



Drilling hits targeted cobalt zones & wide pegmatite intercepts at Broken Hill



Highlights

- Four drill-holes for 488m were completed at the Tors Tank Prospect, within the BHA Project's East Zone (Appendix A), which delivered encouraging initial observations:
 - ❖ All four drill-holes hit targeted cobalt mineralisation zones, evidenced by intersecting sequences comprising clay, amphibolite, schist, and gneiss
 - ❖ Qualitative logging identified multiple disseminated sulphide layers (mostly pyrite), up to 12m thick, associated with amphibolite layers that can potentially host cobalt mineralisation
 - ❖ Field XRF observations, which are subject to final assay results, indicated the presence of cobalt mineralisation within these amphibolite zones
 - ❖ The intersected geology is interpreted to be consistent with observations by previous explorers, including Broken Hill North¹, across the 1970-80s
- Proximal to the amphibolite layers, there are significant magnetite-rich zones – associated with pegmatite up to 14m thick – that potentially hosts rare earth elements (REEs):
 - ❖ This interpretation is based on recently re-assayed diamond core from drill-hole DD90_IB3 at the Iron Blow Prospect which returned up to 1,270ppm TREO²
- The Board is delighted with the start to the drilling campaign, particularly the positive interpretations on the Tors Tank Prospect, and looks forward to receiving the final assay results within the coming weeks

Castillo Copper's Managing Director Dr Dennis Jensen commented: "The drilling campaign has got off to an excellent start, with initial interpretations from the geology team confirming that targeted cobalt zones have been intersected. Moreover, whilst subject to final assay results, the Board is delighted to learn that significant pegmatite zones have been intersected which could potentially host rare earth elements."

Drilling completed at Tors Tank Prospect

Castillo Copper Limited's ("CCZ") Board is delighted to announce that four drill-holes for a total of 488m have been completed at the Tors Tank Prospect (Appendix B), within the BHA Project's East Zone (Appendix A), with encouraging initial observations and interpretations. Subject to confirmation from final assay results, the geology team believe there is potential for cobalt and REE mineralisation.

As noted in Figure 1, the drilling intersected a geological sequence comprising clay, amphibolite, schist, gneiss, and pegmatite that appears to be dipping moderately. More significantly, the intersected geology is interpreted to be consistent with observations by previous explorers, including Broken Hill North¹, during the 1970-80s.

FIGURE 1: QUALITATIVE LOGGING MINERALS PRESENT DRILL-HOLES TT_001RC-004RC

Borehole	From (m)	To (m)	Apparent Thick. (m)	Magnetite (%)	Epidote (%)	Chlorite (%)	Sulphides (%)	Comments
TT_001RC	1	21	20	1-5	0	1-3	1-3	Amphibolite, sulphides (mostly pyrite) & trace chalcopyrite
TT_001RC	25	38	13	1-12	0	0	0	Pegmatite & clay
TT_001RC	66	75	9	0	0-2	1-3	1-3	Schist & sulphides (pyrite)
TT_001RC	110	118	8	1-3	0	1-3	0-1	Schist, Iron oxide & haematite (1-3%)
TT_002RC	4	13	9	2-40	0	0	0-2	Clayey amphibolite & haematite (2-15%)
TT_002RC	26	30	4	1-5	0	0	0	Clay & schist
TT_002RC	44	47	3	1-5	0	0-1	0-1	Pegmatite
TT_002RC	79	80	1	0	0	1-2	1-3	Pyrite band
TT_003RC	8	30	22	3-40	1-2	1-3	1-4	Clay & amphibolite
TT_003RC	72	79	7	1-10	0	1-2	0-1	In schist
TT_003RC	106	132	26	0	1-3	1-3	1-5	Mostly schist & gneiss
TT_004RC	1	6	5	1-5	0	0	0	Amphibolite
TT_004RC	21	44	23	1-30	0	0	0	Amphibolite & schist
TT_004RC	97	104	7	1-5	0	0	0	Schist
TT_004RC	108	114	6	0	1-3	0-1	1-4	Schist & sulphides (mostly pyrite)

Note: Ranges of minerals represent qualitative estimation during geological modelling.
Source: CCZ geology team

Cobalt mineralisation

During the qualitative logging process, multiple disseminated sulphide layers (mostly pyrite) up to 12m thick were identified. This is significant, as previous work by North Broken Hill¹ suggested the pyrite hosts cobalt mineralisation. Further analysis of the samples showed that pyrite is mostly associated with amphibolite layers and, thinner, sparser horizons which also occur and are spread within interbedded schist and gneiss layers.

Supporting the interpretation that cobalt mineralisation is apparent, but subject to final assay confirmation, field XRF observations indicated positive readings within the amphibolite zones.

REE potential

Proximal to the amphibolite layers are significant magnetite zones which are directly associated with pegmatite up to 14m thick (Figure 1) that, subject to final assay confirmation, could potentially host REEs.

This interpretation is based on recent re-assays of diamond core from drill-hole DD90_IB3 at the Iron Blow Prospect. It has comparable geology and confirms the presence of high-grade REEs within the BHA Project's East Zone. Notably, the best intersection was **8m @ 1,270ppm TREO²**.

RC samples

With the conclusion of the drilling campaign at the Tors Tank Prospect, all 488 one metre RC samples collected were geologically logged (Figure 2) then dispatched to ALS' Adelaide laboratory for processing and analysis.

FIGURE 2: LOGGING CHIPS AT TT_003RC



Location: 6460000mN, 570000mE
Source: CCZ geology team

PHOTO GALLERY 1: DRILLING AT TT_001RC & TT_004RC SITE



Location: 6460000mN, 570000mE
Source: CCZ geology team



PHOTO GALLERY 2: MICROGRAPH OF PYRITE AT 111M IN TT_003RC



Source: CCZ geology team

Photo Gallery 2 shows a photo-microscope at 40x magnification of a gneiss containing disseminated pyrite from TT_003RC. Across the Broken Hill region, this type of mineralisation has been shown to contain cobalt in solid solution³.

The Board of Castillo Copper Limited authorised the release of this announcement to the ASX.

Dr Dennis Jensen

Managing Director

Competent Person's Statement

The information in this report that relates to Exploration Results and Mineral Resource Estimates for "BHA Project, East Zone" is based on information compiled or reviewed by Mr Mark Biggs. Mr Biggs is a director of ROM Resources, a company which is a shareholder of Castillo Copper Limited. ROM Resources provides ad hoc geological consultancy services to Castillo Copper Limited. Mr Biggs is a member of the Australian Institute of Mining and Metallurgy (member #107188) and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, and Mineral Resources. Mr Biggs holds an AusIMM Online Course Certificate in 2012 JORC Code Reporting. Mr Biggs also consents to the inclusion in this report of the matters based on 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.

References

- 1) Leyh:
 - a. Leyh, W.R., 1976, Progress Report on Exploration Licence, No. 846 Iron Blow -Yellowstone Area, Broken Hill, New South Wales for the six months period ended 29th June 1976, North Broken Hill Limited, Report GS1976-198, Jul 76, 88pp
 - b. Leyh, W.R., 1977a, Progress Report on Exploration Licence, No. 846 Iron Blow -Yellowstone Area, Broken Hill, New South Wales for the six months period ended 29th December 1976, North Broken Hill Limited, Report GS1976-198, Feb 1977, 24pp
 - c. Leyh W.R., 1977b, Progress Report on Farmcote Exploration Licenses 780 and 782, Farmcote Area, Broken Hill, NSW for the three months to 5th March 1977, North Broken Hill Limited for the NSW Geological Survey, (GS1977-078)
 - d. Leyh W.R., 1977c, Progress Report on Farmcote Exploration Licenses 780 and 782, Farmcote Area, Broken Hill, NSW for the three months to 23rd May 1977, North Broken Hill Limited for the NSW Geological Survey, (GS1977-078)
 - e. Leyh W.R., 1978, Progress Report on Farmcote Exploration Licenses 780 and 782, Farmcote Area, Broken Hill, NSW for the three months to 27 October 1978, North Broken Hill Limited for the NSW Geological Survey, (GS1977-078)
 - f. Leyh W.R., 1978 Progress Report on Exploration Licenses 1099 and 1100 for the six months to 27 October 1978, North Broken Hill Limited for the NSW Geological Survey, (GS1978-407)
 - g. Leyh, W.R., 1990, Exploration Report for the Third Six Monthly Period ended 12th June 1990 for EL 3238 (K Tank), Broken Hill District, New South Wales for the six months period, Pasminco Limited, Report GS1989-226, Jun 90, 22pp
 - h. Leyh, W.R., and Lees T.C., 1977, Progress Report on Exploration Licence, No. 846 Iron Blow -Yellowstone Area, Broken Hill, New South Wales for the six months period ended 29th June 1977, North Broken Hill Limited, Report GS1976-198, Jul 77, 35pp
 - i. Leyh, W.R., and Larson P.D., 1981, Final Report for the Third Six Monthly Period ended 12th June 1990 for EL 3238 (K Tank), Broken Hill District, New South Wales for the six months period, Pasminco Limited, Report GS1989-226, Jun 90, 22pp
- 2) CCZ ASX Release – 5 May 2022
- 3) COB ASX Release – 19 September 2022 (Annual Report 2022)

About Castillo Copper

Castillo Copper Limited is an Australian-based explorer primarily focused on copper across Australia and Zambia. The group is embarking on a strategic transformation to morph into a mid-tier copper group underpinned by its core projects:

- A large footprint in the in the Mt Isa copper-belt district, north-west Queensland, which delivers significant exploration upside through having several high-grade targets and a sizeable untested anomaly within its boundaries in a copper rich region.
- Four high-quality prospective assets across Zambia's copper-belt which is the second largest copper producer in Africa.
- A large tenure footprint proximal to Broken Hill's world-class deposit that is prospective for cobalt-zinc-silver-lead-copper-gold and platinoids.
- Cangai Copper Mine in northern New South Wales, which is one of Australia's highest grading historic copper mines.

The group is listed on the LSE and ASX under the ticker "CCZ."

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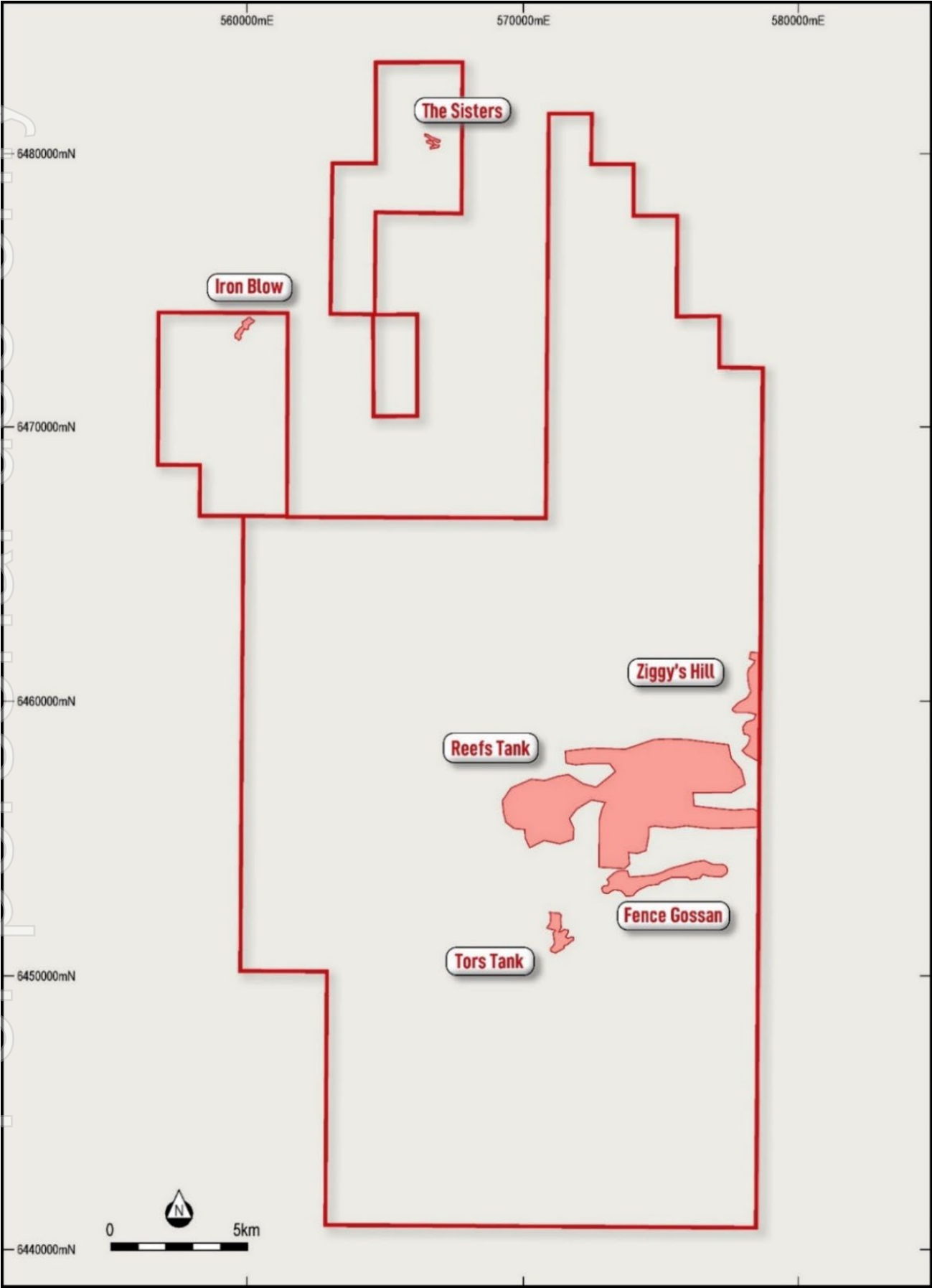
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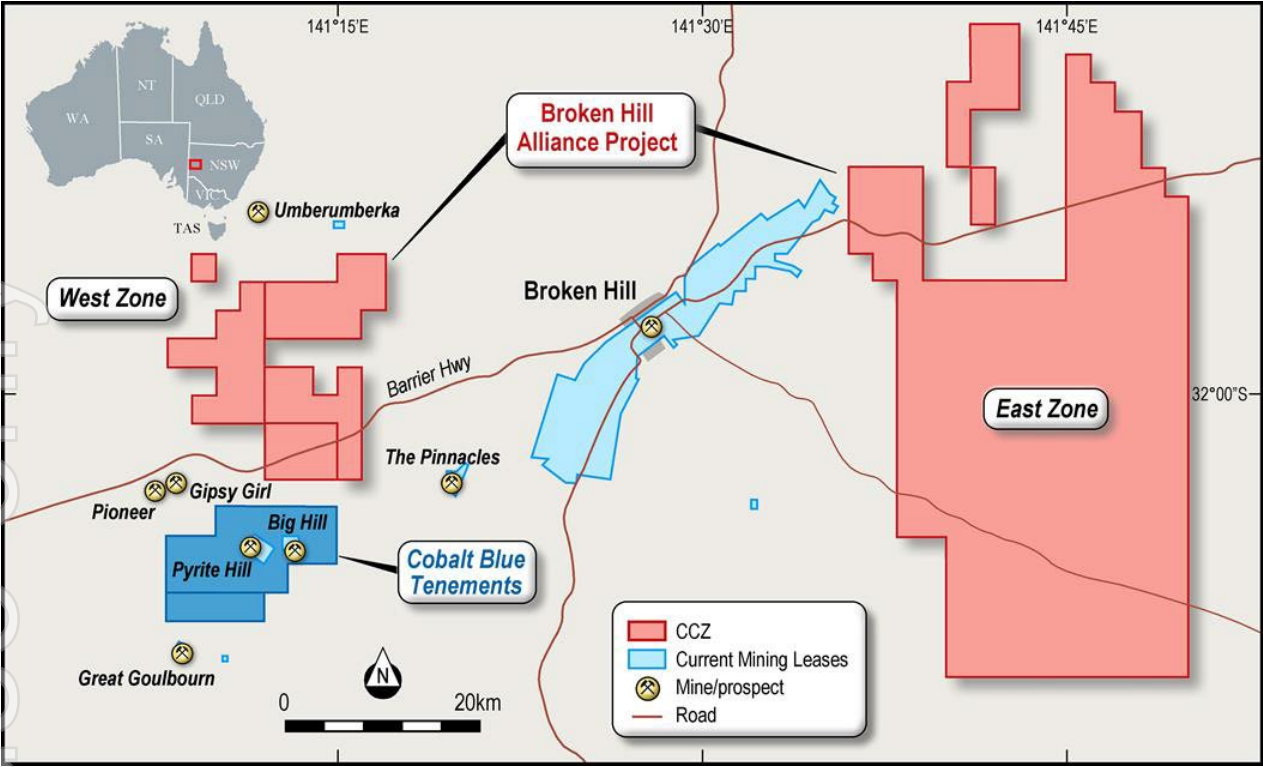
APPENDIX A: PROSPECTS IN BHA PROJECT'S EAST ZONE

FIGURE A1: PROSPECTS AT BHA PROJECT EAST ZONE



Source: CCZ geology team

FIGURE A2: BHA PROJECT



Source: CCZ geology team

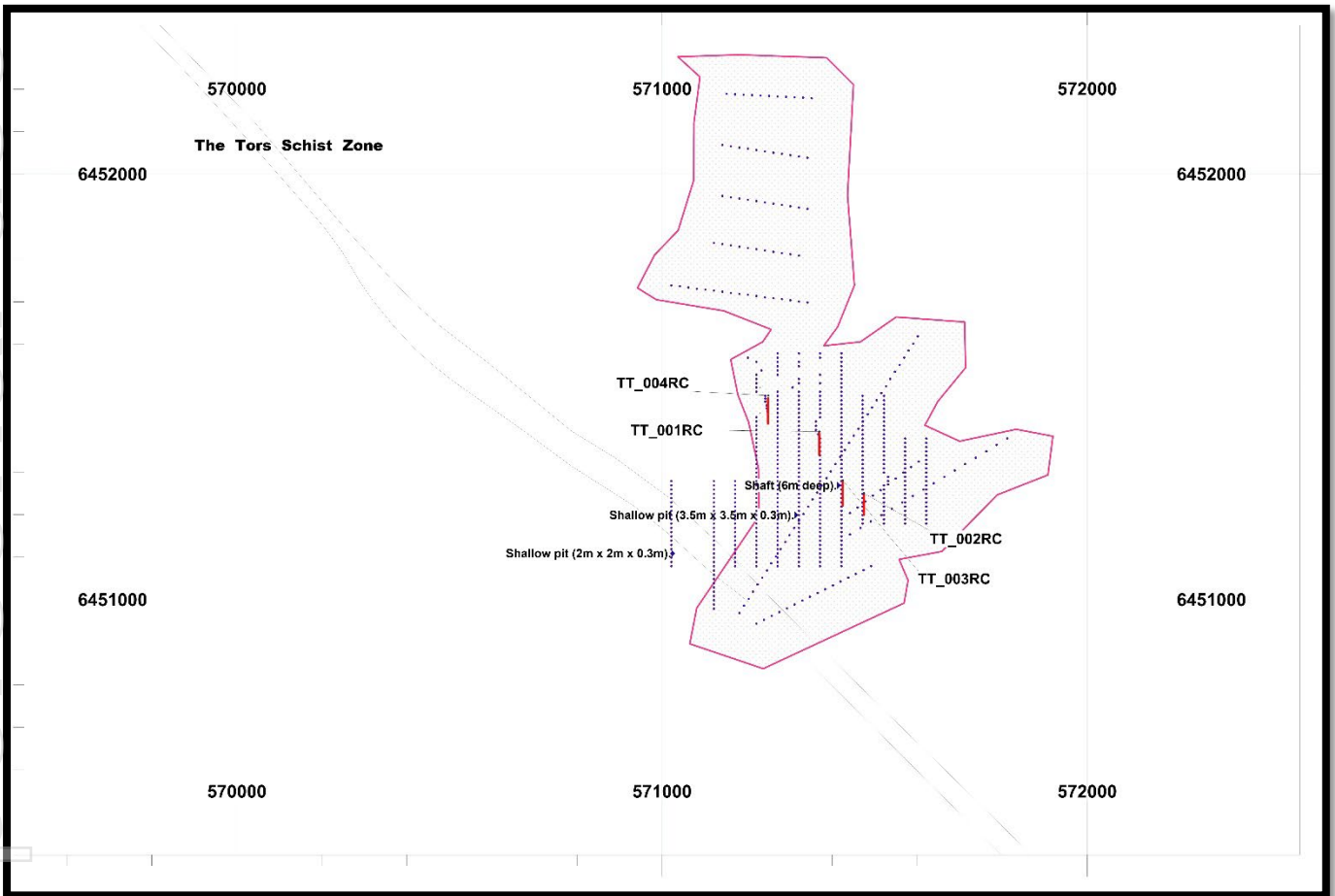
APPENDIX B: DRILL-HOLES AT TORS TANK PROSPECT

FIGURE B1: TORS TANK RC DRILLING STATISTICS

SiteID	HoleID	Est. Easting (GDA94)	Est. Northing (GDA94)	TDepth (m)	Azimuth Planned	Planned DipH	Hole Type	Source	Start	End
2022_TT_01	TT_004RC	571250	6451480	120	180	-60	RC	CCZ	03-Oct-22	04-Oct-22
2022_TT_02	TT_001RC	571370	6451395	120	180	-60	RC	CCZ	30-Sep-22	01-Oct-22
2022_TT_03	TT_003RC	571425	6451280	140	180	-60	RC	CCZ	02-Oct-22	03-Oct-22
2022_TT_04	TT_002RC	571475	6451250	108	180	-60	RC	CCZ	01-Oct-22	02-Oct-22
				488						

Source: CCZ geology team

FIGURE B2: DRILL-HOLE LOCATIONS AT TORS TANK PROSPECT



Source: CCZ geology team

APPENDIX C: JORC CODE, 2012 EDITION – TABLE

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>Diamond Drilling (DDH)</p> <ul style="list-style-type: none"> Diamond drilling of NQ or BQ diameter is planned later in the current program. The location is yet to be decided but will be located next to an RC hole already drilled. <p>Reverse Circulation ('RC') Drilling</p> <ul style="list-style-type: none"> RC drilling at Tors Tank was used to obtain a representative sample by means of riffle splitting with samples submitted for analysis using the above-mentioned methodologies. Four (4) holes for a total of 488m have been completed to the 4th October 2022, all at the Tores Tank Prospect. The RC drilling technique was used to obtain a representative sample by means of a cone or riffle splitter with samples submitted for assay by mixed acid digestion and analysis via ICP-MS + ICP-AES with anticipated reporting a suite of 48 elements (sulphur >10% by LECO).
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> Historical drilling consists of auger, rotary air blast, reverse circulation, and NQ, BQ, and HQ diamond coring. One cored hole of NQ or BQ diameter will be completed after all the RC holes have been completed. Diamond drilling will be completed with standard diameter, conventional HQ and NQ with historical holes typically utilizing RC and percussion pre-collars to an average 30 metres (see Drillhole Information for further details).

Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Reverse Circulation ('RC') Drilling - Reverse circulation sample recoveries were visually estimated during drilling programs. Where the estimated sample recovery was below 100% this was recorded in field logs by means of qualitative observation. • Reverse circulation drilling employed sufficient air (using a compressor and booster) to maximise sample recovery. • Historical cored drillholes were well documented and generally have >90% core recovery. • No relationship between sample recovery and grade has been observed. • No relationship between sample recovery and grade has been observed.
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • The drilling that did occur was completed to modern-day standards. The preferred exploration strategy in the eighties and early nineties was to drill shallow auger holes to negate the influence of any Quaternary and Tertiary sedimentary cover, and then return to sites where anomalous Cu or Zn were assayed. In this program holes are planned to varying depths ranging from 100-160m. • No downhole geophysical logging took place; however, measurements of magnetic susceptibility were taken at the same 1m intervals as the PXRF readings were taken.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> 	<ul style="list-style-type: none"> • Core samples will be hand-split or sawn with re-logging of available historical core indicating a 70:30 (retained: assayed) split was typical. The variation of sample ratios noted are considered consistent with the sub-sampling technique (hand-splitting). • No second half samples were submitted for analysis, but duplicates have been taken at a frequency of 1:20 samples collected. • It is considered water planned to be used for core cutting is unprocessed and unlikely to have introduced sample contamination.

	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Procedures relating to the definition of the line of cutting or splitting are not available. It is expected that 'standard industry practice' for the period was applied to maximize sample representivity. Quarter core will be submitted to ALS for chemical analysis using industry standard sample preparation and analytical techniques. The sample interval details and grades quoted for cored intervals described in various maps in the main section are given in previous ASX releases (Castillo Copper 2022a, b, c, d, e, f).
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The nature and quality of all proposed assaying and laboratory procedures employed for samples obtained through drilling (diamond and reverse circulation) are considered 'industry standard' for the respective periods. The assay techniques employed for drilling (diamond and reverse circulation) include mixed acid digestion with ICP-OES, ICP-AES, ICP-MS and AAS finishes. These methods are considered appropriate for the targeted mineralisation and regarded as a 'near total' digestion technique with resistive phases not expected to affect cobalt analysis. using ME-MS61R and PGM-ICP27 methods. All samples will processed at independent commercial laboratories including Australian Laboratory Services, (ALS) at Adelaide, Brisbane, and Perth (for any core metallurgical beneficiation). Laboratory inserted standards, blanks and duplicates were analysed per industry standard practice. The first batch of analyses is awaited to determine any evidence of bias from these results. None of the drillholes have been twinned yet until the location of the planned cored hole is chosen. To monitor the accuracy of assay results from drilling, CRM standards were included in the assay sample stream at an average rate of 1:30. Internal lab standards will be routinely included by ALS Brisbane for the CCZ retesting.

Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • Historical drilling intersections were internally verified by personnel employed by previous explorers including CRAE Pty Limited, Falconbridge Limited and Hunter Resources. North Broken Hill Pty Ltd and EagleHawk Consulting completed a systematic review of the related data. • The CCZ drilling database exists in electronic form of an Access Database but will be loaded to a Datamine GDB database through the independent management of ROM Resources. The database procedures strictly apply integrity rules to all downhole and measurement recordings. If data fails the integrity rules, the data is not loaded into the database. • Historical drilling data available in electronic form has been re-formatted and imported into the drilling database. Quantitative historical drilling data, including assays, have been captured electronically during systematic data compilation and validation completed by ROM Resources. • Samples returning assays below detection limits are assigned half detection limit values in the database. • All significant intersections are verified by ROM Resources' Exploration Manager and an alternative Company representative.
Location of data points	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • In general, locational accuracy does vary, depending upon whether the historical surface and drillhole samples were digitised off plans or had their coordinated tabulated. Many samples were originally reported to AGD66 or AMG84 and have been converted to MGA94 (Zone 54) • The holes are currently surveyed with handheld GPS, awaiting more accurate DGPS survey. It is thus estimated that locational accuracy therefore varies between 2-4m until the more accurate surveying is completed. • The quality of topographic control (GSNSW 1 sec DEM) is deemed adequate for the purposes of the exploration drilling program.

Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • The average sample spacing from the current drilling program across the tenure varies per prospect, and sample type, as listed in Table C1-1, below: <p>Table C-2: EL 8434 Drillhole Spacing</p> <table border="1"> <thead> <tr> <th>Prospect</th><th>Drillholes in Model</th><th>RMS Drillhole Spacing (m)</th></tr> </thead> <tbody> <tr> <td>The Sisters</td><td></td><td></td></tr> <tr> <td>Iron Blow</td><td></td><td></td></tr> <tr> <td>Tors Tank</td><td>4</td><td>127</td></tr> <tr> <td>Fence Gossan</td><td></td><td></td></tr> <tr> <td>Ziggy's Hill</td><td></td><td></td></tr> <tr> <td>Reefs Tank</td><td></td><td></td></tr> </tbody> </table> <ul style="list-style-type: none"> • The Datamine software allows creation of fixed length samples from the original database given a set of stringent rules. 	Prospect	Drillholes in Model	RMS Drillhole Spacing (m)	The Sisters			Iron Blow			Tors Tank	4	127	Fence Gossan			Ziggy's Hill			Reefs Tank		
Prospect	Drillholes in Model	RMS Drillhole Spacing (m)																					
The Sisters																							
Iron Blow																							
Tors Tank	4	127																					
Fence Gossan																							
Ziggy's Hill																							
Reefs Tank																							
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Historical drill holes at the BHAЕ are typically drilled vertically for auger and RAB types (drilled along section lines) and angled at -55° or -60° to the horizontal and drilled perpendicular to the mineralised trend for RC and DDH (Figure C-1). • Drilling orientations are adjusted along strike to accommodate folded geological sequences. All Tors Tank holes were designed to drill toward grid south at an inclination of 60 degrees from horizontal. • The drilling orientation is not considered to have introduced a sampling bias on assessment of the current geological interpretation. • Geological mapping by various companies has reinforced that the strata dips variously between 5 and 65 degrees. 																					
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • Sample security procedures are considered 'industry standard' for the current period. • Samples obtained during drilling completed between 30/9/22 to the 4/10/22 were transported by exploration employees or an independent courier directly from Broken Hill to ALS Laboratory, Adelaide. 																					

		<ul style="list-style-type: none"> The Company considers that risks associated with sample security are limited given the nature of the targeted mineralisation.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No external audits or reviews have yet been undertaken.

FIGURE C1-1: TORS TANK DRILLHOLE LOCATION OCTOBER 2022



Notes:

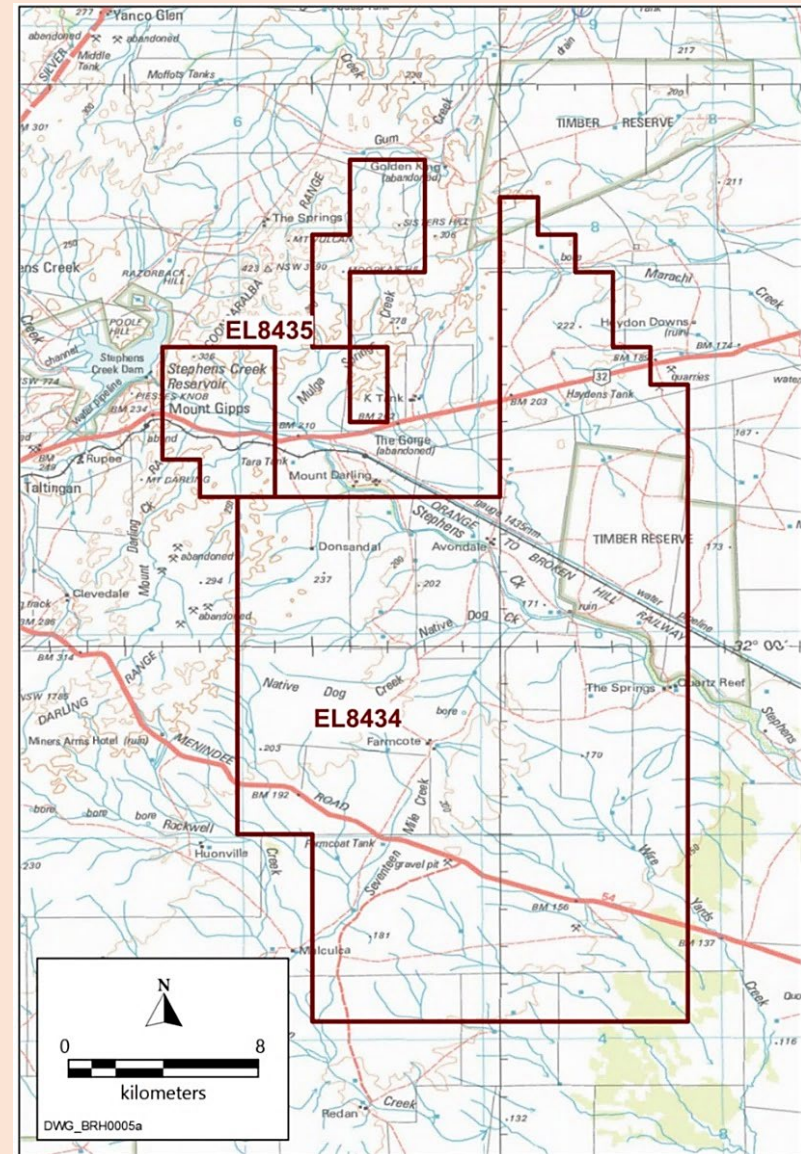
1. Historical drillholes shown and deposit block model mask, All holes orientated south at -60 degrees from horizontal.

Source: CCZ Geology Team

SECTION 2: REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<p>EL 8434 is located about 28km east of Broken Hill whilst EL 8435 is 16km east of Broken Hill. Both tenures are approximately 900km northwest of Sydney in far western New South Wales (Figure A1-2-1).</p> <p>EL 8434 and EL 8435 were both granted on the 2nd of June 2016 to Squadron Resources for a term of five (5) years for Group One Minerals. On the 25th of May 2020, Squadron Resources changed its name to Wyloo Metals Pty Ltd (Wyloo). In December 2020 the tenure was transferred from Wyloo Metals to Broken Hill Alliance Pty Ltd a 100% subsidiary company of Castillo Copper Limited. Both tenures were renewed on the 12th of August 2021 for a further six (6) years and are due to expire on the 2nd of June 2027.</p> <p>EL 8434 lies across two (2) 1:100,000 geology map sheets Redan 7233 and Taltingan 7234, and two (2) 1:250,000 geology map sheets, SI54-3 Menindee, and SH54-15 Broken Hill in the county of Yancowinna. EL 8434 consists of one hundred and eighty-six (186) units in the Adelaide and Broken Hill 1:1,000,000 Blocks covering an area of approximately 580km².</p> <p>EL 8435 is located on the 1:100,000 geology map sheet Taltingan 7234, and the 1:250,000 geology map sheet SH/54-15 Broken Hill in the county of Yancowinna. EL 8435 consists of twenty-two (22) units (Table 1) in the Broken Hill 1:1,000,000 Blocks covering an area of approximately 68km².</p> <p>Access to the tenures from Broken Hill is via the sealed Barrier Highway. This road runs north-east to south-west through the northern portion of the EL 8434, passes the southern tip of EL 8435 eastern section and through the middle of the western section of EL 8435. Access is also available via the Menindee Road which runs north-west to south-east through the southern section of the EL 8434. The Orange to Broken Hill Rail line also dissects EL 8435 western section the middle and then travels north-west to south-east slicing through the eastern arm of EL 8434 (Figure C-2).</p>

Figure C-2: EL 8434 and EL 8435 General Location Map



**Exploration
done by other
parties**

- *Acknowledgment and appraisal of exploration by other parties.*

Explorers who were actively involved over longer historical periods in various parts of EL8434 were: - North Broken Hill Ltd, CRAE Exploration, Major Mining Ltd and Broken Hill Metals NL, Pasminco Exploration Ltd, Normandy Exploration Ltd, PlatSearch NL/Inco Ltd/ EGC Pty Ltd JV and the Western Plains Gold Ltd/PlatSearch/EGC Pty Ltd JV.

A comprehensive summary of work by previous explorers was presented in Leyh (2009). However, more recently, follow-up field reconnaissance of areas of geological interest, including most of the prospective zones was carried out by EGC Pty Ltd over the various licenses. This work, in conjunction with a detailed interpretation of aeromagnetic, gravity plus RAB / RC drill hole logging originally led to the identification of at least sixteen higher priority prospect areas. All these prospects were summarized in considerable detail in Leyh (2008). Future work programs were then also proposed for each area. Since then, further compilation work plus detailed geological reconnaissance mapping and sampling of gossans and lode rocks has been carried out.

A total of 22 prospects were then recognised on the exploration licence with at least 12 occurring in and around the tenure.

With less than 45% outcropping Proterozoic terrain within the licence, this makes it very difficult to explore and is in the main very effectively screened from the easy application of more conventional exploration methodologies due to a predominance of extensive Cainozoic cover sequences. These include recent to young Quaternary soils, sands, clays and older more resistant, only partially dissected, Tertiary duricrust regolith covered areas. Depth of cover ranges from a few metres in the north to over 60 metres in some areas on the southern and central license.

Exploration by EGC Pty Ltd carried out in the field in the first instance has therefore been heavily reliant upon time consuming systematic geological reconnaissance mapping and reliable geochemical sampling. These involve a slow systematic search over low outcropping areas, poorly exposed subcrops and float areas as well as the progressive development of effective regolith mapping and sampling tools. This work has been combined with a vast amount of intermittently acquired past exploration data. The recent data compilation includes an insufficiently detailed NSWGS regional mapping scale given the problems involved, plus some regionally extensive, highly variable, low-level stream and soil BLEG geochemical data sets over much of the area.

There are also a few useful local detailed mapping grids at the higher priority prospects, and many more numerous widespread regional augers, RAB, and

percussion grid drilling data sets. Geophysical data sets including ground magnetics, IP and EM over some prospect areas have also been integrated into the exploration models. These are located mainly in former areas of moderate interest and most of the electrical survey methods to date in this type of terrain continue to be of limited application due to the high degree of weathering and the often prevailing and complex regolith cover constraints.

Between 2007 and 2014 Eaglehawk Geological Consulting has carried out detailed research, plus compilation and interpretation of a very large volume of historic exploration data sourced from numerous previous explorers and dating back to the early 1970's. Most of this data is in non-digital scanned form. Many hard copy exploration reports (see references) plus several hundred plans have been acquired from various sources, hard copy printed as well as downloaded as scans from the Geological Survey of NSW DIGS system. They also conducted field mapping, costean mapping and sampling, and rock chip sampling and analysis.

Work Carried out by Squadron Resources and Whyloo Metals 2016-2020

Research during Year 1 by Squadron Resources revealed that the PGE-rich, sulphide-bearing ultramafic rocks in the Broken Hill region have a demonstrably alkaline affinity. This indicates a poor prospectivity for economic accumulations of sulphide on an empirical basis (e.g., in comparison to all known economic magmatic nickel sulphide deposits, which have a dominantly tholeiitic affinity). Squadron instead directed efforts toward detecting new Broken Hill-Type (BHT) deposits that are synchronous with basin formation. Supporting this modified exploration rationale are the EL's stratigraphic position, proximity to the Broken Hill line of lode, abundant mapped alteration (e.g., gahnite and/or garnet bearing exhalative units) and known occurrences such as the "Sisters" and "Iron Blow" prospects.

The area overlies a potential magmatic Ni-Cu-PGE source region of metasomatised sub-continental lithospheric mantle (SCLM) identified from a regional targeting geophysical data base. The exploration model at the time proposed involved remobilization of Ni-Cu-PGE in SCLM and incorporation into low degree mafic-ultramafic partial melts during a post-Paleoproterozoic plume event and emplacement higher in the crust as chonoliths/small intrusives - Voisey's Bay type model. Programs were devised to use geophysics and geological mapping to locate secondary structures likely to control and localise emplacement of Ni-Cu-PGE bearing chonoliths. Since EL8434 was granted, the following has been completed:

- Airborne EM survey.
- Soil and chip sampling.
- Data compilation.
- Geological and logistical reconnaissance.
- Community consultations; and
- Execution of land access agreements.

Airborne EM Survey

Geotech Airborne Limited was engaged to conduct an airborne EM survey using their proprietary VTEM system in 2017. A total of 648.92-line kilometres were flown on a nominal 200m line spacing over a portion of the project area. Several areas were infilled to 100m line spacing.

The VTEM data was interpreted by Southern Geoscience Consultants Pty Ltd, who identified a series of anomalies, which were classified as high or low priority based on anomaly strength (i.e., does the anomaly persist into the latest channels). Additionally, a cluster of VTEM anomalies at the “Sisters” prospect have been classified separate due to strong IP effects observed in the data. Geotech Airborne have provided an IP corrected data and interpretation of the data has since been undertaken.

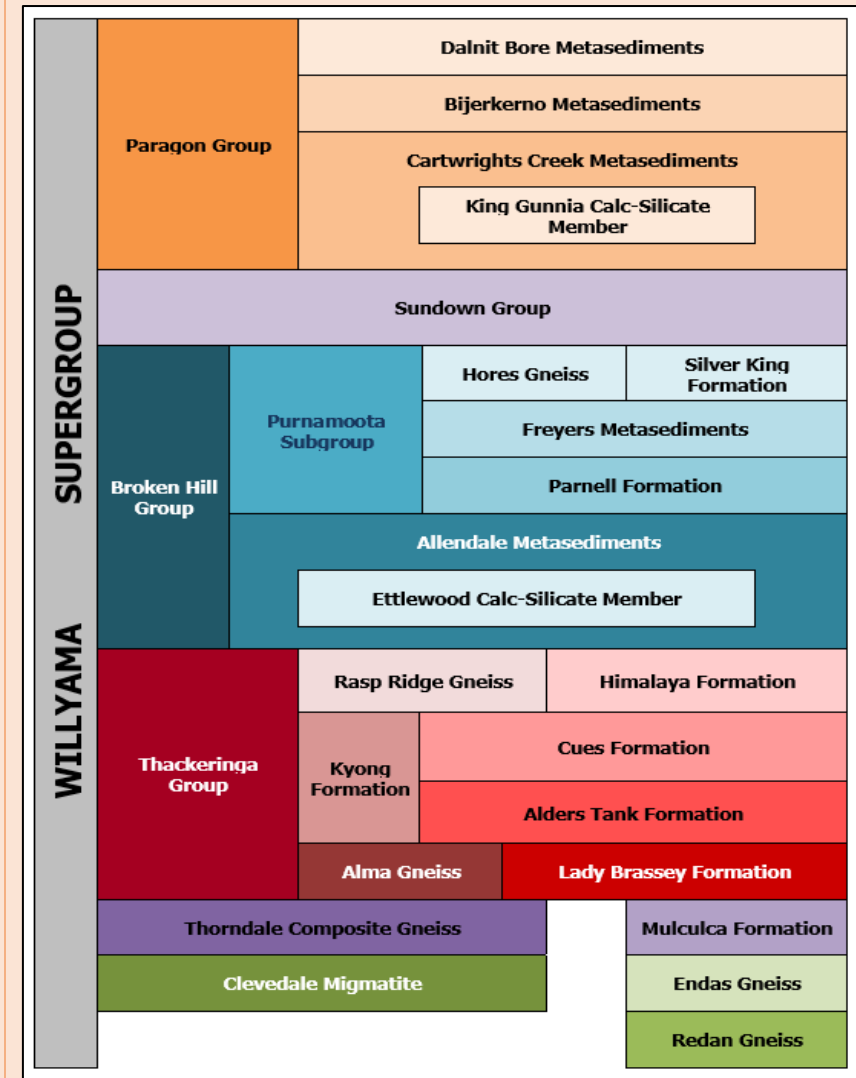
Soil and Chip sampling

The VTEM anomalies were followed up by a reconnaissance soil sampling programme. Spatially clustered VTEM anomalies were grouped, and follow-up soil lines were designed. Two (2) VTEM anomalies were found to be related to culture and consequently no soils were collected. Two (2) other anomalies were sampled which were located above thick alluvium of Stephens Creek and were therefore not sampled. A line of soil samples was collected over a relatively undisturbed section at Iron Blow workings and the Sisters Prospect.

One hundred and sixty-six (166) soil samples were collected at a nominal 20cm depth using a 2mm aluminum sieve. Two (2) rock chips were also collected during this program. The samples were collected at either 20m or 40m spacing over selected VTEM anomalies. The samples were pulverised and analysed by portal XRF at ALS laboratories in Perth.

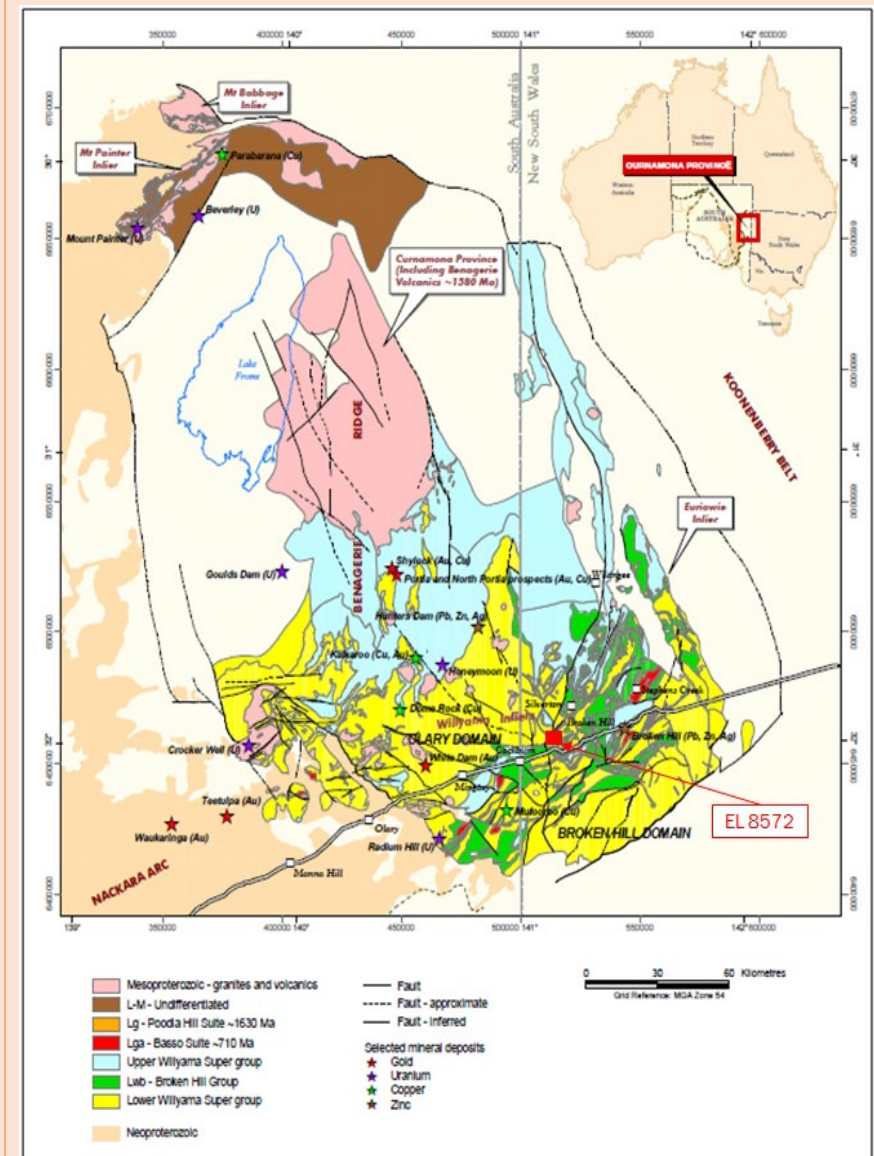
		<p>Each site was annotated with a “Regolith Regime” such that samples from a depositional environment could be distinguished from those on exposed Proterozoic bedrock, which were classified as an erosional environment. The Regolith Regime groups were used for statistical analysis and levelling of the results. The levelled data reveals strong relative anomalies in zinc at VTEM anomaly clusters 10, 12 and 14 plus strong anomalous copper at VTEM 17.</p>
Geology	<ul style="list-style-type: none">• <i>Deposit type, geological setting, and style of mineralisation.</i>	<p>Regional Geology</p> <p>The Broken Hill polymetallic deposits are located within Curnamona Province (Willyama Super group) (Figure C-3) 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 quartz-feldspathic gneisses, lesser basic gneisses, and minor 'lode' rocks which are quartz-albite and calc-silicate rocks (Geoscience Australia, 2019). Prograde metamorphism ranges from andalusite through sillimanite to granulite grade (Stevens, Barnes, Brown, Stroud, & Willis, 1988).</p> <p>Regionally, the tenures are situated in Broken Hill spatial domain which extends from far western New South Wales into eastern South Australia. 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 (Figure C-4).</p> <p>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, Albert, and Thackaringa-Pinnacles Shear Zones.</p>

Figure C-3: Regional Stratigraphy



Modified after: (Stevens, Barnes, Brown, Stroud, & Willis, 1988)

Figure C-4: Regional Geological Map



Modified after (Peljo, 2003)

Local Geology

There are over twenty (20) rock formations mapped within the project area. Parts of the project area are covered by Quaternary alluvium, sands, and by Tertiary laterite obscuring the basement geology. Within the Lower to Middle Proterozoic Willyama Supergroup (previously Complex) there are two (2) groups, the Thackaringa Group, and the younger Broken Hill Group (Colquhoun, et al., 2019). A summary of the units that host or appear to host the various mineralisation styles within EL 8434 and EL 8435 is given below.

Broken Hill Group

The Hores Gneiss is mostly comprised of quartz-feldspar-biotite-garnet gneiss, interpreted as metadacite with some minor metasediments noted. An age range from Zircon dating has been reported as 1682-1695Ma (Geoscience Australia, 2019). The Allendale Metasediments unit contains mostly metasedimentary rocks, dominated by albitic, pelitic to psammitic composite gneiss, including garnet-bearing feldspathic composite gneiss, sporadic basic gneiss, and quartz-gahnite rock. Calc-silicate bodies can be found at the base of the unit and the formation's average age is 1691 Ma (Geoscience Australia, 2019).

Thackaringa Group

The **Thorndale Composite Gneiss** is distinguished by mostly gneiss, but also migmatite, amphibolite, and minor magnetite. The age of this unit is >1700Ma (Geoscience Australia, 2019) and is one of the oldest formations in the Group. The **Cues Formation** is interpreted as a deformed sill-like granite, including Potosi-type gneiss. Other rock-types include pelitic paragneiss, containing cordierite. The average age: ca 1700-1730 Ma. (Stevens, Barnes, Brown, Stroud, & Willis, 1988). Other rock types include mainly psammo-pelitic to psammitic composite gneisses or metasedimentary rocks, and intercalated bodies of basic gneiss. This unit is characterised by stratiform horizons of granular garnet-quartz +/-magnetite rocks, quartz-iron oxide/sulphide rocks and quartz-magnetite rocks (Geoscience Australia, 2019). This is a significant formation as it hosts the Pinnacles Ag-Pb-Zn massive sulphide deposit along with widespread Fe-rich stratiform horizons.

The protolith was probably sandy marine shelf sedimentary rocks. An intrusion under shallow cover was syn-depositional. The contained leuco-gneisses and Potosi-type gneisses are believed to represent a felsic volcanic or volcanoclastic protolith. Basic gneisses occur in a substantial continuous interval in the middle sections of the Formation, underlain by thinner, less continuous bodies. They

are moderately Fe-rich (abundant orthopyroxene or garnet) and finely layered, in places with pale feldspar-rich layers, and are associated with medium-grained quartz-feldspar-biotite-garnet gneiss or rock which occurs in thin bodies or pods ('Potosi-type' gneiss).

A distinctive leucocratic quartz-microcline-albite(-garnet) gneiss (interpreted as meta-rhyolite) occurs as thin, continuous, and extensive horizons, in several areas. The sulphide-bearing rocks may be lateral equivalents of, or associates of Broken Hill type stratiform mineralisation. Minor layered garnet-epidote-quartz calc-silicate rocks occur locally within the middle to basal section. The unit is overlain by the **Himalaya Formation**.

The **Cues Formation** is intruded by Alma Granite (Geoscience Australia, 2019). The **Himalaya Formation** (Figure C-6) consists of medium-grained saccharoidal leucocratic psammitic and albitic meta-sedimentary rocks (average age 1700Ma). The unit comprises variably interbedded albite-quartz rich rocks, composite gneiss, basic gneiss, horizons of thinly bedded quartz-magnetite rock.

Pyrite-rich rocks occur at the base of the formation (Geoscience Australia, 2019). It is overlain by the **Allendale Metasediments** (Broken Hill Group). The Himalaya Formation hosts cobalt-rich pyritic horizons at Pyrite Hill and Big Hill. The protolith is probably sandy marine shelf sedimentary rocks with variable evaporitic or hypersaline component. Plagioclase-quartz rocks are well-bedded (beds 20 - 30mm thick), with rare scour-and-fill and cross-bedded structures.

Thin to thick (0.5 - 10m) horizons of thinly bedded quartz-magnetite rock also occur with the plagioclase-quartz rocks. In some areas the formation consists of thin interbeds of plagioclase-quartz rocks within meta-sedimentary rocks or metasedimentary composite gneiss (Geoscience Australia, 2019). Lady Brassey Formation which is well-to-poorly-bedded leucocratic sodic plagioclase-quartz rock, as massive units or as thick to thin interbeds within psammitic to pelitic metasedimentary composite gneisses. A substantial conformable basic gneiss. It overlies both Mulculca Formation and Thorndale Composite Gneiss. Part of the formation was formerly referred to as Farmcote Gneiss in the Redan geophysical zone of Broken Hill Domain - a zone in which the stratigraphy has been revised to create the new Rantya Group (Redan and Ednas Gneisses, Mulculca Formation, and the now formalised Farmcote Gneiss).

Lady Louise Suite

This unit is approximately 1.69Ma in age comprising amphibolite, quartz-bearing, locally differentiated to hornblende granite, intrusive sills, and dykes, metamorphosed, and deformed; metabasalt with pillows (Geoscience Australia,

2019). Annadale Metadolerite is basic gneisses, which includes intervening metasedimentary rocks possibly dolerite (Geoscience Australia, 2021).

Rantya Group

Farmcote Gneiss contains metasedimentary rocks and gneiss and is a new unit at the top of Rantya Group. It is overlain by the Cues Formation and Thackaringa Group, and it overlies the Mulculca Formation. The age of the unit is between 1602 to 1710Ma. Mulculca Formation is abundant metasedimentary composite gneiss, variable sodic plagioclase-quartz-magnetite rock, quartz-albite-magnetite gneiss, minor quartz-magnetite rock common, minor basic gneiss, albite-hornblende-quartz rock (Geoscience Australia, 2019). Ednas Gneiss contains quartz-albite-magnetite gneiss, sodic plagioclase-quartz-magnetite rock, minor albite-hornblende-quartz rock, minor quartz-feldspathic composite gneiss. It is overlain by Mulculca Formation.

Silver City Suite

Formerly mapped in the Thackaringa Group this new grouping accommodates the metamorphosed and deformed granites. A metagranite containing quartz-feldspar-biotite gneiss with variable garnet, sillimanite, and muscovite, even-grained to megacrystic, elongate parallel to enclosing stratigraphy. It occurs as sills and intrudes both the Thackaringa Group and the Broken Hill Group. This unit is aged between 1680 to 1707Ma.

Torrowangee Group

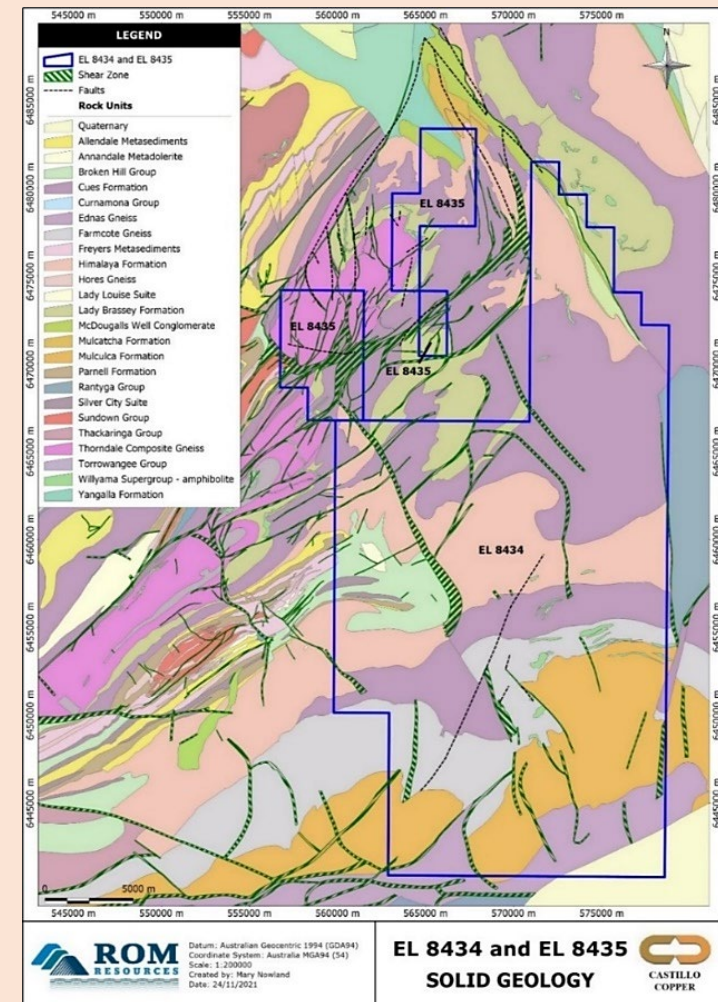
Mulcatcha Formation comprises flaggy, quartzose sandstone with lenticular boulder and arkosic sandstone beds. Yangalla Formation contains boulder beds, lenticular interbedded siltstone, and sandstone. It overlies the Mulcatcha Formation (Geoscience Australia, 2020).

Sundown Group

The Sundown Group contains Interbedded pelite, psammopelitic and psammitic metasedimentary rocks and it overlies the Broken Hill Group. The unit age is from 1665 to 1692Ma (Figure C-5).

There is also an unnamed amphibolite in Willyama Supergroup, which present typically medium grained plagioclase and amphibole or pyroxene rich stratiform or discordant dykes.

Figure C-5: EL 8434 and EL 8435 Solid Geology



**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:
 - easting and northing of the drill hole collar

Header information about all drillholes completed at Tors Tank have been tabulated in the main body text.

	<ul style="list-style-type: none"> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> <ul style="list-style-type: none"> • <i>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.</i> 	
Data aggregation methods	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • No metal equivalents have been reported. Rare earth element results have been converted to rare earth oxides as per standard industry practice (Castillo Copper 2022f). • No compositing of assay results has taken place, but rather menu options within the Datamine GDB module have been used to create fixed length 1m assay intervals from the original sampling lengths. • The rules follow very similarly to those used by the Leapfrog software in creating fixed length samples.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>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').</i> 	<ul style="list-style-type: none"> • A database of all the historical borehole sampling has been compiled and validated. It is uncertain if there is a strong relationship between the surface sample anomalies to any subsurface anomalous intersections due to the possible masking by variable Quaternary and Tertiary overburden that varies in depth from 0-40m. • As the strata is tightly folded, the intersected cobalt-rich layers are overstated in terms of apparent thickness, however the software calculates a true, vertical thickness. • Mineralisation is commonly associated with shears, faults, amphibolites, and a quartz-magnetite rock within the shears, or on or adjacent to the boundaries of the Himalaya Formation.

		<ul style="list-style-type: none"> In general, most of the cobalt-rich layers have a north-northwest to north strike.
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Current surface anomalies are shown on maps released on the ASX (Castillo Copper 2022a and 2022b). All historical surface sampling has had their coordinates converted to MGA94, Zone 54.
Balanced reporting	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> All recent laboratory analytical results have been recently reported (see Castillo Copper 2022a, b, c, d, e, and f) for assay results. Regarding the surface and sampling, no results other than duplicates, blanks or reference standard assays have been omitted.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Historical explorers have also conducted airborne and ground gravity, magnetic, EM, and IP resistivity surveys over parts of the tenure area but this is yet to be fully georeferenced (especially the ground IP surveys). Squadron Resources conducted an airborne EM survey in 2017 that covers Iron Blow and The Sisters, but not the southern prospects.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<p>It is recommended that:</p> <ul style="list-style-type: none"> The non-sampled zones within the Core Library drillholes, BH1, BH2, and DD90-IB3 in the north of the tenure group be relogged and sampled. DD90-IB3 is a good candidate for hyperspectral logging. A program of field mapping and ground magnetic or EM surveys be planned and executed. Complete the comprehensive drilling campaign that will comprise RC drilling and specifically target coring the known cobalt mineralisation down dip to at least 100m depth at one of the prospects. The current drilling program is also designed to increase the resource confidence and now has its ESF4 applications approved by the NSW Resource Regulator.