CASTILLO COPPER LIMITED

ASX Release

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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

Directors / Officers:
Peter Meagher
Alan Armstrong
Peter Smith

Issued Capital:
580.1 million shares
67.5 million options

ASX Symbol:
CCZ

Himalaya Formation confirmed at six highly prospective targets for cobalt at Broken Hill

- **CCZ's geology team have identified six highly prospective sites for cobalt mineralisation within the Broken Hill project that have the Himalaya Formation present – this is the same geological sequence apparent at Cobalt Blue's (ASX: COB) Thackaringa deposit[1]**

- **Further, the geology team are currently undertaking a field trip to the Broken Hill project and have commenced implementing the high-level exploration plan on the six pre-selected sites to gain a greater understanding of the underlying geology, especially extent of cobalt mineralisation**

- **Mapping and geochemical work is well underway and when reconciled with geophysics interpretation will be the key factors determining the design of the inaugural cobalt-focused drilling program**

- **While the Board's core objective is to re-open the Cangai Copper Mine, building up a first-hand understanding of the geology at the Broken Hill project is now critical with the region's growing profile as an emerging cobalt supply chain hub**

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Castillo Copper's Chairman Peter Meagher commented: *"It is pleasing to have the geology team on site at our Broken Hill project progressing the high-level exploration program. Notably, the six targeted areas have been carefully selected for their high prospectivity for cobalt mineralisation and similarities with Cobalt Blue's Thackaringa project, especially having the Himalaya Formation presence confirmed. With a relatively large footprint in a region that is growing in stature as a prospective global supply chain hub for speciality metals, it is critical the Board is across the underlying geology and extent of cobalt mineralisation. However, the Board's core focus still remains bringing Cangai Copper Mine back to life."*

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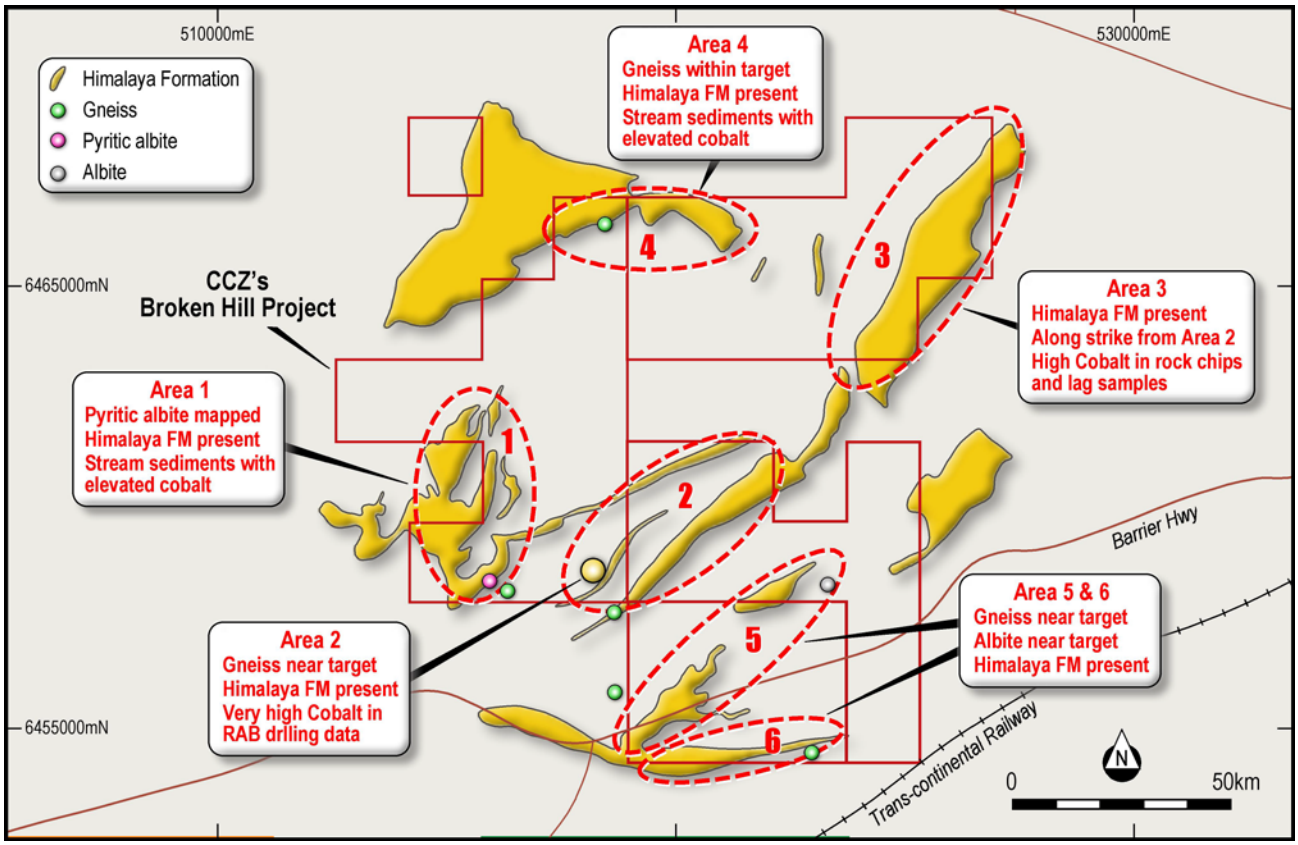
Castillo Copper Limited's ("CCZ" or **"the Company")** Board is pleased to announce the geology team is on site at the Broken Hill project undertaking mapping reconnaissance and geochemistry work across six highly prospective target areas known to have the Himalaya Formation. The ultimate objective is to derive sufficient first-hand data to design the inaugural cobalt-focused drilling program.

SIX PRIORITY AREAS AT BROKEN HILL PROJECT

The geology team is now on-site at the Broken Hill project undertaking crucial reconnaissance mapping and geochemical work, so the inaugural drilling program can be designed as soon as practical. The team reviewed legacy drilling/geochemistry data, geophysics, geological observations and regional maps to identify six priority target areas highly prospective for cobalt mineralisation (Figure 1). A key commonality is the presence of the Himalaya Formation, which is a significant feature at COB's Thackaringa deposit[1], located 2-3km south of CCZ's target area six. Of the six areas identified, the geology team believes target area one is the most prospective based on preliminary analysis.

FIGURE 1: PRIORITY COBALT TARGETS RELATIVE TO HIMALAYA FORMATION



Source: CCZ geology team with the Himalaya Formation data extracted from the NSW Geoscience Datawarehouse

PHOTO GALLERY

Source: CCZ Geology team undertaken reconnaissance mapping within the tenure

Process for identifying six target areas

The geology team selected six priority target areas after thoroughly analysing several data sets, which were compared to peers' deposits with known geology and confirmed cobalt mineralisation. The data sets comprised:

- **Geological observations**

Based on identifying areas within the Broken Hill deposit that exhibit similar geological sequences to `Thackaringa style' mineralisation at surface outcrops. Placing this in context, COB's Thackaringa deposit has constrained cobalt mineralisation that is strata-bound hosted in a quartz-albite gneiss. Moreover, descriptions have recorded pyritic albite as the surface exposure of COB's deposits.

Multiple academic geological studies have reviewed the Thackaringa project, while much of the ground has been sampled and undergone microscopy style analysis. The results have been classified based on mineralogical composition. This has facilitated the team being able to target specific mineral units and areas prospective for cobalt mineralisation.

- **Historic drilling campaigns**

Legacy drilling data has been reviewed and used to identify areas that exhibit high-cobalt readings near surface. Typically, cobalt-pyrite mineralisation is located sub-surface in unweathered rock, so any anomalous cobalt recorded near surface is a potential indicator warranting closer field-based exploration.

A simple statistical analysis was completed to identify cobalt assay data to determine the normal range. The outliers, with exceptionally high values, were plotted as primary targets and positive indicators for sub-surface mineralisation. Further, values in the upper quartile were plotted as secondary targets due to their elevated cobalt values.

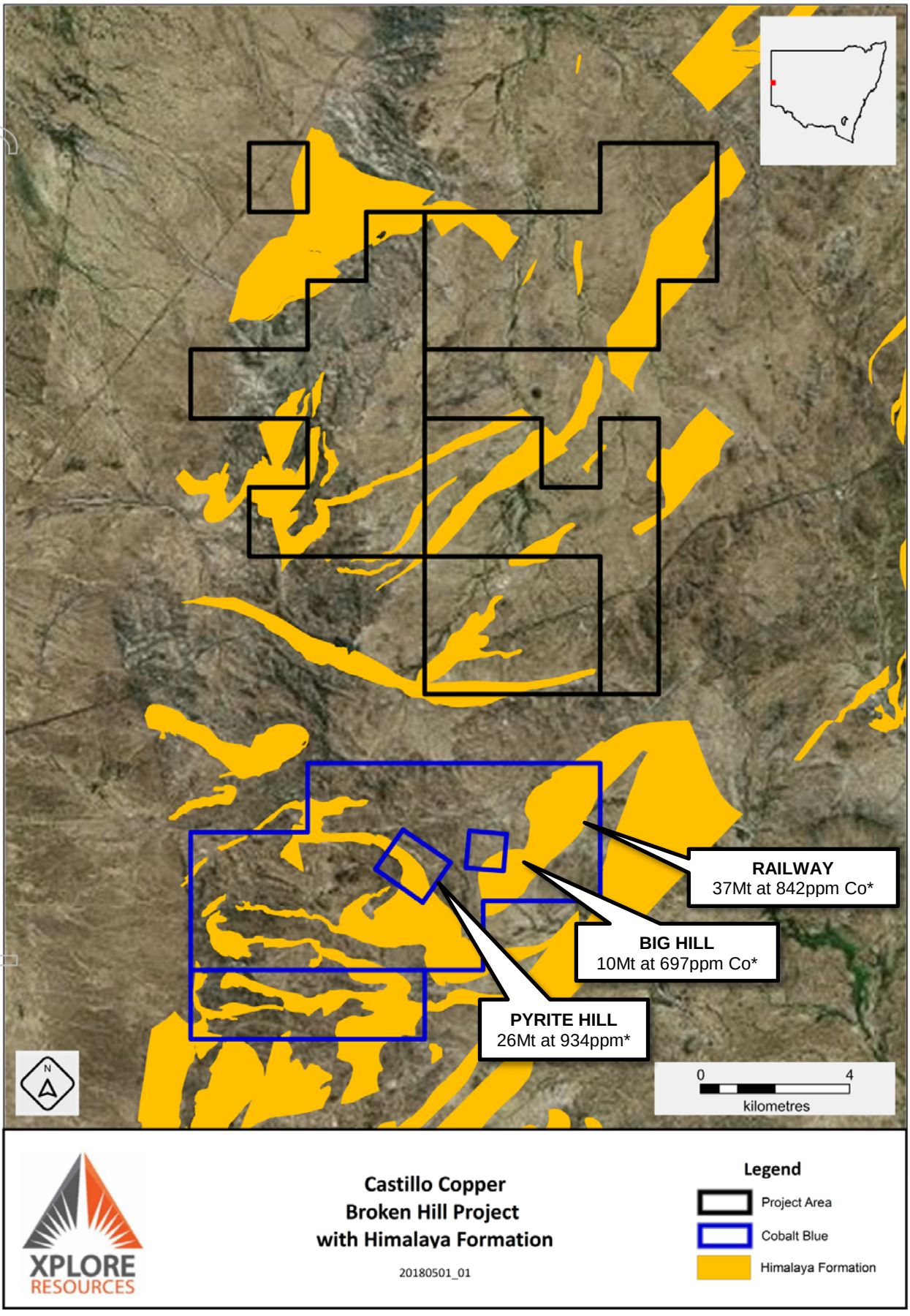
- **Surface geochemistry**

Numerous historic exploration programs within and near tenure for primarily Broken Hill style mineralisation uncovered 191,048 data points[2]. This series was then purged and cleaned, so the final dataset consisted of certified laboratory assays and historical data without reported bias. This delivers consistent cobalt assay data that can be utilised to establish a baseline, which in turn, enables identifying primary/secondary exploration target areas with elevated readings that are prospective for cobalt mineralisation.

- **Curnamona province geology map**

Archer Exploration (ASX: AXE) owns an adjacent deposit, which has identified several cobalt targets at surface that are constrained to the Himalaya Formation of the Thackaringa Group[5]. Notably, the geology of surface outcrops at COB's Thackaringa deposit aligns with this description. Moreover, the unit is extensively mapped throughout COB's project area and aligns with the Pyrite Hill, Big Hill and Railway deposits, which are hosted within siliceous albitic gneisses and schists of the Himalaya Formation[1].

FIGURE 2: CCZ AND COB (SOUTH) SHOWING HIMALAYA FM



Source: MinView and CCZ geology team[4] (*Total Resource at 500ppm cut off)

From these observations, there is a clear association between cobalt mineralisation and the Himalaya Formation of the Thackaringa Group (Willyama Supergroup), which is a key feature in determining the six target areas. Interestingly, further associations can be made including:

- Pyritic gneiss from the geological observations is located within the Himalaya Formation; and
- Geochemical anomalies follow the trends/striking along the length of the Himalaya Formation.

Holistically, this provides incremental credence to reports the Himalaya Formation is prospective for cobalt-pyrite mineralisation, based on the confirmation of the significant cobalt mineralisation associations reported by other companies projects (COB, AXE) in the Broken Hill region and the highly positive mineralisation association produced from CCZ's geological team analysing the historical assay data.

Next Steps

Continue to progress the Broken Hill exploration plan and evaluate which areas are suitable to be drilled as soon as practical.

For and on behalf of Castillo Copper

Alan Armstrong

Executive Director

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.

ABOUT CASTILLO COPPER

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

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

- **NSW assets:** Consists of two projects: 1) Jackaderry, which includes Cangai Copper Mine, is in an area highly prospective for copper-cobalt-zinc and made up of three tenements; and, 2) Broken Hill which consists of two contiguous tenements prospective for cobalt-zinc that are located within a 20km radius of Broken Hill and just north of Cobalt Blue's ground (ASX: COB).

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

Finally, CCZ' holds six exploration concessions in Chile.

REFERENCE LIST:

1) COB ASX Announcement 25 May 2017
2) Refer Table 1 CCZ ASX Announcement 20 September 2017 and GSNW Data Warehouse
3) Geological Survey of NSW Total Magnetic Intensity Reduced to Pole dataset accessed via MinView
4) COB ASX Announcement 19 March 2018
5) AXE ASX Announcement 19 May 2017

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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 databased if it occurred inside the EL and in a 500m buffer surrounding the EL, to establish anomalous trend directions, if any existed. • Nearly 2,144 sample analyses from stream sediment, soil, and rock chip sources were collated and combined. Of these approximately 325 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 1,397 drillholes, however it should be noted that the majority of these are less than 12m in total depth. The number of holes greater than 12m in total depth, number around 46, with 26 inside the tenure. No drilling analyses has been compiled, with a total of 4,968 lines of assay data captured.

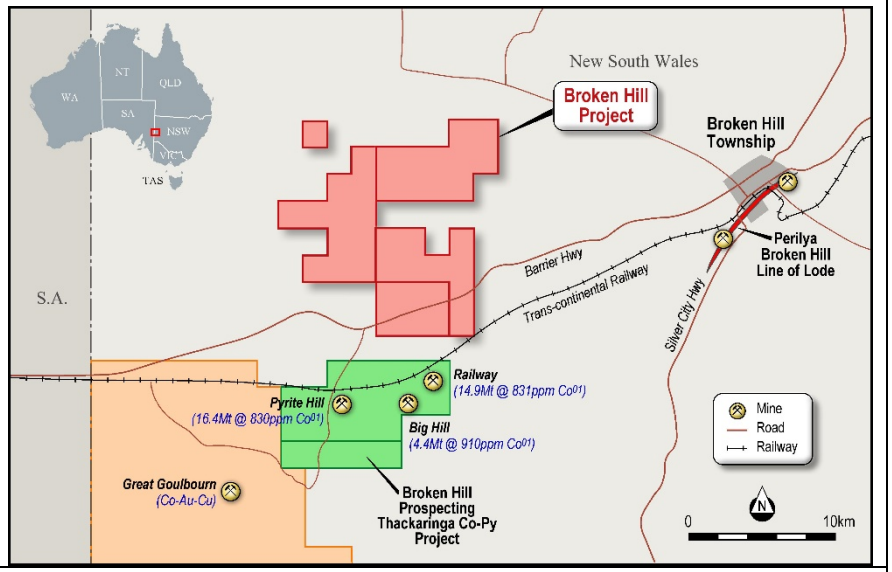
Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Historical sample recovery in the historical deeper drilling was always >90%. • The historical drilling is generally shallow and it is unclear until significantly deeper drilling occurs in the future if any basis in the relationship for recovery and grade exists. The Competent person considers any potential bias effects to be low, as the results demonstrate exploration prospectivity appropriate for the determination of mineral prospectivity of defining cobalt targets in the Broken Hill project area.
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.*	• Historical drilling had geological logging that appeared to be comparable to modern-day standards and geological logging standards. • 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 Competent Person assumes that the sub-sampling techniques and the sample preparation is appropriate for the determination of mineral prospectivity of defining cobalt targets in the Broken Hill project area. The Competent Person has not found any reason to challenge this assumption.

Criteria	JORC Code explanation	Commentary
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.*	• All the analyses bar a few (<200 out 2.144) 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.
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.
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. • It is estimated that locational accuracy therefore varies between 2-50m, a variance that is appropriate for the determination of mineral prospectivity of defining cobalt targets in the Broken Hill project area.
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 RMS spacing between sample points is 138m, ranging down to 98m for zinc. • The data spacing is appropriate for the determination of mineral prospectivity of defining cobalt targets in the Broken Hill project area. • No sample compositing has been applied.

Criteria	JORC Code explanation	Commentary
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.*	• Some of the drilling programs were planned to intersect anomalous surface base metal anomalies at depths, but some 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. Sample security measures employed at the time of the historical sample collection are considered to have been in line with industry practices at the time.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No detailed audits or third reviews have yet been undertaken for the interpretation produced by the CCZ Geological Team.

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 ("CCZ") holds: ➢ EL 8599 consisting of 20 units (approx. 60 km^2). The tenure has been formally granted for the term of thirty-six months until 20 June 2020. ➢ EL 8572 consisting of 19 units (approx. 57 km^2). The tenure has been formally granted for the term of thirty-six months until 23 May 2020 • The location of the CCZ project tenures are shown in Figure 2.1, below: *Figure 2.1: Location of EL 8599 & EL 8572, 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 5500ppm Ag with Cu and Au credits. However, once the Broken Hill orebody

Criteria	JORC Code explanation	Commentary
		was discovered in the 1880s, interest in the Thackaringa field was lost (Aitchison, 1995). **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. In the 1970s CRAE did extensive dump, soil and stream sediments geochemistry testing for lead, zinc, copper and silver content. One hundred eighteen (118) samples from dump reported average 0.3% Cu. Soil geochemistry (348 samples) demonstrated 29 ppm Cu. Stream sediments showed 45 ppm Cu (Aitchison, 1995). Between 1980 and 1998, CRAE carried out geological mapping, geochemistry sampling, geophysical survey and drilling (206 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>
<tr><td></td><td></td><td>
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 & EL 8572 Current Exploration Neighbouring Companies
<table>
<tr><th>Tenure</th><th>Company</th><th>Commodity</th></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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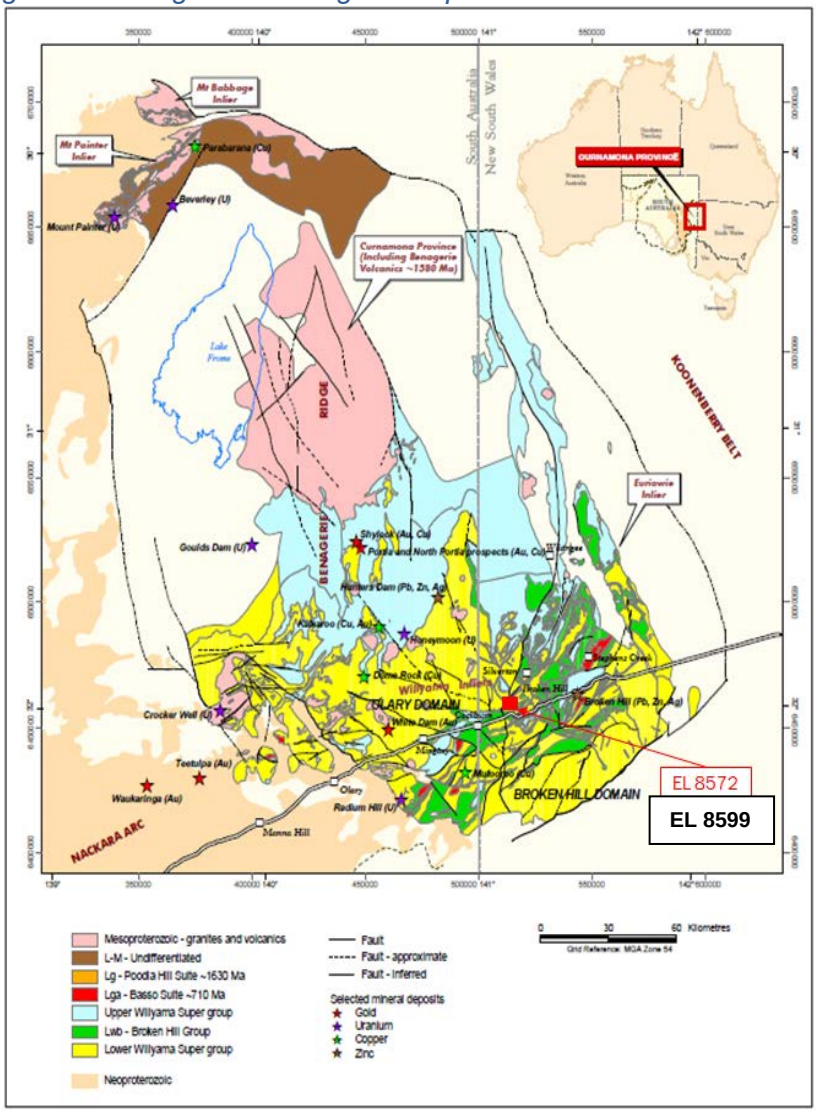
Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	**Regional Geology** The Broken Hill polymetallic deposits are located within Curnamona Province (Willyama Super group) that hosts several world-class deposits of lead, zinc, silver and copper. The Willyama Supergroup consists of highly-deformed metasedimentary schists and gneisses with abundant quartzo-feldspathic gneisses, lesser basic gneisses and minor 'lode' 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



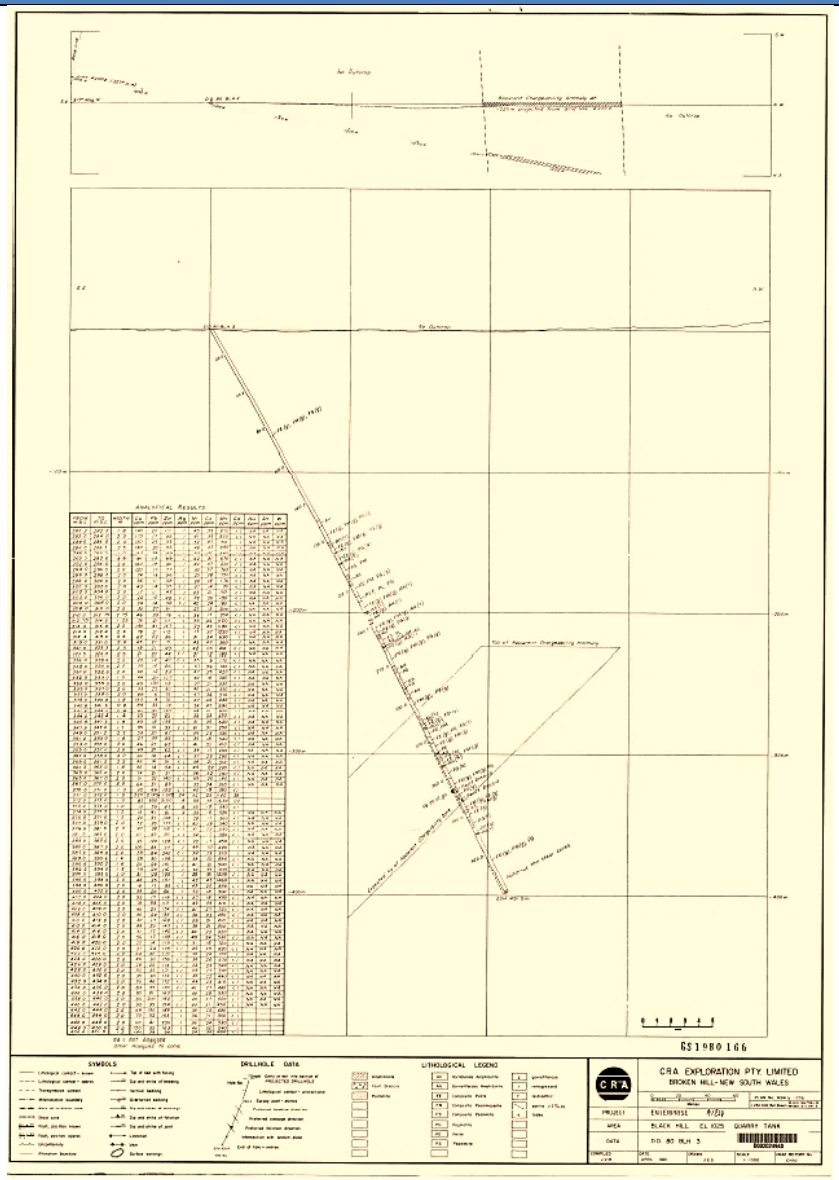
Modified after (Peljo, 2003)

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

Criteria	JORC Code explanation	Commentary
		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.

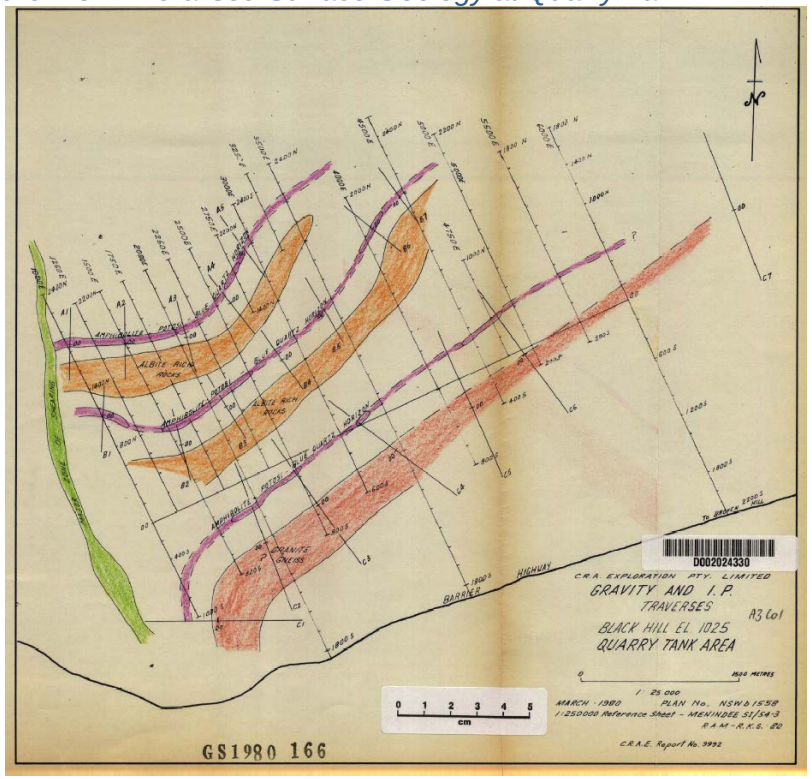
		Figure 3: Mineralisation Intersected at Pyrite Hill.  *Source:* (Broken Hill Prospecting Ltd, 2016) Seventy two (61) mineral occurrences are located in and around EL 8599. Twenty-five (21) are within the tenure (Barnes, 1980) which includes twenty-one (17) unnamed occurrences that were mined by shallow 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. Figure 2.4 below shows the results from drillhole PD81BLH3 drilled in the Quarry Tank Project area of EL 1025, illustrating lithological units and pyrite percentage. This hole intersected 1.7m of 2.1%Pb, 1.1%Zn and 24 g/t Ag *Figure 2.4: EL 1025 Drillhole PD81BLH3*

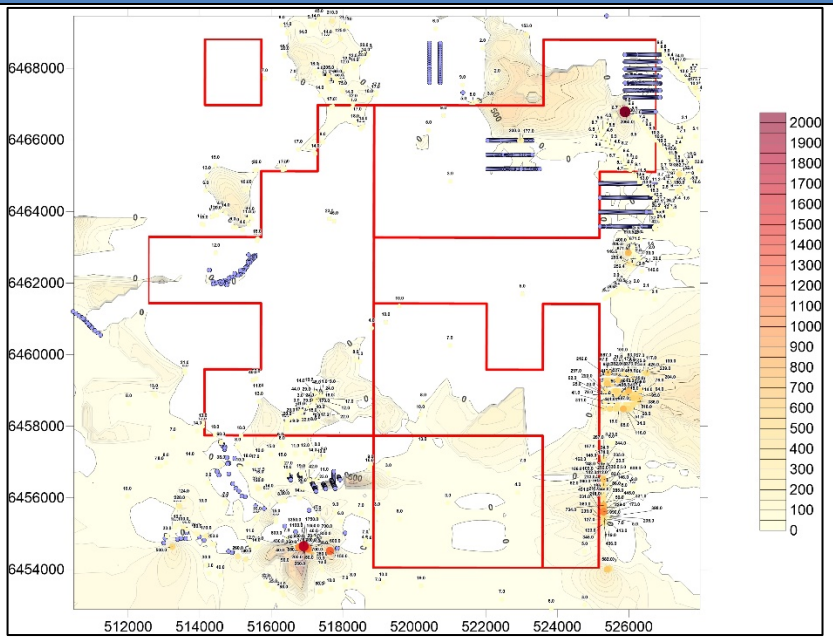
Criteria	JORC Code explanation	Commentary
		

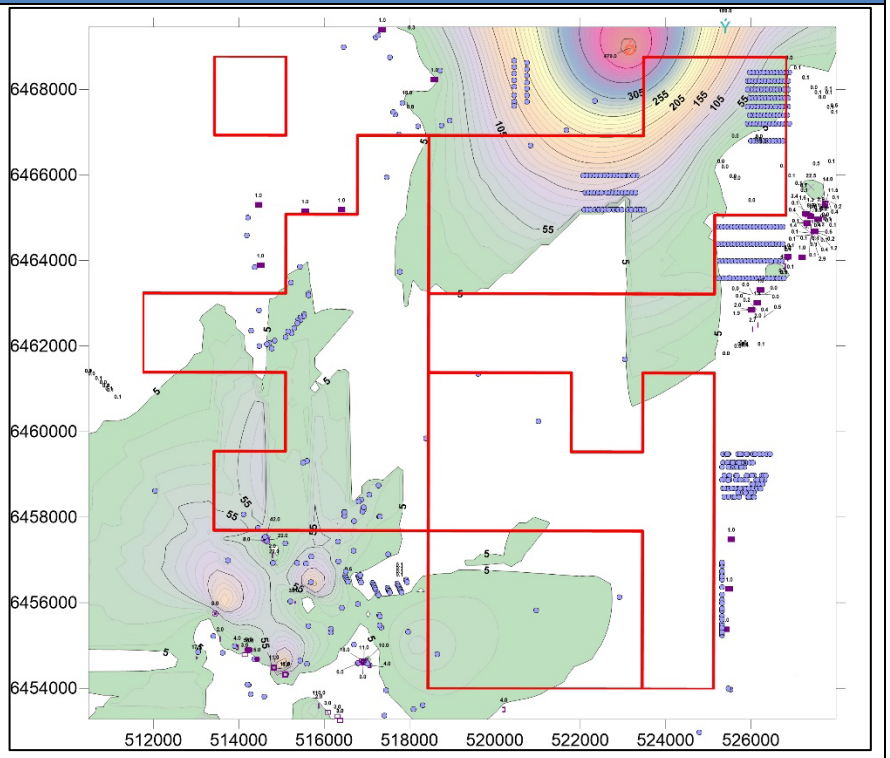
Modified after Herriman (1980)

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 new drillholes have been reported in this announcement. • Historical Drilling Information is available to the public via the NSW's Department of Primary Industries Division of Resources & Energy platforms of [1] DIGS, [2] Minview, and the [3] Geoscience Data Warehouse.
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 new assays have been reported in this announcement. • Historical Drilling Information is available to the public via the NSW's Department of Primary Industries Division of Resources & Energy platforms of [1] DIGS, [2] Minview, and the [3] Geoscience Data Warehouse.
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').*	• The exact structural controls relationship between the surface sample anomalies to any subsurface anomalous intersections, is not yet determined, what is clear that mineralisation is associated with the Himalaya Formation and the weathered sediments that are derived from the Himalaya Formation. • No existing geological 3D models exist but preliminary investigation has shown that sufficient data could potentially estimate a small resource of lead, zinc or silver. It is noted that further work would have to occur in order to estimate any form

Criteria	JORC Code explanation	Commentary
		of exploration target or mineral resource to be reported under the JORC (2012) Code. • The current observations regarding the Himalaya Formation relationship to controlling the cobalt mineralisation is appropriate for the determination of mineral prospectivity of defining cobalt targets in the Broken Hill project area. The exact local geological mineralisation controls are yet to be determined onsite, with the mineralisation controls anticipated to be in line with regional cobalt mineralistion trends uncovered. • Figure 2.5 shows the solid geology map at Quarry Tank, where mineralisation is in a sheared and brecciated quartz-magnetite rock:

Criteria	JORC Code explanation	Commentary
		Figure 2.5: Mineralised Surface Geology at Quarry Tank • 
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.*	• Current surface anomalies are shown on maps below. All historical surface sampling has had their coordinates converted to MGA94, Zone 54. Figure 2.6 (below) shows the anomalous surface cobalt values collated from the NSW Geological Survey database

Criteria	JORC Code explanation	Commentary
		 Figure 2.7 shows anomalous surface silver in ppm

Criteria	JORC Code explanation	Commentary
		 • Assays results from historical annual and relinquishment reports were encoded for 1436 holes (RAB, Dimond drilling, auger, Open hole percussion) for Zn, Cu, Ag. All relevant holes are now encoded. Black Hill East EL 8599-surface sampling encoded; • Lithology is encoded for DD and PD holes. 20 were encoded so far. 8 holes were encoded for structure and alterations. • Deviation was encoded for 57 holes. • The group of PHR—PHR11 holes, drilled by North Broken Hill Ltd have Zinc mineralisation intersections up to 3% Zn. • Group of holes BRH1—BRH5 drilled by North Broken Hill Ltd have Cobalt intersects up to 0.7%. • The DD79BLH1 drilled by CRA Exploration Pty Ltd has intersected Ag mineralisation up to 82 ppm.

Criteria	JORC Code explanation	Commentary
		• The decision was made to complete the encoding for assays, and then based on assay data decide what holes to encode for lithology, structure, alteration and deviation.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.*	• No new exploration results have been reported, but regarding the surface sampling, no results other than duplicates or reference standard assays have been omitted. • The reporting of the mineralisation results is considered for the determination of mineral prospectivity of defining cobalt targets in the Broken Hill project area.
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
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.*	Future work tentatively proposed for EL 8599 & EL8572 include: • Assigning a prospection ranking to the 6 priority cobalt areas defined within the Broken Hill project area; • Follow up conformational surface sampling, assay dispatch to accredited laboratory for analysis, and geological mapping of the 6 priority cobalt areas; • Follow up conformational geophysical surveys and subsequent geophysical interpretation across the 6 priority cobalt areas; • Follow up conformational drilling, sampling, and assaying of the 6 priority cobalt areas; and • A review of the completed work to evaluate the geological interpretation of the 6 priority cobalt areas against the newly collected geological data, in order to plan the future stages of work.