

**ASX Release** 

15 July 2021

# CASTILLO COPPER LIMITED ACN 137 606 476

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ASX/ LSE Symbol: CCZ

# Significant results at Big One Deposit – visible copper mineralisation up to 34m thick

- Drill-hole BO\_318RC intersected significant visible copper mineralisation in two distinctive zones – 11m from 89-100m and 34m from 153-187m (apparent thickness):
  - Notably, massive copper sulphide mineralisation chalcopyrite and chalcocite – was clearly observed
- More significantly, all seven drill-holes completed in the campaign so far, through visual inspection, have appeared to intersect copper mineralisation – the best intercepts are shown in Figure 1 below:

FIGURE 1: BEST INTERCEPTED MINERALISATION				
Borehole	From (m)	To (m)	Apparent Thickness (m)	
BO_318RC	89.0	100.0	11.0	
BO_318RC	153.0	187.0	34.0	
BO_319RC	55.0	64.0	9.0	
BO_321RC	63.0	72.0	9.0	
BO_315RC <sup>1</sup>	61.0	69.0	8.0	
BO_316RC <sup>1</sup>	113.0	120.0	7.0	
BO_316RC <sup>1</sup>	129.0	146.5	17.5	
BO_317RC <sup>1</sup>	90.5	103.0	12.5	

Note: Results for drill-holes 315-17RC published on 29 June 2021

- Reconciling these new data points with the geological modelling completed to date, clearly verifies material extensions to known mineralisation and potentially a larger underlying system then initially envisaged
- A key feature behind the success of the current campaign has been the significantly improved targeting, resulting from the effective utilisation of geophysical insights<sup>2</sup> to refine and reshape the drilling program to boost the collective exploration potential
- All samples from drill-holes BO\_318-21RC are currently with the laboratory for analysis, while results from BO\_315-317RC are expected to be received imminently

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Castillo Copper's Managing Director Simon Paull commented: "Hitting copper mineralisation seven times from seven starts is an outstanding way to progress the drilling campaign at the Big One Deposit. Moreover, the result from drill-hole 318RC is excellent, throwing off two zones of visible mineralisation totalling 45m and confirms massive copper sulphides are apparent. In addition, the Board is delighted there is clear evidence that known copper mineralisation has been extended and looks forward to releasing interpreted insights from upcoming assays results."

**Castillo Copper Limited ("CCZ")** is pleased to report copper mineralisation was intersected in drill-holes BO\_318-21RC at the Big One Deposit in Mt Isa's copper-belt, which complements the results from BO\_315-317RC announced on 29 June 2021 (Figure 2 & Appendix A)¹.

# **VISIBLE COPPER MINERALISATION**

## Significant results continue

The latest results for drill-holes BO\_318-21RC were positive, as all intersected visible copper mineralisation. Drilling down, the standout drill-hole was BO\_318RC which, from visual inspection, appears to have intersected copper mineralisation in two distinct zones – 11m from 89-100m and 34m from 153-187m (apparent thickness). In a further positive development, which makes the Big One Deposit's case even more compelling, massive copper sulphide mineralisation – chalcopyrite and chalcocite – were observed.

In addition, the results for drill-holes BO\_319RC and BO\_321RC were encouraging, as both intersected 9m of visible copper mineralisation at relatively shallow depths.

FIGURE 2: BIG ONE DEPOSIT – QUALITATIVE ASSESSMENT OF DRILLHOLES 315RC-321RC

Borehole	From (m)	To (m)	Apparent Thickness (m)	Comments
BO_318RC	89.0	100.0	11.0	Dacitic
BO_318RC	153.0	187.0	34.0	Dacitic, some orthoclase
BO_319RC	55.0	64.0	9.0	Dacitic, some orthoclase
BO_319RC	83.0	84.0	1.0	Quartzite
BO_319RC	87.0	91.0	4.0	Dacitic
BO_319RC	96.0	98.0	2.0	Dacitic
BO_320RC	79.0	80.0	1.0	Quartzite, some orthoclase
BO_321RC	63.0	72.0	9.0	Dacitic
BO_321RC	86.0	88.0	2.0	Quartzite
BO_321RC	97.0	100.0	3.0	Quartzite
BO_315RC <sup>1</sup>	58.0	61.0	2.0	Quartzite
BO_315RC <sup>1</sup>	61.0	69.0	8.0	Trachyte to porphyry dacite
BO_315RC <sup>1</sup>	69.0	71.0	2.0	Quartzite
BO_316RC <sup>1</sup>	113.0	120.0	7.0	Quartzite
BO_316RC <sup>1</sup>	129.0	146.5	17.5	Trachyte to porphyry dacite
BO_317RC <sup>1</sup>	11.0	13.0	2.0	Haematite-rich shale
BO_317RC <sup>1</sup>	20.0	24.0	1.0	Quartzite; pyrolusite
BO_317RC <sup>1</sup>	42.0	43.0	1.0	Quartzite; pyrolusite
BO_317RC <sup>1</sup>	65.0	66.0	1.0	Quartzite; pyrolusite
BO_317RC <sup>1</sup>	75.0	76.0	1.0	Siltstone; potassic alteration
BO_317RC <sup>1</sup>	90.5	103.0	12.5	Andesite dyke, plus sericite and chrysocolla
BO_317RC <sup>1</sup>	103.0	105.0	2.0	Quartzite

#### Notes:

- 1. Samples have been taken at 1m intervals
- 2. Mineralisation estimated from field geologists rock chip estimates
- 3. Each dyke intersections 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 deepened drill hole
- 6. In borehole BO\_319RC the dyke was intersected at a shallower depth than predicted

Source: CCZ geology team

Overall, when factoring in BO\_315-17RC, all seven drill-holes completed so far in the campaign have intersected visible copper mineralisation. This is an encouraging start, considering there are still a further 19 drill-holes to complete in the current program.

#### Known mineralisation extended

Leveraging the insights from the recent Induced Polarisation (IP) survey<sup>2</sup> has been a key feature in improving the drilling results for this current campaign, as targeting has been greatly enhanced. Consequently, the geology team are now able to verify the following issues with a higher degree of conviction:

- ➤ The findings from drill-holes BO\_315RC-21RC suggest the underling copper mineralisation at the Big One Deposit is controlled by structural trends. This is positive, as it potentially means the mineralisation constrained within the trachyte/dacite dyke is a secondary feature.
- ➤ Reviewing and reconciling the latest data points with the geological modelling undertaken so far clearly verifies significant extensions to known mineralisation. Moreover, the clear follow-on implication is potentially a larger underlying system then initially envisaged.
- ➤ A program of mapping and rock chip sampling is contemporaneously occurring along each of the five IP survey lines (refer to the photo gallery below LHS & Appendix B).
- The use of surface and downhole geophysical interpretations for this current campaign has been a critical factor that has enhanced the exploration potential at the Big One Deposit.

# PHOTO GALLERY - DRILLING TEAM AT BIG ONE DEPOSIT

## PHOTO 1: GEOLOGIST COLLECTING SAMPLES PHOTO 2: DRILL RIG OPERATING





Source for photo 1 and 2: CCZ geology team [Location: 7,880,306E, 335,422N]

# **Next steps**

There are several ongoing steps, including:

- > Assay results for BO 315RC-317RC are due back from the laboratory imminently.
- ➤ Samples for BO\_318RC-321RC have been dispatched for follow up analysis.
- ➤ The drilling campaign continues at Big One Deposit with a further 19 drill-holes to complete.
- > 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** 

#### **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 29 June 2021
- 2) CCZ ASX Release 20 May 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

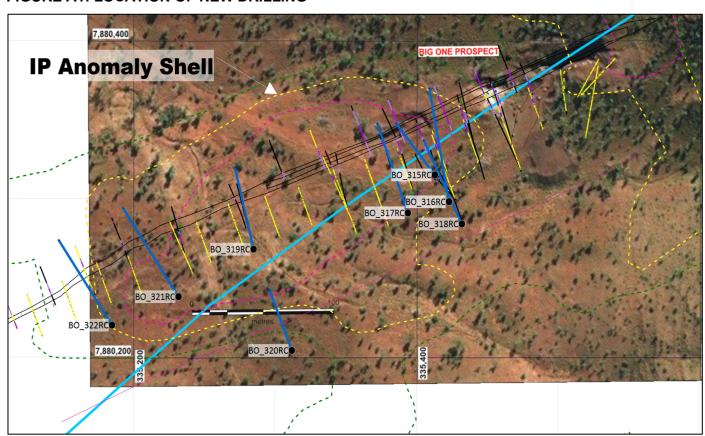
The location of the four drill-holes completed is provided in Table A1 below, with a companion sketch map relative to those previously drilled in the 2020 campaign (Figure A1).

**TABLE A1: LOCATION OF THREE NEW HOLES** 

Drill Order	Site ID	Easting (GDA94)	Northing (GDA94)	Total Depth (m)	Grid Azimuth	Dip	Drilling Days	Notes
1	BO_318RC	335432	7880284	203	333	-73	1.0	203RC (drilled 103m)
2	BO_319RC	335285	7880268	149	346	-69	1.5	312RC (drilled 107m)
3	BO_320RC	335539	7880352	83	338	-60	1.0	New drillhole
4	BO_321RC	335482	7880296	137	325	-60	2.0	New drillhole

Source: CCZ geology team

FIGURE A1: LOCATION OF NEW DRILLING



Source: CCZ geology team

# **Drill data interpretation**

A closer assessment of the mineralisation within the four completed drill-holes is listed in Table A2. This highlights the mineralised zone extends outside the wireframe of the igneous dyke, with the apparent thicknesses between 9 to 34m.

In addition, as shown by the recently completed ground dipole-to-dipole IP survey, the copper mineralisation may be more influenced and controlled by the major structural trends. More significantly, this implies mineralisation along the dyke may be a secondary feature, as the tenor decreases past 800m of the 1,200m long dyke to the south-west (as currently mapped).

TABLE A2: QUALITATIVE ASSESSMENT OF DRILLHOLES 318RC TO 322RC

Borehole	From (m)	To (m)	Apparent Thick. (m)	Orthoclase (%)	Epidote (%)	Sericite (%)	Chalcocite (%)	Comments
BO_318RC	89	100	11	1-3	1-3	1-2	0-1	Drilled next to 203RC, Dacitic
BO_318RC	153	187	34	1-5	1-5		1-15	Dacitic, some orthoclase
BO_319RC	55	64	9	1-10	1-5	1-3	0-10	Drilled next to 312RC. Dacitic, some orthoclase
BO_319RC	83	84	1	0			1-5	Quartzite
BO_319RC	87	91	4	1-5			1-5	Dacitic
BO_319RC	96	98	2	0	1-5		1-5	Dacitic
BO_320RC	79	80	1	5-10				Quartzite. New hole abandoned at 83m due to high water flow; up to 10% orthoclase
BO_321RC	63	72	9	5-50	1-5			Dacitic
BO_321RC	86	88	2	5-10			1-3	Quartzite
BO_321RC	97	100	3	0-5	1-10		0-1	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 deepened drill hole
- 6. In borehole BO\_319RC the dyke was intersected at a shallower depth than predicted; consequently, there was no requirement to drill the bore to the estimated total depth of 150m

Source: CCZ geology team

# APPENDIX B: GEOLOGICAL MAPPING AND ROCK CHIP SAMPLING

With the drilling campaign still underway, a companion program of mapping, sample collection and XRF analysis along the five induced polarisation lines has been progressed. Work along line L10600, which is characterised by steep, rugged terrain and inaccessible for a drilling rig (Figure A2), has recently been completed.

A total of 22 samples were collected, with XRF results for L10600 now under review and reconciliation with known geophysical anomalies. Several of the samples are being sent to the laboratory for further analysis, with the results to be interpreted once returned.

FIGURE A2: SAMPLING SITE, LOOKING NORTHEAST ALONG THE RIDGELINE, IP LINE L10600



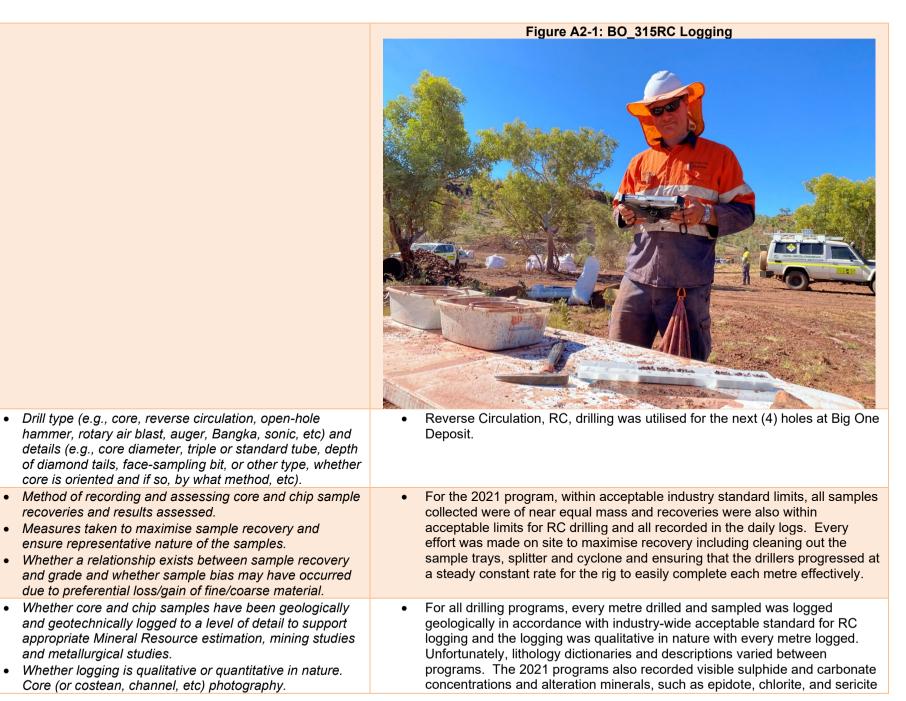
Source: CCZ Geology team

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

The following JORC Code (2012 Edition) Table 1 is primarily supplied for the provision of the 2nd 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 techniques	<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

Drill sample

recovery

Logging

core is oriented and if so, by what method, etc).

ensure representative nature of the samples.

Core (or costean, channel, etc) photography.

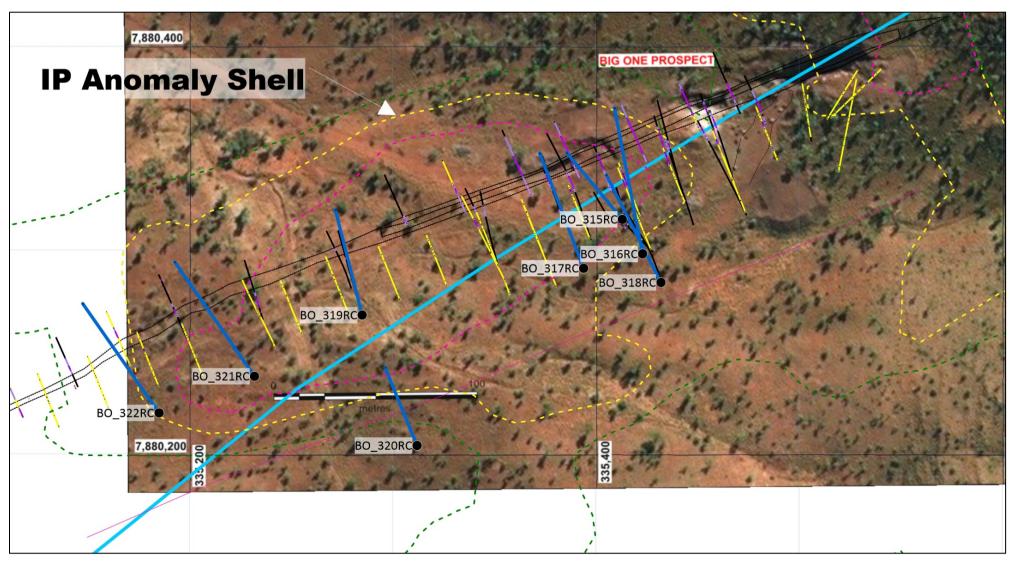
recoveries and results assessed.

and metallurgical studies.

	The total length and percentage of the relevant intersections logged.	
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>For the 2021 program, samples with copper &lt;100ppm will be composited every four metres and 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. 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 mass x interval calculation (i.e., weight-averaged).</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>CCZ's first second (4) RC holes will be assayed by an independent laboratory, ALS in Brisbane Australia. Methods used were as follows:         <ul> <li>Gold – by method Au-AA25 30g charge (fire Assay with AAS finish);</li> <li>High gold values within oxide zone/supergene zone may need further testing by method Au-SCR21.</li> <li>Copper and 32 other – by method ME-ICP41 (HF-HN03-HCL04 acid digest, HCL leach and ICP-AES finish).</li> <li>Over-limit copper (&gt;10,000 ppm [0.01%]) to be re assayed for copper by method Cu-OC62 (HF-HN03-HCL04 acid digest, HCL leach and ICP-AES finish).</li> </ul> </li> <li>These analytical methods are considered as suitable and appropriate for this type of mineralisation.</li> <li>For the current drilling program ALS Brisbane will analyse all samples. All elements except for gold were analysed by method ME-MS61 (41 element testing via Aqua Regia digest then ICP-AES) and with any copper assays &gt;1%, the copper will be redone using method Cu-OG46 with ICP-AES. The gold was done by method AA25. All methods used were both suitable and appropriate for the styles of mineralisation present in the Big One Deposit at the time of sampling.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>CCZ's first 21 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</li> </ul>

	Discuss any adjustment to assay data.	duplicates were used in accordance with standard procedures for geochemical assaying.
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>The first 7 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>	<ul> <li>The first 21 RC holes were part of a 35-hole program that was set out on a nominal 50m pattern. 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.</li> </ul>
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	The results of any audits or reviews of sampling techniques and data.	<ul> <li>This will be done once all 35 holes in CCZ's Stage 1 &amp;2 program, and their assay results have been verified.</li> <li>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.</li> </ul>

Figure A2-2 Drillhole Location



Note: The coordinate system shown is MGA1994-Zone 54

Source: CCZ Geology team

# **Section 2 Reporting of Exploration Results**

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 18<sup>th of</sup> 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> <li>Various Holders and related parties of the 'Big One' historical mining tenure (ML8451) completed a range of mining activities and exploration activities on</li> </ul>

		what is now the 'Big One' prospect for EPM 26574. The following unpublished work is acknowledged (and previously shown in the reference list):  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  West Australian Metals NL, 1994. Drill Programme at the "Big One" Copper Deposit, North Queensland for West Australian Metals NL.  Wilson, D., 2011. 'Big One' Copper Mine Lease 5481 Memorandum – dated 7 May 2011.  Wilson, D., 2015. 'Big One' Mining Lease Memorandum – dated 25 May 2015: and  Csar, M, 1996. Big One & Mt Storm Copper Deposits. Unpublished field report.  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 <50m in supergene ore at Mt Oxide Pillar") released on the ASX by CCZ on the 14-January-2020.  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.
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).         <ul> <li>Sediment hosted silver-lead-zinc – occurs mainly within fine-grained sedimentary rocks of the Isa Super basin within the Western Fold Belt.</li> </ul> </li> </ul>

- 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.
- o 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:
  - 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:
  - Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Quilalar Formation; and/or
  - o 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 IOCG mineralisation related to potassic rich fluids.  At the 'Arya' prospect there is the additional potential for: Supergene mineralisation forming at the surface along the fault, fault breccia, and the Surprise Creek Formation 'PLrd' rock unit ('Prd' historical).  Epigenetic replacement mineralisation for Cu (with minor components of other base metals and gold) from replacement carbonate mineralisation, particularly the Surprise Creek Formation.  Skarn mineralisation for Cu-Au and/or Zn-Pb-Cu from replacement carbonate mineralisation, particularly the Surprised Creek Formation.  Sulphide mineralisation within breccia zones, along stress dilation fractures, emplaced within pore spaces, voids, or in other rock fractures; and/or IOCG mineralisation related to chloride rich fluids.  A selection of publicly available QDEX documents / historical exploration reports have been reviewed, refer to Section 2, sub-section "Further Work" for both actions in progress and proposed future actions.  The SRK Independent Geologists Report released by 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.
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 density, groundwater, geotechnical and rock geochemical sampling, with no detailed geophysical data collection. The copper intersected to date appears to be associated with a NE-SW trending characteristics: potential deleterious or contaminating 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 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 (see Figure A2-1). 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. Further work • The nature and scale of planned further work (e.g., Future potential work is described within the body of the ASX Release, and will 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 Diamond Coring. Block modelling and wireframing. interpretations and future drilling areas, provided this information is not commercially sensitive. Resource Estimation.