CASTILLO COPPER LIMITED

**ASX Release**

**17 May 2018**

**CASTILLO COPPER LIMITED**
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**Issued Capital:**
580.1 million shares
84.5 million options

**ASX Symbol**:
CCZ

# Phase I assays confirm widespread mineralisation at Cangai, Phase II drilling campaign set to start

- **Assay results from the final nine holes of the Phase I drilling campaign – targeting deeper sulphide mineralisation – confirmed high-grade copper intersections greater than 3% off the line of lode**
- **Mineralisation was found in 7 out of 9 drill-holes with the best result 6m @ 2.69% Cu, 0.39% Zn & 9.2g/t Ag incl 4m @ 3.08% Cu, 0.44% Zn & 10.6g/t Ag**
- **Mineralisation remains open to the east and west, while massive sulphides intersected at drill hole CRC018 (incl 1m @ 3.31% Cu, 1.11% Zn & 5.7 g/t Ag) suggests a potential splay off the main line of lode warranting further investigation**
- **The drill-hole electromagnetic (DHEM) survey showed a likely massive sulphide anomaly adjacent to the drill-hole CRC005 intersection of 4m @ 1.54% Cu, 1.17% Zn and 11.5 g/t Ag**
- **This builds on initial results from the first nine holes with the best comprising: 5m @ 1.56% Cu, 0.4% Zn & 4.43g/t Ag incl 3m @ 2.22% Cu, 0.60% Zn & 6.38g/t Ag; and 3m @ 1.76% Cu, 1.33% Zn & 13.08g/t Ag incl 1m @ 2.66% Cu, 2.35% Zn & 20.70g/t Ag**
- **Overall, the geology team are delighted with the results from the first campaign, as the evidence suggests incremental larger scale drilling programs can potentially deliver resource size upside**
- **As such, the next drilling campaign – due to start as soon as regulatory approval is granted – will comprise 39 shallow drill-holes focused on supergene ore near legacy workings; a drilling contractor has been appointed and is ready to deploy to site**
- **To further enhance the understanding of the stockpiles, and build on metallurgy test-work currently underway, several drill-holes are planned for the Smelter Stockpile site – the geology team will then target modelling up a JORC compliant resource**
- **In addition, the Board has held discussions with prospective customers interested in reviewing stockpile samples and committing to off-take agreements post metallurgical testwork**

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**Castillo Copper's Chairman Peter Meagher commented:** *"The first round of drilling at Cangai Copper Mine, which specifically targeted deeper sulphide mineralisation, has been highly successful, evidenced by some encouraging assays, which demonstrated extensive mineralisation, that also produced assays over 3% copper. Moving forward, the next drilling campaign, which is set to commence once regulatory approval is secure, has been designed specifically to determine the extent of high-grade supergene ore mineralisation near legacy workings. Further, in an encouraging development, metallurgical test-work and JORC modelling of the stockpiles will be fast-tracked, as several prospective customers are showing interest in signing off-take agreements for the discarded ore."*

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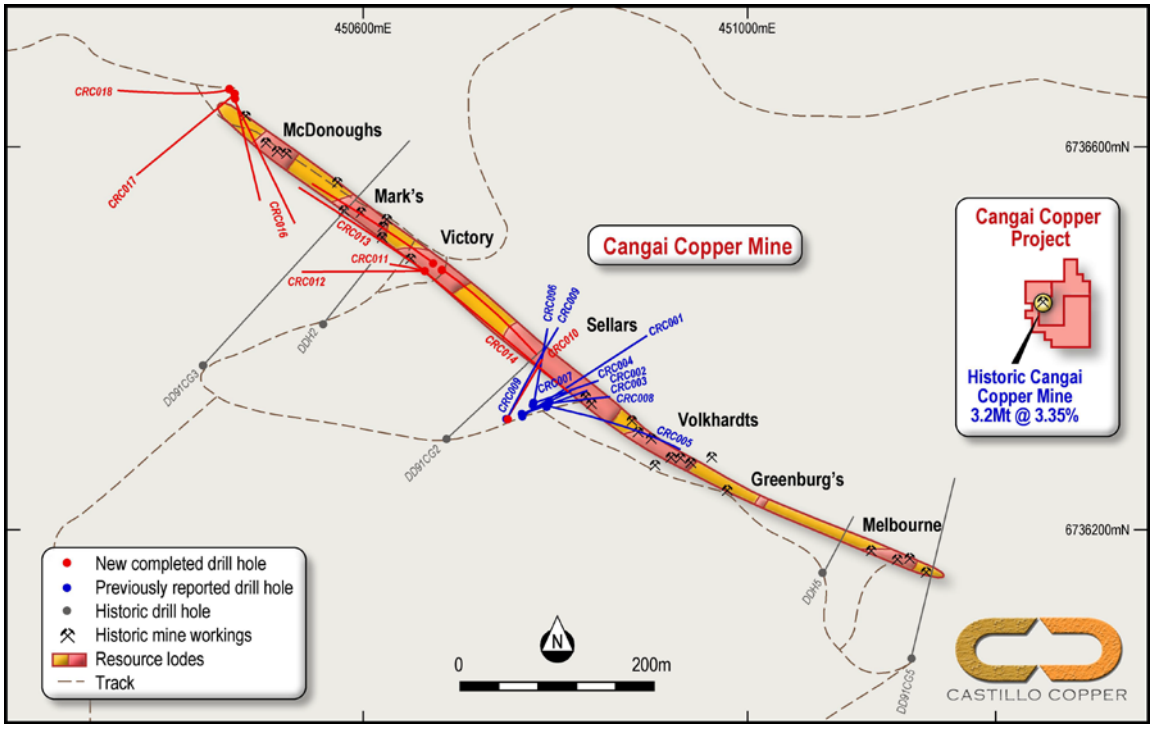
**Castillo Copper Limited's ("CCZ"** or **"the Company")** Board is pleased to announce the first round of drilling at Cangai Copper Mine (CCM) has concluded, with the focus now shifting to the next campaign.

## DRILLING CAMPAIGN UPDATE

Phase I of the drilling program, which comprised 18 holes along the line of lode (Figure 1) targeting deeper sulphide mineralisation, has successfully concluded with assays confirming extensive mineralisation outside the JORC modelled zone.

**FIGURE 1: COMPLETED DRILLHOLES ALONG THE LINE OF LODE**



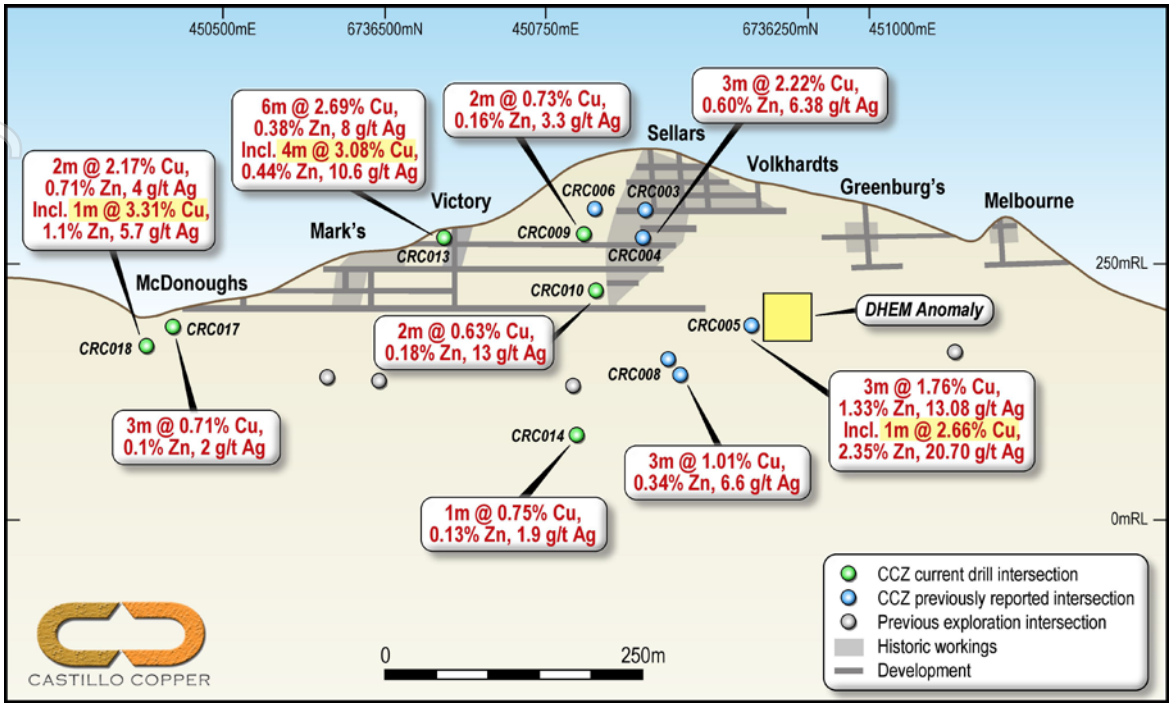

Source: CCZ geology team

Notably, new mineralisation outside the JORC modelled envelope was discovered at CRC013 and CRC016-18 drill-holes, while the DHEM identified an anomaly near CRC005 drill-hole (Figure 2 below).

Of particular interest is the result from drill-hole CRC018, which included a massive sulphide intersection reading – 1m @ 3.31% Cu, 1.11% Zn & 5.7 g/t Ag. The significance of this intersection is that its potentially a splay off the main line of lode that clearly warrants further investigation from the next drilling campaign.

In addition, the DHEM anomaly, which has been discovered immediately along strike to the east of CRC005 drill-hole, will be investigated further in the upcoming drilling campaign. The geology team believe it comprises massive sulphides with high-grade copper-zinc-silver mineralisation, given CRC005 had an intersection of 4m @ 1.54% Cu, 1.17% Zn and 11.5 g/t Ag.

**FIGURE 2: LONG SECTION OF CANGAI COPPER MINE**




Source: CCZ Geology team

## High-grade copper intersections

Assays confirmed mineralisation was discovered in seven out of the nine final drill-holes, with several high-grade copper intersections recorded (Table 1). Notably, the best intersection was 6m @ 2.69% Cu, 0.39% Zn & 9.2g/t Ag which included 4m @ 3.08% Cu, 0.44% Zn & 10.6g/t. This builds on assays for the first nine drill-holes with the best 3m @ 2.22% Cu, 0.60% Zn & 6.4 g/t Ag (refer Figure 2 for best intersections and ASX Announcement dated 9 March 2018).

Overall, the geology team was delighted with the first-round drilling campaign. It confirmed the integrity of the JORC modelled zone, then uncovered new extensions and potential discoveries that warrant further investigation. Indeed, the geology team believe that, based on the evidence uncovered so far, Cangai Copper Mine has the right ingredients to justify an aggressive forward drilling campaign.

**TABLE 1: BEST INTERSECTIONS FROM CRC010-18 DRILL-HOLES**

| Hole ID | Width | From | Intersection Assays | Mineralisation Summary |
|---|---|---|---|---|
| CRC010 | 2m | 145m | 0.63% Cu, 0.18% Zn & 13.1g Ag | Quartz veins with pyrite & chalcopyrite |
| CRC012 | 2m | 9m | 0.3% Cu, 0.08% Zn & 6.2g Ag | Malachite on fracture surfaces |
| CRC013 | 6m | 1m | 2.69% Cu, 0.39% Zn & 9.2g Ag | Malachite on fracture surfaces, pyrite & chalcopyrite in grey dacite |
| inc | 4m | 2m | 3.08% Cu, 0.44% Zn & 10.6g Ag | Semi-massive pyrite & chalcopyrite in grey dacite |
| CRC014 | 1m | 232m | 0.75% Cu, 0.13% Zn & 1.9g Ag | Quartz veins with pyrite & chalcopyrite |
| CRC016 | 1m | 0m | 1.14% Cu, 0.18% Zn & 7.9g Ag | Malachite on fracture surfaces |
| CRC017 | 3m | 4m | 0.71% Cu, 0.1% Zn & 2.2g Ag | Malachite on fracture surfaces |
| CRC018 | 1m | 13m | 1.43% Cu, 0.17% Zn & 2.3g Ag | Malachite on fracture surfaces |
| CRC018 | 2m | 39m | 2.17% Cu, 0.71% Zn & 3.7g Ag | Massive sulphides, pyrite, chalcopyrite & minor pyrrhotite |
| inc | 1m | 39m | 3.31% Cu, 1.11% Zn & 5.7g Ag | Massive sulphides, pyrite, chalcopyrite & minor pyrrhotite |

Source: ALS and CCZ geology team

## PHASE II AND LEGACY STOCKPILES

The Board's priority is the next phase of the drilling campaign which will focus on shallower supergene ore near the legacy workings. Castillo has already submitted an application to the regulator for a 39 drill-hole campaign, while a drilling contractor has been appointed that uses highly versatile equipment suitable for the hilly terrain at Cangai Copper Mine (Figure 3). Upon receiving formal approval, the team will be able to quickly deploy to site to commence preparations for the campaign.

**FIGURE 3: VERSATILE DRILLING EQUIPMENT TO NAVIGATE CANGAI'S HILLY TERRAIN**


Source: CCZ geology team

The first target area is the large legacy stockpile near the historic smelter, known as the Smelter Creek stockpile (refer ASX announcement dated 19 April 2018), so that it can be JORC modelled as quickly as possible to determine the extent of contained copper-zinc-silver in the ore (Figure 4). The Board has already been in discussions with two prospective customers that are interested in committing to off-take agreements if the metallurgy results confirm high-grade mineralisation is present.

**FIGURE 4: ORE FROM SMELTER CREEK STOCKPILE**

449988mE 6735604mN MGA Zone 56

Source: CCZ geology team

**Next steps**

Ensure the team is ready to deploy to site once the regulator approves the next phase of the drilling program.

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 Mr Peter Smith, BSc (Geophysics) (Sydney) AIG ASEG, who is a Member of The Australasian Institute of Geoscientists (AIG). Mr Smith has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves" (JORC Code). Mr Smith has approved and consented to the inclusion in this document of the matters based on his 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.

**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.

# APPENDIX A: JORC CODE, 2012 EDITION – TABLE 1; CANGAI DRILLING PROGRAM

## Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | • *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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>*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.* | Samples from the Cangai drilling program were collected using the reverse circulation method of drilling on a 1 metre basis. Initially 20-25kg of chips and dust was collected and riffled down to a 1-2kg sample for further lab analysis.<br><br>All samples are delivered for to ALS Laboratory in Orange NSW where the lab undertakes the splitting and compositing of the 5m composite samples and undertakes multi-element analysis on the 1m and 5m composite samples.<br><br>The 1m samples were also sent to ALS Brisbane for a suite of major oxide and trace element determinations as described in later sections.<br><br>The drilling program completed to date is shown in the Appendices within the report. |
| ***Drilling techniques*** | • *Drill type (e.g. core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face sampling bit or other type, whether core is oriented and if so, by what method, etc.).* | Drilling was provided by Budd Drilling using a modified track-mounted UDH RC rig as illustrated below: |

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| | | Figure A1-1 Budd Drilling at Cangai<br>  |
| ***Drill sample recovery*** | *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>*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 except when mining cavities (workings >5m wide) were intersected. Circulation and sample was lost in CRC002, 3 & 7 as these holes terminated in workings, but CRC004 was able to progress through the cavity zones and mineralised wall rocks between the cavities to planned depth, even though the three workings intersected were 2 metres wide, in each instance. Drill recovery was lower through these zones. |
| ***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.*<br>*Whether logging is qualitative or quantitative in nature.*<br>*Core (or costean, channel, etc.) photography.*<br>*•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.<br>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:<br><br>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. |

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| | | Figure A1-2 1M Sample chips preserved in plastic sample trays<br>  <br><br>CRC013 was planned as a vertical hole but deviated to the southwest. |
| ***Subsampling techniques and sample preparation*** | *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>*If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. 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.*<br>*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.* | RC sample are collected in 1m samples and riffle split in to calico bags at the rig. The samples are weighed details recorded. A pXRF unit is utilized to test the samples for mineralisation to determine which samples are tested as individual meters and which samples are to composited into 5m samples. Composite samples are being homogenized and riffle split at the labs prior to assaying.<br><br>Industry acceptable standards and blanks were used as certified reference material to ensure satisfactory performance of the laboratory. |

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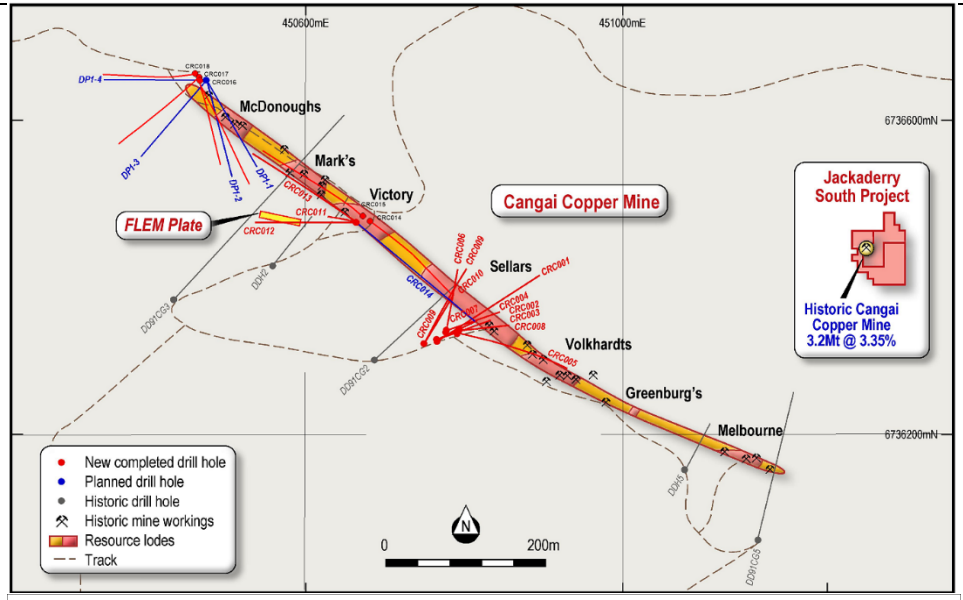
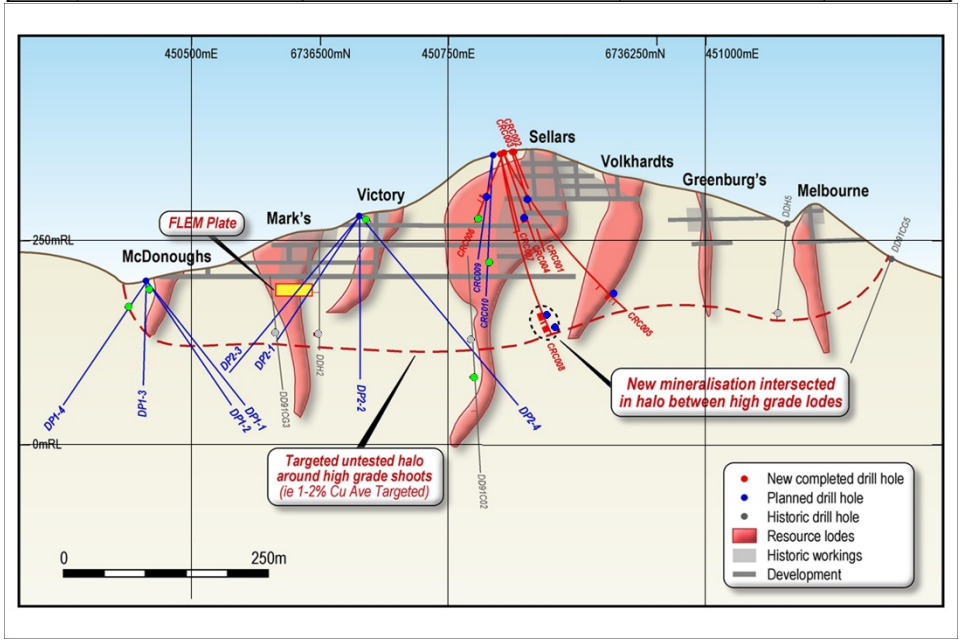
| ***Quality of assay data and laboratory tests*** | *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>*For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>*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, is being completed by ALS in Brisbane QLD, 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.<br><br>Samples containing >1000ppm Cu are being 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.*<br>*The use of twinned holes.*<br>*Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>*Discuss any adjustment to assay data.* | Field reading of multi-elements are estimated using NITON XLt3 950 Portable XRF analyser as conducted as in internal check prior to sending samples for laboratory analysis.<br>Reading times using 2 beam Geochem Mode was employed via 30sec/beam for a total of 60 sec.<br>All logging and sampling data is collected, and data entered into excel spread sheets. Data is send to consulting geologist in Brisbane and Perth for compilation, correlation and data base inclusion prior to being interpreted. |
| ***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.*<br>*Specification of the grid system used.*<br>*Quality and adequacy of topographic control.* | Drill pads were initial located using an RTK differential GPS. Drillholes collar locations have been picked using a Garmin handheld GPS to $\pm$3m. At completion all drill hole will be accurately surveyed. Collars RLs are corrected and tagged to a recently completed Drone DTM topography model which has accuracies for AHD of ±0.3m. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | Eighteen (18) drill holes were completed at the Sellars Lode drill site (DP3) and the Victory Lode drill site (DP2) with differing dips and orientations in order to intersect and wide spread of targets so as to determine geological and grade continuity for future mineral resource estimation work.<br><br>Other than field 5m composites the raw assay results returned from the labs have not been composited in the database (other than the 5m sample composites of non mineralised samples at the lab). |



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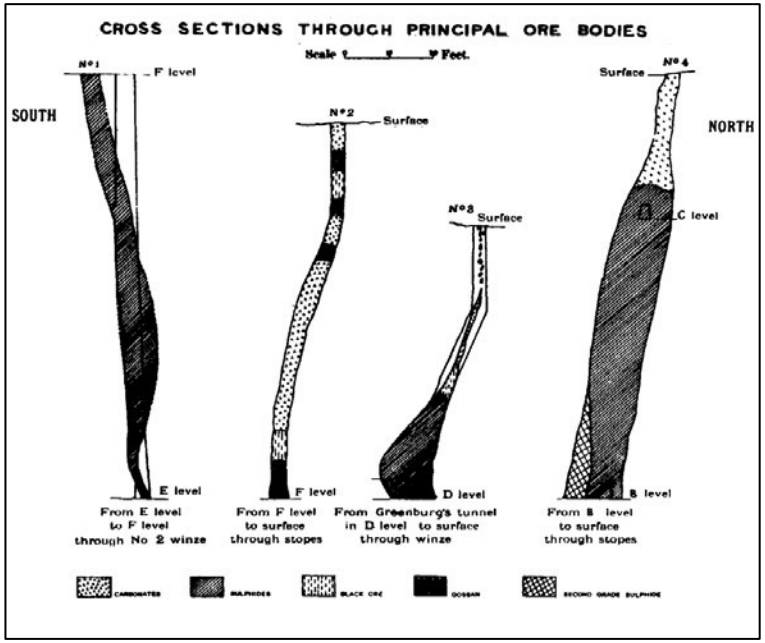
|---|---|---|---|
| ***Orientation of data in relation to geological structure*** | • <br>• | *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* <br>*If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | The drilling is planned to intersect workings and drill into data gaps between orebodies such that in general the intersections are where possible (due to restricted access) perpendicular to a strike of 126 degrees.<br><br>Additional surface bedding and foliation data, and that from some of the accessible underground mine adits was compiled from a UNSW Honours thesis (Brauhart 1991). Information is available from underground workings, open cut(s), shaft(s), adit(s), shallow pits and scrapings. The Lode sub-vertical to vertical, striking 126 degrees true north and pitching at 60 degrees to the west. The high-grade ore as mined, varies from 0.3m-3.9m wide<br><br>The known copper-gold mineralisation around Cangai strikes from 290-330 degrees, It should be noted that these orebody shapes were drawn at >13% Cu so that the with the major orebody shapes shown by Figure A1-5, below:<br><br>Figure A1-5: Orientation of Copper-Gold Mineralisation at the Cangai Mine<br><br>  <br><br><br>modelled wireframes in this current resource have been enlarged to try to capture mineralisation down to 0.5% Cu. |

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|---|---|---|
| ***Sample security*** | • *The measures taken to ensure sample security.* | Samples were bagged and have been delivered by Gnomic Exploration Staff to ALS Orange who on-freighted them to ALS Laboratories Brisbane. 1m sample results have been returned for CRC001-013 and the majority of the 5m composite samples are awaiting completion. Gold assays for samples returning >1000ppm Cu are also in progress (method Cu-OG62). |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | No audits or reviews have yet been undertaken. This will commence once all assay results have been received. |

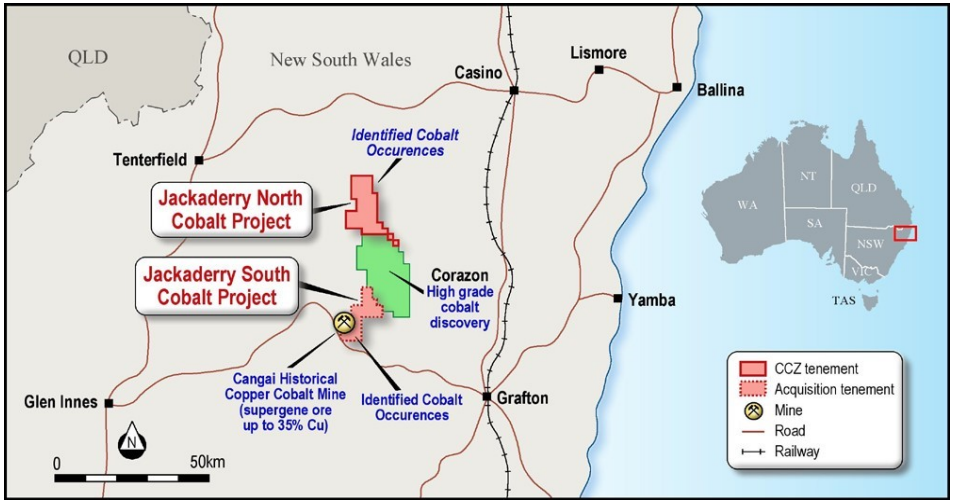
Table A1-1: Cangai Copper Drilling Stage 1

| HoleID | MGA Zone | AZI_Mag | AZI_GDA | Dip | Depth (m) | MGAEast | MGANorth | RL |
|---|---|---|---|---|---|---|---|---|
| CRC001 | 56 | 42 | 53.65 | -45 | 174 | 450796 | 6736328 | 358 |
| CRC002 | 56 | 45 | 56.65 | -50 | 58 | 450796 | 6736326 | 358 |
| CRC003 | 56 | 55 | 66.65 | -60 | 71 | 450794 | 6736325 | 358 |
| CRC004 | 56 | 55.5 | 67.15 | -60 | 132 | 450776 | 6736327 | 357 |
| CRC005 | 56 | 81.5 | 93.15 | -60 | 252 | 450777 | 6736329 | 357 |
| CRC006 | 56 | 358 | 9.65 | -50 | 120 | 450780 | 6736330 | 357 |
| CRC007 | 56 | 52 | 63.65 | -65 | 107 | 450767 | 6736326 | 356 |
| CRC008 | 56 | 56 | 67.65 | -70 | 240 | 450767 | 6736326 | 356 |
| CRC009 | 56 | 11 | 22.65 | -55 | 174 | 450752 | 6736321 | 355 |
| CRC010 | 56 | 18 | 29.65 | -70 | 228 | 450755 | 6736320 | 355 |
| CRC011 | 56 | 258.35 | 270 | -50 | 201 | 450672 | 6736470 | 280 |
| CRC012 | 56 | 348.35 | 0 | -90 | 162 | 450667 | 6736472 | 280 |
| CRC013 | 56 | 298.35 | 310 | -50 | 249 | 450673 | 6736477 | 280 |
| CRC014 | 56 | 118.35 | 130 | -50 | 260 | 450681 | 6736472 | 280 |
| CRC015 | 56 | 138.35 | 150 | -50 | 197 | 450468 | 6736644 | 202 |
| CRC016 | 56 | 153.35 | 165 | -50 | 197 | 450465 | 6736655 | 202 |
| CRC017 | 56 | 208.35 | 220 | -50 | 198 | 450465 | 6736654 | 202 |
| CRC018 | 56 | 258.35 | 270 | -50 | 198 | 450462 | 6736659 | 202 |

Cangai Copper Drilling Stage 1 Intersection Summary (Table 1)

| Hole ID | Width | From | Intersection Assays | Mineralisation Summary |
|---|---|---|---|---|
| CRC010 | 2m | 145m | 0.63% Cu, 0.18% Zn & 13.1g Ag | Quartz veins with pyrite & chalcopyrite |
| CRC012 | 2m | 9m | 0.3% Cu, 0.08% Zn & 6.2g Ag | Malachite on fracture surfaces |
| CRC013 | 6m | 1m | 2.69% Cu, 0.39% Zn & 9.2g Ag | Malachite on fracture surfaces, pyrite & chalcopyrite in grey dacite |
| inc | 4m | 2m | 3.08% Cu, 0.44% Zn & 10.6g Ag | Semi-massive pyrite & chalcopyrite in grey dacite |
| CRC014 | 1m | 232m | 0.75% Cu, 0.13% Zn & 1.9g Ag | Quartz veins with pyrite & chalcopyrite |
| CRC016 | 1m | 0m | 1.14% Cu, 0.18% Zn & 7.9g Ag | Malachite on fracture surfaces |
| CRC017 | 3m | 4m | 0.71% Cu, 0.1% Zn & 2.2g Ag | Malachite on fracture surfaces |
| CRC018 | 1m | 13m | 1.43% Cu, 0.17% Zn & 2.3g Ag | Malachite on fracture surfaces |
| CRC018 | 2m | 39m | 2.17% Cu, 0.71% Zn & 3.7g Ag | Massive sulphides, pyrite, chalcopyrite & minor pyrrhotite |
| inc | 1m | 39m | 3.31% Cu, 1.11% Zn & 5.7g Ag | Massive sulphides, pyrite, chalcopyrite & minor pyrrhotite |

## 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.*<br>• *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 100% of EL 8625 & EL 8635. 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 A2.1 below:<br>Figure A2.1: Location of EL 8625 and EL8635 Jackaderry South<br>  <br><br>The current drilling has all been completed on EL 8625 and EL 8635 Jackaderry South only. |

| | | |
|---|---|---|
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | Some mining history and discovery information provided by North Broken Hill Ltd (1970) is as follows:<br><br>**Cangai**<br>The Cangai copper mine, located 10 km north west of Jackadgery, is one of the richest copper and gold mines in the region. This deposit was discovered in 1901 by J. Sellers and was subsequently mined by the Grafton Copper Mining Company Ltd from 1904 to 1917. A copper smelter was built and a substantial village with a sawmill developed. Recorded production is 5080 tonnes of copper, 52.7 kg of gold and 1035 kg of silver (Henley and Barnes 1992). The mine was unusual in that its discovery post-dated much of the initial mineral discoveries in New England. It had the distinction of paying its own way from ore produced from the mine and paid rich dividends to its shareholders as a result of the rich ore and the low production costs related to the self fluxing ore and that ore could be easily hauled downhill to the smelter. The mine prompted upgrades to roads and communications into the area.<br><br>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:<br><br>• Quartz-tourmaline-sulphide-cemented, magmatic-hydrothermal breccia hosted copper-gold-molybdenum-cobalt (Cu-Au-Mo-Co) deposit;<br>• 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;<br>• Potential also exists for copper-gold (Cu-Au) skarn;<br><br>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 |

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| ***Geology*** | *Deposit type, geological setting and style of mineralisation.* | Regional Geology<br><br>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.<br>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.<br>These rocks are intruded by the Early Permian Kaloe Granodiorite (tonalite), which also in turn is intruded by numerous later-stage mafic (lamprophyre) dykes. Local Geology<br><br>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. The mineralisation is controlled by the presence of shear zones within the country rock and persistent jointing. Chloritic alteration is pervasive, with the major minerals identified (Henley and Barnes 1990) as:<br><br>• **Azurite** major ore<br>• **Chalcocite** major ore<br>• **Chalcopyrite** major ore<br>• **Copper** major ore<br>• **Malachite** major ore<br>• **Pyrite** major ore<br>• **Pyrrhotite** major ore<br>• **Arsenopyrite** minor ore<br>• **Sphalerite** minor ore<br>• **Cuprite** minor ore<br>• **Gold** minor ore<br>• **Limonite** minor ore<br>• **Chlorite** major gangue<br>• **Calcite** major gangue<br>• **Quartz** major gangue<br>• **Sericite** minor gangue |

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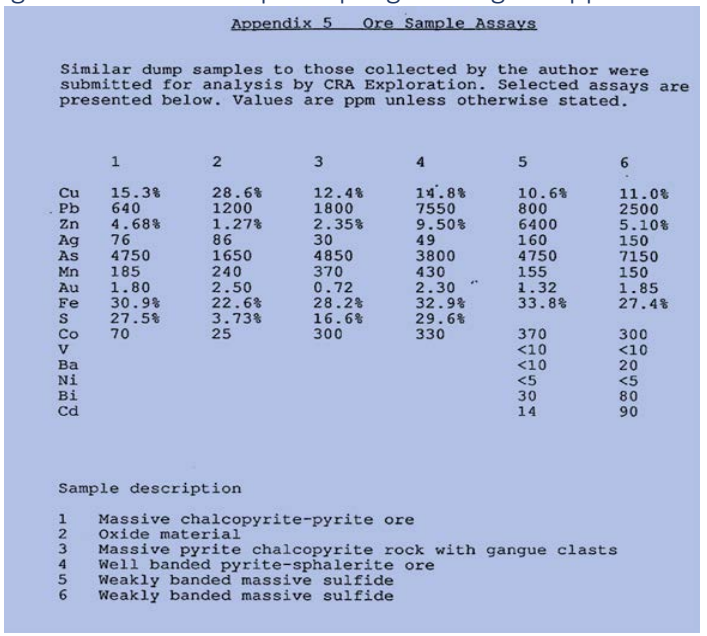
| | | **Western Mining 1982-1984**<br>Western Mining found that the recognition of substantial amounts of pyrrhotite in high grade ore collected from mine dumps led to the reappraisal of previous explorer's ground magnetics (Brown, 1984). Two soil anomalies were identified @ +60ppm Cu (max 1100ppm) and 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.<br>**CRA Exploration 1991-1992**<br><br>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 A2-2). 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. |

Figure A2.2: Rock Chip Sampling at Cangai Copper Mine



Appendix 5 Ore Sample Assays

Similar dump samples to those collected by the author were submitted for analysis by CRA Exploration. Selected assays are presented below. Values are ppm unless otherwise stated.

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Cu | 15.3% | 28.6% | 12.4% | 14.8% | 10.6% | 11.0% |
| Pb | 640 | 1200 | 1800 | 7550 | 800 | 2500 |
| Zn | 4.68% | 1.27% | 2.35% | 9.50% | 6400 | 5.10% |
| Ag | 76 | 86 | 30 | 49 | 160 | 150 |
| As | 4750 | 1650 | 4850 | 3800 | 4750 | 7150 |
| Mn | 185 | 240 | 370 | 430 | 155 | 150 |
| Au | 1.80 | 2.50 | 0.72 | 2.30 | 1.32 | 1.85 |
| Fe | 30.9% | 22.6% | 28.2% | 32.9% | 33.8% | 27.4% |
| S | 27.5% | 3.73% | 16.6% | 29.6% | | |
| Co | 70 | 25 | 300 | 330 | 370 | 300 |
| V | | | | | <10 | <10 |
| Ba | | | | | <10 | 20 |
| Ni | | | | | <5 | <5 |
| Bi | | | | | 30 | 80 |
| Cd | | | | | 14 | 90 |

Sample description

1 Massive chalcopyrite-pyrite ore
2 Oxide material
3 Massive pyrite chalcopyrite rock with gangue clasts
4 Well banded pyrite-sphalerite ore
5 Weakly banded massive sulfide
6 Weakly banded massive sulfide

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| ***Drill hole Information*** | *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:*<br>• *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>• *dip and azimuth of the hole*<br>• *down hole length and interception depth*<br>• *hole length.*<br>*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* | Drill hole collar summary table and intersection summary tables are included as an Appendices in the report and shown in table A1-1 above.<br>Mineralised zones are identified by the field geologist and flagged as geological/mineralised zones as shown in Table A1-1. |

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| ***Data aggregation methods*** | *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.*<br>*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.*<br>*The assumptions used for any reporting of metal equivalent values should be clearly stated.* | No top cuts have been applied to reporting of the Significant Intersections and lower cut of 0.5% (5,000ppm) Cu has generally been used. No more than 1m of lower internal dilution has been used in the calculations. Full detailed assay intervals for the key elements are included in the Appendices of this report<br><br>Summary Intersections have been reported based on<br><br>Minimum criteria = 0.5% Cu or 0.2% Zn or 2 g/t Ag |

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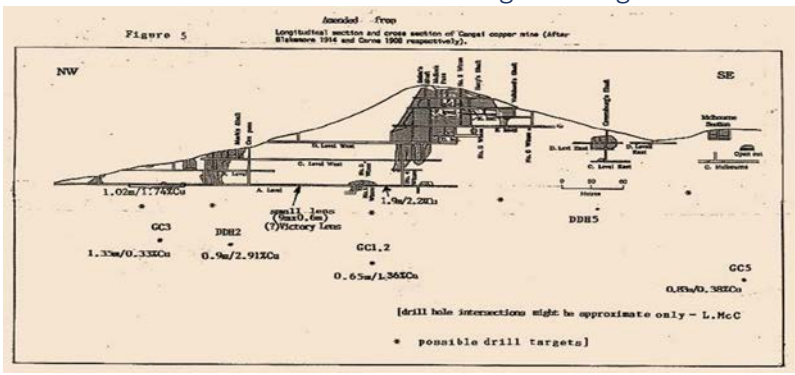
| ***Relationship between mineralisation widths and intercept lengths*** | *These relationships are particularly important in the reporting of Exploration Results.*<br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known 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').* | All intersections are reported as downhole widths. Once assays are returned and the geological controls are fully established, the 3D modelling package will determine true widths which will be reported in due course.<br><br>The Lode is currently modelled to be sub-vertical to vertical, striking 126 degrees and pitching at 60 degrees west. Varies from 0.3m-3.9m wide. The main mining was from Volkardts, Melbourne, Marks, Sellers & Greenbergs lens. The secondary supergene zone grades averaged 20-35% Cu. The sulphide zone decreased to 8-10% Cu at depth. The Lode was largest at structural intersections. Breccia was recorded at D level.<br>The host rock is massive fine-grained intermediate volcanic, and bedding is difficult to define. The deposit is structurally controlled with lodes following or adjacent to the shear zone. A temperature of formation is suggested to be about 380 degrees centigrade (Brauhart 1991). The NSW Geological Survey has characterized Cangai as a metahydrothermal structurally-controlled deposit. Figure A2-3, below is a cross-section showing the four (4) main near vertical mineralised zones at the Cangai Mine.<br><br>Figure A2-3: NW to SE Cross-section of workings at Cangai Mine<br>  <br><br>Geo-registering was undertaken in August and September 2017, particularly the anomalous zones (which are in the process of being digitised off the 1908 and 1912 mine plans (Brauhart 1991), which become priority targets for geological mapping, ground magnetic and EM surveys.<br>Data has also been extracted from a thorough UNSW Honours Thesis as referenced below:<br><br>Brauhart, C. (1991). *The Geology & Mineralisation of the Cangai Copper Mine, Coffs Harbour Block Northeastern New South Wales*. CRAE Report No: 17739. University of NSW. |

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| ***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.* | Appropriate diagrams have been included in the body text of the announcement. |
| ***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.* | All drillholes completed to date have been reported. |
| ***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.* | Historical explorers have also conducted airborne and ground gravity, magnetic, EM, and resistivity surveys over parts of the tenure area but this is yet to be collated.<br>A new EM Survey has been undertaken and has been previously reported (Multiple conductors discovered from FLEM survey, drill program to be expanded 8th January ASX Release). |
| ***Future Work*** | *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>*Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | Castillo Copper is preparing to conduction a Phase 2 of drilling with 39 drillholes submitted for regulatory approval by the NSW Dept Mines.<br><br>Targeting the following locations<br>• Smelter Creek Copper Smelter Dumps<br>• Along strike and under the McDonoughs workings<br>• Proximal to Marks' workings<br>• Underneath Volkhardts' workings<br>• DHEM anomaly located along strike from CRC005 |