

ASX RELEASE: 23 February 2026

# Exploration Targets Demonstrates Significant Potential at NWQ Copper Project

- **High-tenor, strike-extensive copper and in several cases Cu-Pb-Zn anomalism, supported by a combination of geophysics, geochemistry, and historical drilling underpins the potential for further characterising structurally controlled copper deposits within the NWQ Copper Project**
- **New Frontier’s geology team has delineated 14 priority prospects within the NWQ Copper Project (Mt Isa region, Queensland) which holistically demonstrates significant exploration potential**
- **The geology team’s proposed development pathway comprises the following steps:**
  - **Secure the mining lease over the Big One Deposit (MRE: 2.1Mt @ 1.1% Cu for ~21kt copper metal)<sup>1</sup>, which is currently under review by the Queensland regulator**
  - **Leveraging the alignment with Austral Resources (ASX:AR1), formalise a revenue sharing arrangement to have copper ore processed at the Mt Kelly facility<sup>2</sup>**
- **Future development work across the NWQ Copper Project, which could create significant incremental value for shareholders, includes:**
  - **Progressing RC and diamond drilling campaigns at the Big One and Big One North Deposits to potentially extend known mineralisation and upgrade the current MRE<sup>3,4</sup>**
  - **Site visits to the 14 other under-explored priority prospects to ascertain their potential to host copper deposits**

**New Frontier Minerals Limited** (ASX: NFM) (“**New Frontier**”) is pleased to announce updated JORC Exploration Targets (to the standard of Clause 17 of the 2012 JORC Code) across 14 prospects within NWQ Copper Project, located in the Mt Isa region of northwest Queensland.

**Chairman Gerrard Hall commented:** “*The Exploration Targets underscore the substantial potential scale and depth of opportunity across the NWQ Copper Project. Moreover, they clearly demonstrate significant exploration potential beyond the Big One Deposit.*”

*New Frontier’s initial focus is to secure a mining lease over Big One Deposit and formalise a copper ore processing agreement with Austral Resources to utilise its Mt Kelly facility. In due course, the development pathway comprises fully developing the Big One Deposit, then explore the remaining 13 prospects to determine their potential to host copper deposits. Collectively, this work highlights the NWQ Copper Project’s potential to have multiple copper deposits with a clear production pathway, that could generate significant value for shareholders.”*

## EXPLORATION TARGETS

The updated Exploration Target<sup>1</sup> estimate ranges from 12-58 million tonnes (Mt) @ 0.3-1.5% Cu, representing circa 50,000-473,000t of contained copper. This has been defined across 14 priority prospects within New Frontiers' NWQ Copper Project, Mt Isa region, Queensland (Table 1).

Target	Cut off %	Low Range Tonnage (Mt)	High Range Tonnage (Mt)	Grade (%)	Grade (%)	Contained Cu (t)	Contained Cu (t)
Prospects	Cu	Low	High	Low	High	Low	High
Eldorado South and North	0.2	3.0	13.3	0.3	0.6	9,000	79,800
Big One Deposit	0.5	2.0	6.0	0.6	1.0	12,000	63,000
Mt Storm <sup>2</sup>	0.5	0.5	3.7	0.5	1.5	2,500	55,500
Johnnies	0.3	1.0	4.5	0.4	0.8	4,000	36,000
Crescent	0.3	0.5	4.0	0.4	0.8	4,000	32,000
The Wall	0.5	0.5	3.6	0.3	0.9	1,500	32,400
Flapjack	0.5	0.5	3.6	0.4	0.8	4,000	32,000
Pancake	0.5	1.0	4.4	0.4	0.7	4,000	30,800
Crescent East	0.3	0.5	3.0	0.4	0.8	2,000	24,000
Valparaisa	0.2	1.3	3.5	0.2	0.5	2,600	17,500
Pandanus Creek	0.5	0.2	2.2	0.3	0.8	600	17,600
Black Mountain	0.5	0.2	1.7	0.5	1.0	1,000	17,000
Arya	0.5	0.3	1.8	0.5	0.9	1,500	16,200
Big One North	0.2	0.2	1.7	0.5	1.0	1,500	15,300
Amanda	0.1	0.1	0.9	0.2	0.5	200	4,500
		<b>11.8</b>	<b>57.9</b>	<b>0.5</b>	<b>0.9</b>	<b>50,400</b>	<b>473,600</b>

Table 1: Exploration Target<sup>1</sup> Summary Ranges for Copper

Note: (2) Previously mined at Mt Storm 1,100t @6% Cu<sup>5</sup>

The updated targets reflect a comprehensive technical review of historical open file datasets, combined with exploration data generated by the NFM since 2018<sup>6,7</sup>. This work builds on earlier ROM Resources studies and incorporates subsequent prospect ranking exercises completed internally between 2023–2025<sup>8,9</sup>

### Cautionary Statement<sup>1</sup>

It should be noted that the Exploration Target tonnage ranges quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

## CURRENT WORK

The purpose of this extensive study was to highlight and prioritise prospects across New Frontier Minerals' NWQ Copper Project (PROJ0221) in the Mt Isa Region of Northwest Queensland (Figure 1 & 2), using available open file historical data and that generated by NFM (previously Castillo Copper Limited) since 2018 for each prospect as of the 1st of January 2026. This study represents an update to work completed by ROM Resources in 2019-2020 and various ASX releases during 2020. Recently, a comprehensive ranking exercise was completed in 2023 and reported to the ASX<sup>5</sup> that provided additional information.

New Frontier has applied a systematic approach that has included mapping, geochemistry, and geophysics to identify, define and prioritise multiple drill ready targets. Targets consist of up to 100-500m long, 5-20m-wide gossanous breccias with strongly anomalous copper and key geochemical pathfinders (Ag, Co, As, Sb, Bi). These targets are hosted in two structural clusters, 15km apart, bisected by a major, northeast-trending unnamed regional fault.

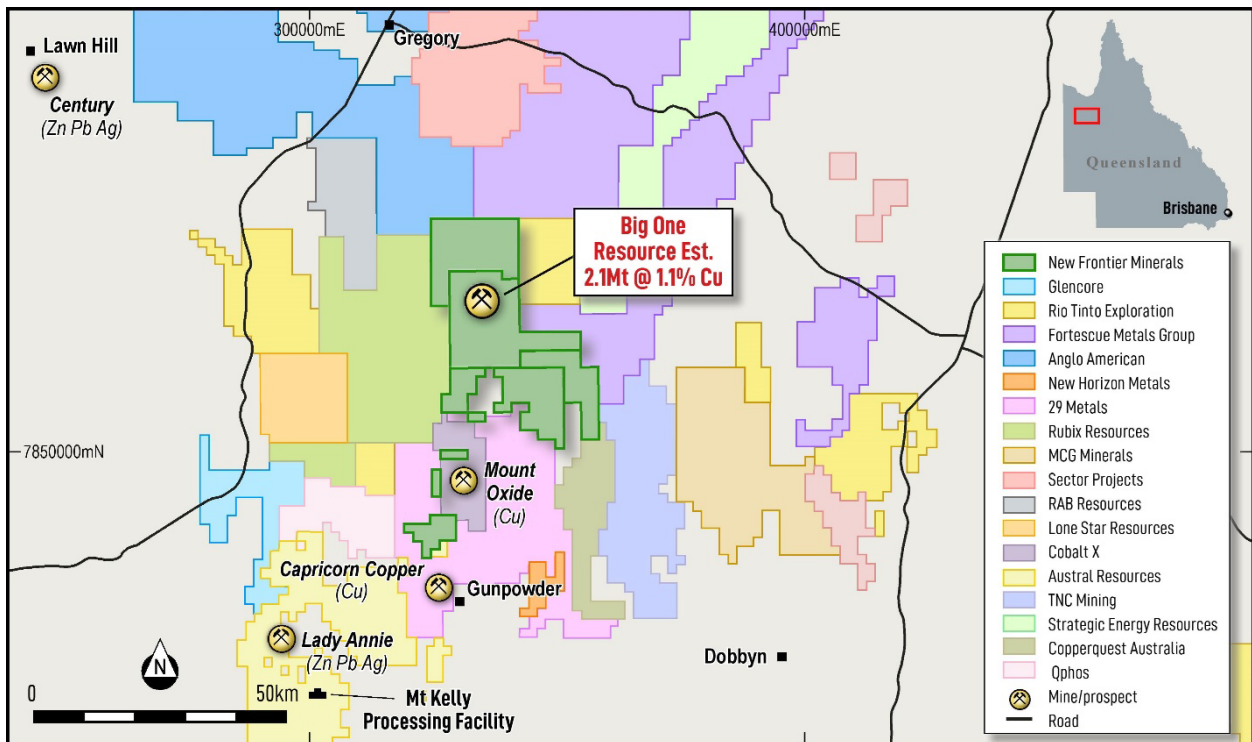


Figure 1: NWQ Project Area and Active Neighbours

**NWQ COPPER PROJECT – KEY PROSPECTS**

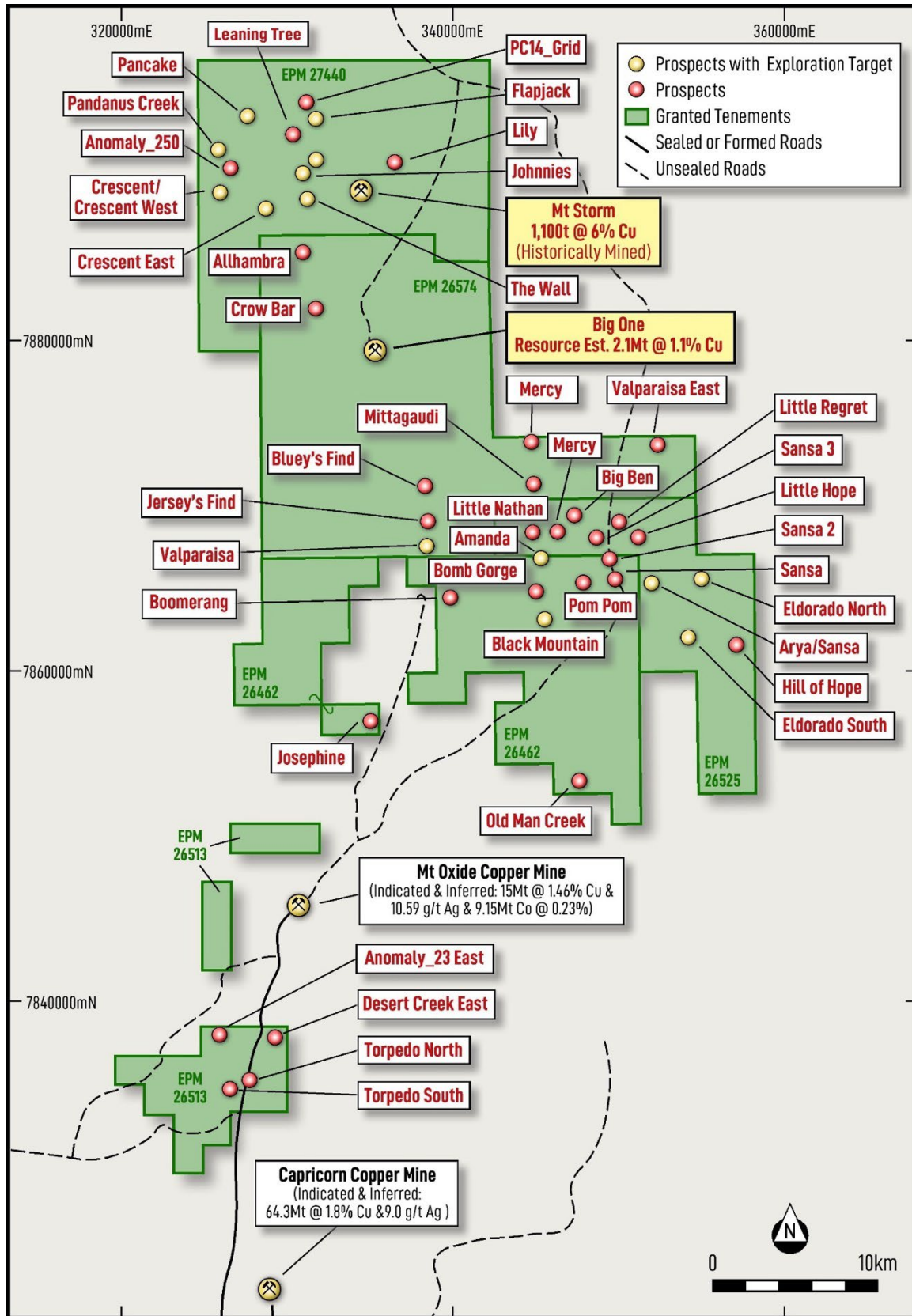


Figure 2: NWQ Tenement and Copper Prospect Location Map

## REGIONAL GEOLOGY HIGHLIGHTS COPPER PROSPECTIVITY

The NWQ Copper Project lies at the northern limits of a block of Haslingden Group volcanic and sedimentary rocks including the Eastern Creek Volcanics which lie within a large north-trending graben structure (Leichhardt River Fault Trough), forming a north plunging complexly faulted anticline. The Haslingden Group forms the basement to sedimentary rocks which include the Mount Isa Group (Blake, 1987) (Domagala, Southgate, McConachie, & Pidgeon, 2000) (Page & Sweet, Geochronology of basin phases in the western Mount Isa Inlier, and correlation with the McArthur Basin, 1998) (Southgate, Neumann, & Gibson, 2013).

The Mount Gordon Fault, a major structural element in the Mount Isa Inlier, bounds the Leichhardt River Fault Trough to the west. The Leichhardt River Fault contains the most significant of the Proterozoic base metal deposits in the Inlier including those at Mount Isa and Hilton (George Fisher). Other deposits including those at Mount Gordon and Mount Oxide lie within the Mount Gordon Fault Zone itself. A north-east trending branch of the Mount Gordon Fault passes to the east of the NWQ Copper Project (Figure 3).

Younger Proterozoic sedimentary rocks occur along both the eastern and western margins of the Leichhardt River Fault Trough and between the faulted 'segments' of the Haslingden Group rocks. These marginal sedimentary rocks commonly host mineral deposits probably for two reasons: the sedimentary rocks are adjacent to the faulted margins of the graben structure where there has been greater fluid flow and, the sedimentary rocks were being laid down during a major mineralizing episode. Most of the rocks that are equivalent to the Mount Isa Inlier host sedimentary rocks have been removed by erosion of the Leichhardt River Fault Trough (Wilde, 2011).

Within the vicinity of the Big One Copper Deposit, small areas of Mount Isa Group equivalent rocks exist in narrow synclinal areas. These lie under a shallow cover of Mesozoic and Cainozoic sedimentary rocks in the northern portion of the area (Figure 3).

## EXPLORATION RATIONALE

Several copper prospects and indications of copper mineralisation are known in the area, mineralisation styles vary, namely:

- Structurally controlled Cu (IOCG)
- Sheared-hosted sedimentary rocks Cu-Au
- Stratiform Pb-Zn; and
- Unconformity-hosted U

Almost without exception, copper mineralisation is hosted within the upper rock units of the Paradise Creek, Quilalar, and Surprise Creek Formations. The latter is a unit consisting of laminated shales and siltstones, often carbonaceous and graphitic, dolomitic silty sandstone, in places stromatolitic, and quartzites with interbedded argillite and sandstone. The unit is prominent as weak anomalies on regional airborne AEM surveys. Regionally, this unit is preferentially weathered and outcrops poorly and is often covered in quartzite scree from the overlying Warrina Park Quartzite. Minor occurrences of copper mineralisation are also reported from the Whitworth and Warrina Park Quartzite usually in the form of turquoise (copper phosphate).

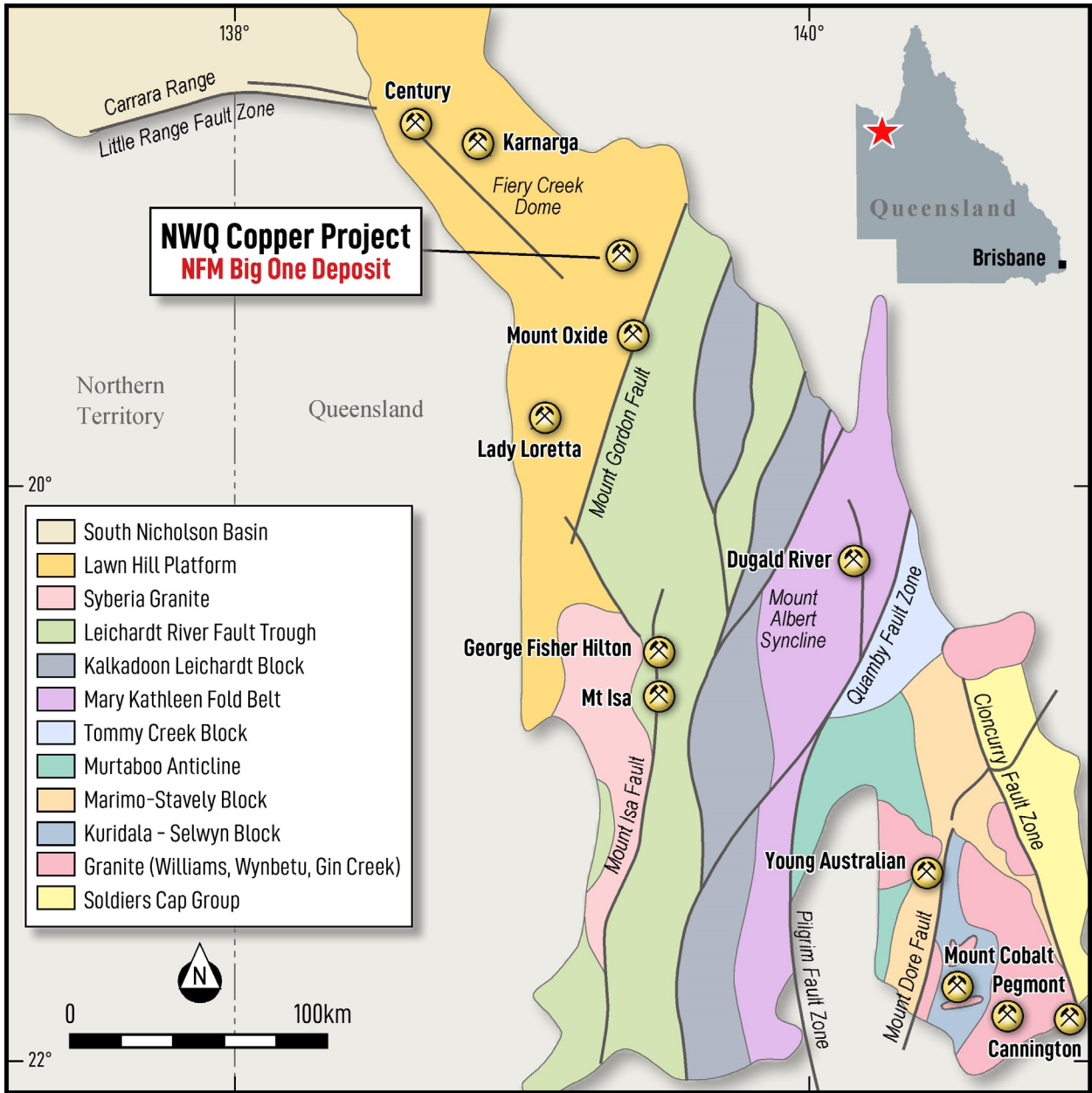


Figure 3: NWQ Project – Regional Tectonic Domains<sup>10</sup>

## RESOURCE TABLES

Each Exploration Target<sup>2</sup> estimate is supported by sufficient geological, geophysical, geochemical, and occasional sparse drilling data to constrain scale and tenor. Full details of the target generation methodology, data validation, and estimation approach are provided in Appendix 1 through to 4 in accordance with the JORC Code (2012).

An Exploration Target range (to standard of Clause 17 of the 2012 JORC Code) has been estimated for 14 copper prospects (Big One, Eldorado North and South, Pancake, Mt Storm, Crescent, Crescent East, Valparaisa, Arya, The Wall, Flapjack, Johnnies, Amanda, Pandanus Creek, and Black Mountain; Tables 1, 2 & 3) by ROM Resources and some previously reported internally by R3D Resources (Biggs and Reed 2022).

Note these Exploration Target<sup>2</sup> estimates are in addition to the small JORC Indicated and Inferred MRE (Table 4) previously reported at Big One Deposit (Biggs 2022, Paull 2022). Moreover, the 14 Exploration Targets provide a preliminary estimate and base position for future development.

Target	Strike Length (m)		Width (m)		Depth below surface (m)		Density (Kg/m <sup>3</sup> )	
	Low	High	Low	High	Low	High	Low	High
Ranges								
Big One	600	1,550	5	20	10	190	2.65	2.75
Big One North	30	120	10	80	10	70	2.55	2.70
Mt Storm	1,000	2,900	5	15	10	60	2.60	2.75
Black Mountain	600	1,550	10	50	10	50	2.55	2.70
Arya Copper	600	1,200	3	10	10	60	2.60	2.70
Arya Graphite	1,600	2,500	50	80	40	400	1.80	2.10
Valparaisa	2,000	6,000	2	5	50	100	2.55	2.65
Pancake (Cu)	110	800	100	200	30	100	2.55	2.70
Pancake (Zn)	1400	2,200	30	150	20	80	2.55	2.75
Eldorado North and South	400	500	100	200	20	100	2.55	2.70
The Wall	300	700	50	150	15	60	2.55	2.70
Flapjack	250	650	40	130	10	50	2.55	2.70
Johnnies	500	1,000	30	100	10	50	2.55	2.70
Amanda	75	160	5	10	10	60	2.55	2.75
Crescent	1,000	2,000	80	150	10	60	2.55	2.70
Pandanus Creek	500	1,400	20	50	20	70	2.55	2.70
Crescent East	600	1,000	30	80	10	50	2.55	2.70

Table 2: NWQ Mineral Prospects - Exploration Target Background Data for Tonnage Estimate

### Cautionary Statement<sup>2</sup>

It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

Target	Cut off %	Low Range Tonnage (Mt)	High Range Tonnage (Mt)	Grade (%)	Grade (%)	Contained Cu (t)	Contained Cu (t)
<b>Prospects</b>	<b>Cu</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
<b>Eldorado South and North</b>	0.2	3.0	13.3	0.3	0.6	9,000	79,800
<b>Big One and</b>	0.5	2.0	6.0	0.6	1.0	12,000	63,000
<b>Mt Storm<sup>4</sup></b>	0.5	0.5	3.7	0.5	1.5	2,500	55,500
<b>Johnnies</b>	0.3	1.0	4.5	0.4	0.8	4,000	36,000
<b>Crescent</b>	0.3	0.5	4.0	0.4	0.8	4,000	32,000
<b>The Wall</b>	0.5	0.5	3.6	0.3	0.9	1,500	32,400
<b>Flapjack</b>	0.5	0.5	3.6	0.4	0.8	4,000	32,000
<b>Pancake</b>	0.5	1.0	4.4	0.4	0.7	4,000	30,800
<b>Crescent East</b>	0.3	0.5	3.0	0.4	0.8	2,000	24,000
<b>Valparaisa</b>	0.2	1.3	3.5	0.2	0.5	2,600	17,500
<b>Pandanus Creek</b>	0.5	0.2	2.2	0.3	0.8	600	17,600
<b>Black Mountain</b>	0.5	0.2	1.7	0.5	1.0	1,000	17,000
<b>Arya</b>	0.5	0.3	1.8	0.5	0.9	1,500	16,200
<b>Big One North</b>	0.2	0.2	1.7	0.5	1.0	1,500	15,300
<b>Amanda</b>	0.1	0.1	0.9	0.2	0.5	200	4,500
		<b>11.8</b>	<b>57.9</b>	<b>0.5</b>	<b>0.9</b>	<b>50,400</b>	<b>473,600</b>

REPEAT Table 1: Exploration Target<sup>3</sup> Summary Ranges for Copper

Resource Type	Ore Type	Inferred (Mt)	Indicated (Mt)	Measured (Mt)	Copper Grade (%)	Silver Grade (g/t)	Contained Copper (t)	Contained Silver (kg)
<b>Mine Dumps</b>	Oxidised	0	0.007	-	1.2	4.0	86	29
<b>Mine Insitu</b>	Oxidised	1.7	0	-	1.0	1.1	17,000	1,870
<b>Mine Insitu</b>	Fresh	0.4	0	0	1.2	1.4	4,800	560
<b>Sub-Totals</b>		<b>2.1</b>	<b>0.007</b>	<b>0</b>			<b>21,886</b>	<b>2,459</b>

Table 3: Big One 2022 Mineral Resource Estimate<sup>1</sup>

**Source:** Maiden Mineral Resource Estimate 2.1Mt @ 1.1% ASX Release 28 February 2022

Notes:

Mt Storm previously mined was 1,100t @6% Cu, in the mid-nineties<sup>4</sup>.

Anomalous Gold, and Cobalt also at Mt Storm, Amanda, and Flapjack.

Target	Tonnage (Mt)		Grade Zn (%)		Grade Pb (%)	
	Low	High	Low	High	Low	High
<b>Pancake</b>	5	25	0.2	3.0	0.1	2.0
<b>Pandanus Creek</b>	0.5	5	0.2	2.0	0.1	1.0
<b>Flapjack</b>	0.2	3	0.2	3.0	0.2	2.5
<b>Johnnies</b>	0.5	6	0.3	3.5	0.3	3.0
	<b>6.2</b>	<b>39</b>	0.2	2.9	0.2	2.0

Table 4: Exploration Target Summary for Other Minerals

Note: 0.1 % Zn cut-off; 0.1 % Pb cut-off, 0.5 % Cg cut-off.

### Cautionary Statement<sup>3</sup>

It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

The total insitu contained copper is approximately 22,000 t (Table 3). Separately, if one considers the low range of the Exploration Targets that is approximately 50,000 t (Table 1).

### INDIVIDUAL SUMMARIES

At the **Eldorado South** Copper Prospect surface sampling campaigns have returned up to 5,400ppm Cu in rock chip samples, suggesting the presence of structurally controlled copper-gold system. Moreover, this may be linked to a major NNE trending fault. The interpreted anomalous zones should be prioritised for follow-up field work and potentially drilling in Q3 2026.

The **Pancake** Prospect has Mt Isa style mineralisation potential. Soil samples along an east-west trending anomalous zone delivered positive readings for zinc-lead-copper mineralisation with peak values for rock chips up to 7,100ppm Zn, 2,000ppm Pb and 670ppm Cu. As these reconcile favourably with two (2) sub-surface anomalies identified with ground geophysics, they are priority targets to be test-drilled incrementally.

At the **Big One** Deposit three (Figure 2) exploration campaigns have been conducted which has produced an Inferred MRE of 21,556kt contained copper. An Exploration Target<sup>1</sup> that ranges between 2 to 6Mt and 0.6 to 1.0% Cu for a mid-range of 30,000 insitu tonnes Cu has also been estimated using available geophysics & geochemical data (Figure 4). A planned Stage 3 drilling campaign, comprising infill & testing a sizeable conductor north of the line of lode should extend known mineralisation plus increase the confidence / grade of the current MRE has recently been scoped by infill soil and rock chip sampling completed during August 2024 (Logan 2024).

Also, some 300m to the north is the **Big One North** extension (Figures 5 and 6), with a small wireframe target (up to 120m in length) based on IP conductivity shells of >8 mv/v and scattered rock chip mapping. This has an estimated range of 0.2 to 1.7Mt and grade 0.3 to 0.9% Cu. As with Big One, drilling is planned for Q3 2026.

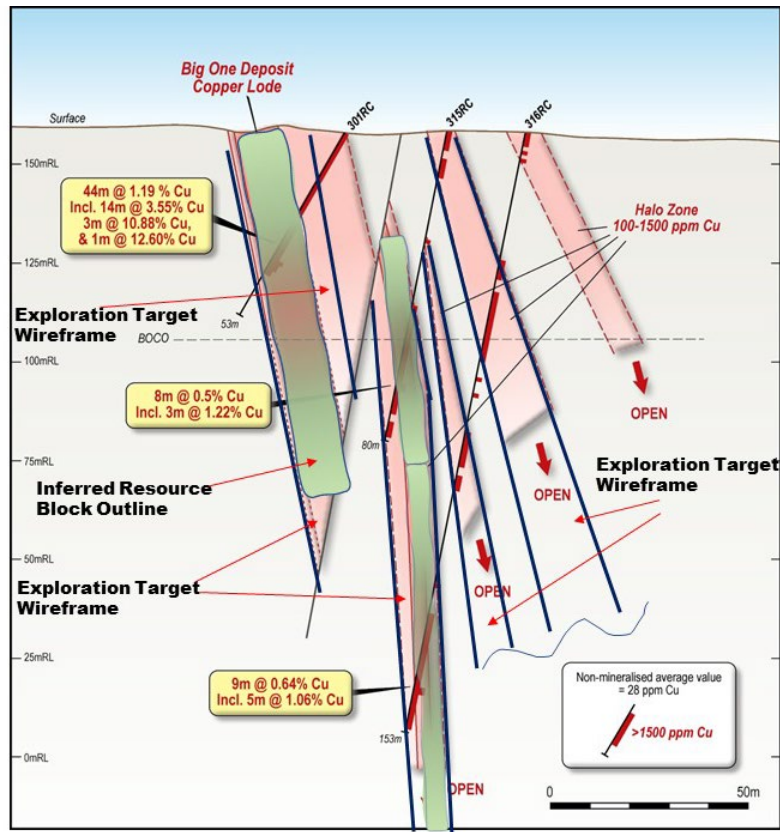


Figure 4: Big One Cross-section showing Derivation of Exploration Target

Source: Biggs and Reed (2022)



Figure 5: Big One North Exploration Target Location Plan

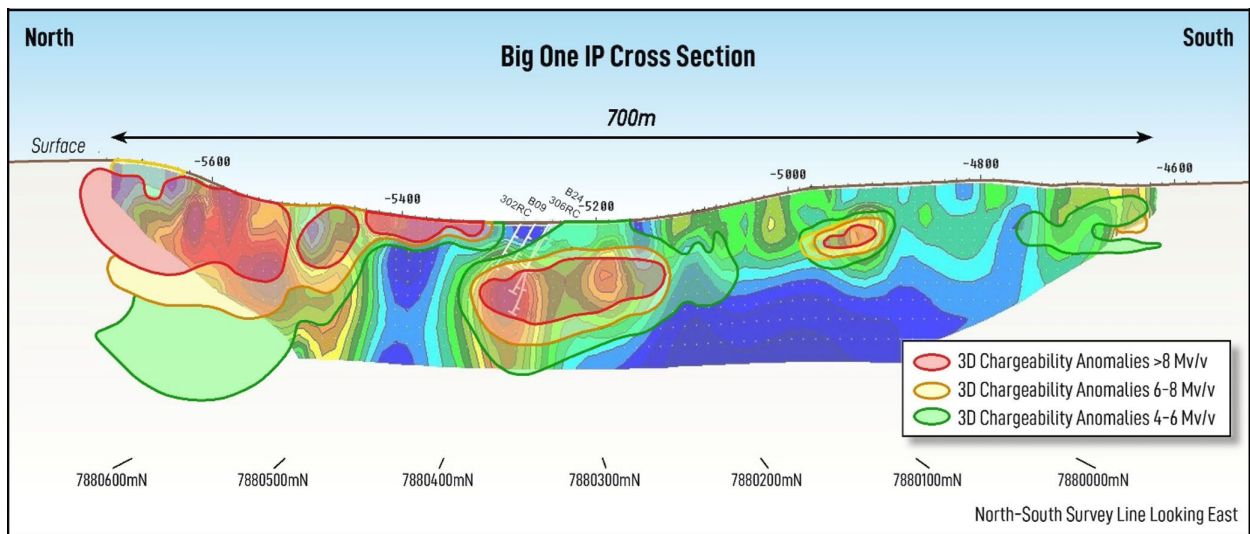


Figure 6: Big One North Exploration Target based on Sect. 10400, Station 5500-5600

Note: Coordinate System is MGA2020-Z54S

The **Valparaisa** Copper Prospect consists of copper mineralisation in two horizons over a 6km strike event. Previous explorers, including BHP, found rock chips with up to 2,530ppm Cu. Reconciling this against the interaction of two intersecting faults suggest a structurally controlled copper system that could be drill-tested. R3D Resources had estimated a range of 1.3 to 3.5Mt and grade 0.2 to 0.5% Cu.

At the **Arya** Prospect there is a significant magnetic anomaly, south of a known graphite system, which shows potential to be a primary source of copper mineralisation. Further field work is necessary to determine the relationship between the structure and mineralisation, prior to a proof-of-concept campaign to drill-test the magnetic anomaly.

At the **Mt Storm** Copper Prospect previous small scaling mining extracted approximately 1,100t of ore with a head grade at 6% Cu. Subsequent fieldwork found copper-cobalt at surface with gold nearby which could form part of a structurally controlled system along a porphyry dyke. Further fieldwork is required, and a small reverse circulation (RC) drilling campaign is recommended if compelling evidence is found.

The **Black Mountain** Copper Prospect was the subject of company rock chip sampling in late 2021, which returned anomalous copper values up to 940ppm from the ferro-manganiferous outcrop. Further follow up surface sampling and geophysics campaigns to identify potential targets for drill-testing are recommended.

**The Wall** is a Mt Isa-style Copper/Lead/Zinc Prospect, having an anomalous zone 400m long by 225m wide with soil samples that assayed up to 7,163ppm Zn, 2,023ppm Pb and 1,464ppm Cu coincident with an airborne GEOTEM conductor.

The **Flapjack** Copper Prospect saw MIM complete a range of geological investigations, including extensive surface sampling campaigns at the Flapjack prospect but no drilling. Bear in mind the best gold assay at Crescent is 170ppb Au for a stream sediment sample that showed visible panned gold). There were consistently elevated gold values than the Crescent prospect – the IOCG alteration appear to be closer to where IOCG “ore forms” or is situated in the IOCG mineral system - Tick Hill had been located following up a 7ppb stream sediment anomaly, Tick Hill is a unique deposit, but it

falls within the IOCG spectrum of deposits. A total of 31 rock chip samples were collected over the Flapjack Prospect grid with the highest values of 606ppm Cu, 404ppm Pb, 463ppm Zn, 4.3ppm Ag and 1.37ppm Au.

The historical reports indicate that there is “red rock”- “green rock” alteration, the petrographic reports should be examined in detail, and if possible, compared to the distinct similar style of observed altered rock at Tick Hill. Tick Hill is an IOCG deposit and there are papers published on its “discovery” (attention should be directed towards visible alteration, surface sample assay values, etc, to compare/contrast what is at Flapjack).

An aerial GEOTEM geophysical anomaly exists to the south-west of the Flapjack prospect. A review of this and other geophysical RTP and TMI surveys should be completed – as it is possible that potentially, when considering the other datasets, that geophysical-geochemical-alteration anomaly exists in proximity to the Flapjack prospect data sets.

The **Pandanus Creek** (previously called Camel Back East) and **Johnnies** prospects are similar in that they are shear-hosted copper-lead-zinc deposits with rock chip assays up to 59,100ppm Cu, 9,500ppm Zn and 45,000ppm Pb. In addition, at Johnnies two 16m long costeans were constructed, mapped, and sampled which produced similar values from a 5m composite sample. Complementing the geochemical work, an induced polarisation ground survey identified two anomalies: one with a low phase response that is potentially sulphide mineralisation continuing down plunge, while the other is a north-trending downwards plunging anomaly, neither of which have been drilled.

**Crescent and Crescent East** prospects includes a zone of structurally controlled east-northeast trending haematitic-quartz veins, that appear to be situated along trend from the Crescent Prospect. Identification of haematitic-quartz veins laced with gold, and other alteration features are arguments for IOCG mineralisation. Cu-Au mineralisation could be related to structurally controlled mineralisation associated with the fault zone and/or stratabound copper. Skarn alteration identified to the north of the fault in the dolomites, dolomitic breccias, with the Quilalar Formation sandstone and quartzite, is distinctly different alteration to the chlorite alteration mapped.

**Amanda** was identified as a quartz shear vein (150m by 5m wide) associated with an easterly-trending fault within the Lochness Formation. Gold values as high as 4ppm in soil sampling led to the drilling of five south-dipping shallow RAB holes that failed to find elevated gold values above 100ppb, but did intersect copper values as high as 3,000ppm.

## **SAMPLING TECHNIQUES**

Over the 40-odd years of modern exploration has resulted in a wide diversity of methodologies employed.

### **Regional Magnetics**

The 100m line spacing and 60 vertical clearances reported for the available dataset is of sufficient density.

### **Gradient Array Induced Polarity**

At Pancake the 100m line spacing and 25m dipole spacing, as well as perpendicular orientation of the survey lines is of high-quality and more than sufficient.

## Surface Geochemistry

Surface stream sediment, soil and rock chip samples have been collected by MIM, BHP, CST Minerals, and other explorers generally a different spacings depending upon the deposit (for soil 100m spaced lines, <20m spacing) are of sufficient density for the purposes reported here. Closer line spacing is required in some areas.

Rock chip sampling at Black Mountain is of sufficient density for the purpose of report. Additional work is still required to close of the anomaly(s). Sample data of Crescent, Pancake, and Eldorado is of high-density and sufficient for the purpose reported here. Analyses collected over Crescent are sufficient to identify strike extension of surficial anomalism, while more work is still required to define the width of anomalism, and additional strike orientation.

## Conventional Soils

At many of the Prospects 25m x 100m line spacing extending to 25m x 400m at extremities of the grid. Sample spacing is suitable for the definition of the anomaly for further exploration interrogation. Further work is planned to improve the definition of the anomalism.

## Costean and Mullock Composites

Costean mapping and sampling and collection of mullock composite samples at Johnnies reported here are of sufficient density for the purpose in which is reported and used.

## Drilling

Drilling at the Pancake Prospect is broadly-spaced along strike (~120m), and 40m spaced in section which has been sufficient in the reporting of the inferred resource. Additional resource definition drilling is planned for Mt Storm and The Wall. Downhole logging is regular 1m intervals and is sufficient. Exploration RC drilling at Amanda and Valparaisa is exploratory in nature. Downhole sampling of 4m composites is sufficient for initial exploratory drilling.

## SAMPLE ASSAY

For the various drilling programs will be composited every two or four metres and all samples were collected to maximise optimal representation for each sample. In all cases for the historical drilling sampling was not continuous and narrow in scope (Cu, Pb, Zn, As, and sometimes Au (e.g. Amanda)).

Each metre sample had an amount removed for washing and cleaning and sieving then place into metre allocated chip trays. These chips were logged on site by the rig geologists and those logs have been saved into a spreadsheet and stored on the Company server. Any visible mineralisation, alteration or other salient features were recorded in the logs. Industry-wide, acceptable, standard practices were adhered to for the drilling and sampling of each metre as per the Drilling and Sampling Procedures set out before commencement of the drilling program, although drilling pre 1998 did not include QA/QC checks for the laboratory assays.

Any reporting of significant mineralised intervals was on a received apparent thickness x interval calculation (i.e., thickness averaged). All geochemical samples to be laboratory assayed are uniquely numbered and dispatched via courier to ALS Mount Isa where they are logged into the laboratory system on delivery. From there, the prepared samples are freighted to Townsville or Brisbane laboratories, where they underwent analysis using varying techniques developed over time.

## CUT-OFF GRADES

Copper cut-off grades varied per deposit/prospect was assumed for potential open pit material down to 60 m below the surface. Below this level the stripping ratio is likely to be too high for open pit extraction. These cut-off grades are preliminary in nature and are subject to confirmation by feasibility work on the project.

## CLASSIFICATION CRITERIA

Insufficient data exists at all Prospects investigated to preclude Mineral Resource classifications being assigned. At Big One a block model was generated only for the main deposit and not the northern extension. At Big One, Inferred resource blocks required the closest sample within 55m on the second pass, an average sample distance <35m, and a minimum of three drill-hole samples, with the remaining blocks between 80-190m, previously unreported, have now been assigned to an Exploration Target<sup>4</sup>.

## RESOURCE ESTIMATE

Due to the lack of both volume and sufficient spacing of drilling data, even at prospects that have drilling, no JORC-standard Resources are possible to be estimated. Certainly, at Big One and Big One North, a well-placed drilling program has the potential to greatly increase this number and confidence class, as the deposit is open to the north, east, and downdip. Estimates of mine stockpiles at Mt Storm have not at this time been included, as detailed drone-based surveying will be required to assess their extent more accurately. All the Exploration Targets<sup>4</sup> tabulated are generally calculated at depths of <80m below ground, and hence it is likely that any insitu ore will be partially to completely oxidised.

## METHODOLOGY

For Exploration Targets<sup>4</sup> estimated (to the standard of Clause 17 of the 2012 JORC Code) the following methodology was applied:

Except for Big One Deposit where a wireframe or enclosing shell was generated surrounding the Inferred Resource shell, all other estimations were based on simple geometric shapes of the form:

**Length (m) x width (m) x depth (m) x density (Kg/m<sup>3</sup>)**

to obtain wireframe volumes then mass (tonnes) across a reasonable minimum and maximum range.

Except for Big One Deposit where core has been tested for specific gravity, following global average density of 2.2 g/cc for oxidized material, 2.55 for partially weathered rock and 2.75 for fresh rock was used to estimate total in situ tonnes with no constraints.

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<sup>4</sup> It should be noted that the Exploration Target tonnage ranges quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

Unexpected geological loss mainly due to faulting and discontinuous mineralisation over large distances between any drillholes used, expressed as a % deleted from the original insitu tonnages estimated. Typically, loss of 20-60% was applied.

Where quoted, it should be noted that where Exploration Target tonnages are estimated in the report, they are considered non-JORC and are conceptual in nature. There has been insufficient exploration to define an MRE and that it is uncertain if further exploration will result in the determination of an MRE.

Some surface and rare drilling assay data within the project area was uncovered in historical reports. Big One Deposit and Mt Storm and to a lesser degree Valparaisa and Black Mountain have been previously mined. Scattered historical drilling was conducted at Amanda, Pancake, Johnnies, and Valparaisa.

Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised domains and generate a grid mesh or block model. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient surface and downhole thicknesses interpreted from historic drilling to warrant further investigation in some areas.

## **CONCLUSIONS**

In summary the top five prospects (Big One Deposit (and Big One North), Mt Storm, Eldorado South, the Wall, and Pancake) require further fieldwork to firm locations for small confirmatory RC drilling programs. In the case of Big One Deposit, further deep drilling along the line of lode is expected to encompass diamond drill core drilling with further metallurgical sampling.

## **STRATEGY**

- Assessment of priority NWQ prospects and targets for drilling.
- Continue engagement with the Queensland Natural Resources and Mines Department as the Big One Deposit MLA advances through the technical assessment.
- Progress assessment of priority mining areas and historical stockpiles outside the current Mineral Resource Estimate.
- Receive and assess assay results from the Harts Range Heavy Rare Earths drilling program and continue to improve the beneficiation process with Metallium.
- Expand OTC investor outreach to improve market visibility of core assets.

## **ENDS**

This announcement was approved for release by the Board of New Frontier Minerals Limited.

## REFERENCES

1. Maiden Mineral Resource Estimate 2.1Mt @ 1.1% Cu (21,886t) for Big One Deposit – ASX announcement, 28 February 2022. (Refer to Appendices 1-4).
2. Strategic alliance with Austral Resources to process NFM copper ore – ASX announcement, 21 January 2025.
3. Copper Recovery Testing Supports Mt Kelly Pathway and MOU with Austral Resources – ASX announcement, 3 July 2025.
4. Plans Underway to Fully Develop the Big One Deposit in the World-Class Mt Isa Copper Belt – ASX announcement, 14 May 2024.
5. Csar, M., 1996, Big One and Mt Storm Copper Deposits, unpublished report by Aberfoyle Limited for Coffee Gold NL, 8pp.
6. Major copper discovery at Big One Deposit extended – ASX announcement, 10 February 2021.
7. Surface assays increase priority copper target area at Big One Deposit – ASX announcement, 29 October 2024.
8. Biggs, M.S., and Reed G., 2022, NWQ Copper Project, Mt Isa Region, Queensland, Target Generation, unpublished report by ROM Resources and R3D Resources Limited for Castillo Copper Limited, October 2022, 51pp.
9. North-West Queensland Copper Project, Over Twenty Prospects Delivering Exploration Upside, ASX Release, Castillo Copper Limited, 30th March 2023.
10. Depositional systems in the Mt Isa Inlier from 1800 Ma to 1640 Ma: Implications for Zn–Pb–Ag mineralisation. Australian Journal of Earth Sciences, 60(2), 157–173. Southgate, P.N., Neumann, N.L. & Gibson, G.M. (2013)

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### About New Frontier Minerals

New Frontier Minerals Limited is an Australian-based focused explorer, with a strategy to develop multi-commodity assets that demonstrate future potential as an economic mining operation. Through the application of disciplined and structured exploration, New Frontier has identified assets deemed core and is actively progressing these interests up the value curve. Current focus will be on advancing exploration activity at the Harts Range Niobium, Uranium and Heavy Rare Earths Project which is circa 140km north-east from Alice Springs in the Northern Territory.

Other interests include the NWQ Copper Project, situated in the copper-belt district circa 150km north of Mt Isa in Queensland. Additionally, the Pomme Project, situated in Quebec, Canada, is prospective for carbonatite-hosted Rare Earth Element (REE) mineralisation.

New Frontier Minerals is listed on the LSE and ASX under the ticker “NFM”.

### Competent Persons Statement

The scientific and technical information in this announcement, which relates to Exploration Results, Exploration Targets and the geology of the deposits described, is based on information compiled and approved for release by Mark Biggs. Mark Biggs is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM Member # 107188) and meets the requirements of a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition). Mark Biggs has 35 years of experience relevant to Rare Earth Elements (REE), industrial minerals, and copper mineralisation types, as well as

expertise in the quality and potential mining methods of the deposits under consideration. Additionally, he has 25 years of experience in the estimation, assessment, and evaluation of exploration results and mineral resource estimates, which are the activities for which he accepts responsibility. He also successfully completed an AusIMM Online Course Certificate in 2012 JORC Code Reporting. Mark Biggs is a consultant with ROM Resources and was engaged by New Frontier Minerals Limited to prepare the documentation for several prospects, specifically those within the Harts Range Prospects upon which the Report is based.

Furthermore, the full nature of the relationship between himself and New Frontier Minerals Limited has been disclosed, including any potential conflicts of interest. Mark Biggs is a director of ROM Resources, a company that is a shareholder of New Frontier Minerals Limited, and ROM Resources provides occasional geological consultancy services to New Frontier Minerals Limited. The Report or excerpts referenced in this statement have been reviewed, ensuring that they are based on and accurately reflect, in both form and context, the supporting documentation relating to exploration results and any mineral resource estimates. The release of the Report and this statement has been consented to by the Directors of New Frontier Minerals Limited. Mr Biggs consents to the inclusion in this announcement of the matters based on his information and supporting documents in the form and context in which it appears.

### **Forward Looking Statements**

Certain information in this document refers to the intentions of New Frontier Minerals Ltd, but these are not intended to be forecasts, forward-looking statements, or statements about future matters for the purposes of the Corporations Act or any other applicable law. The occurrence of events in the future is subject to risks, uncertainties and other factors that may cause New Frontier Minerals Ltd's actual results, performance, or achievements to differ from those referred to in this announcement. Accordingly, New Frontier Minerals Ltd, its directors, officers, employees, and agents, do not give any assurance or guarantee that the occurrence of the events referred to in this announcement will occur as contemplated. The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken based on interpretations or conclusions contained in this announcement will therefore carry an element of risk. The announcement may contain forward-looking statements that involve several risks and uncertainties. These risks include but are not limited to, economic conditions, stock market fluctuations, commodity demand and price movements, access to infrastructure, timing of approvals, regulatory risks, operational risks, reliance on key personnel, Ore Reserve and Mineral Resource estimates, native title, foreign currency fluctuations, exploration risks, mining development, construction, and commissioning risk. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward-looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

### **ASX Listing Rule 5.23.2**

New Frontier Minerals Ltd confirms that it is not aware of any new information or data that materially affects the information included in this market announcement and that all material assumptions and technical parameters underpinning the estimates in this market announcement continue to apply and have not materially

# APPENDIX 1: DEPOSIT SUMMARIES

## Location and Access

The NWQ project area is located within a Tier 1 exploration and development region, approximately 150 km north of Mt Isa in Queensland, hosts several historic / currently operating copper mines including Lady Annie, Mt Oxide and Capricorn Copper. Extensive historical exploration has provided New Frontier with over within its 977km<sup>2</sup> tenure, including the major ‘Big One’ copper discovery.

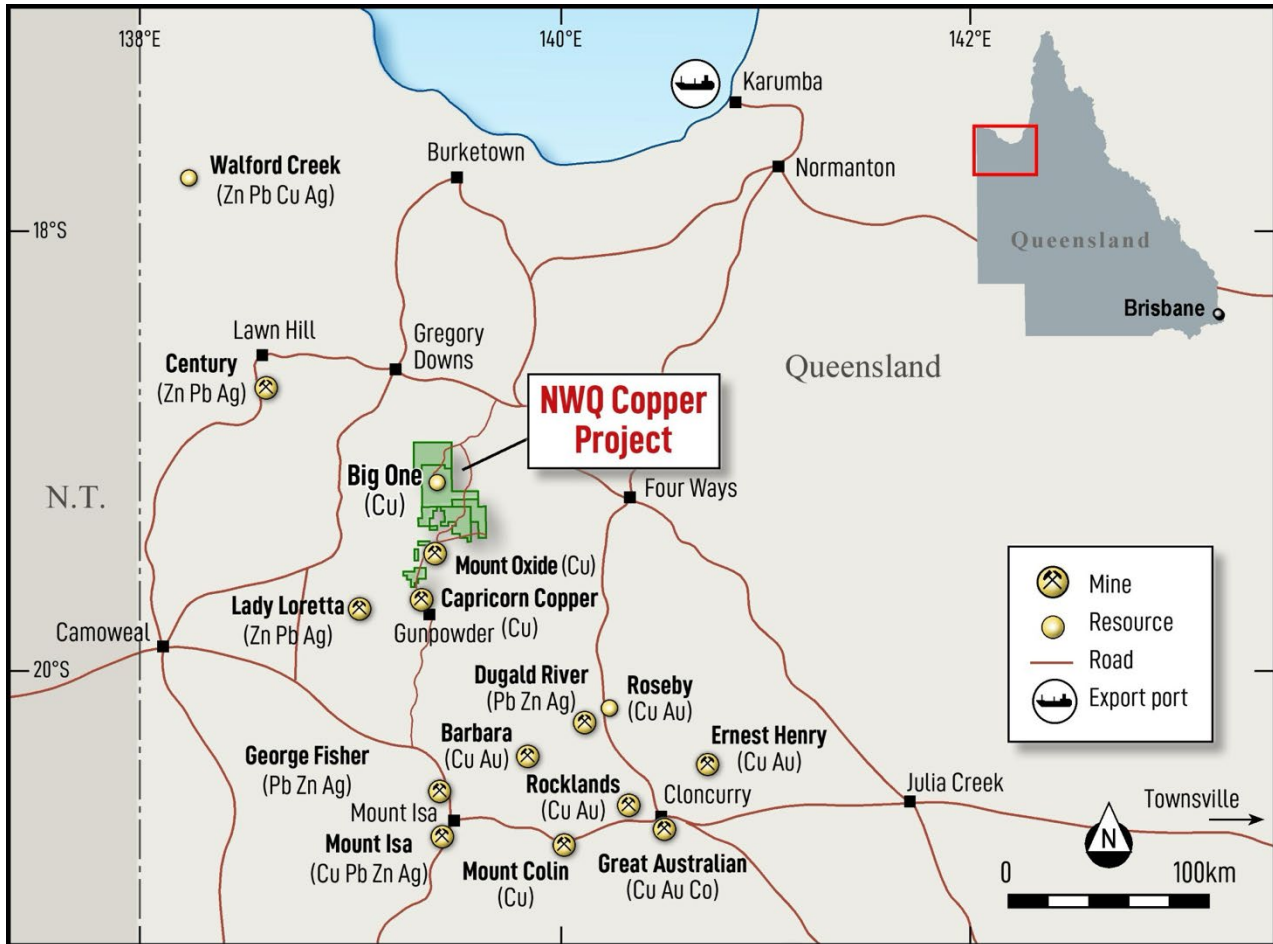


Figure 1: Regional Location of the NWQ Copper Project

## Introduction and Scope

The purpose of this summary is to highlight the priority prospects across New Frontier Minerals Limited’s (ASX: NFM) NWQ Copper Project in the Mt Isa Region that are currently interpreted to deliver significant exploration upside for primarily copper mineralisation. The objective is to re-investigate known and not-as-yet named mineral occurrences for Cu, Zn, Co, V, Au, Ag, and REE within four (4) (EPM 26574, EPM 26525, EPM 26462, and EPM 27440) of the five (5) tenures (that make up the NWQ Copper Project). Timing and funding constraints meant that the fifth (5<sup>th</sup>) tenure (EPM 26513) was not included in this study, as it some 25km south of the main project area.

This work compliments earlier anomalous polymetallic contouring of all available surface sampling completed by ROM Resources in 2017, 2018 (Biggs 2018) and 2019 (Biggs & Nowland, 2019) and various ASX releases prepared by Xplore Consultants during 2020 (Paull, 2020a,b,c,d,e). Some anomalous areas, identified outside the major named prospects, are yet to be fully evaluated.

Many outcropping copper-gold occurrences have been noted within the project area by historical explorers, but only a few have compiled comprehensive databases or completed stream sediment and rock chip contour maps, and when this has occurred, the focus was on lead-zinc, copper, or uranium. Proposed work activities over a four (4) year period included:

1. Compilation of exploration datasets and GIS.
2. Analysis of existing identified copper targets – especially for cobalt and REE.
3. Field checking of the geology of the historically mineralised outcrop.
4. Ground gravity, resistivity and/or magnetics surveying at appropriate traverse spacing.
5. Identification of additional targets.
6. Plan an initial drill program that can assist with defining the extent of shallower mineralisation.
7. Submit drill plans for approval by Landowners and Government.
8. Complete data compilation and review.

Stage 1 investigations focused on the first two (2) activities above by combining and modelling of all the historical rock chip, soil, and stream sediment sampling data and gridding selected elements to identify anomalous zones and trends.

Stage 2 involved selecting the fourteen (14) of the forty-four (44) most prospective prospects (Figure A1-1) to report in this release through examining the drilling and sampling data in more detail and then generating Exploration Targets (to the standard of Clause 17 of the 2012 JORC Code) (Appendix 2) for each prospect. ROM Resources and R3D Resources were contracted to complete the Exploration Targets and the prospects they investigated are:

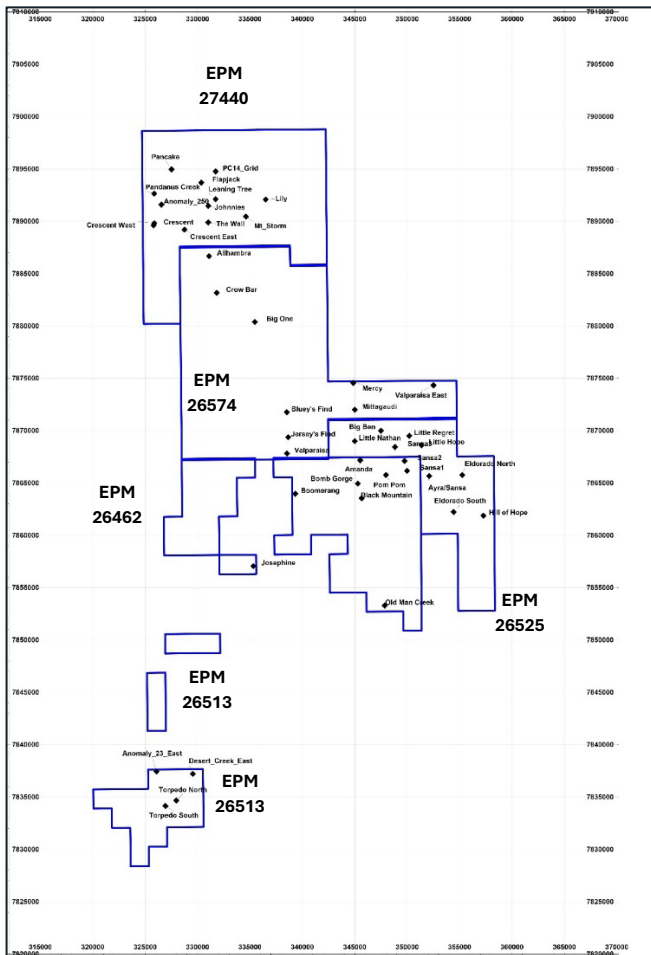
1. Eldorado (R3D Resources).
2. Pancake (R3D Resources)
3. Big One (ROM Resources).
4. Mt Storm (ROM Resources).
5. Valparaisa (R3D Resources).
6. Arya (ROM Resources).
7. Black Mountain (ROM Resources).
8. Johnnies (ROM Resources).
9. The Wall (ROM Resources).
10. Pandanus Creek (ROM Resources).
11. Crescent (ROM Resources).
12. Crescent East (ROM Resources).
13. Flapjack (ROM Resources); and
14. Amanda (ROM Resources).

More detail on the first seven (7) prospects, listed below, gives a flavour of the different mineralisation styles of those fourteen (14) investigated.

## Location

The five (5) tenures (EPM 26574, EPM 26525, EPM 26462, EPM 27440, and EPM 26513) that make up the NWQ Copper Project are located approximately 160km north of Mt Isa in north-west Queensland (Figure 1). Two (2) prospects (Big One and Valparaisa) lie within EPM 26574. Two (2) prospects (Arya and Eldorado) are within EPM 26525. Two (2) prospects (Mt Storm and Pancake) are within EPM 27440 and one (1) prospect (Black Mountain) is within EPM 26462. (Figure 1). EPM 26513 was not included in this study due to its distance (>25km south) from the other four (4) northern tenures but will be evaluated in future studies.

**Figure A1- 1: Location of Prospects**



Notes: Coordinate system is MGA2020-Z54S

## REGIONAL GEOLOGY

The NWQ Copper Project lies at the northern limits of a block of Haslingden Group volcanic and sedimentary rocks including the Eastern Creek Volcanics which lie within a large north-trending graben structure (Leichhardt River Fault Trough), forming a north plunging complexly faulted anticline. The Haslingden Group forms the basement to sedimentary rocks which include the Mount Isa Group (Blake, 1987) (Domagala, Southgate, McConachie, & Pidgeon, 2000) (Page & Sweet, Geochronology of basin phases in the western Mount Isa Inlier, and correlation with the McArthur Basin, 1998) (Southgate, Neumann, & Gibson, 2013).

The Mount Gordon Fault, a major structural element in the Mount Isa Inlier, bounds the Leichhardt River Fault Trough to the west. The Leichhardt River Fault contains the most significant of the Proterozoic base metal deposits in the Inlier including those at Mount Isa and Hilton (George Fisher). Other deposits including those at

Mount Gordon and Mount Oxide lie within the Mount Gordon Fault Zone itself. A north-east trending branch of the Mount Gordon Fault passes to the east of the NWQ Copper Project (Figure A1-2).

Younger Proterozoic sedimentary rocks occur along both the eastern and western margins of the Leichhardt River Fault Trough and between the faulted 'segments' of the Haslingden Group rocks. These marginal sedimentary rocks commonly host mineral deposits probably for two reasons: the sedimentary rocks are adjacent to the faulted margins of the graben structure where there has been greater fluid flow and, the sedimentary rocks were being laid down during a major mineralizing episode. Most of the rocks that are equivalent to the Mount Isa Inlier host sedimentary rocks have been removed by erosion of the Leichhardt River Fault Trough (Wilde, 2011).

Within the vicinity of the Big One Copper Mine, small areas of Mount Isa Group equivalent rocks exist in narrow synclinal areas. These lie under a shallow cover of Mesozoic and Cainozoic sedimentary rocks in the northern portion of the area (Figure A1-2).

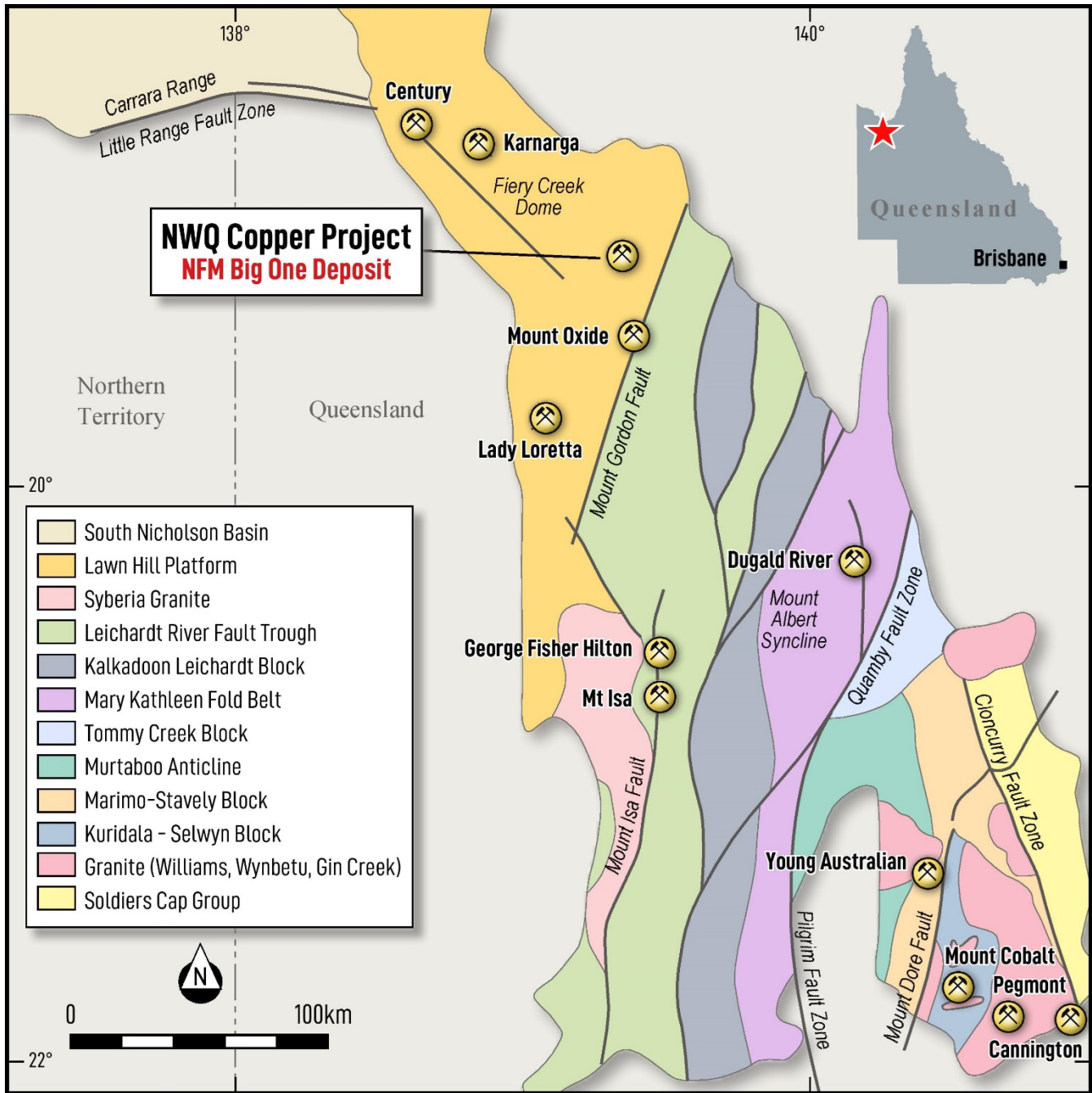
### **Exploration Rationale**

Several copper prospects and indications of copper mineralisation are known in the area, mineralisation styles vary, namely:

- Structurally controlled Cu (IOCG).
- Sheared-hosted sedimentary rocks Cu-Au.
- Stratiform Pb-Zn; and
- Unconformity-hosted U.

Almost without exception, copper mineralisation is hosted within the upper rock units of the Paradise Creek, Quilalar, and Surprise Creek Formations. The latter is a unit consisting of laminated shales and siltstones, often carbonaceous and graphitic, dolomitic silty sandstone, in places stromatolitic, and quartzites with interbedded argillite and sandstone. The unit is prominent as weak anomalies on AEM surveys. Regionally, this unit is preferentially weathered and outcrops poorly and is often covered in quartzite scree from the overlying Warrina Park Quartzite. Minor occurrences of copper mineralisation are also reported from the Whitworth and Warrina Park Quartzite usually in the form of turquoise (copper phosphate).

Figure A1- 2: Regional Tectonic Blocks of the Mt Isa Inlier



Modified after (Southgate, Neumann, & Gibson, 2013)

## PROSPECT SUMMARY

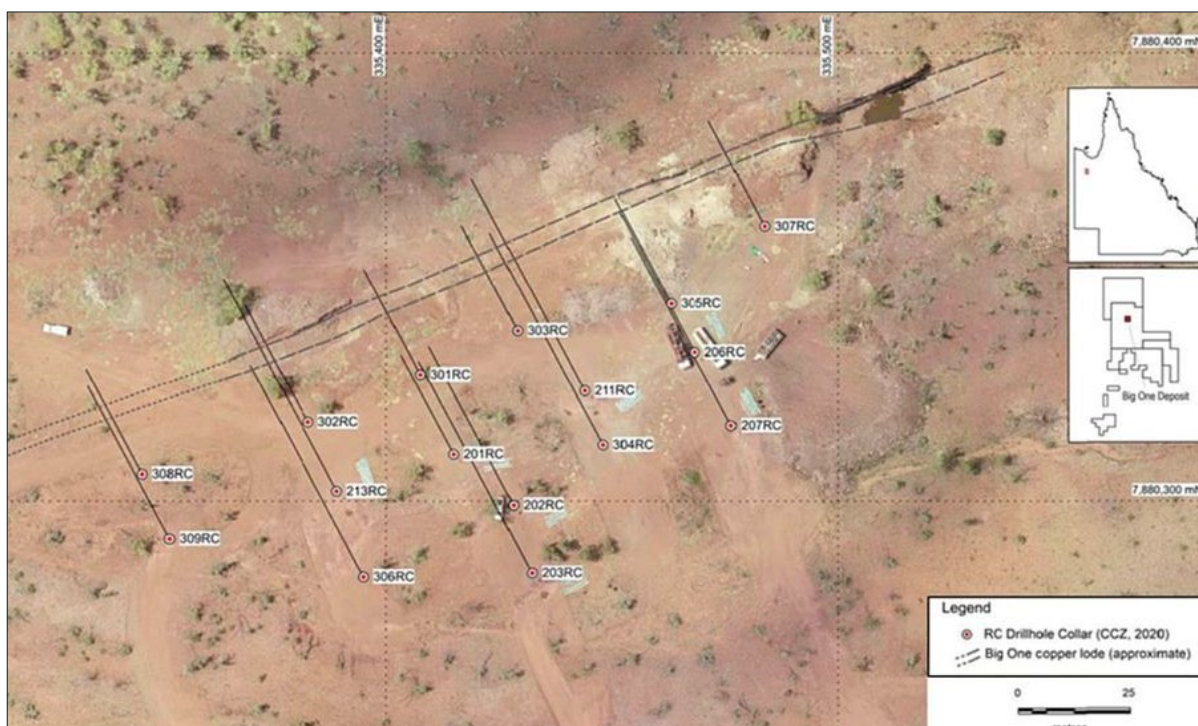
Five (5) prospects (Big One Extended, Arya, Mt Storm, Eldorado South, and Black Mountain) (Figure 1) were completed by Mr Mark Biggs (ROM Resources). The other two (2) prospects (Pancake and Valparaisa) (Figure 1) were completed by Mr Geoff Reed (R3D Resources). A discussion on these prospects and their economic potential are documented below.

### Big One Copper Prospect

- **Location**

The Big One Copper Prospect is located on the 1:100,000 Mt Oxide geology sheet (6759) approximately 2km south-southeast (SSE) of Alhambra Homestead and lies slightly north of centre of EPM 26574 (Figure 3). The Big One Copper Mine historical workings are sited on a north-east (NE) striking fault structure which lies subparallel to and approximately 11km away from the Mt Gordon Fault Zone. The Big One deposit comprises several historical open-cut pits mined into the west side of a small hill and a small shaft sited along a fault gouge. The northern workings contain main working of a 15m strike length by 7m high scraping into the side of a hill and three (3) trenches approximately 20 to 30m apart along the fault. The workings extend over approximately 400m of strike. The southern working is approximately 300m south of the northern workings (Csar, 1996). Whilst initial workings were completed in the early 1990's most of the mining occurred between 1994 and 1996.

**Figure A1-3: Big One Copper Mine Location**



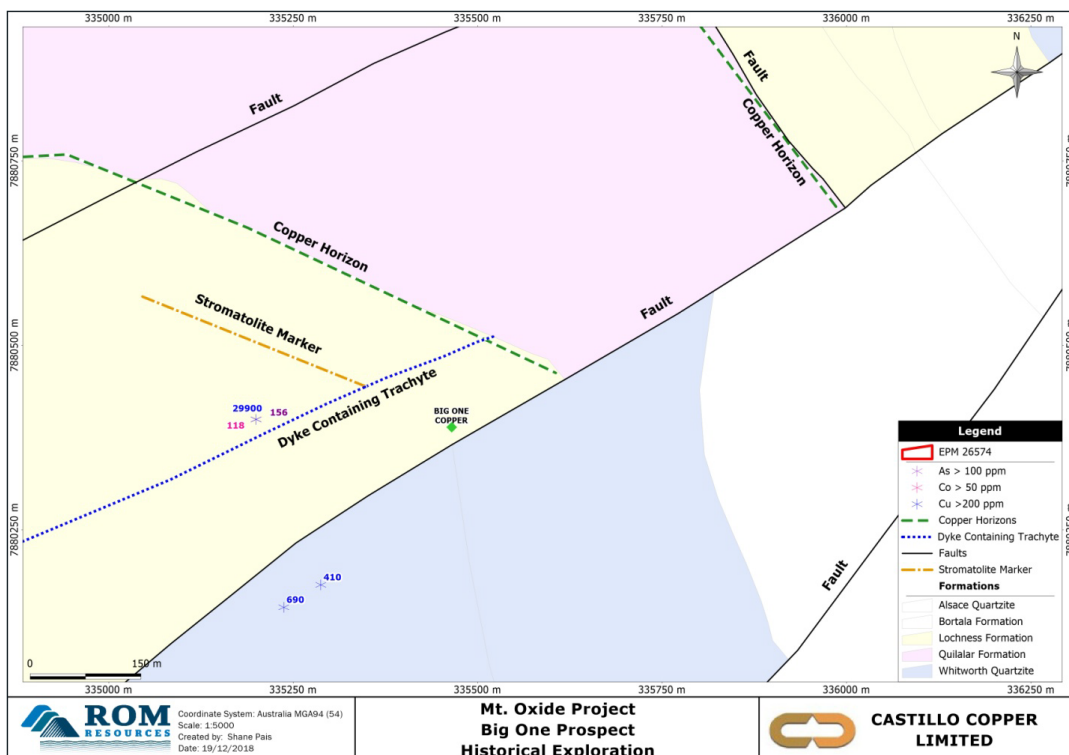
Source: (Paull, 2020j)

- **Previous Investigations**

Previous explorers aiming to discovery sedimentary copper deposits included Carpentaria Exploration (1981), MIM Exploration (1992), Savannah Resources (2007) and several private parties who were exploring and mining in the now expired ML 5481. The work in the area involved stream sediment surveys, soil sampling and establishing a geochemical signature. The Big One Copper Mine was the subject of a stream sediment orientation survey, as thirty-one (31) samples were fractionated into -20+40, -40+60, -60+80 and -80 mesh sizes. All samples were assayed for copper, lead, and zinc. Statistical analysis of the weighted averages of the various fractions confirmed the finer meshes carry more consistent copper contents down-channel. Regional soil sample traverses indicated the Quilalar Formation carried the maximum copper grade which is nine (9) times the background. The basal dolomitic siltstones of the Lochness Formation had copper grades that were up to four (4) times the background. The copper geochemical response is interpreted as originating from either the faulted contact within the Quilalar units or a local enrichment at the base of the carbonate lithologies.

Whilst some areas have been selectively drill-tested, most of the tenement surrounding Big One Copper Mine has not been subject to well targeted and methodical exploration work. A major drilling program was undertaken at the Big One Copper Mine in three (3) stages by Castillo Copper (now New Frontier Minerals) across late 2020 and 2021. This work was complemented by a surface IP survey, ground mapping, drone survey, and rock chip sampling, and built upon small, shallow drilling campaigns by Forsyth Minerals in 1970 and Western Metals Limited in 1993. Figure A1-4 shows the geological formations, structure, and distribution of surface samples in the region. Five (5) anomalous values have been identified, with three (3) showing copper >200 ppm, one with cobalt >50 ppm and one arsenic >100 ppm. One (1) sample, located in the middle of the Lochness Formation, is significant due to its extremely high copper value.

**Figure A1- 4: Big One Mine – Selected Surface Sample Results**



- **Local Geology**

The mine area is underlain in the east by brown quartzose sandstone, slightly metamorphosed showing abundant ripple marking and in the west by interbedded ripple marked sandstone and stromatolite dolomite. The beds strike roughly east to west and dip at shallow to moderate angles, 25° to 35° (degrees) to the north. A

fault zone has been exposed in the outcrop and mine workings. The fault trends at 62° (degrees) (mag) and dips steeply south-east. Bedding at the fault is steeply dipping and has been turned into the fault. This bedding indicates the fault is a normal fault and has limited vertical and horizontal movement. The fault has been intruded by what was described as a trachyte dyke of 5-7 metre width.

Small, rounded quartz phenocrysts suggest the dyke may be more dacitic in composition. The dyke has an abundance of small 12mm devitrified glass shards which have been attacked and dissolved by groundwater solutions and what is now seen is a rock with several small holes. As seen in outcrop, the dyke has been extensively altered due to sericite alteration producing a greenish colouring of the dyke. The dyke has been intruded after the main fault movement as it has not the dislocation seen in the surrounding sedimentary rocks. However, the dyke is fractured suggesting the fault has been reactivated. The dyke is easily characterised in trace element analyses as Cr values are around four times (4x) background.

- **Mineralisation**

The mineralisation at the Big One Copper Mine has been dominated by copper and weak silver within the fault zone and the dyke. Copper observed in the pit and ore dumps is secondary ore comprising malachite ( $\text{Cu}_2\text{CO}_3(\text{OH})_2$ ), azurite ( $\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$ ), cuprite ( $\text{Cu}_2\text{O}$ ) and tenorite ( $\text{CuO}$ ). The copper minerals occur both as linings along fractures within the intrusive and immediate surrounding sedimentary rocks and as infillings in vesicles within the dyke. Chalcocite ( $\text{Cu}_2\text{S}$ ) was also observed in the recent drilling campaigns. Initial surface sampling recorded some silver (<5 g/t) and very little gold or zinc associated with the copper mineralisation.

- **Mineral Resource Estimate and Exploration Target**

An extensive database has been compiled, along with a block model, and a maiden 2012 JORC Inferred MRE at 2.1Mt @ 1.1% Cu (Table A1-3) which was reported to the ASX in February 2022 (Jensen, 2022). A small Indicated MRE of mine stockpiles (from previous mining) was also reported. A drilling campaign focussing on diamond coring has the potential to increase this number and confidence class, as the deposit is open to the east and downdip.

**Table A1-1: Big One Copper Mine Deposit Mineral Resource Tonnages**

Tenure Name	Ore Type	Depth (m)	Specific Gravity (kg/m <sup>3</sup> )	Inferred (Mt)	Indicated (Mt)	Copper Grade (%)	Silver Grade (g/t)	Contained Copper (t)	Contained Silver (kg)
Mine Dumps	Oxidised	at surface / ROM	2.55	0	0.007	1.2	4.0	86	29.6
Mine Insitu	Oxidised	2-70	2.65	1.7	0	1.0	1.1	17,000	1,870
Mine Insitu	Fresh	70-120	2.75	0.4	0	1.2	1.4	4,800	560
Sub-Totals				2.1	0.007			21,886	2,459.6

*Note: No Measured Resources estimated. Source: (Biggs 2022)*

The MRE includes some areas adjacent to and down dip to the main resource shell which have sufficient information that allows estimation of an Exploration Target<sup>2</sup> mid-range of 4Mt @ 0.6 - 1.0 % Cu (Table 4). This Exploration Target is larger than that published in February 2022, due to a new wireframe extended along the entire line of lode length.

An Exploration Target<sup>5</sup> (to the standard of Clause 17 of the 2012 JORC Code) has been estimated from the available geophysics and surface sampling data. Details of the background data and estimate are documented in Tables A1-4 and 5. A cross-section example and the location of the Exploration Target shell is illustrated by Figures 5 and 6.

**Table A1- 2: Big One Copper Mine Prospect Exploration Data for Tonnage Estimate**

Target	Strike Length (m)		Width (m)		Depth below surface (m)		Density (Kg/m <sup>3</sup> )	
	Low	High	Low	High	Low	High	Low	High
Big One	600	1,550	5	20	10	190	2.65	2.75

*Note: Volume and mass are exclusive of the Big One Copper Mine Inferred Resource Shell; At 0.5% Cu cut-off.*

**Table A1- 3: Big One Copper Mine Prospect Exploration Target for Copper**

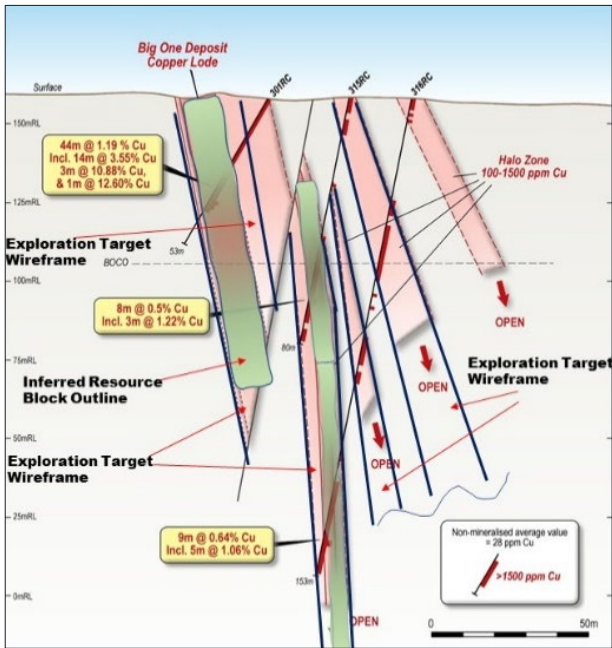
Target	Tonnage (Mt)		Grade (%)		Contained Cu (t)	
	Low	High	Low	High	Low	High
Big One	2.0	6.3	0.6	1.0	12,000	63,000

*Note: Volume and mass are exclusive of the Big One Copper Mine Inferred Resource Shell; At 0.5% Cu cut-off.*

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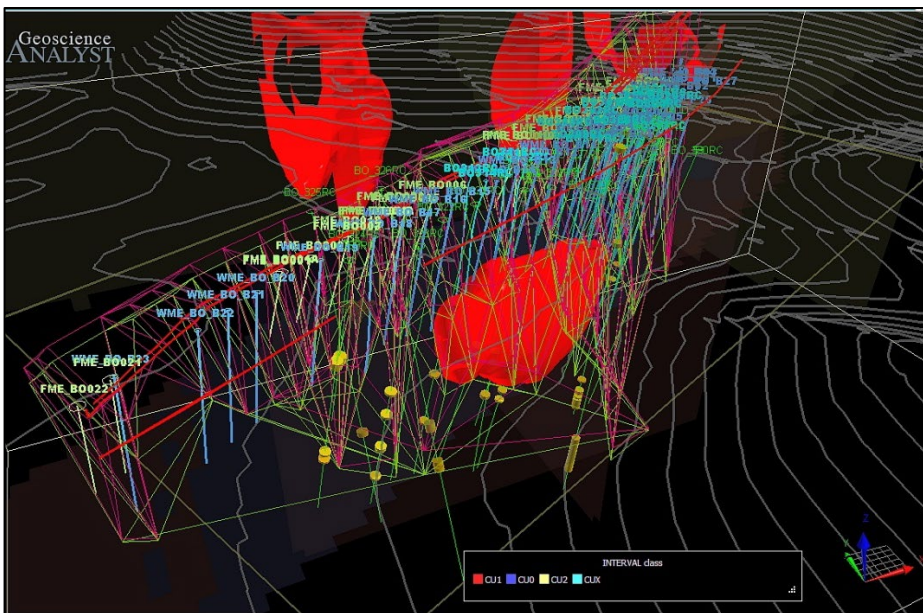
<sup>5</sup> It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

FigureA1- 5: NE to SW Cross-Section Example of Exploration Target Shell



Notes: Coordinates MGA94-Zone 54. Cross-section looking east.

Figure A1- 6: Location of Exploration Target Shell Relative to Drilling



Notes:

1. Coordinates MGA94-Zone 54.
2. IP Highly anomalous zones (>8 mv/v) shown in red
3. Looking northeast, with two (2) times vertical exaggeration.
4. Yellow discs on boreholes are laboratory assay Cu >1,000ppm.
5. Hanging wall triangulation in light green and footwall in light pink.

- **Recommendations**

Further drilling is warranted along the Big One orebody to the east, north and downdip, as the orebody is not fully defined. Furthermore, there are strong historical surface copper anomalies to the north-west and south-east of the Big One Copper Mine, which should be covered by detailed geological mapping and soil sampling and then drill testing.

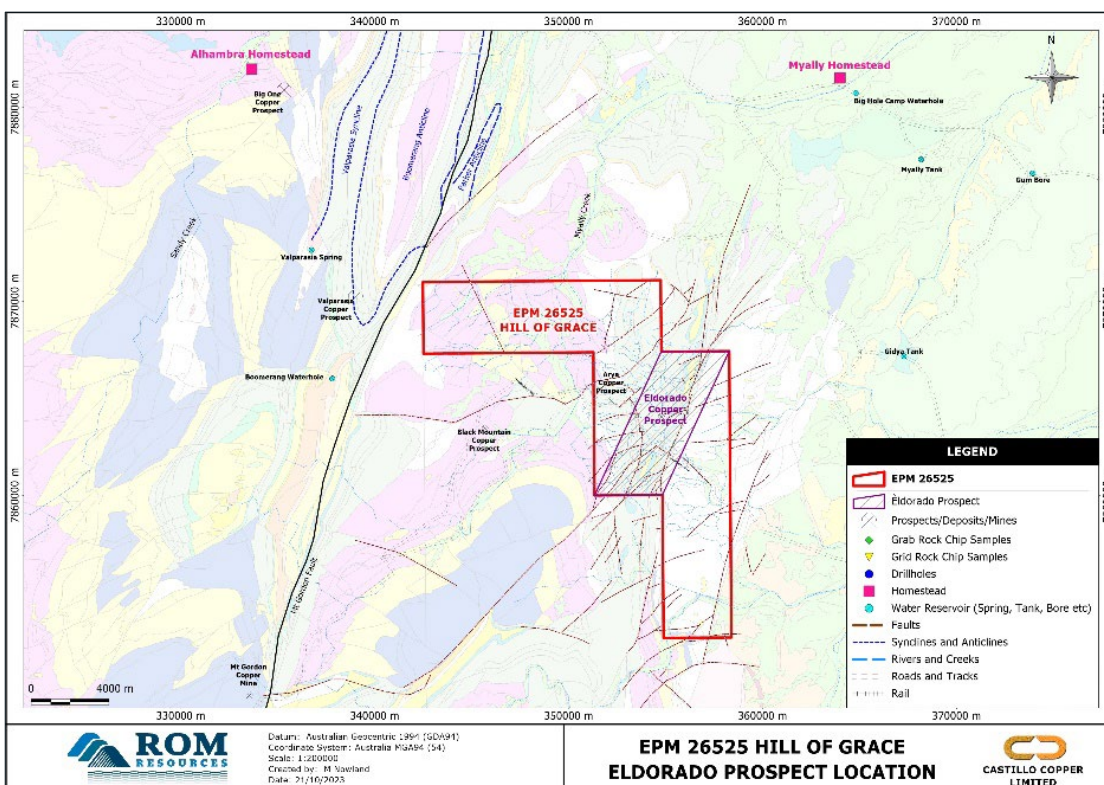
Subsequently a geological work program, including a ground geophysical program has been planned (magnetics and gravity), more reverse circulation drilling to the immediate north and east of Big One Copper Mine, and an initial six (6) hole campaign at the eastern dyke limit with a substantial diamond core component followed by a bigger program to convert a large portion of the Exploration Target to a JORC Resource.

## Eldorado Copper Prospect

- **Location**

The Eldorado Copper Prospect is in the centre of EPM 26525 in the Myally Gap area within a fault-bound block (Figure A1-7) and lies within the 1:100,000 Myally (6859) geological series map. Eldorado is approximately 26km northeast of Mt Gordon Mine, 20km southwest of Myally Homestead, 9km east of Black Mountain Prospect and 3.5km southeast of Arya Prospect.

**Figure A1- 7: Location of Eldorado Prospect**



- **Previous Investigations**

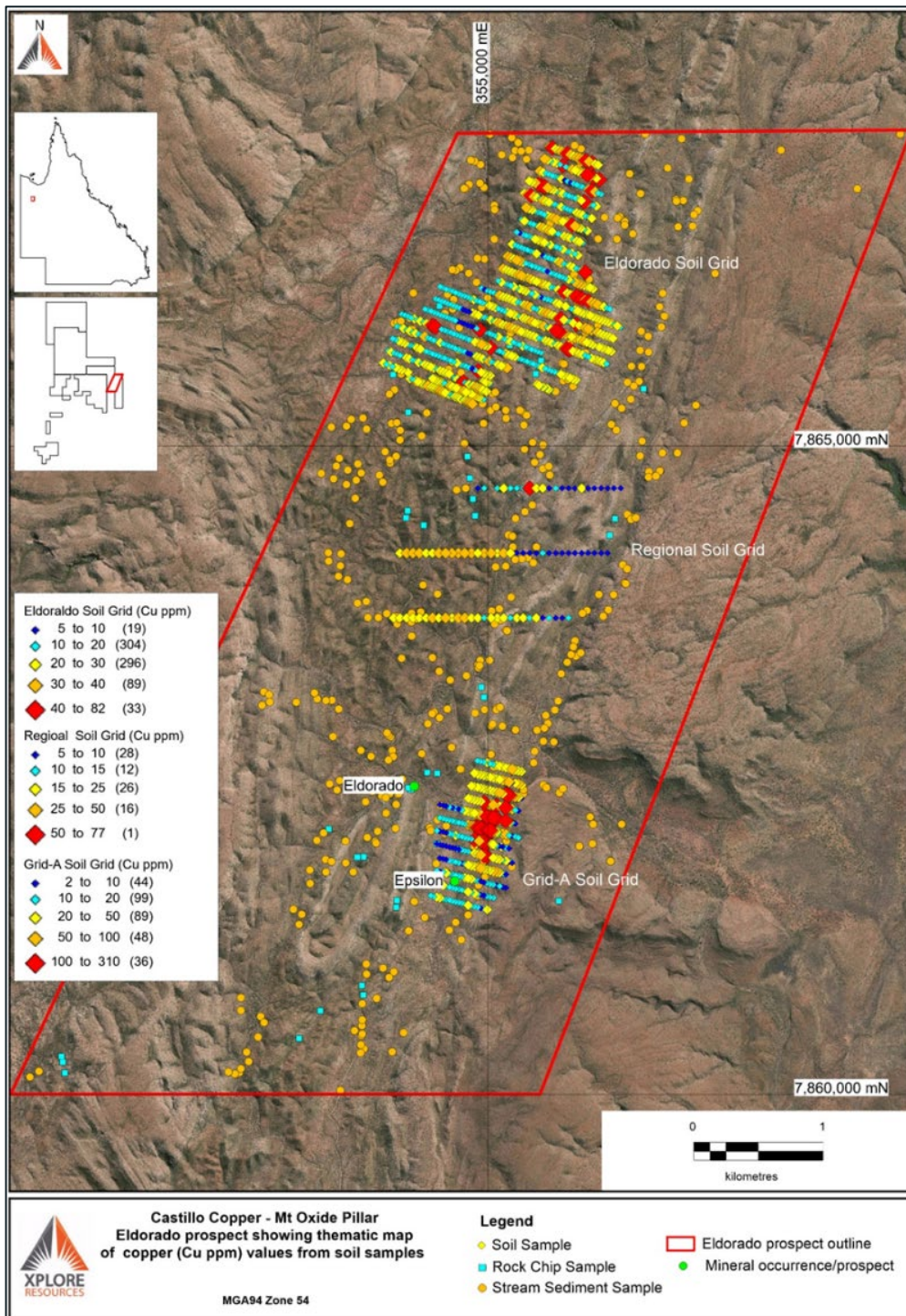
Pacminex Pty Limited collected three hundred and sixteen (316), minus 80 mesh (-80#) soil samples at 25m intervals along twelve (12) lines spaced 100m apart at the Grid-A (syncline) soil grid. The soil sampling identified anomalous values over a 200m by 500m area up to 310ppm Cu in the Pr<sub>A</sub> sandstone unit of the Surprise Creek Formation (Vicary, 1975). Rock chip samples were collected from areas of strong copper staining which returned anomalous copper values up to 5,400ppm in brecciated, copper-stained, micaceous sandstone (Vicary, 1975).

MIM collected seven hundred and forty-one (741), -80# soil samples from their Eldorado soil grid at either 12.5m or 25m intervals along twenty-two (22) grid lines that were spaced either 50m or 100m apart (Gregory, 1992d) (McGeough, 1993).

CRA Exploration Pty Limited collected eighty-four (84) samples from a three (3) line soil sampling program undertaken to determine the source of wide-spread low-order drainage copper anomalism sourced within catchments draining a north-easterly plunging anticline in rocks of the Surprise Creek Formation (Geary, 1996).

Overall, 1,144 historical soil samples (Figure A1-8) have been collected from the Eldorado Copper Prospect at three (3) separate localities.

**Figure A1- 8: Copper (Cu ppm) Values in Soil Samples at Eldorado Prospect**



Source: (Paull, 2020h)

- **Local Geology**

There is an abundance of feldspathic and quartz-rich sedimentary rocks, principally due to the dominance of outcropping units of the Myally Subgroup and Surprise Creek Formation. Finer-grained arenaceous siltstones, shales and rare carbonate facies are confined to the upper Quilalar Formation and lower Mount Isa Group sedimentary rocks. The four (4) formations of the Myally Subgroup; Alsace Quartzite, Bortala Formation, Whitworth Quartzite, and Lochness Formation consist of predominantly feldspathic and quartz-rich sandstones (Blake, 1987) but pelitic and dolomitic packages do exist, principally within the upper Lochness Formation (Wilson and Grimes, 1984). The Quilalar Formation differs from the underlying conformable to disconformable Myally Subgroup in that it has two (2) broad facies subdivisions - a lower sandstone sequence, and an upper carbonate-siltstone-sandstone sequence.

The Bigie Formation and Fiery Creek Volcanics are the oldest units in the area, and both are correlated with the Carters Bore Rhyolite elsewhere within the Mt Isa Inlier (Blake, 1987). The Bigie Formation's redbed sandstones, and the felsic and mafic lavas of the Fiery Creek Volcanics rarely outcrop and are disconformably overlain by the Surprise Creek Formation (Blake, 1987). The Surprise Creek Formation comprises an upward-fining package from basal pebble sandstone and sandstone to a sandstone-siltstone-shale sequence (Wilson & Grimes, 1984). Deformation of these Proterozoic sedimentary rocks have a strong northeast trend indicated by a dominance of northeast oriented faulting and both broad and tight fold patterns. Where encountered during reconnaissance field work, faulting is represented by either massive drusy quartz-filled dilatational zones, or thin zones of brittle fracturing and brecciation also with drusy quartz flooding. Development of fold related axial planar cleavage is observed to be dependent upon rock type and competency (McGeough, 1993).

- **Mineralisation**

This review of the historical surface geochemical sampling at the Eldorado Copper Prospect shows that there are several anomalous geochemical zones that could indicate the presence of stratabound copper and/or structurally controlled copper-gold mineralisation that have not been drill tested due to the rugged terrain and lack of access tracks. Significantly, the anomalous copper values may be linked with a major north-northeast trending fault.

- **Exploration Target**

The current study identified three (3) areas at Eldorado over which an Exploration Target<sup>6</sup> (to the standard of Clause 17 of the 2012 JORC Code) has been estimated from the available mining and surface sampling data available, as given in Tables A1- 6 and A1-7.

**Table A1- 4: Eldorado Prospect Exploration Target Data for Tonnage Estimate**

Target	Strike Length (m)		Width (m)		Depth below surface (m)		Density (Kg/m <sup>3</sup> )	
	Low	High	Low	High	Low	High	Low	High
Eldorado North and South	400	500	100	200	20	100	2.55	2.70

<sup>6</sup> It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

Note: at 0.2% Cu cut-off

**Table A1- 5: Eldorado Prospect Exploration Target for Copper**

Target	Tonnage (Mt)		Grade (%)		Contained Cu (t)	
	Low	High	Low	High	Low	High
Eldorado	3.0	13.3	0.3	0.6	9,000	79,800

Note: at 0.2% Cu cut-off

**• Recommendations**

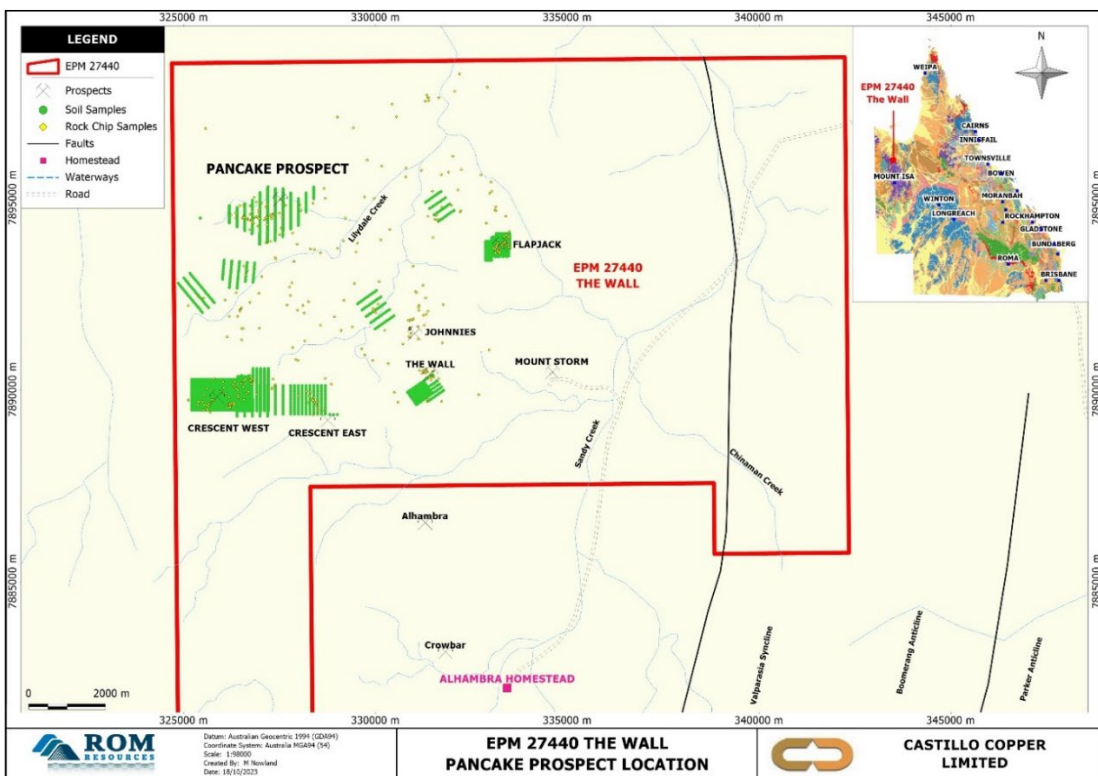
There are at least three (3) interpreted zones of anomalous copper and gold surface geochemistry that form the basis for this Exploration Target estimate and have been identified as priority targets for follow-up investigations, starting with appropriate ground geophysical surveys and surface mapping.

**Pancake Prospect**

**• Location**

The Pancake Copper-Lead-Zinc (Cu-Pb-Zn) Project is located within EPM 27440 (Figure A1-9), approximately 4km in from the top lefthand corner of the tenure boundary and west of Lilydale Creek. The prospect is also approximately 8km northwest of Mt Storm Prospect and 14km north-northwest of Alhambra Homestead.

**Figure A1- 9: Pancake Prospect Location**



**• Previous Investigations**

Complementing geochemical work, the previous holder (MIM Exploration) from the 1990s undertook an aerial GEOTEM geophysical survey which identified one (1) anomaly. In addition, a ground magnetics campaign highlighted two (2) anomalies that reconcile directly with assayed soil sample grids, which are potentially ready

targets for drill testing. The first comprised a shallow source adjacent to mapped north-west trending faults, with the other modelled as moderate depth source dipping to the east. The historical tenure holders completed significant programs of surface sampling which delivered high-grade assay results verifying Mt Isa style mineralisation including:

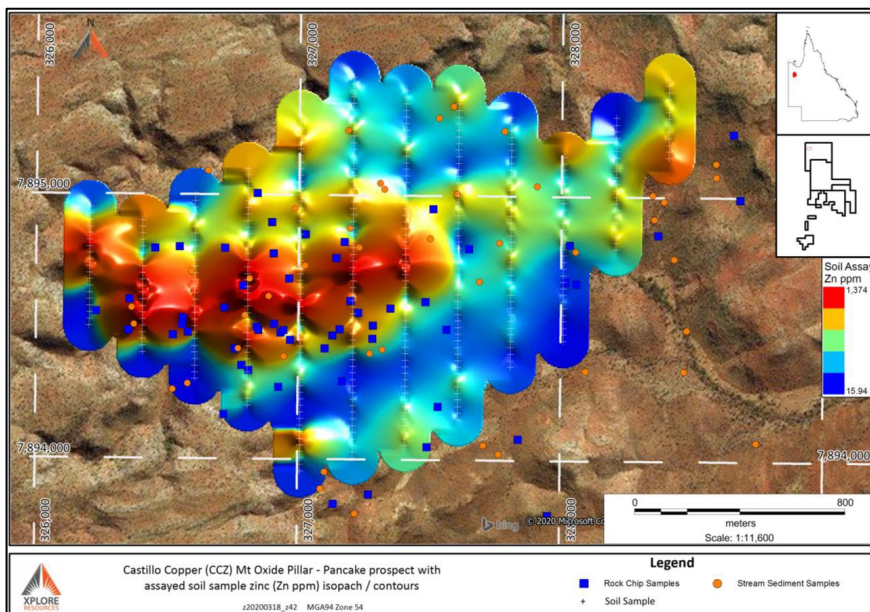
- Stream sediment: up to 60ppm Cu, 316ppm Pb & 1,370ppm Zn;
- Soil: up to 690ppm Cu, 1,320ppm Pb & 7,140ppm Zn; and
- Rock chips: up to 433ppm Cu, 1,320ppm Pb & 4,600ppm Zn.

They also embarked upon a small drilling program, and the best percussion drilling results were: 8m @ 1.73% Zn and 20m @ 0.4% Zn.

Analysing the historic geochemical data resulted in a sizeable (1,100m east west by 200m north south) zinc-lead-copper anomalous zone being defined. In turn, reconciling the geochemical findings with the geophysics results, has facilitated identifying preliminary targets to infill drill.

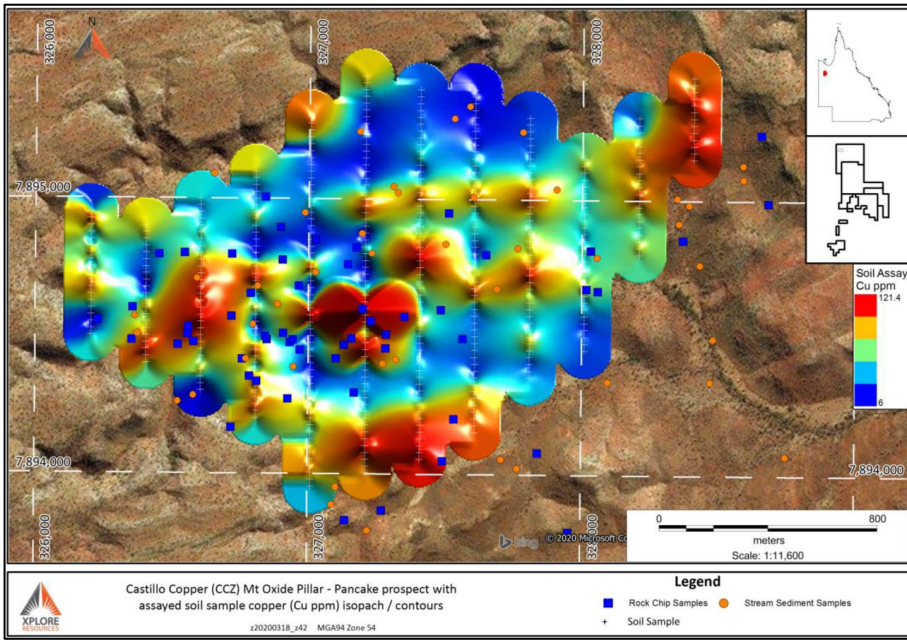
Among the historical reports it was observed there was a haematitic alteration within the Pancake Prospect, which is an indicative signature for IOCG potential. Figures A1-10 to A1-12 below are isopach contour maps for Pancake Prospect comprising zinc-copper-lead readings, in soils, which highlight the concentration and surface mineralisation.

**Figure A1- 10: Pancake Prospect Zinc Isopach Contours**



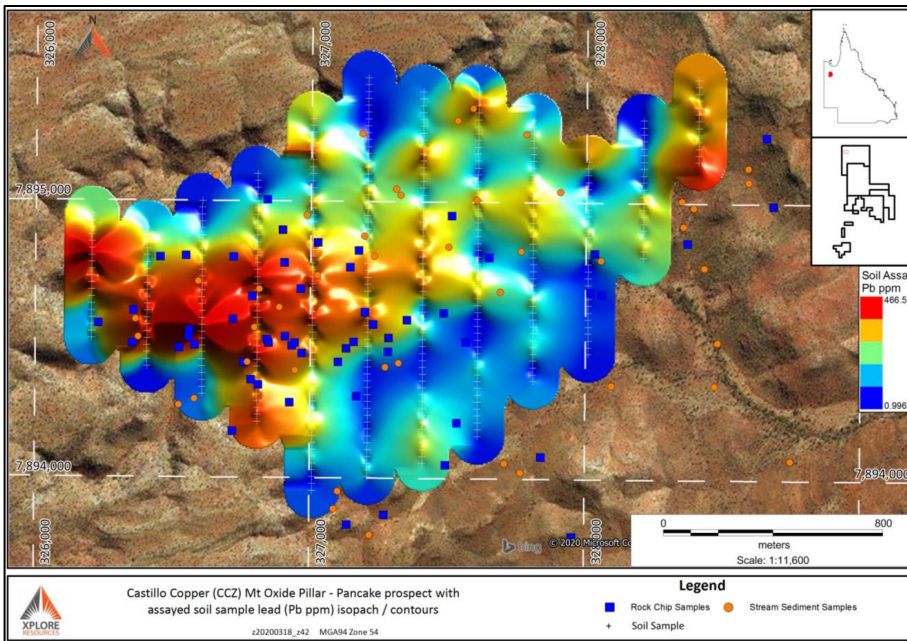
Source: (Paull, 2020b)

**Figure A1- 11: Pancake Prospect Copper Isopach Contours**



Source: (Paull, 2020b)

**Figure A1- 12: Pancake Prospect Lead Isopach Contours**



Source: (Paull, 2020b)

- **Local Geology**

The Pancake Prospect lies near the eastern margin of the Lawn Hill platform with most prominent feature is the Fiery Creek Fault juxtaposing the McNamara Group sedimentary rocks to the west against the Haslingdon Group sedimentary and volcanic rocks to the east.

The axis of the Mellish Park syncline folding McNamara Group rocks lies sub-parallel to the trend of the fault. The fault zone has numerous associated fault splays and sub-parallel fold zones. Abundant ring fracturing and small porphyry dykes are associated with the Weberra Granite to the immediate south.

- **Mineralisation**

The Pancake Prospect has Mt Isa style potential as soil samples defined along an east-west trending anomalous zone, circa 1,100m by 200m, delivered positive readings for zinc-lead-copper mineralisation. Moreover, the peak values for rock chips were 7,100ppm Zn, 2,000ppm Pb and 670ppm Cu from the Lochness Formation.

Incrementally, two (2) sub-surface anomalies were identified with ground geophysics that are priority targets not yet drilled.

- **Exploration Target**

An Exploration Target<sup>7</sup> (to the standard of Clause 17 of the 2012 JORC Code) has been estimated for several elements from the available geophysics and surface sampling data at Pancake. Details of the background data are documented in Tables A1-8, 9 and 10.

**Table A1- 6: Pancake Prospect Exploration Target Data for Tonnage Estimate**

Target	Strike Length (m)		Width (m)		Depth below surface (m)		Density (Kg/m <sup>3</sup> )	
Ranges	Low	High	Low	High	Low	High	Low	High
Pancake	110	800	100	200	20	100	2.55	2.75

**Table A1- 7: Pancake Prospect Exploration Target for Copper**

Target	Tonnage (Mt)		Grade Cu (%)		Contained Cu (t)	
Ranges	Low	High	Low	High	Low	High
Pancake	1	4.4	0.4	0.7	4,000	30,800

**Table A1- 8: Pancake Prospect Exploration Target for Zinc and Lead**

Target	Tonnage (Mt)		Grade Zn (%)		Grad Pb (%)	
Ranges	Low	High	Low	High	Low	High
Pancake	5	30	0.2	3.0	0.1	2.0

Note: at 0.5% Cu cut-off, 0.1 % Zn cut-off; and 0.1 % Pb cutoff.

- **Recommendation**

Recent interpretation from the geophysics and geochemistry delineated several anomalous areas which require a RC drilling campaign to assess the potential. It is recommended that prior to drilling a short field visit is required to firm up drillhole positions.

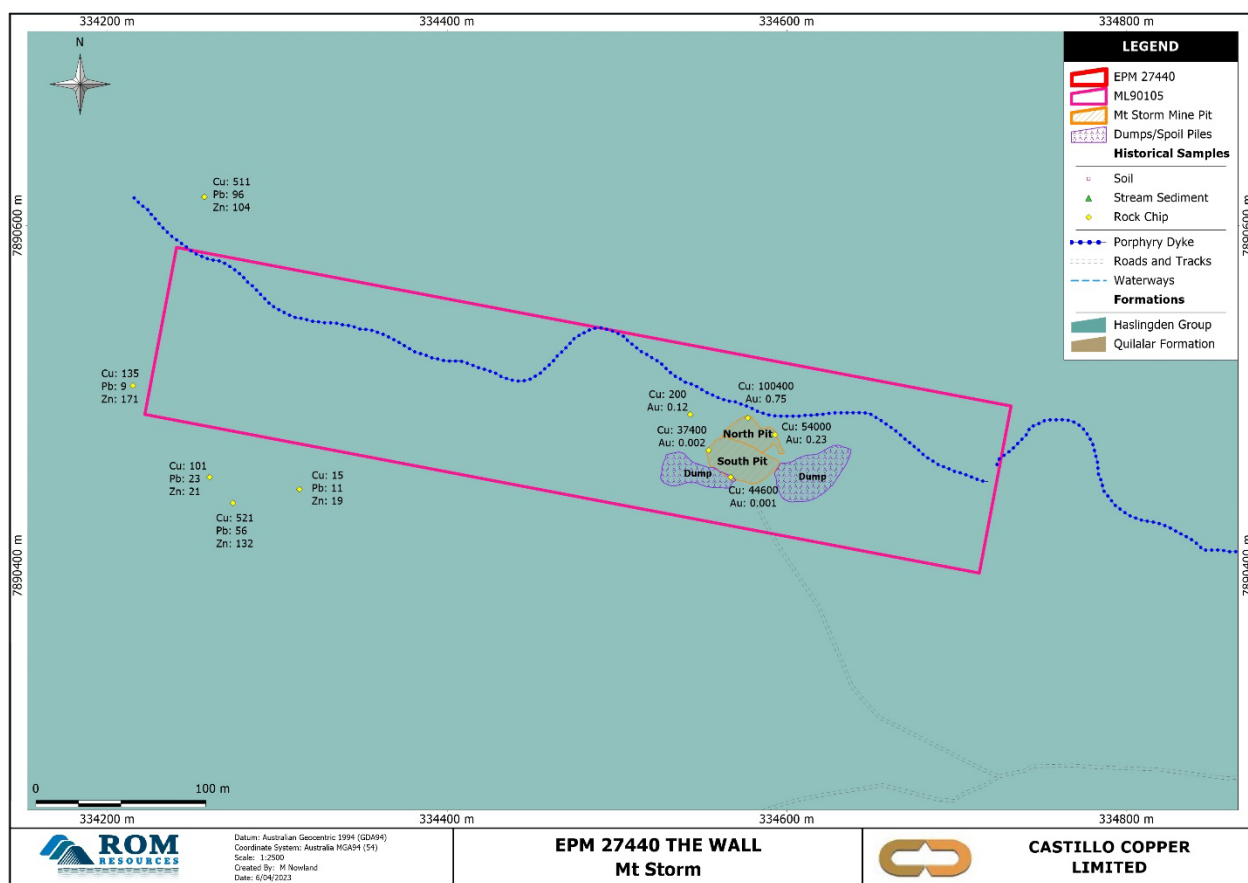
<sup>7</sup> It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

## Mount Storm Copper Prospect

### • Location

The Mt Storm deposits are located approximately 8km north of Alhambra Homestead which is circa 35km north of the closed Mt Oxide Copper Mine. The Mt Storm Copper Mine workings lie within EPM 27440 on a slightly elevated 700m long, 30m wide east-west ridge immediately south of an intrusive porphyry system. Two (2) small pits were excavated historically (Figure A1- 13) within the now lapsed ML 90105. The closed mine is about 8km north-northwest of Castillo's Big One Copper Mine and circa 2km east of the Johnnies Copper-Gold Prospect. The pits have aligned along a malachite vein system which strikes between 30° to 70° with steep dip towards the southwest.

Figure A1- 13: Mt Storm Location



### • Previous Investigations

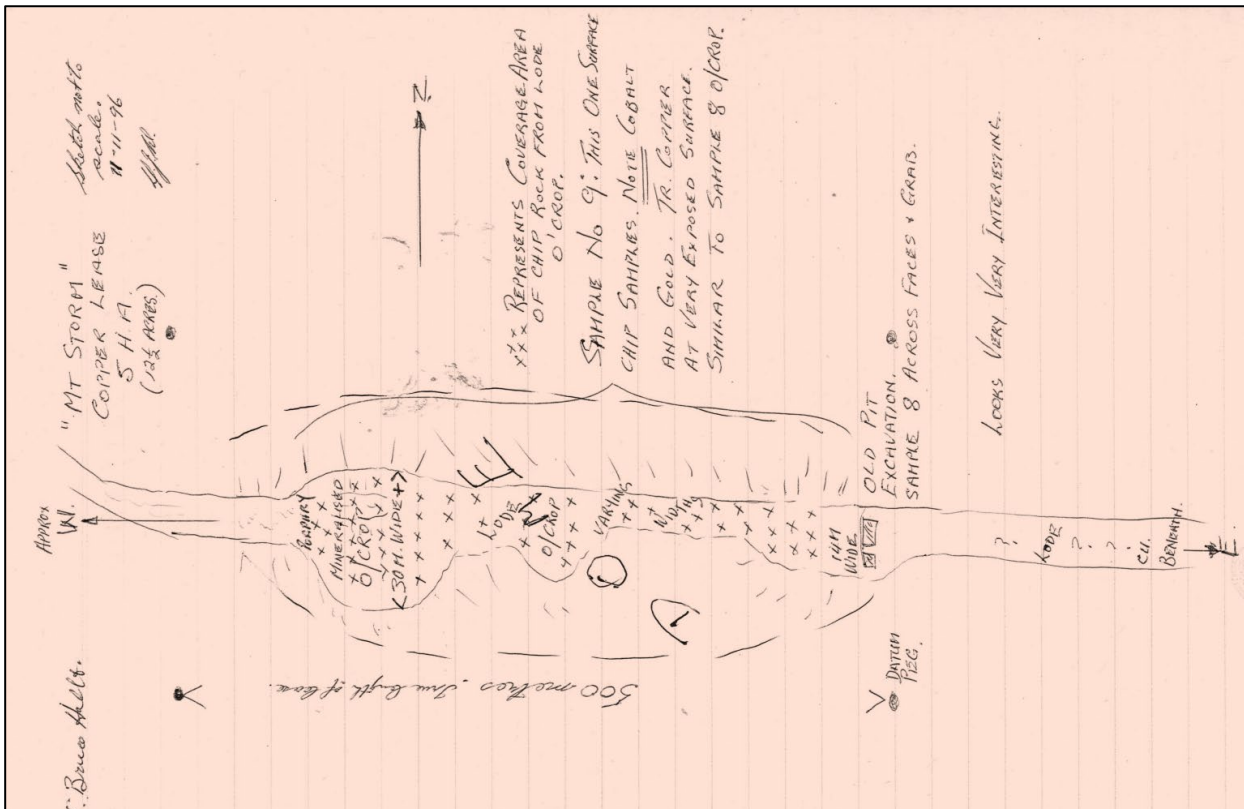
The original mining was undertaken in ML 5488 but appears to be located just outside the extents of that lease. Subsequent mining by Coffee Gold NL in the early 1990's was conducted within a much smaller mining lease ML 90105 (which was active from 1990 to 2011). The original 1970's pits were approximately 5m apart, with the southern pit being excavated to a depth of 0.6m and the northern pit excavated to circa 2m depth. Enlargement by Coffee Gold NL (Wilson 1996b) consumed the pits into a larger and deeper open cut. A total of 700t were extracted for a head grade of 7% Cu and then a later batch of 400t at 4.5% Cu (Wilson 1996a&b) (Csar, 1996). Today, the old workings (Figure A1- 14) lie within Morella Station and are held by New Frontier Minerals under EPM 27440.

Three (3) samples were taken (from the Mt Storm area: two in the south pit and one in the north pit (Csar, 1996). Sample #1 (4.46% Cu) was taken from the southern 2.8m of the west wall of the southern pit, Sample #2 (3.74%

Cu) was taken from the northern 1.4m of the western wall of the southern pit. Sample #3 (10.4% Cu) was taken across a 0.6m interval covering the western cherty vein containing malachite.

Earlier sampling and assaying by ALS Cloncurry (Wilson 1996b) found copper as high as 5.4% and 271 ppm cobalt in similar locations. No accurate sample coordinates were given by either author. Later rock chip sampling by Mt Isa Metals under EPM 16498 (Bowden, 2010) found copper as high as 521ppm, cobalt 519ppm and 750ppb gold away from the workings.

**Figure A1- 14: Sketch Map of Mt Storm Workings**





Source: Wilson 1996b

- **Local Geology**

The Mt Storm Copper Mine lies on the southern edge of a steeply dipping porphyry within siliceous, hard, haematitic, and red silty sandstones belonging to the Quilalar Formation. The porphyry strikes 288° magnetic and dips 80° to the south. From field mapping the dyke is >750m long (Csar, 1996).

The southern pit (Figure A1- 15) is 4.2m wide and contains bedding planes striking parallel to the porphyry but dipping 35° S. Rocks within the pit are pink to cream in colour, talc and weakly haematitic with minor malachite staining on oxidised surfaces, and malachite and azurite on bedding planes and joint faces. The malachite vein which the northern pit is based upon is poorly displayed in the southern pit.

The northern pit (Figure A1- 16) is an excavation approximately 2.7m wide containing joints and small-scale faults striking 30° magnetic and dipping 80° W. These structures are cherty and haematitic with visible malachite throughout. The westernmost structure in the pit appears to be the strongest mineralised structure and is 15cm wide. Malachite is visible throughout the pit on joint planes. Host sandstones with the excavation are haematitic and become more talcose toward the hanging wall of the structures (Csar 1996).

Figure A1- 15: Mt Storm Mining Operation	Figure A1- 16: Mt Storm Ex-Mine Stockpiles
	
Source: Wilson 1996b	Source: Wilson (1996a)

- **Mineralisation**

Copper-cobalt-gold mineralisation is structurally controlled along the porphyry dyke contact but there is no drilling to support deep downdip extensions. Field mapping and mining observe abundant copper carbonate mineralisation in haematitic altered low-grade metamorphic rocks.

- **Exploration Target**

An Exploration Target<sup>8</sup> (to the standard of Clause 17 of the 2012 JORC Code) has been estimated from the available mining and surface sampling data available, as given in Tables A1-11 and A1-12.

**Table A1- 9: Mt Storm Prospect Exploration Target Data for Tonnage Estimate**

Target	Strike Length (m)		Width (m)		Depth below surface (m)		Density (Kg/m <sup>3</sup> )	
	Low	High	Low	High	Low	High	Low	High
Mt Storm	1,000	2,900	5	15	10	60	2.60	2.75

*Note: at 0.5% Cu cut-off*

**Table A1- 10: Mt Storm Prospect Exploration Target for Copper**

Target	Tonnage (Mt)		Grade (%)		Contained Cu (t)	
	Low	High	Low	High	Low	High
Mt Storm	0.5	3.7	0.5	1.5	2,500	55,500

*Note: at 0.5% Cu cut-off*

<sup>8</sup> It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

- **Recommendations**

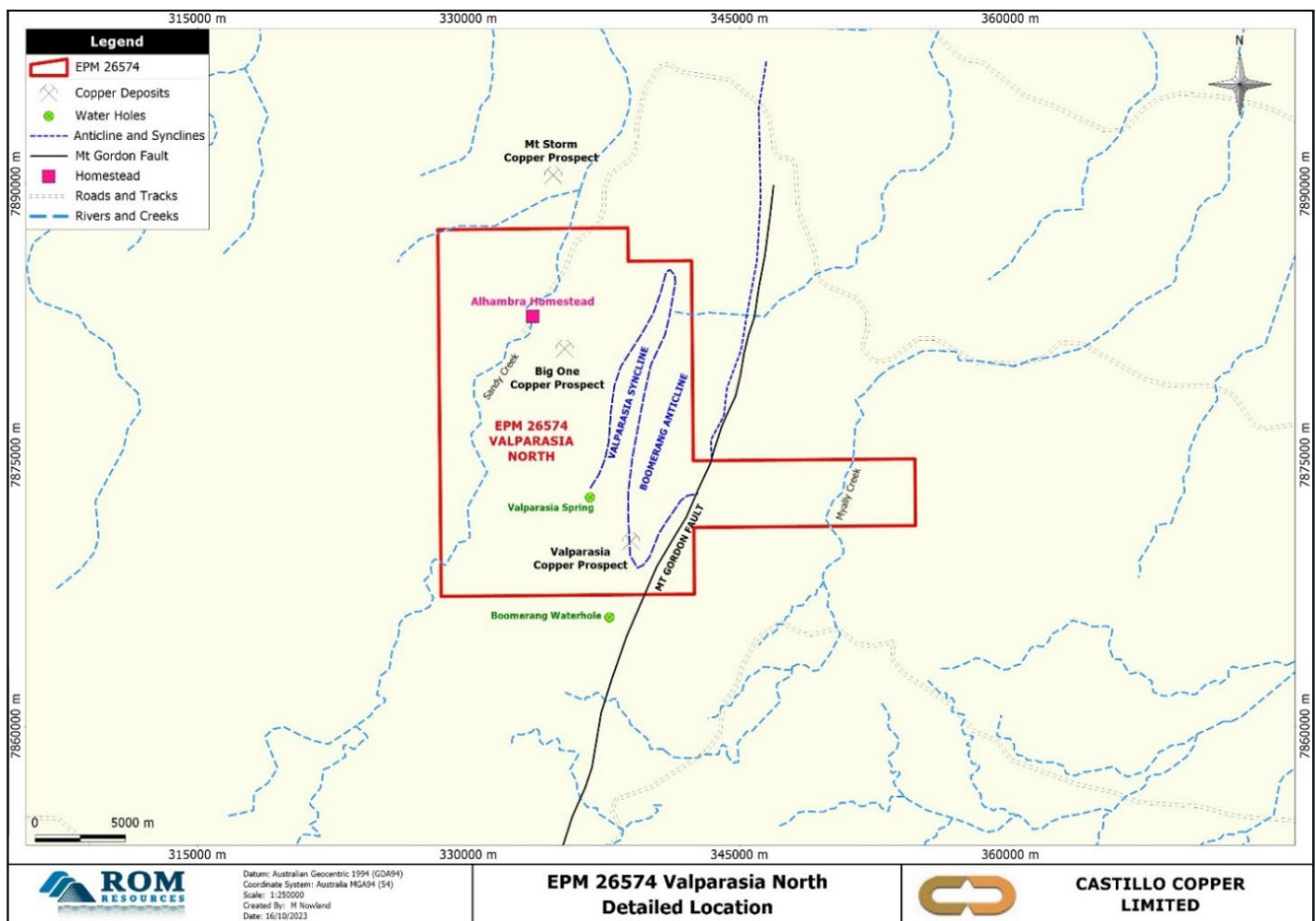
It is recommended that Mt Storm be subjected to a coordinated surface geological mapping and sampling program before any drilling commences to better understand the relationships between the porphyry and mineralisation.

## Valparaisa Copper Prospect

- **Location**

The Valparaisa Copper Prospect is located 500m north of the southern boundary of EPM 26574 (Figure A1- 17) just east of centre, approximately 3km northeast of Boomerang Waterhole and 3km southeast of Valparaisa Spring which the deposit is named after. The deposit is sited west of the Mt Gordon Fault close to the base of the Boomerang Anticline. Valparaisa Copper Prospect has a surface expression of a weak discontinuous copper staining over a strike length of about six (6) kilometres.

**Figure A1- 17: Valparaisa Copper Prospect Location**

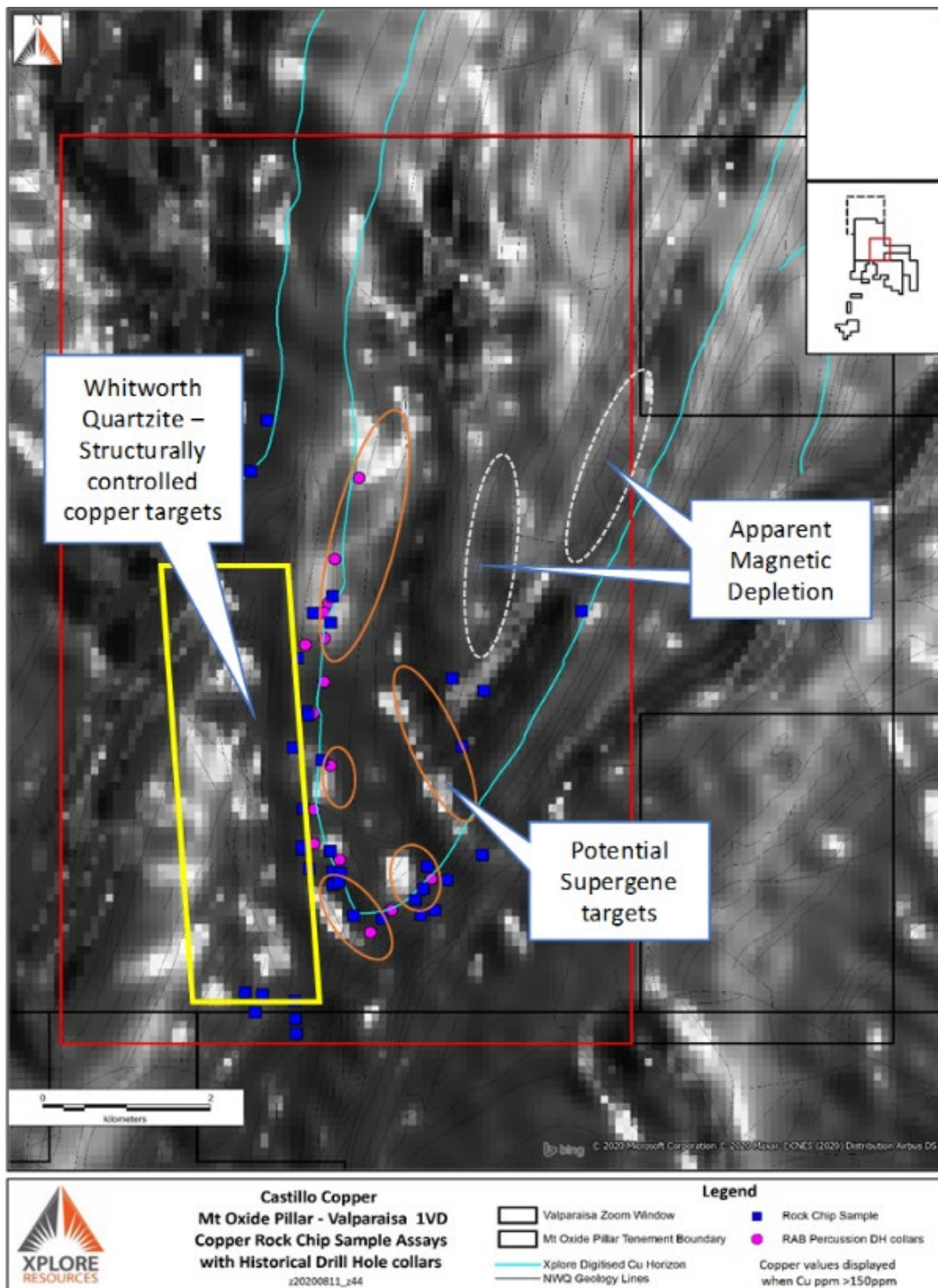


- **Previous Investigations**

Previous explorers, including BHP, undertook rock-chip sampling at the Valparaisa Copper Prospect which returned high-grade assayed results up to 2,530ppm Cu, demonstrating prospectivity at surface for copper mineralisation also linked to the interaction of two (2) intersecting faults, (the Mt Gordon (southwest (SW) to northeast (NE) and links to the Mt Mammoth Deposit) and Valparaisa (south southeast (SSE) to north northwest (NNW)) potentially forming a structurally controlled system. A key positive was identifying the Whitworth Quartzite rock formation (Figure A1- 18), which is present in the Valparaisa fault, as it hosts copper sulphide mineralisation within the Mt Gordon fault at the Mammoth and Esperanza deposits. There is several small

workings scattered across the Valparaisa prospect most notably Bluey's Find and Jersey's Find (Figure 19) that consist of shallow pits and trenches.

**Figure A1- 18: Structurally Controlled and Supergene Targets**

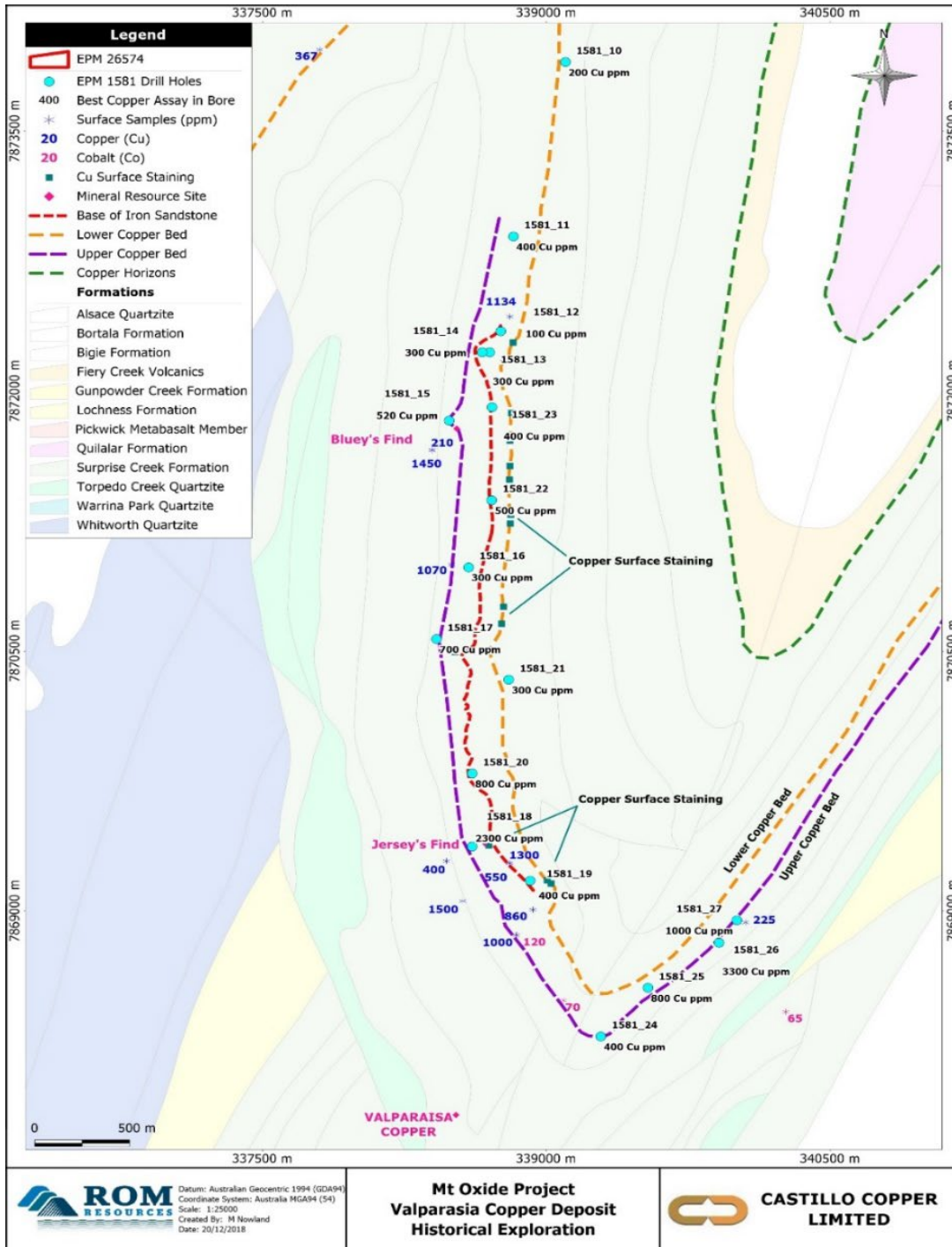


Source: (Paull, 2020g)

- **Local Geology**

The Valparaisa Copper Prospect consists of copper mineralisation in two (2) horizons (termed the “upper and lower copper beds”) within the Middle Gunpowder Creek Formation. The surface expression consists of a weak discontinuous copper staining over a 6km strike length. The surface sampling and drilling along these copper horizons are in Figure A1- 19.

**Figure A1- 19: Valparaisa Prospect Geology, Surface Samples and Drillholes**



Source: (Biggs & Nowland, 2019)

- **Mineralisation**

The “lower copper bed” has the stronger outcrop and shows more staining and is present at the Boomerang Copper Prospect, which was drilled by Dampier Mining. It is usually a bouldery outcropping ridge of brown,

medium-grained quartz sandstone often showing Liesegang banding and occasionally consists of 5-10 cm pyritic lenses. Historically, early rotary air blast (RAB) drilling in the region notoriously tended to smear copper mineralisation downhole which gave wider intersections of lower grades. Follow up RC drilling often showed narrower intercepts with higher grades. Mineralisation is dominated by copper carbonates (malachite and azurite) and phosphates (chrysocolla).

- **Exploration Target**

An Exploration Target<sup>9</sup> (to the standard of Clause 17 of the 2012 JORC Code) has been estimated from the available surface sampling data available of the Valparaisa Exploration, as given in Tables A1-13 and 14.

**Table A1- 11: Valparaisa Prospect Exploration Target Data for Tonnage Estimate**

Target	Strike (m)		Width (m)		Depth (m)		Density (Kg/m <sup>3</sup> )	
Ranges	Low	High	Low	High	Low	High	Low	High
Valparaisa	2,000	6,000	2	5	50	100	2.55	2.65

Note: Cut-off grade 0.2% Cu

**Table A1- 12: Valparaisa Prospect Exploration Target for Copper**

Target	Tonnage (Mt)		Grade (%)		Contained Cu (t)	
Ranges	Low	High	Low	High	Low	High
Valparaisa	1.3	3.5	0.2	0.5	2,600	17,500

Note: Cut-off grade 0.2% Cu

- **Recommendation**

It is recommended that a shallow RC drilling campaign of six (6) to eight (8) holes to be undertaken that targets mineralisation for Cu as well as Co, V and REE.

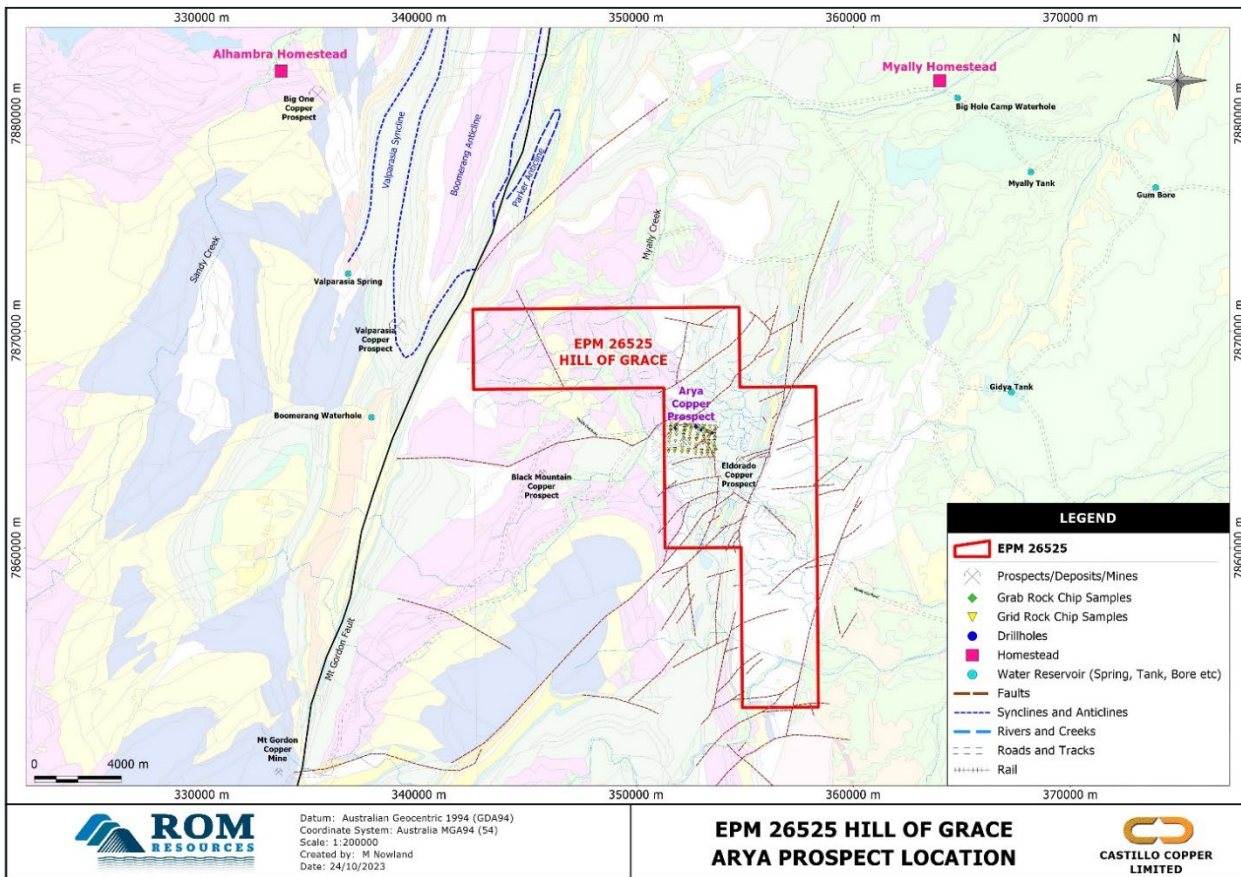
## Arya Prospect

- **Location**

The Arya Prospect is located near the northwestern boundary of the centre section of EPM 26525 in an area known for structurally controlled copper deposits (Figure A1- 20). It lies in the Myally Gap area within a fault-bound block and is approximately 3km northwest of Eldorado Prospect and 7km northeast of Black Mountain Prospect. It is also approximately 20km southwest of Myally Homestead, 25km southeast of Alhambra Homestead with the Myally Gap Road running east to west through the middle of the prospect.

<sup>9</sup> It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

**Figure A1- 20: Arya Prospect Location**



• **Previous Investigations**

The Arya Prospect was previously discovered by BHP in the mid-1990s and has been explored by MIM Exploration in the late 1990s. Previous investigations had identified anomalous surface sampling results for Cu, Co, Ag, and Zn.

The Arya Prospect is characterised by a strong airborne electromagnetic (AEM) anomaly that was originally identified by the 1997 Alsace/Epsilon BHP AEM survey (Lowe & Stewart, 1997). Further, the prospect is associated with a low-level aeromagnetic anomaly that is offset to the south and yet is not drill-tested. Originally several previous explorers had postulated either a pyrrhotite or magnetite association, associated with the iron-rich alteration noted with anomalous copper mineralisation.

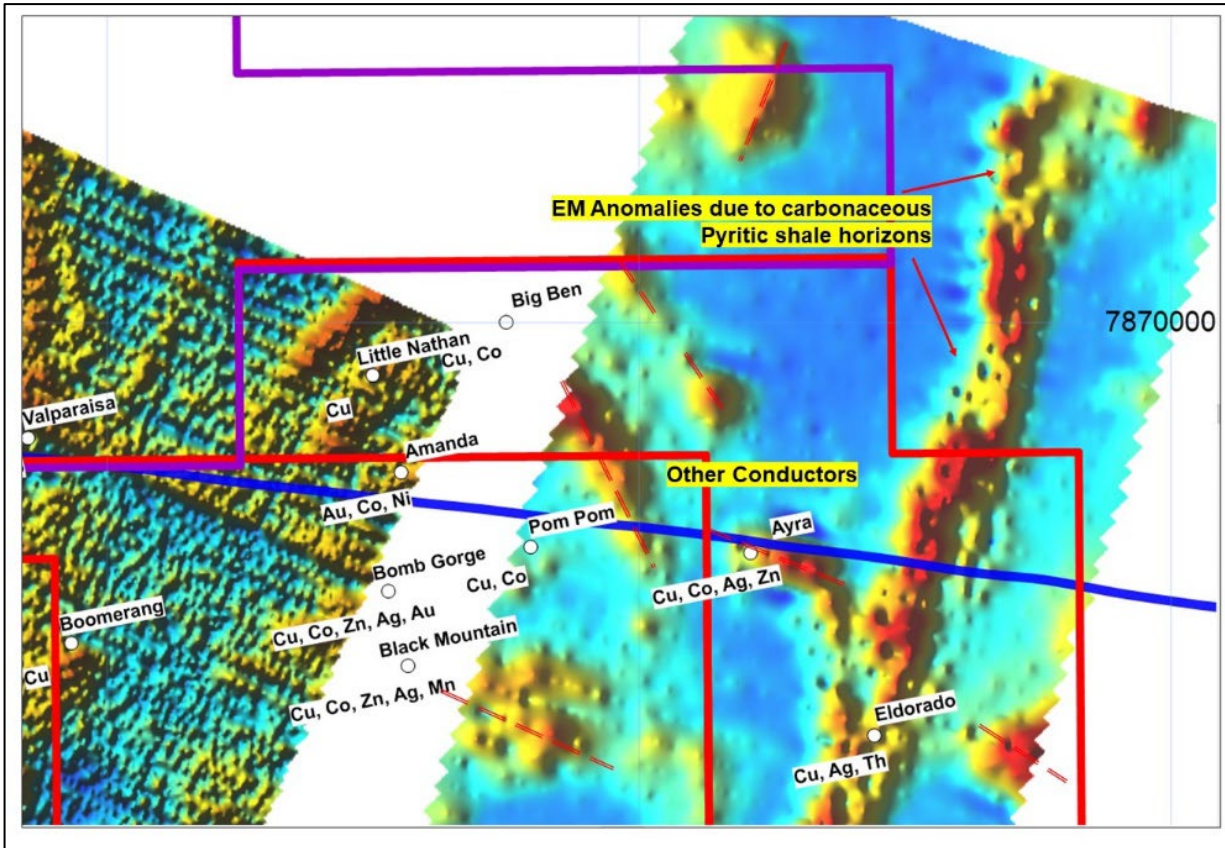
BHP classified the AEM a priority target and followed up with a ground survey which once interpreted, indicated that the target was at approximately 300m depth, with recommendation for drilling. Until Castillo Copper’s exploration program in 2021, no drilling or follow-up work was undertaken by either BHP or any exploration companies holding the ground since.

Further work by Castillo Copper (Biggs, 2021) on the Alsace EM survey identified some other prospective EM anomalies, not related to the general regional anomaly shown to the east in Figure A1- 21, that BHP (and later MIM) attributed to steeply dipping thick carbonaceous, pyritic shales in an otherwise typical sequence of laminated micaceous siltstones, shales, and dolomitic sandstones of the middle Surprise Creek Formation.

In March 2019, Geoscience Australia released the results of an AEM survey which identified the anomaly (Figure A1-22), within the Arya Prospect. Reconciling this finding with earlier work undertaken by BHP in 1997, which originally discovered the anomaly via an AEM survey, theorised that it was a sizeable, massive sulphide bedrock conductor. This interpretation was made after assayed rock chips at surface, up to 1.84% Cu, were interpreted as up-dip extensions to the main sulphide body that correlated with the bedrock conductor. BHP noted that the

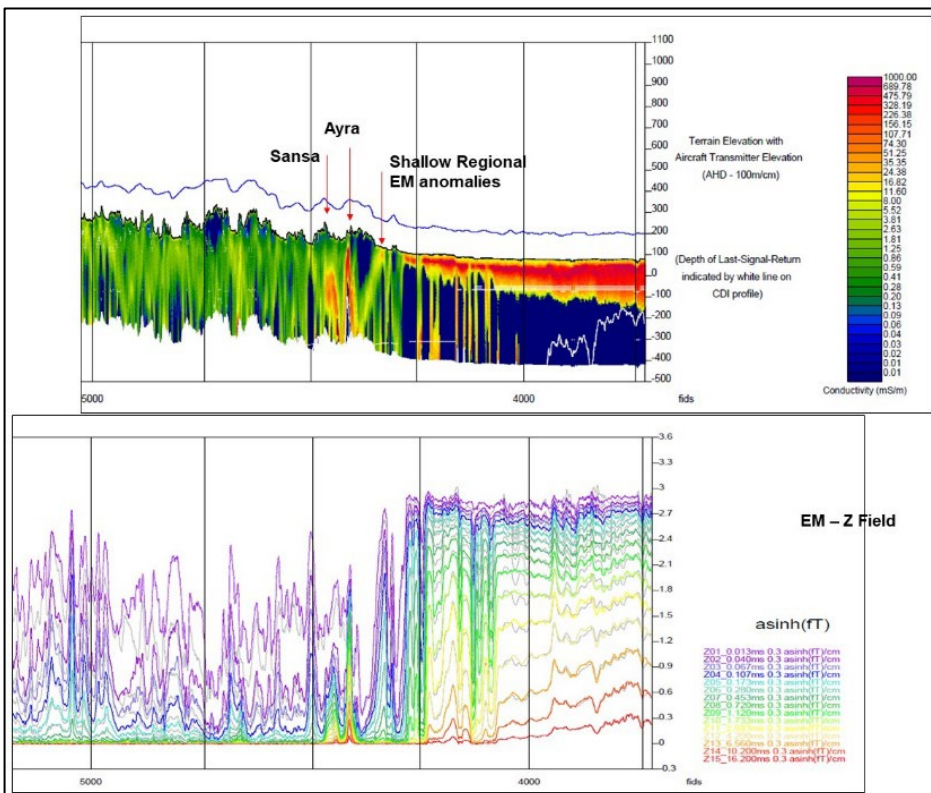
Arya Prospect was prospective for IOCG mineralisation and recommended follow-up drilling. However, this never materialised, likely due a base-metal down-turn in the late 1990's.

Figure A1-21: Copper Geochemistry on BHP AEM Channel 5z Image



Note: Thick blue line is part of the AusAEM Profile L2023003

Figure A1- 22: Arya Prospect AUSAEM Z Profile



- **Local Geology**

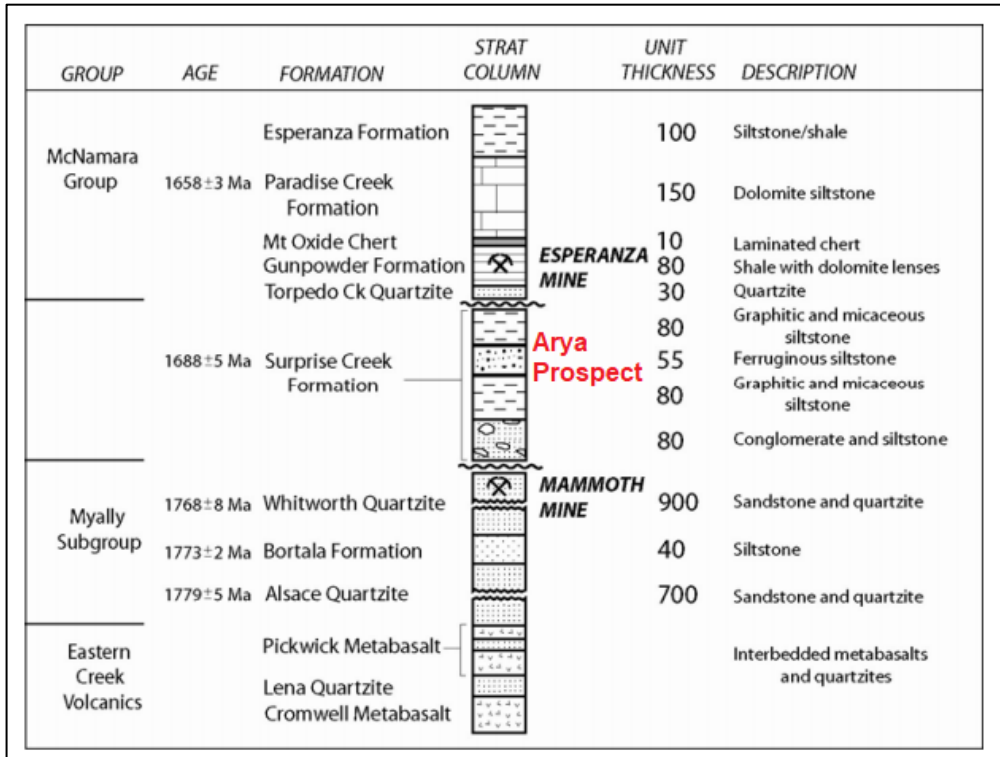
The Arya Prospect is located within the Surprise Creek Formation (Figure A1- 23) unit (Prd), with several rock descriptions from rock chip sampling indicating an epigenetic, structural origin for the anomalous copper values (Figure A1- 24). Moreover, the Prospect is proximal to an east to north-east trending fault that offsets the Surprise Creek unit Prd from lower units near the base of the Surprise Creek Formation, and Myally Sub-Group units, including quartzites, and sandstones. Probable mineralisation styles include:

- Supergene mineralisation forming at the surface along the fault, fault breccia, and the Surprise Creek Formation (PLrd) rock unit.
- Epigenetic replacement mineralisation for Cu (with minor components of other base metals and gold) from replacement carbonate mineralisation, particularly the Surprise Creek Formation.
- Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Surprise Creek Formation.
- Sulphide mineralisation within breccia zones, along stress dilation fractures, emplaced within pore spaces, voids, or in other rock fractures; and/or dykes.

Main ore minerals noted have been:

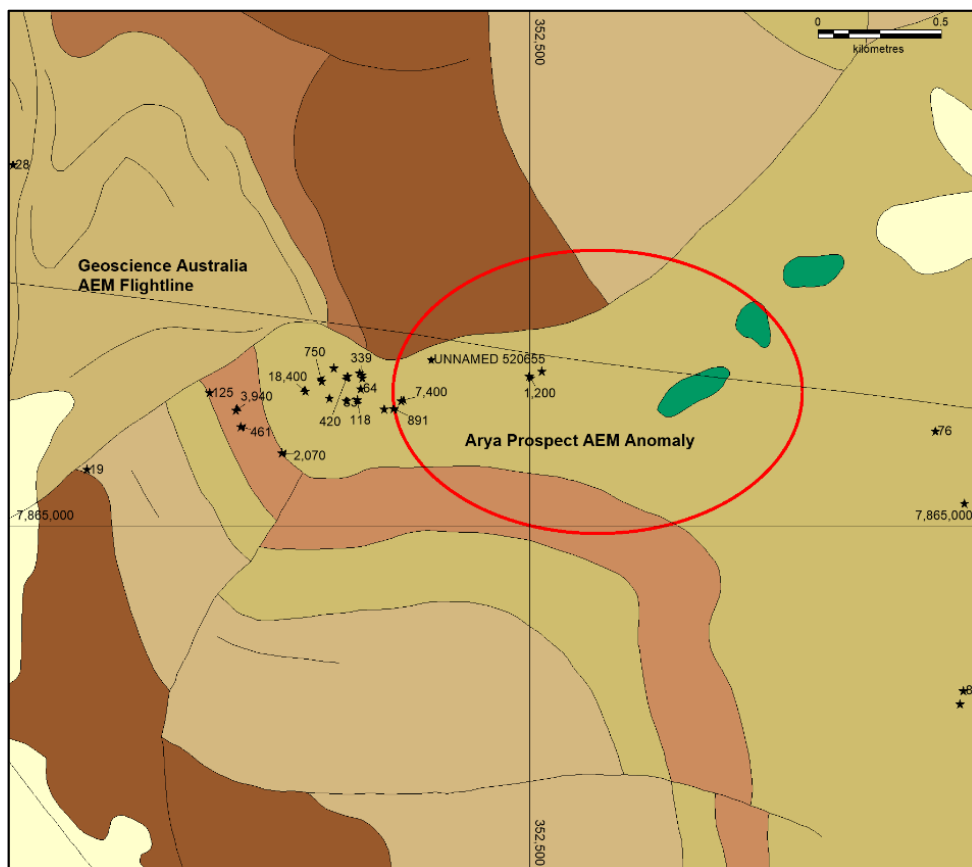
- Malachite and chrysocolla along foliation, in brecciated/strongly haematitic sedimentary rocks.
- Quartzite/rhyolite with chrysocolla on joint surfaces and fractures, approx. 3-5% Copper.
- Malachite and azurite on joint planes in porous sandstone.

**Figure A1- 23: Stratigraphic Column**



Source: Smith (2019)

Figure A1- 24: Copper Geochemistry at Arya Prospect



Source: Smith (2019)

- **Mineralisation**

A small drilling campaign to test several large Airborne EM and ground resistivity anomalies at the Arya Prospect, ran from early October to December 2021. The assays confirmed a low-grade graphite system that warrants no further work.

However, a sizeable magnetic anomaly south of the known electromagnetic anomalies could be associated with known surface copper and to a lesser degree silver mineralisation. This should be drill-tested as this may be a primary source of base metal mineralisation at the Arya Prospect.

Secondary copper staining was observed along bedding planes within occasionally quartz-veined and variably ferruginous medium-grained bedded sandstones of the Surprise Creek Formation. Copper concentration appears greatest at the intersection, and adjacent to, a major east-west fault and a smaller north-south trending fault.

It was originally interpreted that the AEM anomaly was a down plunge extension of brecciated copper mineralisation currently identified at surface. Rock chips up to 1.84% copper (Table A1-17) exist in interpreted up dip extensions of the main sulphide body representing a structurally controlled copper deposit (Figures A1-25 to 27); display contoured stream sediment, soil, and rock chip samples, respectively).

Figure A1- 25: Stream Sediment Samples - Copper (ppm)

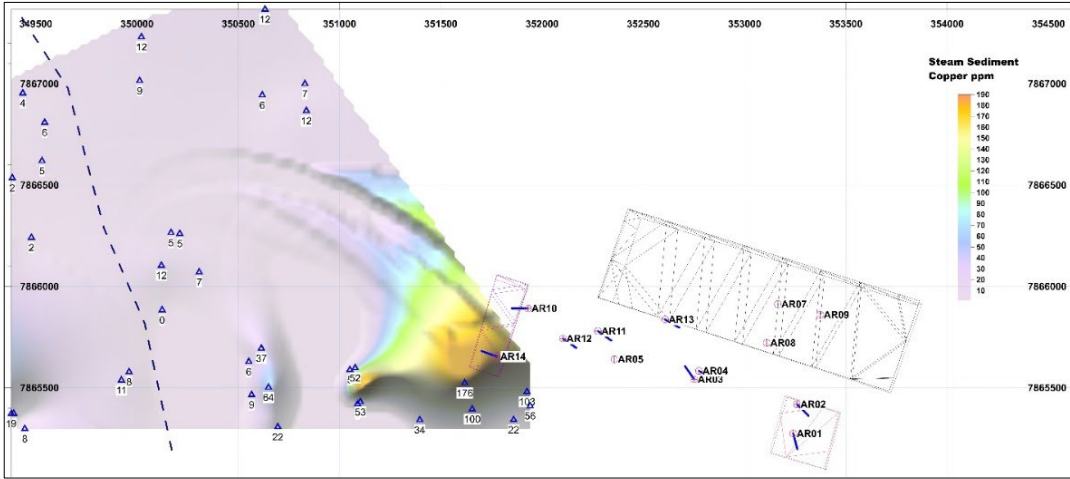


Figure A1- 26: Soil Samples - Copper (ppm)

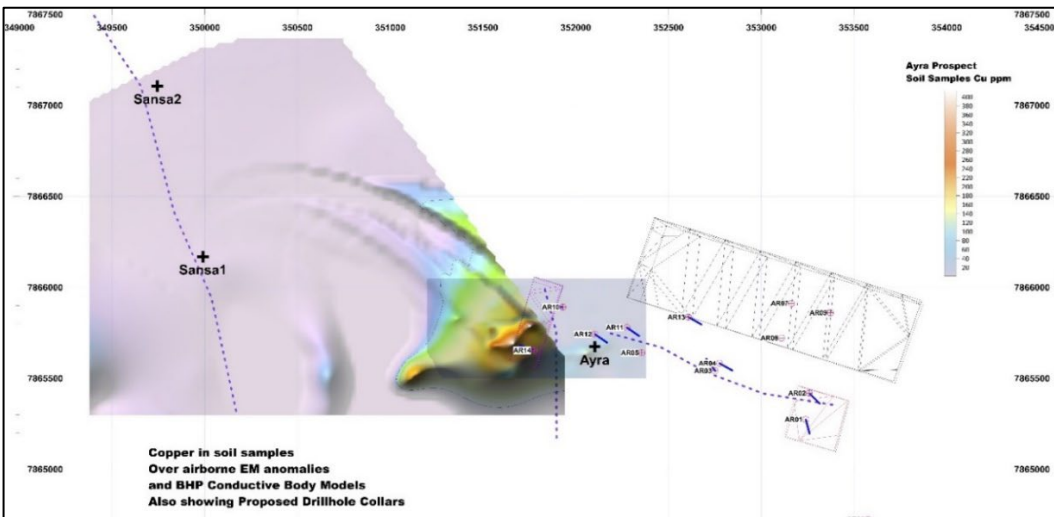


Figure A1- 27: Rock Chip Samples - Copper (ppm)

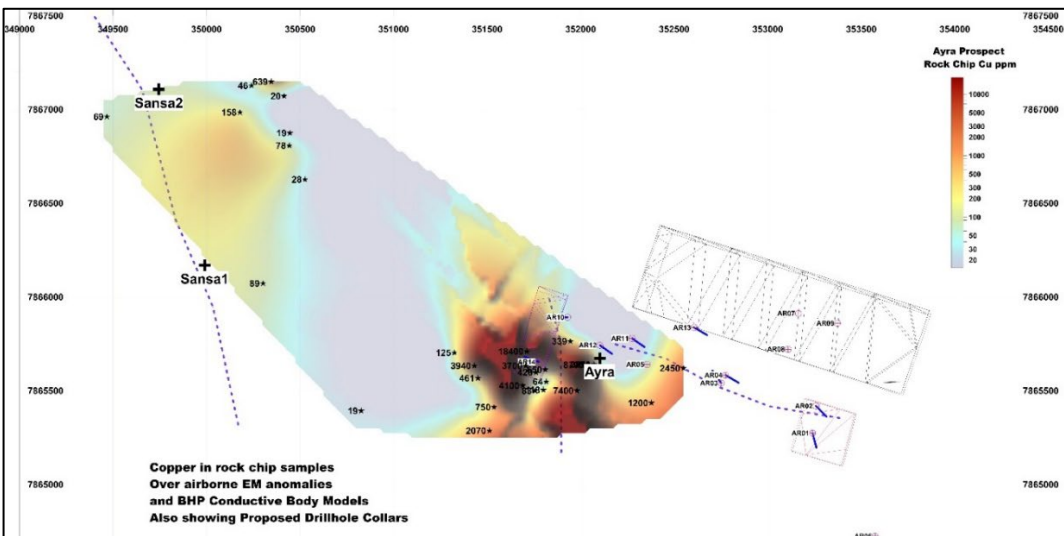


Table A1-15 documents the summary statistics (Paull, 2020e) for the rock chips samples for the relevant analysis, shown Figures A1-25 to 27 above.

**Table A1- 13: Statistical Summary of Assayed Rock Chip Samples**

Descriptor:	Cu (ppm)	Pb (ppm)	Zn (ppm)	Au (ppb)
Minimum	64	1.5	1	0.5
Maximum	18400	300	200	15.0
Average	2930.6	35.4	41.6	6.3
Std. Dev.	4382.3	74.9	50.9	4.6
Count	20	15	20	13

- Note:
1. Twenty (20) rock chip samples were collected over the "Arya" prospect.
  2. Four (4) rock chip samples in the "Arya" prospect did not appear to be tested for Gold (Au ppb).
  3. Three (3) rock chip samples in the "Arya" prospect were 'Below Detectable Limit' for Gold (Au ppb).
  4. Five (5) rock chip samples in the "Arya" prospect were 'Below Detectable Limit' for Lead (Pb ppm).

- **Exploration Targets**

Based on the available drilling and surface sampling, sufficient data is available that an Exploration Target<sup>10</sup> (to the standard of Clause 17 of the 2012 JORC Code) has been estimated. Details of the background data are given in Table A1-16 and the estimates documented in Tables A1-17 and 18. The location of the ET Masks and recently completed drilling is given in Figures A1-28 and 29.

**Table A1- 14: Arya Prospect Exploration Target Data for Tonnage Estimates**

Target	Strike Length (m)		Width (m)		Depth below surface (m)		Density (Kg/m <sup>3</sup> )	
	Low	High	Low	High	Low	High	Low	High
Arya Copper	600	1,200	3	10	10	60	2.60	2.70
Arya Graphite	1,600	2,500	50	80	40	400	1.80	2.10

<sup>10</sup> It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

Table A1- 15: Arya Prospect Exploration Target for Copper

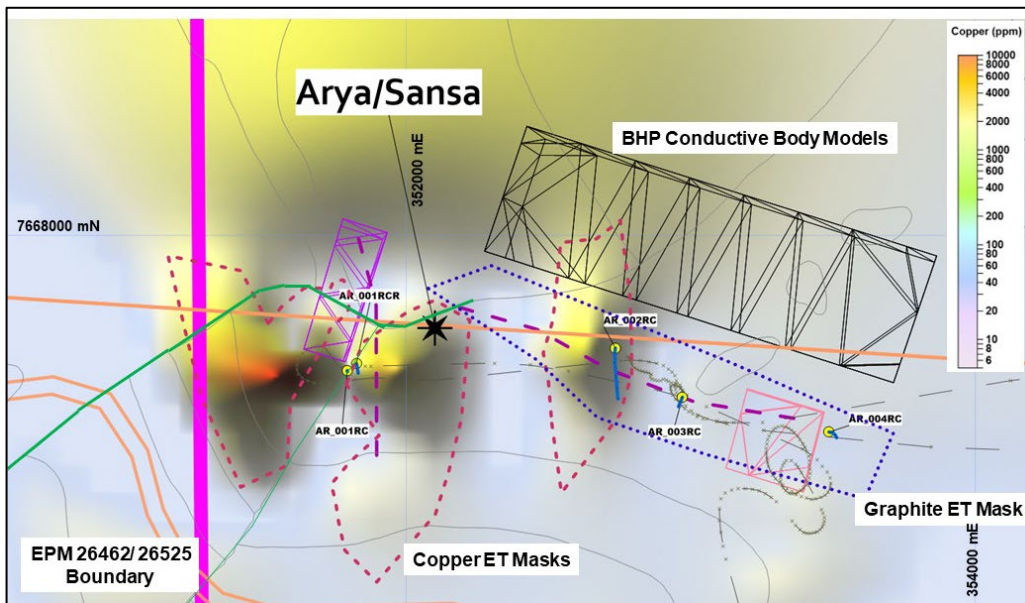
Target	Tonnage (Mt)		Grade (%)		Contained Cu (t)	
	Low	High	Low	High	Low	High
Arya	0.3	1.8	0.5	0.9	1,500	16,200

Table A1- 16: Arya Prospect Exploration Target for Graphite

Target	Tonnage (Mt)		Grade (%)		Contained Cg (t)	
	Low	High	Low	High	Low	High
Arya	6	168	0.5	2.0	30,000	3,360,000

Note: at 0.5% Cu and Cg cut-off. Preliminary metallurgy testing (Schultz and others 2022) suggests that Graphite flake size would all be characterized as “amorphous”.

Figure A1-28: Arya Prospect – Location of ET Masks



Note: Coordinate system is GDA94 Zone 54S

Figure A1- 29: Arya Drillhole Location and Graphite Intersections



## Notes:

1. 3D View at Arya looking north-east, showing topography (2m contours) and drilling.
2. Coloured bars represent Cg >0.5%, with purple higher grade (>1% TGC).
3. Light green polygons (see Figure 32) present surface copper anomalies (>250ppm Cu) untested by drilling.

### • Recommendations

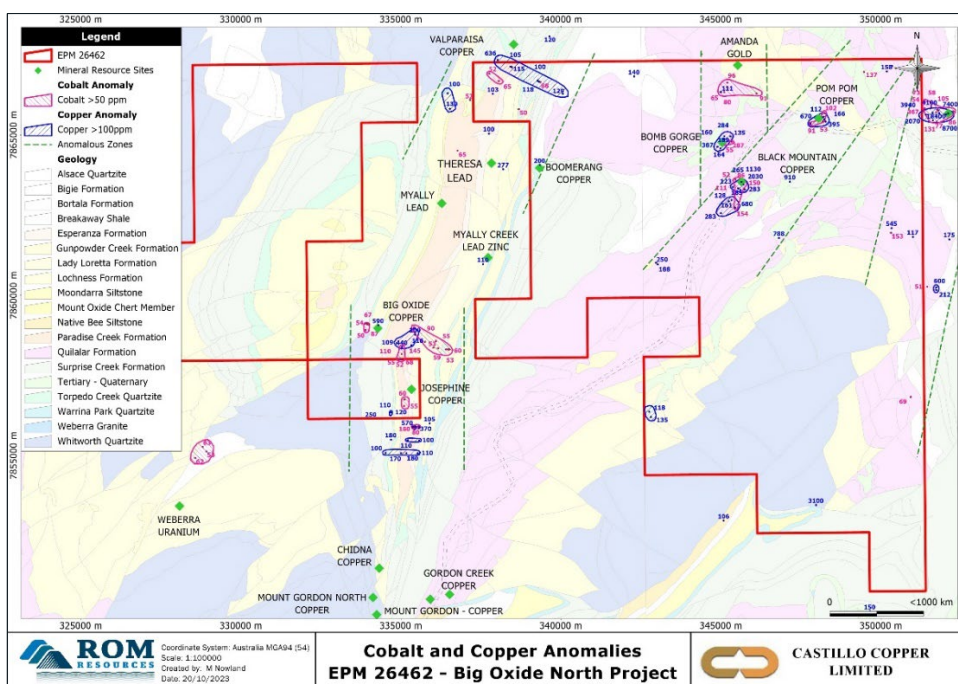
It is recommended the Arya Prospect be subjected to further grid-based surface geological mapping and sampling before any further drilling commences to better understand the relationships between the local structure and mineralisation. In addition, a ground magnetic, gravity, or resistivity survey with a 100m line spacing is recommended. Based on this work the next phase of drilling should complete testing the magnetic anomaly south of the known electromagnetic anomalies, which maybe the source of the surface anomalous copper.

## Black Mountain Copper Prospect

### • Location

Black Mountain is in the north-east of EPM 26462 near Bomb Gorge and Pom Pom Prospects (Figure 30) on the 1:100,000 Myally (6859) geological series map. Although in proximity (<3km) to these two (2) prospects, this assessment was only focussed on Black Mountain.

**Figure A1-30: Black Mountain Prospect Location**



### • Previous Investigations

Historical mining was minimal with the Queensland Geological Survey field mapping recording a single 2m long by 2m wide by 1m deep pit at the site. Historical explorers (notably BHP and MIM) completed several campaigns of surface sampling and ground geophysical surveys, and through analysis of the uranium - manganese anomalies, the Black Mountain Copper Prospect suggested leaching from a Cretaceous sandstone cap rock.

Many outcropping copper-gold-cobalt occurrences have been noted within the project area by historical explorers. MIM explored the Black Mountain prospect area in 1990 for significant base metal or gold deposits. Exploration revealed the presence of favourable host rocks and structural complexity and an opportunity to apply the BCL geochemical analysis technique which was scarce in the region at that time. The principal survey undertaken was a helicopter-assisted drainage sampling programme, followed by drainage sampling and rock chip sampling of the defined anomalies. The final phase involved the gridding and soil sampling of selected anomalous areas.

Reconnaissance rock chip sampling completed by Castillo Copper Limited at the Black Mountain Copper Prospect in November 2021 also returned anomalous copper from the ferromanganiferous altered sandstone outcrop.

- **Local Geology**

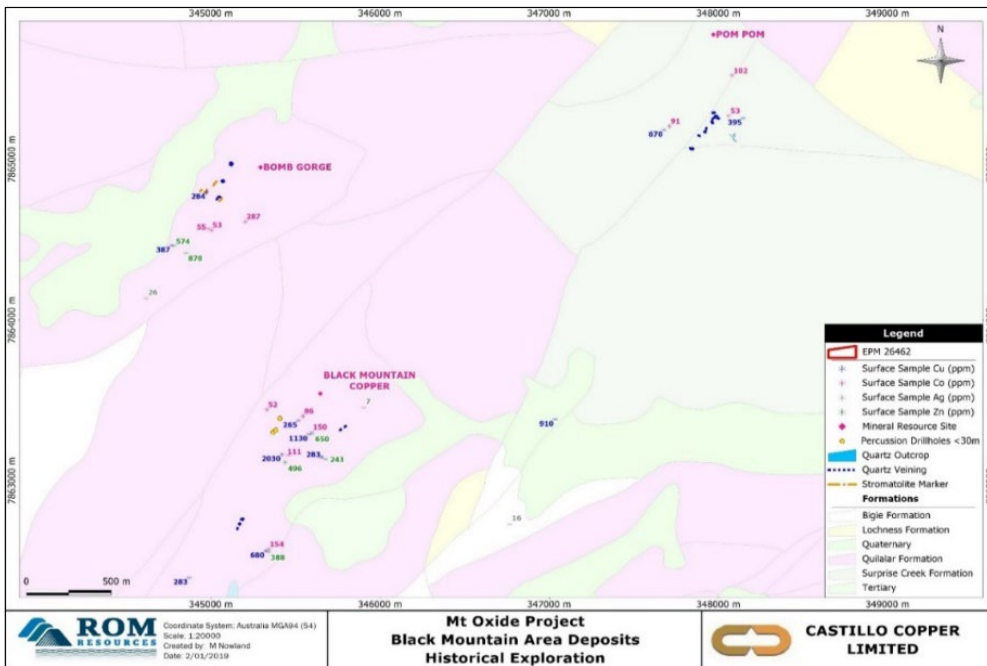
The Black Mountain prospect is situated within a north-east trending thin linear belt of the Quilalar Formation sedimentary rocks proximal to a north-east trending fault. It lies in a shallow to flat lying draping Mesozoic cap which is ferromanganiferous sandstone to sandy grit, massive strongly leached ferruginous siltstone, which is variably silicified with thin to thick planar massive bedding. Mapping identified orangey tan to light brown medium coarse grained moderate to thick planar bedded calcareous sandstone, moderate to strongly leached with 1-5% open vughs. Purple, brown to grey partially leached thin planar bedded dolomitic siltstone to sandy dolomitic siltstone. Lastly, common fining upward beds internally, variable convoluted sandy beds, grading into laminated to massive siltstone beds, with a 1% trace of coarse-grained pyrite present.

#### Mineralisation

The Black Mountain Copper Prospect is a copper anomaly from drainage sampling and was mapped as a uranium-manganese prospect by government geologists. It was defined by six (6) drainage samples elevated in copper and from visual observation of outcropping ferruginous material.

Pace and compass mapping and soil sampling consisted of five (5) lines covering a 900 by 900 metre area. A total of sixty-seven (67) soil samples (-180 um) were collected for 3.1-line kilometres of gridding. Analyses for base metals, gold and uranium returned only seven (7) values >100ppm Cu. Geological analysis of the assay results suggests that the copper is being concentrated at locations of pervasive silicification and strong ferromanganiferous grit development. Figure A1-31 shows the locations of the three (3) drill holes and highlights quartz veining in the region. No testing for cobalt or REE elements was undertaken on the RAB samples. Unfortunately, the samples are not held in the GSQ Core Library so cannot be retested. This region is a good target as sixteen (16) anomalous values have been identified, of which six (6) are copper >200 ppm, five are cobalt >50 ppm, five are zinc >200 ppm, and there is anomalous silver.

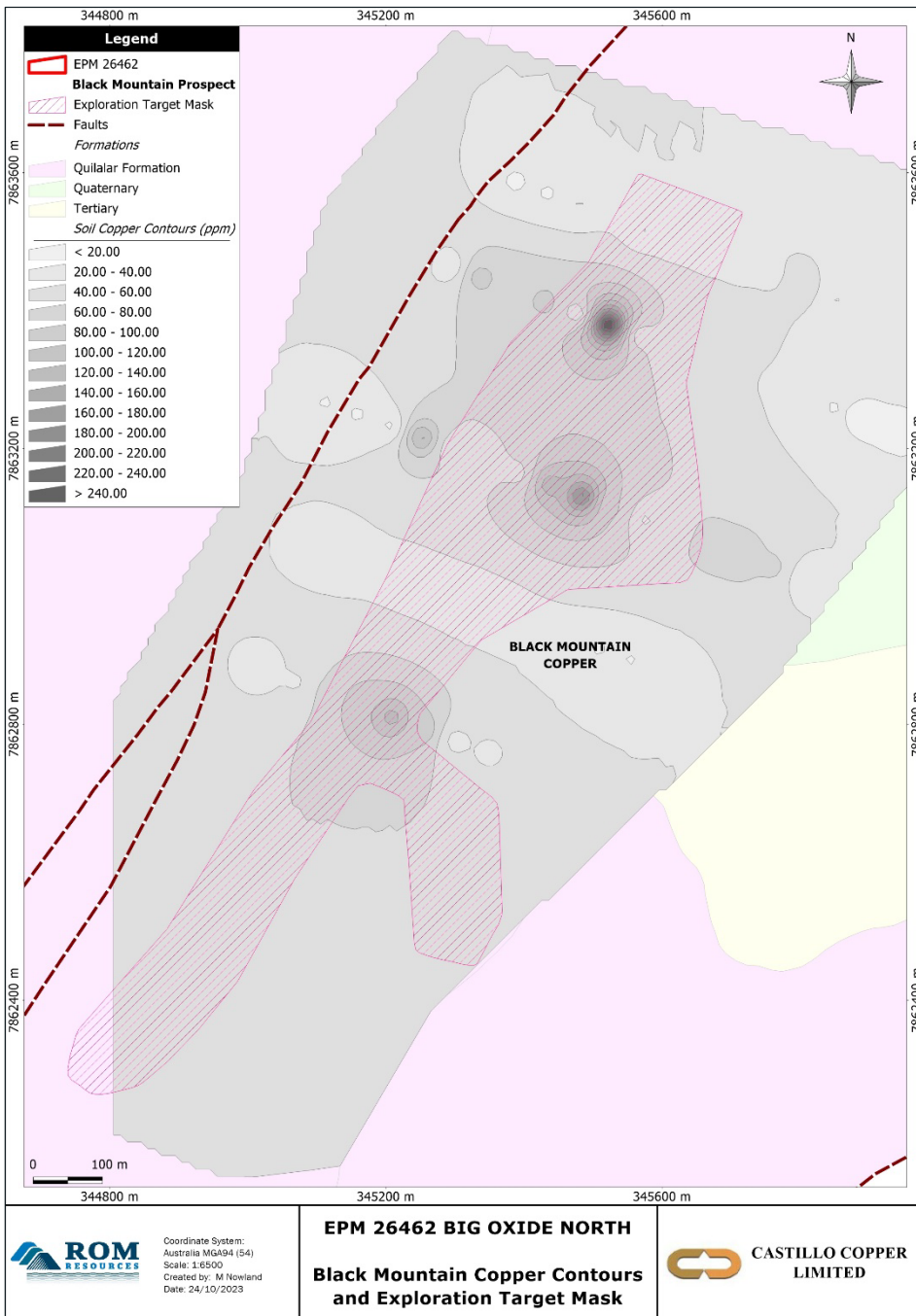
**Figure A1-31: Black Mountain Anomalous Surface Samples**



Source: (Biggs & Nowland, 2019)

Black Mountain is proposed as a structurally controlled copper deposit that has been overprinted with manganese-rich secondary enrichment from outlier Eromanga Basin sandstone outcrops that have leached down from a series of low hills. Further exploration is required to tighten the preliminary target area shown in Figure A1- 32. Minor occurrences of copper mineralisation are also reported from the Whitworth and Warrina Park Quartzite usually in the form of turquoise (copper phosphate). Surface sampling by BHP, MIM, and NFM have revealed anomalous Cu, Co, Zn, Au, Ag, Mn in stream sediment, soil, and rock chip assays (Figure A1-32).

**Figure A1- 32: Black Mountain Anomalous Copper Soil Contours**



- **Exploration Target**

An Exploration Target<sup>11</sup> (to the standard of Clause 17 of the 2012 JORC Code) has been estimated from the available geophysics and surface sampling data. Details of the background data are documented below in Tables A1-19 and 20.

<sup>11</sup> It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised horizons within the Exploration Target area. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient mineralised thicknesses interpreted from historical drilling to warrant further investigation in some areas.

**Table A1- 17: Black Mountain Prospect Exploration Target Data for Tonnage Estimate**

Target	Strike Length (m)		Width (m)		Depth below surface (m)		Density (Kg/m <sup>3</sup> )	
	Low	High	Low	High	Low	High	Low	High
Black Mountain	600	1,550	10	50	10	50	2.55	2.70

*Note: at 0.5% Cu cut-off*

**Table A1-18: Black Mountain Prospect Exploration Target<sup>5</sup> for Copper**

Target	Tonnage (Mt)		Grade (%)		Contained Cu (t)	
	Low	High	Low	High	Low	High
Black Mountain	0.2	1.7	0.5	1.0	1,000	17,000

*Note: at 0.5% Cu cut-off*

## Recommendations

It is recommended that the Black Mountain prospect be subjected to a grid-based surface geological mapping and sampling before any planned drilling commences to better understand the relationships between the local structure and mineralisation. Further, a ground IP or resistivity survey with a 300m line spacing is recommended.

Due to the proximity (<3km) to the Pom Pom and Bomb Gorge prospects all three (3) areas should be considered when planning any future field work programs.

## APPENDIX 3: JORC TABLE 1

The following JORC Code (2012 Edition) Table 1 is primarily supplied for the provision of updated Exploration Targets for fourteen (14) copper prospects within the NWQ Mineral Project tenure group. There is additional commentary provided in Appendix 1 and 3.

Criteria in this section apply to all succeeding sections.)

### Section 1 Sampling Techniques and Data

Criteria/JORC Code explanation	Commentary
<p><b><u>Sampling techniques</u></b></p> <ul style="list-style-type: none"> <li><i>Nature and quality of sampling (eg 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.</i></li> <li><i>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>	<p>Over the 40-odd years of modern exploration has resulted in a wide diversity of methodologies employed.</p> <ul style="list-style-type: none"> <li>Regional Magnetics</li> </ul> <p>The 100m line spacing and 60 vertical clearances reported for the available dataset is of sufficient density.</p> <ul style="list-style-type: none"> <li>Gradient Array Induced Polarity</li> </ul> <p>At Pancake the 100m line spacing and 25m dipole spacing, as well as perpendicular orientation of the survey lines is of high-quality and more than sufficient.</p> <ul style="list-style-type: none"> <li>Surface Geochemistry</li> </ul> <p>Surface stream sediment, soil and rock chip samples have been collected by MIM, BHP, CST Minerals, and other explorers generally a different spacings depending upon the deposit (for soil 100m spaced lines, &lt;20m spacing) are of sufficient density for the purposes reported here. Closer line spacing is required in some areas.</p> <p>Rock chip sampling at Black Mountain is of sufficient density for the purpose of report. Addition work is still required to close of the anomaly(s). Sample data of Crescent, Pancake, and Eldorado is of high-density and sufficient for the purpose reported here. Analyses collected over Crescent are sufficient to identify strike extension of surficial anomalism, while more work is still required to define the width of anomalism, and additional strike orientation.</p> <ul style="list-style-type: none"> <li>Conventional Soils</li> </ul> <p>At many of the Prospects 25m x 100m line spacing extending to 25m x 400m at extremities of the grid. Sample spacing is suitable for the definition of the anomaly for further exploration interrogation. Further work is planned to improve the definition of the anomalism.</p> <ul style="list-style-type: none"> <li>Costean and Mullock Composites</li> </ul> <p>Costean mapping and sampling and collection of mullock composite samples at Johnnies reported here are of sufficient density for the purpose in which is reported and used.</p>
<p><b><u>Drilling techniques</u></b></p> <ul style="list-style-type: none"> <li><i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air</i></li> </ul>	<p>Reverse Circulation, RC, and HQ-sized diamond wireline drilling techniques were utilised for all holes drilled at the Big One Deposit.</p>

<p><i>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></p>	
<p><b><u>Drill sample recovery</u></b></p> <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>	<p>Generally historical reporting has documented sampling was within acceptable industry standard limits, all samples collected were of near equal mass and recoveries were also within acceptable limits for RC drilling and all recorded in the daily logs. Every effort was made on site to maximise recovery including cleaning out the sample trays, splitter and cyclone and ensuring that the drillers progressed at a steady constant rate for the rig to easily complete each metre effectively.</p>
<p><b><u>Logging</u></b></p> <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>	<p>For all drilling programs, every metre drilled and sampled was logged geologically in accordance with industry-wide acceptable standard for RC logging and the logging was qualitative in nature with every metre logged. Unfortunately, lithology dictionaries and descriptions varied between programs. The MIM and NFM programs also recorded visible sulphide and carbonate concentrations and alteration minerals, such as orthoclase, epidote, chlorite, and sericite.</p>
<p><b><u>Sub-sampling techniques and sample preparation</u></b></p> <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> <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>	<p>For the Big One drilling program, samples with pXRF copper &lt;200ppm will be composited every four metres and all samples were collected to maximise optimal representation for each sample. If XRF is not available, then all samples with no visible mineralisation will be sampled as above.</p> <p>Each metre sample had an amount removed for washing and cleaning and sieving then place into metre allocated chip trays. These chips were logged on site by the rig geologists and those logs have been saved into a spreadsheet and stored on the Company server. Any visible mineralisation, alteration or other salient features were recorded in the logs. Industry wide, acceptable, standard practices were adhered to for the drilling and sampling of each metre as per the Drilling and Sampling Procedures set out before commencement of the drilling programme.</p> <p>Any reporting of significant mineralised intervals was on a received apparent thickness x interval calculation (i.e., thickness averaged).</p>
<p><b><u>Quality of assay data and laboratory tests</u></b></p> <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> </ul>	<p>All companies DDH and RC holes will be assayed by an independent laboratory, ALS at Mt Isa, Townsville, or Brisbane Australia. Methods used were as follows:</p> <ul style="list-style-type: none"> <li>• Gold – by method <b>Au-AA25</b> 30g charge (fire Assay with AAS finish);</li> <li>• High gold values within oxide zone/supergene zone may need further testing by method Au-<b>SCR21</b>.</li> </ul>

<ul style="list-style-type: none"> <li>• 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.</li> <li>• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• Copper and 32 other – by method <b>ME-ICP41</b> (HF-HN03-HCL04 acid digest, HCL leach and ICP-AES finish).</li> <li>• Over-limit copper (&gt;10,000 ppm [0.01%]) to be re assayed for copper by method <b>Cu-OC62</b> (HF-HN03-HCL04 acid digest, HCL leach and ICP-AES finish).</li> </ul> <p>These analytical methods are considered as suitable and appropriate for this type of mineralisation.</p> <p>For the current drilling program ALS Brisbane will analyse all samples. All elements except for gold were analysed by method ME-MS61 (41 element testing via Aqua Regia digest then ICP-AES) and with any copper assays &gt;1%, the copper will be redone using method Cu-OG46 with ICP-AES. The gold was done by method AA25. All methods used were both suitable and appropriate for the styles of mineralisation present in the Big One Deposit at the time of sampling.</p>
<p><b><u>Verification of sampling and assaying</u></b></p> <ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<p>All NFM's DDH and RC hole assay results from ALS have been reviewed by two independent consultant geologists. Assays from the BO334DD have recently been resolved.</p> <p>For current the rock chip sampling, Independent Laboratory assaying by ALS has confirmed, within acceptable limits, the occurrences of high-grade copper inferred from the initial XRF readings. Laboratory standards and duplicates were used in accordance with standard procedures for geochemical testing.</p>
<p><b><u>Location of data points</u></b></p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<p>All twenty holes done by NFM in 2021 have had their location surveyed by GPS and will, at then, at the completion of drilling, were surveyed by differential GPS by independent licensed surveyors (GMC Surveys).</p> <p>The spatial location for these holes has been differentially surveyed into MGA94 Zone 54. Collar heights are to the Australian Height Datum.</p> <p>The locations of the 1970 drillholes and 1993 drillholes have been determined from georeferencing several plans and utilizing tables in historical reports. Location errors for the 1970 drilling is ±20m whereas it is about ±12m that for the 1993 holes.</p>
<p><b><u>Data spacing and distribution</u></b></p> <ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<p>The final 20 RC holes were part of a 35-hole program that was set out on a nominal 100m pattern or to redrill 2020 holes that were found to be too short. The 1970 drilling was set at a 30m spacing and the 1993 drilling also at a 50m spacing. At the completion of all the planned holes, the drillhole collars were differentially surveyed by an independent, licensed surveyor and the grid pattern verified. A drone survey over a 2.3Ha area was flown over the exploration area and covered the outcrop length of the dyke. Data was supplied as spot height clouds, orthophoto and topographic contours in DXF / DWG format.</p>
<p><b><u>Orientation of data in relation to geological structure</u></b></p> <ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<p>The current NFM RC drilling program has had all holes oriented to intersect the mineralised structure/zone subsurface perpendicularly and therefore does not constitute any perceived bias. The typical dip direction of the new drillholes is 335-350 deg (Grid North).</p>

<ul style="list-style-type: none"> <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>	<p>Rock chip samples have also been taken at areas of interest from observed mineralisation along the line of lode of the mineralised dyke, secondary structures, and surrounding spoil heaps.</p>
<p><b><u>Sample security</u></b></p> <ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<p>Big One and Arya</p> <p>Each day's RC samples were removed from site and stored in a secure location off site.</p> <p>The RC chip samples taken were securely locked within the vehicle on site until delivered to Mt Isa for dispatch to the laboratory in person by the field personnel.</p>
<p><b><u>Audits or reviews</u></b></p> <ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<p>Audits and reviews have been taken out by SRK and GeoDiscovery at various deposits.</p> <p>For the historical drilling, the sampling techniques and the data generated from the Laboratory Assay results have been peer reviewed by consultant geologists familiar with the overall NWQ Mineral Project and deemed to be acceptable. At Big One, to facilitate this, six (6) sites have twinned drillholes, with the current drilling spudded immediately adjacent to the historical 1970, 1993 and 2020 drilling programs.</p>

## Section 2 Reporting of Exploration Results

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

Criteria/JORC Code explanation	Commentary
<p><b><u>Mineral tenement and land tenure status</u></b></p> <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> <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>	<p>The following mineral tenures are held 100% by subsidiaries of Castillo Copper Limited, totalling an area of 736.8 km<sup>2</sup> in the “Mt Oxide North Project”. A check on the tenures in ‘granted’ status was completed in ‘GeoResGlobe’ on the 12th December 2025.</p> <p>EPM 26574 (Valparaisa North) encompasses the Big One historical mineral resource, Holder Total Minerals Pty Ltd, granted 12-June-2018 for a 5-year period over 100 sub-blocks (323.3Km<sup>2</sup>), Expires 11-June-2023.</p> <p>EPM 26462 (Big Oxide North) encompasses the ‘Boomerang’ historical mine and the ‘Big One’ historical mine, Holder: QLD Commodities Pty Ltd, granted: 29-Aug-2017 for a 5-year period over 67 sub-blocks (216.5 Km<sup>2</sup>), Expires: 28-Aug-2022.</p> <p>EPM 26525 (Hill of Grace) encompasses the Ayra (previously Myally Gap) significant airborne EM anomaly, Holder: Total Minerals Pty Ltd for a 5-year period over 38 sub-blocks (128.8Km<sup>2</sup>), Granted: 12-June-2018, Expires: 11-June-2023.</p> <p>EPM 26513 (Torpedo Creek/Alpha Project) Granted 13-Aug-2018 for a 5-year period over 23 sub-blocks (74.2 Km<sup>2</sup>), Expires 12-Aug-2023; and</p> <p>EPM 27440 (The Wall) was granted 18<sup>th</sup> March 2021 for 5 years over 70 sub-blocks (~215 Km<sup>2</sup>) by Castillo Copper Limited and expires 18 March 2026.</p>
<p><b><u>Exploration done by other parties</u></b></p> <ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<p>Historical QDEX / mineral exploration reports have been reviewed for historical tenures that cover or partially cover the Project Area in this announcement. Federal and State Government reports supplement the historical mineral exploration reporting (QDEX open file exploration records). Most explorers were searching for Cu-Au-U, and, proving satellite deposit style extensions to the several small sub-economic copper deposits (e.g., Big Oxide and Josephine).</p> <p>With the Mt Oxide North Project in regional proximity to Mt Isa and numerous historical and active mines, the Project area has seen portions of the historical mineral tenure subject to various styles of surface sampling, with selected locations typically targeted by shallow drilling (Total hole depth is characteristically less than 50m). The Mt Oxide North project tenure package has a significant opportunity to be reviewed and explored by modern exploration methods in a coherent package of EPM’s, with three of these forming a contiguous tenure package.</p> <p>Various Holders and related parties of the ‘Big One’ historical mining tenure (ML8451) completed a range of mining activities and exploration activities on what is now the ‘Big One’ prospect for EPM 26574. The following unpublished work is acknowledged (and previously shown in the reference list):</p> <ul style="list-style-type: none"> <li>Katz, E., 1970, Report on the Big One, Mt Devine, and Mt Martin Mining Lease Prospects, Forsayth Mineral Exploration NL, report to the Department of Mines, CR5353, 63pp</li> <li>West Australian Metals NL, 1994. Drill Programme at the “Big One” Copper Deposit, North</li> </ul>

	<p>Queensland for West Australian Metals NL.</p> <ul style="list-style-type: none"> <li>• Wilson, D., 2011. 'Big One' Copper Mine Lease 5481 Memorandum – dated 7 May 2011.</li> <li>• Wilson, D., 2015. 'Big One' Mining Lease Memorandum – dated 25 May 2015: and</li> <li>• Csar, M, 1996. Big One &amp; Mt Storm Copper Deposits. Unpublished field report.</li> </ul> <p>The reader of the current ASX Release is referred to the NFM's first publication of the 1993 historical reverse circulation drilling results for additional diagrams and drilling information ("Historic drill data verifies grades up to 28.40% Cu from &lt;50m in supergene ore at Mt Oxide Pillar") released on the ASX by NFM on the 14-January-2020.</p> <p>The SRK Independent Geologists Report released by NFM on the ASX on 28-July-2020 contains further details on the 'Exploration done by other parties - Acknowledgment and appraisal of exploration by other parties' this report is formally titled "A Competent Persons Report on the Mineral Assets of Castillo Copper Limited" Prepared as part of the Castillo Copper Limited (ASX: NFM, LSE: NFM) LSE Prospectus, with the effective date of 17-July-2020.</p>
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<p><b><u>Geology</u></b></p> <ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting, and style of mineralisation.</i></li> </ul>	<p>NFM's NWQ Mineral project is located within the Mt Isa Inlier of western Queensland, a large, exposed section of Proterozoic (2.5 billion- to 540-million-year-old) crustal rocks. The inlier records a long history of tectonic evolution, now thought to be like that of the Broken Hill Block in western New South Wales.</p> <p>The Mt Oxide North project lies within the Mt Oxide Domain, straddling the Lawn Hill Platform and Leichhardt River Fault Trough. The geology of the tenement is principally comprised of rocks of the Surprise Creek and Quilalar Formations which include feldspathic quartzites, conglomerates, arkosic grits, shales, siltstones and minor dolomites and limestones. The Project area is cut by a major fault zone, trending north- northeast to south- southwest across the permits. This fault is associated with major folding, forming several tight synclines- anticline structures along its length. The desktop studies commissioned by NFM on the granted mineral tenures described four main styles of mineralisation account for most mineral resources within the rocks of the Mt Isa Province (after Withnall &amp; Cranfield, 2013).</p> <ul style="list-style-type: none"> <li>• Sediment hosted silver-lead-zinc – occurs mainly within fine-grained sedimentary rocks of the Isa Super basin within the Western Fold Belt. Deposits include Black Star (Mount Isa Pb-Zn), Century, George Fisher North, George Fisher South (Hilton) and Lady Loretta deposits.</li> <li>• Brecciated sediment hosted copper – occurs dominantly within the Leichhardt, Calvert, and Isa Super basin of the Western Fold Belt, hosted in brecciated dolomitic, carbonaceous, and pyritic sediments or brecciated rocks proximal to major fault/shear zones. Includes the Mount Isa copper orebodies and the Esperanza/Mammoth mineralisation.</li> <li>• Iron-oxide-copper-gold ("IOCG") – predominantly chalcopyrite-pyrite magnetite/hematite mineralisation within high grade metamorphic rocks of the Eastern Fold Belt. Deposits of this style include Ernest Henry, Osborne, and Selwyn; and</li> <li>• Broken Hill type silver-lead-zinc – occur within the high-grade metamorphic rocks of the Eastern Fold Belt. Cannington is the major example, but several smaller currently sub-economic deposits are known.</li> <li>• Gold is primarily found associated with copper within the IOCG deposits of the Eastern Fold Belt. However, a significant exception is noted at Tick Hill where high grade gold mineralisation was produced, between 1991 and 1995 by Carpentaria Gold Pty Ltd, some 700 000 tonnes of ore was mined at an average grade of 22.5 g/t Au, producing 15 900 kg Au. The Tick Hill deposit style is poorly</li> </ul>
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understood (Withnall & Cranfield, 2013).

ROM Resources had noted in a series of recent reports for NFM on the granted tenures, that cover the known mineralisation styles including:

- Stratabound copper mineralisation within ferruginous sandstones and siltstones of the Surprise Creek Formation.
- Disseminated copper associated with trachyte dykes.
- Copper-rich iron stones (possible IOCG) in E-W fault zones; and
- possible Mississippi Valley Type (“MVT”) stockwork sulphide mineralisation carrying anomalous copper-lead-zinc and silver.

The Mt Oxide and Mt Gordon occurrences are thought to be breccia and replacement zones with interconnecting faults. The Mt Gordon/Mammoth deposit is hosted by brittle quartzites, and Esperanza by carbonaceous shales. Mineralisation has been related to the Isan Orogeny (1,590 – 1,500 Ma).

Mineralisation at all deposits is primarily chalcopyrite-pyrite-chalcocite, typically as massive sulphide within breccias.

At the Big One prospect, West Australian Metals NL described the mineralisation as (as sourced from the document “West Australian Metals NL, 1994. Drill Programme at the “Big One” Copper Deposit, North Queensland for West Australian Metals NL.”):

- The targeted lode / mineralised dyke is observable on the surface. The mineralisation targeted in the 1993 drilling program is a supergene copper mineralisation that includes malachite, azurite, cuprite, and tenorite, all associated with a NE trending fault (062o to 242o) that is intruded by a porphyry dyke.
- The mineralised porphyry dyke is vertical to near vertical (85o), with the ‘true width’ dimensions reaching up to 7m at surface.
- At least 600m in strike length, with strong Malachite staining observed along the entire strike length, with historical open pits having targeted approximately 200m of this strike. Exact depth of mining below the original ground surface is not clear in the historical documents, given the pits are not battered it is anticipated that excavations have reached 5m to 10m beneath the original ground surface.
- Associated with the porphyry dyke are zones of fractured and/or sheared rock, the siltstones are described as brecciated, and sandstones around the shear as carbonaceous.
- The known mineralisation from the exploration activities to date had identified shallow supergene mineralisation, with a few drillholes targeting deeper mineralisation in and around the 200m of strike historical open cut pits.
- A strongly altered hanging wall that contained malachite and cuprite nodules. Chalcocite mineralization has been identified but it is unclear on the prevalence of the Chalcocite; and
- The mineralisation was amenable to high grade open pit mining methods of the oxide mineralization (as indicated by numerous historical open pit shallow workings into the shear zone).

Desktop studies commissioned by NFM and completed by ROM Resources and SRK Exploration have determined that the Big One prospect is prospective for Cu, Co, and Ag. These studies have also

determined the Boomerang prospect contains:

- Secondary copper staining over ~800m of strike length.
- Associated with a major east-west trending fault that juxtaposes the upper Surprise Creek Formation sediments against both the underlying Bigie Formation and the upper Quilalar Formation units.

At the 'Flapjack' prospect there is the additional potential for:

- Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Quilalar Formation.
- Thermal Gold Aureole mineralisation is a potential model due to the high silica alteration in thermal aureole with contact of A-Type Webbera Granite – related to the Au mineralisation; and/or
- IOCG mineralisation related to chloride rich fluids.

At the 'Crescent' prospect there is the additional potential for:

- Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Quilalar Formation; and/or
- Thermal Gold Aureole mineralisation is a potential model due to the high silica alteration in thermal aureole with contact of A-Type Webbera Granite – related to the Au mineralisation; and
- IOCG mineralisation related to potassic rich fluids.

At the 'Arya' prospect there is the additional potential for:

- Supergene mineralisation forming at the surface along the fault, fault breccia, and the Surprise Creek Formation 'PLrd' rock unit ('Prd' historical).
- Epigenetic replacement mineralisation for Cu (with minor components of other base metals and gold) from replacement carbonate mineralisation, particularly the Surprise Creek Formation.
- Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Surprise Creek Formation.
- Sulphide mineralisation within breccia zones, along stress dilation fractures, emplaced within pore spaces, voids, or in other rock fractures; and/or
- IOCG mineralisation related to chloride rich fluids.

A selection of publicly available QDEX documents / historical exploration reports have been reviewed, refer to Section 2, sub-section "Further Work" for both actions in progress and proposed future actions.

The SRK Independent Geologists Report released by NFM on the ASX on 28-July-2020 contains further details on the 'Geology - Deposit type, geological setting and style of mineralisation': this report is formally titled "A Competent Persons Report on the Mineral Assets of Castillo Copper Limited" Prepared as part of the Castillo Copper Limited (ASX: NFM, LSE: NFM) LSE Prospectus, with the effective date of the 17-July-2020.

<p><b><u>Drill hole Information</u></b></p> <ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <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> </ul> </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>For the current program, all drillhole information was coded to the same formatted spreadsheets used by NFM, being hand-encoded from hard-copy reports, plans, and cross-sections.</p> <p>For NFM's current drilling program, this information has been recorded in formatted spreadsheets during the drilling and will be checked and verified at the conclusion of the current program. The current reported holes (315-317RC) are listed in Appendix 2, with previous drilling collars listed in the 11TH and 26th July ASX release and in Tables B2-2 and B2-3.</p> <p>A summary of the holes drilled are given at the end of this section</p>
<p><b><u>Data aggregation methods</u></b></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>For historical surface sampling, Independent Laboratory Assay results for soil and rock chip samples from the Big One Deposit were averaged if more than one reading or determination was given.</p> <p>Copper grades were reported in this ASX release as per the received laboratory report, i.e., there was no cutting of high-grade copper results as they are directly relatable to high grade mineralisation styles readily visible in the relevant samples and modelling has yet not commenced.</p> <p>There were no cut-off grades factored into any assay results reported, however once modelling commenced at Big One a high cut-off grade of 10,000ppm or 10% copper will be used.</p>
<p><b><u>Relationship between mineralisation widths and intercept lengths</u></b></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.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<p>When available, all mineralised intervals (i.e., &gt;500ppm) have been reported in this and previous ASX releases as the "as-intersected" apparent thickness (in metres) and given that most drillholes dip at -60 to -70 degrees from the horizontal, true intersection widths will be calculated during the block modelling process.</p>

<p><b><u>Diagrams</u></b></p> <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>	<p>Appropriate diagrams are presented in the body and the Appendices of the current ASX Release. Where scales are absent from the diagram, grids have been included and clearly labelled to act as a scale for distance.</p> <p>Maps and Plans presented in the current ASX Release are in MGA94 Zone 54, Eastings (mE), and Northing (mN), unless clearly labelled otherwise.</p> <p>A series of cross-sections have been generated at Big One displaying copper analyses in ppm to aid interpretation and exploration planning (in previous ASX releases in July and August 2021)</p>
<p><b><u>Balanced reporting</u></b></p> <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 avoiding misleading reporting of Exploration Results.</i></li> </ul>	<p>Comprehensive reporting has been published to Appropriate diagrams are presented in the body and the Appendices of the current ASX Release. Where scales are absent from the diagram, grids have been included and clearly labelled to act as a scale for distance.</p> <p>All intersected intervals are apparent thicknesses in metres.</p>
<p><b><u>Other substantive exploration data</u></b></p> <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>	<p>Several airborne EM and magnetic surveys (notably MIM and BHP) have been conducted nearby by historical explorers and New Frontier Minerals has conducted its own surface sampling program prior to drilling commencing as noted above. In terms of ground surveys MIM conducted various magnetic, resistivity, and Genie TEM surveys generally orientated perpendicular to defined targets.</p> <p>NFM, at Big One, planned and completed an IP survey was completed during May 2021 across five (5) north-east trending survey lines (dipole-dipole array). Historical work has focussed on drilling and geochemical sampling, with no detailed geophysical data collection. The copper intersected to date appears to be associated with a NE-SW trending dyke. It occurs in two zones - oxidised (malachite, azurite, tenorite, cuprite) and chalcocite. The aim of the IP survey was to ascertain if the copper mineralisation intersected to date has a discernible electrical response (chargeable and / or conductive). If so, it is hoped that other zones of similar electrical response can be highlighted to better focus the upcoming drill program.</p> <p>As a result of the evaluation of data from the IP surveys carried out, the following recommendations are made:</p> <ul style="list-style-type: none"> <li>• The 2D section models are likely to give the most accurate representation of the earth's conductivity and chargeability variations and should be used when drill targeting. The 3D model output allows trends and structures to be mapped and may give some indications of off-line anomalies.</li> <li>• Treat anomalies on the edge of lines (and at depth) with caution. Although care was taken to remove spurious data, some edge effects may persist in the data. Before testing any anomalies, GeoDiscovery can check the raw data to verify if a particular anomaly likely to be real.</li> <li>• 50m DP-DP is shown to be a cost-effective method to cover ground relatively quickly and map the electrical properties of the top 150m or so. If drill testing the regions of elevated chargeability proves successful, a larger 100m DP-DP or P-DP campaign may be considered to cover more ground and to greater depth.</li> </ul>

	<ul style="list-style-type: none"> <li>• Incorporate the 3D and 2D IP models into the available geological database to determine the extent to which the chargeable zones may or may not have been tested, as well as their geological / stratigraphic significance.</li> <li>• It is recommended that where IP anomalies occur near surface, a field visit is undertaken to see if anomaly can be explained by surficial clays / lithology.</li> </ul>
<p><b><u>Further work</u></b></p> <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>	<p>Future potential work is described within the body of the ASX Release, and will include:</p> <ul style="list-style-type: none"> <li>• Detailed mapping and rock chip sampling.</li> <li>• Surface gravity and magnetic surveys, and potentially downhole EM surveys.</li> <li>• Drilling of RAB or RC scout holes at Big One, Big One North, Mt Storm and Crescent or Eldorado.</li> <li>• Block modelling and wireframing.</li> <li>• Resource Estimation.</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 / JORC Code Explanation	Commentary
<p><b><u>Database integrity</u></b></p> <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>	<p>Historical data from hard copy reports and electronic files such as excel and word, have been captured within a Datamine GDB database. Historical data has been audited by ROM Resources Geologists before entered, and cross referenced with recent data. Data base checks have been run by ROM Resources geologists before resource estimation commenced. Where the location of historical drill holes was in question they have been removed from any models.</p> <p>At Big One reported collars have been adjusted to the topography model (drone) where the discrepancy is <math>\pm 0.2\text{m}</math>. For other areas the Geoscience Australia 1 sec topography model has been used.</p>
<p><b><u>Site visits</u></b></p> <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>	<p>Mr Mark Biggs visited several of the prospects November 2021 and May 2023 to observe the geology, as well as drilling and sampling procedures (Biggs, 2021). Recommendations to: (1) collect additional bulk density data from mineralised lodes; and (2) employ triple tube diamond drilling methods and in split logging for geotechnical holes have since been implemented. No other material issues were noted.</p>
<p><b><u>Geological interpretation</u></b></p> <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>	<p>Most deposits have been interpreted on vertical oblique sections at variable spacing by reviewing geological logging and gold grades, as well as considering interpretations from historic mining reports and previously mined voids. Confidence is moderate in areas of close-spaced drilling. Data has been supplied as a drill hole database, including collar, survey, lithology, weathering, and assay data.</p> <p>At Big One, magnetic susceptibility readings completed on the RC chips have not uniquely characterised mineralised zones. Alternate correlations of lodes between drill holes are possible in some places but would not materially affect the Mineral Resource estimate.</p> <p>Mineralised lodes have been interpreted using a 0.2-0.5% nominal copper cut off and aided with the use of lithology, veining, and structure to help identify the key shear structures. Potentially economic mineralisation not always restricted to an easily identifiable sheared, porphyritic syenite or diorite. Within the lodes high-grade copper (&gt;2%) is erratically distributed. The main lode wireframe includes some barren material between copper mineralisation. Due to its narrow nature the orientation of interpreted lode wireframes can be influenced locally due to the accuracy of down-hole surveys.</p>
<p><b><u>Dimensions</u></b></p> <ul style="list-style-type: none"> <li>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.</li> </ul>	<p>The extent of the Big One Mineral Resource below the original topography is:</p> <p>Main Strike = 1,200m, Depth = 200m, Width = 6 to 14m.</p> <p>At Big One Mineralisation extends from the historical pit floor for the main lode.</p> <p><b>Other Prospects</b></p>

	<p>For the other 13 Exploration Targets estimated, mineralised bodies vary in dimensions between 150-2,000m in length 15-70m width and depth 20-70m depending upon the interpreted wireframes generated.</p>
<p><b><u>Estimation and modelling techniques</u></b></p> <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 (eg 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>	<p><b>Big One Exploration Target</b></p> <p>Block grade estimation for Cu was by inverse distance squared methods (ID2). ID2 was considered suitable for the style of mineralisation, size of blocks relative to the drill hole spacing, and the assumed open pit and underground mining selectivity.</p> <p>Drill holes were composited to 1m and data was interpolated using Datamine Minescape Block Model software.</p> <p>Hard boundaries were adopted for lode wireframes, with each lode estimated independently.</p> <p>No blocks outside the interpreted lodes were estimated.</p> <p>Blocks were estimated using 1 – 8 samples with a maximum of 2 samples from any one drill hole.</p> <p>A two-pass search strategy was employed with search ellipsoids orientated in accordance with the average lode orientation.</p> <p>Main Lode:</p> <p>Maximum search distance of 60m by 40m by 2m for search pass 1.</p> <p>Maximum search distance of 120m by 55m by 4m for search pass 2.</p> <p>For the Big One North Expansion Exploration Target no block model was generated but a digitised trapezoid was generated.</p> <p><b>All other deposits (Exploration Targets)</b></p> <p>For Exploration Targets3 estimated (to the standard of Clause 17 of the 2012 JORC Code) the following methodology was applied:</p> <ol style="list-style-type: none"> <li>1. Except for Big One where a wireframe or enclosing shell was generated surrounding the Inferred Resource shell, all other estimations were based on simple geometric shapes of the form: Length (m) x width (m) x depth (m) x density (Kg/m3) to obtain wireframe volumes then mass (tonnes) across a reasonable minimum and maximum range.</li> <li>2. Except for Big One where core has been tested for specific gravity, following global average density of 2.2 g/cc for oxidized material, 2.55 for partially weathered rock and 2.75 for fresh rock was used to estimate total in situ tonnes with no constraints.</li> <li>3. Unexpected geological loss mainly due to faulting and discontinuous mineralisation over large distances between any drillholes used, expressed as a % deleted from the original insitu tonnages estimated. Typically, loss of 20-60% was applied.</li> </ol>

	<p>4. Where quoted, it should be noted that where Exploration Target tonnages are estimated in the report, they are considered non-JORC and are conceptual in nature. There has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.</p> <p>5. Some surface and rare drilling assay data within the project area was uncovered in historical reports. Big One and Mt Storm and to a lesser degree Valparaisa and Black Mountain have been previously mined. Scattered historical drilling was conducted at Amanda, Pancake, Johnnies, and Valparaisa.</p> <p>6. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised domains and generate a grid mesh or block model. It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the current exploration tonnage calculations, and the sufficient surface and downhole thicknesses interpreted from historic drilling to warrant further investigation in some areas.</p>
<p><b><u>Moisture</u></b></p> <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>	<p>Resource and Exploration Target tonnages are estimated on a dry in situ basis (air-dried).</p>
<p><b><u>Cut-off parameters</u></b></p> <ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<p>The current reporting cut-off grades between 0.2 to 0.5 % Cu for open pit and will require confirmation through feasibility work.</p>
<p><b><u>Mining factors or assumptions</u></b></p> <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>	<p>Big One and Mt Storm have previously been selectively mined by open cut mining methods. A total of 6,500t and 1,100t, respectively, of ore has been deducted from the resource estimate to reflect this.</p> <p>Portions of the remaining resources are considered to have sufficient grade and continuity to be considered for both selective open cut and underground mining but will require confirmation through feasibility work.</p> <p>No mining parameters or modifying factors have been applied to the Mineral Resources nor Exploration Targets.</p>
<p><b><u>Metallurgical factors or assumptions</u></b></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>	<p>Metallurgical test work has been undertaken at Big One, but for the other prospects the treatment process and metallurgical recovery will need to be confirmed through feasibility work.</p>

<p><b><u>Environmental factors or assumptions</u></b></p> <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>	<p>Big One and Mt Storm were previously mined and now lie on lapsed Mining Licenses with no EA in place but waste dump capacity available.</p> <p>Historically, ore processing and tailings storage has been conducted on-site, various third-party options are available for offsite ore processing and tailings storage.</p> <p>Mining has previously taken place at Big One with no significant environmental impediments.</p>
<p><b><u>Bulk density</u></b></p> <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 (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>	<p>Bulk dry density has been determined on unmineralized core from The Big One deposit which gave an average of 2.70 kg/m<sup>3</sup> Measurements would been taken during the 1992-1996 open cut mining operation, which have not been sighted.</p> <p>Average density measurements were assigned to the other areas as follows; Oxide non-lode = 2.45 t/m<sup>3</sup>, Oxide lode = 2.55 t/m<sup>3</sup>, Fresh = 2.65.</p>
<p><b><u>Classification</u></b></p> <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 (ie 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<p><b>Big One</b></p> <p>The resources were classified on a block-by-block basis using estimation outputs. Inferred resource blocks required the closest sample within 35m, an average sample distance &lt;55m, and a minimum of 2 drill holes, with the remaining blocks assigned to Exploration Target ranges.</p> <p>The resource classification appropriately reflects the Competent Person's view of the deposit.</p> <p><b>Other Prospects</b></p> <p>Insufficient data is available is available to classify mineral resources, and all are reported as Exploration Target ranges based on data to hand.</p>
<p><b><u>Audits or reviews</u></b></p> <ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<p>The Big One mineral resource estimate was undertaken by an independent consultant to Castillo Copper but has not been audited or reviewed. It is recommended that an external audit be undertaken during the next upgrade.</p>
<p><b><u>Discussion of relative accuracy/ confidence</u></b></p> <ul style="list-style-type: none"> <li>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</li> </ul>	<p><b>Big One</b></p> <p>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. Detailed statistical and geostatistical methods to quantify the relative accuracy of the resource have not been undertaken. However, preliminary statistical analysis suggests the relative error of this estimate to be ±20-30%.</p> <p><b>Other Prospects</b></p>

*accuracy and confidence of the estimate.*

- *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*
- *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*

The lode geometry and grade can vary significantly over short distances, but continuity of mineralisation and grade is not supported by close-spaced drilling in areas classified as Exploration Target.

Drill hole data was collected and analysed using prevailing industry practices but a small amount of drilling pre-dates 1995. There is a small possibility of the resource including minor amounts of undocumented underground voids from historical mining, however, post mining drilling did not intersect any underground voids. The resource statement relates to the global resource estimate. The grade cut-offs and depth of potential open pit material used to determine the Exploration Targets were assumed and require confirmation through feasibility work. No prospect is currently being mined, but the resource estimate has a lower average grade than production records for the same mineralisation zone that was mined at higher elevations from 1972-1996. A preliminary statistical analysis at the Pancake Prospect suggests that the relative error of this estimate to be  $\pm 30-50\%$ .

## APPENDIX 4: ALL NWQ PROSPECT SUMMARIES

PROSPECT NAME	EPM	EASTING	NORTHING	SHEET 1:100,000	SHEET 1:250,000	TARGET STYLE	ANOMALOUS ELEMENTS	HISTORICAL Drilling	NFM Drilling	ET Estimate
Big One	26574	335464.8	7880389.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Shear/Dyke hosted Epigenetic Copper	Cu, Co, As	Y	Y	Y
Mt_Storm	27440	334612.0	7890461.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Shear-hosted copper and supergene ore potential	Cu, Co	?	N	Y
Eldorado South	26525	354427.3	7862240.5	6859 (Myally)	SE54-14 (DOBBYN)	Shear-hosted copper and supergene ore potential	Cu, Ag, Th	N	N	Y
Johnnies	27440	331022.0	7891473.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Shear-hosted copper and supergene ore potential	Cu, Co	Y	N	N
Black Mountain	26462	345646.6	7863542.4	6859 (Myally)	SE54-14 (DOBBYN)	Copper	Cu, Co, Zn, Ag, Mn	N	N	Y
Ayra/Sansa	26525	352101.9	7865673.5	6859 (Myally)	SE54-14 (DOBBYN)	massive sulphide anomaly with IOCG potential	Cu, Co, Ag, Zn	N	Y	Y
Boomerang	26462	339321.6	7863973.1	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Sedimentary Copper	Cu	Y	N	N
The Wall	27440	331020.0	7889900.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Mt Isa style	Cu-Pb-Zn	N	N	Y
Valparaisa	26462/26574	338521.9	7867823.4	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Sedimentary Copper	Cu, Co	Y	N	Y
Eldorado North	26525	355250.0	7865765.0	6859 (Myally)	SE54-14 (DOBBYN)	Shear-hosted copper and supergene ore potential	Cu, Co, Au	N	N	Y
Amanda	26574	345521.9	7867173.5	6859 (Myally)	SE54-14 (DOBBYN)	IOCG	Au, Co, Ni	Y	N	N
Big Ben	26525	347500.0	7870000.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Gold - Copper	Cu, Co	N	N	N
Pancake	27440	327522.0	7894973.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Mt Isa style	Cu-Pb-Zn	N	N	Y
Flapjack	27440	330350.0	7893700.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	IOCG	Cu, Co, Au	N	N	Y
Pandanus Creek	27440	325855.0	7892645.0	6761 (Mt. Oxide)	SE54-13 (COMOOWEAL)	IOCG	Cu	N	N	Y
Josephine	26513	335321.5	7857073.2	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Copper	Cu, Co	N	N	N
PC14_Grid	27440	331715.0	7894772.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)		Cu,Co	N	N	N
Leaning Tree	27440	331717.0	7892113.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	IOCG ?	Cu,Co	N	N	N
Lily	27440	336494.0	7892095.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	IOCG ?	Cu,Co	N	N	N
Anomaly_250	27440	326550.0	7891600.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	IOCG ?	Pb, Zn, Cu,Co	N	N	N
Crescent West	27440	325870.0	7889820.0	6762 (Mt. Oxide)	SE54-13 (COMOOWEAL)	IOCG	Cu	N	N	N

<b>Crescent</b>	27440	325800.0	7889620.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	IOCG	Cu, Co, Au	N	N	N
<b>Crescent East</b>	27440	328750.0	7889205.0	6760 (Mt. Oxide)	SE54-13 (COMOOWEAL)	IOCG	Cu	N	N	N
<b>Alhambra</b>	26574	331100.0	7886672.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Mt Isa style	Cu-Pb-Zn	N	N	N
<b>Crowbar</b>	26574	331821.0	7883171.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Shear-hosted copper and supergene ore potential	Cu, Co	N	N	N
<b>Mittagaudi</b>	26525	345000.0	7872000.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)			N	N	N
<b>Mercy</b>	26574	344850.0	7874570.0	6859 (Myally)	SE54-14 (DOBBYN)	Shear/Dyke hosted Epigenetic Copper	Cu, Co	N	N	N
<b>Valparaisa East</b>	26574	352513.0	7874341.0	6860 (Myally)		?	Cu, Co	N	N	N
<b>Little Regret</b>	26525	350199.0	7869507.0	6861 (Myally)	SE54-13 (COMOOWEAL)	?	Cu, Co			N
<b>Little Nathan</b>	26525	345000.0	7869000.0	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Gold - Copper	Cu	N	N	N
<b>Little Hope</b>	26525	351375.0	7868625.0	6861 (Myally)	SE54-13 (COMOOWEAL)	?	Cu, Co	N	N	N
<b>Sansa3</b>	26525	348829.0	7868446.0	6861 (Myally)	SE54-13 (COMOOWEAL)	?	Cu, Co, Cg	N	N	N
<b>Sansa2</b>	26525	349745.0	7867107.0	6861 (Myally)	SE54-13 (COMOOWEAL)	?	Cu, Co, Cg	N	N	N
<b>Sansa1</b>	26525	349990.0	7866169.0	6861 (Myally)	SE54-13 (COMOOWEAL)	?	Cu, Co, Cg	N	N	N
<b>Pom Pom</b>	26462	347968.9	7865775.5	6859 (Myally)	SE54-14 (DOBBYN)	Gold	Cu, Co	N	N	N
<b>Bomb Gorge</b>	26462	345292.7	7864949.7	6859 (Myally)	SE54-14 (DOBBYN)	Gold	Cu, Co, Zn, Ag, Au	N	N	N
<b>Hill of Hope</b>	26525	357270.0	7861881.0	6859 (Myally)	SE54-14 (DOBBYN)	?	Cu, Co	N	N	N
<b>Old Man Creek</b>	26462	347848.0	7853294.1	6859 (Myally)	SE54-14 (DOBBYN)	Shear/Dyke hosted Epigenetic Copper	Cu	N	N	N
<b>Anomaly_23_East</b>	26513	326080.0	7837442.0	6761 (Mammoth Mines)		?	Co	N	N	N
<b>Desert_Creek_East</b>	26513	329539.0	7837214.0	6760 (Mammoth Mines)		?	Ag	N	N	N
<b>Torpedo North</b>	26513	327972.0	7834677.0	6758 (Mammoth Mines)		?	Au	N	N	N
<b>Torpedo South</b>	26513	326938.0	7834160.0	6759 (Mammoth Mines)		?	Au	N	N	N
<b>Bluey's Find</b>	26574	338511.6	7871767.9	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Sedimentary Copper	Cu, Co	Y	N	?
<b>Jersey's Find</b>	26574	338649.1	7869376.1	6759 (Mt. Oxide)	SE54-13 (COMOOWEAL)	Sedimentary Copper	Cu, Co	Y	N	?

<b>PROSPECT NAME</b>	<b>NFM Drilling</b>	<b>ET Estimate</b>	<b>GEOLOGY COMMENTS</b>
<b>Big One</b>	Y	Y	Situated within a thin belt of Quilalar Formation sedimentary rocks (Pqx) proximal to a northeast trending fault, and igneous dyke
<b>Mt Storm</b>	N	Y	Small scale mining along 2 shear zones associated with basic felsic dyke. See Target Generation Report and ET estimation for more details.
<b>Eldorado South</b>	N	Y	Situated solely within the upper unit of the Surprise Creek Formation (Prd). Rocks at the Eldorado grid are variably ferruginous, fine to medium grained silt to rare sandstone, with local areas of massive to bedded shale. Regional open-style folding predominates within the sedimentary package.
<b>Johnnies</b>	N	N	Refer to ASX release; also see 1993 Western Minerals NL modelling report. Also drilled in 1970 as Mt Storm
<b>Black Mountain</b>	N	Y	Reconnaissance rock chip sample returned anomalous copper from the ferro-manganiferous outcrop forming the prospect. Analysis of the Uranium - Manganese Black Mountain prospect suggested leaching from a Cretaceous Sandstone cap.
<b>Ayra/Sansa</b>	Y	Y	Formally Greenacres or Myally Gap Prospect. Secondary copper staining observed along bedding planes within rarely quartz veined variably ferruginous medium-grained bedded sandstones of the Surprise Creek Formation (Prd). Copper concentration is adjacent to a major east-west fault. None of the drilling, unfortunately, intersected the copper but found that the EM anomaly was due to a low-level of graphite mineralisation.
<b>Boomerang</b>	N	N	Secondary copper staining has a strong association with a major regional east fault juxtaposing upper Surprise Creek Formation sediments (Prd) against underlying Bigie Formation (Pfy) and upper Quilalar Formation units (Pqx).
<b>The Wall</b>	N	Y	Refer to ASX release
<b>Valparaisa</b>	N	Y	The Valparaisa copper prospect consists of copper mineralisation in two horizons (termed the "upper and lower copper bed") within the Surprise Creek Formation. The surface expression is weak discontinuous copper staining over a strike length of about 6,000 metres. The "lower copper bed" is usually a bouldery outcropping ridge of brown medium-grained quartz sandstone which often shows Liesegang banding. The "upper copper bed" occurs in a valley between quartzite ridges and is in a softer shale unit.
<b>Eldorado North</b>	N	Y	Northern Extension of Eldorado South.
<b>Amanda</b>	N	N	Occurs within the Lochness Formation of the Myally Subgroup and is associated with an east fault on the northwest limb of a large regional north plunging anticline.
<b>Big Ben</b>	N	N	This gold and minor copper anomaly occurs within the upper stratigraphic unit of the Quilalar Formation, near its contact with the upper quartzite member of the same Formation. Located within EPM 26525 Hill of Grace investigation of this anomaly consisted of gridded soil sampling and 1:2,500 geological mapping of an initial drainage area elevated in gold (3.8-60 ppb) and copper (up to 1,200ppm). Situated over Quilalar Formation (Pqx) sediments outcropping as variably alluvial-covered sandy arenaceous to dolomitic sands, silts and shales, the anomaly is confined to a small valley bound by moderate relief quartzite ridges.
<b>Pancake</b>	N	Y	Refer to ASX release
<b>Flapjack</b>	N	Y	Refer to ASX release. Also called Anomaly "O"
<b>Pandanus Creek</b>	N	Y	Surface copper anomaly. 400m soil grid; also called Camelback East.
<b>Josephine</b>	N	N	Occurs within a fault-bounded block of middle-lower Surprise Creek Formation sedimentary rocks (Prb). This consists of buff, brown and grey thin bedded fine feldspathic and labile sandstone, ferruginous sandstone, micaceous siltstone.
<b>PC14_Grid</b>	N	N	Surface copper anomaly.
<b>Leaning Tree</b>	N	N	Surface copper anomaly.
<b>Lily</b>	N	N	Surface copper anomaly.
<b>Anomaly_250</b>	N	N	Surface copper anomaly.
<b>Crescent West</b>	N	N	
<b>Crescent</b>	N	N	Refer to ASX release which also discusses Crescent East and West.
<b>Crescent East</b>	N	N	
<b>Alhambra</b>	N	N	The sheared sedimentary rocks of the Quilalar Formation host the Unicorn prospect, with several high copper and zinc rock chip samples originally outlined by BHP as the Myally Creek prospect.
<b>Crowbar</b>	N	N	The Crowbar Prospect is located two kilometres west-northwest of Alhambra and 6 km northwest of Big One within EPM 26574 Valparaisa North. The prospect, located by Dampier Mining, covers a conformable succession of Myally sub-group feldspathic sandstones overlain by Quilalar quartzites and sandstones. The

			Quilalar Formation has been intruded by Webbera Granite a medium grained felsic pluton. The mineralization consists of a small area of malachite specks and pods in brecciated Upper Myally unit (Ply3) dolarenites and calcsilicates, around the margins of granite intrusions. There are no workings.
<b>Mittagaudi</b>	N	N	
<b>Mercy</b>	N	N	Rock chip samples taken from a fault zone with visible quartz, pyrite and malachite. One sample went 11,000ppm and another nearby 700ppm. Not followed up by MIM.
<b>Valparaisa East</b>	N	N	Surface copper anomaly.
<b>Little Regret</b>		N	Surface copper anomaly.
<b>Little Nathan</b>	N	N	This prospect straddles a north-east trending fault separating arenaceous sedimentary rocks of the Lochness Formation (Phn) to the north from middle Quilalar Formation (Pqx) units to the south. 1:2500 scale grid mapping indicated much of the grid area to be covered by quartzite scree, or fine alluvial sand. This effectively masked much of the potential outcrop. The basal unit mapped within the grid consisted of a white-pink feldspathic quartzite, which strikes approximately north-east and dips uniformly 60 degrees to the north-west. The soil sampling delineated a low-level gold anomaly, from a low of 2.0 ppb to a maximum of 24.7 ppb over a strike length of 300 metres and width variable from 50 to 125 metres.
<b>Little Hope</b>	N	N	Surface copper anomaly.
<b>Sansa3</b>	N	N	Airborne EM Anomaly, probably graphite.
<b>Sansa2</b>	N	N	Airborne EM Anomaly, probably graphite.
<b>Sansa1</b>	N	N	Airborne EM Anomaly, probably graphite.
<b>Pom Pom</b>	N	N	Confined to a fault-bound block of middle Surprise Creek Formation (Prb) arenaceous sedimentary rocks.
<b>Bomb Gorge</b>	N	N	Confined to slightly recessive outcrop of a sandy dolomitic siltstone within which is a low ridge-forming, strongly quartz-veined pink feldspathic quartzite horizon. Dolomitic units show rare veining. Veining concentrated in pink feldspathic quartzite which acts as a brittle horizon. Gold could be sourced from the quartz veining.
<b>Hill of Hope</b>	N	N	Surface copper anomaly.
<b>Old Man Creek</b>	N	N	Consists of a west fault-bounded and folded sequence of Mt. Isa Group rocks, from basal Warrina Park Quartzite to a thin sliver of Native Bee siltstone. These sedimentary rocks crop out over four kilometres of strike. Results of drainage and rock chip samples were low except for a 3100ppm copper assay from a single rock chip sample.
<b>Anomaly_23_East</b>	N	N	Centre of cobalt surface copper anomaly.
<b>Desert_Creek_East</b>	N	N	Centre of silver surface copper anomaly.
<b>Torpedo North</b>	N	N	Centre of gold surface copper anomaly.
<b>Torpedo South</b>	N	N	Centre of gold surface copper anomaly.
<b>Bluey's Find</b>	N	?	The Bluey's Find copper prospect consists of copper mineralisation in two horizons (termed the "upper and lower copper bed") within the Surprise Creek Formation. The surface expression is weak discontinuous copper staining over a strike length of about 6,000 metres. The "lower copper bed" is usually a bouldery outcropping ridge of brown medium-grained quartz sandstone which often shows Liesegang banding. The "upper copper bed" occurs in a valley between quartzite ridges and is in a softer shale unit.
<b>Jersey's Find</b>	N	?	The Jersey's Find copper prospect consists of copper mineralisation in two horizons (termed the "upper and lower copper bed") within the Surprise Creek Formation. The surface expression is weak discontinuous copper staining over a strike length of about 6,000 metres. The "lower copper bed" is usually a bouldery outcropping ridge of brown medium-grained quartz sandstone which often shows Liesegang banding. The "upper copper bed" occurs in a valley between quartzite ridges and is in a softer shale unit.

## APPENDIX 5: DRILLHOLES

- Pancake**

Table A4-1: Pancake Drillholes

Hole_ID	Amg_E	Amg_N	Azimuth	Dip	Final_Depth	Precollar Depth	Prospect Code	Company	Drilling Type	Water Depth
PC-001P	330354	7894061	5.3	-90	12	12	MIPD	MIM	HAM	NL
PC-002P	330354	7894058	5.3	-90	12	12	MIPD	MIM	HAM	NL
PC-003P	328327	7894058	5.3	-90	6	6	MIPD	MIM	HAM	NL
PC-004P	326705	7894573	5.3	-90	42	42	MIPD	MIM	HAM	24
PC-005D	326752	7894573	5.3	-90	249.3	53.9	MIPD	MIM	DDH	24
PC-006P	326729	7894448	185	-60	120	120	MIPD	MIM	HAM	45
PC-007P	326443	7894338	185	-60	150	150	MIPD	MIM	HAM	NL
PC-008P	326977	7894482	185	-60	6	6	MIPD	MIM	HAM	NL
PC-009P	326861	7894435	185	-65	150	150	MIPD	MIM	HAM	NL
PC-010P	330741	7891219	5.3	-90	54	54	MIPD	MIM	HAM	NL

- Big One**

Table A4-2: Location All Completed 2021 Drillholes – GMC Survey

SiteID	Easting (GDA94)	Northing (GDA94)	Collar RL (m)	Total Depth (m)	Azimuth	Dip	Note	Comments
BO_315RC	335416.54	7880310.99	156.13	80.00	320.8	-57.6	Redrill 201RC	Breakdowns delayed hole.
BO_316RC	335426.88	7880296.19	156.04	155.00	349.6	-71.9	Redrill 202RC	
BO_317RC	335392.82	7880285.23	154.67	125.00	347.6	-59.6	Redrill 306RC	
BO_318RC	335431.00	7880282.63	155.58	203.00	344.2	-74.6	Redrill 203RC	
BO_319RC	335288.27	7880265.10	152.63	149.00	331.9	-72.7	Redrill 312RC	
BO_320RC	335309.56	7880203.56	155.53	83.00	329.3	-60.0	New hole	Abandoned due to high water flow
BO_321RC	335224.68	7880234.68	154.47	137.00	321.6	-66.0		
BO_322RC	335191.11	7880219.79	154.75	131.00	324.2	-65.4		
BO_323RC	335158.35	7880188.76	155.04	131.00	331.6	-61.9	Matched to 325RC	
BO_324RC	335118.00	7880203.00	157.00	76.00	328.2	-61.8		Abandoned due to faulted ground and cavities
BO_325RC	335113.69	7880291.66	151.26	130.00	164.4	-64.5	Oriented south	
BO_326RC	335175.53	7880306.22	151.81	191.00	160.4	-57.1	Oriented south	Breakdowns, abandoned due to high water flow
BO_327RC	335333.50	7880264.58	153.26	173.00	324.4	-61.6		
BO_328RC	335376.95	7880295.83	154.36	131.00	332.6	-62.4		
BO_329RC	335402.88	7880254.32	155.84	120.00	320.4	-60.0		
BO_330RC	335412.00	7880211.00	163.00	130.00	333.2	-60.4		
BO_331RC	335275.45	7880249.48	152.89	161.00	322.6	-56.0		
BO_332RC	335294.48	7880240.07	153.76	132.00	330.8	-58.0		Redrill of 320RC

<b>BO_333RC</b>	335110.60	7880194.01	154.21	125.00	330.2	-60.3		Redrill of 324RC
<b>BO_334DD</b>	335458.29	7880313.59	157.59	104.98	335.0	-61.2	Between 207RC and 304RC	HQ cored from 68.85m; 32.31m HQ core
				<b>2,667.98</b>				

Notes:

1. All drillholes except BO\_334DD downhole geophysically logged the entire hole.
2. Azimuths and dips are averaged readings from downhole deviation tool over the length of the hole.

Source: NFM geology team

**Table A4-3: Location All Completed 2020 Drillholes – GMC Survey**

<b>SiteID</b>	<b>Easting (GDA94)</b>	<b>Northing (GDA94)</b>	<b>Collar RL (m)</b>	<b>Total Depth (m)</b>	<b>Azimuth</b>	<b>Dip</b>	<b>Comments</b>
<b>BO_201RC</b>	335414.80	7880310.43	156.04	50.0	306.5	-51.6	
<b>BO_202RC</b>	335428.03	7880299.12	156.29	82.0	342.0	-62.2	
<b>BO_203RC</b>	335432.18	7880283.98	155.60	107.0	330.5	-70.5	
<b>BO_206RC</b>	335468.16	7880333.15	158.40	71.0	340.1	-65.5	
<b>BO_207RC</b>	335476.25	7880316.80	158.42	95.0	332.1	-61.4	
<b>BO_211RC</b>	335443.87	7880324.68	157.30	107.0	345.0	-67.9	
<b>BO_213RC</b>	335389.02	7880302.33	155.35	107.0	338.4	-69.3	
<b>BO_301RC</b>	335405.00	7880325.87	156.98	53.0	339.0	-66.7	Mineralised entire length
<b>BO_302RC</b>	335382.75	7880316.70	156.11	59.0	342.3	-68.1	
<b>BO_303RC</b>	335425.16	7880339.52	158.31	53.0	342.6	-60.8	Mineralised entire length
<b>BO_304RC</b>	335448.96	7880312.64	157.18	107.0	340.8	-65.3	
<b>BO_305RC</b>	335461.65	7880346.92	159.13	53.0	340.5	-69.0	
<b>BO_306RC</b>	335391.40	7880285.01	154.58	107.00	337.4	-70.1	
<b>BO_307RC</b>	335481.53	7880361.85	160.40	91.00	336.4	-69.2	
<b>BO_308RC</b>	335339.75	7880305.93	153.40	53.0	335.8	-65.3	
<b>BO_309RC</b>	335350.03	7880291.61	153.31	77.0	346.5	-68.5	
<b>BO_310RC</b>	335347.89	7880277.61	153.62	107.0	336.1	-66.9	
<b>BO_311RC</b>	335281.18	7880275.09	152.02	59.0	336.8	-66.7	
<b>BO_312RC</b>	335286.17	7880264.98	152.23	83.0	344.0	-65.3	
<b>BO_313RC</b>	335209.65	7880258.84	153.98	59.0	344.8	-66.8	
<b>BO_314RC</b>	335221.14	7880250.74	153.92	71.0	330.2	-63.2	
				<b>1,651</b>			

Notes:

1. All drillholes except BO\_314RC downhole geophysically logged.
2. Azimuths and dips are averaged readings from downhole deviation tool over the length of the hole.

- **Amanda**

**Table A4-4: Amanda Drillholes**

Drillhole ID	EASTING	NORTHING	TDEPTH	AZIMUTH	DIP
LC001R	345211.8	7866763	55	135	-60
LC002R	345265.7	7866723	62	135	-60
LC003R	345187.6	7866794	65	135	-60
LC004R	345295.7	7866755	45	135	-60
LC005R	345237.2	7866797	45	135	-60

- **Valparaisa**

Table A4-5: Valparaisa Drillholes

Borehole ID	EAST	NORTH	TOTAL DEPTH	AZIMUTH	DIP
PD_01	339351.9	7864160	80	5.3	-90
PD_02	339401.6	7864070	52	5.3	-90
PD_03	339317.9	7864037	52	5.3	-90
PD_04	339575.4	7863951	52	5.3	-90
PD_05	339696.9	7863943	52	5.3	-90
PD_06	339719.1	7863861	48	5.3	-90
PD_07	339689	7863791	56	5.3	-90
PD_08	339643.3	7863752	48	5.3	-90
PD_09	339625	7863663	60	5.3	-90
PD_10	339099.7	7873899	60	5.3	-90
PD_11	338825.3	7872893	60	5.3	-90
PD_12	338744.3	7872374	60	5.3	-90
PD_13	338749.5	7872199	39	5.3	-90
PD_14	338655.4	7872225	39	5.3	-90
PD_15	338496	7871822	60	5.3	-90
PD_16	338616.2	7870965	57	5.3	-90
PD_17	338425.4	7870576	60	5.3	-90
PD_18	338577	7869395	60	5.3	-90
PD_19	338940.3	7869102	52	5.3	-90
PD_20	338584.9	7869852	60	5.3	-90
PD_21	338788.7	7870445	60	5.3	-90
PD_22	338705.1	7871404	60	5.3	-90
PD_23	338712.9	7871794	60	5.3	-90
PD_24	339287.9	7868276	60	5.3	-90
PD_25	339536.2	7868556	60	5.3	-90
PD_26	339917.7	7868812	42	5.3	-90
PD_27	339996.1	7868956	70	5.3	-90

Source: NFM geology team

## APPENDIX 6: REFERENCES

- Alston, A. J. (1991). Exploration Permit (Minerals) 7312 Relinquishment Report 29 May 1990 to 15 March 1991. QDEX Company Report CR 22777, Prepared on behalf of Metana Metals NL.
- Ashton Mining Limited. (1989). Authority to Prospect 3907M Camooweal Final Report for the Period 3rd December 1984 to 2nd December 1988. QDEX Company Report CR 20611, Brisbane.
- BHP Minerals open file report (CR29726, Alsace Project, Annual Report 19 Dec 1997) held within the QLD, QDEX open-file Exploration Reporting System & CCZ ASX Release – 4 September 2019
- BHP Minerals Limited. (1983). ATP 3252M, Theresa, Report for the six months ended 28th March 1983. BHP Minerals Limited. Report CR11833 to the Department of Mines, Brisbane.
- Biggs, M. S. (2018). Castillo Copper Mt Oxide North Project Multi-element Surface Sample Contouring Au, Ag, Cu, Pb, Zn, Ni, Co, Cu, Mn. ROM Resources confidential report to Castillo Copper Limited.
- Biggs, M. S., & Nowland, M. L. (2017), EPM 26462 Big Oxide North Preliminary Geological Evaluation Report. ROM Resources for Castillo Copper. Unpublished Confidential Report.
- Biggs, M. S., & Nowland, M. L. (2019), Mt Oxide North Project, (EPM's 26462, 26525 and 26574), Target Generation Report, ROM Resources for Castillo Copper, unpublished Confidential Report, Feb19, 25pp.
- Biggs M.S., (2021), Big One Drilling Program, End of Hitch Report, prepared by ROM Resources for Castillo Copper Limited, unpublished memo, Sep21.
- Biggs M.S., (2022), Big One Mine, Updated Mineral Resource Estimate, prepared by ROM Resources for Castillo Copper Limited, unpublished memo, Sep21.
- Biggs, M.S., and Reed G., 2022, NWQ Copper Project, Mt Isa Region, Queensland, Target Generation, unpublished report by ROM Resources and R3D Resources Limited for Castillo Copper Limited, October 2022, 51pp.
- Blake, D. H. (1987). Geology of the Mount Isa Inlier and environs, Queensland, and Northern Territory. *Geology and Geophysics Bulletin*, 225.
- Blake, D. H., Etheridge, M. A., Page, R. W., Stewart, A. J., Williams, P. R., & Wyborn, L. A. (1990). Mount Isa Inlier — regional geology and mineralisation. In: Hughes, F.E. (Editor): *Geology of the Mineral Deposits of Australia and Papua New Guinea*. The Australian Institute of Mining and Metallurgy.
- Blake, D. H., & Stewart, A. J. (1992a). Geology of the Mount Isa-Cloncurry Transect, 1:250 000 scale map. First edition. Australian Geological Survey Organisation, 1v, Map legend.
- Blake, D. H., & Stewart, A. J. (1992b). Stratigraphic and Tectonic Framework, Mount Isa Inlier. In Stewart, A. J. & Blake, D. H. (Compilers and Editors): *Detailed Studies of the Mount Isa Inlier*. AGSO, Bulletin 243.
- Blake, D. H., Etheridge, M. A., Page, R. W., Stewart, A. J., Williams, P. R., & Wyborn, L. A. (1990). Mount Isa Inlier — regional geology and mineralisation. In: Hughes, F.E. (Editor): *Geology of the Mineral Deposits of Australia and Papua New Guinea*. The Australian Institute of Mining and Metallurgy.

Csar, M., 1996, Big One and Mt Storm Copper Deposits, unpublished report by Aberfoyle Limited for Coffee Gold NL, 8pp.

Brodie, R. C., & Ley-Cooper, A. Y. (2019). AusAEM Year 1 NT/QLD Airborne Electromagnetic Survey TEMPEST® airborne electromagnetic data and Em Flow® conductivity estimates. Geoscience Australia.

Castillo Copper Limited. (2018, August 10). ASX Announcements: Strategy for Optimising the Qld Projects. Retrieved October 31, 2018, from Castillo Copper Limited:  
<https://www.castillocopper.com/asx-announcements/>

Castillo Copper Limited. (2019). Mt Oxide Project. Retrieved July 1, 2019, from Castillo Copper Limited: <https://www.castillocopper.com/project-mt-oxide/>

Castillo Copper Limited, 2020a, Pancake Prospect, ASX Release – 28 April 2020

Castillo Copper Limited, 2020b, Crescent Prospect, ASX Release – 1 June 2020

Castillo Copper Limited, 2020c, The Wall Prospect, ASX Release – 14 July 2020

Castillo Copper Limited (ASX: CCZ) Release 14-Jan-2020 Titled “Historic drill data verifies grades up to 28.40% Cu from <50m in supergene ore at Mt Oxide pillar”

Castillo Copper Limited, 2024, Plans Underway to Fully Develop the Big One Deposit in the World-Class Mt Isa Copper Belt – ASX announcement, 14 May 2024.

Castillo Copper Limited, 2021, Major copper discovery at Big One Deposit extended – ASX announcement, 10 February 2021.

Castillo Copper Limited, 2022, Maiden Mineral Resource Estimate 2.1Mt @ 1.1% Cu (21,886t) for Big One Deposit – ASX announcement, 28 February 2022. (Refer to Appendix 1).

CST Exploration. (2012). EPM 13176 Valparaisa Surrender Report Period ending 13th August 2012. QDEX Company Report CR 74140, Prepared on behalf of CST Minerals Lady Annie Exploration Pty Ltd.

Cudahy, T. J., Jones, M., Thomas, M., Laukamp, C., Caccetta, M., Hewson, R. D., Verrall, M. (2008). Next Generation Mineral Mapping: Queensland Airborne HyMap and Satellite ASTER Surveys 2006-2008. CSIRO Exploration and Mining, Report P2007/364, 153pp (<http://c3dmm.csiro.au/NGMM/index.html>).

Derrick, G. M., Wilson, I. H., & Sweet, I. P. (1980). The Quiltar and Surprise Creek Formations - new Proterozoic units from the Mount Isa Inlier: their regional sedimentology and application to regional correlation. BMR Journal of Australian Geology and Geophysics 5 (3), 215-223.

Derrick, G. M., Sweet, I. P., Butterworth, G. J., Stirzaker, J. F., & Green, D. E. (1984). Geology of the Mount Oxide Region, Queensland, 1:100 000 geological special. 1st edition. Bureau of Mineral Resources. Australia & Geological Survey of Queensland.

Domagala, J., Southgate, P. N., McConachie, B. A., & Pidgeon, B. A. (2000). Evolution of the Palaeoproterozoic Prize, Gun and lower Loretta Supersequences of the Surprise Creek Formation and Mt Isa Group. Australian Journal of Earth Sciences 47, 485–507.

Drakeley, D., 2023, North-West Queensland Copper Project, Over Twenty Prospects Delivering Exploration Upside, ASX Release, Castillo Copper Limited, 30th March 2023.

Esser, D. (1992). Relinquishment Report for EPMs 8141 and 8277 Weberra/Morella. QDEX Company Report CR 24216, Prepared on behalf of Placer Exploration Ltd.

Geoscience Australia – 19 March 2019 <http://www.ga.gov.au/eftf/minerals/nawa/ausaem> & CCZ ASZ Release – 6 May 2019

GeoResGlobe, 2020. Detailed Geology 1:100,000 layers. <https://georesglobe.information.qld.gov.au/> Accessed 2020-Aug-01

GeoResGlobe, 2020. Qld variable 'Reduced to Pole' ("RTP") 'first vertical derivate' ("1VD") geophysical imagery. <https://georesglobe.information.qld.gov.au/> Accessed 2020-Aug-01

GeoResGlobe, 2020. Detailed Geology 1:100,000 layers. <https://georesglobe.information.qld.gov.au/> Accessed 2020-Sept-15.

Mt Isa Metals Ltd, 2010. EPM 15767, Myally Tenement, Annual Report for the Period 5/06/2009 to 4/6/2010. QDEX Report: 64491

M.I.M Exploration Pty Ltd, 1992, "Myally Creek" EPM 7338 and "Lagoon Creek" EPM 7448 Joint Twelve Month Report for Period 18 May 1990 to 18 May 1991 Queensland, Australia. QDEX Report: 23516.

M.I.M Exploration Pty Ltd, 1992. Exploration Permit for Minerals No. 7863 "Eldorado" Queensland. Annual Report for the 12 months ended April 17, 1992. QDEX Report number: 23661.

M.I.M Exploration Pty Ltd, 1993. Exploration Permit for Minerals Nos. 7676 "Pandanus Creek", and 7804 "Fiery Creek". Annual Report for the 12 months ended February 25, 1993. QDEX Report number: 24522.

M.I.M Exploration Pty Ltd, 1993, Exploration Permit for Minerals Nos. 7448 "Lagoon Creek". Second Annual Report 18 May 1991 to 17 May 1992, Queensland Australia. QDEX Report: 24523.

M.I.M Exploration Pty Ltd, 1998. Exploration Permit for Minerals No. 7804 "Fiery Creek" Queensland. Final Report. QDEX Report number: 30006.

M.I.M Exploration Pty Ltd, 1996. Exploration Permit for Minerals No. 7676 "Pandanus Creek", Queensland. Final Report. QDEX Report number: 27982.

M.I.M Exploration Pty Ltd, 1994. Exploration Permit for Minerals Nos. 7676 "Pandanus Creek", and 7804 "Fiery Creek". Annual Report for the 12 months ended February 25, 1994. QDEX Report number: 25492.

Jell, P. A. (2013). Geology of Queensland. Department of Natural Resources and Mines, State of Queensland, Brisbane.

Mt Isa Metals Ltd open file report (CR64491, Isa North Project, Annual Report 4 June 2010) held within the QLD, QDEX open-file Exploration Reporting System & CCZ ASX Release – 4 September 2019

New Frontier Minerals, 2024, Surface assays increase priority copper target area at Big One Deposit – ASX announcement, 29 October 2024.

New Frontier Minerals, 2025a, Strategic alliance with Austral Resources to process NFM copper ore – ASX announcement, 21 January 2025.

New Frontier Minerals, 2025b, Copper Recovery Testing Supports Mt Kelly Pathway and MOU with Austral Resources – ASX announcement, 3 July 2025.

Opik, A. A., Carter, E. K., deKeyser, F., & Burton, G. M. (1961). Camooweal 1: 250,000 Geology Sheet E 54-13, 1st Edition. Canberra: Bureau of Mineral Resources and the Geological Survey of Queensland.

Page, R. W., & Sweet, I. P. (1998). Geochronology of basin phases in the western Mount Isa Inlier, and correlation with the McArthur Basin. *Australian Journal of Earth Sciences* 45, 219–232.

Smart, J., McLaren, M., Mikolajczak, A. S., & Cooper, R. (1972). Dobbyn 1:250 000 Geology Series Sheet SE 54-14, Second Edition. Canberra: Bureau of Mineral Resource, Geology and Geophysics.

Smith P., 2019, Ayra Mt Oxide prospect, unpublished report by Yoda Consulting Pty Ltd to Castillo Copper Limited, Apr 2019, 15pp.

Southgate, P. N., Neumann, N. L., & Gibson, G. M. (2013). Depositional systems in the Mt Isa Inlier from 1800 Ma to 1640 Ma: Implications for Zn–Pb–Ag mineralisation. *Australian Journal of Earth Sciences*, 60:2, 157-173. doi:10.1080/08120099.2013.758176

Tang, J. (2016a). The Mount Isa West Block: Queensland Exploration Geochemistry and Drillhole Database, Background Information and Operational Guide, January 2016 Version. Queensland Department of Natural Resources and Mines, Queensland Geological Survey, 36pp.

Tang, J. (2016b). The Mount Isa East Block: Queensland Exploration Geochemistry and Drillhole Database, Background Information and Operational Guide, January 2016 Version. Queensland Department of Natural Resources and Mines, Queensland Geological Survey, 38pp.

The Broken Hill Pty Co Ltd, 1975. A-P 1581M Boomerang, N.W. Queensland Annual Report for 1975. QDEX Report 5714.

The Broken Hill Pty Co Ltd, 1976. Authority to Prospect 1581M Boomerang, Queensland Final Report. QDEX Report 5823.

The Broken Hill Pty Co Ltd, 1975. Authority to Prospect 1528M Alhambra, N.W. Queensland Annual Report for 1975. QDEX Report 5682.

The Broken Hill Pty Co Ltd, 1976. Authority to Prospect 1528M Alhambra, Queensland Final Report. QDEX Report 5748.

West Australian Metals NL, 1994. Drill Programme at the “Big One” Copper Deposit, North Queensland for West Australian Metals NL and CCZ ASX Release – 14 January 2020

Williams, P. J. (1998). Metalliferous economic geology of the Mt Isa Eastern Succession, Queensland. *Australian Journal of Earth Sciences*, 45:3, 329-341. doi:10.1080/08120099808728395

Wilson D., 1996a, Mt Storm Fieldwork, memorandum to Bruce Haltt, Gunpowder Copper, Nov1996, 8pp

Wilson D., 1996b, Big One and Mt Storm Options, memorandum to Bruce Haltt, Gunpowder Copper, Dec1996, 3pp

Wilson, D., 2011. 'Big One' Copper Mine Lease 5481 Memorandum – dated 7 May 2011:

Wilson, D., 2015. 'Big One' Mining Lease Memorandum – dated 25 May 2015