

**ASX Release** 

26 July 2021

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ASX/ LSE Symbol: CCZ

# Up to 9% copper in Big One Deposit assays plus more visible mineralisation up to 26m thick

Initial assays for drill-holes BO\_315-317RC verify up to 9.19%
 Cu and clearly extends known mineralisation – the best intercepts are summarised below:

9m @ 1.42% Cu from 88m including 4m @ 3.06% Cu from 92m & 1m @ 9.19% Cu from 92m (BO\_317RC)

5m @ 1.06% Cu from 141m (BO\_316RC)

3m @ 1.22% Cu from 65m (BO\_315RC)

 Encouragingly, visual inspection shows new drill-holes have potentially intersected copper mineralisation up to 26m – the best intercepts are shown in Figure 1:

FIGURE 1: BEST INTERCEPTED MINERALISATION				
Borehole	From (m)	To (m)	Apparent Thickness (m)	
BO_322RC	57	73.5	16.5	
BO_323RC	82	97	15.0	
BO_324RC	41	53	12.0	
BO_326RC	134	160	26.0	
BO_327RC	60	68	8.0	
BO_327RC	81	90	8.0	
BO_327RC	90	99	9.0	

Source: CCZ geology team

- Assays for samples from priority drill-holes BO\_318RC¹ & BO\_326RC, which exhibited visual copper intercepts up to 34m & 26m respectively, should be back shortly as the laboratory is fast-tracking the analysis
- Holistically, a closer examination of the initial assay results by CCZ's geology team, highlights the following interpretations:
- ❖ Factoring the new data points into the preliminary geological model for the Big One Deposit suggests the underlying system is larger than initially envisaged;
- ❖ There is now increasing evidence that copper mineralisation is potentially structural as it extends beyond the trachyte/dacite dyke; and
- Using geophysics has enabled significantly better targeting and, in turn, optimised the results of the drilling campaign so far

\*\*:

Castillo Copper's Managing Director Simon Paull commented: "It is encouraging there is a strong correlation between visual mineralisation and the assays, as the Board optimistically looks forward to receiving further results. Otherwise, the progress of the drilling campaign is taking shape, especially verification the underlying copper system at the Big One Deposit is likely to be larger than our geology team's initial expectations."

Castillo Copper Limited ("CCZ") is pleased to report the initial assays for drill-holes BO\_315-317RC returned up to 9.19% Cu and verified extensions to known mineralisation at the Big One Deposit in Mt Isa's copper-belt. In addition, visual inspection of samples from drill-holes BO\_322-27RC identified further copper mineralisation, with the best intercept of 26m found in BO\_326RC (refer to Figure 4 & Appendix A).

# **ASSAY RESULTS - MORE VISIBLE COPPER MINERALISATION**

# **Encouraging initial assays**

The initial assay results for drill-holes BO\_315-317RC (Figure 2) are encouraging as **up to 9.19% Cu** was intersected, while the intercepts clearly extend known mineralisation.

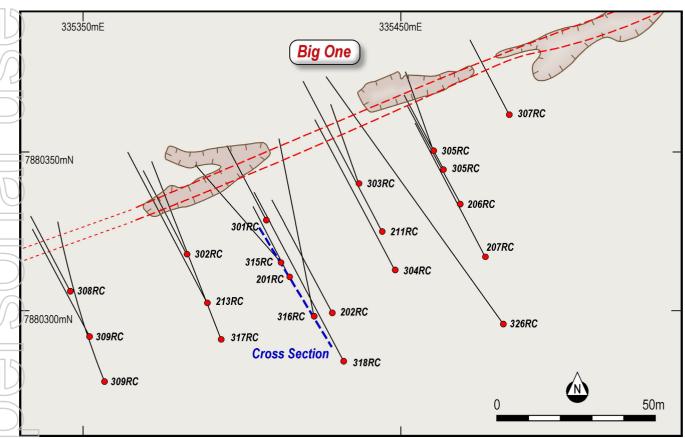
A summary of the best intercepts is shown below:

9m @ 1.42% Cu from 88m including 4m @ 3.06% Cu from 92m & 1m @ 9.19% Cu from 92m (BO\_317RC)

5m @ 1.06% Cu from 141m (BO\_316RC)

3m @ 1.22% Cu from 65m (BO\_315RC)

FIGURE 2: BIG ONE DEPOSIT - POSITION OF DRILL-HOLES 315RC-17RC

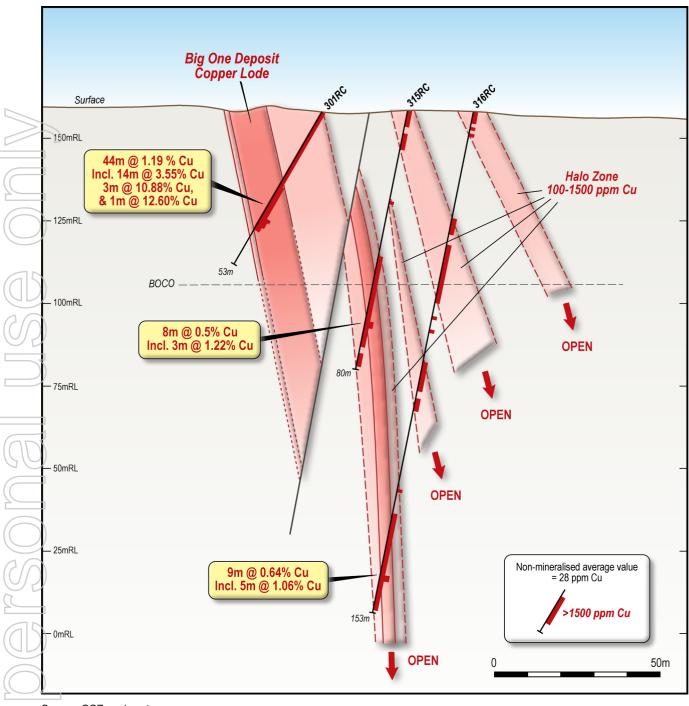


Source: CCZ geology team

There are several interpreted takeaways the geology team has determined post-analysis of the initial results, including:

- Incorporating the fresh data points into the preliminary geological model for the Big One Deposit suggests the underlying system is larger than initial expectations,
- ➤ There is now demonstrable evidence that Copper mineralisation is structural as there is increasing evidence that it potentially extends beyond the trachyte/dacite dyke (refer Figure 3 cross section for BO\_315RC-316RC); and
- The use of geophysics has enabled significantly better targeting and, in turn, delivered drilling and assay results higher than initially anticipated.

FIGURE 3: CROSS SECTION - DRILL-HOLES 315RC-316RC



Source: CCZ geology team

Drilling down, the assay results verify there is a relatively strong correlation to the visual estimates of sulphides and alteration minerals. Notably, there were incremental zones outside these depths with 1-6m low tenor copper mineralisation ranging from 500–2,500ppm Cu coupled to elevated silver-cobalt levels.

However, consistent with the 2020 drilling campaign, there was no anomalous lead-zinc found at the Big One Deposit, while weak gold mineralisation (0.05–0.15 ppm) was apparent, it did not correlate with the copper zones, rather dolomitic siltstones and quartzites.

# Visual copper mineralisation

Consistent with drill-holes BO\_315RC-321RC, visual inspection shows that all new drill-holes have potentially intersected copper mineralisation. There are several significant intercepts ranging from 8m up to 26m (Figure 4 and Appendix A).

Assays for the priority drill-holes, BO\_318RC and BO\_326RC, with visual copper intercepts at 34m and 26m respectively, is being expedited. As such, the results of the analysis should be returned within the next few weeks.

FIGURE 4: BIG ONE DEPOSIT - QUALITATIVE ASSESSMENT OF DRILLHOLES 322RC-327RC

	Borehole	From (m)	To (m)	Apparent Thickness (m)	Comments
	BO_322RC	57	73.5	16.5	Dacitic
	BO_323RC	8	9	1.0	Dacitic, pervasive orthoclase
	BO_323RC	82	97	15.0	Dacitic, some orthoclase
	BO_324RC	3	6	3.0	Quartzite
	BO_324RC	33	40	7.0	Fractured quartzite
5	BO_324RC	41	53	12.0	Dacite
$\Box$	BO_325RC	2	4	2.0	Dacite
	BO_325RC	45	46	1.0	Dacitic
	BO_326RC	5	9	4.0	Dacite
	BO_326RC	27	28	1.0	Quartzite with abundant pyrite
	BO_326RC	96	100	4.0	Dacite
	BO_326RC	134	160	26.0	Dacite
	BO_327RC	60	68	8.0	Dacite
	BO_327RC	81	90	8.0	Dacite
	BO_327RC	90	99	9.0	Quartzite

# Notes:

- 1. Samples have been taken at 1m intervals
- 2. Mineralisation estimated from field geologists rock chip estimates
- 3. Each dyke intersections also characterised by potassic and chloritic alternation
- 4. True vertical depths will be calculated by Minescape block model procedures
- 5. A zone of limited mineralisation inferred to be associated with the dyke was intersected in each drill-hole

Source: CCZ geology team

# **Next steps**

There are several ongoing steps, including:

- Reporting of the assay results for BO 318-27RC which are due back from the laboratory; and
- Finalise logistics, access, cultural heritage, and targets for the drilling campaign at the Arya Prospect.

For and on behalf of Castillo Copper

Simon Paull

**Managing Director** 

# PHOTO GALLERY – DRILLING TEAM AT BIG ONE DEPOSIT









P3: DRILL RIG AT BIG ONE DEPOSIT



Location: 7,880,306E, 335,422N Source: CCZ geology team

# **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 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."

### References

1) CCZ ASX Release – 15 July 2021

# Competent Person Statement

The information in this report that relates to Exploration Results for "Big One Deposit" is based on information compiled or reviewed by Mr Mark Biggs. Mr Biggs is both a shareholder and 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: DRILL-HOLE DATA & LOCATIONS**

# Location

The location of the drill-holes completed is provided in Figure A1 below, with a companion sketch map relative to those previously drilled in the 2020 campaign (Figure A2).

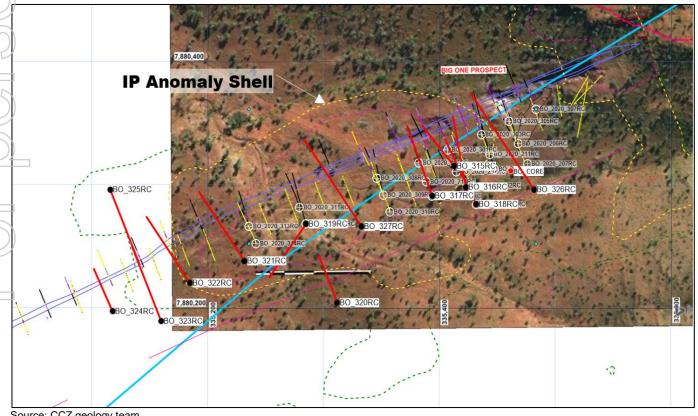
FIGURE A1: LOCATION OF DRILL-HOLES

	Site ID	Easting (GDA94)	Northing (GDA94)	Total Depth (m)	Grid Azimuth	Dip	Estimated days	Туре
	BO_315RC	335413	7880315	80	320	-58	2.0	Redrill 201RC
	BO_316RC	335423	7880298	155	349	-68	1.2	Redrill 202RC
	BO_317RC	335394	7880291	125	339	-61	1.5	Redrill 306RC
	BO_318RC	335432	7880284	203	333	-73	1.2	Redrill 203RC
	BO_319RC	335285	7880268	149	3456	-69	1.5	Redrill 312RC
	BO_320RC	335312	7880204	83	337.6	-60	1.3	Abandoned due to high water flow
75	BO_321RC	335232	7880238	137	325	-60	1.3	-
	BO_322RC	335185	7880220	131	325	-60	1.2	-
an	BO_323RC	335160	7880189	131	337.5	-60	1.3	Matched to 325RC
	BO_324RC	335118	7880197	76	335	-60	1.2	Abandoned due to faulted ground and cavities
	BO_325RC	335116	7880296	130	157.4	-60	1.3	Oriented south
	BO_326RC	335482	7880296	191	325	-60	3	Abandoned due to high water flow
	BO_327RC	335333	7880266	173	325	-60	1.5	-

Note:

Source: CCZ geology team

# FIGURE A2: LOCATION OF NEW DRILLING



Source: CCZ geology team

Some locations corrected after loading to database and plotting extents - compared to previous ASX releases.

# **Observations**

BO 322RC to 327RC are all new drill-holes either along the dyke or testing the IP anomalies. Of note is that each of the new drillholes have intersected the trachyte - porphyritic dacite dyke and associated mineralisation within and surrounding the dyke.

The mineralisation is characterised by potassic alteration and a suite of minerals such as orthoclase, epidote, sericite, and variable iron oxide contents. Note, orthoclase up to 50% of a 1m interval has been recognised.

Mineralisation within the five drill-holes completed are listed in Figure A3, again highlighting the mineralised zone extends outside the wireframe of the igneous dyke. The apparent thickness of the major mineralised zone varied between 1m up to 26m.

FIGURE A3: QUALITATIVE ASSESSMENT OF DRILLHOLES 322RC TO 327RC

Borehole	From (m)	To (m)	Apparent Thick. (m)	Orthoclase (%)	Epidote (%)	Sericite (%)	Chalcocite (%)	Comments
BO_322RC	57	73.5	16.5	1-10	0	1-2	0-5	Dacitic
BO_323RC	8	9	1.0	1-20	1-2	0	3-5	Dacitic, pervasive orthoo
BO_323RC	82	97	15.0	1-10	1-5	0	0-3	Dacitic, some orthoclase
BO_324RC	3	6	3.0	1-5	0	1-3	1-5	Quartzite
BO_324RC	33	40	7.0	1-10	0	0	1-2	Fractured quartzite
BO_324RC	41	53	12.0	2-15	1-5	1-5	1-6	Dacite; hole abandoned 76m
BO_325RC	2	4	2.0	5-10	0	0	1-5	Dacite
BO_325RC	45	46	1.0	1-5	1-5	1-5	1-3	Dacitic
BO_326RC	5	9	4.0	5-10	0	0	1-3	Dacite
BO_326RC	27	28	1.0	0-5	0	1-5	0-1	Quartzite with abundant pyrite
BO_326RC	96	100	4.0	0-5	0-2	1-5	1-3	Dacite
BO_326RC	134	160	26.0	0-25	1-5	0-10	1-6	Dacite
BO_327RC	60	68	8.0	0-10	1-3	0-2	1-5	Dacite
BO_327RC	81	90	8.0	0-15	1-5	0-3	1-5	Dacite
BO_327RC	90	99	9.0	0-20	1-3	0	5-10	Quartzite

# Notes:

- Samples have been taken at 1m intervals
- Mineralisation estimated from field geologists rock chip estimates
- Each dyke intersections also characterised by potassic and chloritic alteration
- True vertical depths will be calculated by Minescape block model procedures
- A zone of mineralisation inferred to be associated with the dyke was intersected in each drill hole

Source: CCZ geology team

# **APPENDIX B: JORC CODE, 2012 EDITION – TABLE 1**

The following JORC Code (2012 Edition) Table 1 is primarily supplied for the provision of the 3rd release of data for the 2021 Drilling Program at the Big One Deposit.

# Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling	<ul> <li>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.</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 to the Public Report.</li> <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>For the 2021 program, 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>Weights recovered from riffle splitting varied between 1-2kg for both the 1970 and 1993 drilling programs.</li> <li>For the 2021 program, 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 (see Figure A1-1). 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>
Drilling techniques	<ul> <li>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	Reverse Circulation, RC, drilling was utilised for all holes drilled to date at Big One Deposit.
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>	<ul> <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>

#### Logging • Whether core and chip samples have been geologically For all drilling programs, every metre drilled and sampled was logged and geotechnically logged to a level of detail to support geologically in accordance with industry-wide acceptable standard for RC logging and the logging was qualitative in nature with every metre logged. appropriate Mineral Resource estimation, mining studies Unfortunately, lithology dictionaries and descriptions varied between and metallurgical studies. • Whether logging is qualitative or quantitative in nature. programs. The 2021 programs also recorded visible sulphide and carbonate Core (or costean, channel, etc) photography. concentrations and alteration minerals, such as orthoclase, epidote, chlorite, and sericite • The total length and percentage of the relevant intersections logged. Sub-• If core, whether cut or sawn and whether quarter, half or For the 2021 program, samples with copper <100ppm will be composited every four metres and all samples were collected to maximise optimal sampling all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc. representation for each sample. techniques and whether sampled wet or dry. Each metre sample had an amount removed for washing and cleaning and and sample sieving then place into metre allocated chip travs. These chips were logged For all sample types, the nature, quality, and preparation appropriateness of the sample preparation technique. on site by the rig geologists and those logs have been saved into a spreadsheet and stored on the Company server. Any visible mineralisation. Quality control procedures adopted for all sub-sampling alteration or other salient features were recorded in the logs. Industry wide. stages to maximise representivity of samples. acceptable, standard practices were adhered to for the drilling and sampling Measures taken to ensure that the sampling is of each metre as per the Drilling and Sampling Procedures set out before representative of the in-situ material collected, including commencement of the drilling programme. for instance results for field duplicate/second-half Any reporting of significant mineralised intervals was on a received mass x samplina. interval calculation (i.e., weight-averaged). • Whether sample sizes are appropriate to the grain size of the material being sampled. Quality of • The nature, quality and appropriateness of the assaying CCZ's first second (4) RC holes will be assayed by an independent and laboratory procedures used and whether the laboratory. ALS in Brisbane Australia. Methods used were as follows: assav data o Gold – by method **Au-AA25** 30g charge (fire Assay with AAS finish): technique is considered partial or total. and • For geophysical tools, spectrometers, handheld XRF o High gold values within oxide zone/supergene zone may need **laboratory** instruments, etc. the parameters used in determining the further testing by method Au-SCR21. tests analysis including instrument make and model, reading o Copper and 32 other – by method **ME-ICP41** (HF-HN03-HCL04 acid times, calibrations factors applied and their derivation. digest, HCL leach and ICP-AES finish). etc. Over-limit copper (>10,000 ppm [0.01%]) to be re assayed for copper Nature of quality control procedures adopted (eq. by method Cu-OC62 (HF-HN03-HCL04 acid digest, HCL leach and standards, blanks, duplicates, external laboratory checks) ICP-AES finish). and whether acceptable levels of accuracy (i.e. lack of These analytical methods are considered as suitable and appropriate for this bias) and precision have been established. 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 Agua Regia digest then ICP-AES) and with any copper assays >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

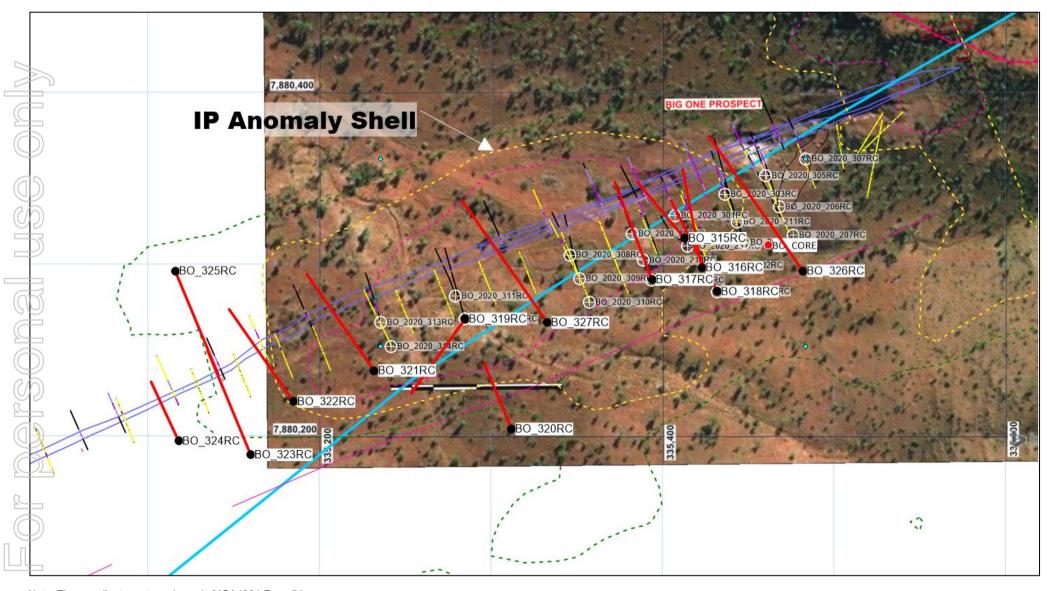
the time of sampling.

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>CCZ's first 3 RC hole assay results from ALS have been reviewed by two independent consultant geologists. Assays from the 2021 drilling program have yet to be returned.</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</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>geochemical assaying.</li> <li>The first 16 RC holes done by CCZ in 2021 have had their location surveyed by GPS and will, at the completion of drilling, be surveyed by differential GPS by independent licensed surveyors.</li> <li>The spatial location for these holes has been differentially surveyed into MGA94 – Zone 54. Collar heights are to the Australian Height Datum.</li> <li>The locations of the 1970 drillholes and 1993 drillholes have been determined from georeferencing several plans and utilizing tables in historical reports. Location errors for the 1970 drilling is ±10m whereas it is about ½ that for the 1993 holes.</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>	The first 16 RC holes were part of a 35-hole program that was set out on a nominal 100m pattern or to redrill 2020 holes that were found to be too short. The 1970 drilling was set at a 30m spacing and the 1993 drilling also at a 50m spacing. At the completion of all the planned holes, the drillhole collars will be differentially surveyed by independent, licensed surveyors and the grid pattern verified.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The current CCZ RC drilling programme (Figure A2-2) has had all holes oriented to intersect the mineralised structure/zone subsurface perpendicularly and therefore does not constitute any perceived bias. The typical dip direction of the new drillholes is 335-350 deg (Grid North).</li> <li>Rock chip samples have also been taken at areas of interest from observed mineralisation along the line of lode of the mineralised dyke, secondary structures, and surrounding spoil heaps.</li> </ul>
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
15)
<u>)</u>
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- The results of any audits or reviews of sampling techniques and data.
- This will be done once all 28 holes in CCZ's Stage 2021 program, and their assay results have been verified.
- For the historical drilling, the sampling techniques and the data generated from the Laboratory Assay results have been peer reviewed by consultant geologists familiar with the overall Mt Oxide Project and deemed to be acceptable. To facilitate this, six (6) sites have twinned drillholes, with the current drilling spudded immediately adjacent to the historical 1970, 1993 and 2020 drilling programs.

FIGURE B1: DRILLHOLE LOCATION



Note: The coordinate system shown is MGA1994-Zone 54

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
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 736.8 km² in the "Mt Oxide North Project":  <ul> <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 (216.5Km²), Expires: 28-Aug-2022.</li> <li>EPM 26525 (Hill of Grace) – encompasses the Ayra (previously Myally Gap) significant airborne EM anomaly, Holder: Total Minerals Pty Ltd for a 5-year period over 38 sub-blocks (128.8Km²), 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>EPMA 27440 (The Wall) – An application lodged on the 12-Dec-2019 over 70 sub-blocks (~215Km²) by Castillo Copper Limited. The tenure was granted on the 18th of March 2021.</li> </ul> </li> <li>A check on the tenures in 'application-status' was completed in 'GeoResGlobe' on the 2<sup>ND</sup> July-2021.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Historical QDEX / mineral exploration reports have been reviewed for historical tenures that cover or partially cover the Project Area in this announcement. Federal and State Government reports supplement the historical mineral exploration reporting (QDEX open file exploration records).</li> <li>Most explorers were searching for Cu-Au-U, and, proving satellite deposit style extensions to the several small sub-economic copper deposits (e.g., Big Oxide and Josephine).</li> <li>With the Mt Oxide North Project in regional proximity to Mt Isa and numerous historical and active mines, the Project area has seen portions of the historical mineral tenure subject to various styles of surface sampling, with selected locations typically targeted by shallow drilling (Total hole depth is characteristically less than 50m).</li> <li>The Mt Oxide North project tenure package has a significant opportunity to be reviewed and explored by modern exploration methods in a coherent package of EPM's, with three of these forming a contiguous tenure package.</li> </ul>

		<ul> <li>Various Holders and related parties of the 'Big One' historical mining tenure (ML8451) completed a range of mining activities and exploration activities on what is now the 'Big One' prospect for EPM 26574. The following unpublished work is acknowledged (and previously shown in the reference list):         <ul> <li>Katz, E., 1970, Report on the Big One, Mt Devine, and Mt Martin Mining Lease Prospects, Forsayth Mineral Exploration NL, report to the Department of Mines, CR5353, 63pp</li> <li>West Australian Metals NL, 1994. Drill Programme at the "Big One" Copper Deposit, North Queensland for West Australian Metals NL.</li> <li>Wilson, D., 2011. 'Big One' Copper Mine Lease 5481 Memorandum – dated 7 May 2011.</li> <li>Wilson, D., 2015. 'Big One' Mining Lease Memorandum – dated 25 May 2015: and</li> <li>Csar, M, 1996. Big One &amp; Mt Storm Copper Deposits. Unpublished field report.</li> </ul> </li> <li>The reader of the current ASX Release is referred to the CCZ's first publication of the 1993 historical reverse circulation drilling results for additional diagrams and drilling information ("Historic drill data verifies grades up to 28.40% Cu from &lt;50m in supergene ore at Mt Oxide Pillar") released on the ASX by CCZ on the 14-January-2020.</li> <li>The SRK Independent Geologists Report released by CCZ on the ASX on 28-July-2020 contains further details on the 'Exploration done by other parties - Acknowledgment and appraisal of exploration by other parties' this report is formally titled "A Competent Persons Report on the Mineral Assets of Castillo Copper Limited' Prepared as part of the Castillo Copper Limited (ASX: CCZ, LSE: CCZ) LSE Prospectus, with the effective date of the 17-July-2020.</li> </ul>
Geology	Deposit type, geological setting, and style of mineralisation.	<ul> <li>The Mt Oxide North 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 Mt Oxide North project lies within the Mt Oxide Domain, straddling the Lawn Hill Platform and Leichhardt River Fault Trough. The geology of the tenement is principally comprised of rocks of the Surprise Creek and Quilalar Formations which include feldspathic quartzites, conglomerates, arkosic grits, shales, siltstones and minor dolomites and limestones.</li> <li>The Project area is cut by a major fault zone, trending north- northeast – south- southwest across the permits. This fault is associated with major folding, forming several tight synclines- 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> </ul>

- Sediment hosted silver-lead-zinc occurs mainly within fine-grained sedimentary rocks of the Isa Super basin within the Western Fold Belt. Deposits include Black Star (Mount Isa Pb-Zn), Century, George Fisher North, George Fisher South (Hilton) and Lady Loretta deposits.
- 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.
  - o 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.
- At least 600m in strike length, with strong Malachite staining observed along the entire strike length, with historical open pits having targeted approximately 200m of this strike. Exact depth of mining below the original ground surface is not clear in the historical documents, given the pits are not battered it is anticipated that excavations have reached 5m to 10m beneath the original ground surface.
- Associated with the porphyry dyke are zones of fractured and/or sheared rock, the siltstones are described as brecciated, and sandstones around the shear as carbonaceous.
- The known mineralisation from the exploration activities to date had identified shallow supergene mineralisation, with a few drillholes targeting deeper mineralisation in and around the 200m of strike historical open cut pits.
- A strongly altered hanging wall that contained malachite and cuprite nodules. Chalcocite mineralization has been identified but it is unclear on the prevalence of the Chalcocite; and
- The mineralisation was amenable to high grade open pit mining methods of the oxide mineralization (as indicated by numerous historical open pit shallow workings into the shear zone).
- Desktop studies commissioned by CCZ and completed by ROM Resources and SRK Exploration have determined that the Big One prospect is prospective for Cu, Co, 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 additional potential for:

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- 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 additional potential for:

		<ul> <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> <li>At the 'Arya' prospect there is the additional 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 carbonate mineralisation, particularly the Surprised Creek Formation.</li> <li>Sulphide mineralisation within breccia zones, along stress dilation fractures, emplaced within pore spaces, voids, or in other rock fractures; and/or</li> <li>IOCG mineralisation related to chloride rich fluids.</li> </ul> </li> <li>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.</li> <li>The SRK Independent Geologists Report released by CCZ on the ASX on 28-July-2020 contains further details on the 'Geology - Deposit type, geological setting and style of mineralisation: this report is formally titled "A Competent Persons Report on the Mineral Assets of Castillo Copper Limited" Prepared as part of the Castillo Copper Limited (ASX: CCZ, LSE: CCZ) LSE Prospectus, with the effective date of the 17-July-2020.</li> </ul>
Drill hole Information	<ul> <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> <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> <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 (315-317RC) are listed in Appendix 2, with previous drilling collars listed in the 11<sup>TH</sup> of January ASX release (307-314RC).</li> <li>A summary of the holes drilled are given at the end of this section.</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>Queries on some assays are currently pending on CCZ's current drilling program.</li> <li>For historical surface sampling, Independent Laboratory Assay results for soil and rock chip samples from the Big One Deposit were averaged if more than one reading or determination was given.</li> <li>Copper grades were reported in this ASX release as per the received laboratory report, i.e., there was no cutting of high-grade copper results as they are directly relatable to high grade mineralisation styles readily visible in the relevant samples and modelling has yet not commenced.</li> <li>There were no cut-off grades factored into any assay results reported, however once modelling commences a high cut-off grade of 10,000ppm or 10% copper will be used.</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>When available, all mineralised intervals (i.e., &gt;500ppm) have been reported in this and previous ASX releases as the "as-intersected" apparent thickness (in metres) and given that most drillholes dip at -60 to -70 degrees from the horizontal, true intersection widths will be calculated during the block modelling process.</li> </ul>
Diagrams	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.	<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> <li>A series of cross-sections are being regenerated at Big One displaying copper analyses in ppm to aid interpretation and exploration planning.</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 avoiding misleading reporting of Exploration Results.	<ul> <li>Comprehensive reporting is planned once CCZ's current drilling program has all sample queries returned and have been verified.         <ul> <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 is given in Table A3-1 at the end of the section. All intersected intervals are apparent thicknesses in metres.</li> </ul>
Other substantive	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;</li> </ul>	<ul> <li>Several airborne EM and magnetic surveys have been conducted nearby by historical explorers and Castillo Copper has conducted its own surface sampling program prior to drilling commencing as noted above. A major IP</li> </ul>

## exploration geochemical survey results: bulk samples - size and survey was completed during May 2021 across five (5) north-east trending method of treatment: metallurgical test results: bulk survey lines (dipole-dipole array). Historical work has focussed on drilling and data geochemical sampling, with no detailed geophysical data collection. The density, groundwater, geotechnical and rock characteristics: potential deleterious or contaminating copper intersected to date appears to be associated with a NE-SW trending dyke. It occurs in two zones - oxidised (malachite, azurite, tenorite, cuprite) substances. and chalcocite. The aim of the IP survey was to ascertain if the copper Further work mineralisation intersected to date has a discernible electrical response (chargeable and / or conductive). If so, it is hoped that other zones of similar electrical response can be highlighted to better focus the upcoming drill program. As a result of the evaluation of data from the IP surveys carried out, the following recommendations are made: The 2D section models are likely to give the most accurate representation of the earth's conductivity and chargeability variations and should be used when drill targeting. The 3D model output allows trends and structures to be mapped and may give some indications of off-line anomalies. • Treat anomalies on the edge of lines (and at depth) with caution. Although care was taken to remove spurious data, some edge effects may persist in the data. Before testing any anomalies, GeoDiscovery can check the raw data to verify if a particular anomaly likely to be real. 50m DP-DP is shown to be a cost-effective method to cover ground relatively quickly and map the electrical properties of the top 150m or so. If drill testing the regions of elevated chargeability proves successful, a larger 100m DP-DP or P-DP campaign may be considered to cover more ground and to greater Incorporate the 3D and 2D IP models into the available geological database to determine the extent to which the chargeable zones may or may not have been tested, as well as their geological / stratigraphic significance. It is recommended that where IP anomalies occur near surface, a field visit is undertaken to see if anomaly can be explained by surficial clays / lithology. Future potential work is described within the body of the ASX Release, and will • The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or include: large-scale step-out drilling). Surface gravity and magnetic surveys, and potentially downhole EM Diagrams clearly highlighting the areas of possible surveys.

extensions, including the main geological

information is not commercially sensitive.

interpretations and future drilling areas, provided this

Diamond Coring.

Resource Estimation.

Block modelling and wireframing.