

# NWQ Copper Project's development targets

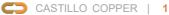


## Highlights

- Following a review of prospects at the NWQ Copper Project (Mt Isa copper-belt), CCZ's geology team will be undertaking site visits to several prospects – including Big One, Arya and Valparaisa – during 1H 2023, to identify new drill targets
  - The initial focus will be on the Big One, which has an inferred Mineral Resource Estimate (MRE) of 2.1Mt @ 1.1% Cu for 21,886kt<sup>1</sup> copper metal post-two drilling campaigns across 2020-21:
    - Factoring in a large conductor north of the line of lode, plus reconciling available geophysics and geochemical data, CCZ's geological consultant has set an Exploration Target that ranges from 2-6Mt @ 0.6-1% Cu for 12-60kt copper metal\*
  - The Valparaisa Prospect comprises copper mineralisation across two horizons over a 6km strike event, with the interaction of two intersecting faults suggesting a structurally controlled copper system that can potentially be drill-tested<sup>2</sup>
- At the Arya Prospect, there is a significant magnetic anomaly, south of a known graphite system<sup>3</sup> (test drilled in late 2021), that shows potential to be a primary source of copper mineralisation
- Meanwhile, final drill and auger assays, which are still pending, should define the potential scale of the rare earth element discovery at the BHA Project's East Zone

**Castillo Copper's Managing Director Dr Dennis Jensen commented:** *"With the macro-outlook for copper remaining upbeat, the Board has authorised the geology team to visit several prospects to identify new targets to test-drill. Key areas of focus include increasing the grade and confidence in the current MRE at Big One and the magnetic anomaly at the Arya Prospect. Given the large size of the NWQ Copper Project, the Board remains open to aligning with a strategic partner to further advance development work."* 

\* Cautionary Statement: 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.



## NWQ Copper Project – Site Visit

**Castillo Copper Limited's** ("**CCZ**") Board, following a review of prospects within the NWQ Copper Project (Appendix A), has authorised the geology team to visit several prospects – including Big One, Arya and Valparaisa – during 1H 2023 to identify new targets for test-drilling.

A summary of salient points from the review for the three prospects highlighted follows:

#### **Big One**

Whilst some areas around Big One were drill-tested in the 2020-21 drilling campaigns, much of the area remains under-explored which highlights the exploration potential.

Utilising information from CCZ's drilling campaigns, complemented with historical data, CCZ's geological consultant compiled an extensive database, built a block model, and produced a maiden 2012 JORC Inferred MRE at 2.1Mt @ 1.1% Cu for 21,886kt copper metal<sup>1</sup> (Figure 1).

#### FIGURE 1: MINERAL RESOURCE TONNAGES BIG ONE

	Tenure Name	Ore Type	Depth (m)	Specific Gravity (kg/m³)	Inferred (Mt)	Indicated (Mt)	Copper Grade %	Silver Grade g/t	Contained Copper (t)	Contained Silver (kg)
2	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: CCZ geology team

Building on this work, the geology team believe further drilling is warranted along the known orebody to the east, north and downdip as it is not fully defined. Specifically, the geology team believe a well-designed drilling campaign – focussing on diamond coring – has the potential to materially increase the grade and confidence in the current MRE, as the orebody is open to the east and downdip.

In addition, an Exploration Target\* (to the standard of Clause 17 of the 2012 JORC Code) has been estimated utilsing the following information:

- the MRE plus some areas proximal to and downdip to the main resource shell; and
- ✤ available geophysics and surface sampling data.

The Exploration Target's\* mid-range is 4Mt @ 0.6-1.0% Cu, with the low at 2Mt and high at 6Mt – refer to Figures 2 & 3. It should be explained that this is an enlarged range of tonnage compared to the MRE due a new wireframe model extended along the entire line of lode.

\* Cautionary Statement: 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 2: BIG ONE – EXPLORATION TARGET \*

	Target	Strike Length (m)	Strike Length (m)	Width (m)	Width (m)	Depth below surface (m)	Depth below surface (m)	Density (t/m³)	Density (t/m³)
$\sim$	Ranges	Low	High	Low	High	Low	High	Low	High
	D Big One	600	1,550	4	14	10	190	2.65	2.80

>	Ranges	Low	High	Low	High	Low	Hiç	gh	Low	High
	Big One	600	1,550	4	14	10	19	0	2.65	2.80
	Note: Mid-points a Source: CCZ geolo FIGURE 3: B	ogy team		·			. ,	sity (2.725	t/m3)	
	Target	Tonna	ige (Mt)	Tonnage (N	/lt) G	rade (%)	Grade (%)		ined Cu (t)	Containe Cu (t)
	Ranges Low		ow	High Low		Low	High	Low		High
	Big One	2	2.0	6.0		0.6	1.0	12	2,000	60,000
	<ol> <li>Volume and r</li> <li>Where quote JORC (Claus</li> </ol>	nass are exc d, it should b e 17 Explorat uncertain if fu	usive of the B e noted that v ion Results) a	and are concep	ed resource ion Target t tual in natur	shell. onnages are e. There has	ot) estimated in thi been insufficien ineral Resource	nt explorat		

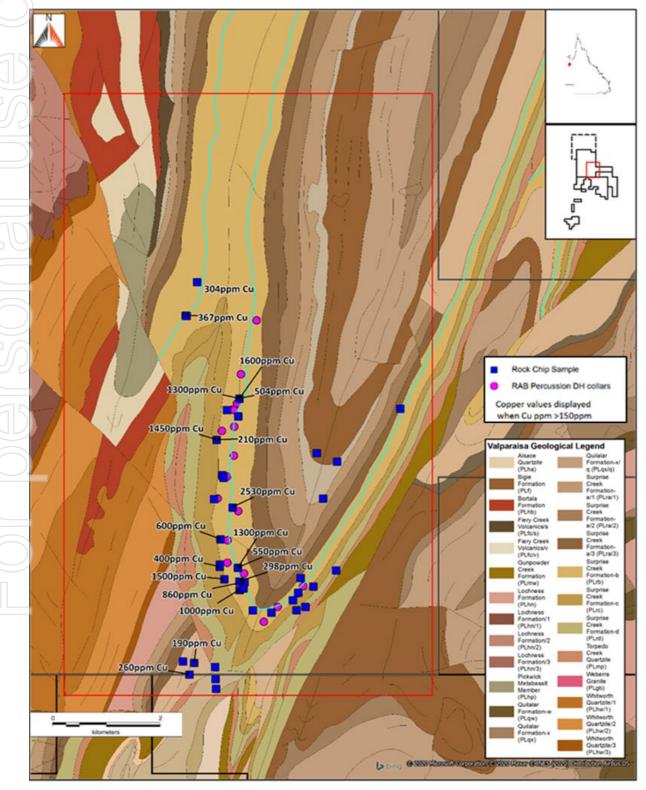
\* Cautionary Statement: It should be noted that the Exploration Target tonnage range quoted above are conceptual in nature and there has been insufficient exploration to define a copper resource. Although a preliminary analysis was undertaken, insufficient data exists to confidently correlate mineralised 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.

#### Valparaisa Prospect

The Valparaisa Prospect comprises copper mineralisation in two horizons – termed the "upper and lower copper beds" – within the Middle Gunpowder Creek Formation over a 6km strike length (Figure 4). Compared with the 'upper bed' the 'lower bed' has the stronger outcrop and more copper staining<sup>2</sup>.

Previous explorers, including BHP, undertook rock-chip sampling which returned high-grade assay results up to 2,530ppm Cu, demonstrating prospectivity at surface for copper mineralisation<sup>2</sup>. Interestingly, the surface anomalism aligns with the interaction of two intersecting faults – Mt Gordon (SW-NE – links to Mt Mammoth Deposit) and Valparaisa (SSE-NNW).

Reconciling and interpreting the foregoing facts has postulated that there is a structurally controlled copper system at the Valparaisa Prospect.

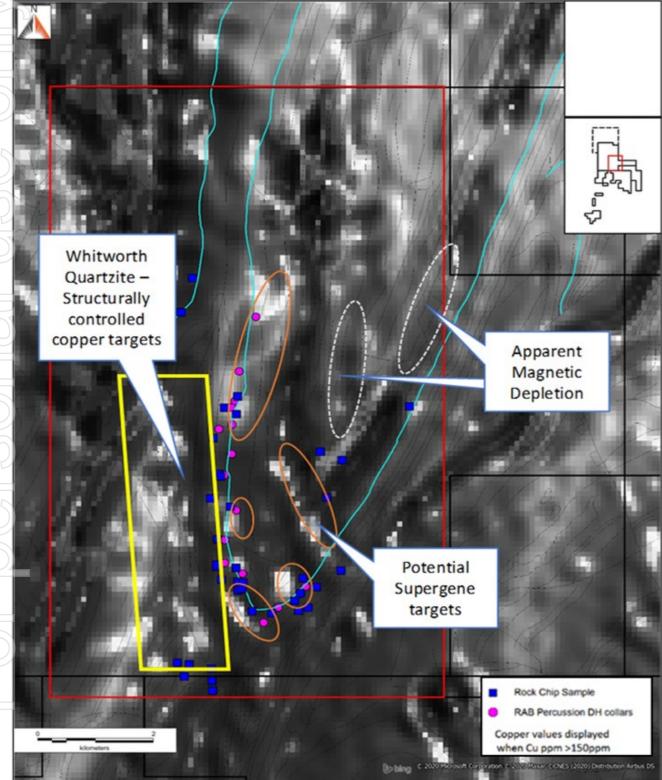


#### FIGURE 4: VALPARAISA PROSPECT - SOLID GEOLOGY, ROCK CHIPS & DRILLHOLES

Source: CCZ geology team

In terms of identifying potential targets for closer scrutiny, a key positive was identifying the Whitworth Quartzite rock formation within the Valparaisa fault. This is significant as it hosts copper sulphide mineralisation within the Mt Gordon fault at the Mt Mammoth Deposit. Reconciling this against overlaid magnetic imagery, enables several target areas for structurally controlled copper and supergene ore mineralisation to be generated (Figure 5).





Source: CCZ geology team

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#### Arya Prospect

A limited drilling campaign in late 2021, designed to test several large airborne electro-magnetic and ground resistivity anomalies, confirmed a low-grade graphite system that won't be further explored (refer Appendix B for assay results).

However, a sizeable magnetic anomaly – south of the known electro-magnetic anomalies – is interpreted to be associated with known surface copper and to a lesser degree silver mineralisation. A key focus of the site visit is to determine if this should be drill-tested as it may be a primary source of base metal mineralisation at the Arya Prospect.

In terms of regional geology, the Arya Prospect is located in the Western Mt Isa Succession, within a structurally deformed and copper anomalous district that hosts the Capricorn Copper Mine, Mt Oxide Mine and the Ladie Annie Mine. These are hosted within units of the upper Myally sub-group to lower McNamara Group, while the Arya Prospect is hosted within the Surprise Creek formation (Figure 6).

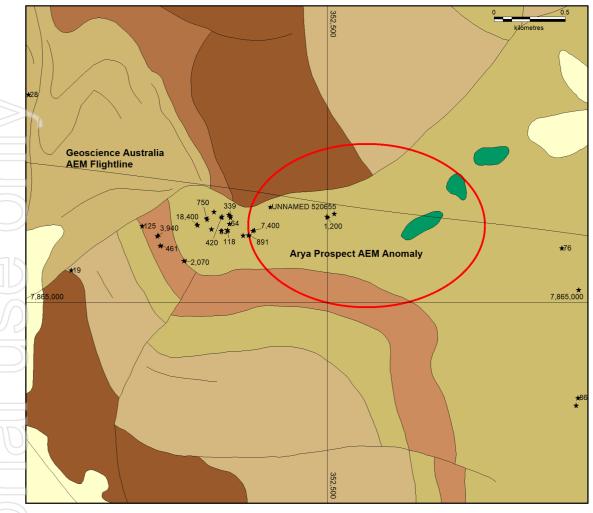
GROUP	AGE	FORMATION	STRAT COLUMN	UNIT THICKNESS	DESCRIPTION	
McNamara		Esperanza Formation	Ē	100	Siltstone/shale	
Group	1658±3 Ma	Paradise Creek Formation		150	Dolomite siltstone	
		Mt Oxide Chert Gunpowder Formation Torpedo Ck Quartzite	esper A MINE	NZA 10 80 30	Laminated chert Shale with dolomite lenses Quartzite	
	1688±5 Ma	Surprise Creek Formation	Arya Prosp	80 55 80	Graphitic and micaceous siltstone Ferruginous siltstone Graphitic and micaceous siltstone	
				80	Conglomerate and siltstone	
Myally	1768±8 Ma	Whitworth Quartzite	MAMM MINE	отн 900	Sandstone and quartzite	
Subgroup	1773±2 Ma	Bortala Formation		40	Siltstone	
	1779±5 Ma	Alsace Quartzite		700	Sandstone and quartzite	
Eastern Creek Volcanics		Pickwick Metabasalt – Lena Quartzite Cromwell Metabasalt	Image: second		Interbedded metabasalts and quartzites	

#### FIGURE 6: STRATIGRAPHIC COLUMN

Source: Smith (2019) - reference 4

In terms of local geology, the Arya Prospect is located within the Surprise Creek Formation unit (Prd), with several results from rock-chip sampling indicative of a structural system for anomalous copper values (Figure 7). Moreover, the Arya 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.

#### FIGURE 7: COPPER GEOCHEMISTRY ON QUEENSLAND GOVT GEOLOGICAL MAP



Source: Smith (2019) - reference 4

Interpreting these findings, suggests 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 Surprised 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 observed comprise:

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

The Board of Castillo Copper Limited authorised the release of this announcement to the ASX. Dr Dennis Jensen

**Managing Director** 

#### **Competent Person's Statement**

The information in this report that relates to Exploration Results and Mineral Resource Estimates for "BHA Project, East Zone" is based on information compiled or reviewed by Mr Mark Biggs. Mr Biggs is a director of ROM Resources, a company which is a shareholder of Castillo Copper Limited. ROM Resources provides ad hoc geological consultancy services to Castillo Copper Limited. Mr Biggs is a member of the Australian Institute of Mining and Metallurgy (member #107188) and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, and Mineral Resources. Mr Biggs holds an AusIMM Online Course Certificate in 2012 JORC Code Reporting. Mr Biggs also consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The Australian Securities Exchange has not reviewed and does not accept responsibility for the accuracy or adequacy of this release.

#### References

- CCZ ASX Release 28 February 2022
- CCZ ASX Release 7 September 2020
  - CCZ ASX Release 10 August 2021 & 17 November 2021; 28 January 2022

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



## **About Castillo Copper**

Castillo Copper Limited is an Australian-based explorer primarily focused on copper across Australia and Zambia. The group is embarking on a strategic transformation to morph into a mid-tier copper group underpinned by its core projects:

- A large footprint in the in the Mt Isa copper-belt district, north-west Queensland, which delivers significant exploration upside through having several high-grade targets and a sizeable untested anomaly within its boundaries in a copper rich region.
- Four high-quality prospective assets across Zambia's copper-belt which is the second largest copper producer in Africa.
- A large tenure footprint proximal to Broken Hill's world-class deposit that is prospective for cobalt-zinc-silver-leadcopper-gold and platinoids.
- Cangai Copper Mine in northern New South Wales, which is one of Australia's highest grading historic copper mines.

The group is listed on the LSE and ASX under the ticker "CCZ."

## **Directors**

Gerrard Hall

Dr Dennis Jensen

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## **ASX/LSE Symbol**

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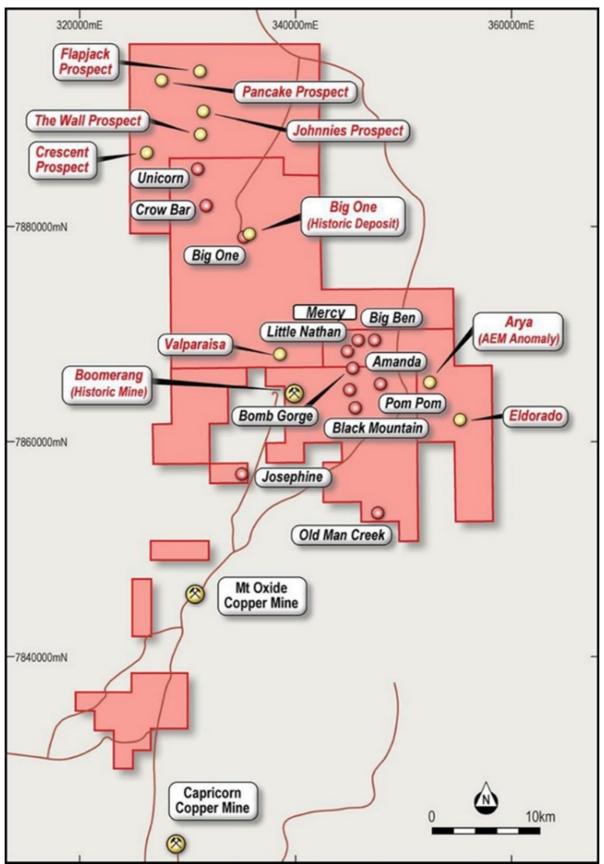
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## **APPENDIX A: NWQ COPPER PROJECT**

### FIGURE A1: PROSPECTS WITHIN NWQ COPPER PROSPECT



## **APPENDIX B: ARYA PROSPECT – METALLURGICAL TESTS**

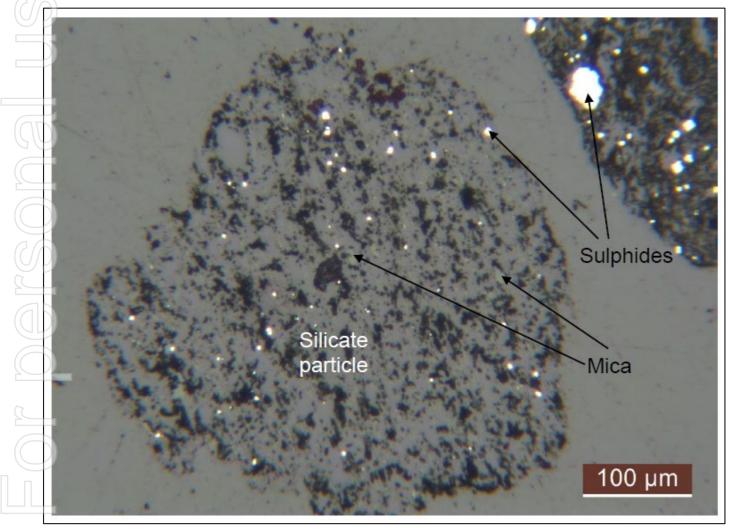
#### Background petrographic description

One composite sample from drill-hole AR\_002RC, sized into 7 fractions, was submitted for optical investigation, with the main aim of characterising the presence and mode of occurrence of graphite (Schulz and others 2022; refer to Appendix C for reference list).

Polished blocks were prepared for all size fractions, and these were examined using a petrographic microscope (reflected light). Further, representative splits of the +800 µm and +500 µm fractions were examined using a stereo microscope.

Reflected light images of selected fields of the polished blocks (all size fractions) and stereo-microscope images of the unmounted +800  $\mu$ m and +500  $\mu$ m fractions were included in the metallurgical report (refer Appendix C: Schulz and others 2022). Figure AB-1 illustrates the nature of mica and sulphide inclusions in the sized schist chips.

FIGURE AB-1: PHOTOMICROGRAPH - SCHIST PARTICLES W/MICA & SULPHIDE INCLUSIONS

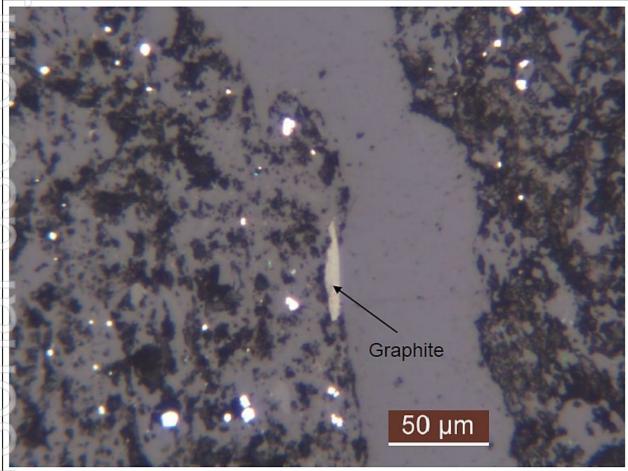


Source: ALS Perth

The presence of graphite was confirmed by the optical investigation. With the chosen settings, graphite particles are identified as creamy white, elongated particles under reflected light. The graphite flakes range in size from a few µm (not positively identifiable by the optical investigation) to about 50 µm in length.

They occur as fine-grained flakes within larger, silicate-rich particles (see Figure AB-2 for an example of the graphite grains).

#### FIGURE AB-2: GRAPHITE AND SULPHIDE INCLUSIONS WITHIN SCHIST FRAGMENTS



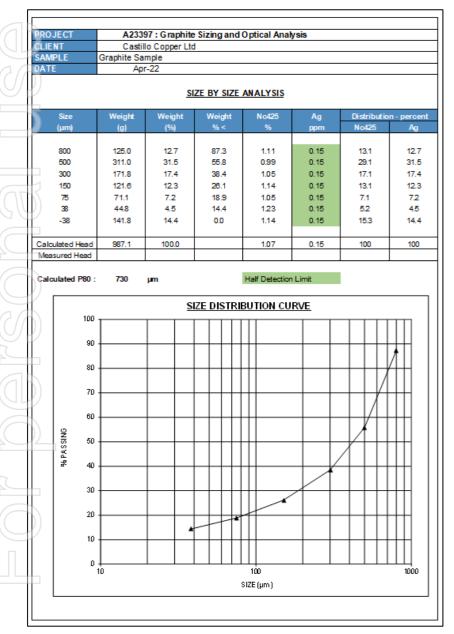
Source: ALS Perth



#### Graphite sizing and optical analysis

The composite sample supplied to ALS Perth's laboratory was made up as follows:

- AR\_002RC: 17m samples CCZ03231 (73m) to CCZ03247 (90m) from the coarsest fraction saved. This graphite prospect is low grade, but there are large thicknesses (e.g., 56m @ 1.35% TGC and 0.25 g/t Ag in one hole). The field association of the Ag and its relationship to graphite has yet to be resolved. The sulphur and vanadium reporting from assays over the graphite horizons are low.
- The sizing of the supplied RC chips and subsequent testing and optical analysis is given by Figure AB-3 below. No further sizing was conducted on the graphite component.



#### FIGURE AB-3: AR\_002RC SIZING AND OPTICAL ANALYSIS

Note:

This sizing distribution is for the whole RC chip composite, not the graphite component.
 No graphite grains above 50µm in length were detected.

Source: ALS Perth

# APPENDIX C: JORC CODE, 2012 EDITION – TABLE 1 AYRA DRILLING AND SURFACE ROCK CHIP SAMPLING

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material</li> </ul>	<ul> <li>Drilling</li> <li>Reverse Circulation samples were taken off a cyclone for every metre drilled, put through a three tier, 87.5/12.5 splitter where approximately 2.5 kg of RC chip samples were collected for every metre drilled. The remainder was bagged separately and stored in case additional sub sampling is required before the end of the program.</li> <li>Samples were also composited every four metres where visual inspection did not initially indicate copper or cobalt mineralisation. All samples were collected to maximise optimal representation for each sample.</li> </ul>
IZODAI	<ul> <li>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.</li> </ul>	<ul> <li>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.</li> <li>Rock Chip Sampling</li> <li>CCZ completed rock chip sampling methods over at least four (4) separate surface sampling campaigns and are described in the October</li> </ul>

<u>M</u> M		<ul> <li>and November 2021 ASX Releases, a generalised description of rock chip sample collection is presented here.</li> <li>Rock Chip Samples – were collected up to approximately a 5m radius around the recorded co-ordinate location. The rock chip fragments that were collected to make up the sample included a typical fragment size that approximately ranged from 2-5cm.</li> <li>Sub-sampling occurred as described in the section 'Sub-sampling techniques and sample preparation' in Section 1 of the current Table 1.</li> <li>The surface sample results described in this ASX Release are suitable for the reporting 'exploration results' for mineral prospectivity, additional exploration work would have to be completed to geologically model and then estimate a mineral resource.</li> </ul>
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	<ul> <li>Arya. Reverse Circulation, RC, and Rotary Air blast (RAB) drilling techniques were utilised for all holes drilled at the Arya Deposit.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	• For the 2021 program, 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.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate	• 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. The 2021 program

	<ul> <li>Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	recorded visible sulphide, carbonate, and graphite concentrations and alteration minerals, such as orthoclase, epidote, chlorite, and sericite.
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Drilling</li> <li>For the 2021 program, samples with pXRF copper &lt;200ppm will b composited every four metres and all samples were collected to maximis optimal representation for each sample. If XRF is not available, then a samples with no visible mineralisation were sampled as above.</li> <li>Each metre sample had an amount removed for washing and cleanin 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 int a spreadsheet and stored on the Company server. Any visibl mineralisation, alteration or other salient features were recorded in th logs. Industry wide, acceptable, standard practices were adhered to for the drilling and sampling of each metre as per the Drilling and Samplin Procedures set out before commencement of the drilling programme.</li> <li>Any reporting of significant mineralised intervals was on a receiver apparent thickness x interval calculation (i.e., thickness averaged).</li> <li>Rock Chip Sampling</li> <li>All surface samples were collected dry.</li> <li>The surface sample results described in this ASX Release are suitable for the reporting 'exploration results' for mineral prospectivity, additional exploration work would have to be completed to geologically model an then estimate a mineral resource.</li> </ul>
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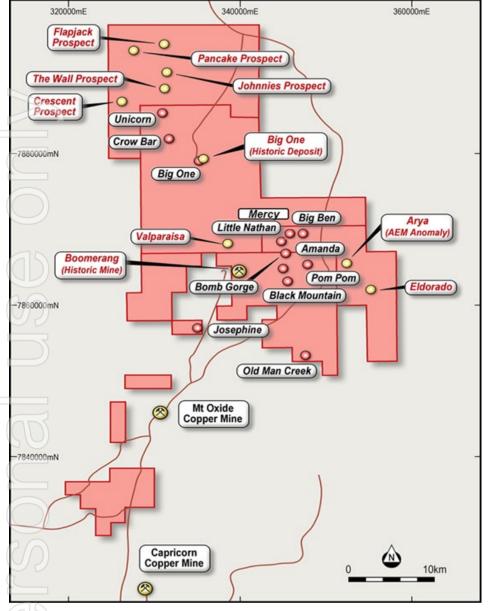
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining 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 (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>CCZ's RC holes were assayed by an independent laboratory, ALS at Mt Isa, Townsville, or Brisbane Australia. Methods used were as follows:         <ul> <li>Gold – by method Au-AA25 30g charge (fire Assay with AAS finish).</li> <li>High gold values within oxide zone/supergene zone may need further testing by method Au-SCR21.</li> <li>Copper and 32 other – by method ME-MS61 (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 Cu-OC62 (HF-HN03-HCL04 acid digest, HCL leach and ICP-AES finish).</li> </ul> </li> <li>These analytical methods are considered as suitable and appropriate for this type of mineralisation.</li> <li>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.</li> </ul>
Verification of sampling and assaying	<ul> <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>	<ul> <li>All CCZ's RC hole samples have been audited for completeness from ALS have been reviewed by two independent consultant geologists.</li> <li>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 assaying.</li> </ul>

Location of data points	<ul> <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>	<ul> <li>For rock chip samples positions were recorded by handheld GPS with areas highlighting anomalies sometimes returned to for additional sampling and locations checked by handheld GPS.</li> <li>Locational data for the 4 drillholes completed. Collars are listed in MGA94 Zone 54 Easting (mE) and Northing (mN); refer to Table AC-1 below.</li> <li>The Arya rock chip sample dataset is anticipated on average to have up to a +/-20m horizontal level of accuracy in sample locations and range up to a +/-10m of accuracy in sample locations for vertical accuracy.</li> <li>Surface sample and assay data had been prepared and compiled into Manifold GIS System and all data converted to GDA94-Zone 54.</li> </ul>
Data spacing and distribution	<ul> <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>	<ul> <li>For the Arya surface sampling modelling for copper, the average RMS sample-to-sample spacing was as follows:         <ul> <li>Rock chip 200m</li> </ul> </li> <li>Drillholes were spaced approximately 250m apart.</li> </ul>
Orientation of data in relation to geological structure		<ul> <li>In general, the strike of the Surprise Creek Formation is east-northeast to east, dipping moderately to the north.</li> <li>For 'Arya' rock chips there was no fixed orientation as these methods were used in the first instance to define distinct areas of anomalisms, based on areas of observed surface mineralisation.</li> <li>For 'Arya' rock chips that produced significant anomalous values appear to be associated with the mapped fault, fault bounded breccia, and the Surprise Creek Formation 'PLrd' rock unit ('Prd' historical) that dominates the 'Arya' prospect to the south of the fault.</li> </ul>

		• All drilling is intended to be vertical to intersect the dipping sedimentary beds.
Sample security	• The measures taken to ensure sample security.	<ul> <li>Each day's RC samples were removed from site and stored in a secure location off site.</li> <li>The RC chip samples taken were securely locked within the vehicle on site until delivered to Mt Isa for despatch to the laboratory in person by the field personnel.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No external reviews or audits have been undertaken, except for the Independent Geologists Report by SRK in 2019 for the LSE Listing and a review of the airborne and ground geophysics by the GeoDiscovery Group. Note, the reference is: Nelson K., Review of open file EM and magnetic geophysical data at Arya Prospect, GeoDiscovery Group, unpublished confidential report to Castillo Copper Limited, June 2021, 16pp.

## Drilling program summary

The inaugural drilling campaign at the Arya Prospect (Figure AC-1) was completed in December 2021, after a massive logistical effort to prepare the drillpads and heli-lift the rig and all supporting equipment to site (see Figure AC-2). In each hole thick horizons (up to 55m) of dark grey and black carbonaceous siltstone / schist were intersected (Figure AC-3), with scattered, sparse base-metal sulphides, low levels of silver and TREO (to 400ppm), and fine-grained graphite mineralisation occurrences which remains open in all directions and to depth.



#### FIGURE AC-1: PROSPECTS COMPRISING THE NWQ COPPER PROJECT

Source: CCZ geology team

#### FIGURE AC-2: DRILLING AT SITE AR\_20 (AR\_001RCR)



Location: 351825 mN; 7865551 Mn; Source: CCZ geology team

The "proof of concept" campaign, which eventually only comprised five initial RC drill-holes at four sites. Delays to the drilling were extensive and have included:

- Wet weather and flooding.
- Daytime temperatures >43 degrees Celsius.
- Compressor overheating.
- Drill thread breaking.
- Large water flows in each hole drilled.
- Bushfires.
- Helicopter lifts of all gear required between sites and daily travel to/from site.
- Very hard quartzite wearing down hammer components.

The key focus was drill-testing the three targets identified by BHP in the mid-1990s including EG01, EG02 and EG10. Of these, EG01 had been interpreted to potentially be a massive sulphide bedrock conductor 130m thick, 1,500m long and 450m wide at a revised 100-200m depth.

Drilling to date has found no sign of massive copper sulphide mineralisation, but instead thick horizons (10-40m) of a dark grey to black carbonaceous, siltstone to schist, exhibiting scattered base metal mineralisation and fine-grained graphite occurrences (Figure AC-3). The horizons are not magnetic, but portable XRF readings, supported by laboratory analyses have identified scattered anomalous chromium, zinc, cobalt, manganese, and rare earth element readings throughout the sequence (Figure AC-4). All 1m samples were collated to 4m composites, then analysed for a comprehensive suite of trace and rare earth elements, total carbon, and total graphitic carbon.

#### FIGURE AC-3: AR\_001RCR CHIP TRAY 111-120m



Post reconciling historic geochemical and geophysical data, the Board decided it was strategically more prudent to orchestrate a "proof of concept" reduced campaign comprising five RC drill-holes initially which included sites AR04, AR08, AR09, AR13 & AR21 (Table AC-1 and Figure AC-4). Vertical holes were planned however due to the drilling techniques and narrower diameter pipe employed, several completed drillholes exhibited significant downhole deviations to the south-east and south-west (Figure AC-5).

The exploration program objective was changed so that if the first-round observations and geological findings were encouraging, there is built-in flexibility to expand the campaign to fully drill-test the extent of any underlying system.

Drilling of AR\_002RC progressed to a depth of 238m before the drill string disintegrated leaving most of the drill string stuck in the hole. The drillhole had deviated significantly, being almost horizontal at total depth. Drilling in AR\_001RCR through to AR\_004RC intersected, hard, dark, material identified as a carbonaceous schist (See Appendix B). The material contains no base metal mineralisation, but a low tenor of rare earth elements (to 400ppm TREO) and graphite (0.5 - 2%; refer to Appendix B) that was confirmed by laboratory testing.

Drillhole	Easting	Northing	AHD	Total Depth	Azimuth	Dip	Туре	Comments
AR_001RC	351793	7865526	202.2	96	175	-85	RC	Quartzite to 42m, dark carbonaceous schist to 90m; Major fault @90m.
AR_001RCR	351825	7865551	203.4	142	172	-60	RC/PCD	Quartzite then dark carbonaceous siltstones and schists to TD
AR_002RC	352735	7865605	191.8	238	170	-17	RC	Quartzite then dark carbonaceous siltstones and schists to TD
AR_003RC	352971	7865433	192.5	143	203	-60	RC	Quartzite then dark carbonaceous siltstones and schists to TD
AR_004RC	353486	7865310	188	177	160	-67	RC	Quartzite then dark carbonaceous siltstones and schists to TD

#### TABLE AC-1: DRILLHOLE LOCATION

Notes: Coordinate system is MGA94-Zone 54, collars are AHD.

## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The following mineral tenures are held 100% by subsidiaries of Castillo Copper Limited, totalling an area of approximately 961km<sup>2</sup> in the "NWQ project":</li> <li>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 (323.3Km2), Expires 11-June-2023.</li> <li>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 (216.5Km<sup>2</sup>), Expires: 28-Aug-2022.</li> <li>EPM 26525 (Hill of Grace) – encompasses the Arya significant aeromagnetic anomaly, Holder: Total Minerals Pty Ltd for a 5-year period over 38 sub-blocks (128.8Km2), Granted: 12-June 2018, Expires: 11-June-2023.</li> <li>EPM 26513 (Torpedo Creek/Alpha Project) – Granted 13-Aug 2018 for a 5-year period over 23 sub-blocks (74.2Km2), Expires 12-Aug-2023; and</li> <li>EPM 27440 (The Wall) – An application was lodged on the 12-Dec2019 over 70 sub-blocks (~215Km<sup>2</sup>) by Castillo Copper Limited. The tenure was granted on the 7<sup>th</sup> of March 2021.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• A selection of historical QDEX / mineral exploration reports has 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).

		<ul> <li>Most explorers were searching for Cu-Au-U and/or Pb-Zn-Ag, and, proving satellite deposit style extensions to the several small sub-economic copper deposits (e.g., Big Oxide and Josephine).</li> <li>With the NWQ Project in regional proximity to Mt Isa and numerous historical and active mines, the Project area has seen the historical mineral tenures subject to various styles of surface sampling, with selected locations typically targeted at specific locations within the NWQ Pillar by shallow drilling (Total hole depth is typically less than 75m).</li> <li>The NWQ 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.</li> <li>Arya prospect - the five (5) historical exploration reports generated by various explorers that contributed information and data to this ASX Release are detailed in the References section of the main body.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting, and style of mineralisation.</li> </ul>	<ul> <li>The NWQ 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.</li> <li>The NWQ 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.</li> <li>The NWQ Pillar project area is cut by a major fault zone, trending northnortheast to south-southwest across the permits. This fault is associated with major folding, forming several tight syncline and anticline structures along its length.</li> <li>The desktop studies commissioned by CCZ on the granted mineral tenures described four main styles of mineralisation account for most mineral</li> </ul>

resources within the rocks of the Mt Isa Province (after Withnall & Cranfield, 2013).

- 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 PbZn), Century, George Fisher North, George Fisher South (Hilton) and Lady Loretta deposits.
- 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.
- 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
- 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.

- 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 understood (Withnall & Cranfield, 2013).
- ROM Resources had noted in a series of recent reports for CCZ 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.
- o 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 programmed is a supergene copper mineralisation that includes malachite, azurite, cuprite, and tenorite, all associated with a NE trending fault (062° to 242°) that is intruded by a porphyry dyke.
- The mineralised porphyry dyke is vertical to near vertical (85°), with the 'true width' dimensions reaching up to 7m at surface. o 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 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 CCZ and completed by ROM Resources and SRK Exploration have determined that the Big One prospect is prospective for Cuco, and Ag.
- Desktop studies commissioned by CCZ have 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 potential for:
  - Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Quilalar Formation.
  - Thermal Gold Auroele mineralisation is a potential model due to the high silica alteration in thermal aureole with contact of A-Type Weberra Granite – related to the Au mineralisation; and/or
  - o IOCG mineralisation related to chloride-rich fluids.
- At the 'Crescent' prospect there is the potential for:
  - Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Quilalar Formation; and/or

	<ul> <li>Thermal Gold Auroele mineralisation is a potential model due to the high silica alteration in thermal aureole with contact of A-Type Weberra Granite – related to the Au mineralisation; and</li> <li>IOCG mineralisation related to potassic rich fluids.</li> <li>At the 'Arya' prospect there is the potential for:         <ul> <li>Supergene mineralisation forming at the surface along the fault, fault breccia, and the Surprise Creek Formation 'PLrd' rock unit ('Prd' historical).</li> <li>Epigenetic replacement mineralisation for Cu (with minor components of other base metals and gold) from replacement carbonate mineralisation, particularly the Surprise Creek Formation.</li> <li>Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement</li> </ul> </li> </ul>
	carbonate mineralisation, particularly the Surprised Creek Formation; and/or
$\mathcal{I}\mathcal{I}$	<ul> <li>IOCG mineralisation related to chloride rich fluids.</li> </ul>
	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.
<b>Drill hole</b> • A summary of all information material to th	<ul> <li>There is no historical drilling at Arya.</li> </ul>
Information understanding of the exploration results including tabulation of the following information for all Materia drill holes:	
<ul> <li>easting and northing of the drill hole collar</li> </ul>	<ul> <li>For CCZ's current drilling program, this information has been recorded in formatted spreadsheets during the drilling and will be checked and verified at</li> </ul>
<ul> <li>elevation or RL (Reduced Level – elevatio above sea level in metres) of the drill hol</li> </ul>	<i>n</i> the conclusion of the current program.
collar	<ul> <li>A summary of the holes drilled are given in Table AC-1 in Section 1 of Appendix C, above.</li> </ul>
$\circ$ dip and azimuth of the hole	11 -7

	<ul> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No data aggregation methods are utilised in the current ASX Release, since the sampling types are surface rock chip samples.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>The strike of the country rock is northeast to east, with the deep Arya conductor is orientated east – west. The smaller, shallower conductors strike north-northeast to northeast. The main faulting trends is northeast.</li> <li>When available, all mineralised intervals (i.e., &gt;500ppm) will be reported in future ASX releases as the "as-intersected" apparent thickness (in metres) and given that all drillholes dip at -90 degrees from the horizontal, true intersection widths will be calculated during the block modelling process.</li> </ul>

Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>This part will be done once CCZ's current drilling program is completed, and all samples have been assayed and verified.</li> <li>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.</li> <li>Maps and Plans presented in the current ASX Release are in MGA94 Zone 54, Eastings (mN), and Northing (mN), unless clearly labelled otherwise.</li> </ul>
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>Comprehensive reporting was completed (Biggs 2022) once CCZ's drilling program had all sample queries returned and have been verified.</li> <li>Appropriate diagrams are presented in the body and the Appendices of the current ASX Release (see Figure AC-5 and AC-6). Where scales are absent from the diagram, grids have been included and clearly labelled to act as a scale for distance.</li> <li>A complete comparison of visual mineralisation estimated by the site geologist will be published once all assays are returned. All intersected intervals are apparent thicknesses in metres.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>GEOTEM &amp; PROTEM:</li> <li>The airborne electromagnetic GEOTEM geophysical survey undertaken by BHP Minerals in 1997 on historical tenure EPM11383 &amp; EPM1152. A total of 726-line kilometres were flown on a SE-NW, flown by 'Geoterrex-Dighem Pty Limited' at a mean height of approximately 105m above the ground surface (line spacing 500m apart). Previous interpretations the penetration of the GEOTEM method to have an estimated range of between 200-300m below the ground surface, this is dependent on conductivity contrasts, size, and attitude of the subsurface targets. Eleven (11) anomalies were identified, with four (4) recommended for follow up, with three (3) of the four (4) anomalies followed up by ground geophysical at what CCZ calls the 'Arya' prospect. The BHP Minerals 1997 GEOTEM survey information was extracted from QDEX Data to accompany the QDEX report information.</li> </ul>

 The 'Arya' prospect anomalies are EG01, EG02, EG10, with the geophysical observations of the body and Appendices of the current ASX Release, including the PROTEM observations. The PROTEM observations are anticipated to have a deeper penetration than the GEOTEM observations, based on the PROTEM loop, survey traverse, and/or depth sounding method applied.

#### QUESTEM & GENIE-EM:

- The airborne electromagnetic GEOTEM geophysical survey undertaken by Mount Isa Mines in 1991 on historical tenure EPM7448, EPM7338, and EPM7863. A total of approximately 600km-line kilometres (exact line length would need to be extracted from digitised images) would were flown on a SE-NW, flown by 'Aerodata Holdings Limited' at a mean height of approximately 120m above the ground surface (line spacing 400m apart). In a previous ASX release (July 2020) Xplore Resources Pty Ltd interprets the penetration of the QUESTEM method to have an estimated range of between 200-300m below the ground surface, this is dependent on conductivity contrasts, size, and attitude of the subsurface targets. Twentynine (29) anomalies were identified across the three (3) historical tenure, with six (6) recommended for follow up ground geophysical survey for historical tenure EPM7448, and one of these L4 near the Arya prospect.
- Arya prospect anomaly L4 followed up by a ground electromagnetic traverse by Mount Isa Mines GENIE-EM is to the west of the EG02 BHP minerals anomaly.
- Queensland Government Data: 'PLrd' rock unit lower boundary from the Surprise Creek Formation sourced from QSpatial and aligns with GeoResGlobe this is equivalent to the historical tenure reports 'Prd' rock unit lower boundary from the Surprise Creek Formation.

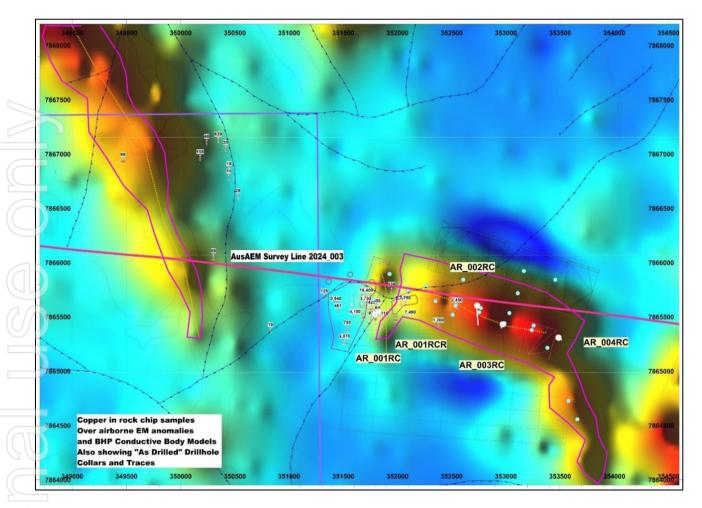
#### **GEODISCOVERY REVIEW**

The study of Nelson (2021) concluded that:

• Whilst hard copies of the 1997 BHP ground EM data are available, no digital data is on open file. Hard copy profiles have been visually interpreted,

	<ul> <li>however due to lack of digital data it cannot be remodelled. The historic BHP model results and survey locations have not been provided and there is uncertainty in the location of Anomaly E02.</li> <li>Magnetic modelling, CDI and LEI of the TEMPEST survey line indicate the BHP depth estimate of conductive from the EG01 sounding is likely over estimated. Depth to main conductive sources appears to be between around 200m beneath surface (Nelson (2021).</li> <li>EG02 appears to be associated with a fault and EG10 appears to be more surficial.</li> <li>It is recommended that the LEI of the TEMPEST survey (most recent AEM data acquired in the region), along with magnetic model output be used to plan the next drill campaign. The current drill plan could be improved to better test the modelled conductive sources and structural features.</li> <li>If the drill testing of the conductive sources indicates the presence of prospective lithologies and/or mineralisation, then consideration should be given to acquiring detailed ground EM and magnetic coverage to further assist targeting.</li> </ul>
<ul> <li>Further work         <ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul> </li> </ul>	<ul> <li>Further work will consist of a combination of:</li> <li>Fourteen (14) hole RC drilling Program</li> <li>Soil and or Rock chip sampling</li> <li>Ground IP or EM Survey</li> </ul>

#### FIGURE AC-4: ARYA DRILLHOLE LOCATION vs EM ANOMALY



#### Notes:

- 1. Coordinate system is MGA94-Zone 54, collars are AHD.
- 2. Shows EM anomalies, MIM EM airborne survey, Location of AusAEM survey line 2024\_003, and the "as drilled" 2021 collars.

#### FIGURE AC-5: ARYA DRILLHOLE LOCATION AND GRAPHITE INTERSECTIONS



#### Notes:

- 1. View at Ayra 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 AC-4) present surface copper anomalies (>250ppm Cu) untested by drilling.
- 4. Source: CCZ Geology Team.

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