

#### **ASX Release**

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CASTILLO COPPER LIMITED ACN 137 606 476

Level 26 140 St Georges Terrace Perth WA, 6000 Australia

Tel: +61 8 6558 0886 Fax: +61 8 6316 3337

**Contact:** Alan Armstrong Executive Director

E-mail: info@castillocopper.com

For the latest news:

www.castillocopper.com

Directors / Officers: Peter Meagher Alan Armstrong Peter Smith

**Issued Capital:** 580.1 million shares 84.5 million options

> ASX Symbol: CCZ

# New results confirm "Area 1" as standout target at Broken Hill

- CCZ's geology team have commenced the process of formulating an inaugural drilling campaign in the high-priority "Area 1"<sup>1</sup> at the Broken Hill project targeting cobalt
- This follows the receipt of assay results which successfully confirmed cobalt mineralisation up to 291ppm Co at surface within outcropping Himalayan Formation in "Area 1"
- In addition, the south of "Area 1" provides secondary mineralisation potential for zinc, lead and copper given solid legacy assay results up to 5,300ppm Zn, 12,800ppm Pb and 2,900ppm Cu.
- CCZ has now successfully negotiated land access and compensation agreements across the tenure with all landowners
- Once sufficient geological data is compiled, after the next field trip, the geology team can then finalise "Area 1" drill targets and start preparing an application to be lodged with the NSW regulator for approval
- Relative to some peers in the region, CCZ's distinct comparative advantages are 100%-ownership of its tenure and full mineral rights
- Re-opening Cangai Copper Mine remains the Board's core objective, but compelling geological evidence for surface mineralisation at "Area 1" provides the Board a significant opportunity to create incremental value for shareholders

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**Castillo Copper's Chairman Peter Meagher commented:** *"With* progress to re-open Cangai Copper Mine underway and the Marlborough assets free carried to Bankable Feasibility Study, the Board is delighted to confirm plans to progress a drilling campaign at "Area 1" within our Broken Hill tenement. As CCZ owns all mineral rights, and assays confirm the prevalence of high-grade mineralisation, the Board is looking forward to starting a drilling campaign on a second front in NSW."

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**Castillo Copper Limited's ("CCZ" or "the Company")** Board has decided to progress planning for a drilling campaign at its Broken Hill tenure, focused on the highly prospective "Area 1" on the western boundary. The decision to proceed follows the receipt of new assay results confirming high-grade cobalt mineralisation at surface within the Himalaya Formation, coupled with compelling legacy data.

#### FORMULATING "AREA 1" DRILLING PROGRAM

#### New findings from initial field trip

During the field trip announced 28 June 2018, the geology team collected rock-chip samples from outcropping Himalaya Formation within "Area 1" which were sent to the laboratory for follow up analysis. Subsequently, new elevated results up to 291ppm Co were confirmed, which is a clear significant indicator of underlying mineralisation (Figure 1 and Appendix A).

This result is one of the key reasons for formulating a drilling programme at "Area 1" to build up sufficient geological data to potentially model a JORC (2012) compliant Inferred Resource.



#### FIGURE 1: ROCK CHIP SAMPLE LOCATIONS & RESULTS - "AREA 1" HIMALAYA FORMATION

Source: CCZ geology team, refer to the accompanying JORC (2012) Code Table 1 for further details

#### Field-team redeployed

Following receipt of the new cobalt assay results, the team will redeploy to site to complete field exploration work. The field geologists aim to:

- Extensively sample the outcropping Himalaya Formation in Area 1 (Figure 2);
- Structurally map the outcropping Himalaya Formation in Area 1;
- > Review historic copper workings within the tenement; and
- Commence the "control" soil sampling program to establish a baseline for future sampling programs.

By mapping the surface extents and structural controls of the Himalaya Formation within the project area, the geology team will be able to design a maiden exploration drilling program to intersect the prospective mineralised body at depth.

#### FIGURE 2: HIMALAYA FORMATION OUTCROPPING AT BROKEN HILL





Looking north-east, showing Himalaya Formation scree slope on southeast hillside slope. (Location: 515683mE 6457799mN)

Steeply east-dipping Himalaya Formation at the top of the hill (Location: 515670mE 6457916mN)

#### Secondary mineralisation potential

As a priority, the Broken Hill project's zinc-lead-copper potential is currently being targeted as a secondary focus within "Area 1", since historic geochemistry data highlights the prospectivity of Zn-Pb-Cu mineralisation.

Notably, historic geochemical assay results of up to 5,300ppm Zn, 12,800ppm Pb and 2,900ppm Cu have been confirmed within "Area 1" – southern portion. Meanwhile, outside the tenement and interpreted to strike along the same mineralisation trend, results up to 126,000ppm Pb and 73,910ppm Zn show the Broken Hill project's upside potential (Figure 3).



FIGURE 3: HISTORIC GEOCHEMICAL SAMPLES FOR PB, ZN AND CU

Source: CCZ geology team refer to the accompanying JORC (2012) Code Table 1 for further details

The area to the north of the tenement, which has a lower sample density, has recorded results up to 34,600ppm Pb and 31,400ppm Zn. This area is underpinned by the Broken Hill Group which includes the Allendale metasediments, Ettlewood Calc Silicate Member, Hores Gneiss, Parnell Formation and Silver King Metadolerites.

The famous Broken Hill deposit is hosted within Broken Hill group rocks, with the unit being targeted by the Silver City Minerals Ltd<sup>2</sup> and Perilya Ltd<sup>3</sup> for Pb-Zn bearing potential. It is believed these groups aimed to discover another Broken Hill type deposit of analogous mineralisation and magnitude.

Post reviewing "Area 1" the geology team will review the Broken Hill project for its secondary mineralisation potential. Further, any future exploration programs will include a multi-mineralisation potential approach. With the project largely underexplored and the correct host lithologies present for traditional Broken Hill style mineralisation, the northern part of the tenement boasts significant exploration upside.

#### Next steps

Update on legacy stockpiles, Cangai Copper Mine Phase II drilling program and progress inaugural drilling program for "Area 1" within the Broken Hill project.

For and on behalf of Castillo Copper

# Alan Armstrong

#### **Executive Director**

#### COMPETENT PERSON STATEMENT

The information in this document that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Nicholas Ryan, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Ryan has been a Member of the Australian Institute of Mining and Metallurgy for 12 years and is a Chartered Professional (Geology). Mr Ryan is employed by Xplore Resources Pty Ltd. Mr Ryan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ryan consents to the inclusion in the report of the matters based on his information and 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.

#### ABOUT CASTILLO COPPER

Castillo Copper Limited (ASX: CCZ) is an ASX-listed base metal explorer that's flagship project is the historic Cangai Copper Mine near Grafton in northeast NSW. The project comprises a volcanogenic massive sulphide ore deposit, with one of Australia's highest grade JORC compliant Inferred Resources for copper: 3.2Mt @ 3.35% (6 September 2017). In terms of contained metal, the Inferred Resource is 107,600t Cu, 11,900t Zn, 2.1Moz Ag and 82,900 Moz Au. A notable positive is the presence of supergene ore with up to 35% copper and 10% zinc which is ideal feedstock for direct shipping ore. Incrementally, the project holds five historic stock piles of high-grade ore located near Cangai Copper Mine.

In brief, CCZ's Australian assets are 100% owned and comprise four tenure groups detailed briefly as follows:

NSW assets: Consists of two projects: 1) Jackaderry, which includes Cangai Copper Mine, is in an area highly prospective for copper-cobalt-zinc and made up of three tenements; and, 2) Broken Hill which consists of two

contiguous tenements prospective for cobalt-zinc that are located within a 20km radius of Broken Hill and just north of Cobalt Blue's ground (ASX: COB).

Queensland assets: Comprises two projects: 1) Mt Oxide made up of three prospects (two are contiguous) in the Mt Isa region, northwest Queensland, and are well known for copper-cobalt systems; and, 2) Marlborough which includes three prospects located north-west of Gladstone (adjacent to Queensland Nickel mining leases) in an area with proven high-grade cobalt-nickel systems.

Finally, CCZ' holds six exploration concessions in Chile.

#### **REFERENCE LIST from ASX Announcements:**

- 1) ASX Announcement CCZ 2 May 2018
- 2) ASX Announcement: SCI ASX Presentation May 2011
- 3) http://www.perilya.com.au/our-business/exploration/broken-hill

# APPENDIX A: CCZ WITHIN TENURE ASSAY RESULTS

### Table 1: Broken Hill Project Rock Chip Results, samples collected 28 June 2018

Sample_ No	E_G94z54	N_G94z54	RL_mA SL	As (ppm)	Co (ppm)	Cu (ppm)	Fe (%)	Pb (ppm)	Zn (ppm)
385751	515683	6457799	304	6	5	24	3.22	15	11
385752	515701	6457839	306	2020	291	29	>50	22	42
385753	515663	6457896	338	10	6	9	1.36	6	7
385754	515676	6457928	335	18	8	33	1.7	14	6
385755	515768	6458006	342	<5	11	10	7.19	8	23
385756	515746	6458017	337	165	82	321	18.95	26	28
385757	515709	6458017	335	7	205	180	22.5	16	58

Source: ALS, refer to the accompanying JORC (2012) Code Table 1 for further details

# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>A total of 7 rock chips were analysed from the fieldtrip completed on the 28 June 2018:</li> <li>Samples were dispatched to ALS Brisbane for preparation. They were crushed to 6mm then pulverized to 75µm before being split and bulk residue retained.</li> <li>Analysis was via HF-HNO3-HCL04 acid digest + HCL leach ICP-AES finish (ME-ICP61).</li> <li>As previously reported on 27<sup>th</sup> June 2018 62 rock chip samples were analysed from an earlier fieldtrip:</li> <li>Samples were dispatched to ALS Adelaide for preparation. They were crushed to 6mm then pulverized to 75µm before being split and bulk residue retained.</li> <li>Analysis was via HF-HNO3-HCL04 acid digest + HCL leach ICP-AES finish (ME-ICP61).</li> <li>Historic sampling used in this announcement are from 1964-2017, details for these samples can be found via the NSW Geological Survey surface sampling database and historical annual and relinquishment reports. Specifically, the DIGS reports referred to include:GS1995/160, GS1996/021, GS1980/117, GS1979/063, GS981450, GS1982/477, GS1980/166</li> <li>Sampling details referring to the above were previously reported in the Table 1 on 2<sup>nd</sup> May 2018</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>No exploration drilling undertaken to date</li> <li>Historical drilling was previously reported in the Table 1 on 2<sup>nd</sup> May 2018</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>No exploration drilling undertaken to date.</li> <li>Historical drilling was previously reported in the Table 1 on 2<sup>nd</sup> May 2018</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>No exploration drilling undertaken to date</li> <li>Historical drilling was previously reported in the Table 1 on 2<sup>nd</sup> May 2018</li> </ul>
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>Procedure for rock chip sample collection: <ul> <li>1-1.5kg of sample collected via geopick</li> <li>Samples were bagged and tagged with unique assay number for analysis</li> </ul> </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 (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Rock chip and soil samples were delivered in person to ALS Brisbane Laboratories</li> <li>ALS has an in-house QA-QC protocol</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All assay data was delivered in both csv and pdf/certified assay certificate format from ALS</li> <li>Data was manually checked, and all QA/QC samples assessed for analytical precision and variance. The data was entered into Pitney Bowes MapInfo Professional and validated by the CCZ Geology Team.</li> <li>All electronic data is backed up and no hard copy data is retained.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>Rock chip and soil samples locations (easting, northing, RL) were picked up by handheld Garmin Oregon 750t.</li> <li>This is adequate for current requirements with lateral accuracy of plus or minus 10m.</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>Rock chip sample spacing is irregular and results are indicative only.</li> <li>The results are not appropriate for Mineral Resource and Ore Reserve estimation.</li> <li>Samples from both rock chips and soil are appropriate for guiding the and refining the selection of areas for exploration drilling.</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>Rock chip samples were taken opportunistically where outcropping units were observed within the tenements.</li> <li>Samples locations were selected based on the GSNSW mapping targeting the Himalaya Formation</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>All samples were temporarily stored at site accommodation then delivered in person to ALS Minerals Laboratory in Brisbane. This acted as physical security in the chain of custody, with sample itinerary sheets used for handing samples over to the ALS Minerals Laboratory.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	No reviews or audits have been conducted to this point.

# **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>Castillo Copper ("CCZ") holds:</li> <li>EL8599 consisting of 20 units (approx. 60 km2). The tenure has been formally granted for the term of 36 months until 20 June 2020.</li> <li>EL 8572 consisting of 19 units (approx. 57km2). The tenure has been formally granted for the term of 36 months until 23 May 2020.</li> <li>The location of the CCZ project tenures are shown in Figure 4 below:</li> </ul>		
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previously reported in Table 1 on 2nd May 2018</li> </ul>		
Geology	Deposit type, geological setting and style of mineralisation.	Previously reported in Table 1 on 2nd May 2018		
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:</li> <li>easting and northing of the drill hole collar</li> </ul>	<ul> <li>Previously reported in Table 1 on 2nd May 2018</li> <li>No new drilling completed and reported in this announcement.</li> </ul>		

Criteria	JORC Code explanation	Commentary
	<ul> <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> 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.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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>Previously reported in Table 1 on 2nd May 2018</li> <li>No new drilling completed and reported in this announcement.</li> </ul>
Relationship between mineralisatio n widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>The mineralisation is hosted within lateritic material, likely overlain by alluvial material.</li> <li>Rock chip were collected at surface from areas interpreted to overlie the Himalaya Formation</li> <li>No exploration drilling undertaken to date.</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>No significant discovery reported to date.</li> <li>No new exploration drilling undertaken to date.</li> </ul>
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>Rock Chip Geochemistry Samples (results in ppm) are reported in Appendix 1 of the announcement; these are discussed within the body of this announcement:</li> </ul>

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>Previously reported in Table 1 on 2nd May 2018</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Future work proposed for EL 8599 and EL 8572 includes:</li> <li>Expanded rock chip sampling program over the Himalaya Formation and any other areas deemed prospective by the field geologists</li> <li>Soil sampling program to delineate potential mineralised bodies at depth</li> <li>Exploration drilling program at Target Area 1</li> </ul>