

## Potentially >200m of base metal and graphite mineralisation intersected at Arya Prospect

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Castillo Copper's Managing Director Simon Paull commented: "The preliminary findings from the drilling campaign are quite remarkable, as over 200m of carbonaceous siltstone and schist, exhibiting occurrences of base metal sulphides and fine-grained graphite mineralisation, was intersected. This is an exciting development, particularly given strong prevailing demand for battery related minerals such as copper, cobalt, and graphite. The Board looks forward to reviewing the assay results and remains committed to continued drilling at the Arya Prospect."

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- So far, three drill-holes have been completed from two drill pads, with standout, AR\_002RC, reaching a depth of 238m:
  - ❖ Around 200m of dark grey and black carbonaceous siltstone / schist was intersected (Figure 1), with occurrences of scattered base-metal sulphides and fine-grained graphite mineralisation, remaining open at depth
- Encouragingly, visible but scattered chalcopyrite (copper sulphide mineralisation) was observed in drill-hole AR\_001RC

FIGURE 1: COMPLETE CHIP TRAY COLLECTION (AR\_002RC)



Source: CCZ geology team

- All samples have been dispatched to the laboratory for comprehensive analysis including base (copper, zinc) / speciality metals (cobalt, REEs) and total graphitic carbon
- Subject to weather, drilling will continue through to the end of November 2021, resuming in 2022, as there are now new targets to drill-test to determine the full extent of the underlying systems:
  - ❖ The next phase of drilling will complete testing the known electromagnetic anomalies EG01, EG02 & EG10
  - ❖ Further, the geology team plan to drill test the significant magnetic anomaly to the south of EG01, EG02 & EG10 as this may be a primary source of base metal mineralisation
- A comprehensive update will be released once the assays are returned and the geology team interprets all pertinent fundamentals



ASX Release

17 November 2021

CASTILLO COPPER  
LIMITED  
ACN 137 606 476

45 Ventnor Avenue,  
West Perth,  
Western Australia 6005

Tel: +61 8 9389 4407

### Contact:

Simon Paull  
Managing Director

### E-mail:

info@castillocopper.com

For the latest news:

www.castillocopper.com

### Directors / Officers:

Rob Scott  
Simon Paull  
Gerrard Hall  
Geoff Reed

ASX/ LSE Symbol:  
CCZ

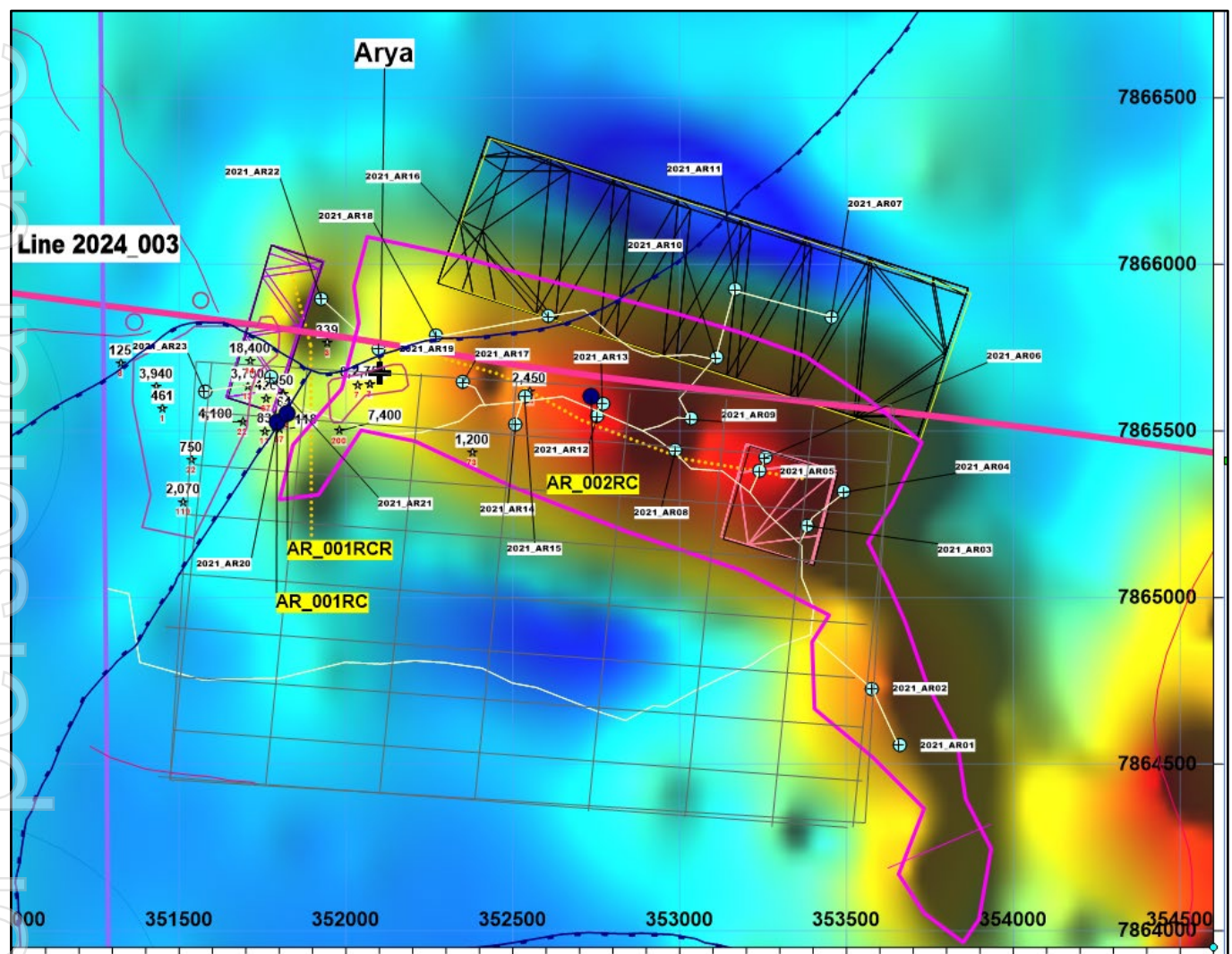
**Castillo Copper Limited (“CCZ”)** is pleased to announce initial findings from the drilling campaign currently underway at the Arya Prospect in the Mt Isa region, Queensland.

## MINERALISATION INTERSECTED

Of the three drill-holes completed from two drill-pads at the Arya Prospect, all intersected thick horizons of black carbonaceous siltstone / schist, between 30-40m from surface (Figure 2 & 3). Notably, circa 200m of dark-grey / black carbonaceous siltstone / schist was intersected in AR\_002RC, with coincident base-metal (portable XRF readings) and graphite mineralisation occurrences recorded (Appendix A). Encouragingly, scattered, but visible chalcopyrite (copper sulphide mineralisation) was observed in AR\_001RC (Appendix A).

Note, the visible sulphides are estimated to range between 1-3% by volume, but estimations of graphite content are not possible by portable XRF, and visible estimation was difficult due to the amount of black schist (estimated 1-5%).

**FIGURE 2: ARYA DRILL-HOLE LOCATIONS**



Notes:

1. Co-ordinate system is MGA94-Zone 54, collars are AHD
2. Shows EM anomalies, MIM EM airborne survey, Location of AusAEM survey line 2024\_003, proposed and as-drilled collars
3. Values shown are Cu (black) and Co (red) assay from surface rock chips (in ppm).

Source: CCZ geology team

**FIGURE 3: DRILL-HOLE LOCATION**

Drill-hole	Easting	Northing	AHD	Total Depth	Azimuth	Dip	Type	Comments
AR_001RC	351793	7865526	202.2	96	0	-90	RC	Quartzite to 42m, dark carbonaceous schist to 90m; Major fault @ 90m
AR_001RCR	351825	7865551	203.4	142	0	-90	RC/PCD	Quartzite to 30m then dark carbonaceous siltstones and schists to TD
AR_002RC	352735	7865605	191.8	238	0	-90	RC	Quartzite to 29m then dark carbonaceous siltstones and schists to TD

Source: CCZ geology team

All samples have been sent to the laboratory for further analysis, with a specific request to test for all base / speciality metals, total carbon, sulphur, and total graphitic carbon.

### Drilling campaign

The drilling campaign will run through until the end of November 2021, resuming in 2022.

Once the assays are returned, the geology team will conduct a full review and chart the next targets to focus on, so as to fully understand the underlying systems. Notably, the next phase of drilling will complete testing of the known electromagnetic anomalies: EG01, EG02 and EG10.

In addition, the team intend to drill-test the sizeable magnetic anomaly that is proximal (south) to EG01, EG02 and EG10 as this potentially could be the primary source of base metal mineralisation.

### SURFACE MAPPING AND ROCKCHIP SAMPLING

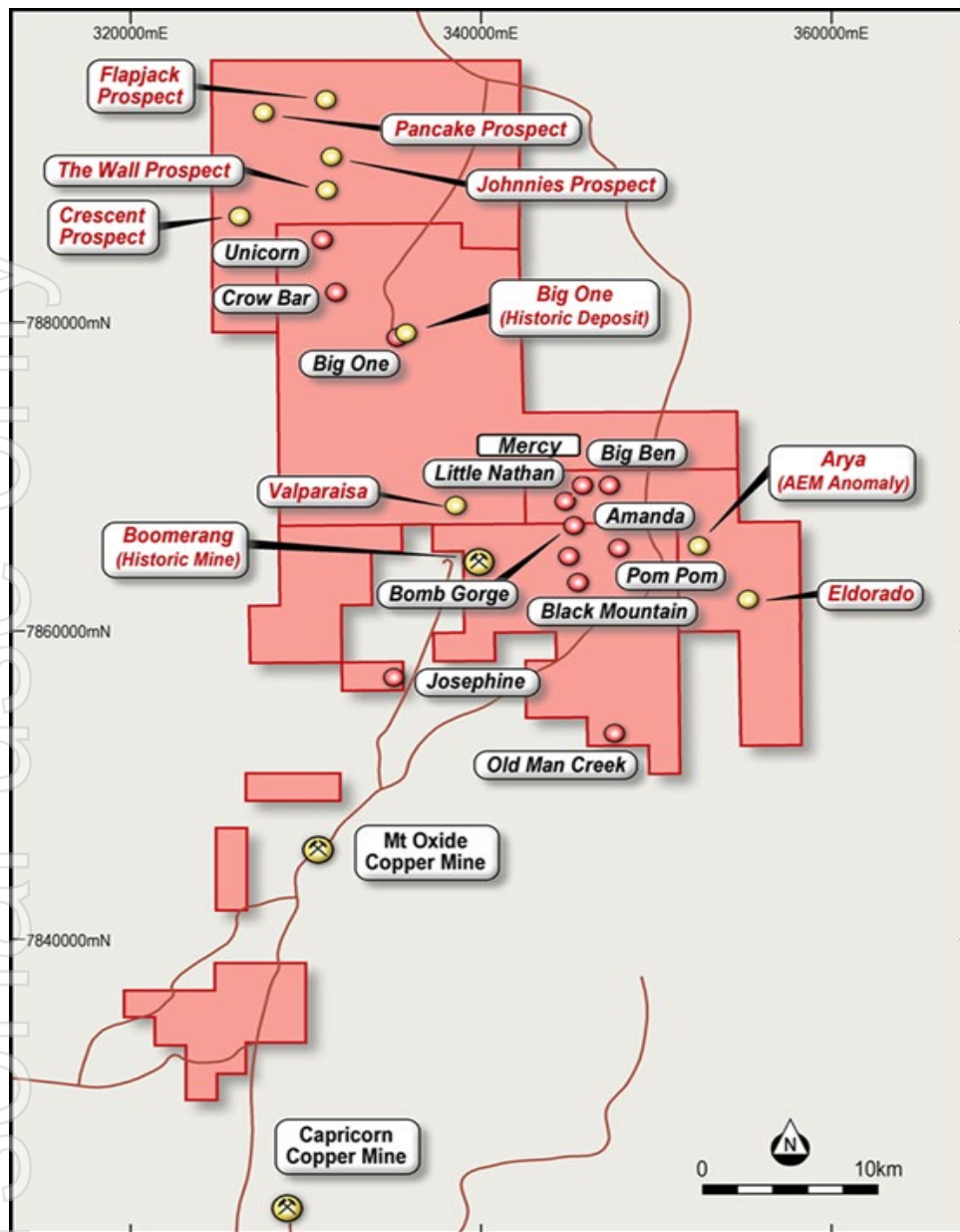
Concurrently, the geology team has undertaken a circa 200m-by-200m mapping / rock chip sampling campaign at the Arya Prospect which is designed to extend the known surface anomaly to the south. Locations are detailed in Appendix A.

Further, rock specimens were collected from fourteen locations across the Eldorado Prospect – further to the south-east (Figure 4). The terrain is rougher, steeper, and more timbered than the Arya Prospect. Interestingly, the surface geology is more varied, with signs of copper mineralisation apparent.

Rock specimens collected from the Arya and Eldorado Prospects have been analysed with the portable XRF gun and magnetic susceptibility tool. The samples will be forward to the laboratory for assaying, but the field results from both tools suggest the Eldorado Prospect is prospective for copper mineralisation.



**FIGURE 4: PROSPECTS AT NWQ COPPER PROJECT**



Source: CCZ geology team

### Next steps

In Queensland, the following is set to take place over the coming weeks:

- Assay results and forward drilling plans for the Arya Prospect.

For the lithium projects:

- Ongoing due diligence for the Picasso and Litchfield Lithium Projects, including return of assay results for surface sampling campaigns.

There are two ongoing steps for the Zambia operations, including:

- Complete the IP survey at the Mkushi Project; and
- Complete work on the inaugural drilling campaign for the Luanshya Project.

**For and on behalf of Castillo Copper**

**Simon Paull**

**Managing Director**

## 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 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 zinc-silver-lead-copper-gold.
- 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."

### Competent Person Statement

The information in this report that relates to Exploration Results for "Arya Prospect" 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.

# APPENDIX A: 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
<b>Sampling techniques</b>	<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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<p><b>Drilling</b></p> <ul style="list-style-type: none"> <li>Samples are 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 mineralisation. All samples were collected to maximise optimal representation for each sample.</li> <li>Each metre sample had an amount removed for washing and cleaning and sieving then place into metre allocated chip trays (<b>see Figure A1-1</b>). 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> </ul> <p><b>Rock Chip Sampling</b></p> <ul style="list-style-type: none"> <li>CCZ completed rock chip sampling methods over at least four (4) separate surface sampling campaigns and are described in the current ASX Release, 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>

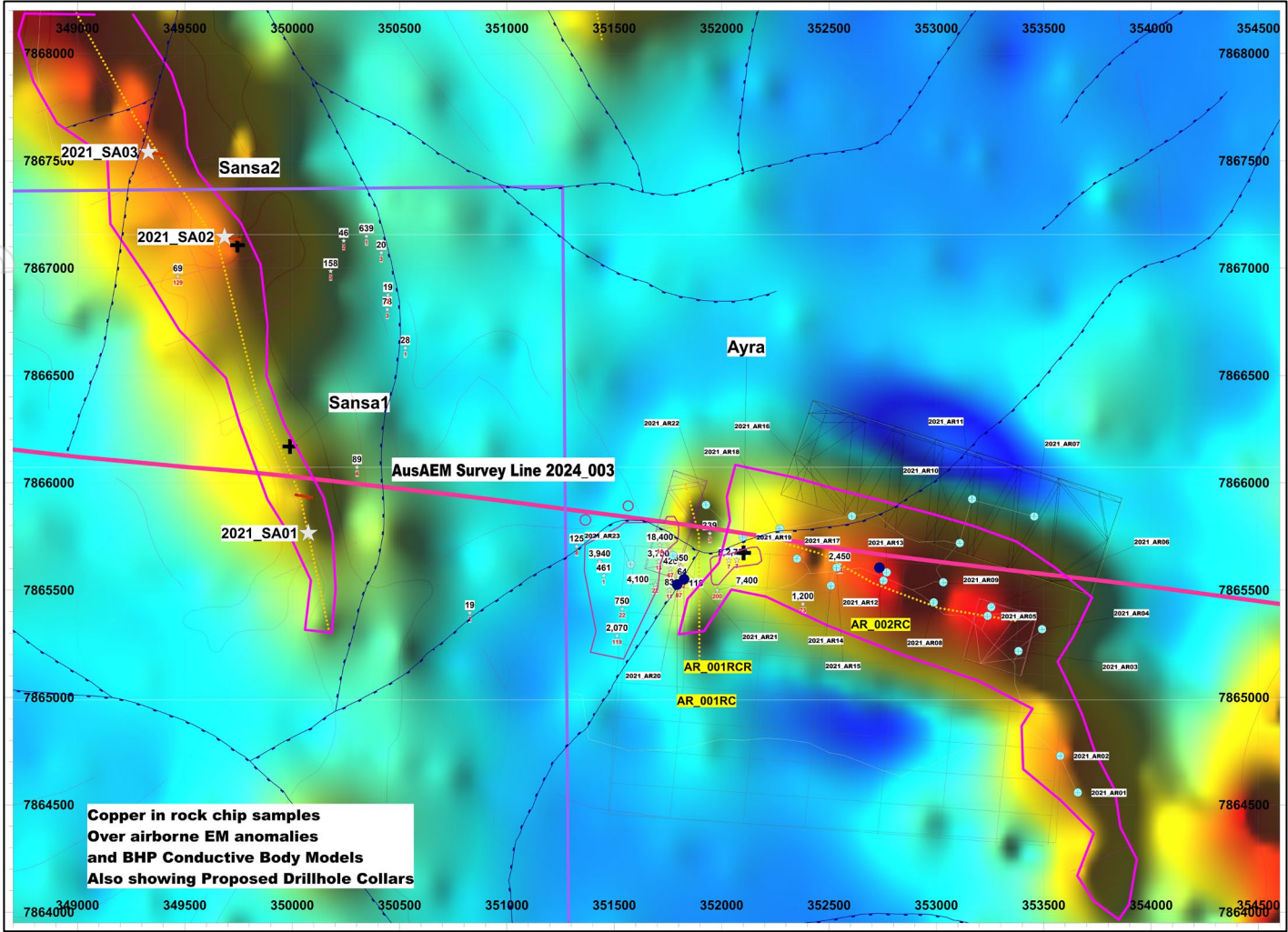
Criteria	JORC Code explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Arya. Reverse Circulation, RC, and Rotary Air blast (RAB) drilling techniques were utilised for all holes drilled at the Arya Deposit.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>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 recorded visible sulphide, carbonate, and graphite concentrations and alteration minerals, such as orthoclase, epidote, chlorite, and sericite.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p><b>Drilling</b></p> <ul style="list-style-type: none"> <li>For the 2021 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.</li> <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>Any reporting of significant mineralised intervals was on a received apparent thickness x interval calculation (i.e., thickness averaged).</li> </ul> <p><b>Rock Chip Sampling</b></p> <ul style="list-style-type: none"> <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</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<p>exploration work would have to be completed to geologically model and then estimate a mineral resource.</p> <ul style="list-style-type: none"> <li>CCZ's RC holes will be assayed by an independent laboratory, ALS at Mt Isa, Townsville, or Brisbane Australia. Methods used were as follows: <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> <li>Copper and 32 other – by method <b>ME-MS61</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> </li> <li>These analytical methods are considered as suitable and appropriate for this type of mineralisation. 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>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>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>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>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>.</li> <li>Locational data for the 3 drillholes completed. was recorded in local grid and/or MGA94 zone 54 Easting (mE) and Northing (mN).</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. Surface sample and assay data had been prepared and compiled into Manifold GIS System and all data converted to GDA94-Zone 54.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• For the Arya surface sampling modelling for copper, the average RMS sample-to-sample spacing was as follows: <ul style="list-style-type: none"> <li>○ Rock chip 200m</li> </ul> </li> <li>• Drillholes are spaced approximately 250m apart.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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 anomalies, 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> <li>• All drilling is intended to be vertical to intersect the dipping sedimentary beds.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<p>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.</p>

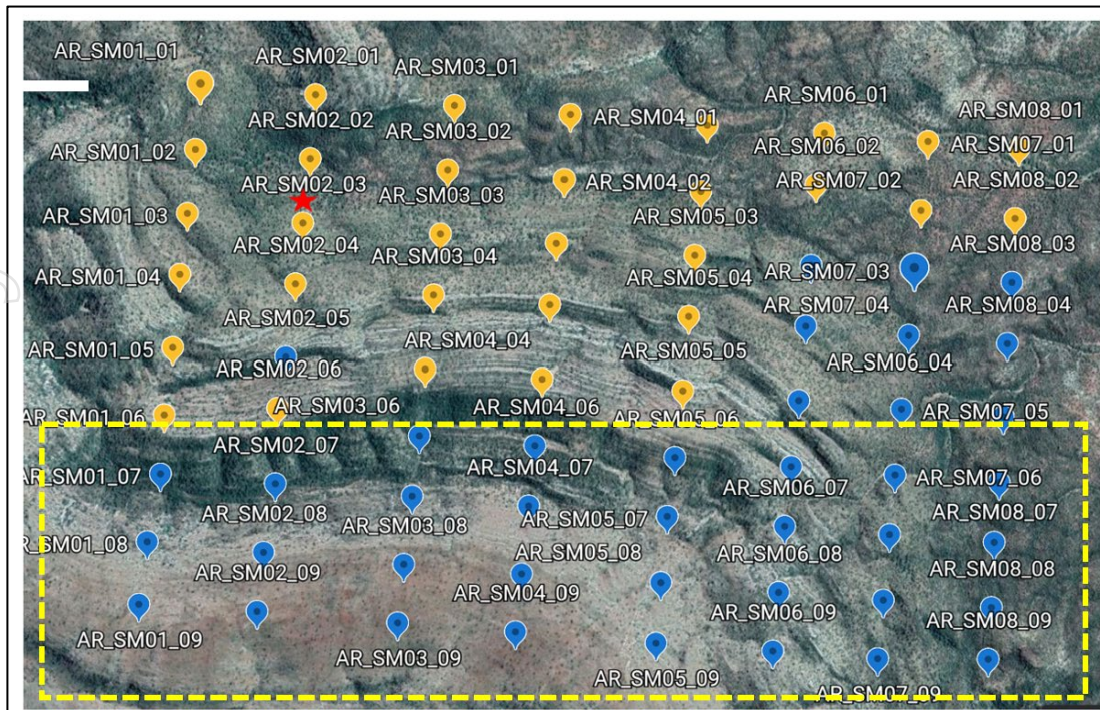
FIGURE A1-1: LOCATION MAP



Source: CCZ geology team



**FIGURE A1-2: ARYA COPPER SURFACE SAMPLING GRID**



Source: CCZ geology team

**FIGURE A1-3: ELDORADO COPPER SURFACE SAMPLING GRID**



Source: CCZ geology team

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>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 (323.3Km<sup>2</sup>), 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 (128.8Km<sup>2</sup>), 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 (74.2Km<sup>2</sup>), 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> March 2021.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <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> </ul>



Criteria	JORC Code explanation	Commentary
		<p>○ .</p> <p>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.</p>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The 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 north-northeast 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 resources within the rocks of the Mt Isa Province (after Withnall &amp; Cranfield, 2013).</li> <li>Sediment hosted silver-lead-zinc – occurs mainly within fine grained sedimentary rocks of the Isa Super basin within the</li> <li>Western Fold Belt. Deposits include Black Star (Mount Isa PbZn), 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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>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 &amp; Cranfield, 2013).</p> <ul style="list-style-type: none"> <li>• ROM Resources had noted in a series of recent reports for CCZ on the granted tenures, that cover the known mineralisation styles including: <ul style="list-style-type: none"> <li>◦ Stratabound copper mineralisation within ferruginous sandstones and siltstones of the Surprise Creek Formation.</li> <li>◦ Disseminated copper associated with trachyte dykes.</li> <li>◦ Copper-rich iron stones (possible IOCG) in E-W fault zones; and</li> <li>◦ possible Mississippi Valley Type ("MVT") stockwork sulphide mineralisation carrying anomalous copper-lead-zinc and silver.</li> </ul> </li> <li>• 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).</li> <li>• Mineralisation at all deposits is primarily chalcopyrite-pyrite-chalcocite, typically as massive sulphide within breccias.</li> <li>• 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."): </li> <li>• The targeted lode / mineralised dyke is observable on the surface. The mineralisation targeted in the 1993 drilling programme 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.</li> <li>• The mineralised porphyry dyke is vertical to near vertical (85°), with the 'true width' dimensions reaching up to 7m at surface. <ul style="list-style-type: none"> <li>◦ 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.</li> </ul> </li> <li>• 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.</li> <li>• The known mineralisation from the exploration activities to date had</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>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).</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Desktop studies commissioned by CCZ have determined the Boomerang prospect contains:</li> <li>• Secondary copper staining over ~800m of strike length.</li> <li>• 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.</li> <li>• At the 'Flapjack' prospect there is the potential for: <ul style="list-style-type: none"> <li>○ Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Quilalar Formation.</li> <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/or</li> <li>○ IOCG mineralisation related to chloride-rich fluids.</li> </ul> </li> <li>• At the 'Crescent' prospect there is the potential for: <ul style="list-style-type: none"> <li>○ Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Quilalar Formation; and/or</li> <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> </ul> </li> <li>• At the 'Arya' prospect there is the potential for: <ul style="list-style-type: none"> <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>

Criteria	JORC Code explanation	Commentary
		<p>carbonate mineralisation, particularly the Surprised Creek Formation; and/or</p> <ul style="list-style-type: none"> <li>IOCG mineralisation related to chloride rich fluids.</li> </ul> <p>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.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </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>	<ul style="list-style-type: none"> <li>There is no historical drilling at Arya.</li> <li>For the current program, all drillhole information was coded to the same formatted spreadsheets used by CCZ, being hand-encoded from hard-copy reports, plans, and cross-sections.</li> <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 the conclusion of the current program. The current reported holes (AR_001RC, AR_001RCR, and AR_002RC) will be fully described in the next ASX release.</li> <li>A summary of the holes drilled are given in Table 1 in the main body of text.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No data aggregation methods are utilised in the current ASX Release, since the sampling types are surface rock chip samples.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>



Criteria	JORC Code explanation	Commentary
<b>Diagrams</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive reporting is planned once CCZ's current drilling program has all sample queries returned and have been verified. <ul style="list-style-type: none"> <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> </ul> </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>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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>	<p>GEOTEM &amp; PROTEM:</p> <ul style="list-style-type: none"> <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> <li>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.</li> </ul> <p>QUESTEM &amp; GENIE-EM:</p> <ul style="list-style-type: none"> <li>The airborne electromagnetic GEOTEM geophysical survey undertaken by Mount Isa Mines in 1991 on historical tenure EPM7448, EPM7338, and</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>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.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul> <p><b>GEODISCOVERY REVIEW</b></p> <p>The study of Nelson (2021) concluded that:</p> <ul style="list-style-type: none"> <li>• 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, 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 (Figure 10 - 12). 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</li> </ul>

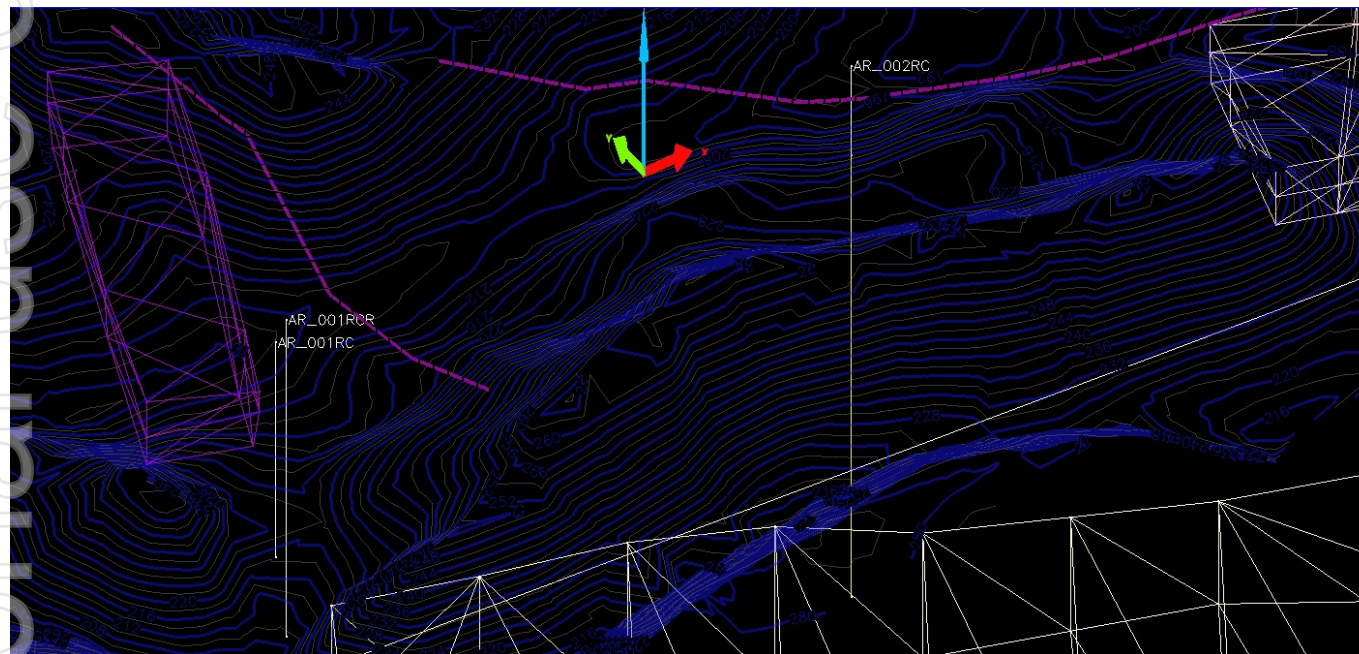
Criteria	JORC Code explanation	Commentary
		<p>given to acquiring detailed ground EM and magnetic coverage to further assist targeting.</p> <p>Figures A2-1 to A2-4 illustrate the above conclusions.</p>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Further work will consist of a combination of: <ul style="list-style-type: none"> <li>Fourteen (14) hole RC drilling Program</li> <li>Soil and or Rock chip sampling</li> <li>Ground IP or EM Survey</li> </ul> </li> </ul>

**FIGURE A2-1: DRILL-HOLE LOCATION**

Drill-hole	Easting	Northing	AHD	Total Depth	Azimuth	Dip	Type	Comments
AR_001RC	351793	7865526	202.2	96	0	-90	RC	Quartzite to 42m, dark carbonaceous schist to 90m; Major fault @ 90m.
AR_001RCR	351825	7865551	203.4	142	0	-90	RC/PCD	Quartzite to 30m then dark carbonaceous siltstones and schists to TD
AR_002RC	352735	7865605	191.8	238	0	-90	RC	Quartzite to 29m then dark carbonaceous siltstones and schists to TD

Source: CCZ geology team

**FIGURE A2-2: DRILL-HOLE LOCATION VS EM MODELLED BODIES**



Notes:

1. Looking northeast
2. Topographic contours at 2m contour

Source: CCZ geology team

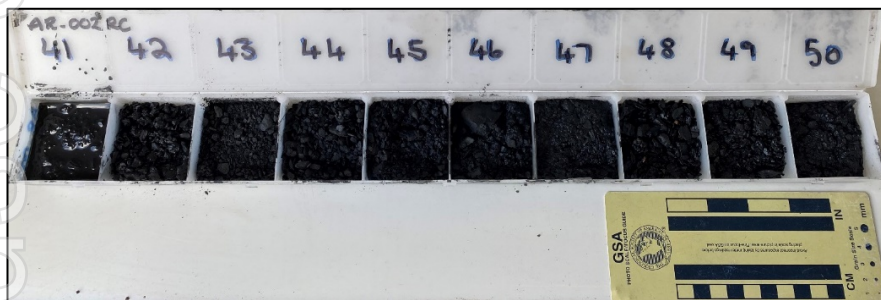


**FIGURE A2-3: AR\_001RCR CHIP TRAY 111-120m**



Source: CCZ geology team

**FIGURE A2-4: ARYA DRILLHOLE AR\_002RC CHIP TRAY 41-50M**



Source: CCZ geology team