CASTILLO COPPER LIMITED

ASX Release

3 December 2019

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:
Simon Paull
Managing Director

E-mail:
info@castillocopper.com

For the latest news:

www.castillocopper.com

Directors / Officers:
Rob Scott
Simon Paull
Peter Smith
Gerrard Hall

Issued Capital:
676.4 million shares
96.4 million options

ASX Symbol:
CCZ

Metallurgy test-work verifies Cangai ore produces commercial grade copper concentrate

- **Using a representative massive sulphide ore sample extracted from drill hole CC0023R at Cangai Copper Mine (CCM), a commercial grade concentrate of 22.2% Cu & 7.4% Zn with a recovery of 79.3% of total contained copper was achieved:**
  - **This result was derived from using standard metallurgical flotation methods; and**
  - **The result is highly encouraging as it provides first-hand insight on a potential final copper concentrate product from using high-grade CCM ore**
- **The composite sample utilised in the metallurgical test-work process comprised high-grade massive sulphide RC chips with a head grade of 8.18% Cu and 4.36% Zn**
- **These head grades reinforce that CCM is one of Australia's highest grading historic copper deposits and a strategic core pillar central to progressing CCZ's transformation into a mid-tier copper group**
- **Moving forward, the next phase of the exploration program at CCM will focus on expanding the known orebody, especially drill-testing several sizeable massive sulphide conductors that are open at depth**

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Castillo Copper's Managing Director Simon Paull commented: "The key insight from the metallurgical test-work result is that massive sulphide ore from Cangai Copper Mine can potentially produce a commercial grade copper concentrate. More pointedly, this is clearly a strong motivating force to intensify and progress the exploration campaign at this core pillar, especially test-drill the several sizeable massive sulphide conductors open at depth to ascertain the project's potential scalability. With funding now secured from the recent capital raising exercise, the Board's core focus is to accelerate the exploration program across the three pillars, which is central to our strategic intent to transform CCZ into a mid-tier copper group."

CCZ's London based director Ged Hall remarked: "We are now heading into a significant inflection point in CCZ's evolution which will see a material ramp up in exploration work across the three pillars. Against this backdrop, it is pleasing metallurgical test-work on massive sulphide ore from Cangai Copper Mine can potentially deliver a commercial grade copper concentrate."

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Castillo Copper Limited ("CCZ" or **"the Company**") has received metallurgical test-work results back from ALS Global in Perth which verifies that massive sulphide ore from CCM can produce copper concentrate to industry standard benchmarks.

METALLURGICAL TEST-WORK

Encouraging result

Utilising a standard flotation methodology, the metallurgy test-work achieved a concentrate of 22.2% Cu and 7.4% Zn, with a recovery of 79.3% total contained copper.

Metallurgical Flotation Test-work in progress

This is an encouraging result as it highlights the potential for high-grade massive sulphide ore from CCM to produce a commercial grade copper concentrate. (Note, for this test-work, no attempt was made to separate out the zinc from the copper.) Gold and Silver assays for the composite and the metallurgy flotation test-work were requested after receiving the Copper and Zinc test-work results and assaying is in progress.

High-grade composite sample

The composite sample used to perform the metallurgical test-work was selected from high-grade massive sulphide RC chip bags that were previously drilled and reported[1] (Figure 1; Appendix A). The head grade for the composite sample was 8.18% Cu and 4.36% Zn.

Notably, from the geology team's perspective, the samples were selected as being representative of massive sulphide mineralisation intersected during the two drilling campaigns conducted at CCM over the past two years.

FIGURE 1: COMPONENTS OF COMPOSITE SAMPLE – DRILLHOLE CC0023R

Hole ID	From (m)	To (m)	Length (m)	From Sample ID	To Sample ID	Cu %	Zn %	Ag g/t	Au (g/t)
CC0023R	41	42	1	C10525		8.990	2.290	23.400	1.31
CC0023R	50	51	1	C10535		7.520	6.040	30.600	0.38
COMPOSITE SAMPLE									
CC0023R	comp	comp	-	composited		8.18	4.36	-	-

Source: CCZ ASX Release – 3 September 2018

Next steps

With funding secured following the recent capital raising exercise, the overall objective going into 2020 is to expedite the exploration campaign across the three strategic copper pillars in Australia and Zambia.

For and on behalf of Castillo Copper,

Simon Paull

Managing Director

References:

1) CCZ ASX Release – 3 September 2018

Competent Person Statement

The information in this report that relates to Exploration Results and Mineral Resources of the Cangai Copper Mine is based on information compiled by Peter Smith, a Competent Person who is a Member of the Australian Institute of Geoscientists. Peter Smith is employed by Castillo Copper Pty Ltd. Peter Smith 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'. Peter Smith consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

ABOUT CASTILLO COPPER

Castillo Copper Limited (ASX: CCZ) is an ASX-listed base metal explorer primarily focused on copper then nickel, zinc & cobalt.

The group is embarking on a strategic transformation to morph into a mid-tier copper group underpinned by three core pillars:

- **Pillar I:** Cangai Copper Mine in northern New South Wales, which is one of Australia's highest grading historic copper mines with a JORC inferred resource of 3.2Mt @ 3.35% Cu (ASX Announcement - 6 September 2017);
- **Pillar II:** The Mt Oxide project in the Mt Isa district, north-west Queensland, which delivers significant exploration upside through having a sizeable untested anomaly within its boundaries in a copper-rich region.
- **Pillar III:** Several high-quality prospective assets in Zambia, which is the second largest copper producer in Africa.

In addition, Castillo Copper is progressing a dual listing on the standard board of the London Stock Exchange.

APPENDIX A: JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Sampling techniques</td><td>

Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.
Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.
Aspects of the determination of mineralisation that are Material to the Public Report.
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 (eg submarine nodules) may warrant disclosure of detailed information.

</td><td>

Castillo Copper composited two RC dust/chip bag samples from CC0023R. The samples had been previously collected and saved due to their massive sulphide content. Individually they two samples were previously sent for analysis at ALS using procedure ME-MS61-C which uses a 4 acid digest.

Table 1: Cangai RC Massive Sulphide Chips (ALS, Method ME-MS61-C)
<table>
<tr><th>Sample</th><th>Hole ID</th><th>From (m)</th><th>To (m)</th><th>Copper (%)</th><th>Zinc (%)</th><th>Silver(ppm)</th><th>Gold (ppm)</th></tr>
<tr><td>C10525</td><td>450010E</td><td>41</td><td>42</td><td>8.99</td><td>2.29</td><td>23.40</td><td>1.31</td></tr>
<tr><td>C10535</td><td>459995E</td><td>50</td><td>51</td><td>7.52</td><td>6.04</td><td>30.60</td><td>0.38</td></tr>
</table>
The material was logged as massive sulphide chips.

The material was deemed representative of massive sulphides intersected during the drilling, with mineralogy and grades consistent with historical mined grades.
</td></tr>
<tr><td>Drilling techniques</td><td>

Drill type (eg 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.).

</td><td>Drilling was provided by Budd Drilling using a modified track-mounted UDH RC rig as illustrated below:

Figure A1-1 Budd Drilling at Cangai</td></tr>
</table>

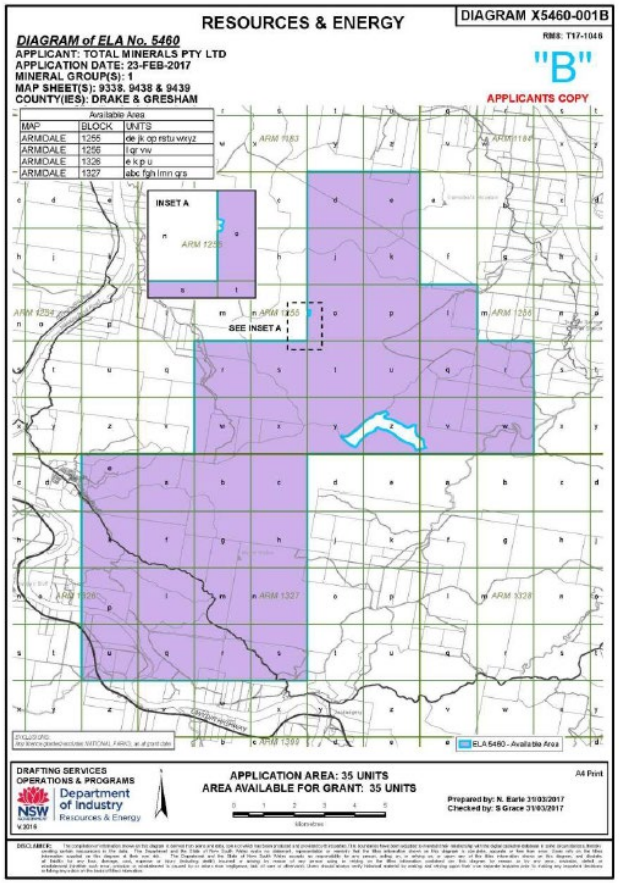
		
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Sample recovery was generally 90-100% for each metre
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	All drilling has been completed to high modern-day standard by a competent field teams & drill crew. Logging of the lithology has been to coded sheets for data entry into Excel and added to the geology database. Plastic chip trays were used to store sample on 1m intervals for future reference as illustrated below: Budd Drilling has provided a single shot tool for hole deviation. Readings are taken every 30m downhole. Hole deviations are in-line with expectations and follow the trend of the geological features.
Sub-sampling techniques	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*	• RC sample are collected in 1m samples and riffle split in to calico bags at the rig. The samples are weighed details recorded. • The two chosen samples were then stored in a 200L sealed PVC Drum. • The material was deemed representative of massive sulphides intersected

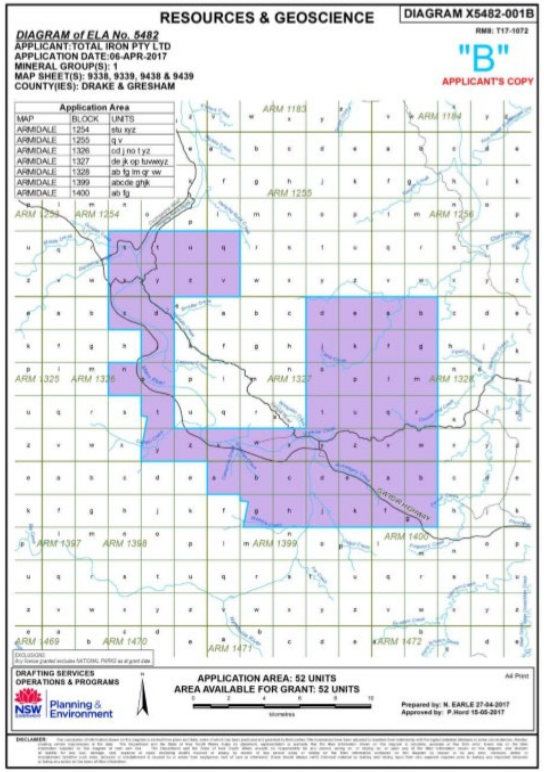
and sample preparation	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	during the drilling, with mineralogy and grades consistent with historical mined grades.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	Multi-suite analysis methodology (MS-ME61) which involves a four-acid digestion, was completed by ALS in Brisbane QLD on the initial RC Chip samples, for the following elements ; Ag, As, Se, Ca, K, S, Ba, Sb, Sn, Cd, Pd, Zr, Sr, Rb, Pb, Hg, Zn, W, Cu, Ni, Co, V, Ti, Au, Ga, Ge, LI, La, Fe, Mn, Cr, Sc, Mo, Th, U, Ta. Samples containing >1000ppm Cu were tested for Au by fire assay method CU-OG62.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	Field reading of multi-elements are estimated using Olympus Vanta M Portable XRF analyser as conducted as in internal check prior to sending samples for laboratory analysis. Reading times using 2 beam Geochem Mode was employed via 30sec/beam for a total of 60 sec. All logging and sampling data is collected, and data entered into excel spread sheets.
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Drill collars located using an RTK differential GPS, with DH surveys carried out by the drilling contractor every 30m. Drillholes and downhole co-ordinates are tied to MGA Zone 56 co-ordinates Topography was linked to a Drone DTM Topography model, with accuracies of +/- 0.3m

Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Drillhole CC0023R was drilled at the Volkhardts drill site. Compositing of the two samples has taken place at ALS Global in Perth where Metallurgical testwork was carried out.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Drilling was planned to intersect known and interpreted mineralization, at a nominal inclination of 30 degrees to true width.
Sample security	• *The measures taken to ensure sample security.*	• The two individual samples were transported under lock and key direct to ALS Global In Perth, with the locks checked at each end, and found to be intact. 
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have yet been undertaken.

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	• *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.* • *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.*	• Castillo Copper holds EL 8625 of 35 units (155 km^2). The tenure has been granted for a period of thirty-six months until 17th July 2020, for Group 1 minerals. The location of the tenure is shown in Figure 1 below: Figure 1: Location of EL 8625 Jackadgery North  • Castillo Copper holds EL 8635 of 52 units. The tenure has been granted for a period of thirty-six months until

		21st August 2020, for Group 1 minerals. The location of the tenure is shown in Figure 1 below: Figure 1: Location of EL 8635 Jackadgery South 
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Previous explorers (Brownlow, 1989; Abraham-Jones, 2012) have noted that a 'basement window' of exposed magmatic hydrothermal alteration and historical copper workings may represent the western and upper extent of a much larger hydrothermal system concealed under Mesozoic cover to the east, prospective for: • Quartz-tourmaline-sulphide-cemented, magmatic-hydrothermal breccia hosted copper-gold-molybdenum-cobalt (Cu-Au-Mo-Co) deposit; • Concealed porphyry copper-gold-molybdenum-cobalt (Cu-Au-Mo-Co) ore body associated with quartz diorite to tonalitic porphyry apophyses proximal to the tourmaline-sulphide cemented breccia's; • Potential also exists for copper-gold (Cu-Au) skarn;

		Considerable exploration has taken place in and around the Cangai Copper Mine (closed) by several large explorers such as Western Mining and CRA Exploration, the results of which are covered in the Local Geology section.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Regional Geology The underlying geology is contained within the Coffs Harbour Block, east of the Demon Fault. The major basement unit is the Silurian-Devonian Silverwood Group (locally the Willowie Creek Beds), a mixed sequence of tuffaceous mudstones, intermediate to basic igneous rocks, slates, and phyllites, a low stage of regional metamorphism. Overlying this rock formation is a younger tectonic melange of Early Carboniferous age – the Gundahl Complex of slates, phyllites and schist, with chert, greenstone and massive lithic greywackes. These rocks are intruded by the Early Permian Kaloe Granodiorite, which also in turn is intruded by numerous later-stage mafic dykes. Local Geology The local geology is well understood as considerable exploration has taken place in and around the Cangai Copper Mine (closed) by several major explorers such as Western Mining and CRA Exploration, the results of which are covered in the section below. Western Mining 1982-1984 Western Mining found that the recognition of substantial amounts of pyrrhotite in high grade ore collected from mine dumps led to the reappraisal of previous explorer's ground magnetics (Brown, 1984). Two soil anomalies were identified @ +60ppm Cu (max 1100ppm) and several strong linear magnetic anomalies (=250nT above background). Soil sampling and detailed ground inspections conducted over the linear magnetic high failed to identify any anomalous geochemistry or a possible source lithology. A 180m diamond drill hole was drilled to test the anomaly. Given the poor results of both the drilling and the follow-up stream sediment sampling, no further work was recommended. The decision was made to relinquish the licence in 1984. CRA Exploration 1991-1992 CRA Exploration examined the geological form, setting and genesis of the mineralisation at the Cangai Copper Mine over several years. The work carried out consisted of geological mapping, collection of rock chip samples, and underground investigations at the mine site. Drill core from a CRA exploration program and mine dumps were also inspected. They concluded that the Cangai Copper Mine is hosted by sedimentary rocks of the Siluro-Devonian Willowie Creek Beds of tuffaceous mudstones, tuffaceous sandstones and conglomerates. Mineralisation appears to be associated with steeply plunging ore shoots in and adjacent to the main shear zone (Figure 2). Massive primary ore consists of chalcopyrite, pyrite and pyrrhotite with lesser sphalerite and minor arsenopyrite and galena. A detailed, well documented report was produced, but no reasons were given for the relinquishment of the licence.

<table>
<tr><td></td><td></td><td></td></tr>
<tr><td>Drill hole Information</td><td>

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:

easting and northing of the drill hole collar
elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
dip and azimuth of the hole
down hole length and interception depth
hole length.

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.

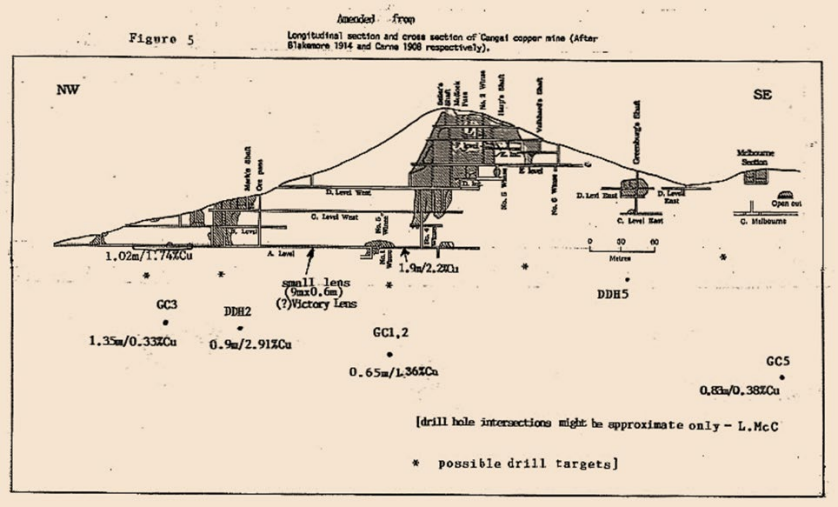
</td><td>
Drill hole collar details
<table>
<tr><th>Hole_ID</th><th>Hole_Type</th><th>Depth</th><th>Projection</th><th>Dip</th><th>Az</th><th>MGA56_East</th><th>MGA56_North</th><th>NAT_RL</th></tr>
<tr><td>CC0023R</td><td>RC</td><td>121</td><td>MGA94_56</td><td>-64</td><td>26.7</td><td>450912.02</td><td>6736270.61</td><td>324.38</td></tr>
</table>
</td></tr>
<tr><td>Data aggregation methods</td><td>

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.
Where aggregate intercepts incorporate short lengths of high grade results and

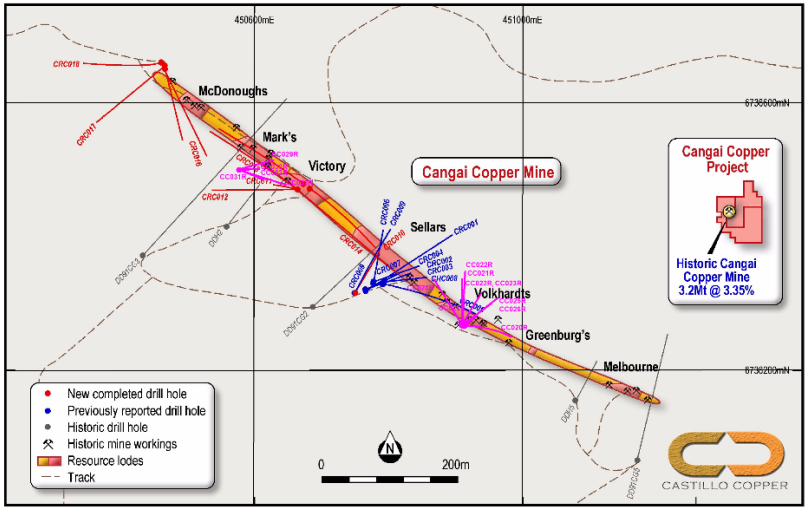
</td><td>

Compositing has taken place, by ALS Global of two individual 1m RC samples.
Combine the two samples together then stage crush to 3.35mm, and split into 1kg charges.

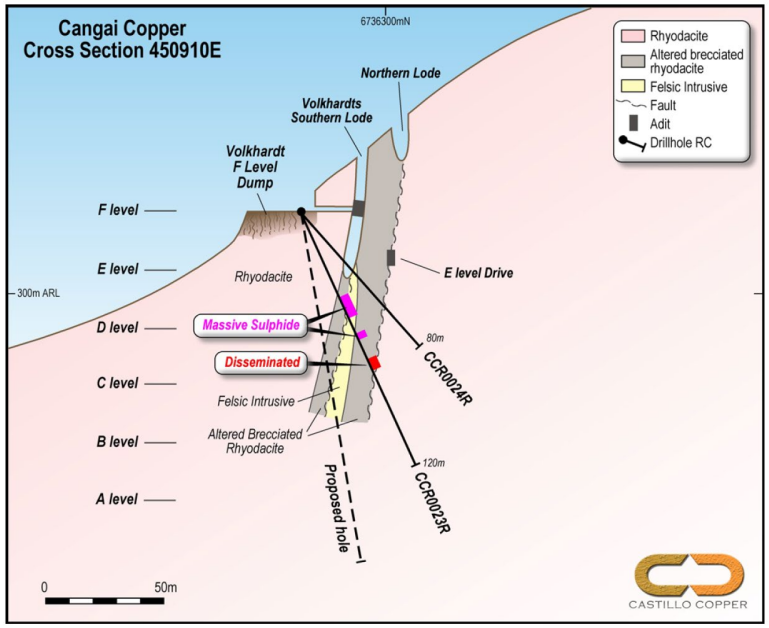
</td></tr>
</table>

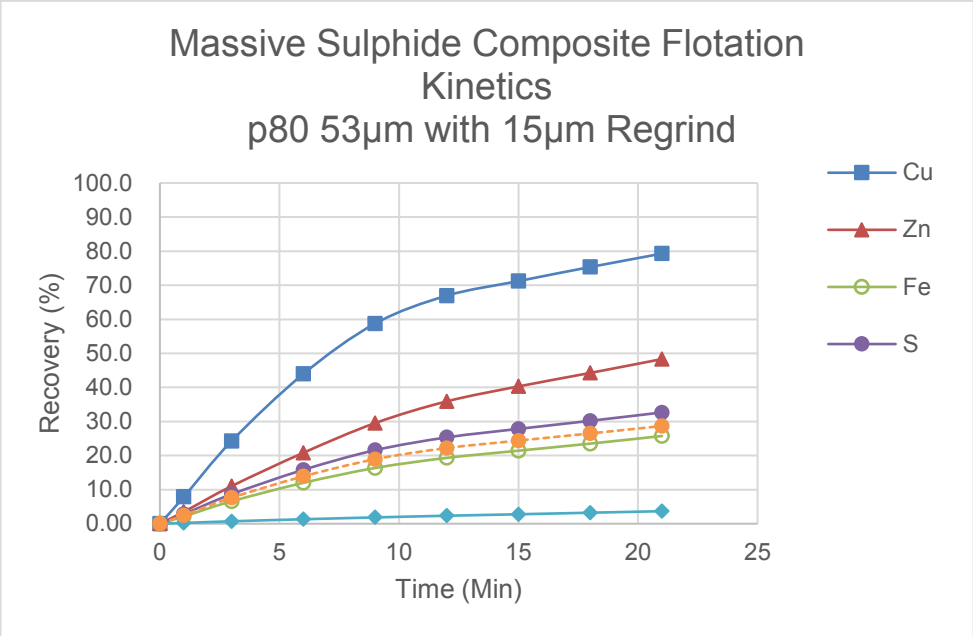
	longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Figure 3, below is a cross-section showing the four (4) main near vertical mineralised zones at the Cangai Mine. *Figure 3 NW to SE Cross-section of workings at Cangai Mine* 
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*	• Drillhole location map.

collar locations and appropriate sectional views.



and Cross-section of CC0023R



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.*	• No new exploration results are being reported other than the metallurgical testwork.
Other substantive exploration data	• *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.*	• The data being reported is metallurgical flotation testwork, using standard flotation methodology, a concentrate of 22.2% Cu, 7.39% Zn with a recovery of 79.3% of total contained copper was achieved. The RC Chip Composite sample Head Grade of composite RC massive sulphide sample Copper: 8.18% Cu, Zinc: 4.36% Cu were ground to P80 53um with a 15 um regrind. 8 Rougher Flotation Stages were carried out, with the results graphed below. 

Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further work on the metallurgical sampling includes assaying for Gold and Silver • Mineralogy using QEMSCAN