



CASTILLO COPPER  
LIMITED

ASX Release

30 April 2018

CASTILLO COPPER  
LIMITED  
ACN 137 606 476

Level 6  
105 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](http://www.castillocopper.com)

**Directors / Officers:**

Peter Meagher  
Alan Armstrong  
Peter Smith

**Issued Capital:**

580.1 million shares  
67.5 million options

**ASX Symbol:**

CCZ

# MARCH QUARTERLY ACTIVITIES REPORT

## HIGHLIGHTS

- Phase I drilling at Cangai Copper Mine concluded, with assay results from the first nine drill-holes highlighting intersections up to 2.66% Cu, 20.7 g/t Ag and 2.35% Zn
- The Board appointed Hetherington Exploration & Mining Title Services to navigate the fastest route to secure regulatory approval to create value from legacy stockpiles
- Assay results from the McDonoughs stockpile were encouraging with up to 2.13% Cu returned, while initial assay results from the Smelter Creek stockpile were up to 1.25% Cu, 2.57% Zn and 357ppm Co
- An updated desktop review identified new primary cobalt targets which builds on currently known occurrences in the Cangai Cobalt project (re-named from Jackaderry North)
- The desktop review highlighted CCZ's ground has occurrences more than 300ppm cobalt at surface – this is 150ppm higher than neighbour Corazon's (ASX: CZN) latest soil sampling program across four new target areas
- An updated desktop review of the Broken Hill project highlighted the potential for additional cobalt mineralisation and favourable zones of outcrops
- There is material exploration upside within the tenure, as c.75% is covered in alluvial sand, significantly where outcrop is visible, legacy assay results indicate the presence of cobalt
- CCZ appointed Peter Meagher and Peter Smith as Chairman and Non-Executive Director respectively

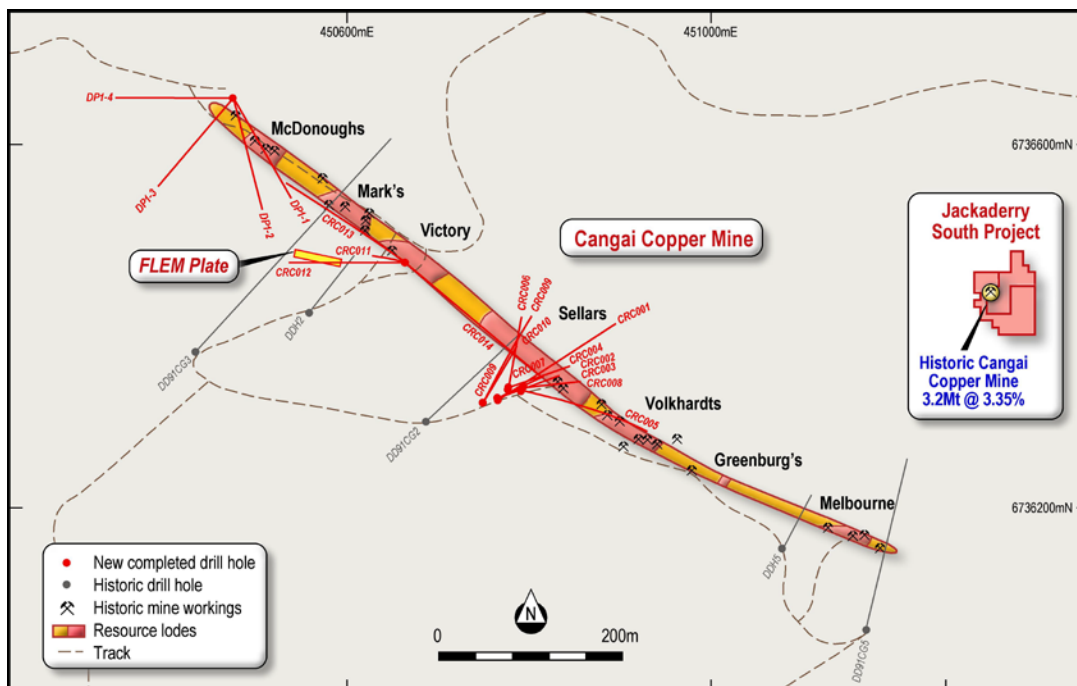
Castillo Copper Limited (“**CCZ**” or “**The Company**”) is pleased to present its latest quarterly report for the period 1 January to 31 March 2018.

There were significant operational activities during the period, focused mostly on the NSW projects, which is discussed in more detail below.

## CANGAI COPPER MINE: PHASE I DRILLING CAMPAIGN

The drilling team completed Phase I of CCZ's maiden drilling campaign at Cangai Copper Mine (“**CCM**”) (Figure 1) and dispatched samples to the laboratory for assay analysis.

**FIGURE 1: TOP DOWN VIEW OF COMPLETED DRILLING PROGRAM AT CANGAI**



Source: CCZ geology team

Key points from the drill site highlight the following<sup>1</sup>:

1. The best intersections from the assay results of the first nine drill-holes are summarised in Table 1, though the standout was from drill-hole CRC005 which recorded up to 2.66% Cu, 20.7 g/t Ag and 2.35% Zn;

**TABLE 1: MATERIAL INTERSECTIONS FROM FIRST 9 DRILL HOLES AT CANGAI<sup>2</sup>**

Drill-hole	From (m)	To (m)	Significant intersections
CRC004	92	97	5m @ 1.56% Cu, 4.43g/t Ag & 0.4% Zn
	<b>94</b>	<b>97</b>	<b>incl. 3m @ 2.22% Cu, 6.38g/t Ag &amp; 0.60% Zn</b>
CRC005	221	224	3m @ 1.76% Cu, 13.08g/t Ag & 1.33% Zn
	<b>221</b>	<b>222</b>	<b>incl. 1m @ 2.66% Cu, 20.70g/t Ag &amp; 2.35% Zn</b>
CRC008	210	213	3m @ 1.01% Cu, 6.60g/t Ag & 0.34% Zn

Source: ALS

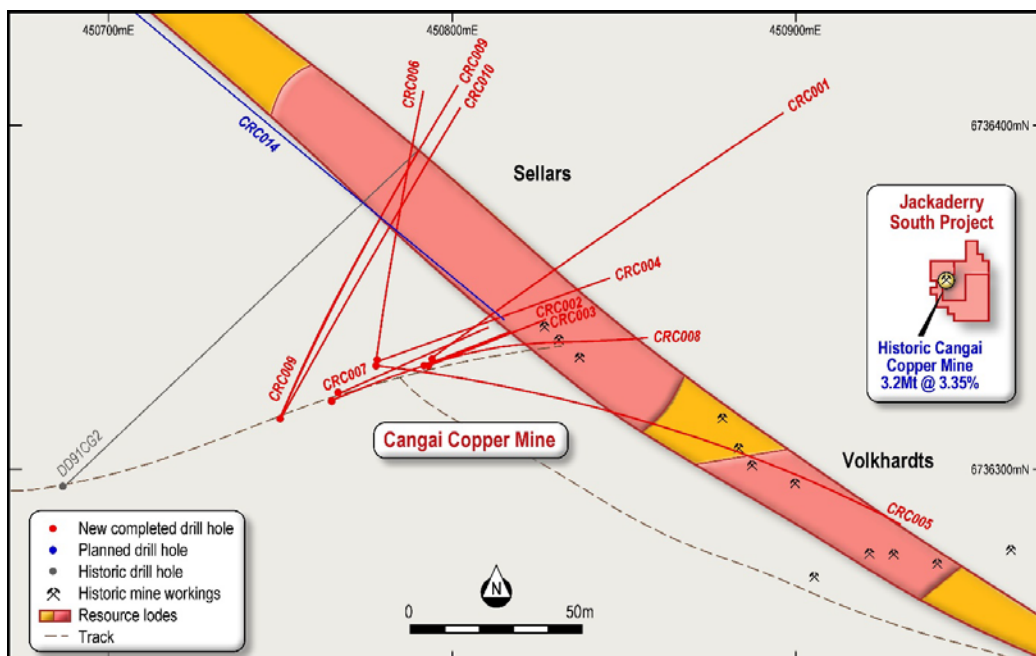
2. Seven out of the final nine drill-holes intersected shallow mineralisation between 0-20m;
3. For drill-hole 18, there were numerous 2-4m mineralised zones from 6 through to 40m; and
4. As most of the Phase I drilling focused on areas outside the JORC modelled zone, the geology team is optimistic the resource size may expand; however, the full extent of any increase won't become apparent until after the second drilling campaign is complete.

A summary of the drilling results for the first nine drill-holes follows<sup>3</sup>:

- Sulphide mineralisation (chalcopyrite-pyrite-pyrrhotite) was intersected in seven drill-holes;
- Four drill-holes (CRC002-CRC004 & CRC007) intersected Sellars' Lode workings which enabled accurate 3D model calibration, positioning of the historic workings and mineralisation within the Line of Lode; copper oxide (malachite) and sulphide mineralisation (chalcopyrite-pyrite-pyrrhotite).
- The veracity of the initial resource model was supported by drilling (CRC004) that intersected mineralisation in the halo prior-to-and-beyond the workings;
- In addition, the model's accuracy was confirmed at Volkhardts' Lode which was successfully intersected at 222m (CRC005), returning sulphide mineralisation (chalcopyrite-pyrite-pyrrhotite) that floated off samples during the washing/logging process;
- Mineralisation was intersected within the unmined portion of Sellars' resource shell (CRC006), which is away from the historic workings;
- Demonstrating the geology team's theory – that the halo between high-grade historic lodes is mineralised – a 30m thick zone of sulphide mineralisation (chalcopyrite-pyrite-pyrrhotite) was intersected between Sellars and Volkhardts Lodes (CRC008); and
- Specifically, the sulphide mineralisation ranged from disseminated (trace-5% estimated sulphide) and breccia sulphides (5-20% estimated sulphide) on the outer zones trending to semi-massive/massive veins (20-60% estimated sulphide) within the core of the shear zone.

The first nine drill-holes at CCM (Figure 3), which confirm an extensive mineralisation system.

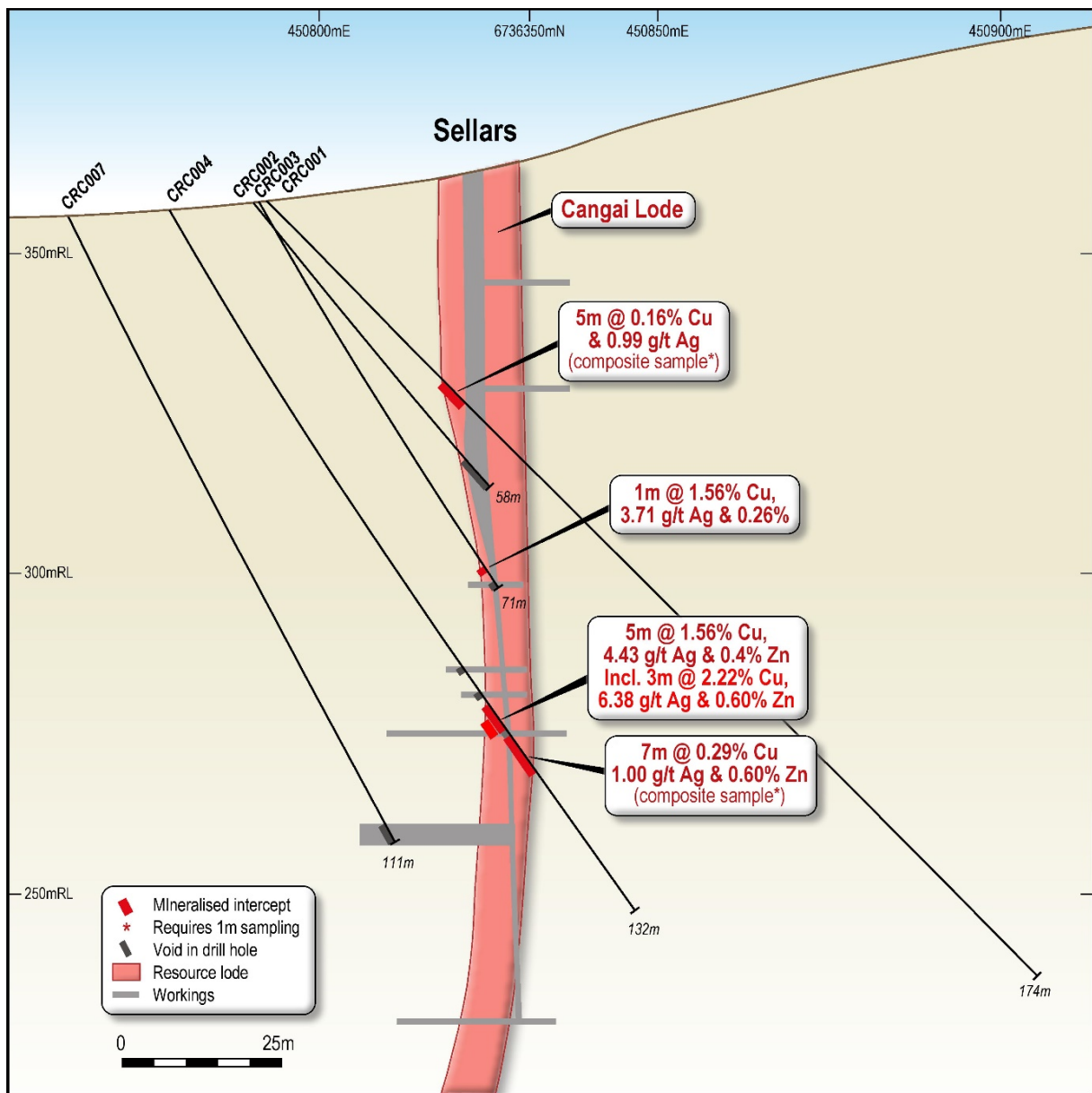
**FIGURE 3: LINE OF LODE, RESOURCE SHELLS AND DRILLING<sup>2</sup>**



Source: CCZ geology team

Figure 4 shows a cross section through Sellars' Lode that details corresponding assay results from completed drill-holes relative to the location of historic workings.

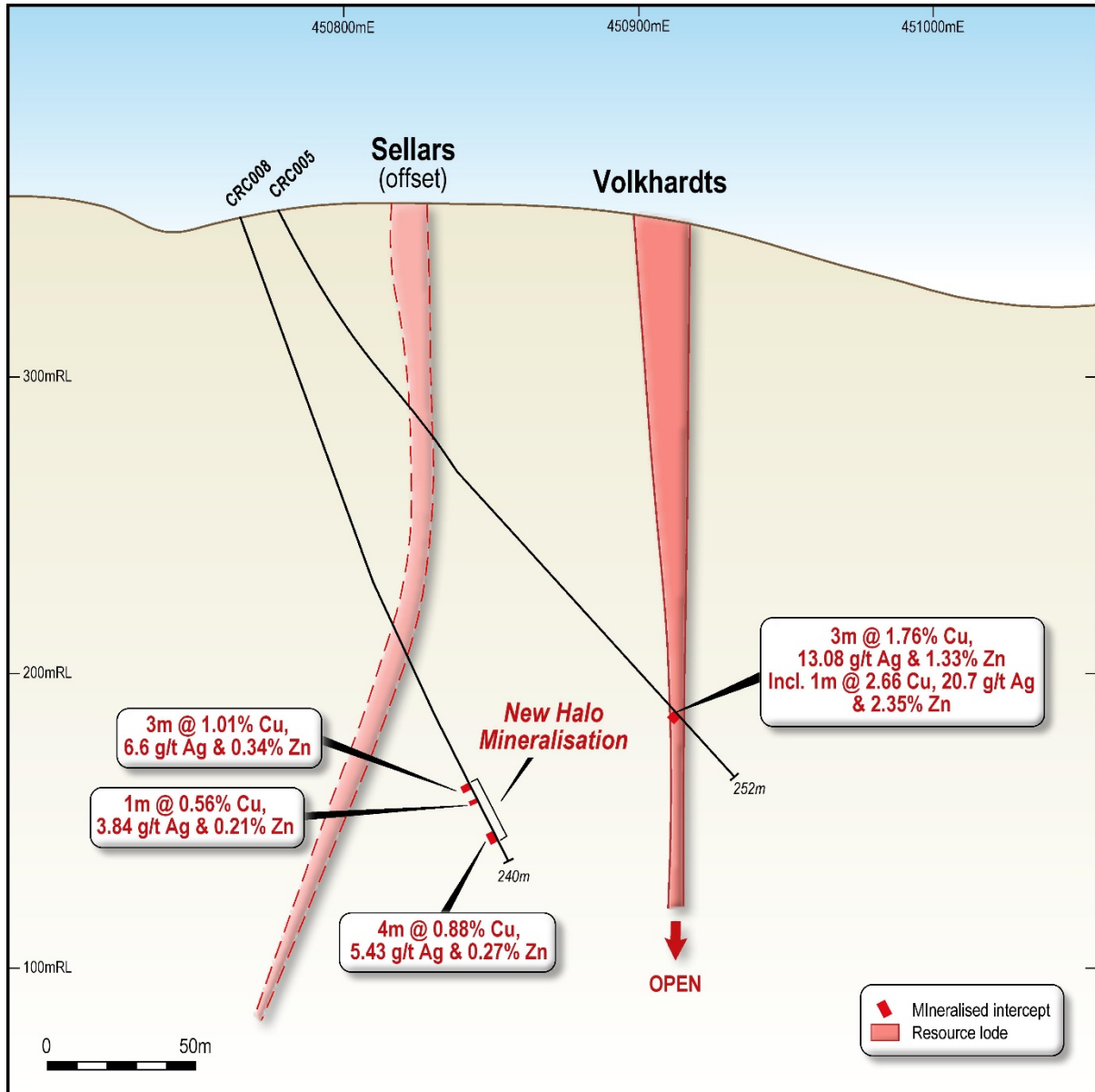
**FIGURE 4: CROSS SECTION - SELLARS LODE<sup>2</sup>**



Source: CCZ geology team

Expanding the cross-section view, Figure 5 highlights Volkhardts' Lode with assay results from completed drill holes and the position of the new mineralisation halo intersected between Sellars and Volkhardts Lodes.

**FIGURE 5: OBLIQUE CROSS SECTION - VOLKHARDTS LODGE<sup>2</sup>**



Source: CCZ geology team

## **Interpretation**

Overall, CCZ's geology team is pleased with the results, as the objective was to target sulphide mineralisation, that when blended with legacy high-grade supergene ore, would expand the resource size. To this end, the assay results confirmed there was significant mineralisation associated with pyrite, chalcopyrite and pyrrhotite sulphides as well as malachite/azurite copper oxides (confirmed from legacy data). Moreover, the results indicate holistically that 1.5-2% Cu bulk head-grade is achievable once the mineralisation system at CCM is fully defined and understood.

A notable feature determined from analysing the assay results was the very strong correlation between Cu-Ag-Pb-Zn mineralisation. Although Au assay results are not back from the laboratory, they are expected to follow suit, and be in line with the current resource gold grade.

Clearly, this link to Ag-Au-Pb-Zn delivers significant incremental Cu mineralisation that potentially enhances the overall resource.

DHEM was collected on a number of holes, and a Priority 1 conductor was identified in CRC005, and adjacent to the significant sulphide intersected in CRC005. The DHEM anomaly will be targeted in the Phase 2 drilling program.

Phase I of the drilling program focused on sulphides, the next round is focused on shallower supergene ore near the historic workings, which should further underpin expanding the overall resource. To facilitate this process, the following have been arranged:

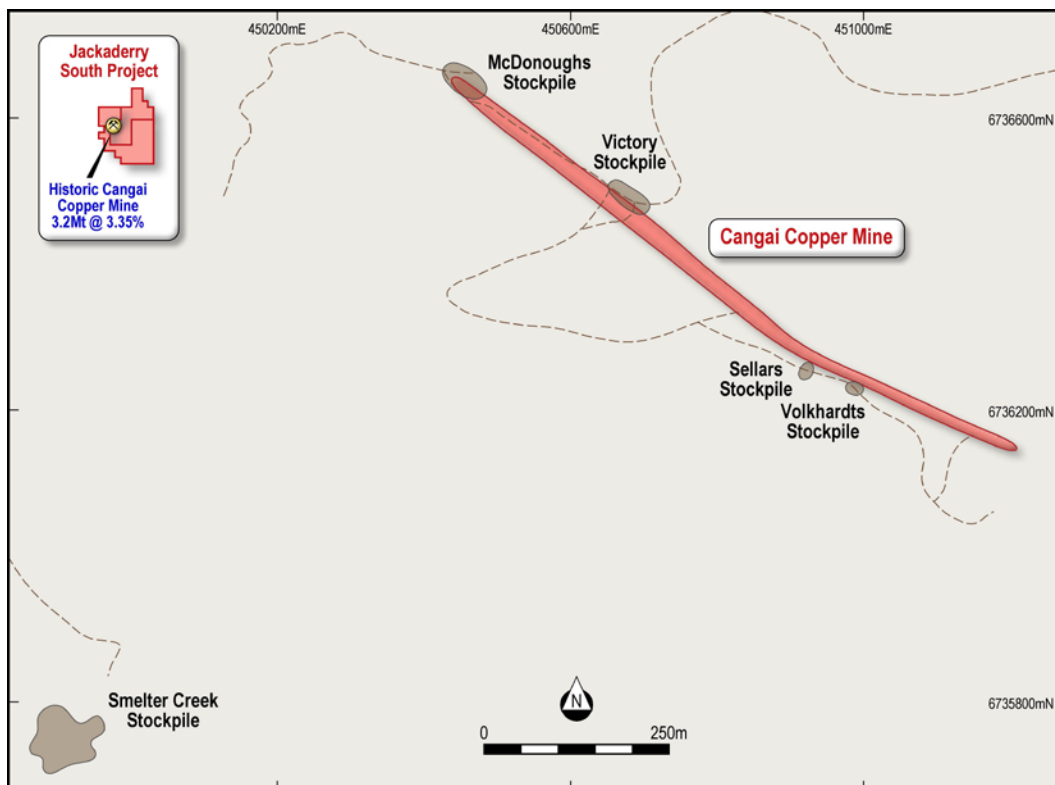
- A suitable small-scale track mounted drilling rig has been sourced, as it is more flexible and can better traverse the hilly terrain at CCM; and
- The land owner has been contracted to commence track and pad clearing once regulatory approval has been received.

## **LEGACY STOCKPILES AT CANGAI COPPER MINE**

### **High-grade mineralised stockpiles**

Along the line of lode (refer Figure 6), and at the old Smelter Site there are legacy stockpiles that the recent topography survey identified as relatively sizeable. The geology team, during a break in the drilling program due to heavy rain, made some headway on one of the stockpiles recording several indicative only pXRF readings with samples of >10% copper, up to 18% copper, from the waste ore reject piles. In addition, there were numerous readings for cobalt, with the highest being above 1,300ppm and 7.9% zinc<sup>4</sup>.

**FIGURE 6: FIVE LEGACY STOCKPILES AT CANGAI COPPER MINE<sup>1</sup>**



Source: CCZ geology team

### Monetising legacy stockpiles

The Board reviewed a range of options on how to create value for shareholders in the near-term and believes monetising the legacy stockpiles is a realistic plan. Along the line of lode there are four stockpiles, while the largest is the former slag waste-pile when the smelter was in operation between 1904-17.

Given complexities securing regulatory approval, the Board has appointed Hetherington Exploration & Mining Title Services (“HEMTS”) to review all the options holistically on how to expedite progressing this plan. Whether the end outcome is direct shipping ore or transporting ore to domestic third-party processors, CCM is located close to efficient transportation infrastructure.

### Smelter Creek stockpile: assay results

Assay results, received subsequent to the end of the quarter, from initial channel rock-chip sampling at the legacy Smelter Creek stockpile (Figure 6) were encouraging with up to 1.25% Cu, 2.57% Zn and 357ppm Co (Table 2). While further work needs to be undertaken, the Board remains committed to creating value for shareholders by monetising the stockpiles and is waiting for an interim report from HEMTS on ways to move forward.

**Table 2: Assays for the initial Smelter Creek stockpile sampling is as follows<sup>5</sup>**

Sample	East (MGA56)	North (MGA56)	Copper (%)	Cobalt (ppm)	Zinc (%)	Silver (ppm)
1012521	450010E	6735565N	0.995%	357	2.30%	2
1012522	459995E	6735536N	1.04%	286	2.26%	2.2
1012523	459977E	6735557N	1.25%	319	2.57%	2.7

Source: ALS

## CANGAI COBALT PROJECT PREVIOUSLY (JACKADERRY NORTH)

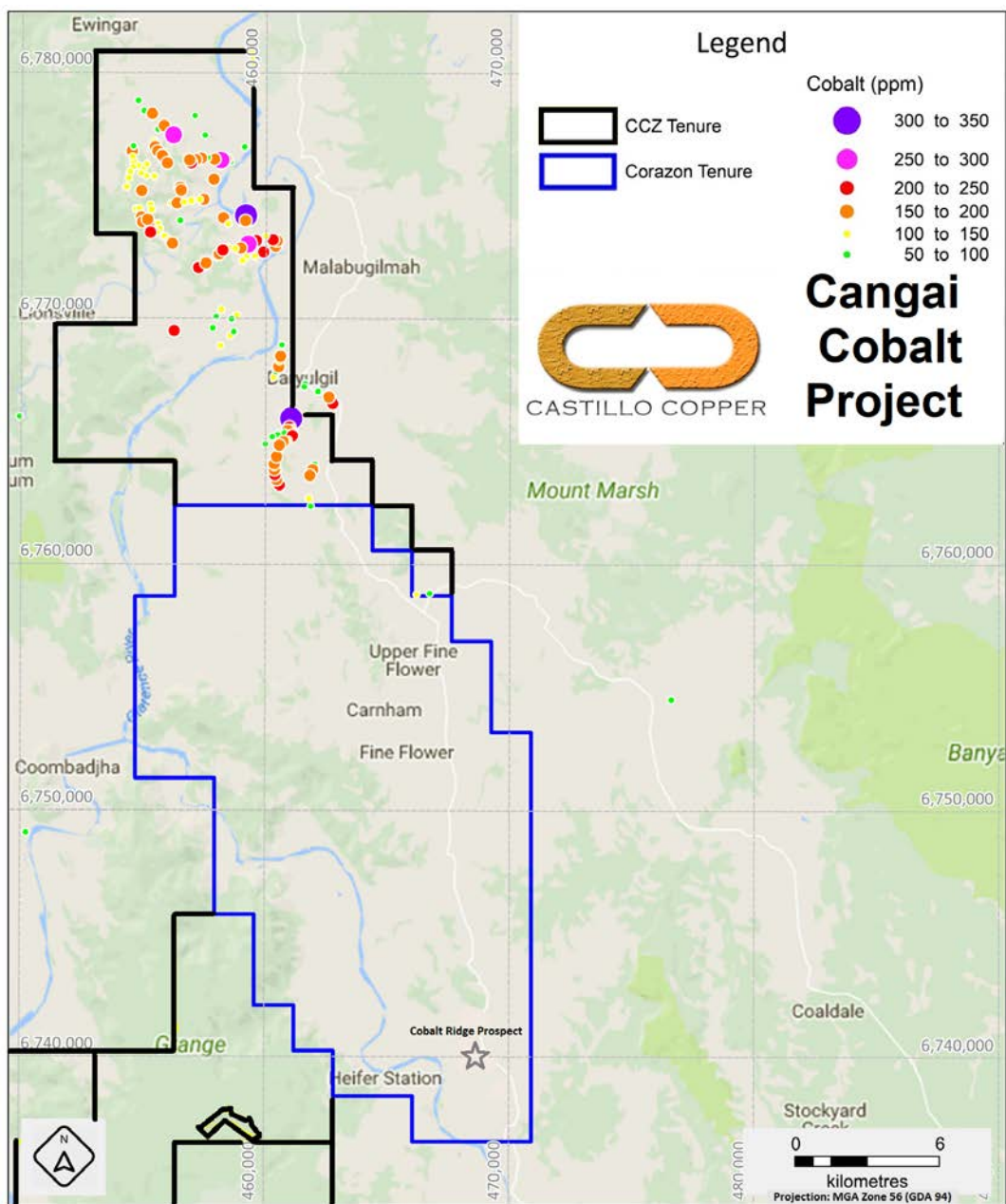
### Exploration upside

Subsequent to quarter end, an updated desktop review identified the material exploration upside for cobalt mineralisation across both Cangai Cobalt/Copper projects.

### Geochemical analysis proving effective

The desktop report highlighted that within the Cangai Cobalt project there are extensive anomalous zones where historic soil sampling has taken place. A closer review of the legacy geochemistry data shows there are samples with readings >300ppm in two locations<sup>5</sup>, which surpasses results reported by CZN<sup>6</sup>.

**FIGURE 7: GEOCHEMISTRY AT CANGAI COBALT PROJECT<sup>5</sup>**



Source: CCZ geology team

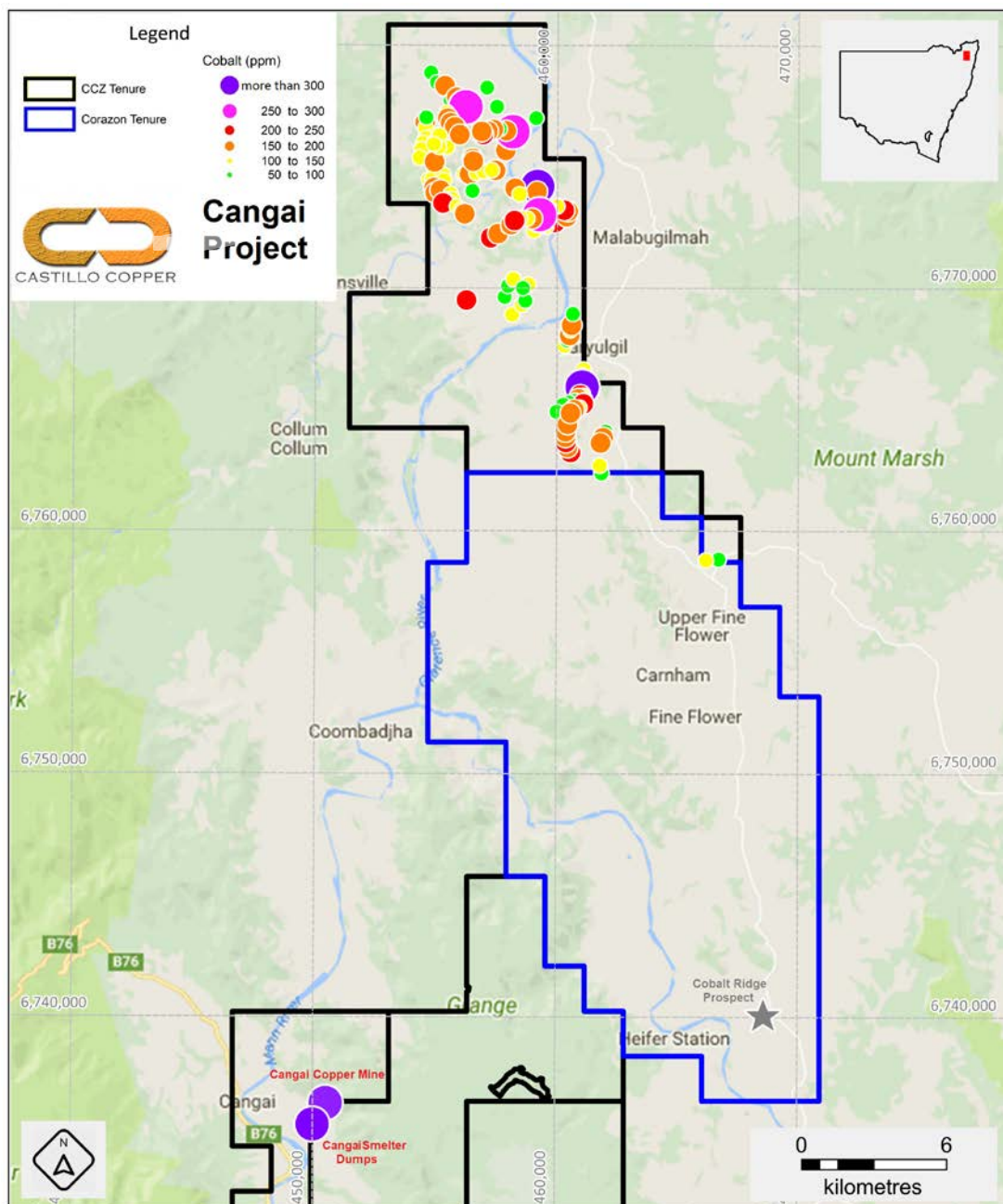


With high cobalt soil anomalies in the Cangai Cobalt project, CCZ are solidly positioned to expedite exploring these zones. By employing a similar strategy deployed by CZN<sup>6</sup> at Cobalt Ridge, CCZ intends to expand the geochemical soil sampling across the combined Cangai Cobalt/Copper tenure to identify incremental cobalt targets and extend current focus areas.

### Undiscovered cobalt potential

The Cangai Copper project, where the flagship CCM is located, remains largely under explored for cobalt (Figure 8). However, historic mining activities provide concrete evidence for the presence of cobalt. Legacy mining reports document the presence of cobalite<sup>7</sup>, which resulted in its inclusion in the Mineral Resource estimate<sup>8</sup>.

**FIGURE 8: COBALT GEOCHEMISTRY AT CANGAI PROJECT<sup>5</sup>**



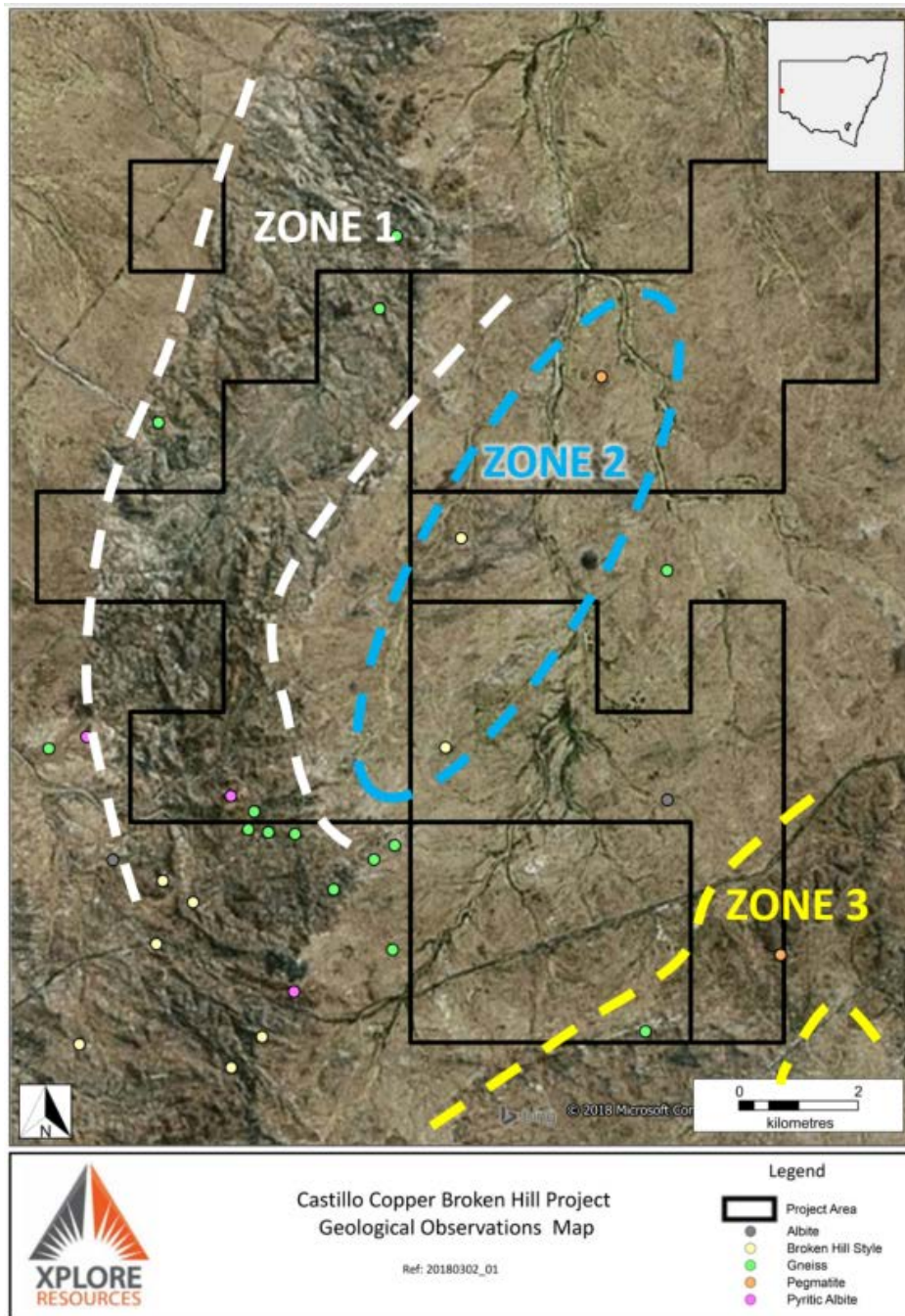
Source: CCZ geology team

## BROKEN HILL

### Cobalt occurrences

A desktop review undertaken by Xplore Resources defined three major zones which are to be targeted for potential cobalt mineralisation (Figure 9). Previous exploration has primarily focused on traditional Broken Hill mineral systems (Zn-Pb-Ag), but due to growing demand for battery grade minerals, the economics are favourable for cobalt.

**FIGURE 9: KEY GEOLOGICAL OBSERVATIONS IN BROKEN HILL PROJECT AREA<sup>9</sup>**

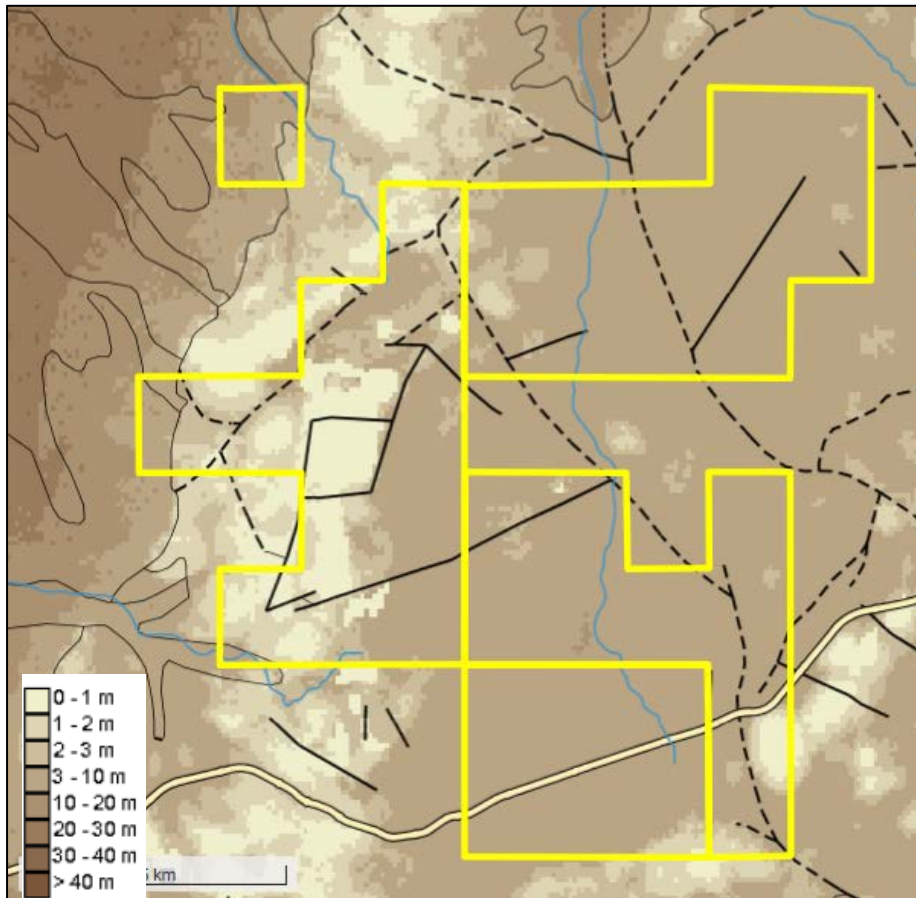


Source: Xplore Resources

One of the key features about the Broken Hill tenure, highlighted in Figure 10 below, is circa 75% of the tenure is unsampled/ineffectively sampled, due to much of the project area being covered in up to 10m of alluvial sand. However, where it has been sampled and outcrop visible,

legacy assay results indicate favourable host rocks and the presence of cobalt (refer below for further analysis and description of the defined Zones).

**FIGURE 10: REGOLITH COVER AND FAULTS WITHIN THE BROKEN HILL PROJECT <sup>9</sup>**



Source: Xplore Resources

CCZ looking to utilise open file and third party helicopter-borne electromagnetic (EM) survey's to uncover prospective areas for cobalt mineralisation beneath the alluvial sand cover. To date, COB<sup>10</sup> and AUZ<sup>11</sup> have successfully utilised this technique to identify sulphide-hosted cobalt mineralisation beneath alluvial sand cover on their tenures. CCZ has commenced discussions with the geophysical companies that hold open file geophysical survey data that is available for purchase. Acquiring the geophysical survey data, that captures parts of the Broken Hill project, will provide CCZ with valuable information without the requirement of completing expensive and time consuming new geophysical surveys over CCZ's entire Broken Hill tenure area. This will help expedite the exploration process and identify new targets that can be progressed to the exploration drilling.

## Current fieldwork<sup>2</sup>

### Cangai Cobalt/Copper projects

Key recommendations from the desktop report include:

1. Conduct infill soil and stream geochemistry sampling to identify additional cobalt anomalies throughout the project area;
2. For Cangai Copper specifically:

- Undertake extensive, large scale geochemical sampling to constrain identified cobalt mineralisation and identify incremental targets;
  - Follow up with a smaller scale soil and rock chip sampling program to fine tune exploration targets; and
3. Utilising data from the geochemistry programs, formulate the inaugural drilling campaign.

The Board took the opportunity to re-set CCZ's strategic intent and formulated a detailed action plan. Key priorities going forward include:

1. Expediting the Phase II drilling campaign at CCM, which has been submitted to the regulator for approval and targets 39 drill-holes focused on supergene ore near the historic workings; and
2. Ramp up efforts to explore for cobalt mineralisation within Cangai Cobalt/Copper project area; and
3. A geology team will be sent to site to commence follow up field work on prospective targets for cobalt mineralisation.

## **QLD PROJECTS**

CCZ continued to progress with the application process of the QLD tenements acquired.

## **CHILEAN COPPER PROJECTS**

CCZ did not perform any material exploration work on these projects.

## **CORPORATE**

During the period CCZ announced the appointment Mr Peter Meagher as Chairman and Mr Peter Smith as non-executive director. Mr Meagher and Mr Smith replaced Mr David Wheeler and Mr Neil Hutchison, who have resigned to focus on other business interests and directorships.

Furthermore, Castillo announced it will seek shareholder approval at a general meeting of shareholders to be held on 10 May 2018, to issue the following proposed options, to acquire CCZ shares, to directors at an exercise price of \$0.10 and expiring on 31 December 2023:

- Mr Peter Meagher – 5 million, as part of his remuneration package;
- Mr Alan Armstrong – 1 million, to further incentivise; and
- Mr Neil Hutchison – 1 million, to further incentivise.

In addition, Castillo will seek shareholder approval for the issue of 8 million options to Hartleys Limited, and or their nominees, who have been appointed as corporate advisor and a maximum of 2 million options to consultants, and or their nominees, in lieu of fees, to acquire CCZ shares, at an exercise price of \$0.10 and expiring on 31 December 2023.

Subsequent to the end of the quarter, the Company applied to, and obtained orders from, the Federal Court of Australia, dated 13 April 2018, which extended the time for the giving of cleansing notices required under section 708A of the *Corporations Act* (the Act) in respect two recent issues of shares in the Company (in October 2017 and January 2018 respectively). The effect of those orders is that the issue of the relevant shares and any subsequent on-sale of those shares is "cleansed" for the purposes of the Act.

For and on behalf of Castillo Copper

**Peter Meagher**

**Chairman**

#### **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) Cangai Copper and Cobalt, which includes the 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) CCZ ASX Announcement dated 28 March 2018
- 2) CCZ ASX Announcement dated 9 March 2018
- 3) CCZ ASX Announcement dated 8 February 2018
- 4) CCZ ASX Announcement dated 16 January 2018
- 5) CCZ ASX Announcement dated 19 April 2018
- 6) CZN ASX Announcement dated 16 June 2016
- 7) CCZ ASX Announcement dated 21 August 2017
- 8) CCZ ASX Announcement dated 6 September 2017
- 9) CCZ ASX Announcement dated 19 March 2018
- 10) COB ASX Announcement dated 22 November 2018
- 11) AUZ ASX Announcement dated 7 March 2018

## APPENDIX 1: INTEREST IN MINING TENEMENTS HELD

<b>JACKADERRY</b>		
New England Orogen in NSW		
Tenement ID	Ownership at end of Quarter	Change during the Quarter
EL8635	100%	-
EL8625	100%	-
EL8601	100%	-

<b>BROKEN HILL</b>		
located within a 20km radius of Broken Hill, NSW		
Tenement ID	Ownership at end of Quarter	Change during the Quarter
EL8599	100%	-
EL8572	100%	-

<b>MT OXIDE</b>		
Mt Isa region, northwest Queensland		
Tenement ID	Ownership at end of Quarter	Change during the Quarter
EPM 26513	0%	-
EPM 26525	0%	-
EPM 26574	0%	-
EPM 26462	100%	-

<b>MARLBOROUGH</b>		
North-west of Gladstone		
Tenement ID	Ownership at end of Quarter	Change during the Quarter
EPM 26522	0%	-
EPM 26528	0%	-
EPM 26541	0%	-

<b>HUANTA (VICUÑA)</b>		
Chile		
Tenement ID	Ownership at end of Quarter	Change during the Quarter
04015-7483-7	100%	-
04015-7484-5	100%	-
04015-7486-1	100%	-
04015-7487-K	100%	-
04015-7488-8	100%	-
04015-7489-6	100%	-

**Note:** Castillo Copper Limited has a 100% interest in properties owned by Castillo Copper Chile SpA. They were originally granted in 2011, and inscribed as El Profeta 1 to 5, Pachi 1 to 3, Camila 1 to 9 and Homero 1 to 2.

## APPENDIX 2: SUMMARY OF EXPLORATION EXPENDITURE INCURRED PER PROJECT

Project	Quarter Cash Spend \$A'000
Jackaderry	294
Broken Hill	5
Mt Oxide North	3
Marlborough	2
Huanta (Vicuna)	1
<b>Total</b>	<b>305</b>