating the physical extents of the LGS. An independent reconciliation was completed to estimate the total tonnes mined from the open pit (22 Mt) less 10 Mt of material that was processed through the mill.

## 9.11 MINING FACTORS AND ASSUMPTIONS

The Insitu resource estimate has been completed with the assumption that it will be mined using open cut and underground mining methods. No other detailed assumptions have been made to date. A BFS study showed that an open cut was viable on a portion of the resources from the September 2021 statement and this is expected to be extended to include these resources as defined in Domain 1 of this study. A scoping study completed in April 2022 shows the potential for some of the higher grade veins to be mined economically from underground and the study was focused on the Inferred Resources outside of Domain 1.

The LGS MRE has been completed with the assumption that it will be mined using quarrying methods. No other detailed assumptions have been made to date. EQR will be completing a Feasibility Study on this resource estimate model and when completed, more detailed assumptions will be applied.

The stockpile fills a valley and will readily be recovered by excavator and truck.

EQR is completing feasibility studies, which will provide additional detailed assumptions for future Mineral Resource and Reserve estimates.

## 9.12 METALLURGICAL FACTORS AND ASSUMPTIONS

Historical production records show that the Mt Carbine Project was in the lowest quartile cost of production of western producers and produced high-grade wolframite (>70% WO<sub>3</sub>) and scheelite (68-72% WO<sub>3</sub>) concentrates with minimal or very low impurity penalties.

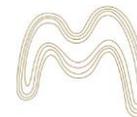
The mineralogy of the material contained in the stockpile is identical to that of the hard rock ore body. The Mt Carbine ore body is low grade in comparison with many other tungsten deposits. However, the successful application of ore sorting to pre-concentrate the ore to a high-grade mill feed has been demonstrated using optical ore sorters, and by extensive trials of X-ray sorting of bulk samples of the stockpile and run of mine ore.

Process design and anticipated recoveries have been derived from historical mill flow sheets, reports and trials that have been confirmed by repeated metallurgical testing of bulk samples.

The work completed by EQR to date indicates that the Mineral Resource has 'reasonable prospects for eventual economic extraction'.

## 9.13 ENVIRONMENTAL FACTORS AND ASSUMPTIONS

EQR has been granted an Environmental Authority by the Queensland Department of Environment and Science ("DES") for the Low-Grade Stockpile. Based on a sampling of existing



stockpiles, tailings storage facilities and analytical characterisation of the mineralisation, the only elements present at hazardous values are fluorine (as fluorite) and arsenic (as arsenopyrite).

Previous mine practice and the present Environmental Management Plan approved by the DES include measures to manage the environmental hazards these elements present. Sampling of the existing stockpiles and tailings storage facility indicates that acid mine drainage will not be a hazard created by future mining and waste storage.

### 9.14 BULK DENSITY

A total of 1,048 density measurements from the drill core were completed. Density measurements were analysed for any spatial trends by easting, northing and depth, with no obvious trends detected. An average density of 2.74 g/m<sup>3</sup> was applied to the insitu orebody. The tonnes estimated to be contained in the LGS were derived independently by a third party engaged by EQR and this has been adopted for use by the Competent Person.

### 9.15 RESOURCE CLASSIFICATION

Classification of the Mineral Resource estimate was interpreted on several criteria, including confidence in the geological interpretation, the integrity of the data, the spatial continuity of the mineralisation and the quality of the estimation.

An assessment of the historical mining showed increased confidence in the surrounding areas of the open pit and confirmed by drilling results.

The classification reflected the author's confidence in the location, quantity, grade, geological characteristics, and continuity of the Mineral Resources (Figure 9-8).

The data spacing and distribution are sufficient to establish geological and grade continuity appropriate for Mineral Resource estimation and classification and the results appropriately reflect the Competent Person's view of the deposit.

Based on the criteria outlined above, the 818,453 blocks that were interpolated in the Insitu Mt Carbine model, were classified as follows: 59% are classified as Indicated and 41% are Inferred Mineral Resources. The remaining blocks are flagged as Target (non-ore lithologies).

Following extensive metallurgical testing of bulk samples from the stockpile that provide robust anticipated recovery and quality of product, the LGS has been classified as an Indicated Resource.

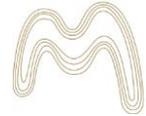
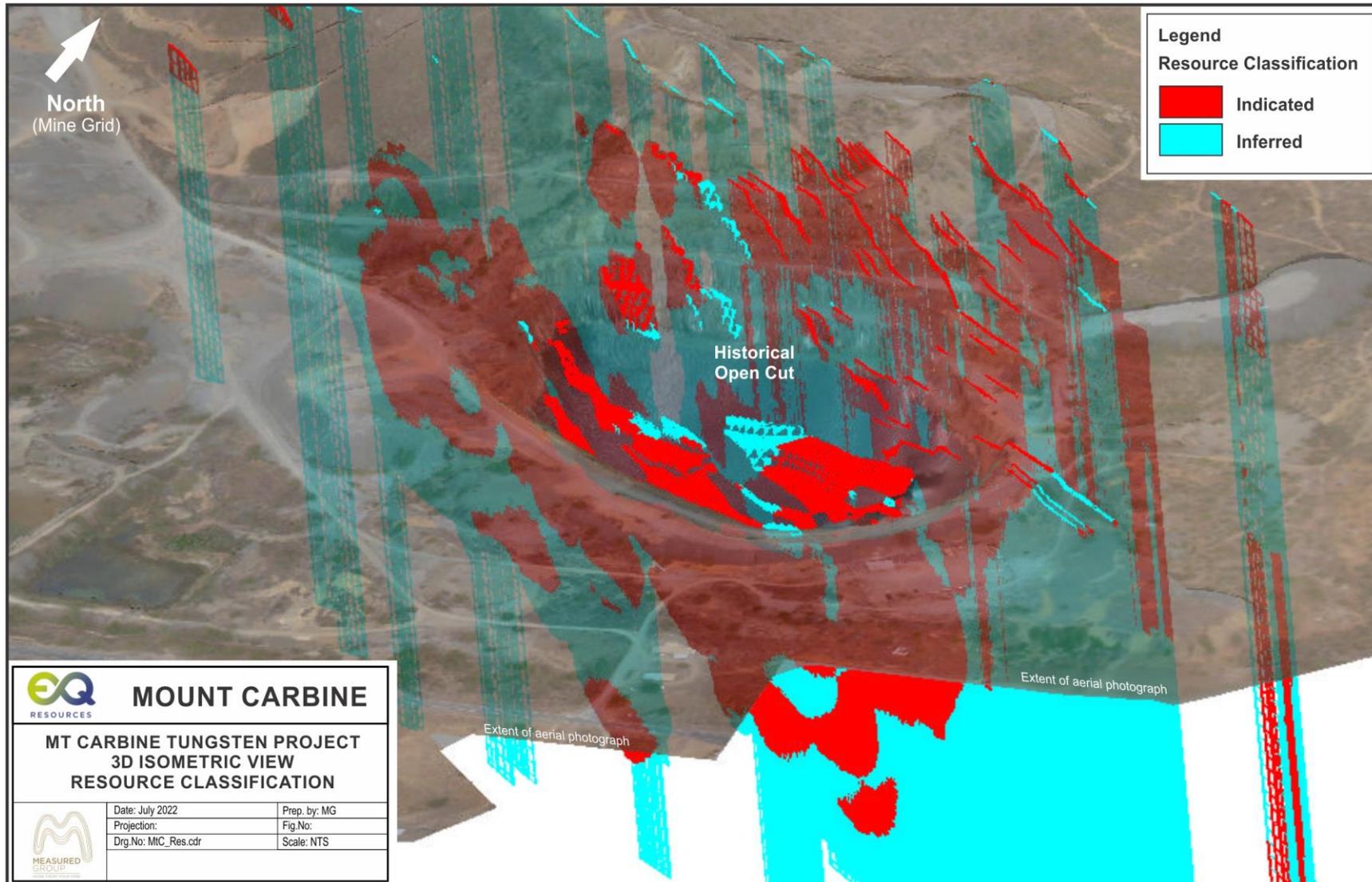
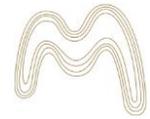


Figure 9-8: Resource Classification





### 9.16 REASONABLE PROSPECTS FOR EVENTUAL ECONOMIC EXTRACTION

EQR has completed and is completing various studies on the Mt Carbine orebodies to assess the viability and economics of maintaining the current operations and developing future mining domains in the deeper orebodies.

The results of work completed for Mt Carbine are assisting EQR in refining the current plan for the ongoing studies for the Mt Carbine Open cut and Underground project. EQR has multiple paths to continue to mine and develop future mining domains in the various orebodies at Mt Carbine.

Measured Group is satisfied that there has been sufficient study, economic analysis, and the opportunity to apply technological developments in mining methods to meet the reasonable prospects for the eventual economic extraction (“RPEEE”) test. In addition, current works on the LGS have demonstrated the viability of low-grade ore down to 0.05% WO<sub>3</sub> to be economic using the Tomra Ore Sorting Technology.

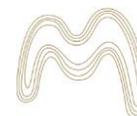
Currently, there is a reasonable basis to assume the Mineral Resource estimated for Mt Carbine orebodies will be mined in future.

### 9.17 MODEL VALIDATION

Validation of the block model was made by:

- Checking that drill holes used for the estimation plotted in expected positions;
- checking that flagged domains intersections lay within, and corresponded with, domain wireframes;
- ensuring whether statistical analyses indicated that grade cutting was required;
- checking that the volumes of the wireframes of domains matched the volumes of blocks of domains in the block model; and
- checking plots of the grades in the block model against plots of drill holes.

Historical estimates were examined and the comparisons were similar yet inconclusive due to the ‘discreet’ style of geological interpretation in this estimate compared to the larger, all-encompassing lower grade style previously.



## 10. STATEMENT OF MINERAL RESOURCES

The terms and definitions outlined in the JORC Code have been adopted for the reporting of Mineral Resources. The JORC Code is published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia, and has been developed with the input of the Committee for Mineral Reserves International Reporting Standards.

The Competent Person responsible for the estimation and reporting of Mineral Resources for the Mt Carbine Tungsten Project, is Mr Christopher Grove, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy.

Mr Grove is a Principal Resource Geologist and a full-time employee of Measured Group Pty Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Grove consents to the inclusion in this report on the matters based on his information in the form and context in which it appears.

As per the requirement of the JORC Code, Table 1, Sections 1-3, has been completed for both the insitu and LGS orebodies and are provided in APPENDIX A and APPENDIX B respectively.

The Mineral Resource estimate was finalised on 29 July 2022, which utilised geological data from 22,546 metres of diamond core drilling from 89 drill holes for the insitu orebody and bulk sampling from the Low-Grade Stockpile (Table 10-1). Grade vs tonnage classification is shown in Figure 10-1 and Table 10-2.

Table 10-1: Mt Carbine Resource Estimate, as of July 2022

Orebody	Resource Classification	Tonnes (Mt)	Grade (WO <sub>3</sub> %)	WO <sub>3</sub> (mtu)
Low-Grade Stockpile	Indicated	12	0.075	900,000
In Situ	Indicated	12.04	0.27	3,296,800
	Inferred	8.28	0.40	3,281,500
	<i>Total</i>	<i>20.32</i>	<i>0.32</i>	<i>6,578,300</i>
<b>All</b>	<b>Total</b>	<b>32.32</b>		<b>7,478,300</b>

1. Total estimates are rounded to reflect confidence and resource categorisation.
2. Classification of Mineral Resources incorporates the terms and definitions from the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012) published by the Joint Ore Reserve Committee (JORC)
3. No uppercut was applied to individual assays for this resource, a lower cut of 0.05% was applied to Southern Domain 1 block and 0.15% WO<sub>3</sub> 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 ½ 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 30 m x 30 m; Inferred is approximately 60 m x 60 m.
7. The deposit is a sheeted vein system with subparallel zones of quartz tungsten mineralisation that extend for >1.2 km in length and remain open. At depth, the South Wall Fault cuts the Iolanthe to Johnson's veins but the Iron Duke zones remain open to depth.

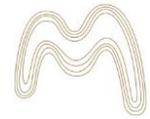


Figure 10-1: Mt Carbine Insitu Mineral Resource Estimate Grade - Tonnage Curve

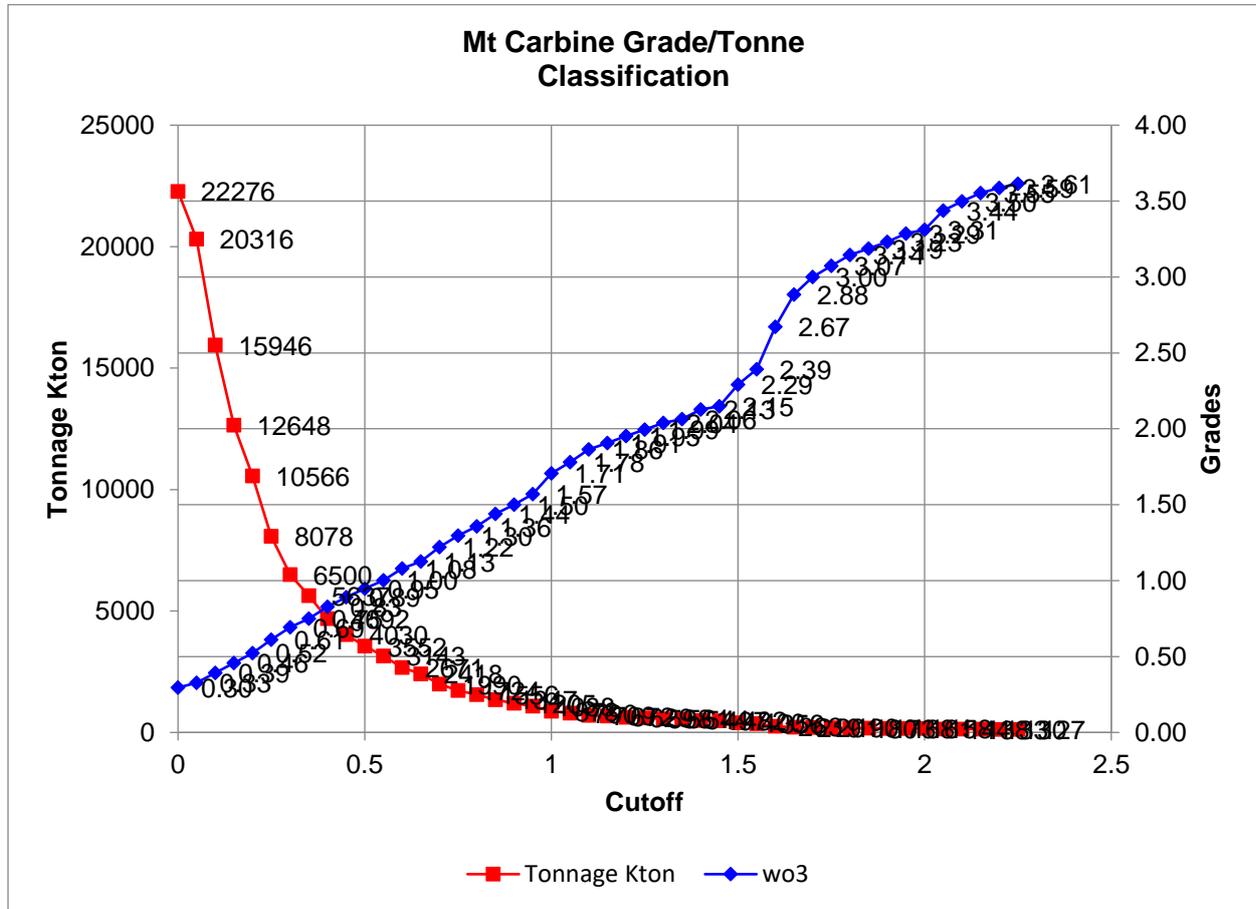
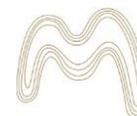


Table 10-2: Mt Carbine Insitu Mineral Resource Estimate Grade - Tonnage (by Cut-off Grade)

Cut-off (%)	WO3%	Tonnage Kton
0	0.30	22276
0.05	0.33	20316
0.1	0.39	15946
0.15	0.46	12648
0.2	0.52	10566
0.25	0.61	8078
0.3	0.69	6500
0.35	0.75	5637
0.4	0.83	4692
0.45	0.89	4030
0.5	0.95	3552
0.55	1.00	3143
0.6	1.08	2671
0.65	1.13	2418
0.7	1.22	1990
0.75	1.30	1724
0.8	1.36	1556
0.85	1.44	1347
0.9	1.50	1205
0.95	1.57	1088
1	1.71	878
1.05	1.78	790
1.1	1.86	709
1.15	1.91	672
1.2	1.95	629
1.25	1.99	598
1.3	2.04	561



Cut-off (%)	WO3%	Tonnage Kton
1.35	2.06	544
1.4	2.13	497
1.45	2.15	482
1.5	2.29	400
1.55	2.39	356
1.6	2.67	263
1.65	2.88	219
1.7	3.00	201
1.75	3.07	190
1.8	3.14	180
1.85	3.19	173
1.9	3.23	168
1.95	3.29	161
2	3.31	158
2.05	3.44	144
2.1	3.50	138
2.15	3.55	133
2.2	3.59	130
2.25	3.61	127

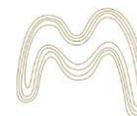
## 10.1 RECONCILIATION TO PRIOR ESTIMATES

The current estimate covers approximately 60% of the previously modelled area, which accounts for the large tonnage difference between the current and previous estimates. The difference in grade between the current estimate (higher) and the previous estimate (lower) is due to the different modelling methodology - the current estimate is more selective in modelling the orebody when compared to the previous estimate that modelled a bulk mining scenario.

Table 10-3 shows a summary of differences between the current and previous Mineral Resource estimates.

Table 10-3: Mineral Resource Reconciliation

Deposit	Estimator	Year	Classification	In Situ Resources			Low Grade Stockpile			Total Resource		
				Tonnes (Mt)	WO3 (%)	WO3 (mtu)	Tonnes (Mt)	WO3 (%)	WO3 (mtu)	Tonnes (Mt)	WO3 (%)	WO3 (mtu)
Mt Carbine Insitu	GeoStat		Measured									
		2010	Indicated						127.6	0.064	8,166,400	
			Inferred	127.6	0.064	8,166,400						
Mt Carbine Insitu	White		Measured									
		2014	Indicated	18	0.14	2,520,000	12	0.07	840,000	59.3		6,876,000
			Inferred	29.3	0.12	3,516,000						
Mt Carbine Insitu	Measured Group		Measured									
		2021	Indicated	2.4	0.74	1,776,000	12	0.07	840,000	21.21		6,693,900
			Inferred	6.81	0.59	4,017,000						
Mt Carbine Insitu	Measured Group		Measured									
		2022	Indicated	12.04	0.27	3,296,800	12	0.07	840,000	32.32		7,478,300
			Inferred	8.28	0.4	3,281,500						



## 11. GEOTECHNICAL ASSESSMENT

A desktop assessment has entailed a review of the following reports and documents:

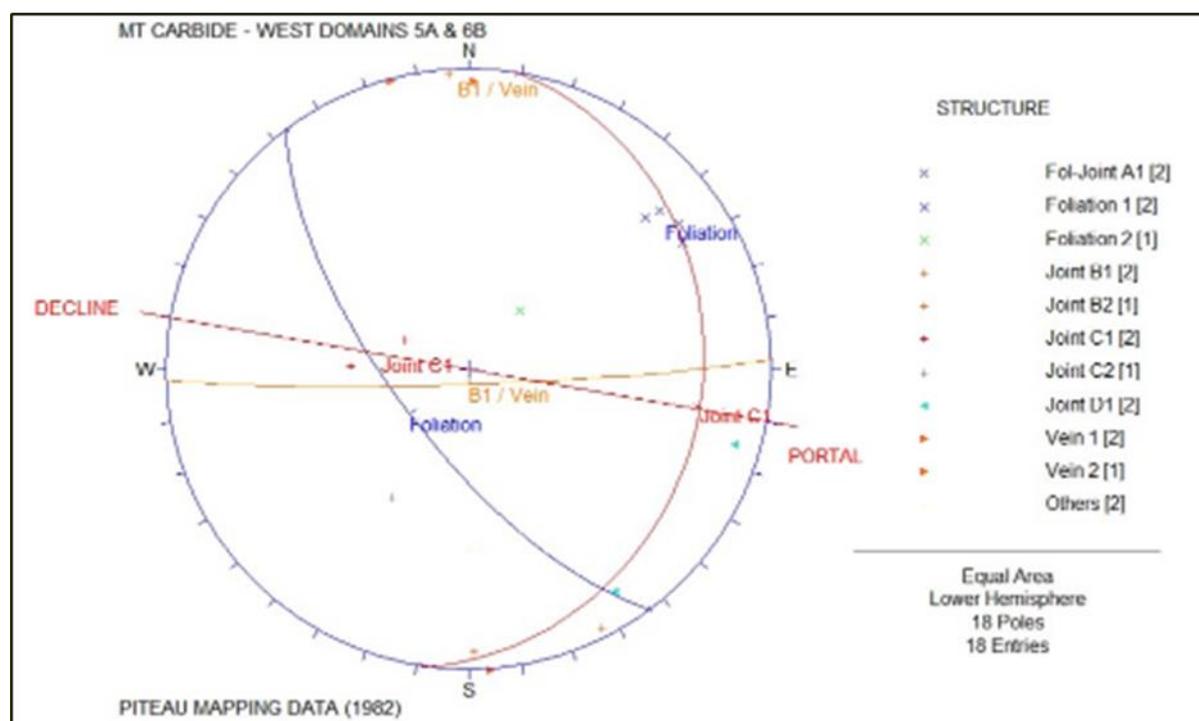
1. Piteau Report HD042: Slope Stability Analysis & Design (April 1982);
2. Golder Report HD035: Review of Rock Mechanics (July 1984);
3. Australian Coal Industry Research Laboratories UCS Test Results (December 1984);
4. Baczynski: Plan of Action to DME for Re-Opening the Mt Carbine Decline (April 2021);
5. MOSHAB Code of Practice: Surface Rock Support for Underground Mines (Feb 1999).

Geotech Consultants examined the historical data and concluded that in the initial 30m or so of surface the rock mass appears to be moderately weathered with an estimated intact rock strength of 10 to 30MPa. Up to four joint sets bisect the rock, to define moderately-sized slabs and flaggy conditions. GCPL stereographic analysis indicates that the pronounced slabs are delineated by persistent, steeply SW - dipping foliation, sub-vertical quartz veins and B1 jointing which runs near-parallel to the decline.

Potential release from the backs of a decline or slopes of a pit face will probably be controlled by dominant joint set C1, spaced at 0.5 to 1.0m and dipping flatly at 15 to 300 to the east.

In GCPL’s analysis of these joints, the situation is more relevant to the interaction of any future decline with the dominant structure as it indicates that the formation of potentially unstable tetrahedral wedges in the backs of the decline is kinematically feasible. (See Figure 11-1)

Figure 11-1: Kinematic Analysis of the interaction of Foliation with Joint Sets B1 and C1



For the pit, the following geotechnical data in Table 11-1 were applied.

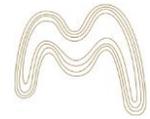


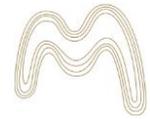
Table 11-1: Geotechnical Data used for the Open Pit

Lithology	Weathering Grade	Degree of Weathering	Estimated Hardness	Estimated Strength (MPa)	Drillhole	Depth (m)	UCS Parallel to Schistosity (MPa)	UCS Normal to Schistosity (MPa)
Fill & Residual Soil	A	Extremely	S4 to R0	< 0.7	-	-	-	-
Highly Weathered Schist & Greywacke	B	Heavily	R1	0.7 to 7	CB3	17	6	6
					CB20	24 - 29	-	-
Moderately Weathered Schist & Greywacke	C	Moderately	R2	7 to 28	CB20	-	-	10
					CB21	-	-	-
Unweathered Hornfels	D to E	Slightly	R4	56	CB3	71 - 77	-	62

Table 11-2: GCPL Interpretation of Strength of Intact Rock and Structure

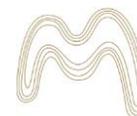
Structural Domain	Number of Poles	Defect Set	Dip Angle	Dip Direction	Average Spacing (m)	Continuity (m)	Roughness	Waviness	Infill	Shear - Strength	
										Friction (deg)	Cohesion (kPa)
5 A in Silicified Siltstone (Hornfels)	111	Foliation 1	71	230	< 0.1	Continuous					
		Foliation 2	21	221	< 0.1	Continuous					
	82	Joint A1	66	229	0.5	5 to 10	Slip Rough	Undulating	None		
		Joint B1	86	333	0.5 to 1	Continuous	Slickensided	Planar to Slip Undulating	Quartz		
	400	Joint B2	83	359	0.5 to 1	Continuous	Slickensided	Planar to Slip Undulating	Quartz	36	0
		Joint C1	19	115	0.5 to 1	Continuous		Planar to Slip Undulating			
	48	Joint D1	80	286	1 to 2	Continuous		Undulating			
		Random G1	50	0	Widely	> 10					
	48	Vein 1	89	165		Continuous	Rough	Irregular	0.02 to 1m Quartz		
		Vein 2	85	181		Continuous	Rough	Irregular	0.02 to 1m Quartz		

# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



EQ RESOURCES PTY LTD

	119	Foliation 1	71	239	< 0.1	Continuous						
6 B	40	Fol-Joint A1	73	235	0.5	5 to 10	Sl Rough	Undulating	None			
in	243	Joint B1	88	176	0.5 to 1	Continuous	Slickensided	Planar to Sl Und	Quartz			
Silicified		Joint C1	32	92	0.5 to 1	Continuous		Planar to Sl Und				
Siltstone		Joint C2	41	31	0.5 to 1	Continuous		Planar to Sl Und		36	0	
(Hornfels)		Joint D1	77	327	1 to 2	Continuous		Undulating				
		Random G1	50	356	Widely	> 10						
	134	Vein 1	90	356		Continuous	Rough	Irregular	0.02 to 1m Quartz			

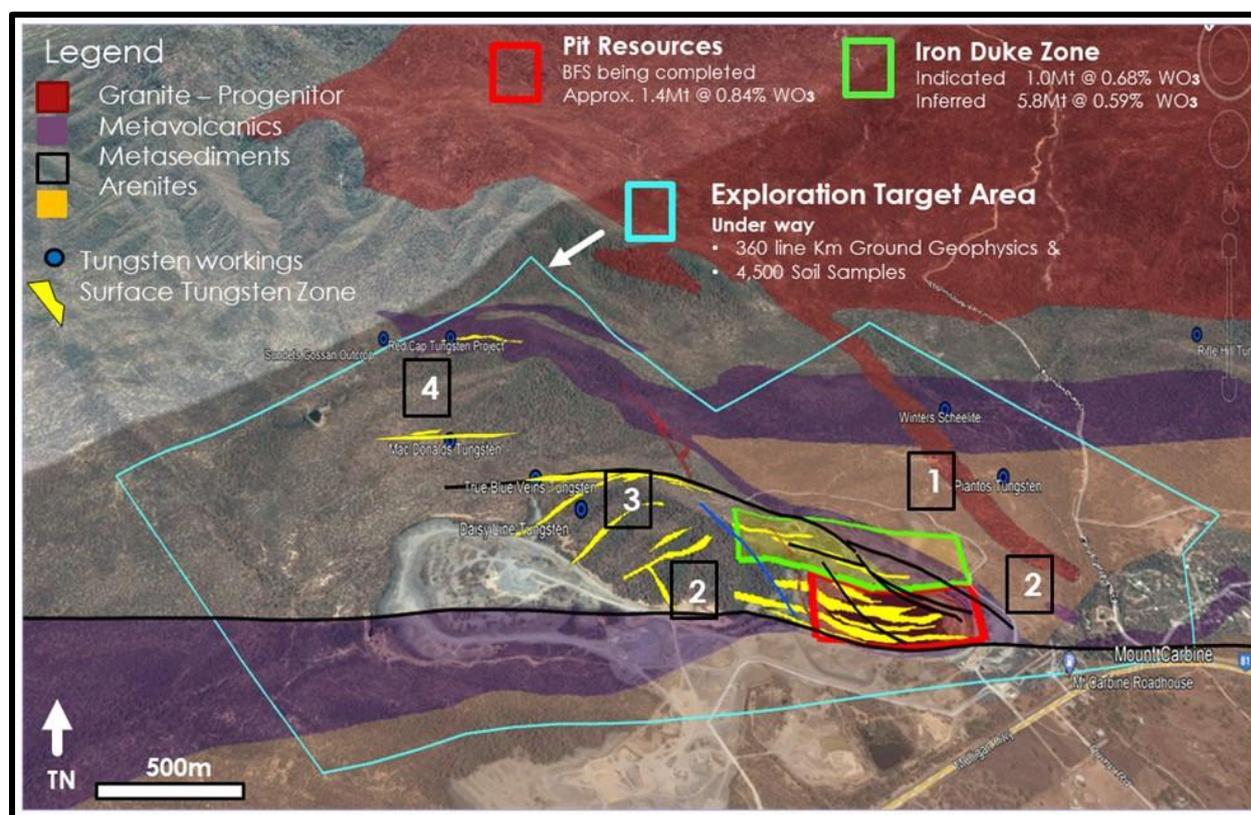


## 12. EXPLORATION POTENTIAL

The recent geological works have been confined to the red and green squares in Figure 12-1 below. The Blue zone shows the area identified as having the potential to extend the Mt Carbine orebody, which includes 4 major targets:

1. Upgrade the Iron Duke Inferred Mineral Resources into Indicated Resources (Figure 12-1) - Iron Duke contains 5.8 Mt @ 0.59% WO<sub>3</sub>.
2. Extend the known veins along strike extents both Grid West and East.
3. Drill to the depth where tungsten continues in Iron Duke - Talis Zone.
4. Evaluate and test the True Blue, Daisy, MacDonald's and Red Cap Zones.

Figure 12-1: Potential Mineral Resource and Orebody Extension Areas



Given the extent of surface vein traces, the open depth consideration and the 5 immediate tungsten working areas it is conceivable that the resource could significantly increase from its current size. EQR should consider targeting future drilling to continue to replace mined ore.

On a regional scale, there are over 50 locations with historical workings within EQR's exploration tenements, which have reported tungsten or tin mineralisation and it is recommended that geological mapping, sampling and follow-up drilling be completed. The location of drill targets within EQR's exploration tenements is shown in Figure 12-2 and Figure 12-3 below.

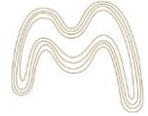
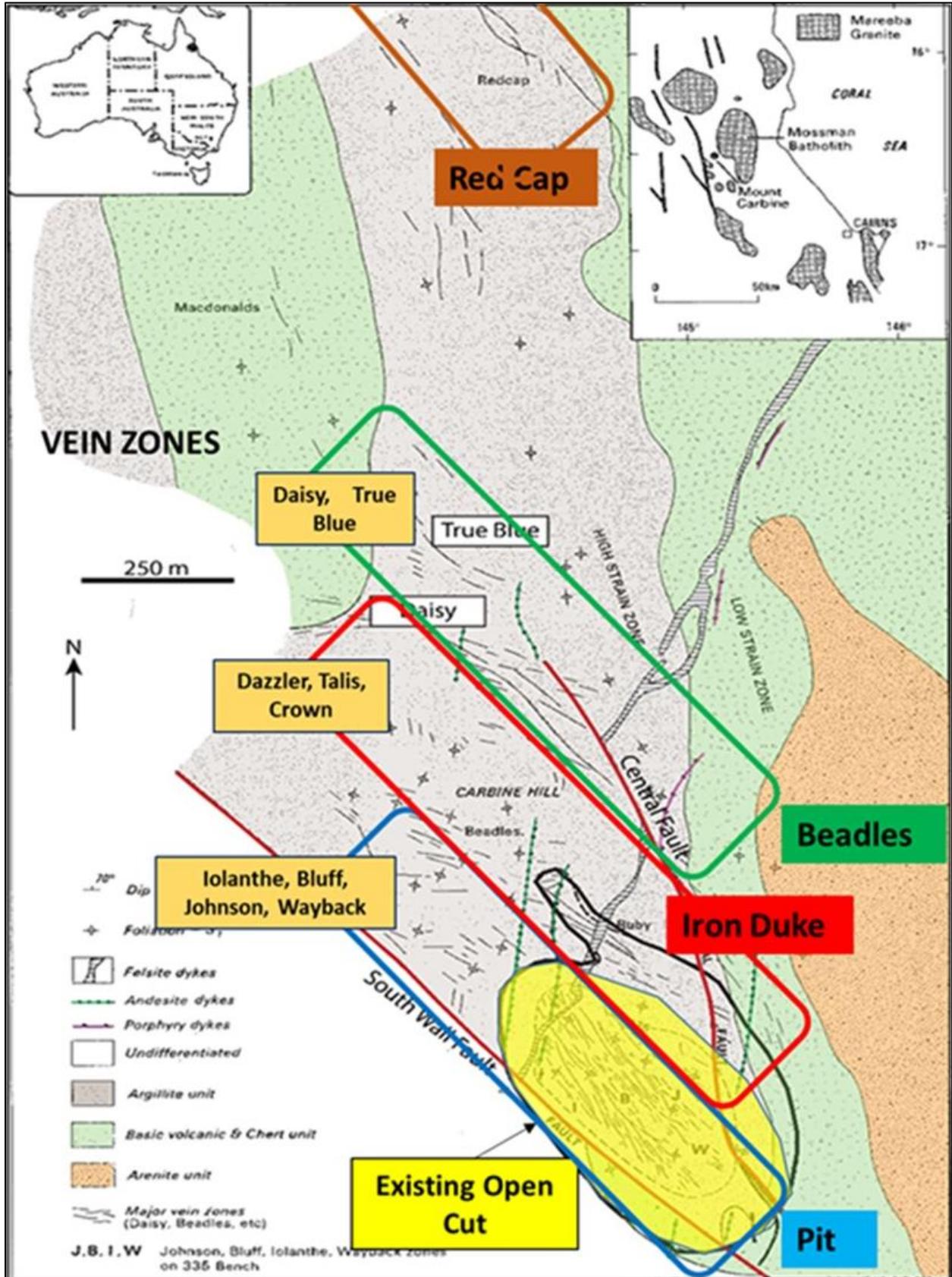


Figure 12-2: Regional Targets Within EQR's Exploration Tenements



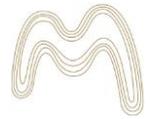
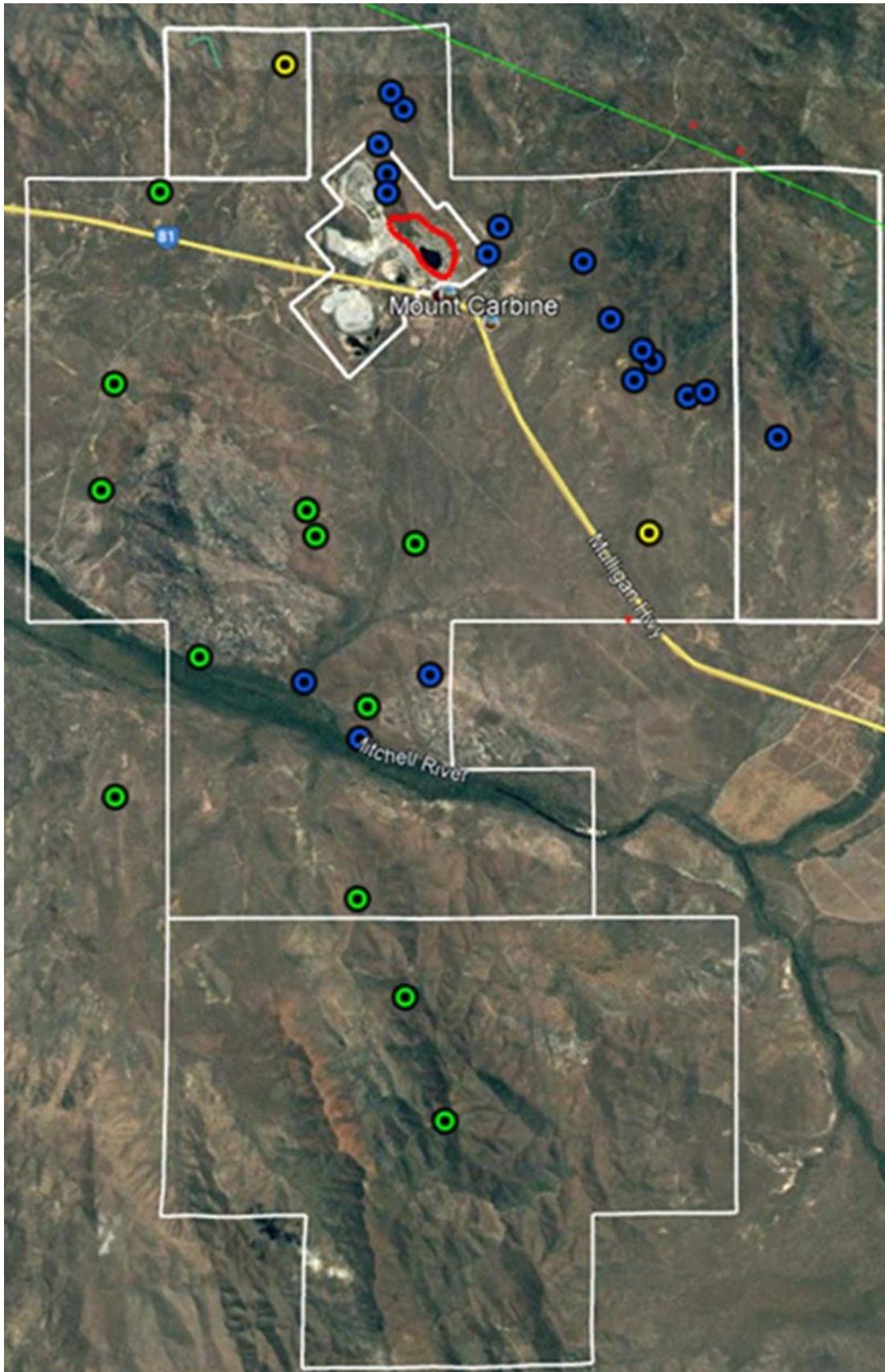
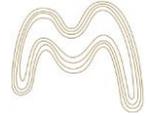


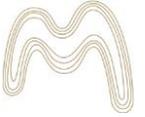
Figure 12-3: Targets within EQR's Exploration Tenements



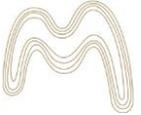


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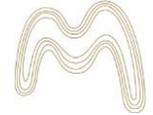
## APPENDIX A: JORC TABLE 1 - INSITU OREBODY



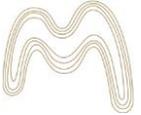
Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

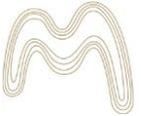
Criteria	JORC Code Explanation	Details
Sampling techniques	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (e.g.- cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g.- 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g.- submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>- All zones of potential mineralisation were logged and sampled by cutting the core interval selected in half and the complete half core was sent to ALS Laboratories in Brisbane Australia for analysis.</li> <li>- Before cutting and sampling the core is logged with zones of visual minerals of wolframite and scheelite recorded by their percentages. scheelite glows under ultraviolet light and although difficult to distinguish under ordinary light from quartz-carbonate it is visual under the shortwave 254nm UV light with a common technique to estimate grade being to trace out individual crystals and determine the overall percentage shown on the face of the core. Often the mineralisation is manifested as very coarse tungsten mineral crystals of up to 10cm in size.</li> <li>- The method used for the analysis of Tungsten was ME-XRF15b where the sample was fused into a disk in a furnace and then analysed by a Bruker X-ray Fluorescent machine. ALS is a registered laboratory that conducts internal and external round-robin analysis to maintain its certification and to ensure that the machine used for analysis is correctly calibrated. The Assaying is completed at 10ppm accuracy, It is important in this process that the sample is homogenous, and as such the sample is prepared by crushing and grinding to less than 200 microns to ensure homogeneity.</li> <li>- All quartz veins intersected in the drilling have been assayed as separate samples. Where the veins are more than 1m in downhole length then the sample is broken into two or more samples each with a maximum of 1m intervals. The minimum vein assayed is 5cm in width. Since the mineralisation at Mt Carbine often occurs in narrow widths of 5-500cm then it is important to assay each such narrow zones. On either side of the mineralised zone, samples are also taken of the host rock at intervals of 1m to ascertain if the mineralisation has extended into the host rocks.</li> <li>- Drilling at Mt Carbine was completed by HQ and NQ sized diamond drilling rig that used both double and triple tube-drilling techniques, HQ was drilled down until the South Wall Fault was intersected and then cased off before continuing in NQ drill size. The footwall of this fault has no mineralisation as noted under the geology section and this fault truncates all observed mineralisation. The full core is being collected and marked for its depth and orientation. The core was drilled using a digital orientation method and the Reflex Act III tool system. Recording hole orientation and hole survey that is wirelessly transmitted to back-end computer for recording.</li> </ul>
Drilling	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g.- core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc)</i></li> </ul>	<ul style="list-style-type: none"> <li>- Drilling at Mt Carbine was completed by HQ and NQ sized diamond drilling rig that used both double and triple tube-drilling techniques, HQ was drilled down until the South Wall Fault was</li> </ul>



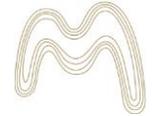
Criteria	JORC Code Explanation	Details
techniques	<i>and details (e.g.- core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	intersected and then cased off before continuing in NQ drill size. The footwall of this fault has no mineralisation as noted under the geology section and this fault truncates all observed mineralisation. The full core is being collected and marked for its depth and orientation. The core was drilled using a digital orientation method and the Reflex Act III tool system. Recording hole orientation and hole survey that is wirelessly transmitted to back-end computer for recording. -
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Core was marked with core blocks typically at 1.5 &amp; 3.0m intervals by the drilling company using stick-up techniques that ensure measurement to 1cm accuracy.</li> <li>- The core showed very high recoveries with 99% recovered on the entire campaign to date. With the extreme hardness of the quartz zones, no loss from drilling has been recorded to date, nevertheless, each interval is measured to ensure this is the case. The core is hard and competent and all sampling in this programme is below the base of oxidation. Host rocks are metasediments that have been silicified and then crosscut by sheeted white quartz veins.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The core has been re-joined into long sticks and photographed using a high-resolution camera for both dry and wet images. The core has a geotechnical log completed and core marked up and measured for recovery etc. Using the marks provided during the drilling an orientation line is marked down the full length of the core. Post sampling, the core has been selected for alteration mapping and petrographic studies but has yet to be sent to the relevant consultancy.</li> <li>- Logging is quantitative in its description of alteration intensity, and mineral types in percentages using geological percentage charts.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The core is cut in half using a diamond saw along the centre line marked referred above being the mark for the orientation of the core. Half core was used in all sampling collections.</li> <li>- Each sample was weighed and marked correctly in consecutive order with a space left for the insertion of standards and this was done every 10th sample for 10% checks and balances. No samples were combined for assay with each sample assayed separately and are either a vein or host rock.</li> </ul>



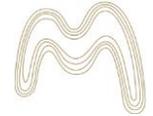
Criteria	JORC Code Explanation	Details
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>- EQR completed a comprehensive assessment of past core including duplicates and repeats to establish that the ALS assaying shows consistency and accuracy and historical results were accurate. EQR inputs 10% of the samples sent to the laboratory as either a blank or predetermined assay standard. With each batch of results sent there is a minimum of 5 check samples inserted.</li> </ul>
Verification of sampling	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g.- standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Tungsten best corresponds to X-ray Fluorescence assay techniques and the best of these techniques uses a fusion disk where a representative sample of the core is taken after fine grinding until a homogenous sample is obtained (&lt;200 microns) and then melted in an arc furnace to produce a clear fused disc. This disk is then x rayed with the fluorescence recorded by way of spectral peaks. The machine needs to be calibrated to record quantitative results. The instrument is a Bruker multi-shot XRF machine with an X-ray scan of 1 minute applied to each disk to get the light and heavy elements.</li> <li>- All checks are also assayed in each batch in their order with 10% check samples submitted alternatively being either a blank, a tungsten standard or a repeat sample with a known grade. Precision is 10 ppm for this technique with our samples noted as being significant above 1000 ppm. Only in one instance, the results do not match the visual in sample no. 100216 and 100217, which are vein and host rock. By the weights of each of these samples, it was determined that the grade of 0.72% was in the vein, not the host rock i.e. samples at the lab have been switched.</li> </ul>
Verification of sampling	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Each mineralised interval is recorded by the Site Resource geologist and then checked for accuracy by the company's chief geologist before cutting and sampling occur.</li> <li>- No twinned holes have been completed in this programme</li> <li>- Data is completed using a paper log sheet with the information and then transferred to a digital database holding all the information on drilling, surveying, assays, recovery, Geotech info etc.</li> <li>- No uppercuts were applied in reporting exploration results and only results where an individual assay was taken are used. No partial intervals or subsets were used.</li> <li>- Drill intervals quoted are down-hole intervals as the true widths will only be determined once the accurate orientation of the veins occurs.</li> </ul>



Criteria	JORC Code Explanation	Details
Location of data points	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Surveying of the drill holes was completed using a Garmin GPS61 model GPS for locating the collar coordinates in the WGS84 Datum system. Downhole surveys were conducted every 30 m down the hole except for the pre-collar zones. These zones reached up to 120 m in depth with HW casing being installed before continuing drilling in NQ-sized core. All survey data were input into the database and then plotted using Leapfrog Mining Software to determine any swings in the hole.</li> <li>- Topography has 2020 been upgraded to 10 cm accuracy using a LIDAR Drone survey technology with the topography having high-resolution photography overlaid.</li> <li>- Holes were in July surveyed by Differential GPS against known trig stations and converted to local grids by professional surveyor Neil Murphy who was Project Manager from Brazier Motti Pty Ltd based in Cairns, North Queensland.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Drilling Is currently designed to complete the testing of the zone beneath the historical pit at a spacing of 50 x 50m.</li> <li>- In several locations, drilling spacing was completed down to 25m to provide additional data and confirm the grade and widths of zones etc.</li> <li>- Sampling compositing has occurred in the reporting of results of this press release using weighted averages for the assay result and a total distance for the length of the geological interval.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The drilling was done at right angles to the trend of the mineralisation on a localized grid that has been used since the 1960s and this local grid has been used to orientate all 89 drill holes completed on the property. This allows for regular spacing and interpretations of the deposit veins.</li> <li>- Depending on the hole angle and attitude of the vein the released results which are down-hole intervals will report a longer interval than the true width of the vein. No bias has been determined for the mineralisation as the mineralised veins show remarkable parallel zones and it is deemed that the drilling has been completed at the best angle to give a true indication of the zones.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The core is transported daily to a fenced core shed yard. This yard remains locked after work hours and contains a roofed shed within which core racks are installed the house the core. On a more permanent basis, each hole is cling-wrapped and put on a separate pallet and put in its number place at the core farm.</li> </ul>



Criteria	JORC Code Explanation	Details
		<ul style="list-style-type: none"> <li>- All samples are taken and bagged and placed in this locked enclosure in larger 1-tonne bags. Rejects from the sampling are also stored should a check is required or further element analysis is needed. The larger bags are inspected on arrival at ALS to ensure no tampering has occurred to the samples.</li> </ul>
Audits reviews	or <ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>- An internal audit of techniques was completed to check for any sample bias or variances being introduced to the samples. No biases were encountered.</li> </ul>

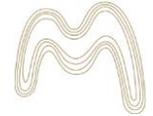


Section 2 - Reporting of Exploration Results

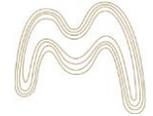
(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Details
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>All 26 holes completed to date have been located within ML4919 and ML4867 owned by Mt Carbine Quarries Pty Ltd which is a 100% wholly-owned subsidiary of EQR. All licenses are in good standing.</li> <li>ML4867 (358.5Ha) is up for renewal on 31/7/2022 and a renewal application was submitted on 20 January 2022 and ML4919 (7.891Ha) is up for renewal on 31/8/2023. No impediments exist at the current point for operations on these licenses.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Historical drilling is extensive with the history of previous mining and drilling outlined in the Company's Annual reports available on the Company's website.</li> <li>About this drilling, all historical holes with their intersections compiled using the same criteria as current drilling have been reported previously (High-grade structural zones extend for 1.2 km: Mt Carbine historical drilling reinterpretation - 16th October 2020) have been recorded on all sections and plans and this has been completed by various companies over the past 25 years.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The deposit falls into the sheeted hydrothermal tungsten vein style that is associated with the Mareeba Granodiorite. The veins are narrow from 5 to 500 cm in width and extend for up to 1.2 km along strike as currently understood. They have been drilled over a 400 m vertical extent and occur in groups designated as zones and referred to as Iolanthe, Bluff, Wayback, Johnson, Dazzler and Iron Duke. The veins with higher grade mineralisation occur as late veins and overprints on an extensive early vein system that has weaker tungsten mineralisation or no mineralisation. This late overprint is what EQR is chasing in the current drill programme.</li> </ul>

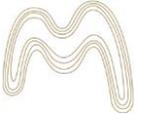




Criteria	JORC Code Explanation	Details
Data aggregation methods	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. - cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Weighted averages are used for any results combined with no uppercuts applied. A zone reported may contain results with no grade provided it is the same zone used on other sections, to maintain geological uniformity between the sections.</li> <li>- Domain 1 - is identified by the closer spacing of the King Veins allowing for larger composites of the zones to be made. The resource uses composites made up above 0.05% WO<sub>3</sub> to identify the boundaries of the zones including up to 10 m of internal waste. The shapes were drawn in sections and confirmed to match the geology and then wire framed as a hard boundary to the mineralized zones. Block modelling was done inside the geological wire frames using a variogram search that matches the veins' orientations, dip and strike. The block model was then validated against the sections to confirm grade distribution reflects the intersected grade and location of intervals.</li> <li>- Domain 2 - Only those zones where the combined metal factor being the 'grade x interval' is above 2 m @0.25% * i.e. a metal factor of 0.5) Tungsten Trioxide (WO<sub>3</sub>) are reported as being significant in this release. e.g. 0.3 @ 8.0% WO<sub>3</sub> has a metal factor of 2.4 and qualifies but 4m @ 0.1% with metal factor of 0.4 does not qualify.</li> </ul>
Relationship between mineralisation widths and intercept length	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g.- 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>- The results reported are downhole intercepts and not true widths. Although all drilling has been completed at right angles to the strike of the veins, the holes may intercept the vein at an angle given that the veins generally are from 60-90 degrees in dip. To determine true width requires the individual veins to be orientated in space and the surveyed hole to also be known at that point.</li> <li>- For orientation, all veins are being measured for both Alpha and Beta angels to enable the absolute dip and direction of each vein to be determined in the orientated core. The veins do vary in their strike and dip and until the orientations have been entered into the database along with the surveyed hole angles, and run through the leapfrog mining software true widths are not known. Interception true widths may vary from being 0.3 of the downhole interval to no change to the downhole intervals. The point of interception of the vein and the attitude of the hole at this point determines the true width and this calculation has not been done. It should also be noted that in quite a few instances the angles of the same vein vary significantly on either margin. In these instances, true width will be calculated on the average dip and strike When any resources will be calculated in the future only true width intervals will be used.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li><i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should</i></li> </ul>	<ul style="list-style-type: none"> <li>- A local grid is used in the drilling to ensure the drilling has been completed at right angles to the strike of the mineralisation. The local grid is at a 51-degree rotation westwards to true north; i.e.</li> <li>- Local Grid North-South is aligned at 51 degrees against true north with a yearly deviation occurring as the continents drift.</li> </ul>

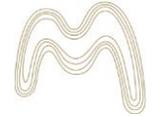


Criteria	JORC Code Explanation	Details
Balanced reporting	<i>include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	
	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>- All zones that meet the criteria of significance as defined above have been recorded and shown on the associated cross-sections. Where there is a blank it means no results met the criteria used as significant results. At this point, only the data is represented with the most recent geological interpretation, but no resource association is implied with the release of these results.</li> <li>- The zones on each section refer only to the results being released for the current hole and the results of adjacent old holes are not included as this is not new information.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The mineralisation occurs as narrow late quartz veins overprinting an earlier phase of quartz veining that reaches up to 30% of the zones marked on the sections. Although all quartz veins are sampled to be complete, most are from the earlier event that has no mineralisation associated with it. The interpretation is centered on those veins that do carry tungsten and what is perceived as the controls to these zones.</li> <li>- More than 100 bulk densities have been completed at the project and the host rock and mineralised zones record bulk densities of 2.6 and 2.8 respectively with 2.74 as the average bulk density</li> <li>- The South Wall Fault marked on the maps has truncated much of the veining as shown on the sections. The current interpretation of this fault is that is a reverse thrust fault with the footwall dropping an unknown distance.</li> </ul>
Further work	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. - tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The company continues to drill to outline the limits of the mineralisation in both strike and depth constraints. The target is limited to what might be considered in an open-cut extension of the pit but several holes were extended to look at the potential of additional veins such as Iron Duke for a future underground operation.</li> </ul>

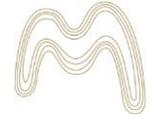


Section 3 - Estimation and Reporting of Mineral Resources

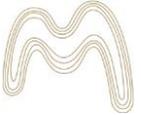
Criteria	JORC Code Explanation	Details
Database integrity	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The specific measures taken by previous parties to ensure database integrity are not known but the creation of a digital database has allowed for ongoing review of the integrity of the data.</li> <li>EQR maintains a database that contains all drill hole surveys, drilling details, lithological data and assay results. Where possible, all original geological logs, hole collar survey files, digital laboratory data and reports and other similar source data are maintained by EQR. The database is the primary source for all such information and was used by the Competent Person to estimate resources.</li> <li>The Competent Person undertook consistency checks between the database and original data sources as well as routine internal checks of database validity including spot checks and the use of validation tools. No material inconsistencies were identified.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person (Mr C. Grove) carried out a site visit to the Mt Carbine Tungsten Project in North Queensland, Australia in April 2021. During the site visit, Mr Grove verified the existence and location of a subset of the historic drill hole collars in the field, inspected the drill core, reviewed the metallurgical and mineralogical test work that was previously completed, and reviewed the extensive geological database.</li> <li>Mr Grove verified the current drilling practices and procedures and sampling and pre-processing of samples before sending them to the laboratory.</li> <li>Mr Grove considers the work completed to be of industry standard and acceptable for use in the estimation of mineral resources.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Geological setting and mineralisation controls of the Mt Carbine Project mineralisation have been confidently established from drill hole logging and geological mapping, including the development of a robust three-dimensional model of the major rock units.</li> <li>The geological domains are based on a minimum 2 m downhole depth of mineralisation. The composited grades are based on sampled, assayed results and barren zones to create a zone of mineralisation for geological modelling and resource estimation based on these composited grades.</li> <li>Due to the confidence in the understanding of mineralisation controls and the robustness of the geological model, investigation of alternative interpretations is unnecessary.</li> </ul>



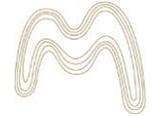
Criteria	JORC Code Explanation	Details
Dimensions	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Drilling indicates that the mineralisation continues up to 1300 m along strike and up to 600 m wide.</li> <li>- The limits of mineralisation have not been completely defined and are open at depth and along strike.</li> </ul>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g.- sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Statistical analysis was undertaken on the composited drill hole file to assess the appropriateness of the domaining process and as such, no additional domaining was undertaken. All domains were interpolated using ordinary kriging (“OK”).</li> <li>- Mineralisation was modelled as three-dimensional blocks of parent size 10 m X 10 m X 10 m with sub-celling allowed to 0.5 m X 0.5 m X 0.5 m.</li> <li>- No assumptions were made regarding the modelling of selective mining units.</li> <li>- Validation of the block model was made by:             <ul style="list-style-type: none"> <li>- checking that drill holes used for the estimation plotted in expected positions;</li> <li>- checking that flagged domains intersections lay within, and corresponded with, domain wireframes;</li> <li>- ensuring whether statistical analyses indicated that grade cutting was required;</li> <li>- checking that the volumes of the wireframes of domains matched the volumes of blocks of domains in the block model;</li> <li>- checking plots of the grades in the block model against plots of drill holes;</li> </ul> </li> <li>- Historical estimates were examined and the comparisons were similar yet inconclusive due to the ‘discreet’ style of geological interpretation in this estimate compared to the larger, all-encompassing lower grade style previously.</li> </ul>



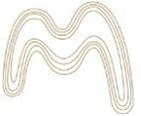
Criteria	JORC Code Explanation	Details
Moisture	<ul style="list-style-type: none"> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	
	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages were estimated on a dry basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>No cut-off grades were applied to the Mt Carbine Resource Estimate.</li> <li>The mineralised material is interpreted to have 'reasonable prospects of eventual economic extraction' by open-pit methods and by underground mining methods.</li> <li>No upper cut-off grades were applied to the Mt Carbine Resource Estimate. The competent person establish to their satisfaction that the high-grade zones recorded in the drill results were present in the mineralized zones and could be linked between sections to our satisfaction.</li> <li>Domain 1 - A lower cut of 0.05% WO<sub>3</sub> was used in Domain 1 to reflect the wider zones that include lower-grade mineralisation halos. It was found that it was not practical to apply a similar cut to other areas of the deposit where the veins themselves are more isolated and are treated as single zones. An upper cut at 10% was applied to the data set for individual assays to match the statistical curve grade-frequency variances.</li> <li>The outer domain - A lower cut of 0.15% WO<sub>3</sub> was used to determine the resource and definition of the geological boundaries to the mineralized zones as per the statement from September 2021 and remains unchanged. Included in the resource statement is a tonne-by-grade table that highlights how cut-off grade variations influenced the tonnages.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with</li> </ul>	<ul style="list-style-type: none"> <li>The resource estimate has been completed with the assumption that it will be mined using open cut and underground mining methods. No other detailed assumptions have been made to date. However, EQR will be completing a Feasibility Study on this resource estimate model, and when completed, more detailed assumptions will be able to be applied.</li> <li>The resource estimate has been completed with the assumption that it will be mined using open cut and underground mining methods. No other detailed assumptions have been made to date. However, EQR has completed a Bankable Feasibility Study on the September 2021 Resource estimate model, based on the following criteria.</li> </ul>



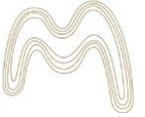
Criteria	JORC Code Explanation	Details																										
	<p><i>an explanation of the basis of the mining assumptions made.</i></p>	<table border="1" data-bbox="1061 352 1704 699"> <caption>Table 29: Summary of Operating Costs per Tonne</caption> <thead> <tr> <th>Operating Cost Item</th> <th>Cost (USD)</th> </tr> </thead> <tbody> <tr> <td>Operating costs of FCA (real) steady state life of mine (C1 cash cost)</td> <td>113/mtu</td> </tr> <tr> <th colspan="2">Operating Cost Components</th> </tr> <tr> <th colspan="2">Cost (AUD)</th> </tr> <tr> <td colspan="2"><b>Mining Costs</b></td> </tr> <tr> <td>• Open cut mining costs of for mining of the open pit by a contractor</td> <td>4.50/ ROM t</td> </tr> <tr> <td>• LGS Mining for 24/hr operations (Phase 2)</td> <td>2.47/t</td> </tr> <tr> <td>• LGS Mining for 12/hr operations (Phase 1)</td> <td>1.68/t</td> </tr> <tr> <td>Mine Closure/Rehabilitation &amp; Ancillary Equipment</td> <td>0.26/t</td> </tr> <tr> <td>Dry processing costs</td> <td>2.00/t (feed)</td> </tr> <tr> <td>Ore Sorting costs</td> <td>1.49/t (feed)</td> </tr> <tr> <td>Gravity processing plant costs incl. by-product management</td> <td>12.45/t (feed)</td> </tr> <tr> <td>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.</td> <td>1.98/t</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>- This showed that in the open-cut scenario the deposit was economic using a 0.2% Composite criteria on the wire-framed geological results.</li> <li>- Mining Trials have continued on the LGS dump showing that excellent efficiencies are presently using the Tomra ore sorting such that grades from 0.05% WO<sub>3</sub> are economic to mine. This has led to looking at a rerun of the block model at a lower cutoff for the pit. Low-grade halo ore from the pit will be put onto an LGS Rom pad and evaluated monthly for its economics at the relevant tungsten price.</li> </ul>	Operating Cost Item	Cost (USD)	Operating costs of FCA (real) steady state life of mine (C1 cash cost)	113/mtu	Operating Cost Components		Cost (AUD)		<b>Mining Costs</b>		• Open cut mining costs of for mining of the open pit by a contractor	4.50/ ROM t	• LGS Mining for 24/hr operations (Phase 2)	2.47/t	• LGS Mining for 12/hr operations (Phase 1)	1.68/t	Mine Closure/Rehabilitation & Ancillary Equipment	0.26/t	Dry processing costs	2.00/t (feed)	Ore Sorting costs	1.49/t (feed)	Gravity processing plant costs incl. by-product management	12.45/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.	1.98/t
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<p>Metallurgical factors or assumptions</p>	<ul style="list-style-type: none"> <li>• <i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Historical production shows the Mt Carbine Project was in the lowest quartile cost of production of western producers and produce very high-grade wolframite (&gt;70% WO<sub>3</sub>) and scheelite (68-72%WO<sub>3</sub>) concentrates with no or very low impurity penalties.</li> <li>- The main processes involve crushing to several different product sizes and then screening to create the product.</li> <li>- These processes are in current production and lead to the ‘reasonable prospects for eventual economic extraction’ considered by the Competent Person.</li> </ul>																										



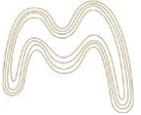
Criteria	JORC Code Explanation	Details
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a Greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>There has been recorded mining activity at the Mt Carbine Project between 1974-1987.</li> <li>There is currently re-processing of low-grade ore from the stockpile constructed from the discarded material and existing tailings dam.</li> <li>Near the project site, the land is mainly used for forestry, livestock farming and recreational activities.</li> <li>As the potential mine area contained an active open-pit mine up until 1987; and is still by law considered an active Mining Licence Area, development near the deposit has been limited.</li> <li>A surface water sampling programme (now in place for two years) for environmental monitoring.</li> <li>Completion of 5 twinned water monitoring bores to aid monitoring of groundwater regimes for environmental management.</li> <li>Development of an application for a higher level of Environmental Approval to cover the mining activities and processing.</li> </ul>
Bulk density	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (i.e. vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>A total of 1,048 density measurements from the drill core were completed.</li> <li>The methodology of density measurements was as follows:                             <ul style="list-style-type: none"> <li>A length of solid and intact/unbroken core with essentially zero porosity was selected and the ends were carefully cut with a diamond saw to make a near-perfect cylinder.</li> <li>The core was then sun-dried and the length and diameter of the cylinder (average of three readings with callipers) and an accurate weight were recorded to permit a simple volume/dry weight density estimate.</li> <li>Density measurements were analysed for any spatial trends by easting, northing and depth, with no obvious trends detected.</li> </ul> </li> <li>Hence, an average density of 2.74 was applied to the whole deposit.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data,</li> </ul>	<ul style="list-style-type: none"> <li>Classification of the Mineral Resource estimate was interpreted on several criteria, including confidence in the geological interpretation, the integrity of the data, the spatial continuity of the mineralisation and the quality of the estimation.</li> <li>An assessment of the historical mining showed increased confidence in the surrounding areas of the open-cut and confirmed by drilling results.</li> </ul>



Criteria	JORC Code Explanation	Details
	<p><i>confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></p> <ul style="list-style-type: none"> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The classification reflected the author's confidence in the location, quantity, grade, geological characteristics and continuity of the Mineral Resources.</li> <li>- The data spacing and distribution are sufficient to establish geological and grade continuity appropriate for Mineral Resource estimation and classification and the results appropriately reflect the Competent Person's view of the deposit.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>- An internal audit of techniques was completed to check for any bias or variances being introduced to the resource estimate. No biases were encountered.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li><i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource 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 resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li><i>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.</i></li> <li><i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The estimates made for this report are global estimates. Predicted tonnages and grades made from such block estimates are useful for feasibility studies, and long-, medium- and short-term mine planning. Individual, as distinct from aggregated, block estimates should not be relied upon for block selection for mining.</li> <li>- Local block model estimates, or grade control estimates, whose block grades are to be relied upon for the selection of ore from waste at the time of mining will require additional drilling and sampling of blast holes.</li> <li>- Confidence in the relative accuracy of the estimates is reflected in the classification of estimates as Indicated and Inferred.</li> <li>- Variography was completed for Tungsten. The variogram models were interpreted as being isotropic in the plane with shorter ranges perpendicular to the plane of maximum continuity.</li> <li>- Validation checks have been completed on raw data, composited data, model data and Resource estimates.</li> <li>- The model is checked to ensure it honours the validated data and no obvious anomalies exist which are not geologically sound.</li> <li>- The mineralised zones are based on actual intersections. These intersections are checked against the drill hole data. The Competent Person has independently checked laboratory sample data. The picks are sound and suitable to be used in the modelling and estimation process.</li> <li>- Further drilling also needs to be completed to improve the Resource classification of the Inferred Resource.</li> </ul>



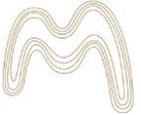
## APPENDIX B: JORC TABLE 1 - LOW-GRADE STOCKPILE



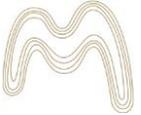
Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

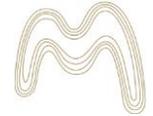
Criteria	Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (e.g. ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Bulk sampling utilizing 8 costeans dug with an excavator around the perimeter of the stockpile, costeans ranging up to 10m deep and 50m long.</li> <li>- Grab sampling at 80 locations (samples approximately 20kg each of minus 100mm material) for mineralogical and chemical characterisation of mineralised rock for environmental permitting purposes.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>



Criteria	Explanation	Commentary
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	- N/A
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>The bulk sample was coned and quartered with the excavator to 2,000 tonnes. This subsample was crushed to minus 50mm and screened into three size ranges: 20-50mm, 10-20mm and minus 10mm. Each size fraction was sampled by channel sampling.</li> <li>The grab samples were crushed to minus 3mm, split, and sub-samples pulverised and assayed for a range of elements including tungsten (the latter by fused disk XRF).</li> </ul>



Criteria	Explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The channel samples were analysed by the fused disk and check analyses were carried out on-site with a Niton portable XRF analyser after careful calibration of this instrument.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data</i></li> </ul>	<ul style="list-style-type: none"> <li>- See Above</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Costean locations are shown in the body of the report.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Costean locations are shown in the body of the report.</li> </ul>

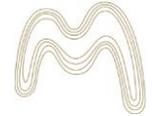


Criteria	Explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	- N/A
Sample security	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	- The bulk sample crushed and screened size splits are stored on-site, and the crushed grab samples and pulverized splits are stored in the mine core shed.
Audits or reviews	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	- The bulk sampling procedures were subject to review by the Competent Person retained to supervise the X-ray ore sorter trials.

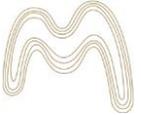
## Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

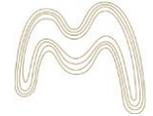
Criteria	Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> </ul>	- The resource estimates reported herein are all within Mining Leases 4867 (358.5ha, expiry 31-07-22) and 4919 (7.891ha, expiry 31-08-2023), held by Mt Carbine Quarries Pty Ltd. The Mining Leases lie within Brooklyn Grazing Homestead Perpetual Lease. Native Title has been extinguished in the Mining Leases by Deed of Grant.



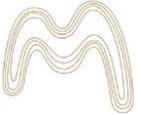
Criteria	Explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	
Exploration done by other parties	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>- No previous examination of the LGS was carried out.</li> <li>- A nearly complete record of mine production, including amounts of mined rock consigned to the LGS, has been compiled using published and unpublished archives, including reporting for State Royalty returns.</li> </ul>
Geology	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The Deposit</li> <li>- The Mt Carbine tungsten deposit is a sheeted quartz vein deposit. Many sub-parallel, sub-vertical quartz veins have been deposited in fractures developed in the host rocks metasediments in a zone that drilling and mapping of historical surface workings have shown to be approximately 300m wide and at least 1.4 km long, trending at about 315 degrees.</li> <li>- Grade Variation</li> <li>- Sampling, drill core logging, geostatistical analysis of drill core assay data and mapping of the open pit have determined that all the material mined during the previous operation was mineralised to some extent and that the mineralogy of the deposit was uniform. There is little doubt that the mineralogy of the stockpile material is identical to that mined and processed. The material in the stockpile comprises a single formation, the result of the alteration of Siluro-Devonian meta-sedimentary host rocks (Forsythe and Higgins, 1990).</li> <li>- The amount of quartz veining varies within the mineralised zone and previous mining and exploration have been concentrated at the south-eastern end of the mineralised zone. It is well understood that there are high-grade zones within the mineralisation in this part of the deposit and that the higher-grade zones are surrounded by lower-grade mineralisation. Interpretation of recent drilling suggests that the main high-grade zone may plunge to the north of the present open pit. The previous mine assumption that quartz vein abundance is directly correlated with grade is not supported by an independent review of quartz vein abundance and grade.</li> <li>-</li> <li>-</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a</i></li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>



Criteria	Explanation	Commentary
	<p><i>tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>• <i>easting and northing of the drill hole collar</i></li> <li>• <i>elevation or RL (Reduced Level - elevation above sea level in metres) of the drill hole collar</i></li> <li>• <i>dip and azimuth of the hole</i></li> <li>• <i>down hole length and interception depth</i></li> <li>• <i>hole length.</i></li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case</i></li> </ul>	
<p>Data aggregation methods</p>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated</i></li> </ul>	<p>- N/A</p>
<p>Relationship between mineralisation widths and intercept length</p>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	<p>- N/A</p>



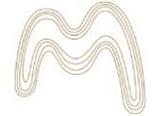
Criteria	Explanation	Commentary
Diagrams	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>- A plan view of sampling is shown in the body of the report.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>- N/A</li> </ul>
Further work	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The bulk sample was subjected to a series of trials through a pilot-scale X-ray ore sorter over 2 months. This work demonstrated that an optimum 6 times upgrade of the tungsten content in the ore sorter accepts and ensuing feasibility studies indicate that the LGS is economic to process utilizing X-ray ore sorting and concentration of mineral in the ore sorter accepts in a conventional gravity mill.</li> </ul>



Section 3 - Estimation and Reporting of Mineral Resources

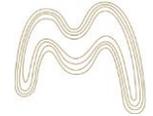
(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	- Commentary
Database integrity	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	- N/A
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person (Mr C. Grove) carried out a site visit to the Mt Carbine Tungsten Project in North Queensland, Australia in April 2021. During the site visit, Mr Grove verified the existence and location of the production history and inspected the LGS to form an opinion of the data retrieved from the historical production data.</li> <li>Mr Grove verified the current production practices and procedures, sampling and processing of ore through crushing and screening before the final product is sent to market.</li> <li>Mr Grove considers the work completed to be of industry standard and acceptable for use in the estimation of mineral resources.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	- Senior geological staff including the Competent Person have developed a sound understanding of the geology and importantly, the metallurgy of the deposit.



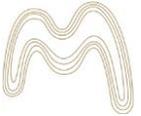
Criteria	Explanation	- Commentary
Dimensions	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>The 12Mt tonnes estimated to be contained in the LGS have been derived from nearly complete historical mine records, confirmed by the reconciliation of an independent estimate of total tonnes mined from the open pit (22Mt) less 10Mt material processed through the mill.</li> </ul>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li><i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li><i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>The detailed distribution of grade through the LGS is not known, as no record was kept of placement of rock consigned to the stockpile, nor was any sampling carried out. The average of assays of the three-size range subsamples of the bulk sample is 0.075% WO<sub>3</sub>. This reconciles very favourably with a back-calculation from historic mine records of production and mill recovery and based on the recent resource estimate which took account of the resource mined during the previous open pit operation, of a global average grade of 0.075% WO<sub>3</sub> for the Low-Grade Stockpile.</li> <li>It should be noted that the historical mine records state that 3.5Mt of rock described as ore was consigned to the stockpile in 1982.</li> <li>The grab samples average 0.088% WO<sub>3</sub> (fused disk XRF analysis), which is taken to indicate that the tungsten grade of the finer fraction (&lt;200mm) of the stockpile is higher than the global average grade of the bulk sample that included fragments up to 500mm.</li> </ul>

# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE

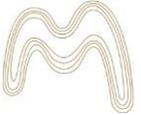


EQ RESOURCES PTY LTD

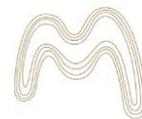
Criteria	Explanation	- Commentary
Moisture	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>- Tonnages are estimated on an air-dried basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>- No cut-off has been applied to the stockpile grade estimation, however, it is planned to screen the stockpiled material at 500mm and only crush and ore sort the minus 500mm fraction, since a growing body of data from ongoing tests indicates that this fraction contains the bulk of the tungsten minerals that it is planned to recover.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>• <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The stockpile fills a valley and will readily be recovered by excavator and truck.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>• <i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The mineralogy of the material contained in the stockpile is identical to that of the hard rock ore body. The Mt Carbine ore body is low grade in comparison with many other tungsten deposits, however, the highly successful application of ore sorting to preconcentrate this ore to a high-grade mill feed has been demonstrated firstly in the previous mining operation which used optical ore sorters, and secondly by extensive recent trials of X-ray ore sorting of bulk samples of the stockpile and Run of Mine ore by EQR.</li> <li>- Process design and anticipated recoveries have been derived from historical mill flow sheets, reports and trials that have been confirmed by repeat metallurgical testing of bulk samples of stockpile material including Run of Mine ore.</li> </ul>
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>• <i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic</i></li> </ul>	<ul style="list-style-type: none"> <li>- EQR has been granted an Environmental Authority by the Queensland Department of Environment and Science ("DES") for the Low-Grade Stockpile. Based on the sampling of existing stockpiles, tailings storage facilities and analytical characterisation of the mineralisation, the only elements present at hazardous values are fluorine (as fluorite) and</li> </ul>



Criteria	Explanation	- Commentary
	<p><i>extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p>	<p>arsenic (as arsenopyrite). Previous mine practice and the present Environmental Management Plan approved by the DES include measures to manage the environmental hazards these elements present. The sampling of the existing stockpiles and tailings storage facility indicates that acid mine drainage will not be a hazard created by future mining and waste storage.</p>
Bulk density	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<p>- N/A. The tonnes estimated to be contained in the stockpile have been derived independently of calculation by multiplying volume by density.</p>
Classification	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>- Following extensive metallurgical testing of bulk samples from the stockpile that provide robust anticipated recovery and quality of product, the LGS has been classified as an Indicated Resource.</p>
Audits or reviews.	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<p>- The estimates for the LGS have been subject to internal Company and Independent Competent Persons Company review.</p>



Criteria	Explanation	- Commentary
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource 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 resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>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.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>- The success of the proposed stockpile treatment is underpinned by the fact that the same orebody was profitably mined for 13 years by the previous operators. The mine only closed in 1987 because of the price collapse caused by oversupply from Chinese producers dumping products on the market, resulting in the closure of most western tungsten-producing mines. Before the price collapse, the Mt Carbine mine operators and their joint venture partners had carried out detailed plans to extend the mine life and maintain production for a further ten years.</li> <li>- The Mt Carbine mine had not run out of ore (there was an estimated 3.5Mt of ore to be extracted from the existing pit before any mine expansion had to be considered). The ore treatment process was well documented, and studies spurred by the collapsing price showed that mill recovery could be significantly increased. This has since been confirmed by test work carried out by EQR.</li> </ul>



## APPENDIX C: DRILL HOLE DATA

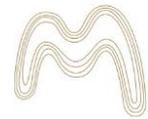
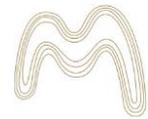


Table D 1: Drillhole Collar Locations (Local Grid)

HOLE ID	EAST	NORTH	ELEVATION	TOTAL DEPTH
CB001	22772.4	26224.6	396	303.28
CB002	22914	26241.4	396	236.4
CB003	22775.4	26178.4	387	320.18
CB004	22912.4	26459	386	146.46
CB005	22853.2	26423.3	410	215.04
CB006	22729.5	26469	443	146.08
CB007	22974.5	26408.4	394	145.66
CB008	22630	26246.1	391	166.27
CB009	22694.5	26205.7	383	215.04
CB011	22989.6	26325.2	388	102.52
CB012	22554.5	26206.5	384	253
CB013	22500.8	26385.5	430	140.04
CB014	22475	26196	386	297
CB015	22605.5	26327.2	416	152
CB016	22663	26276	387	240.78
CB017	22844	26480	404	176.5
CB018	22748.4	26717.2	383	700
CB019	22003	26695	446	331
CB020	22875.9	26176.9	383	0
CB021	22727.3	26213.1	379	68
CB022	22973.5	26476.6	381	245
CB024	22711.4	27075.7	372	448.2
CB025	23052.4	27272.5	367	268
CB029A	22788.9	26637.3	384	404
CB036	23020	27327	365	143
CB037	22988	27370	365	125
CB038	22825.2	26511.5	390	325
CB039	22850.3	26512.6	389	324.7
CB040	22850.6	26544.8	391	351
CB041	22898.8	26499.9	380	279
CB042	22900.2	26537.2	386	142
CB043	22778.4	26245.4	347	50
CB044	22917.8	26291.3	348	50
CB045	22840.1	26266	347	50
CB046	22450.98	26482.17	462	78.5
CB047	22458.7	26531.3	446	131.5
CB048	22551.2	26404.2	435	120
CB049	22408.4	26373.5	450	129.8
CB050	22527.6	26483.5	452	60.5
CB051	22752.13	26668.19	389	267
CB052	22834.46	26601.99	385	399.2
CB053	22698.47	26712.59	389	216
CB054	22698.28	26713.3	389	225.2
CB055	22651.61	26722.25	391	320.6
CB056	22447.25	26167.74	385	246.8
CB057	22397.04	26258.86	407	251.7
CB058	22170.48	26202.81	393	251.8
CB059	22298.42	26174.39	393	182.7
CB060	22504.96	26358.22	426	248.9
CB061	22207.41	26323.7	417	291
CB062	22651.92	26524.41	431	306
CB063	22620.61	26613.22	435	311.8
CB064	22536.23	26485	452	368.5
CB065	22715.73	26593.13	407	440.8

# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



EQ RESOURCES PTY LTD

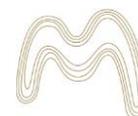
HOLE ID	EAST	NORTH	ELEVATION	TOTAL DEPTH
CB066	22561.36	26725.57	388	248.8
CB067	22750.16	26770.3	378	398.9
EQ001	22793.295	26175.821	389	309.1
EQ002	22793.418	26175.394	389	341.8
EQ003	22735.677	26170.491	387	299
EQ004	22704.388	26174.923	386	327.3
EQ005	22657.446	26173.679	387	312.3
EQ006	22876.196	26188.593	384	309.3
EQ007	23014.294	26328.151	364	48
EQ008	23014.278	26329.307	364	60.5
EQ009	23013.849	26330.958	364	171.5
EQ010	22656.842	26177.017	387	243.3
EQ011	22765.358	26173.378	389	285.3
EQ012	22624.095	26185.785	388	414.6
EQ013	22910.78	26189.687	383	294.2
EQ014	22956.998	26203.604	383	300.4
EQ015	22841.076	26177.612	387	306.3
EQ016	23055.566	26321.271	380	48.4
EQ017	23049.90	26422.15	380	345.4
EQ018	22483.17	26167.92	384	465.2
EQ019	22460.63	26159.36	384	249.3
EQ020	22513.20	26217.40	385	204.0
EQ021	22566.84	26232.40	385	140.4
EQ022	22612.55	26227.23	385	147.0
EQ023	22603.98	26258.85	379	120.0
EQ024	22492.58	26258.76	402	144.4
EQ025	22455.72	26231.95	398	156.0
EQ026	22424.27	26209.50	394	150.2
MTC01	22799.45	26546.47	401	401.5
MTC02	22719.89	26569.7	411	400
MTCB001	23069.35	26491.65	374	339.3
MTCB002	22480.08	26617.27	411	567.4
MTCB003	22240.19	26632.11	430	663.4
MTCB004	21922.84	26260.15	397	186.4
MTCB005	21920.87	26258.46	397	741.4



Table D 2: 2021 Significant Assay Results (by Drillhole)

Hole ID	East	North	RI	EOH	Dip	Azm (TN)	From	To	Interval	WO <sub>3</sub> %	
EQ001	22,798	26,177	389.5	309.1	-49	50	164.73	169.00	4.27	1.27	
							<i>Incl.</i>	<b>166.47</b>	<b>166.57</b>	<b>0.10</b>	<b>50.07</b>
								185.07	191.13	6.06	0.54
							<i>Incl.</i>	<b>187.82</b>	<b>187.99</b>	<b>0.17</b>	<b>17.40</b>
								202.02	208.74	6.72	0.53
							<i>Incl.</i>	<b>202.02</b>	<b>202.78</b>	<b>0.76</b>	<b>3.87</b>
								221.06	221.41	0.35	2.13
								228.84	231.37	2.53	0.48
								296.51	305.63	9.12	0.48
							<i>Incl.</i>	<b>296.51</b>	<b>297.75</b>	<b>1.24</b>	<b>2.64</b>
<i>Incl.</i>	<b>305.12</b>	<b>305.63</b>	<b>0.51</b>	<b>2.07</b>							
EQ002	22,798	26,177	389.5	389.5	-57	50	207.20	211.55	4.35	0.26	
							<i>Incl.</i>	<b>207.20</b>	<b>207.62</b>	<b>0.42</b>	<b>1.95</b>
								262.50	263.13	0.63	0.50
								308.67	313.94	5.27	0.38
							<i>Incl.</i>	<b>308.67</b>	<b>308.86</b>	<b>0.19</b>	<b>1.92</b>
<i>Incl.</i>	<b>312.77</b>	<b>313.94</b>	<b>1.17</b>	<b>1.42</b>							
EQ003	22,730	26,181	387.66	290.0	-50	50	120.85	122.16	1.31	1.36	
								124.82	127.82	3.00	1.51
							<i>Incl.</i>	<b>126.32</b>	<b>127.82</b>	<b>1.50</b>	<b>2.88</b>
								139.79	140.17	0.38	1.26
								154.58	154.72	0.14	11.55
								285.65	286.55	0.90	0.19
								291.77	293.32	1.55	0.46
EQ004	22707	26182.7	386.7	325.0	50	50	114.09	119.42	5.33	1.32	
							<i>Incl.</i>	<b>118.40</b>	<b>119.42</b>	<b>1.02</b>	<b>6.68</b>
								127.09	135.75	8.66	0.45
							<i>Incl.</i>	<b>135.06</b>	<b>135.75</b>	<b>0.69</b>	<b>5.37</b>
								173.33	181.54	8.21	1.13
							<i>Incl.</i>	<b>173.33</b>	<b>173.82</b>	<b>0.49</b>	<b>17.60</b>
							<i>Incl.</i>	<b>180.90</b>	<b>181.54</b>	<b>0.64</b>	<b>0.95</b>
								223.46	224.16	0.70	0.39
	310.20	310.38	0.18	<b>0.73</b>							
	318.76	325.30	6.54	0.14							
EQ005	22665	26187.6	387.0	327.3	-58	50	115.67	118.37	2.70	0.50	
							<i>Incl.</i>	<b>115.67</b>	<b>115.87</b>	<b>0.20</b>	<b>5.32</b>
							<i>Incl.</i>	<b>118.30</b>	<b>118.37</b>	<b>0.07</b>	<b>4.13</b>
								141.81	145.47	3.66	0.28
							<i>Incl.</i>	<b>145.31</b>	<b>145.47</b>	<b>0.16</b>	<b>6.02</b>
	154.24	156.98	2.74	0.35							

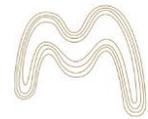
# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



EQ RESOURCES PTY LTD

Hole ID	East	North	RI	EOH	Dip	Azm (TN)	From	To	Interval	WO <sub>3</sub> %
							<i>Incl.</i> 154.56	154.71	0.15	5.85
							174.00	174.89	0.89	0.25
							<i>Incl.</i> 174.58	174.89	0.31	0.57
							212.22	213.92	1.70	0.13
							<i>Incl.</i> 213.59	213.92	0.33	0.64
							217.46	219.60	2.14	0.18
							<i>Incl.</i> 217.90	218.11	0.21	1.43
							300.98	301.45	0.47	0.21
<b>EQ006</b>	<b>22,873</b>	26,202	383.90		-48	50	123.37	127.72	4.35	1.31
							<i>Incl.</i> 124.08	124.62	0.54	8.03
							<i>Incl.</i> 127.26	127.72	0.46	2.71
							131.00	135.12	4.12	0.53
							<i>Incl.</i> 131.00	132.24	1.24	1.00
							150.30	152.41	2.11	0.56
							<i>Incl.</i> 152.36	152.41	0.05	20.05
							162.30	163.65	1.35	2.37
							<i>Incl.</i> 162.30	162.41	0.11	1.82
							<i>Incl.</i> 163.17	163.65	0.48	6.14
							253.06	253.39	0.33	2.48
							267.31	270.19	2.88	0.38
							<i>Incl.</i> 267.31	267.50	0.19	3.83
							278.28	281.98	3.70	0.78
							<i>Incl.</i> 281.77	281.98	0.21	12.93
							287.17	290.44	3.27	0.33
							<i>Incl.</i> 287.17	287.32	0.15	7.14
<b>EQ007</b>	<b>23017</b>	26329	365.0	48.0	-45	230	28.35	28.50	0.15	7.97
<b>EQ008</b>	<b>23017</b>	26329	365.0	60.5		230	47.70	50.20	2.50	0.31
							<i>Incl.</i> 47.70	47.87	0.17	0.78
							<i>Incl.</i> 50.09	50.20	0.11	1.58
<b>EQ009</b>	<b>23017</b>	26329.0	365.0	171.5	-60	50	34.40	35.00	0.60	0.31
							<i>Incl.</i> 34.40	34.45	0.05	2.72
							43.60	45.78	2.18	0.44
							<i>Incl.</i> 45.26	45.55	0.29	2.84
							53.24	53.41	0.17	0.86
							80.39	83.22	2.83	0.67
							101.96	104.57	2.61	0.41
							<i>Incl.</i> 101.96	102.10	0.14	6.47
							<i>Incl.</i> 104.46	104.57	0.11	1.33
							125.90	127.30	1.40	0.60
							<i>Incl.</i> 126.91	126.98	0.07	9.50
							148.62	149.65	1.03	0.21

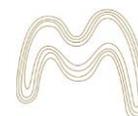
# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



EQ RESOURCES PTY LTD

Hole ID	East	North	RI	EOH	Dip	Azm (TN)	From	To	Interval	WO <sub>3</sub> %
							<i>Incl.</i> <b>148.62</b>	<b>148.68</b>	<b>0.06</b>	<b>2.71</b>
							161.04	161.25	0.21	0.28
EQ010	22656.8	26177.0	243.3	245.0	-45	50	136.92	139.16	2.24	0.27
							<i>Incl.</i> <b>139.04</b>	<b>139.16</b>	<b>0.12</b>	<b>4.99</b>
							156.84	159.45	2.61	0.21
							<i>Incl.</i> <b>158.37</b>	<b>159.45</b>	<b>1.08</b>	<b>0.50</b>
							167.51	171.11	3.60	0.32
							<i>Incl.</i> <b>167.51</b>	<b>168.05</b>	<b>0.54</b>	<b>2.08</b>
							173.49	182.16	8.67	0.30
							<i>Incl.</i> <b>181.23</b>	<b>182.16</b>	<b>0.93</b>	<b>2.59</b>
EQ011	22765.4	26173.4	285.3	285.3	-45	51	118.48	119.06	0.58	2.26
							137.38	138.52	1.14	0.43
							141.55	141.70	0.15	6.36
							144.95	145.47	0.52	2.08
							176.67	176.93	0.26	3.31
							222.53	223.20	0.67	4.22
EQ012	22624.1	26185.8	414.6	412.0	-45	50	111.46	113.60	2.14	0.53
							<i>Incl.</i> <b>111.46</b>	<b>111.73</b>	<b>0.27</b>	<b>4.10</b>
							137.82	141.66	3.84	0.32
							<i>Incl.</i> <b>138.88</b>	<b>139.01</b>	<b>0.13</b>	<b>5.90</b>
							141.50	141.66	0.16	2.53
							327.11	328.78	1.67	3.28
							<i>Incl.</i> <b>327.11</b>	<b>328.34</b>	<b>1.23</b>	<b>5.44</b>
							346.41	349.59	3.18	0.67
							<i>Incl.</i> <b>346.41</b>	<b>346.78</b>	<b>0.37</b>	<b>4.33</b>
							382.08	385.21	3.13	1.93
							<i>Incl.</i> <b>383.21</b>	<b>384.21</b>	<b>1.00</b>	<b>5.92</b>
EQ013	22910.8	26189.7	294.2	294.2	-45	48	135.95	148.87	12.92	0.59
							<i>Incl.</i> <b>135.95</b>	<b>136.65</b>	<b>0.70</b>	<b>1.02</b>
							140.46	140.61	0.15	3.95
							148.39	148.87	0.48	12.40
							165.76	170.85	5.09	1.41
							<i>Incl.</i> <b>165.76</b>	<b>166.64</b>	<b>0.88</b>	<b>3.42</b>
							170.67	170.85	0.18	15.55
							257.12	266.13	9.01	0.38
							<i>Incl.</i> <b>257.12</b>	<b>257.94</b>	<b>0.82</b>	<b>2.49</b>
							265.77	266.13	0.36	3.43
							277.00	284.18	7.18	1.42
							<i>Incl.</i> <b>277.00</b>	<b>277.30</b>	<b>0.30</b>	<b>3.61</b>
							282.90	284.18	1.28	6.96
EQ014	22957.0	26203.6	300.4	300.4	-45	45	133.32	143.03	9.71	0.53

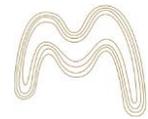
# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



EQ RESOURCES PTY LTD

Hole ID	East	North	RI	EOH	Dip	Azm (TN)	From	To	Interval	WO <sub>3</sub> %
							<i>Incl.</i> <b>134.18</b>	<b>134.47</b>	<b>0.29</b>	<b>2.92</b>
							139.20	139.44	0.24	13.90
							142.78	143.03	0.25	3.25
							146.35	150.40	4.05	1.41
							<i>Incl.</i> <b>146.35</b>	<b>146.70</b>	<b>0.35</b>	<b>1.65</b>
							150.08	150.40	0.32	16.10
							159.74	165.04	5.30	0.66
							<i>Incl.</i> <b>159.74</b>	<b>160.12</b>	<b>0.38</b>	<b>2.55</b>
							162.41	162.85	0.44	4.87
							164.90	165.04	2.25	1.79
							261.05	263.30	2.25	1.72
							<i>Incl.</i> <b>261.05</b>	<b>261.40</b>	<b>0.35</b>	<b>8.02</b>
							263.13	263.30	0.17	6.09
<b>EQ015</b>	<b>22841.1</b>	<b>26177.6</b>	<b>306.3</b>	<b>306.3</b>	<b>-45</b>	<b>50</b>	138.79	147.90	9.11	1.21
							<i>Incl.</i> <b>139.87</b>	<b>140.91</b>	<b>1.04</b>	<b>2.35</b>
							144.77	145.14	0.37	20.00
							156.35	160.80	4.45	5.09
							<i>Incl.</i> <b>156.35</b>	<b>156.81</b>	<b>0.46</b>	<b>10.80</b>
							156.81	157.11	0.30	1.27
							158.13	158.46	0.33	7.57
							159.74	160.80	1.06	13.85
							199.29	209.99	10.70	0.93
							<i>Incl.</i> <b>199.29</b>	<b>199.86</b>	<b>0.57</b>	<b>14.15</b>
							207.23	207.62	0.39	3.12
							209.88	209.99	0.11	5.63
							245.85	252.88	7.03	0.33
							<i>Incl.</i> <b>245.85</b>	<b>246.35</b>	<b>0.50</b>	<b>1.15</b>
							247.71	248.11	0.40	1.86
							252.64	252.88	0.24	4.04
							263.74	268.90	5.16	1.18
							<i>Incl.</i> <b>263.74</b>	<b>264.00</b>	<b>0.26</b>	<b>1.24</b>
							264.62	265.32	0.70	7.03
							268.57	268.90	0.33	2.47
							282.51	290.45	7.94	0.26
							<i>Incl.</i> <b>282.51</b>	<b>283.15</b>	<b>0.64</b>	<b>2.97</b>
<b>EQ016</b>	<b>23053</b>	<b>26305</b>	<b>380.4</b>	<b>48.4</b>	<b>-45</b>	<b>230</b>	No Significant Results			
<b>EQ017</b>	<b>23483</b>	<b>25168</b>	<b>380.2</b>	<b>345.4</b>	<b>-62.1</b>	<b>354.3</b>	201.85	203.00	1.15	0.60
<b>EQ018</b>	<b>22483</b>	<b>26168</b>	<b>384.4</b>	<b>465.2</b>	<b>-45.0</b>	<b>3.8</b>	116.66	116.94	0.28	1.51
							124.09	125.50	1.41	1.06
							182.65	185.81	3.16	0.37
							<i>Incl.</i> <b>182.65</b>	<b>182.81</b>	<b>0.16</b>	<b>5.53</b>
							<i>Incl.</i> <b>185.68</b>	<b>185.81</b>	<b>0.13</b>	<b>2.15</b>

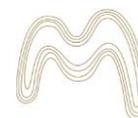
# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



EQ RESOURCES PTY LTD

Hole ID	East	North	RI	EOH	Dip	Azm (TN)	From	To	Interval	WO <sub>3</sub> %
							209.15	210.58	1.43	0.54
							<i>Incl.</i> 209.15	209.37	0.22	1.54
							<i>Incl.</i> 210.09	210.58	0.49	0.89
							231.62	235.51	3.89	0.52
							<i>Incl.</i> 231.62	231.80	0.18	1.56
							<i>Incl.</i> 232.89	233.15	0.26	3.28
							<i>Incl.</i> 235.40	235.51	0.11	8.01
EQ019	22461	26159	384.4	249.3	-44.5	349.6	124.55	124.80	0.25	3.21
							131.55	165.19	33.64	0.22
							<i>Incl.</i> 131.55	132.03	0.48	2.57
							<i>Incl.</i> 137.39	137.59	0.20	3.98
							<i>Incl.</i> 145.63	146.11	0.48	4.94
							<i>Incl.</i> 147.00	147.71	0.71	0.72
							<i>Incl.</i> 152.04	152.72	0.68	1.24
							<i>Incl.</i> 156.77	157.21	0.44	2.09
							<i>Incl.</i> 164.77	165.19	0.42	1.46
EQ020	222513	26217	385.1	204	-50.0	0.0	39.82	48.34	8.52	0.19
							<i>Incl.</i> 39.82	40.02	0.20	5.16
							<i>Incl.</i> 47.88	48.34	0.46	1.27
							61.45	72.96	11.51	0.16
							<i>Incl.</i> 61.45	61.76	0.31	4.84
							<i>Incl.</i> 72.74	72.96	0.22	1.29
							89.63	93.50	3.87	0.22
							<i>Incl.</i> 89.63	89.80	0.17	1.91
							<i>Incl.</i> 91.86	92.28	0.42	0.95
							141.27	147.53	6.26	0.18
							<i>Incl.</i> 141.27	141.58	0.31	0.68
							<i>Incl.</i> 142.73	143.17	0.44	1.41
							<i>Incl.</i> 147.06	147.53	0.47	0.63
							165.56	167.35	1.79	0.79
							<i>Incl.</i> 165.56	166.25	0.69	0.89
							<i>Incl.</i> 167.16	167.35	0.19	4.25
							185.41	190.62	5.21	0.20
							<i>Incl.</i> 185.41	186.12	0.71	1.24
							<i>Incl.</i> 190.37	190.62	0.25	0.68
EQ021	22566	26232	384.9	140.4	-44.6	345.0	38.80	39.32	0.52	1.30
							<i>Incl.</i> 39.16	39.32	0.16	4.09
							54.49	57.06	2.57	0.35
							<i>Incl.</i> 56.63	57.06	0.43	1.85
							61.59	64.79	3.20	0.24
							<i>Incl.</i> 64.29	64.79	0.50	1.29
							73.73	79.31	5.58	0.23

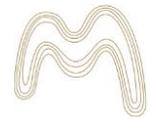
# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



EQ RESOURCES PTY LTD

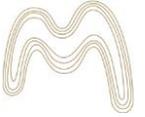
Hole ID	East	North	RI	EOH	Dip	Azm (TN)	From	To	Interval	WO <sub>3</sub> %
							<i>Incl.</i> 73.73	74.23	0.50	0.84
							<i>Incl.</i> 78.55	79.31	0.76	1.11
							104.96	106.36	1.40	0.42
							<i>Incl.</i> 104.96	105.03	0.07	6.88
							113.20	113.60	0.40	1.67
							<i>Incl.</i> 128.78	138.19	9.41	0.54
							<i>Incl.</i> 132.54	132.79	0.25	1.15
							<i>Incl.</i> 134.88	135.04	0.16	6.02
							<i>Incl.</i> 137.12	137.49	0.37	9.94
<b>EQ022</b>	<b>22613</b>	<b>26227</b>	<b>385</b>	<b>147</b>	<b>-47.9</b>	<b>350.4</b>	56.34	65.58	9.24	0.36
							<i>Incl.</i> 63.44	63.85	0.41	5.07
							<i>Incl.</i> 65.18	65.58	0.40	2.24
							79.94	83.05	3.11	0.63
							<i>Incl.</i> 79.94	80.69	0.75	2.55
							98.00	106.63	8.63	0.46
							<i>Incl.</i> 101.60	101.90	0.30	12.85
							137.84	138.92	1.08	2.24
<b>EQ023</b>	<b>22604</b>	<b>26259</b>	<b>379.4</b>	<b>120</b>	<b>-44.8</b>	<b>341.4</b>	58.86	59.12	0.26	1.75
							63.97	69.99	6.02	0.19
							<i>Incl.</i> 63.97	64.29	0.32	1.94
							<i>Incl.</i> 69.8	69.99	0.19	2.83
							82.28	84.75	2.47	0.22
							<i>Incl.</i> 82.28	82.52	0.24	1.66
							93.89	109.66	15.77	0.32
							<i>Incl.</i> 93.89	94.00	0.11	2.63
							<i>Incl.</i> 100.18	100.68	0.50	2.91
							<i>Incl.</i> 102.1	102.35	0.25	4.82
							<i>Incl.</i> 106.23	106.55	0.32	5.74
<b>EQ024</b>	<b>22493</b>	<b>26259</b>	<b>402.3</b>	<b>144.4</b>	<b>-50</b>	<b>356.8</b>	56.12	58.39	2.27	0.21
							83.28	86.00	2.72	0.21
							97.18	99.90	2.72	0.57
							<i>Incl.</i> 97.18	97.5	0.32	1.88
							<i>Incl.</i> 98.41	98.88	0.47	1.78
							108.2	113.7	5.50	0.26
							<i>Incl.</i> 108.87	109.2	0.33	1.43
							<i>Incl.</i> 113.48	113.7	0.22	4.08
<b>EQ025</b>	<b>22456</b>	<b>26232</b>	<b>397.9</b>	<b>156</b>	<b>-45.1</b>	<b>356.2</b>	15.90	16.90	1.00	0.47
							34.32	34.52	0.20	1.76
							65.17	67.26	2.09	0.30
							<i>Incl.</i> 65.17	65.40	0.23	2.66
							100.77	103.93	3.16	0.22
							<i>Incl.</i> 100.77	101.12	0.35	1.54

# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



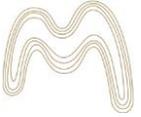
EQ RESOURCES PTY LTD

Hole ID	East	North	RI	EOH	Dip	Azm (TN)	From	To	Interval	WO <sub>3</sub> %
							103.76	103.93	0.17	0.83
EQ026	22424	26209	394.3	150.2	-45	357.4	36.47	38.07	1.6	0.26
							<i>Incl.</i> 36.47	<b>36.89</b>	<b>0.42</b>	<b>0.76</b>
							72.92	93.29	20.37	0.36
							<i>Incl.</i> 72.92	<b>73.40</b>	<b>0.48</b>	<b>0.80</b>
							<i>Incl.</i> 75.20	<b>75.55</b>	<b>0.35</b>	<b>1.04</b>
							<i>Incl.</i> 84.96	<b>85.21</b>	<b>0.25</b>	<b>0.73</b>
							<i>Incl.</i> 86.63	<b>93.29</b>	<b>6.66</b>	<b>0.95</b>
							<i>Incl.</i> 86.63	<b>87.16</b>	<b>0.53</b>	<b>6.23</b>
							<i>Incl.</i> 87.75	<b>88.4</b>	<b>0.65</b>	<b>1.12</b>
							<i>Incl.</i> 89.18	<b>89.33</b>	<b>0.15</b>	<b>1.92</b>
							<i>Incl.</i> 89.77	<b>90.91</b>	<b>1.14</b>	<b>0.92</b>
							<i>Incl.</i> 92.43	<b>93.29</b>	<b>0.86</b>	<b>1.04</b>



## APPENDIX D: Petrology Study report

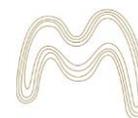
# MT CARBINE GEOLOGY AND MINERAL RESOURCE ESTIMATE



EQ RESOURCES PTY LTD

Table E 1: Summary of Petrological Study of Mt Carbine Geology

EQ RESOURCES MT CARBINE PROJECT - PETROGRAPHIC REVIEW (PTEROSAUR PETROLOGY 2021)															
SECTION	SAMPLE	CORE	HOLE ID	FROM m	TO m	Lithology	HOST ROCK MINERALS	VEINS / FRACTURE INFILL Event 1	WALLROCK ALTERATION E1	VEINS / FRACTURE INFILL Event 2	WALLROCK ALTERATION E2	VEINS / FRACTURE INFILL Event 3	WALLROCK ALTERATION E3	VEINS / FRACTURE INFILL Event 4	WALLROCK ALTERATION E4
TS2109-4.1	MCP01	HQ	EQ010	162.50	162.73	Veined & altered hornfelsed phyllite	Ms-Qz-Bt	Qz	?Chl	Sau-Tur-Po	Ser-Si-Chl-Tur-Po-(Ccp-Asp)	Qz-Cal	Cal-(Py)		
TS2109-4.2	MCP02	HQ	EQ006	109.60	109.70	Complex milled breccia of dacite dyke(?)	Qz-Pl-Kfs	3x Breccia cement: Si-(FeOx)	(Py)	1x Breccia cement: Sau-Ep-Tur		Qz-Cal-(Ccp-Po-Sp)	(Cal-Ccp-Po-Sp)	Qz	
TS2109-4.3	MCP03	HQ	EQ012	37.30	37.50	Complexly veined & altered pelitic phyllite	Ms-Qz	Qz-Si-(Ttn)	?Chl	Breccia cement: Chl-Sau-Si	Chl-Tur?	Sau-Ep-Py-Po-Ccp-Spl	(Po-Ccp-Sp)	Py-Sd-Chl	
TS2109-4.4	MCP04	HQ	EQ012	40.90	41.18	Brecciated & cemented latite dyke(?)	Qz-Pl-Kfs	Breccia cement: Si		Breccia cement: Si-Sau-Chl-Py	Sau-Chl-Si-(Asp-Ccp-Gn?)	Cal-Py	Py		
TS2109-4.5	MCP05	HQ	EQ012	96.12	96.24	Tourmaline-fluorite altered phyllite(?)	?Ms-(Qz)?	Qz-Ap-(Tur)	Tur-Fl-(?Ccp-Asp-Po)	Breccia cement: Si		Sau-Cal-Py-(Ccp-Sp)	(Ccp-Sp-Asp-Gn?)		
TS2109-4.6	MCP06	HQ	EQ013	137.80	138.20	Brecciated altered hornfelsed phyllite	Ms-Qz-And	Qz	?Chl-Tur	Sau-Ep-Chl-Si-(Ttn)		Qz-Si-(Py-Ccp-Sp)	(Py-Ccp-Sp, Po-Sd)		
TS2109-4.7	MCP07	HQ?	EQ013	208.32	208.55	Veined & altered hornfelsed phyllite	Ms-Qz-And	Qz	?Chl-Tur	Sau-Chl-(Qz-Po)	Po-(Ccp-Sp)	Sau-Qz-Py	Py	Py	
TS2109-4.8	MCP08	HQ?	EQ014	127.80	127.96	Fractured & veined psammitic phyllite	Qz-Ms	Qz	?Chl-Tur	Sau-Chl-(Ep-Qz-Po)	(Po-Ccp-Sp)	Cal-Qz		Py-(Chl) + Py	
TS2109-4.9	MCP09	HQ	EQ014	166.81	167.12	Skarn-altered psammite	Qz-Ms-(Cal?)	Qz	?Chl	Grs-Ves-Czo-(Qz-Si)	Grs-Czo-Chl-(Po)	Cal-Ep-Qz-(Po-Ccp-Sp-Asp)	Cal-Ch-Qz-Ep-Ms-(Po)		
TS2109-4.10	MCP10	NQ	EQ015	46.62	46.71	Sheared, veined & altered meta-basalt(?)	Act-Sau	Qz-Chl	?Chl	Act-Czo-Qz-Chl-Po-Py	Sau-Chl-Po-(Ccp-Asp)	Chl-Po-(Cal)	Chl-Po	Py	
TS2109-4.11	MCP11	NQ	EQ015	49.61	49.68	Sheared, veined & altered psammo-pelitic phyllite	Ms-Qz	Qz	?Chl-(Tur)	Sau-Chl-(Ttn)	Sau-Chl ?	Qz-Chl-Cal-Py-(Ccp)	Chl-Cal-Py-(Asp)	Py	
TS2109-4.12a	MCP12	NQ	EQ015	159.74	160.80	Scheelite-sphalerite veined albite	Ab vein	Sch-Sp-Chl	Chl	Py-Cal-(Po-Asp-Ccp)		Chl-Py			
TS2109-4.12b	MCP12	NQ	EQ015	159.74	160.80	Sphalerite-scheelite veined adularia	Adl-Qz vein	Sp-Sch	(Ab?)	Cal-Chl-Py-(Po-(Ccp)		Cal-Py-Qz-Chl-(Asp-Mrc?)			
TS2109-4.13	MCP13	NQ	EQ012	306.25	306.40	Veined & altered, hornfelsed phyllite	Qz-Ms-Bt	Qz		Tur-Ttn-(Po-Sau)	Tur	Qz-Chl-Ep	(Ccp-Asp)		
TS2109-4.14	MCP14	HQ	EQ010	189.48	189.64	Scheelite veined & altered phyllite	Ms-Qz	Qz-Ccp-(Sp-Asp)	Chl?	Tur-Chl-Po-Sau	Tur-Chl-Po-(Sau)	Sch-Chl-Fl	Chl		
TS2109-4.15	MCP15	NQ	EQ012	279.75	279.90	Zeolite-calcite veined quartz	Qz-(Ap?) vein	Zeo?		Cal-Qz-(Ms-Sch?)					
							<b>Abbrev.</b>	<b>Mineral</b>	<b>(trace levels)</b>				<b>Sau</b>	Saussurite	
							<b>Ab</b>	Albite	<b>Ccp</b>	Chalcopyrite	<b>Kfs</b>	K-feldspar	<b>Sch</b>	Scheelite	
							<b>Act</b>	Actinolite	<b>Chl</b>	Chlorite	<b>Ms</b>	Muscovite	<b>Sd</b>	Siderite	
							<b>Adl</b>	Adularia	<b>Czo</b>	Olinosite	<b>Mrc</b>	Marcasite	<b>Ser</b>	Sericite	
							<b>And</b>	Andalusite	<b>Ep</b>	Epidote	<b>Pl</b>	Plagioclase	<b>Si</b>	Micro-silica (& cristobalite?)	
							<b>Ap</b>	Apatite	<b>FeOx</b>	Iron-oxide	<b>Po</b>	Pyrrhotite	<b>Sp</b>	Sphalerite	
							<b>Asp</b>	Arsenopyrite	<b>Fl</b>	Flourite	<b>Py</b>	Pyrite	<b>Ttn</b>	Titanite	
							<b>Bt</b>	Biotite	<b>Gn</b>	Galena	<b>Qz</b>	Quartz	<b>Tur</b>	Tourmaline	
							<b>Cal</b>	Calcite	<b>Grs</b>	Grossular garnet	<b>Rt</b>	Rutile	<b>Zeo</b>	Zeolite	



**Petrological Sample Results**

Sample MCP01



Rock Type	Hole ID	From	To
Chert with qz/scheelite/sulphides and black and green minerals	EQ010	162.5	162.73

Sample MCP02

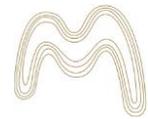


Rock Type	Hole ID	From	To
Chert in hanging wall	EQ006	109.6	109.7

Sample MCP03



Rock Type	Hole ID	From	To
Metavolcanics/metasediment/chert mixture? in hanging wall	EQ012	37.3	37.5



Sample MCP04



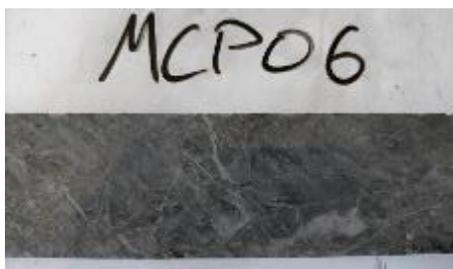
Rock Type	Hole ID	From	To
Felsite dyke containing spotty black mineral with haloes	EQ012	40.94	41.18

Sample MCP05

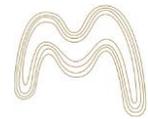


Rock Type	Hole ID	From	To
Qz vein with dravite and fluorapatite?	EQ012	96.12	96.24

Sample MCP06



Rock Type	Hole ID	From	To
Metavolcanics/metasediment? In hanging wall	EQ013	137.8	138.2



Sample MCP07



Rock Type	Hole ID	From	To
Metasediment with spotty black mineral	EQ013	208.32	208.55

Sample MCP08

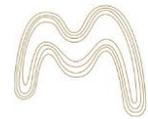


Rock Type	Hole ID	From	To
Metasediments? in footwall	EQ014	127.8	127.96

Sample MCP09



Rock Type	Hole ID	From	To
Potassic alteration	EQ014	166.81	167.12



Sample MCP10



Rock Type	Hole ID	From	To
Metavolcanics in footwall	EQ015	46.62	46.71

Sample MCP11

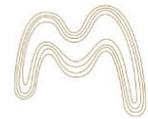


Rock Type	Hole ID	From	To
Metasediment + chert in footwall	EQ015	49.61	49.68

Sample MCP12



Rock Type	Hole ID	From	To
Mineralised vein with altered k-feldspar	EQ015	159.74	160.8



Sample MCP13



Rock Type	Hole ID	From	To
Metasediment	EQ012	306.25	306.4

Sample MCP14

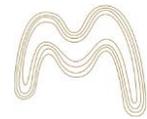


Rock Type	Hole ID	From	To
Metasediment + chert with scheelite	EQ010	189.48	189.64

Sample MCP15



Rock Type	Hole ID	From	To
Grey/blue Qz vein with minor scheelite/fluorapatite	EQ012	279.75	279.9



Example of Petrological Study on Rock Types and Mineralisation.



**Pterosaur Petrology**  
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## PETROGRAPHIC ANALYSIS

### TS2109-4.5 Tourmaline-Fluorite Altered Phyllite (?)

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**SAMPLE:**      *MCP05 (EQ012 96.12-96.24m)*

**LOCATION:**      *Mt Carbine Tungsten Mine*

**PROJECT:**      *Resource Drilling*

**CLIENT:**      *EQ Resources Ltd*

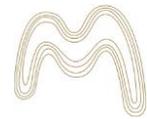
**DATE:**      *25<sup>th</sup> October 2021*

**PETROGRAPHER:**

*Stephen WEGNER - BSc (Hons) Geology*  
*Australian Institute of Geoscientists (AIG) Member # 3942*  
*JCU Economic Geology Research Unit (EGRU) Member*

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CLIENT: EQ RESOURCES LTD      25<sup>th</sup> October 2021      1



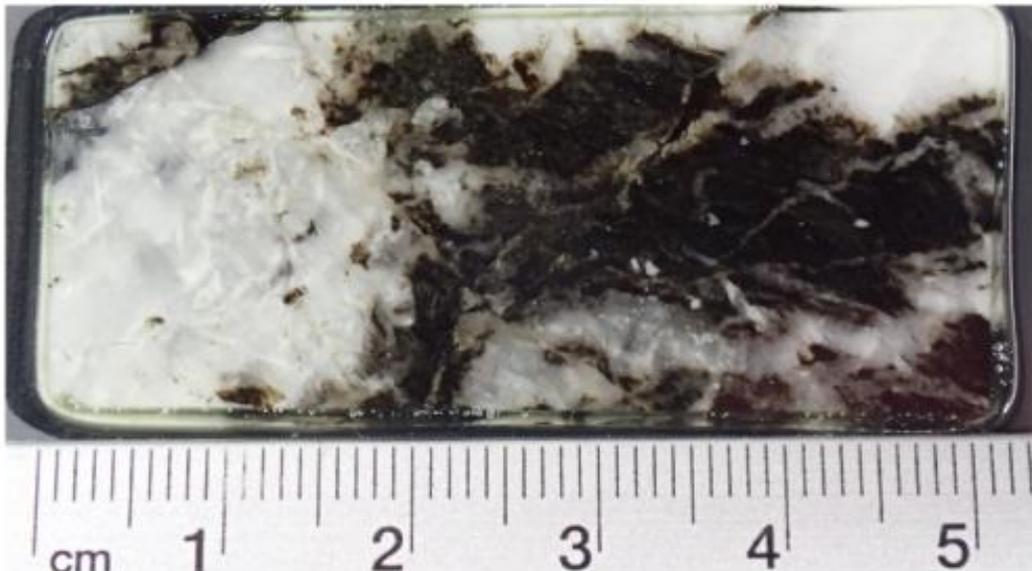
### SPECIMEN HISTORY & PURPOSE

A ~12cm length of cut HQ drill core (front page) was received from the client with request for a petrographic analysis within the white marked area, having regard to identifying the rock type and any hydrothermal alteration or indicators of tungsten mineralisation. The sample, MCP05 96.12-96.24m is reportedly from drill hole EQ012, intersecting units beneath the historic Mt Carbine tungsten mine. This sample is one of fifteen received from the client.

### SAMPLE DESCRIPTION & SELECTION

The drill specimen displays fresh rock dominated by complex quartz veining (and possibly brecciation) of a very fine grained Yellowish Gray (5Y 7/2) uncertain host rock. At least two events of cross-cutting quartz veins; notably 1-2mm veinlets relate to the main 40mm wide white translucent quartz vein. Drops of 1M HCl acid revealed trace specs of calcite associated with isolated specs of yellow sulphide (pyrite?) proximal or within late cross-cutting hairline fracture. A small number of grey-white specs of probable sulphide were observed in isolated patches within the main quartz vein. Uncertain white euhedral short prismatic crystals also observed in the main vein. A 4-watt wide-spectrum ultraviolet light failed to highlight any relevant minerals.

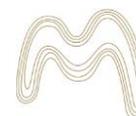
A polished thin section was produced from a cut block (image below) selected from within the white outlined area provided by the client. [Note: red reflection from camera in bottom right corner]



### MICROSCOPIC DESCRIPTION

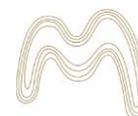
The following mineral proportions are estimates using modal analysis charts.

**Note:** Although mineral grains can be resolved down to 0.001mm in thin section under transmitted light, identification of minerals smaller than the rock section depth of 0.03mm are subject to interference and diminished optical techniques from other crystals in the light path. Identification of mineral grains with maximum dimension <0.03mm can be subjective.



**VEIN MINERALS 100% (Pre-alteration)**

<b>80%</b>	<b>Quartz</b>	<b>16 mm</b>	<b>Anhedral</b>	Coarse anhedral vein quartz with sutured boundaries and notably high strain (undulose extinction). Grains encapsulate former host rock fragments along with euhedral apatite and tourmaline crystals from the same fluid event. The quartz grains display a moderate density of fluid inclusion trails.
<b>10%</b>	<b>Microcrystalline quartz</b>	<b>&lt;0.02 mm</b>	<b>Anhedral</b>	Not strictly veins, but cementing of brittle fracture and related local fine brecciation of host quartz up to 1mm wide, and includes occasionally tourmaline and apatite fragments. Microcrystalline quartz grain boundaries are highly irregular and chert-like.
<b>5%</b>	<b>Apatite</b>	<b>3.6 mm</b>	<b>Euhedral</b>	Large individual euhedral crystals of clear, high relief, low birefringence apatite within large vein quartz crystals as part of the same fluid event. The crystals appear to contain a higher density of fluid inclusions than host vein quartz. A couple of crystals display open small fractures that are infilled with sulphides; chalcopyrite, unknown soft grey and pink phases, and trace sphalerite.
<b>3%</b>	<b>Tourmaline</b>	<b>0.05 (1.8) mm</b>	<b>Euhedral</b>	Fresh golden-brown to clear pleochroic euhedral crystals with long (1.8mm) prismatic forms developed as isolated crystals in the quartz vein. These large crystals grade in size down to fine crystals (0.05mm) replacing former angular fragments of probable host rock. The distinction between free vein crystallisation and replacement tourmaline is hazy at the margins.
<b>1%</b>	<b>Saussurite/epidote</b>	<b>&lt;0.001 (0.03) mm</b>	<b>Anhedral</b>	Diffuse, discontinuous, saussurite micro-veins <0.01mm wide within the tourmaline-fluorite altered host. Similar trace saussurite pass along and truncate late stage breccia fracture indicating late phase fluids related to sulphide development.
<b>1%</b>	<b>Chalcopyrite</b>	<b>0.1 mm</b>	<b>Anhedral</b>	Relatively high proportion of small chalcopyrite grains within fluorite developed in and around tourmaline-replaced host clasts. Isolated anhedral grains located along internal grain boundaries of coarse vein quartz, and within fine breccia of late fracture.
<b>&lt;1%</b>	<b>Arsenopyrite</b>	<b>0.7 mm</b>	<b>Subhedral to euhedral</b>	Isolated crystals of white fresh arsenopyrite with occasional diamond forms located primarily within coarse vein quartz. Not strictly connected to structures, the arsenopyrite is generally proximal to chalcopyrite infill of microfracture within nearby apatite.
<b>&lt;1%</b>	<b>Sphalerite</b>	<b>0.04 mm</b>	<b>Anhedral</b>	Isolated honey-brown to red translucent medium grey grains often connected to chalcopyrite.
<b>&lt;1%</b>	<b>Calcite</b>	<b>0.08 mm</b>	<b>Anhedral</b>	Isolated trace examples of minor discontinuous late cement/replacement of fines in breccia matrix along late fracture associated with sulphides. Calcite also appears to develop at the expense of coarse quartz at the breccia margins.
<b>&lt;1%</b>	<b>Unknown grey (galena?)</b>	<b>0.15 mm</b>	<b>Anhedral</b>	Limited examples of uncertain grains that are opaque (no birefractance or internal reflections) medium to low hardness, light bluish light grey reflectance and partly altered by a very fine patchy pinkish-silver probable pyrrhotite (or vice-versa). Both associated with development of chalcopyrite and particularly arsenopyrite. Possibly galena.



PETROGRAPHIC ANALYSIS TS2109-4.5  
Mt Carbine Mine Resource Drilling

MCPOS (EQ012 96.12-96.24m)

Pterosaur Petrology 

**<1% Unknown pink (pyrrhotite?) 0.1 mm Granular**  
Uncertain very fine grained, pinkish-silver (?) probable sulphide replacing unknown blue-grey phase (cuprite?), associated with arsenopyrite and chalcopyrite. Possibly very fine pyrrhotite.

**WALLROCK ALTERATION MINERALS 100%**

**85% Tourmaline 0.05 (1.8) mm Euhedral**  
Golden-brown to clear pleochroic euhedral crystals with long (1.8mm) prismatic forms ranging down to mostly fine crystals (0.05mm) replacing former angular fragments of probable host rock. The intense fine replacement tourmaline often has fine interstitial fluorite, lesser chlorite, and trace sulphide. Isolated small clusters of small to medium size tourmaline in the quartz vein likely represent tiny former fragments of host rock. Isolated large crystals in the coarse quartz appear to be independent of alteration, indicating the alteration event is synchronous with the quartz vein.

**13% Fluorite 0.05 (1.2) mm Anhedral**  
Mostly interstitial clear fluorite to fine tourmaline replacement of former host rock clasts. Larger irregular anhedral grains appear to grow at the expense of coarse vein quartz. The fluorite is truncated and locally finely brecciated by late stage fracture. Mostly anisotropic, some grains display low grey birefringence colours.

**2% Chlorite 0.1 mm Subhedral**  
Radial micaceous subhedral grains, possibly replacement but mostly infill of late void cavities after tourmaline-fluorite replacement of former host rock clast. Crystals display very weak pale green to clear pleochroism indicating compositions leaning towards magnesium end member.

**<1% Pyrrhotite 0.25 mm Anhedral poikilitic**  
Rare single example of pale pinkish grey poikilitic pyrrhotite with inclusions of fine tourmaline, central to former host rock clast.

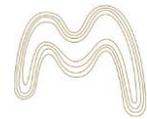
**<1% Rutile 0.15 mm Subhedral infill**  
Rare single example of subhedral rutile partial infill / replacement (?) of iron stained mica (former biotite?) at the junction of coarse vein quartz grains; along with fluorite containing trace chalcopyrite, and unknown pinkish phase.

**GENERAL PETROGRAPHIC OBSERVATIONS & INTERPRETATIONS**

This section presents quartz veined angular fragments of unknown host rock (~15mm) encapsulated by coarse grained vein quartz (~16mm sutured subgrains). The unknown host is completely replaced by fine euhedral golden-brown tourmaline (0.05-1.8mm) with interstitial clear fluorite (Micrographs 1&2). Larger anhedral fluorite crystals (<1.6mm) appear to be interlocked with host vein quartz. The quartz vein also hosts large euhedral apatite crystals up to 3.6mm, and occasional trace euhedral arsenopyrite crystals up to 0.7mm (Micrographs 3&4).

A number of parallel micro-fractures with localised angular fine breccia clasts, of host quartz and tourmaline, truncate the rock. The micro-breccias are tightly packed but in places cemented by fine microcrystalline quartz (<0.02mm) with irregular cherty grain boundaries.

The rock is further truncated by isolated brittle fractures, roughly orthogonal to the chert-cemented fractures. The late fracture also develops localised fine brecciation that contain substantial fragments and fines of tourmaline. The interstitial cement/replacement phase is not clearly chert, but is overprinted by a cloudy submicroscopic phase of probable saussurite. Within and proximal to this late



fracture are development of chalcopyrite and sphalerite. Nearby euhedral arsenopyrite may or may not be associated with the chalcopyrite event.

A trace uncertain blue-grey phase is observed interstitial to fine tourmaline and associated discontinuous micro-veins proximal to arsenopyrite and chalcopyrite. This uncertain bluish-phase is isotropic and moderately altered by pinkish uncertain disseminated phase (Micrographs 4&5). The blue is possibly galena, and the pink possibly pyrrhotite but the relationship is unclear. An isolated single rare grain of poikilitic pyrrhotite is observed encapsulating tourmaline elsewhere in the slide (Micrograph 2). Other phases interstitial to tourmaline include very fine micaceous and radial infill by chlorite (0.005mm).

The textures and forms of the unknown host rock in hand specimen are very similar to other samples of strongly altered phyllite (3m above in the same drill hole).

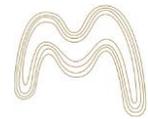
### PARAGENETIC HISTORY

1. Probable phyllite host rock veined by wide coarse-grained white quartz with numerous related veinlets separating angular clasts. Associated with the main quartz vein are euhedral apatite and lesser tourmaline. Synchronous with the quartz vein is intense tourmaline-fluorite-(chlorite) complete replacement of the host rock.
2. Microfracture, subparallel to the main quartz vein, graduates locally to fine breccia of the quartz (and granulation of apatite-tourmaline intersected). This fine breccia is cemented / matrix-replaced with microcrystalline quartz.
3. Isolated discontinuous micro-fractures (roughly orthogonal to the earlier set) display isolated localised brecciation that is patchily replaced/cemented by saussurite-calcite-sulphide (pyrite, chalcopyrite and trace sphalerite). These sulphides, along with arsenopyrite and trace galena/pyrrhotite (?) are also developed in wall rock cracked apatite, tourmaline, and silicified earlier breccia, proximal to this later fracture / breccia event.

The relatively high levels of isolated sulphide grains within the fluorite (notably chalcopyrite-pyrite) appear to be related to nearby pyrite infilled microfracture through the tourmaline (final fracture event).

### CLASSIFICATION

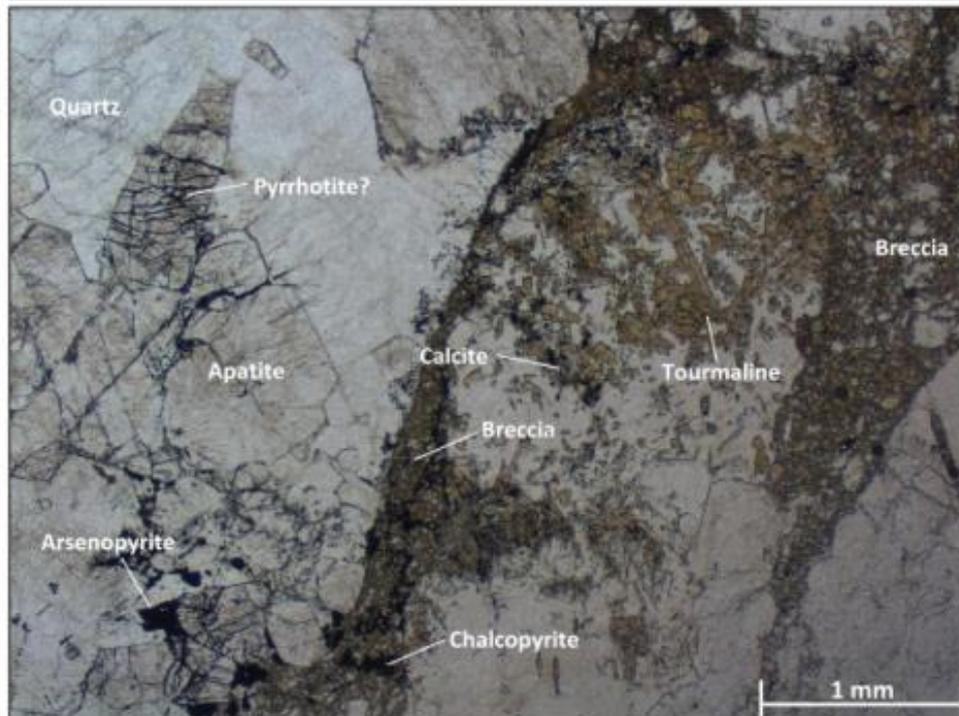
Fresh, quartz-apatite-tourmaline veined  
**PHYLLITE**  
completely altered to tourmaline-fluorite, then later twice fractured and  
mineralised with minor sulphides



PETROGRAPHIC ANALYSIS TS2109-4.5  
Mt Carbine Mine Resource Drilling

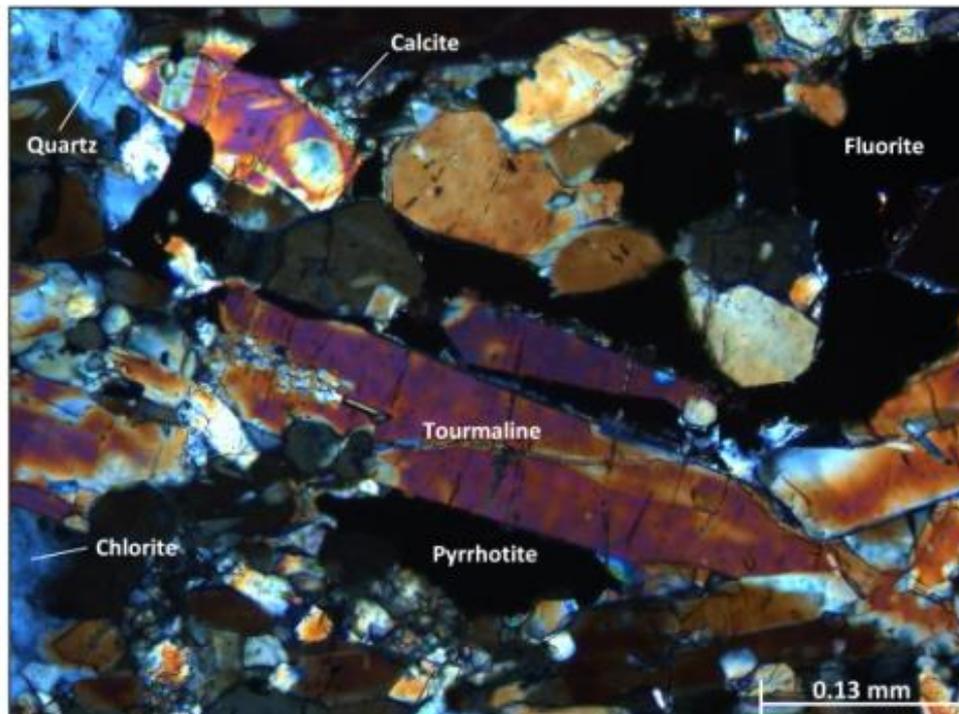
MCPOS (EQ012 96.12-96.24m)

Pterosaur Petrology



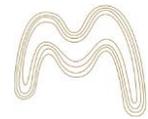
**Micrograph 1.** TS2109-4.5 Plane polarized light [25x Mag, F.O.V. 4.8mm]

Tourmaline-rich portion of quartz vein within breccia line of early fracture. Fine breccia is replaced/cemented by chert and lesser chalcopyrite-calcite. Proximal pyrrhotite (?) arsenopyrite possibly related to breccia event.



**Micrograph 2.** TS2109-4.5 Cross polarized light [200x Mag, F.O.V. 0.6mm]

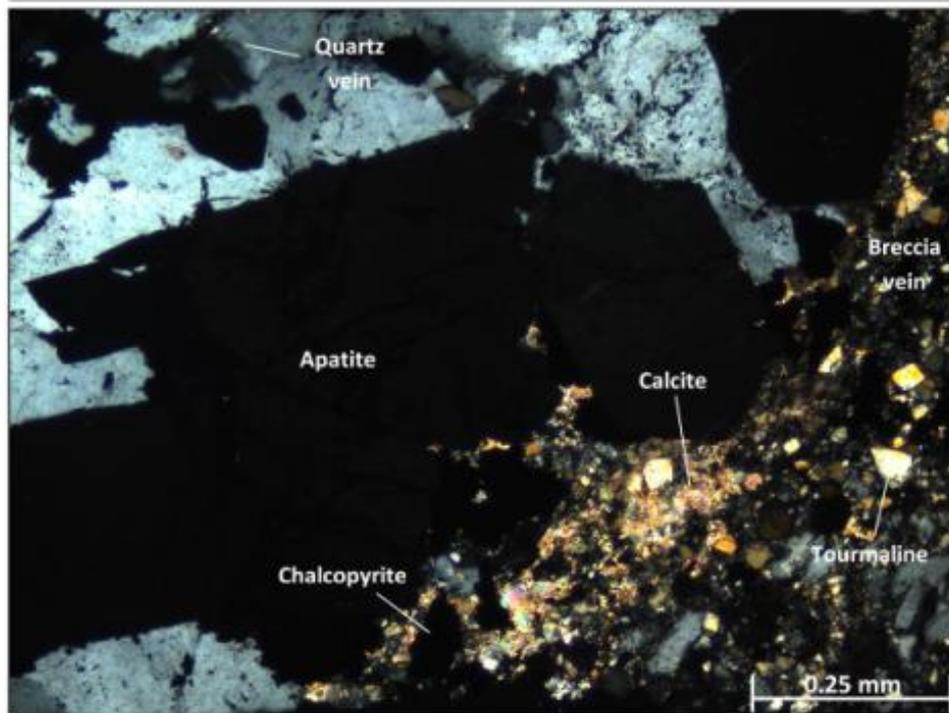
Tourmaline-fluorite-quartz replacement of unknown host with minor interstitial chlorite-calcite and rare poikilitic pyrrhotite. No remains of former rock.



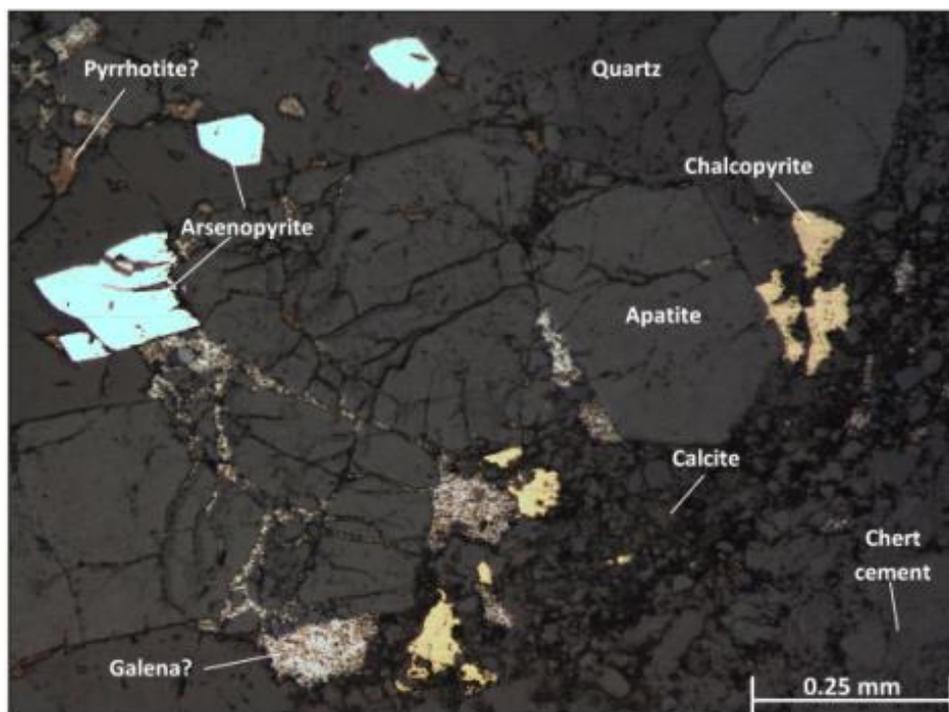
PETROGRAPHIC ANALYSIS TS2109-4.5  
Mt Carbine Mine Resource Drilling

MCP05 (EQ012 96.12-96.24m)

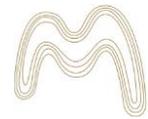
Pterosaur Petrology



**Micrograph 3.** TS2109-4.5 Cross polarized light [100x Mag. F.O.V. 1.2mm] 1 of 2  
Fragments of tourmaline, quartz and fine fluorite in vein-like fine breccia cutting through coarse-grained highly strained quartz and apatite. Breccia matrix cemented by chalcopyrite-calcite-chert.



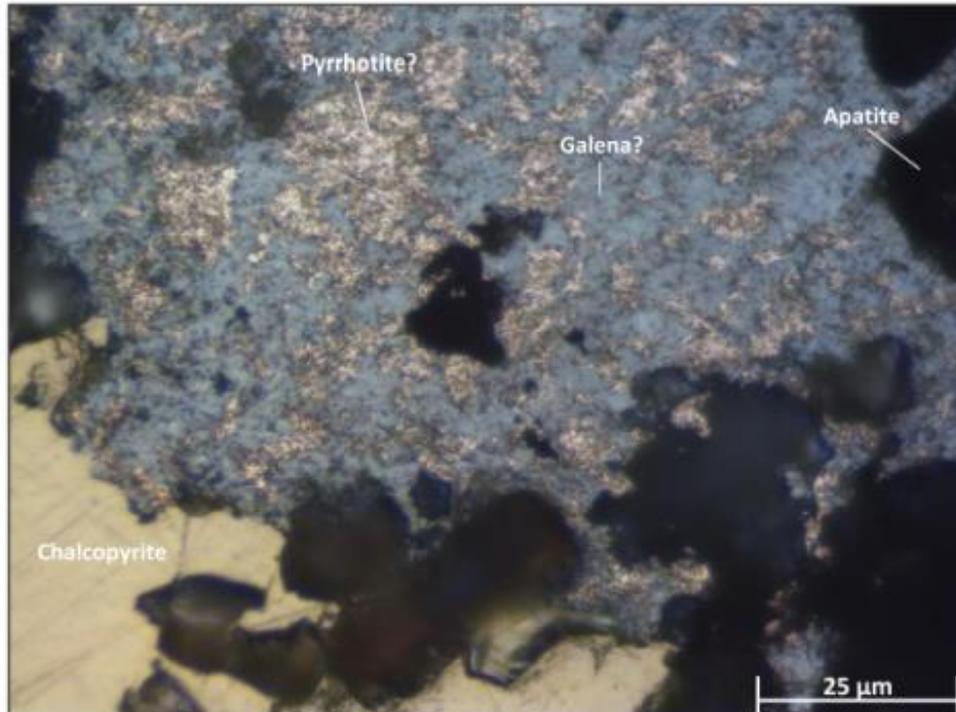
**Micrograph 4.** TS2109-4.5 Cross polarized reflected light [100x Mag. F.O.V. 1.2mm] 2 of 2  
Euhedral arsenopyrite and uncertain pinkish and grey sulphides emanating from brecciated fracture. Calcite and chalcopyrite cement breccia along with very fine cherty quartz.



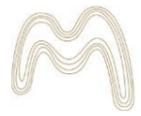
PETROGRAPHIC ANALYSIS TS2109-4.5  
Mt Carbine Mine Resource Drilling

MCP05 (EQ012 96.12-96.24m)

Pterosaur Petrology 



**Micrograph 5.** TS2109-4.5 Cross polarized reflected light [1000x Mag. F.O.V. 0.12mm]  
Uncertain blue-grey isotropic sulphide (galena?) in contact with chalcopyrite. Grey phase is partly replaced by disseminated pinkish-silver very fine grained probable pyrrhotite.



## APPENDIX E: QA/QC Assay Results

Table F 1: Assay for Blanks

Hole_ID	Sample No	Blank Type	WO3%
EQ001	100033	Blank Core	0.005044
EQ001	100063	Blank Core	0.001261
EQ001	100083	Blank Core	0.001261
EQ001	100103	Blank Core	0
EQ002	100137	Blank Core	0.001261
EQ002	100157	Blank Core	0
EQ002	100177	Blank Core	0.002522
EQ003	100379	Blank Core	0.002
EQ003	100399	Blank Core	0.002
EQ003	100419	Blank Core	0.002
EQ003	100439	Blank Core	0.001
EQ003	100459	Blank Core	<0.001
EQ003	100479	Blank Core	0.001
EQ003	100499	Blank Core	0.001
EQ004	100526	Blank Core	0.003
EQ004	100546	Blank Core	0.003
EQ004	100566	Blank Core	<0.001
EQ004	100586	Blank Core	0.004
EQ004	100606	Blank Core	<0.001
EQ004	100626	Blank Core	0.002
EQ005	100663	Blank 1058 0.001% WO3	0.004
EQ005	100683	Blank 1058 0.001% WO3	0.004
EQ005	100703	Blank 1058 0.001% WO3	0.004
EQ005	100723	Blank Core	0.004
EQ005	100743	Blank 1058 0.001% WO3	0.001
EQ005	100763	Blank 1058 0.001% WO3	0.003
EQ006	100211	Blank Core	0.001261
EQ006	100231	Blank Core	0.003783
EQ006	100251	Blank Core	0.002522
EQ006	100271	Blank Core	0.001261
EQ006	100291	Blank Core	0.001261
EQ006	100311	Blank Core	0.003783
EQ006	100331	Blank Core	0.005044
EQ006	100351	Blank Core	0.003783
EQ007	100798	Blank Core	0.02
EQ007	100818	Blank Core	0.009
EQ008	100853	Blank Core	0.008
EQ009	100897	Blank 1083 0.003% WO3	0.001
EQ009	100907	Blank 1083 0.003% WO3	0.005
EQ009	100927	Blank 1083 0.003% WO3	0.003
EQ009	100947	Blank 1083 0.003% WO3	0.005
EQ009	100967	Blank 1083 0.003% WO3	0.001
EQ010	100995	Blank 1083 0.003% WO3	0.002
EQ010	101015	Blank Core	0.003
EQ010	101035	Blank Core	0.003
EQ010	101091	Blank Core	<0.001
EQ011	101122	Blank 1031 0.002% WO3	0.001
EQ011	101132	Blank 1031 0.002% WO3	0.007
EQ011	101152	Blank 1031 0.002% WO3	0.002
EQ011	101172	Blank 1031 0.002% WO3	0.001
EQ012	101207	Blank 1031 0.002% WO3	0.009
EQ012	101227	Blank 1031 0.002% WO3	0.003
EQ012	101247	Blank 1031 0.002% WO3	0.004
EQ012	101267	Blank 1031 0.002% WO3	0.004
EQ012	101287	Blank Core	0.002
EQ012	101307	Blank 1031 0.002% WO3	0.002
EQ012	101056	Blank Core	0.024
EQ013	101339	Blank Core	0.001
EQ013	101359	Blank Core	0.002
EQ013	101379	Blank Core	<0.001
EQ014	101406	Blank Core	<0.001
EQ014	101426	Blank Core	<0.001
EQ014	101446	Blank Core	0.002
EQ015	101472	Blank Core	0.002
EQ015	101492	Blank Core	<0.001
EQ015	101512	Blank Core	0.002
EQ015	101532	Blank Core	<0.001

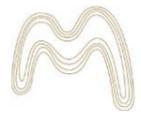
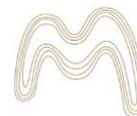
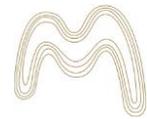


Table F 2: Tungsten Assay for Standards

Hole_ID	Sample No	Previous sample No	Previous grade (ME-XRF15b)	WO3% (ME-XRF15b)	error
EQ001	100023	1014	0.688	<b>0.692</b>	0.004
EQ001	100043	1052	0.046	<b>0.044</b>	-0.002
EQ001	100053	1047	2.850	<b>2.875</b>	0.025
EQ001	100073	1052	0.046	<b>0.043</b>	-0.003
EQ001	100093	1052	0.046	<b>0.044</b>	-0.002
EQ001	100113	1052	0.046	<b>0.044</b>	-0.002
EQ002	100127	1043	0.206	<b>0.207</b>	0.001
EQ002	100147	1026	0.366	<b>0.361</b>	-0.005
EQ002	100167	1026	0.366	<b>0.364</b>	-0.002
EQ002	100187	1043	0.206	<b>0.207</b>	0.001
EQ003	100369	1003	4.320	<b>4.300</b>	-0.020
EQ003	100389	1043	0.206	<b>0.204</b>	-0.002
EQ003	100409	1026	0.366	<b>0.366</b>	0.000
EQ003	100429	1026	0.366	<b>0.372</b>	0.006
EQ003	100449	1043	0.206	<b>0.205</b>	-0.001
EQ003	100469	1026	0.366	<b>0.367</b>	0.001
EQ003	100489	1026	0.366	<b>0.372</b>	0.006
EQ004	100516	1003	4.320	<b>4.320</b>	0.000
EQ004	100536	1026	0.366	<b>0.362</b>	-0.004
EQ004	100556	1026	0.366	<b>0.370</b>	0.004
EQ004	100576	1043	0.206	<b>0.207</b>	0.001
EQ004	100596	1026	0.366	<b>0.369</b>	0.003
EQ004	100616	1026	0.366	<b>0.363</b>	-0.003
EQ004	100636	1034	0.444	<b>0.431</b>	-0.013
EQ005	100653	1024	0.128	<b>0.126</b>	-0.002
EQ005	100673	1024	0.128	<b>0.130</b>	0.002
EQ005	100693	1024	0.128	<b>0.126</b>	-0.002
EQ005	100713	1024	0.128	<b>0.128</b>	0.000
EQ005	100733	1023	1.595	<b>1.595</b>	0.000
EQ005	100753	1024	0.128	<b>0.124</b>	-0.004
EQ005	100773	1023	1.595	<b>1.585</b>	-0.010
EQ006	100201	1003	4.320	<b>4.338</b>	0.018
EQ006	100221	1026	0.366	<b>0.366</b>	0.000
EQ006	100241	1026	0.366	<b>0.357</b>	-0.009
EQ006	100261	1026	0.366	<b>0.362</b>	-0.004
EQ006	100281	1026	0.366	<b>0.357</b>	-0.009
EQ006	100301	1043	0.206	<b>0.207</b>	0.001
EQ006	100321	1026	0.366	<b>0.358</b>	-0.008
EQ006	100341	1003	4.320	<b>4.275</b>	-0.045
EQ007	100788	1024	0.128	<b>0.122</b>	-0.006
EQ007	100808	1122	0.108	<b>0.099</b>	-0.009
EQ007	100828	1122	0.108	<b>0.102</b>	-0.006
EQ008	100843	1122	0.108	<b>0.100</b>	-0.008
EQ008	100863	1099	0.110	<b>0.105</b>	-0.005
EQ009	100877	1023	1.595	<b>1.585</b>	-0.010
EQ009	100887	1017	1.885	<b>1.880</b>	-0.005
EQ009	100917	1099	0.110	<b>0.102</b>	-0.008
EQ009	100937	1099	0.110	<b>0.102</b>	-0.008
EQ009	100957	1023	1.595	<b>1.575</b>	-0.020
EQ010	100985	1072	0.146	<b>0.144</b>	-0.002
EQ010	101005	1023	1.595	<b>1.570</b>	-0.025
EQ010	101025	1072	0.146	<b>0.140</b>	-0.006
EQ010	101081	1074	0.251	<b>0.243</b>	-0.008
EQ011	101102	1009	0.855	<b>0.837</b>	-0.018
EQ011	101112	1023	1.595	<b>1.575</b>	-0.020
EQ011	101142	1016	0.047	<b>0.050</b>	0.003
EQ011	101162	1016	0.047	<b>0.050</b>	0.003
EQ011	101182	1038	0.031	<b>0.031</b>	0.000
EQ012	101197	1038	0.031	<b>0.031</b>	0.000
EQ012	101217	1016	0.047	<b>0.048</b>	0.001
EQ012	101237	1038	0.031	<b>0.030</b>	-0.001
EQ012	101257	1016	0.047	<b>0.052</b>	0.005
EQ012	101277	1038	0.031	<b>0.031</b>	0.000
EQ012	101297	1038	0.031	<b>0.033</b>	0.002
EQ012	101317	1038	0.031	<b>0.033</b>	0.002
EQ012	101046	1023	1.595	<b>1.575</b>	-0.020
EQ012	101066	1074	0.251	<b>0.244</b>	-0.007
EQ013	101329	1038	0.031	<b>0.038</b>	0.007
EQ013	101349	1038	0.031	<b>0.031</b>	0.000
EQ013	101369	1006	3.090	<b>3.060</b>	-0.030
EQ014	101396	100186	1.419	<b>1.420</b>	0.001
EQ014	101416	100138	0.453	<b>0.468</b>	0.015
EQ014	101436	100138	0.453	<b>0.457</b>	0.004
EQ015	101462	100138	0.453	<b>0.455</b>	0.002
EQ015	101482	100186	1.419	<b>1.420</b>	0.001
EQ015	101502	100138	0.453	<b>0.456</b>	0.003
EQ015	101522	100138	0.453	<b>0.453</b>	0.000
EQ015	101542	100138	0.453	<b>0.452</b>	-0.001
EQ016	101555	100138	0.453	<b>0.456</b>	0.003



## APPENDIX F: QA/QC for Survey



LIDAR Survey Report

# UAV SURVEY REPORT

Client:	Speciality Metals International
Project:	Mt Carbine Mine
Area:	Full Mine Lease Area
Date Flown:	27/10/2020
Time Flown: <small>Local time of pilot flight</small>	1250



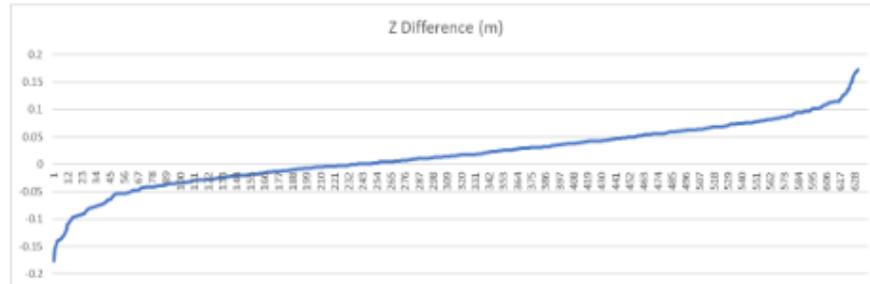
### Data supplied to client:

DATA FILES	
Description	File Name
Vulcan Ready Surface Model	201027 Mt Carbine - Surface.00t
Generic XYZ Surface Model	201027 Mt Carbine - Surface.txt

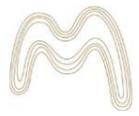
IMAGE / DOCUMENT FILES	
Description	File Name
A0 General Overview Imagery	201027 Mt Carbine - A0 Overview.jpg
10cm Georeferenced Imagery (.geotiff)	201027 Mt Carbine - 10cm MGA94.tif
10cm Georeferenced Imagery (.ecw)	201027 Mt Carbine - 10cm MGA94.ecw
QA and general information report	201027 UAV Report - Mt Carbine.pdf

### QA Results

Descriptive Statistics (m)	
Mean	0.017
Standard Error	0.002
Median	0.015
Mode	0.001
Standard Deviation	0.055
Sample Variance	0.003
Kurtosis	0.393
Skewness	-0.210
Range	0.349
Minimum	-0.176
Maximum	0.173
Sum	10.601
Count	631



The above figures have been derived by comparing independently observed RTK GPS points against the resulting 3D photogrammetry model. The above statistics are a comparison of the vertical (z value) component only as historically this will represent the largest error.



LIDAR Survey Area





## Survey Stations & Local Grid Conversion



Our ref: 35317-2-1

Your ref:

28<sup>th</sup> July 2021

Mt Carbine Quarrying Operations Pty Ltd.  
6888 Mulligan Highway,  
MT CARBINE, QLD 4871

Via email: [abainbridge@eqresources.com.au](mailto:abainbridge@eqresources.com.au)

Dear Tony/Dean

**SURVEY REPORT  
FOR LOCATION OF BOREHOLES  
AND COORDINATE REFERENCE POINTS  
AT MT CARBINE QUARRY**

On the 23<sup>rd</sup> of July Brazier Motti undertook a detail survey of boreholes, trig stations and building locations at the Mt Carbine Quarry.

The survey was carried out using Trimble RTK GNSS, the primary control marks were adopted from published permanent survey control mark coordinates and confirmed using RTK GNSS.

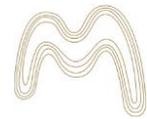
The Survey marks used are:

PSM 108841  
E: 300806.478 (MGA2020)  
N:8171662.415 (MGA 2020)  
RL:359.955 (AHD)  
Horizontal Position Uncertainty of .009m

PSM 107246  
E: 300514.372 (MGA2020)  
N:8171747.722 (MGA 2020)  
RL:362.675 (AHD)  
Horizontal Position Uncertainty of .015m

The accuracy of the survey using RTK GPS is  $\pm 20$ mm horizontal position and  $\pm 30$ mm vertical position.

The survey located 16 boreholes, 5 trig stations and various buildings using MGA2020 coordinates. The MGA2020 and Local mine grid coordinates of the boreholes and trig stations have been listed in the Table below.



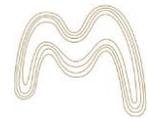
Mine grid coordinates			MGA2020 Coordinates			
Point#	Easting	Northing	Easting	Northing	Elevation	Description
1	23046.505	25981.417	300514.372	8171747.722	362.675	PSM/107246
2	23297.833	26152.991	300806.478	8171662.415	359.955	PSM/108841
Z1002	22653.742	26234.484	300460.626	8172211.852	384.789	TRIG 5
Z1003	22578.077	26234.299	300412.457	8172270.204	385.907	TRIG 7
Z1004	22624.095	26185.785	300404.177	8172203.851	387.839	BH/EQ12
Z1005	22656.842	26177.017	300418.187	8172172.981	386.880	BH/EQ10
Z1006	22657.446	26173.679	300415.991	8172170.395	386.836	BH/EQ5
Z1007	22704.388	26174.923	300446.748	8172134.911	386.265	BH/EQ4
Z1008	22735.677	26170.491	300463.183	8172107.920	387.446	BH/EQ3
Z1009	22765.358	26173.378	300484.254	8172086.817	388.697	BH/EQ11
Z1010	22793.295	26175.821	300503.874	8172066.780	389.439	BH/EQ1
Z1011	22793.418	26175.394	300503.622	8172066.414	389.476	BH/EQ2
Z1012	22841.076	26177.612	300535.586	8172030.995	386.779	BH/EQ15
Z1013	22876.196	26188.593	300566.363	8172010.826	383.632	BH/EQ6
Z1014	22910.780	26189.687	300589.160	8171984.796	382.757	BH/EQ13
Z1015	22956.998	26203.604	300629.250	8171957.916	382.717	BH/EQ14
Z1016	23055.566	26321.271	300782.739	8171956.436	380.383	BH/EQ16
Z1017	23013.849	26330.958	300763.746	8171994.821	364.151	BH/EQ9
Z1018	23014.278	26329.307	300762.742	8171993.441	364.092	BH/EQ8
Z1019	23014.294	26328.151	300761.860	8171992.695	364.188	BH/EQ7
Z1021	22900.226	26472.194	300800.764	8172172.268	380.492	OMEGA
Z1022	22780.542	26508.637	300752.957	8172287.883	399.317	ALPHA
Z1023	22623.397	26379.772	300553.634	8172327.520	398.768	BETA

How to transform MGA2020 coordinates to Local grid coordinates:

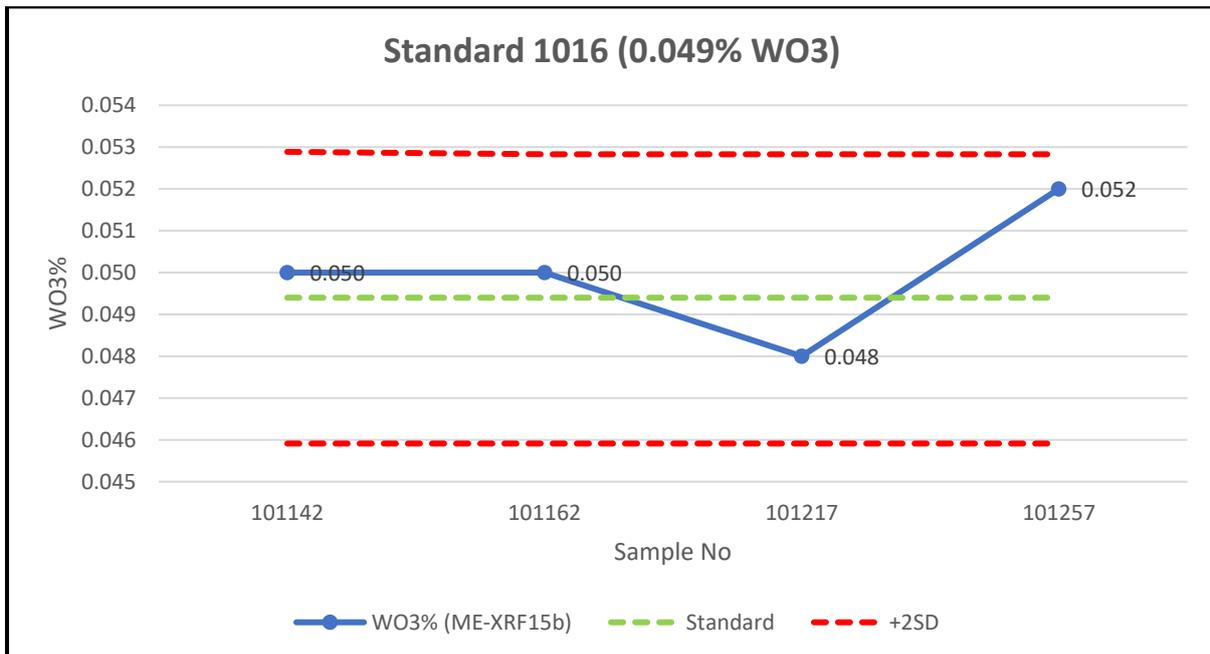
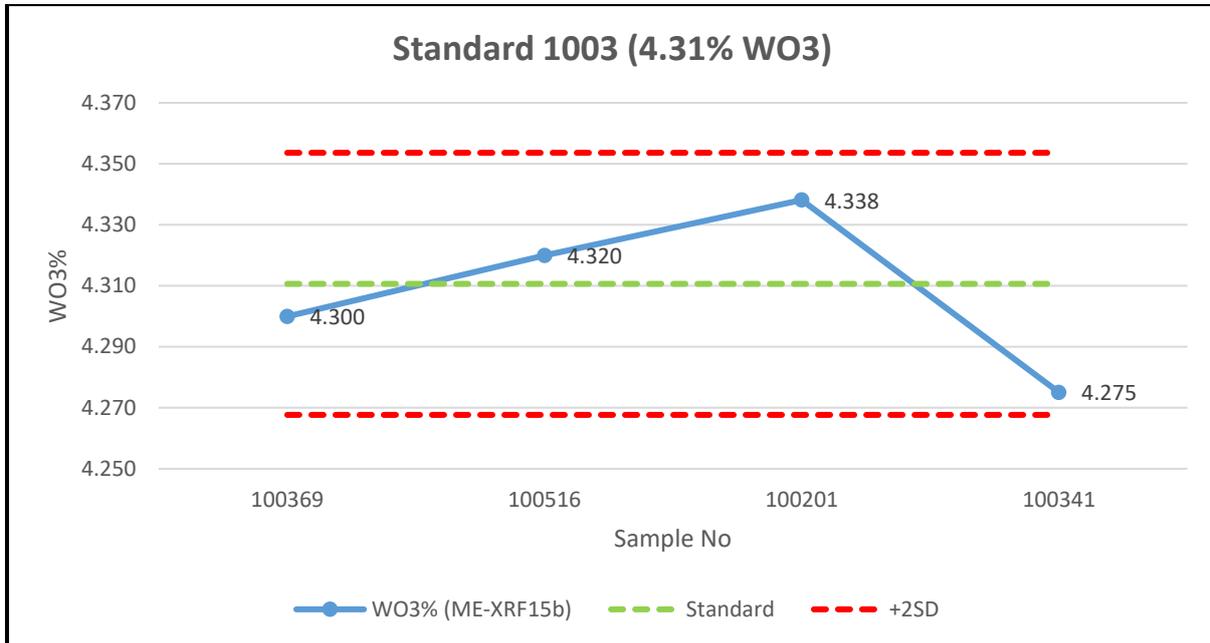
- 1) The block shift from MGA2020 to MGA94 is E: -0.992 and N: -1.468.
- 2) Then translate from the MGA94 points to the mine coordinates by adjusting  
E: -278042.398 N: -8145975.2
- 3) Then rotate around point CB064 ( 22536.230E 26485.000N) by -50°36'00"

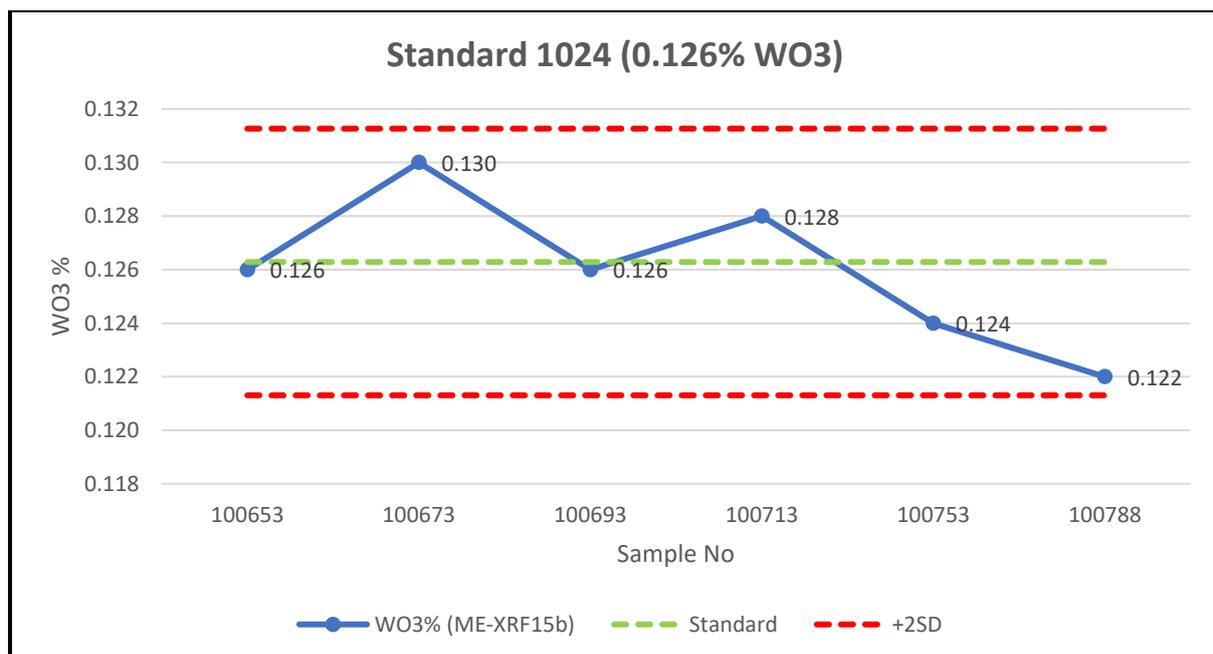
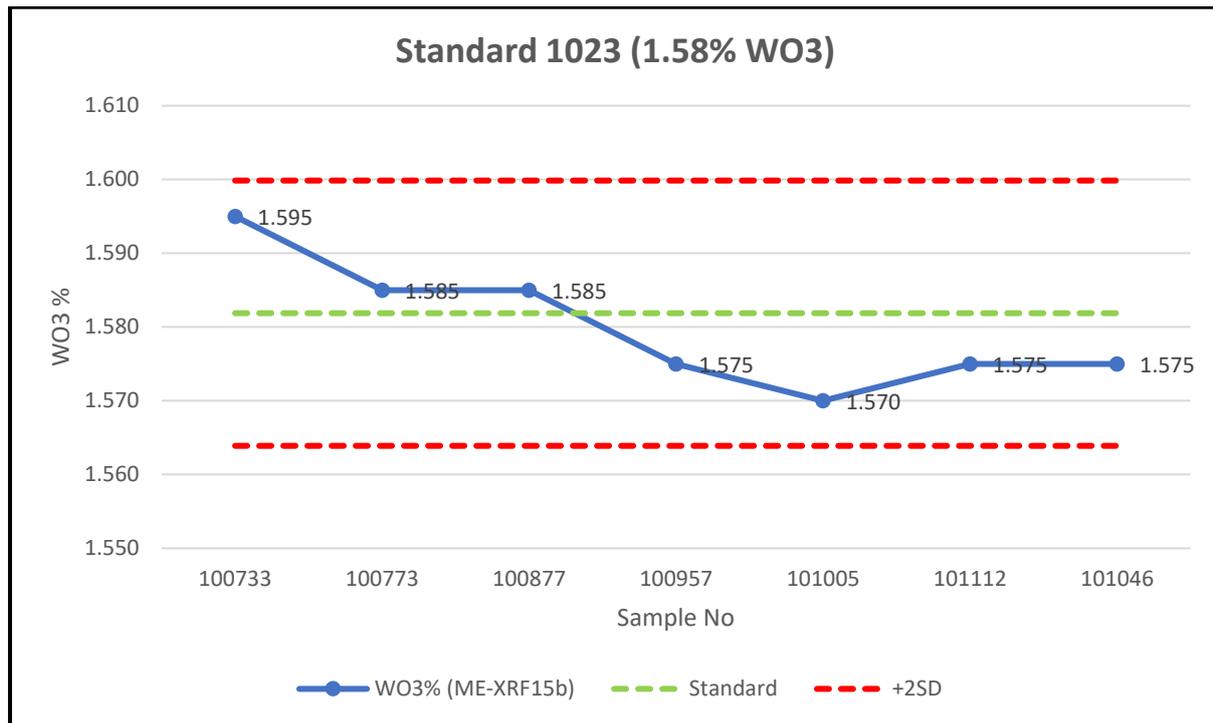
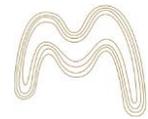
Yours faithfully,

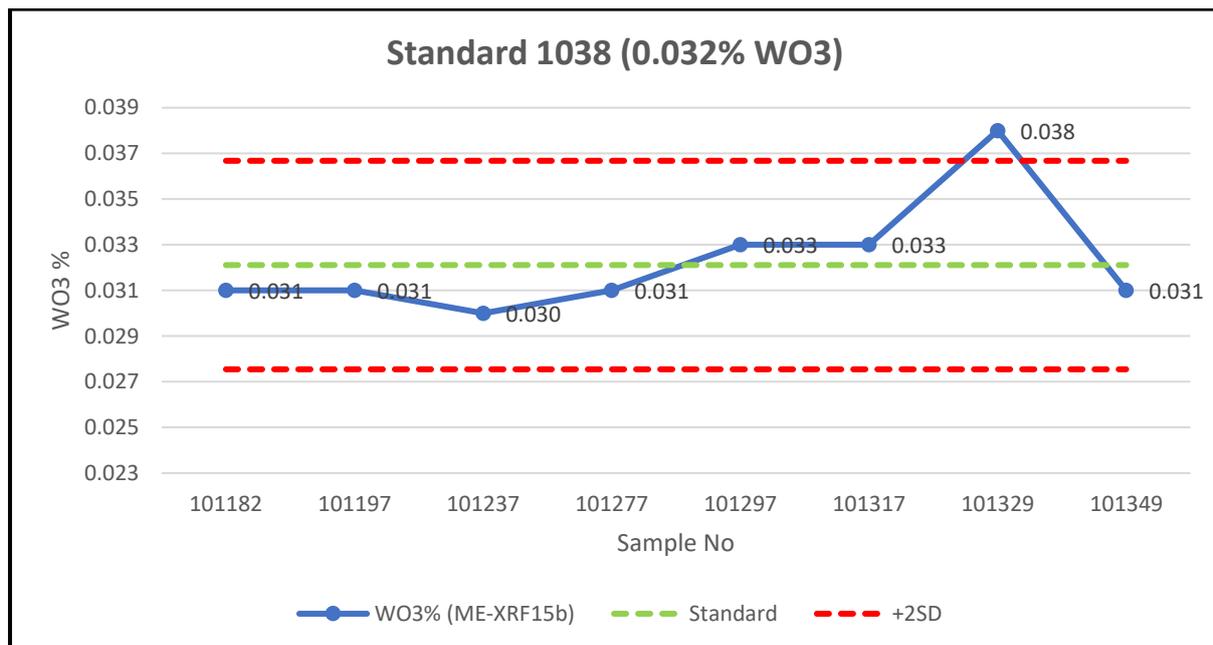
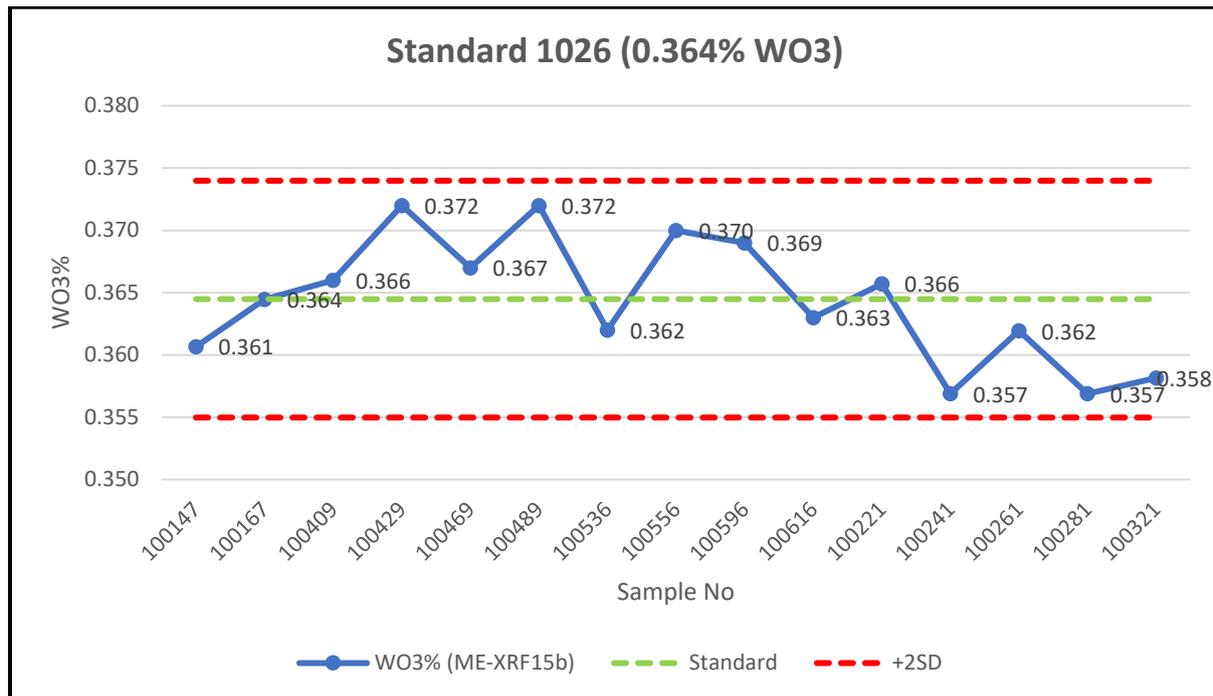
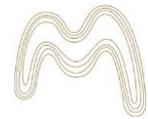
Neil Murphy  
Project Manager  
**Brazier Mott Pty Ltd**

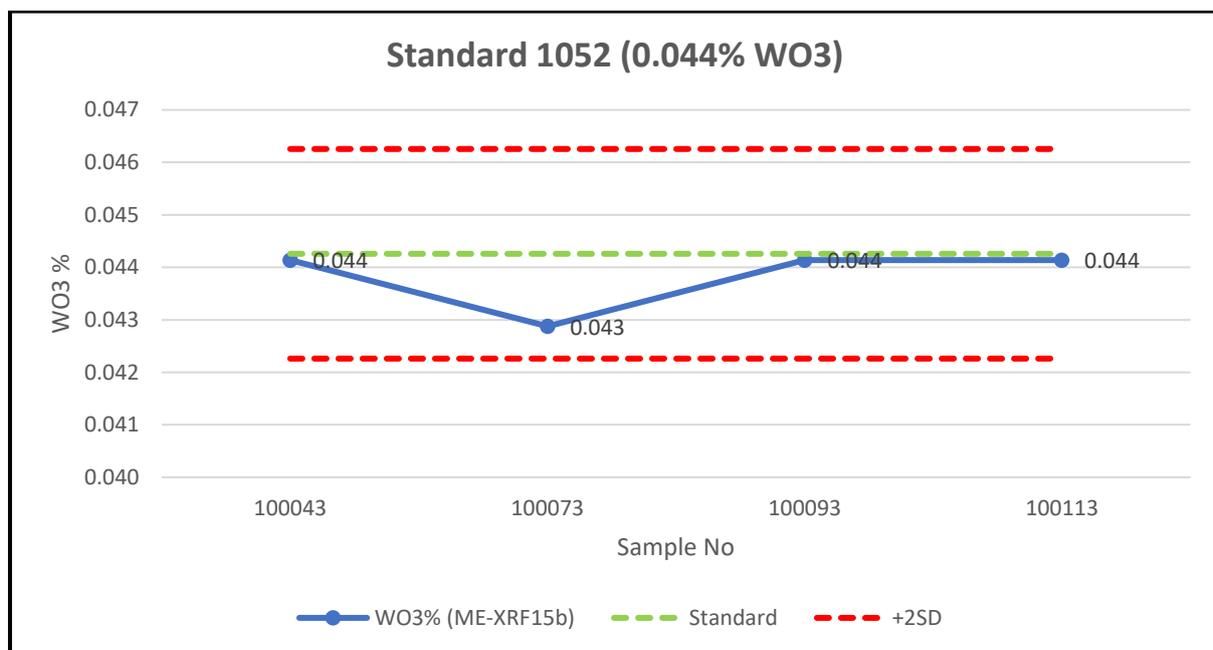
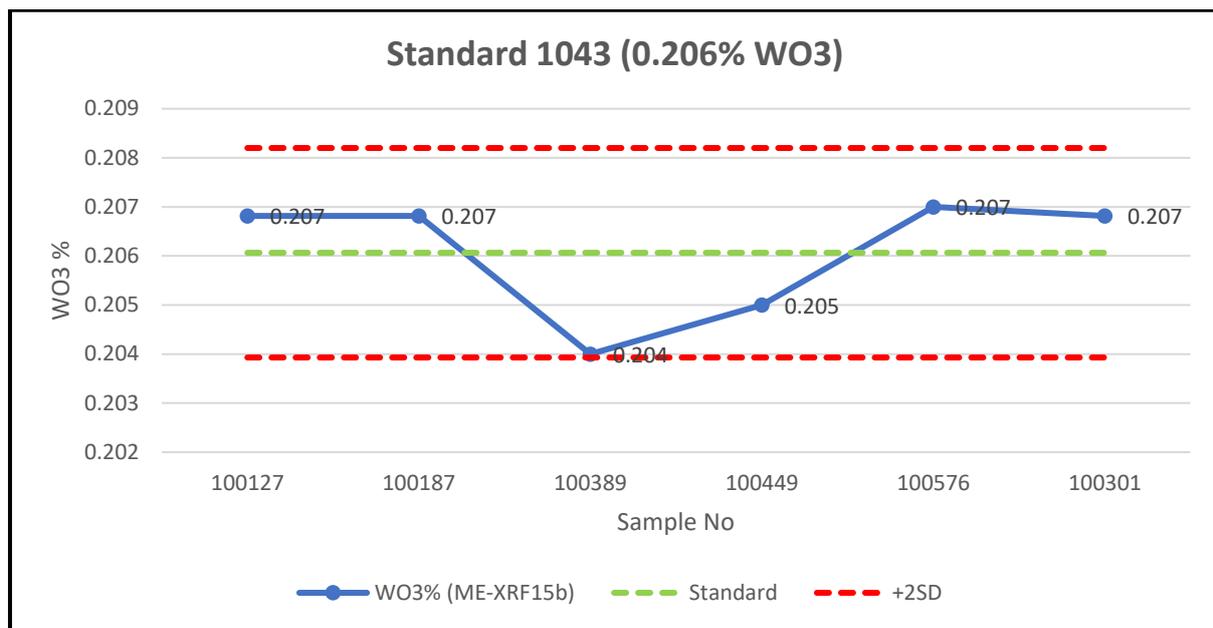
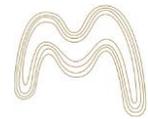


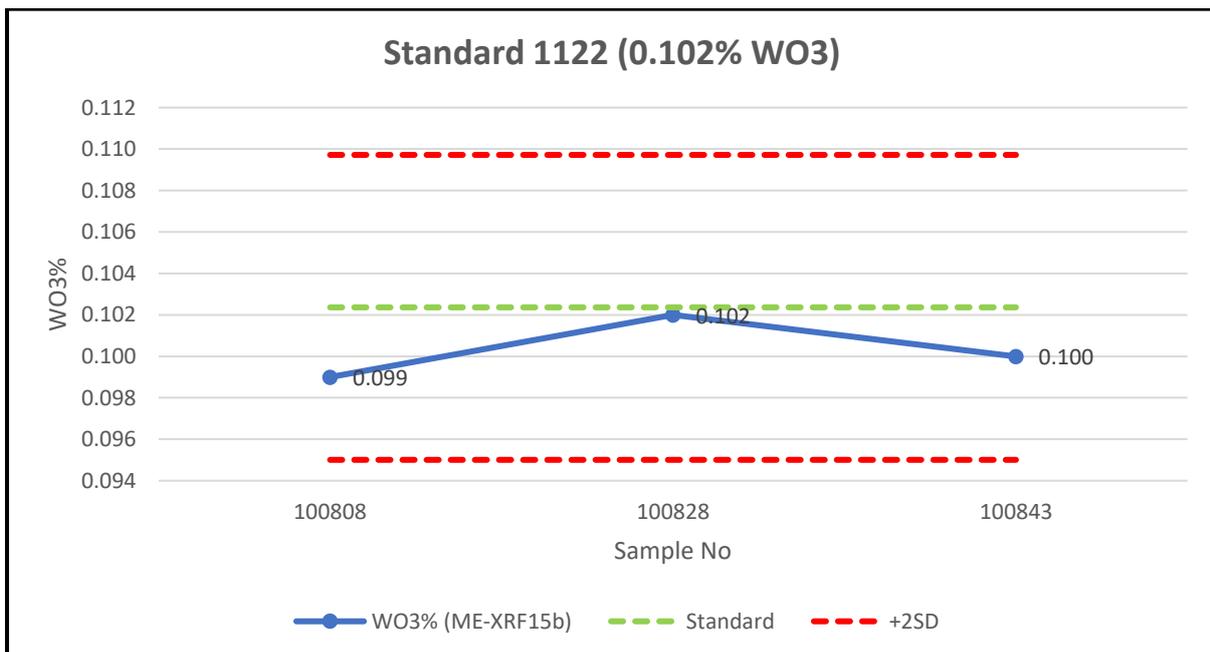
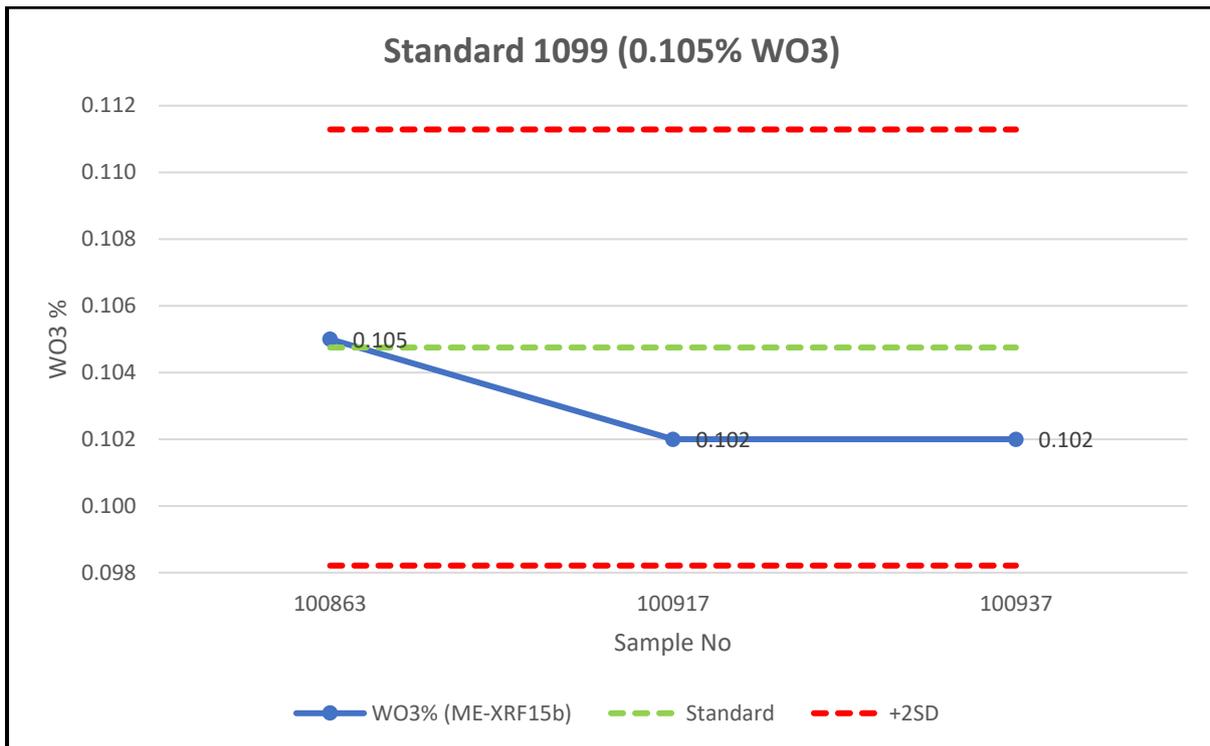
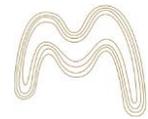
## APPENDIX G: QA/QC Analysis of Standards

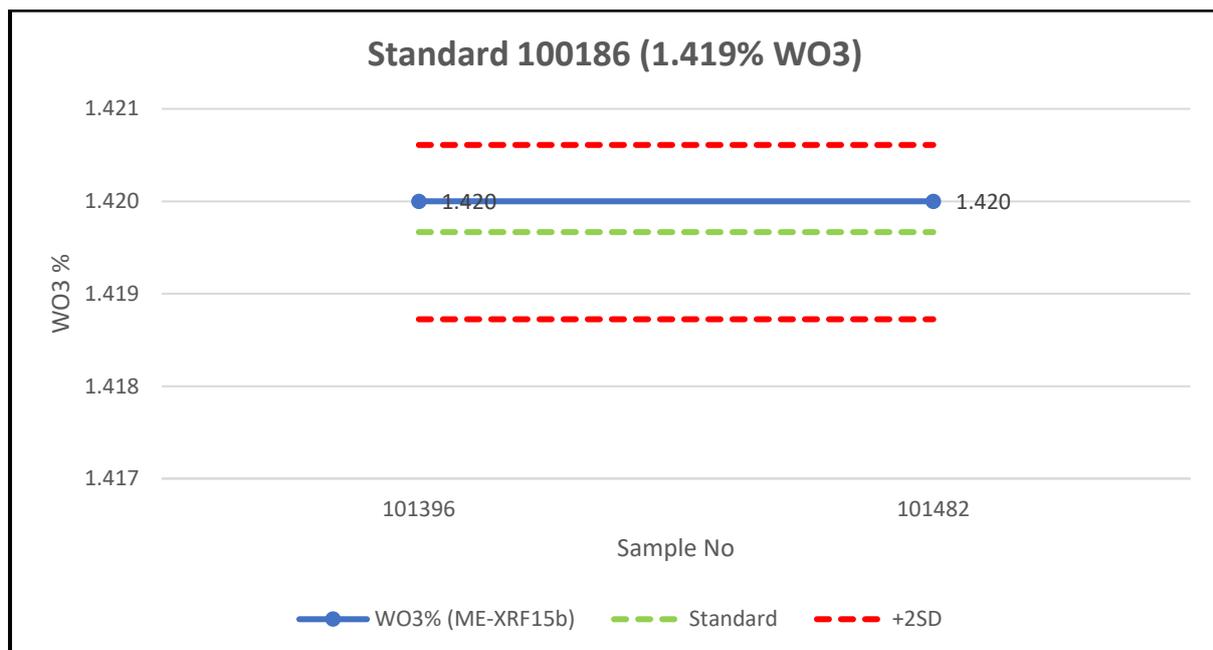
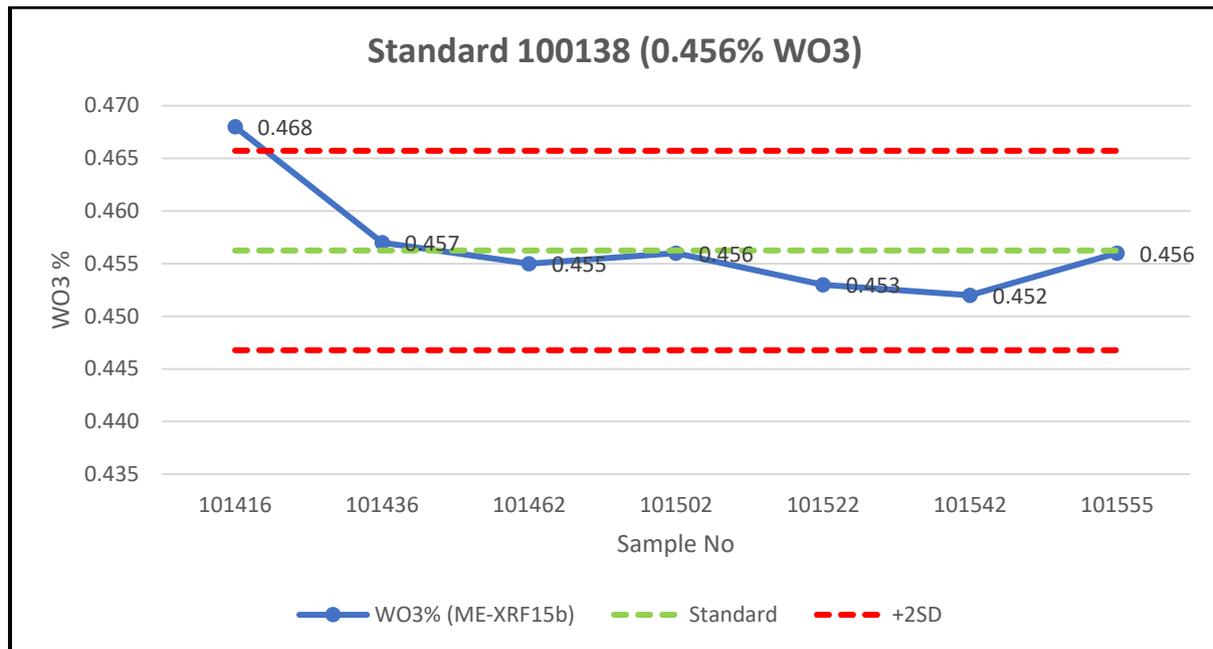
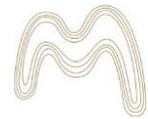






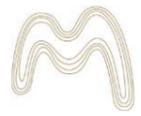








## APPENDIX H: Multi-Element Statistics for Mt Carbine



Statistics of Multi-Element for Mt Carbine													
Domain	Element	Count	Length	Mean	Standard deviation	Coefficient of variation	Variance	Minimum	Lower quartile	Median	Upper quartile	Maximum	
Host + veins	Al2O3	48	24.35	14.382	4.216	0.293	17.778	3	12.9	15.7	16.95	23.2	
	As	39	18.43	0.042	0.063	1.510	0.004	0.01	0.01	0.01	0.03	0.27	
	BaO	46	23.54	0.053	0.020	0.367	0.000	0.01	0.04	0.05	0.07	0.11	
	Bi	7	3.37	0.027	0.020	0.746	0.000	0.01	0.02	0.02	0.03	0.08	
	CaO	48	24.35	1.402	0.533	0.381	0.285	0.39	1.11	1.36	1.68	2.86	
	CeO2	24	12.21	0.011	0.003	0.292	0.000	0.01	0.01	0.01	0.01	0.02	
	Co	0	0	0	0	0	0	0	0	0	0	0	
	Cr	1	0.44	0.030					0.03	0.03	0.03	0.03	0.03
	Cu	37	18.01	0.017	0.045	2.610	0.002	0.005	0.006	0.007	0.014	0.335	
	Fe	48	24.35	3.512	0.930	0.265	0.865	1.24	3.15	3.69	3.93	7.73	
	HfO2	0	0	0	0	0	0	0	0	0	0	0	
	K2O	47	23.86	3.117	1.065	0.342	1.134	0.59	2.8	3.33	3.8	5.72	
	La2O3	25	12.76	0.010	0.000	0.000	0.000	0.01	0.01	0.01	0.01	0.01	
	MgO	48	24.35	1.607	0.847	0.527	0.717	0.29	1.3	1.71	1.88	6.62	
	Mn	48	24.35	0.071	0.022	0.308	0.000	0.02	0.06	0.07	0.09	0.14	
	Mo	4	1.08	0.019	0.021	1.109	0.000	0.007	0.007	0.008	0.022	0.05	
	Nb	1	1.17	0.007					0.007	0.007	0.007	0.007	0.007
	Ni	4	2.67	0.007	0.002	0.233	0.000	0.006	0.006	0.006	0.006	0.006	0.009
	P2O5	48	24.35	0.244	0.278	1.139	0.077	0.09	0.12	0.14	0.25	1.54	
	Pb	4	0.9	0.019	0.019	0.966	0.000	0.005	0.005	0.016	0.041	0.041	
	Rb	46	23.06	0.031	0.014	0.444	0.000	0.006	0.026	0.03	0.037	0.106	
	S	48	24.35	0.158	0.424	2.682	0.180	0.02	0.05	0.07	0.14	3.59	
	Sb	1	0.24	0.007					0.007	0.007	0.007	0.007	0.007
	SiO2	48	24.35	68.171	8.393	0.123	70.450	52.3	63.1	65.8	69.7	92.3	
	Sn	41	21.77	0.009	0.003	0.321	0.000	0.005	0.008	0.009	0.012	0.022	
	Sr	43	21.66	0.016	0.007	0.441	0.000	0.01	0.01	0.01	0.02	0.03	
	TiO2	48	24.35	0.503	0.161	0.320	0.026	0.1	0.42	0.57	0.62	0.68	
	V	34	18.37	0.010	0.000	0.000	0.000	0.01	0.01	0.01	0.01	0.01	
	W	43	21.85	0.087	0.257	2.943	0.066	0.001	0.002	0.004	0.027	1.125	
	Y2O3	31	14.64	0.006	0.001	0.164	0.000	0.005	0.005	0.006	0.007	0.01	
	Zn	46	23.23	0.016	0.016	1.010	0.000	0.005	0.01	0.011	0.016	0.135	
	Zr	45	22.71	0.013	0.004	0.353	0.000	0.01	0.01	0.01	0.02	0.02	
	Host rock	Al2O3	110	79.19	16.015	1.937	0.121	3.751	4.58	15.7	16.3	17.05	19.2
		As	79	55.04	0.030	0.059	1.971	0.003	0.01	0.01	0.02	0.02	0.43
BaO		109	78.96	0.051	0.013	0.248	0.000	0.01	0.04	0.05	0.06	0.09	
Bi		3	2.06	0.010	0.000	0.000	0.000	0.01	0.01	0.01	0.01	0.01	
CaO		110	79.19	1.192	0.428	0.359	0.183	0.53	0.93	1.12	1.32	4.05	
CeO2		69	48.38	0.010	0.001	0.134	0.000	0.01	0.01	0.01	0.01	0.02	
Co		0	0	0	0	0	0	0	0	0	0	0	
Cr		3	1.42	0.012	0.006	0.468	0.000	0.01	0.01	0.01	0.01	0.02	
Cu		75	52.15	0.011	0.015	1.302	0.000	0.005	0.007	0.008	0.01	0.115	
Fe		110	79.19	3.759	0.516	0.137	0.266	1.88	3.66	3.79	3.96	5.65	
HfO2		0	0	0	0	0	0	0	0	0	0	0	
K2O		110	79.19	3.060	0.642	0.210	0.413	0.78	2.76	3.12	3.39	5.33	
La2O3		67	47.77	0.010	0.001	0.065	0.000	0.01	0.01	0.01	0.01	0.02	
MgO		110	79.19	1.725	0.268	0.155	0.072	0.43	1.7	1.78	1.86	2.06	
Mn		110	79.19	0.075	0.020	0.262	0.000	0.05	0.06	0.07	0.09	0.21	
Mo		3	1.68	0.005	0.000	0.000	0.000	0.005	0.005	0.005	0.005	0.005	
Nb		3	1.66	0.006	0.002	0.446	0.000	0.005	0.005	0.005	0.005	0.01	
Ni		13	7.96	0.012	0.007	0.610	0.000	0.005	0.006	0.007	0.016	0.024	
P2O5		110	79.19	0.160	0.083	0.520	0.007	0.05	0.12	0.14	0.16	0.53	
Pb		12	9.84	0.006	0.001	0.234	0.000	0.005	0.005	0.005	0.006	0.009	
Rb		110	79.19	0.026	0.007	0.253	0.000	0.005	0.023	0.027	0.03	0.048	
S		110	79.19	0.101	0.078	0.772	0.006	0.01	0.06	0.09	0.12	0.5	
Sb		3	2.46	0.005	0.001	0.113	0.000	0.005	0.005	0.005	0.006	0.006	
SiO2		110	79.19	65.686	3.749	0.057	14.052	58.6	64	64.9	66.4	88.5	
Sn		82	57	0.008	0.003	0.335	0.000	0.005	0.006	0.007	0.009	0.019	
Sr		105	76.18	0.015	0.006	0.410	0.000	0.01	0.01	0.01	0.02	0.03	
TiO2		110	79.19	0.600	0.096	0.160	0.009	0.13	0.59	0.62	0.65	0.73	
V		102	72.52	0.010	0.000	0.000	0.000	0.01	0.01	0.01	0.01	0.01	
W		84	60.5	0.067	0.287	4.292	0.083	0.001	0.002	0.003	0.008	1.79	
Y2O3		65	48.96	0.006	0.001	0.170	0.000	0.005	0.005	0.006	0.006	0.009	
Zn		110	79.19	0.013	0.007	0.535	0.000	0.006	0.01	0.011	0.014	0.079	
Zr		109	77.9	0.014	0.005	0.360	0.000	0.01	0.01	0.01	0.02	0.03	
Vein		Al2O3	155	46.93	5.552	4.585	0.826	21.021	0.15	2.32	4.16	7.64	19.1
		As	90	27.55	0.035	0.055	1.562	0.003	0.01	0.01	0.01	0.02	0.35
	BaO	112	30.97	0.029	0.029	0.996	0.001	0.01	0.01	0.02	0.03	0.18	
	Bi	58	17.96	0.018	0.019	1.059	0.000	0.01	0.01	0.01	0.02	0.22	
	CaO	154	46.82	0.881	1.211	1.374	1.466	0.08	0.36	0.61	1	9.31	
	CeO2	13	2.32	0.010	0.000	0.000	0.000	0.01	0.01	0.01	0.01	0.01	
	Co	0	0	0	0	0	0	0	0	0	0	0	
	Cr	1	0.54	0.010	0	0	0	0.01	0.01	0.01	0.01	0.01	
	Cu	58	17.09	0.049	0.128	2.602	0.016	0.005	0.006	0.012	0.02	0.742	
	Fe	155	46.93	1.697	0.867	0.511	0.751	0.58	0.99	1.61	2.06	10.05	
	HfO2	3	0.36	0.010	0.000	0.000	0.000	0.01	0.01	0.01	0.01	0.01	
	K2O	144	45.56	1.875	2.220	1.184	4.927	0.03	0.51	1.02	2.5	13.15	
	La2O3	18	2.27	0.010	0.000	0.000	0.000	0.01	0.01	0.01	0.01	0.01	
	MgO	155	46.93	0.359	0.365	1.016	0.133	0.02	0.11	0.25	0.44	2.03	
	Mn	155	46.93	0.066	0.122	1.829	0.015	0.01	0.02	0.03	0.05	1.73	
	Mo	26	4.99	0.012	0.012	0.966	0.000	0.005	0.006	0.007	0.013	0.069	
	Nb	23	7.64	0.020	0.039	1.922	0.002	0.005	0.007	0.014	0.021	0.317	
	Ni	10	2.45	0.015	0.015	0.994	0.000	0.005	0.008	0.011	0.014	0.052	
	P2O5	154	46.24	0.161	0.191	1.188	0.036	0.01	0.04	0.11	0.19	1.34	
	Pb	62	18.08	0.009	0.009	1.007	0.000	0.005	0.005	0.006	0.011	0.119	
	Rb	106	31.31	0.020	0.018	0.890	0.000	0.005	0.006	0.013	0.028	0.081	
	S	147	44.8	0.137	0.237	1.721	0.056	0.01	0.03	0.06	0.13	2.45	
	Sb	10	2.47	0.007	0.001	0.196	0.000	0.005	0.006	0.008	0.008	0.01	
	SiO2	155	46.93	85.268	10.874	0.128	118.248	6.28	81.7	88.4	92.8	99.7	
	Sn	51	12.99	0.013	0.012	0.914	0.000	0.005	0.007	0.012	0.014	0.068	
	Sr	58	13.07	0.019	0.030	1.551	0.001	0.01	0.01	0.01	0.02	0.22	
	TiO2	153	45.8	0.115	0.120	1.048	0.014	0.01	0.04	0.08	0.15	0.68	
	V	19	3.23	0.010	0.000	0.000	0.000	0.01	0.01	0.01	0.01	0.01	
	W	123	34.6	0.896	2.792	3.117	7.796	0.001	0.002	0.097	0.653	39.7	
	Y2O3	28	6.5	0.005	0.001	0.144	0.000	0.005	0.005	0.005	0.006	0.009	
	Zn	84	22.03	0.016	0.037	2.284	0.001	0.005	0.006	0.007	0.01	0.203	
	Zr	38	8.4	0.011	0.003	0.259	0.000	0.01	0.01	0.01	0.01	0.02	