CASTILLO COPPER LIMITED

ASX Release

19 March 2018

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Issued Capital:
580.1 million shares
67.5 million options

ASX Symbol:
CCZ

Broken Hill project's cobalt mineralisation potential materially enhanced

- **An updated desktop review by geological consultant, Xplore Resources, highlights the potential for additional cobalt mineralisation and favourable zones of outcrops**
- **Xplore Resources are currently reviewing additional available geophysical survey data, with a further update expected shortly**
- **Moreover, the region is now emerging as a new global supply chain hub, especially with the cobalt price c.US$85,000/t[1]:**
  - **Peers Cobalt Blue (ASX: COB) and Havilah Resources (ASX: HAV) have confirmed cobalt resources, while Alloy Resources (ASX: AYR) and Australian Mines (ASX: AUZ) have encouraging exploratory results**
- **The core focus is on targeting known host mineralised areas and determining the degree of cobalt mineralisation within CCZ's tenure**
- **HAV reported 193.3Mt @ 120ppm Co (23.2Kt[2] contained metal) and COB 54.9Mt @ 910ppm (49,986t[3])**
- **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**
- **To uncover incremental target areas of sulphide-hosted cobalt mineralisation below the alluvial sand, CCZ plans to deploy heliborne electromagnetic geophysical survey technology which COB and AUZ have successfully utilised**
- **Further, extracting cobalt from sulphides is proven to be materially simpler and more cost effective than laterites**
- **Importantly, re-opening Cangai Copper Mine remains CCZ's primary focus, with the second drilling campaign set to target supergene ore and update on legacy stockpiles due soon**

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Castillo Copper's Chairman Peter Meagher commented: *"With the cobalt price around US$85,000/t, the Board has mandated Xplore Resources to fast-track understanding the extent of cobalt mineralisation and develop the inaugural drilling program for our Broken Hill asset. Indeed, the Board is cognizant the region is emerging as a new potential supply chain hub for cobalt which augurs favourably for CCZ, particularly given its proximity to peers with defined JORC resources. The Board believes focusing on re-opening Cangai Copper Mine and concurrently gaining a deeper understanding of the cobalt potential at the Broken Hill asset are CCZ's key forward value drivers."*

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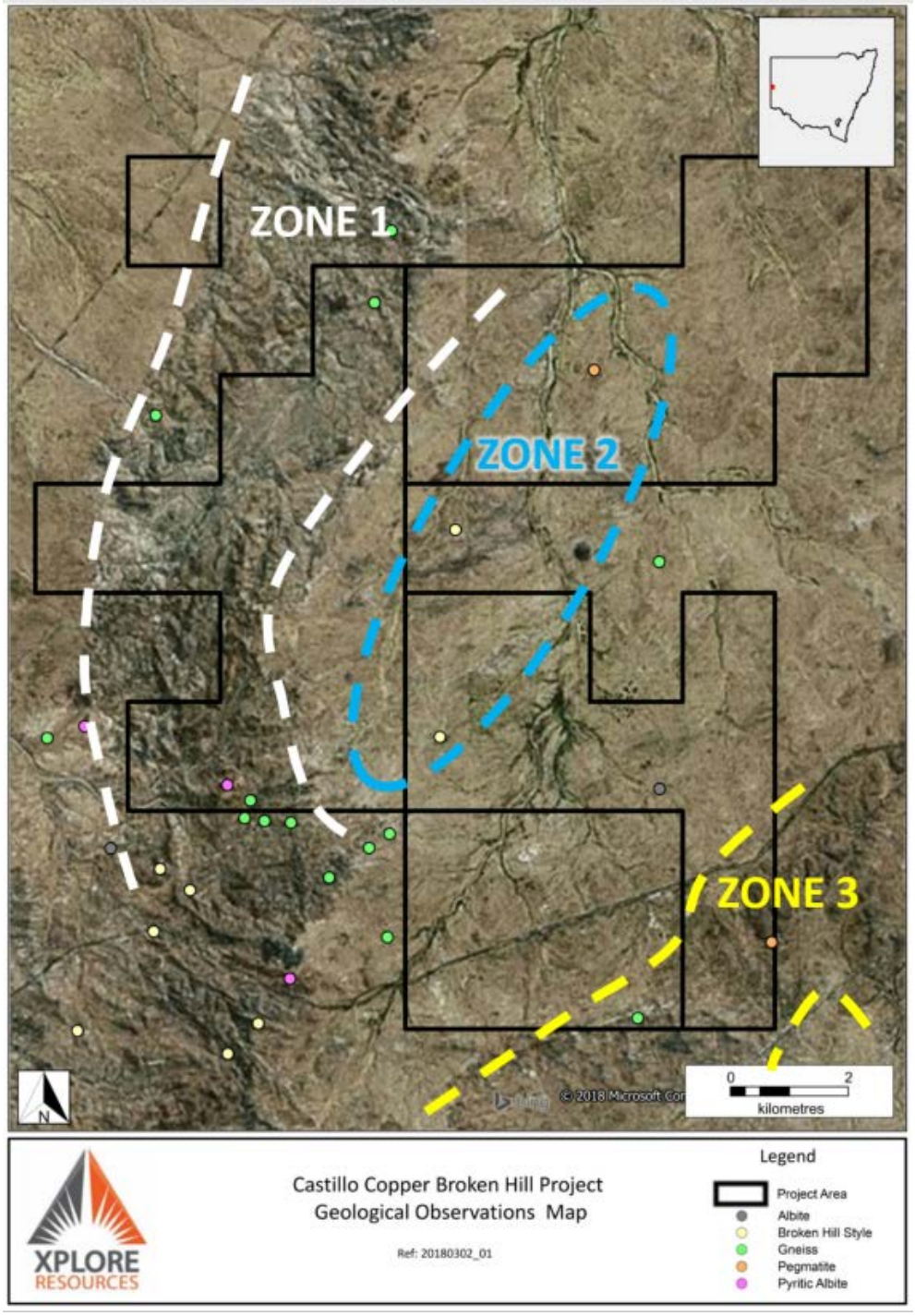
Castillo Copper Limited's ("CCZ" or **"the Company")** Board has received an encouraging desktop report from geology consultant, Xplore Resources, which shows anomalous cobalt occurrences across the Broken Hill asset. With the cobalt price remaining around US$85,000/t and the region emerging as a new global supply hub, the Board is keen to fast-track the exploration program to ascertain the extent of mineralisation across the tenure.

EMERGING COBALT HUB

Cobalt occurrences

A key feature of the new desktop review undertaken by Xplore Resources was defining three major zones which are to be targeted for potential cobalt mineralisation (Figure 1). 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.

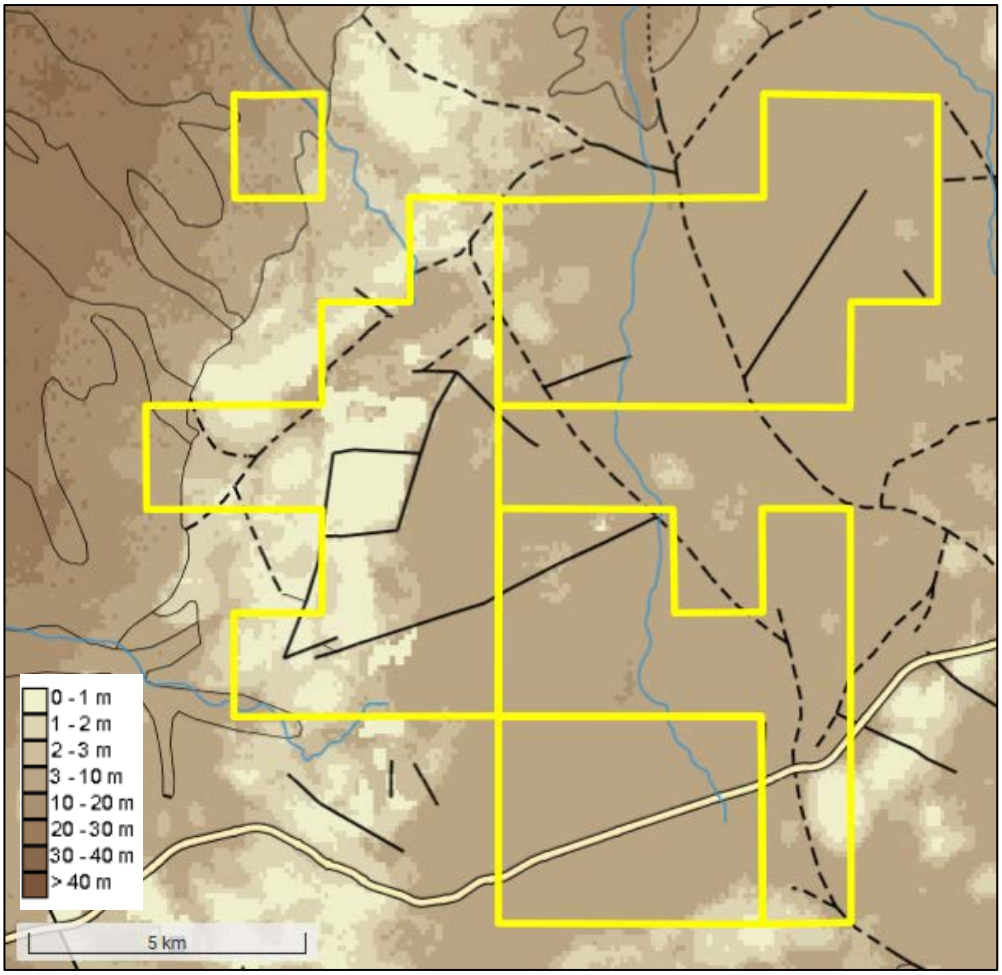
FIGURE 1: KEY GEOLOGICAL OBSERVATIONS IN BROKEN HILL PROJECT AREA



Source: Xplore Resources

One of the key features about the Broken Hill tenure, highlighted in Figure 2 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 2: REGOLITH COVER AND FAULTS WITHIN THE BROKEN HILL PROJECT AREA

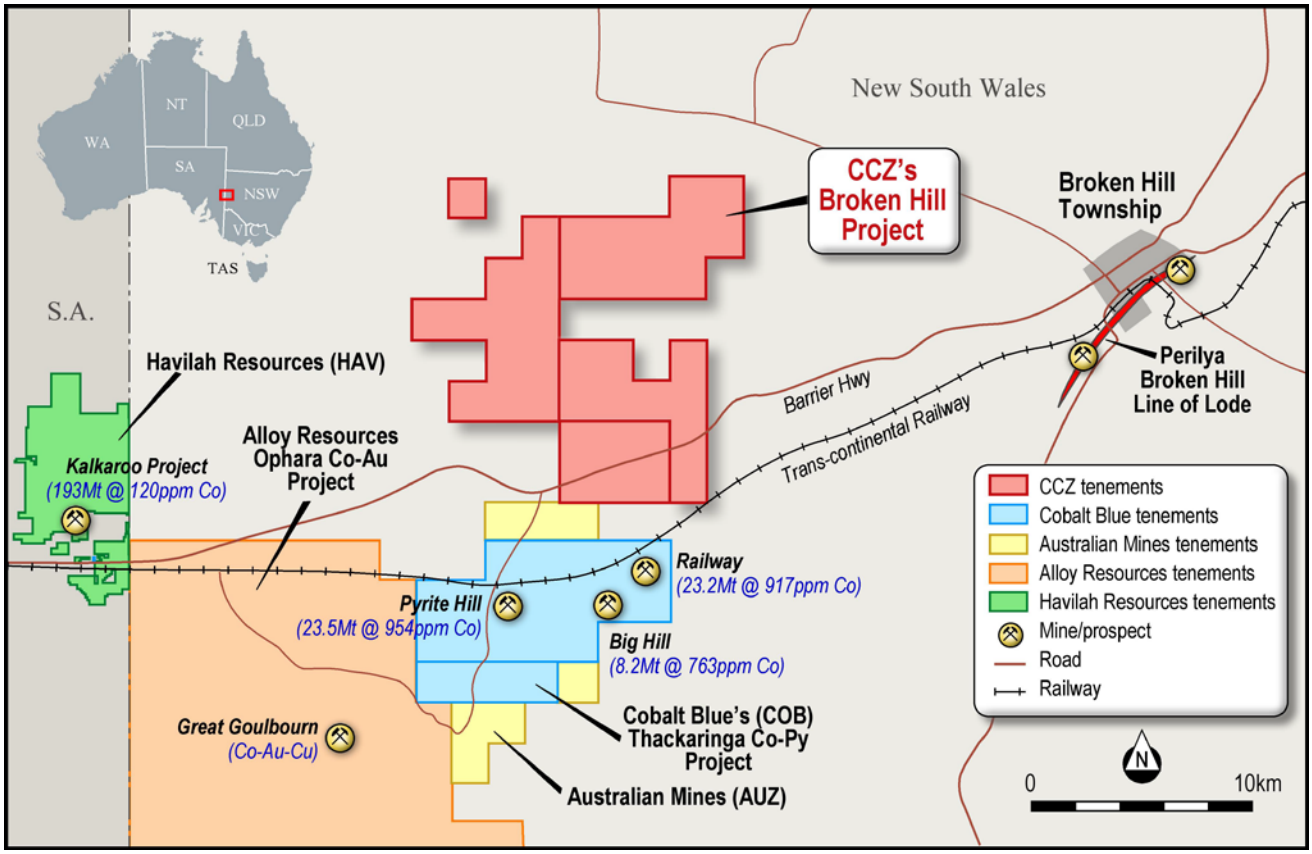


Source: Xplore Resources

The Board now intends to leverage a proven technology via utilising a helicopter-borne electromagnetic (EM) survey to uncover prospective areas for cobalt mineralisation beneath the alluvial sand cover. To date, COB[4] and AUZ[5] have successfully utilised this technique to identify sulphide-hosted cobalt mineralisation beneath alluvial sand cover on their tenures.

Due to COB and AUZ tenures close proximity to CCZ asset's (Figure 3: COB: tenure boundary is less than 3km to the south; AUZ: contiguous), 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.

FIGURE 3: CCZ'S BROKEN HILL ASSET RELATIVE TO PEERS



Source: CCZ geology team

Understanding regional geology in more depth

Neighbouring peers have confirmed cobalt is hosted in an albite-gneiss and, in turn, associated with pyrite mineralisation. The local area has been covered by numerous academic geological studies, with most ground-sampled and thin sections developed for microscopy style analysis.

Although much of CCZ's tenure has been partly sampled, the concentration is on the western boundary and into neighbouring ground where there is outcrop and no sand cover. This data is useful to identify trends in the lithology and for contrasting to known geology maps. However, the lack of data from across much of the tenure confirms it is materially under-explored.

To determine the types of mineralisation within the tenure and properly categorise them, a selection of 286 geological observations were collected (mostly from Geological Survey – NSW) from across the project and immediate vicinity. The list was filtered by rock type and the results plotted based on relevance to the tenure, which facilitated four zones being identified (Figure 1 above):

Zone 1: Primarily a gneiss rich region associated with the areas of high relief, including areas of the primary target – pyritic albite;

Zone 2: An area containing a NE-SW striking Broken Hill style mineralisation area within tenure, with anomalous pegmatites;

Zone 3: Region of high topographic relief with gneiss and pegmatites; and

Zone 4: All other areas, no defining features as they are under-explored.

The recordings of gneiss and albite are concentrated near the SW tenure boundary (Zone 1). Beyond the boundary is a zone which reported minerals including copper, lead, zinc, manganese, silver and tungsten that have been grouped as Broken Hill style mineralisation (Zone 2). In addition, Broken Hill style mineralised units have been identified through the central section of the tenure.

Most importantly, pyritic albite has been identified near the tenure, which is the host rock for the cobalt mineralisation at COB's Thackaringa projects. This high priority prospective unit (Zone 1) is located within the tenure and throughout the range in the SW part of the project.

Historically, geological mapping has not included a unit for pyritic albite gneiss. However, the gneiss units are shown to dominate much of the region and will be the focus for exploration. Similarly, historic mapping over COB's Thackaringa tenure does not identify any pyritic albite gneiss within its surface mapping, yet its presence has been confirmed through recent field mapping. Significantly, this demonstrates that the geological units provided by Geological Survey–NSW are not indicative of the prospective cobalt mineralisation in the region.

A cobalt enriched neighbourhood

Increasingly, global tech-groups have moved to have key raw material inputs sourced from ethical and well-regulated jurisdictions like Australia. Arguably, CCZ holds assets that are exceptionally well positioned, with its Broken Hill tenures člose to peers that have defined cobalt resources or highly encouraging exploratory reports for cobalt mineralisation (Figure 3 above).

Recently HAV and COB reached an agreement[6] to jointly investigate cobalt recovery potential on the Mutooroo copper-cobalt massive sulphide ore. The cooperation agreement is based on the potential to unlock the Broken Hill region's cobalt potential by partnering the two entities in a proximal geographical location with similar cobalt-pyrite ore bodies. The Board is considering the potential of such an agreement to cooperate and expediate to development any future similar cobalt pyrite ore bodies uncovered within the CCZ Broken Hill tenures.

A key feature of the cobalt mineralisation within the region is it is hosted within sulphides, which makes is significantly simpler and more cost efficient to extract compared with laterites. COB has undertaken metallurgical test-work that utilises a coarse crush and gravity separation that upgrades ore (which contains 20% sulphides) to a concentrate that comprises circa 90% sulphides. The result of tests on a bulk 820kg sample showed that, on average, the amount of cobalt in the ore increased from c.600ppm to c.3,300ppm[7] after it was processed into the sulphide concentrate.

This is an exciting development as it potentially means that low grade cobalt ore can now be upgraded into a more economically viable concentrate. More encouraging, is the process utilises a simple technique requiring modest capital expenditure and relatively inexpensive operational costs.

Most importantly, however, if this technology can be deployed efficiently then it means the focus is very much on the amount of contained cobalt metal within a JORC compliant resource. To date, among peers, only two groups have defined total resources, while one has encouraging results (Table 1 below).

TABLE 1: RESOURCES AND NOTABLE RESULTS FROM NEARBY PEERS

ASX Code	Project/Deposit Name	Peer Total Resources (Co only reported) / Notable Results	Distance from CCZ
COB	Pyrite Hill Deposit	23.5Mt @ 954pm Co (cut off 500ppm Co), includes an estimated contained 22,468t of Co metal	5km SSW
COB	Big Hill	8.2Mt @ 763pm Co (cut off 500ppm Co), includes an estimated contained 6,234t of Co metal	5km S
COB	Railway	23.2Mt @ 917pm Co (cut off 500ppm Co), includes an estimated contained 21,284t of Co metal	3km S
COB	**Total Resource – Thackaringa project, NSW**	**54.9Mt @ 910pm Co (cut off 500ppm Co), includes an estimated contained 49,986t of Co metal[3]**	
HAV	Kalkaroo, SA	193.3Mt @ 120ppm Co (cut off 20ppm Co cut off & 0.4% Cu Eq.), includes an estimated contained 23,200t of Co metal[8]	62km NW
HAV	Mutooroo, SA	13.1Mt @ 0.13%Co (geological constraints cut off ore), includes an estimated contained 17,100t of Co metal[8]	35Km SW

Note: Mutooroo contained Co metal tonnage is estimated from the reported Co grades in the ASX Announcement[6]

Sources: Refer to the "REFERENCE LIST from ASX Announcements" section

Next steps

The next steps are to identify geological trends in the data by the near tenure cobalt deposits and from historic explorers over the tenure to pinpoint prospective cobalt zones within the CCZ Broken Hill project area. Given that the area is under-explored for cobalt mineralisation, and the mineralisation is confirmed within the region, the Broken Hill Project is both prospective for cobalt mineralisation and secondary mineralisation targets such as Broken Hill Pb-Zn-Ag Style mineralisation for which the region is famous.

The Board's priority is to fast track the high-level exploration strategy, which comprises the following components:

- Detailed market analysis of peers;
- Geological review and regional drillhole database compilation;
- Geophysical data compilation and review;
- Field work (mapping and sampling);
- Heli-bourne electromagnetic and magnetic geophysical survey; and
- Drill target identification and drill program planning.

While all steps are significant, undertaking a more comprehensive physical data review will uncover some critical insights. Specifically, neighbouring and peers legacy drill-core which is being held at a NSW Government core storage facility in Broken Hill. There are 39 diamond drillholes Xplore Resource's geology team have identified immediately surounding the CCZ tenure. Xplore Resources intends to inspect these core holes to garner a greater understanding of the local and regional geological interpretations.

Conclusion

CCZ's flagship project remains re-opening Cangai Copper Mine, with the next key developments completing the current drilling program, reviewing the final nine assay results, formulating the next drilling phase on supergene ore near the legacy workings and shortly updating the market about forward plans for the five historic stockpiles.

The Board, however, is committed to concurrently progressing the high-level exploration plan for the Broken Hill asset and gaining a greater understanding of the extent of cobalt mineralisation, particularly with the price >US$85,000/t.

For and on behalf of Castillo Copper

Alan Armstrong

Executive Director

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.

COMPETENT PERSON STATEMENT

The information in this report that relates to Geological Interpretation, Historical Exploration Results, Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled 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.

REFERENCE LIST from ASX Announcements:

- 1 – Refer cobalt price on London Metals Exchange www.lme.com
- 2 – HAV ASX Release dated 7 March 2018
- 3 – COB ASX Release Annual Report 2017
- 4 – COB ASX Releases dated 22 November 2017
- 5 – AUZ ASX Release dated 7 March 2018
- 6 – HAV ASX Release dated 1 February 2018
- 7 – COB ASX Release dated 26 October 2017
- 8 – HAV ASX Release Annual Report 2017

APPENDIX A: JORC CODE, 2012 EDITION – TABLE 1 REPORT TEMPLATE: Xplore Resources Desktop Review of the Broken Hill Assets

Section 1 Sampling Techniques and Data

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

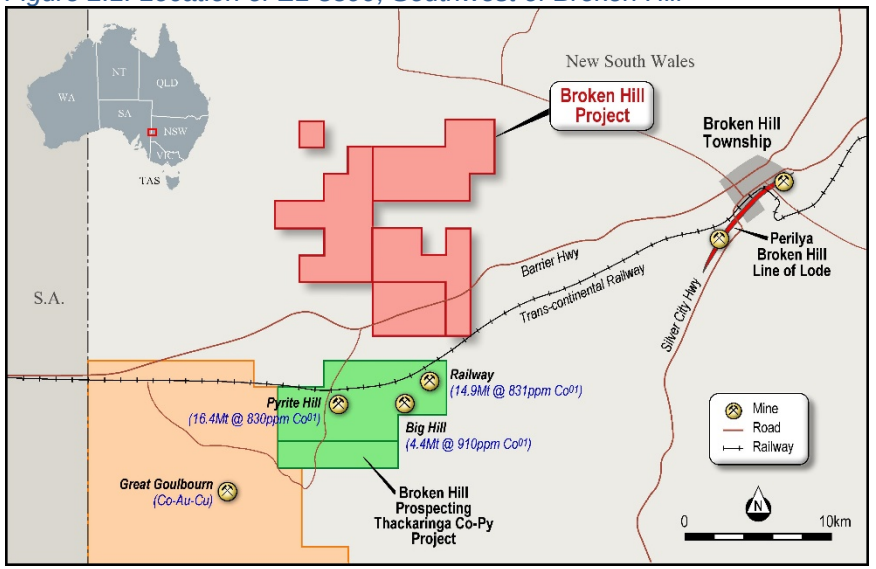
Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *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 30g 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.*	• Sampling used in this analysis was all historical from the period 1964-2017. The data was a combination of the NSW Geological Survey surface sampling database and historical annual and relinquishment reports revisited and additional data extracted. • Sampling was collated if it occurred inside the EL and in an approximate 3,000m buffer surrounding the EL, to establish anomalous trend directions, if any existed. • Nearly 2,500 sample analyses from stream sediment, soil, and rock chip sources were collated and combined. Of these approximately 300 samples did not reside in the government database and had to be encoded from the source reports (15 in total). These were always invariable detailed soil sample grids over named deposits e.g. Quarry Tank • Reference to these reports is given in the associated geology report. • Many of the sampling programs, especially from the 1990's did include reference samples and duplicate analyses and other forms of QA/QC checking. • Sampling prior to 1984 generally has higher "below detection limits" and less QA/QC checks.
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.).*	• Historical drilling consists of auger, rotary air blast, and diamond coring. In and around the tenure are approximately 1,500 drillholes, however it should be noted that the majority of these are <12m in depth, and the number of holes >12m number just below 50, with 26 inside the tenure. No drilling analyses has been compiled and reviewed with the current Announcement focusing on the additional Co analyses.
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*	• Not applicable in this study as no new drilling took place. Sample recovery in the historical deeper drilling was always >90%.

Criteria	JORC Code explanation	Commentary
	loss/gain of fine/coarse material.	
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.*	• Most historical drilling that did occur was completed to the industry standards and practice at the time the drillholes were completed, these are acceptable for the interpretation of mineral prospectivity and are anticipated to be re-evaluated before use in any geological model and/or resource classification. • No downhole geophysical logging took place, except for one trial of a downhole deviation tool in 1980 by CRA Exploration
Sub-sampling techniques and sample preparation	• *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.* • *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.*	• No new sampling undertaken. • The sample preparation and techniques were appropriate to the industry standards at the time that the sampling and analysis had been completed.
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 (i.e. lack of bias) and precision have been established.*	• The majority of samples were laboratory tested in various NATA-registered laboratories throughout Australia. Many of the earlier CRA Exploration stream sediment and soil samples were analysed by CRA internal laboratories. • A small number of samples > 200 had been tested by portable hand held XRF analysis, 1 significant Co anomaly had been identified in this portable hand held XRF dataset within the tenure. At 2060ppm Co with an error of 360ppm Co.
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.*	• Over 450 samples have had their assays duplicated. • None of the historical data has been adjusted.

Criteria	JORC Code explanation	Commentary
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.*	• In general, locational accuracy does vary, depending upon whether the samples were digitised off plans or had their coordinated tabulated. Many samples were reported to AGD66 or AMG84 and have been converted to MGA94. • The majority of sample locations were extracted from the digital data provided by the NSW Governments Geoscience Datawarehouse. • It is estimated that locational accuracy therefore varies between 2-50m.
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.*	• The average sample spacing across the tenure varies per element, e.g. for cobalt the average data spacing between sample points is approximately 140m. • No sample compositing has been applied. • The current view and level of work completed within and/or near the tenures is that the Co assay values are relevant to highlight Co mineralisation and anomaly trends, the Co assay values and associated data have not been reviewed with the purpose of generating a Co Exploration Target, Mineral Resource or Ore Reserve at the time of writing this ASX Announcement.
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.*	• Several of the drilling programs were planned to intersect anomalous surface base metal anomalies at depths, a few were planned to chase chargeability anomalies determined from the surface IP surveys, mostly without success. • Geological mapping by various companies has reinforced that the strata dips variously between 20-80 degrees.
Sample security	• *The measures taken to ensure sample security.*	• No new samples have been obtained. • The sample security and chain of custody measures were appropriate to the industry standards at the time that the sampling and sample transport had been completed.
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 in subsidiaries EL 8599 and EL 8572, EL 8599 consists of 20 graticular units (~60 km^2) and EL8572 graticular consists of 19 units (~57 km^2) The tenure EL 8599 has been formally granted for the term of thirty-six months until 20th June 2020. The tenure EL 8572 has been formally granted for the term of thirty-six months until 23rd May 2020. The location of the tenures is shown in Figure 2.1, below: *Figure 2.1: Location of EL 8599, Southwest of Broken Hill* 
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	**Previous Exploration** Thackaringa lead mineralisation was first discovered in 1875. The concentrated grade was estimated to be 55% Pb and 5,500ppm Ag with Cu and Au credits. However, once the Broken Hill orebody was discovered in the 1880s, interest in the Thackaringa field was lost (Aitchison, 1995).

Criteria	JORC Code explanation	Commentary
		North Broken Hill Limited North Broken Hill Limited held four (4) exploration licenses over the current tenure area from 1975 to 1983: EL 790; EL 1135; EL 1395; and EL 1564 (Archibald & Burket, 1975), (Holzberger, I.R., 1978), (Leyh, W.R., 1982), (Lees, T.C., 1981). The main exploration targets were lead, zinc, copper, silver, gold and tungsten. Exploration was conducted on a regional scale for Broken Hill-type Pb-Zn-Ag lode horizon. A broad stratigraphic relationship was recognized for the Thackaringa-type mineralisation. Work included geological mapping and rock chip geochemistry. The mine dumps assay results reported 14.6% Pb, 14% Zn, 13.4% Cu, 133ppm Ag (Aitchison, 1995). Between 1982 and 1983, 725 tonnes of dump material were converted into 91 tonnes of concentrate that demonstrated 29.6% Pb, 8.7% Zn and 495 ppm Ag (Aitchison, 1995). **CRA Exploration Pty Limited** CRA Exploration Limited (CRAE) conducted exploration over the current tenure area from 1974 to 1998. The work was conducted for eight (8) exploration licenses: EL 2103; EL 216; EL 0712; EL 4536; EL 4535; EL 1025; EL 1666; and EL 4871. Between 1980 and 1998, CRAE carried out geological mapping, geochemistry sampling, geophysical survey and drilling (207 drillholes within and surrounding the tenure area). Samples were analysed for lead, zinc, copper, cobalt, silver and other elements. **Aberfoyle Resources Limited** Aberfoyle Resources Limited held three (3) exploration licences over the current Peak Hill project area from 1987 to 1994: EL 2919; EL 3202; and EL 3105. Exploration work was focused on identifying lead, zinc and copper mineralisations and included EM and UTEM survey, geochemical analysis of soil and drilling.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
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Other Work

Many other companies explored within and surrounding the Peak Hill tenement area, including BHP Minerals Limited; Perilya Broken Hill Limited; Platsearch NL; Rimfire Pacific Mining NL; Pasminco Australia Limited; MIM Exploration Pty Limited; Heritage Gold NZ Limited; Consolidated Feldspar Limited; Alliance Fuel Cells Pem Pty Ltd; Broken Hill Operations Pty Ltd; Broken Hill South Limited; and Newmont Holdings Pty Limited. Samples collected by them were analysed mostly for lead, zinc, copper, silver, gold and iron. Occasionally, cobalt assays were reported for some soil and sedimentary samples, mainly being used as an indicator mineral for the above-mentioned major mineralisation styles.

Current Nearby Exploration

The region is being actively explored, with nearby companies and the commodities they are exploring for, are listed in Table 2.1 below:

Table 2.1: EL 8599 Current Exploration Neighbouring Companies
<table>
<tr><th>Tenure</th><th>Company</th><th>Commodity</th></tr>
<tr><td>EL 8572</td><td>Castillo Copper Limited</td><td>Metallic minerals</td></tr>
<tr><td>EL 8569</td><td>Proton Geoscience Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>EL 8484</td><td>Proton Geoscience Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>EL 7162</td><td>Perilya Broken Hill Limited</td><td>metallic minerals</td></tr>
<tr><td>EL 5958</td><td>Rimfire Pacific Mining NL</td><td>metallic minerals</td></tr>
<tr><td>EL 8477</td><td>Dashell Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>EL 8598</td><td>SA Exploration Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>EL 8485</td><td>Proton Geoscience Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>ML 6302</td><td>Kapitany, Tamas</td><td>garnet</td></tr>
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</td></tr>
<tr><td>Geology</td><td>• Deposit type, geological setting and style of mineralisation.</td><td>
Regional Geology

The Broken Hill polymetallic deposits are located within Curnamona Province (Willyama Super group) that hosts several world-class deposits of lead, zinc, silver and copper. The Willyama Supergroup consists of highly-deformed metasedimentary schists and gneisses with abundant quartzo-feldspathic gneisses, lesser basic gneisses and minor ‘lode’
</td></tr>
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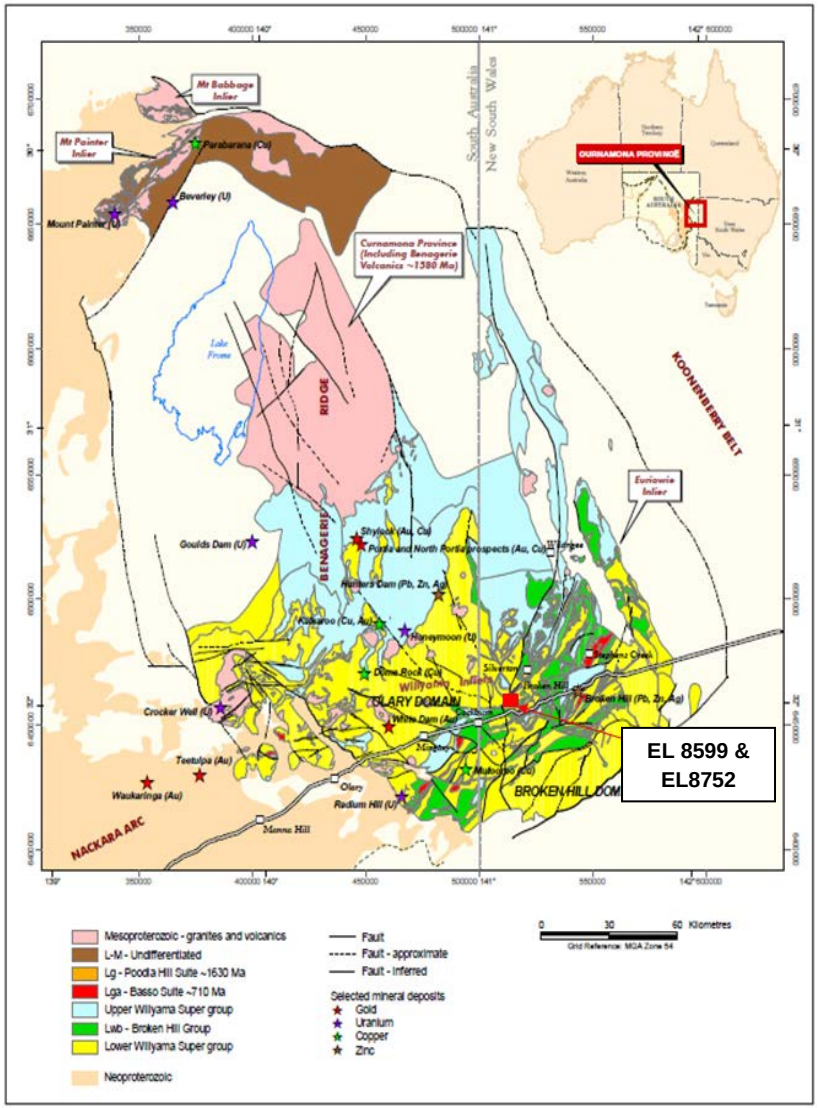
Criteria	JORC Code explanation	Commentary
		rocks. Prograde metamorphism ranges from andalusite through sillimanite to granulite grade (Stevens, Barnes, Brown, Willis, & L, 1988). Regionally, the tenure is situated in Broken Hill spatial domain which extends from far western New South Wales into eastern South Australia (Figure 2.2). The Broken Hill Domain hosts several major fault systems and shear zones, which were formed by various deformation events and widespread metamorphism which has affected the Willyama Supergroup. Major faults in the region include the Mundi Mundi Fault to the west of Broken Hill, the Mulculca Fault to the east, and the Redan Fault to the south. Broken Hill is also surrounded by extensive shear zones including the Stephens Creek, Globe-Vauxhall, Rupee, Pine Creek and Thackaringa-Pinnacles Shear Zones.

Figure 2.2: Regional Geological Map



Modified after (Peljo, 2003)

Criteria	JORC Code explanation	Commentary
		Local Geology The tenement is underlain by Quaternary clay, silt, sand; and Proterozoic sillimanite, feldspathic and granitic gneiss, schist, pegmatite of Willyama Super group of the Adelaide Fold belt. At the south, the area is bounded by the Thackaringa-Pinnacles Shear Zone, and an unnamed orthogonal shear zone trending northeast. At the Broken Hill zinc-lead deposits (NSW Department of Mineral Resources, 1981) the orebodies are represented as a series of boomerang-shaped, highly sheared and disrupted, ribbon-like and poddy (elongated, lens-shaped) massive sulphide lenses which outcrop in the central section and then plunge steeply north and moderately south. The ore consists of massive, recrystallised sphalerite-rich (zinc-rich), galena-sphalerite (lead/zinc-rich) and galena-rich (lead-rich) sulphide lenses often consisting of up to 100% lead-zinc sulphides. The ore itself is hosted within a unit of gneiss known as the Potosi Gneiss. At the Thackaringa Cobalt project (Broken Hill Prospecting Ltd, 2017) three (3) mineral deposits (Pyrite Hill, Big Hill and Railway) are characterised by large tonnage cobaltiferous-pyrite mineralisation hosted within siliceous albitic gneisses and schists of the Himalaya Formation. Cobalt mineralisation exists within stratabound pyritic horizons where cobalt is present within the pyrite lattice (**Figure 3**). Mineralogical studies have indicated the majority of cobalt (~85%) is found in solid solution with primary pyrite. A strong correlation between pyrite content and cobalt grade is observed. The regional geological setting indicates additional mineralisation targets including: • Stratiform Broken Hill Type (BHT) Copper-Lead-Zinc-Silver deposits; • Copper-rich BHT deposits; • Stratiform to stratabound Copper-Cobalt-Gold deposits.

Figure 3: Mineralisation Intersected at Pyrite Hill.

Source: (Broken Hill Prospecting Ltd, 2016)

Seventy two (72) mineral occurrences are located in and around EL 8599 & EL 8572. Reviewing the GSNSW Dataset Twenty-five (25) are within the tenure which includes twenty-one (21) unnamed occurrences that were mined by shallow pits and shafts. Most of them documented uranium and metallic sulphides. Further work is progressing in examining the significance of each mineral occurrence.

Historical drillholes samples were tested for base metals by explorers such as North Broken Hill and CRA Exploration. The base metal analysis in the Desktop Study is ongoing.

Criteria	JORC Code explanation	Commentary
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:* o *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* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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.*	• No drilling has been completed by CCZ, all material information in the current ASX Announcement relates to historical drilling and is appropriate to review the previously uncovered mineralisation within and/or near the CCZ Broken Hill project tenures.
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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No sampling and assaying has been completed by CCZ, all material information in the current ASX Announcement relates to historical assaying and is appropriate to review the previously uncovered mineralisation within and/or near the CCZ Broken Hill project tenures. • All reported values are as reported from the analytical laboratory or as analysed by the portable handheld XRF, no compositing of assay values have been reported in the current ASX Announcement.
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').*	• A comprehensive data secure database of the historical borehole sampling has not yet been compiled and validated, it is uncertain if there is a relationship between the surface sample anomalies to any subsurface anomalous intersections. • No existing geological 3D models exist but preliminary investigation has shown that sufficient data may be available to interpret structural features and/or the GSNSW processed regional geophysical survey information in light of the Co drill intercepts and surface Co sampling.
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*	• Current surface anomalies are shown on maps in the report. All historical surface sampling has had their coordinates converted to MGA94, Zone 54 and/or were already converted when collated from

Criteria	JORC Code explanation	Commentary
	drill hole collar locations and appropriate sectional views.	the NSW Geological Survey database. • The continuation of the Desktop study is anticipated to produce additional interpretation and analysis of the cobalt surface and drillhole assay values against structural controls.
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 recent exploration results have been reported, but regarding the surface sampling, no results other than duplicates or reference standard assays have been omitted. • Locations have been shown of the recently uncovered Co assays.
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 miss-a-le-mass, magnetic, and IP resistivity surveys over parts of the tenure area, especially at Quarry Tank and Edgar Gold Prospect. • Other recent explorers Cobalt Blue Holdings Limited (ASX: COB) and Australian Mines Limited (ASX: AUZ) in the area have completed heliborne electromagnetic geophysical survey over nearby tenure that would have onlapped onto portions of EL 8599 & EL 8752. CCZ is in discussions with the geophysical companies that hold open file geophysical survey data that is to available for purchase. The purchase acquisition of this geophysical survey data captures parts of the Broken Hill project area, without the requirement of completing expensive and time consuming new geophysical surveys over the entire CCZ Broken Hill tenure area. This will help expedite the exploration process, identify new targets, that can be progressed to the exploration drilling
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.*	• The desktop study is progressing and not yet complete, the next stage of the Desktop study aims to interpret the Co assay anomalies against the aeromagnetic GSNSW survey data, in order to delineate structural features that control the Co mineralisation. The next stage of the current Desktop Study is to conduct a rigorous review the borehole and subsurface data in order to interpret: • Compilation of the Zn, Pb, Ag and other element assay values; • Contouring the Co assay anomalies trends of surface sampling; • Filtering of outcrop Co assay anomaly data, contouring if required and analysing the Co data trends; • Comparison of the Co assay anomaly trends in to the aeromagnetic GSNSW survey data, in order to delineate structural features that control the Co mineralisation;

Criteria	JORC Code explanation	Commentary
		• Comparison of the surface Co assay anomalies to the proximal boreholes that had either sampled and mineralisation or lithological information reflecting peer mineralisation; andCompilation of the Zn, Pb, Ag and other element assay values in order to review the other assay values in a similar fashion to the Co rigorous review process described above for geological features that control the Zn-Ag-Pb mineralisation. Post the Desktop Study CCZ intend as a priority a high-level exploration strategy, which comprises the following components: • Detailed market analysis of peers; • Geological review and regional drillhole database compilation; • Geophysical data compilation and review; • Field work (mapping and sampling); • Heli-bourne electromagnetic and magnetic geophysical survey; and • Drill target identification and drill program planning While all steps are significant in the high-level exploration strategy, undertaking a more comprehensive physical data review will uncover some critical insights. Specifically, neighbouring and peers legacy drill-core which is being held at a NSW Government core storage facility in Broken Hill. There are 39 diamond drillholes identified immediately surrounding the CCZ tenure. CCZ intends for Xplore Resources to inspect these core holes to provide an understanding of the local and regional geological interpretations.