23 November 2022

CASTILLO COPPER

Exploration with Purpose

Assays verify extensive, shallow REE discovery at Broken Hill

Highlights

- New assays for RT_001RC (Reefs Tank) and FG_001RC (Fence Gossan) were positive for Total Rare Earth Oxide (TREO), confirming Rare Earth Elements (REE) are more widely apparent across the East Zone than initially envisaged in CCZ's 15 November 2022 ASX Release – the best intercepts comprise:

  11m @ 1,078 TREO from 8m (RT_001RC)
  20m @ 609ppm TREO from surface incl. 4m @ 1,709ppm REO from 8m (FG_001RC)
  11m @ 862ppm TREO from 58m (FG_001RC)

- **More significantly, all the assays returned to date from Fence Gossan, Tors Tank and Reefs Tank highlight the REE mineralisation discovered is extensive and shallow[1]:**
  - Final insights and interpretations will be fully conveyed once assays for RT_002-4RC (Reefs Tank) and TT_005DD (Tors Tank) are returned
- All four drill-holes at the Tors Tank Prospect returned shallow barium and iron assays, with the best intercepts up to:

  13m @ 6,388ppm Ba including 4m @ 10,000ppm Ba (TT_001RC)
  19m @ 38% Fe from 16m (TT_004RC)

- The Board is now progressing further work to fully delineate the REE potential within the BHA Project's East Zone, including:
  - A 20m bulk sample – mostly clay & weathered pegmatite from FG_003RC – will undergo metallurgical test-work to liberate contained REE
  - A hand auger surface sampling campaign, starting at Fence Gossan, to determine the full scale of REE mineralisation and generate test-drill targets
  - Mapping, surface sampling and drilling campaign for the Iron Blow Prospect

Castillo Copper's Chairman Ged Hall commented: *"The Board is delighted with the new assays as they show consistent shallow REE mineralisation across a wide part of the BHA Project's East Zone. Moreover, the interpreted scale of this shallow REE discovery, within a mining friendly district, is an outstanding result which has the potential to create significant value for shareholders."*

Assays verify extensive, shallow REE discovery

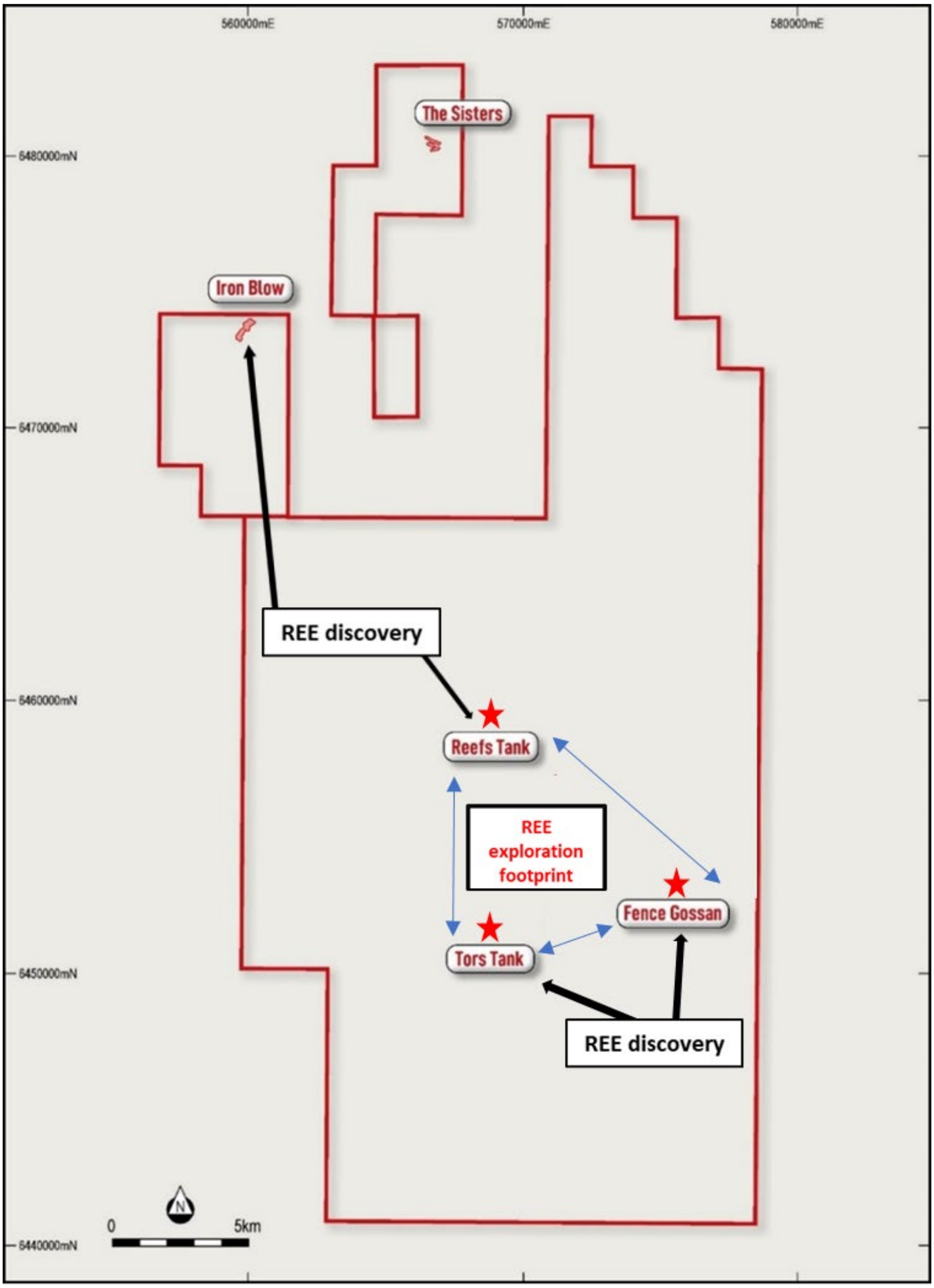
Castillo Copper Limited's (**"CCZ"**) Board is pleased to announce assays received for RT_001RC (Reefs Tank) and FG_001RC (Fence Gossan) – best intercepts below – verify the extensive, shallow REE mineralisation discovery across the central part of BHA Project's East Zone (Figure 1).

11m @ 1,078 TREO from 8m (RT_001RC)
20m @ 609ppm TREO from surface incl. 4m @ 1,709ppm REO from 8m (FG_001RC)
11m @ 862ppm TREO from 58m (FG_001RC)

Further, this complements the known REE mineralisation discovered at the Iron Blow Prospect – identified from assaying historical core from drill-hole, DD90_1B3, which produced:

8m @ 1,460ppm TREO from 150m[2]

FIGURE 1: BHA PROJECT's EAST ZONE EXTENSIVE REE MINERALISATION



Note: Refer to Appendix A.

Source: CCZ geology team

REE exploration footprint

As shown in Figure 2 below, the new assays for Reefs Tank and Fence Gossan are in line with the previous results (refer CCZ ASX Release – 15 November 2022). More importantly, however, is they extend known mineralisation and in effect delineate a sizeable *"REE exploration footprint"* between Fence Gossan, Tors and Reefs Tank to channel future development work (refer Figure 1).

FIGURE 2: BEST INTERCEPTS – FENCE GOSSAN / TORS & REEFS TANK PROSPECTS

- **20m @ 1,780ppm TREO (28.9% Magnet REO) from surface including 4m @ 2,410ppm TREO from 16m (FG_003RC)**
- **11m @ 1,078 TREO (24.7% Magnet REO) from 8m (RT_001RC)**
- **7m @ 1,048ppm TREO (29.9% Magnet REO) from 12m (TT_002RC)**
- **11m @ 862ppm TREO (29.0% Magnet REO) from 58m (FG_001RC)**
- **19m @ 847ppm TREO (29.6% Magnet REO) from surface (TT_003RC)**
- **8m @ 773ppm TREO (24.0% Magnet REO) from 48m (FG_004RC)**
- **4m @ 732ppm TREO (27.1% Magnet REO) from 24m (TT_001RC)**
- **19m @ 661ppm TREO (28.0% Magnet REO) from surface (FG_002RC)**
- **32m @ 636ppm TREO (25.7% Magnet REO) from 52m (FG_003RC)**
- **28m @ 614ppm TREO (27.8% Magnet REO) from 4m (FG_004RC)**
- **20m @ 609ppm TREO (29.5% Magnet REO) from surface incl. 4m @ 1,709ppm TREO from 8m (FG_001RC)**

Note: Refer to Appendix B & C for full results and TREO conversion factor.
Source: CCZ geology team

Although final interpretations remain contingent on receiving results for RT_002-4RC (Reefs Tank) and TT_005DD (Tors Tank – refer Photo Gallery), the Board is already progressing further work to fully delineate the REE potential within the exploration footprint and at the Iron Blow Prospect, including:

- **Tors Tank Prospect:** A comprehensive surface mapping and rock chip sampling campaign has just been concluded (Figure 3). The collected samples, which are now at the laboratory for follow up analyses, should aid identifying incremental targets for drill-testing.

FIGURE 3: TORS TANK FIELD MAPPING AND ROCK CHIP SAMPLING EXAMPLE

Source CCZ geology team

- **Fence Gossan Prospect:** A 200m x 200m grid has been devised as a precursor to a hand auger surface sampling campaign which will aid determining the full scale of the REE mineralisation and pinpoint targets to drill-test. If successful, this could be deployed more widely across the exploration footprint.
  - In addition, a 20m bulk sample, comprising mostly clay and weathered pegmatite from FG_003RC, is set to undergo metallurgical test-work to determine how readily REE mineralisation will liberate to form a concentrate.
- **Iron Blow Prospect[2]:** With assays already showing REE mineralisation is apparent below 150m (from DD90_IB3), further core has been cut (from 4m to 82m) and sent to the laboratory for detailed analysis. Once returned this should provide solid insights into the underlying geology over circa 250m, especially if there is shallower REE mineralisation.
  - In turn, along with planned mapping and surface sampling, this will build the case to identify and drill-test priority targets to determine the extent of REE mineralisation apparent.

PHOTO GALLERY: TORS TANK TT_005DD CORE SHOWING VARIOUS LOGGING ASPECTS

Notes:

1. Location coordinates: e571250 n6451480
2. Hole logged at 1 metre intervals for magnetic susceptibility and PXRF
3. HQ core has been ½ core sawn by a diamond drill and forwarded for comprehensive assay

Source: CCZ geology team

Barium/Iron mineralisation – anomalous results

Whilst interpreting the assays for the Tors Tank Prospect, the geology team noted all the drill-holes returned varied moderate to high barium trace element readings. Interestingly, these were sometimes associated with, or on the margins of, high TREO zones (refer Figure 4).

FIGURE 4: TORS TANK SIGNIFICANT BARIUM INTERSECTIONS >1,000PPM Ba

Hole	From (m)	To (m)	Apparent Width (m)	Ba (ppm)	S (ppm)	La (ppm)
TT_001RC	39	52	13	6,388	1,400	107
Incl.	44	48	4	10,000	2,200	97
TT_002RC	12	19	7	1,150	400	117
TT_003RC	4	12	8	1,510	650	91
TT_003RC	36	39	3	1,580	200	44
TT_004RC	4	8	4	1,210	200	41

Source: ALS Adelaide Laboratory

Similarly at Tors Tank, all drill-holes returned high iron results from shallow, thick, magnetite-rich bands variably hosting some of the higher cobalt mineralisation (refer Figure 5).

FIGURE 5: TORS TANK SIGNIFICANT IRON INTERSECTIONS >20% Fe

Hole	From (m)	To (m)	Apparent Width (m)	Fe (%)	S (ppm)	V (ppm)
TT_001RC	36	39	4	**21.2**	1,400	252
TT_002RC	0	16	16	**27.2**	5,700	359
Incl.	8	12	4	**39.3**	100	412
TT_003RC	16	28	19	**38.0**	220	399
TT_004RC	28	40	12	**32.1**	100	370

Source: ALS Adelaide Laboratory

Cobalt mineralisation – Assays in line with expectations

Cobalt is an important, complementary critical mineral to BHA Project's East Zone following the REE discovery, and the Board still intends to improve the confidence and grade of the current inferred Mineral Resource Estimate. Overall, the two new assay results across Reefs Tank and Fence Gossan, are in line with expectations (Figure 6).

Note, the current inferred Mineral Resource Estimate is 64.4Mt @ 318ppm Co for 21,556t contained cobalt metal (based on data from Reefs Tank and Fence Gossan only)[1].

FIGURE 6: COBALT ZONES DRILL-HOLES TORS & REEFS TANK; FENCE GOSSAN

Hole	From (m)	To (m)	Width (m)	Layer	Ag (g/t)	Co (ppm)	Cu (ppm)	Zn (ppm)
TT_001RC	20	28	8	1	0.20	199	1,029	165
TT_001RC	36	39	3	2	0.07	156	772	52
TT_002RC	12	19	7	1	0.51	308	2,205	171
TT_003RC	8	19	11	1	0.12	216	647	142
TT_004RC	4	8	4	1	0.05	243	342	127
TT_004RC	24	40	16	2	0.13	157	991	47
FG_001RC	48	59	11	1	0.03	107	353	40
FG_002RC	12	16	4	1	0.01	31	137	44
FG_003RC	64	72	8	1	0.05	265	301	78
FG_004RC	40	52	12	1	0.04	158	427	102
RT_001RC	16	19	3	1	0.72	88	84	624

Notes:

1. Assays represents 4m composite results which are slated for individual 1m analyses
2. Lower cut-off for reporting set to 150ppm

Source: CCZ geology team

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) CCZ ASX Release – 15 November and 9 August 2022

2) CCZ ASX Release – 31 October 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."

Directors

Gerrard Hall

Dr Dennis Jensen

Geoff Reed

ASX/LSE Symbol

CCZ

Contact

Dr Dennis Jensen
Managing Director

TEL +61 8 9389 4407

EMAIL info@castillocopper.com

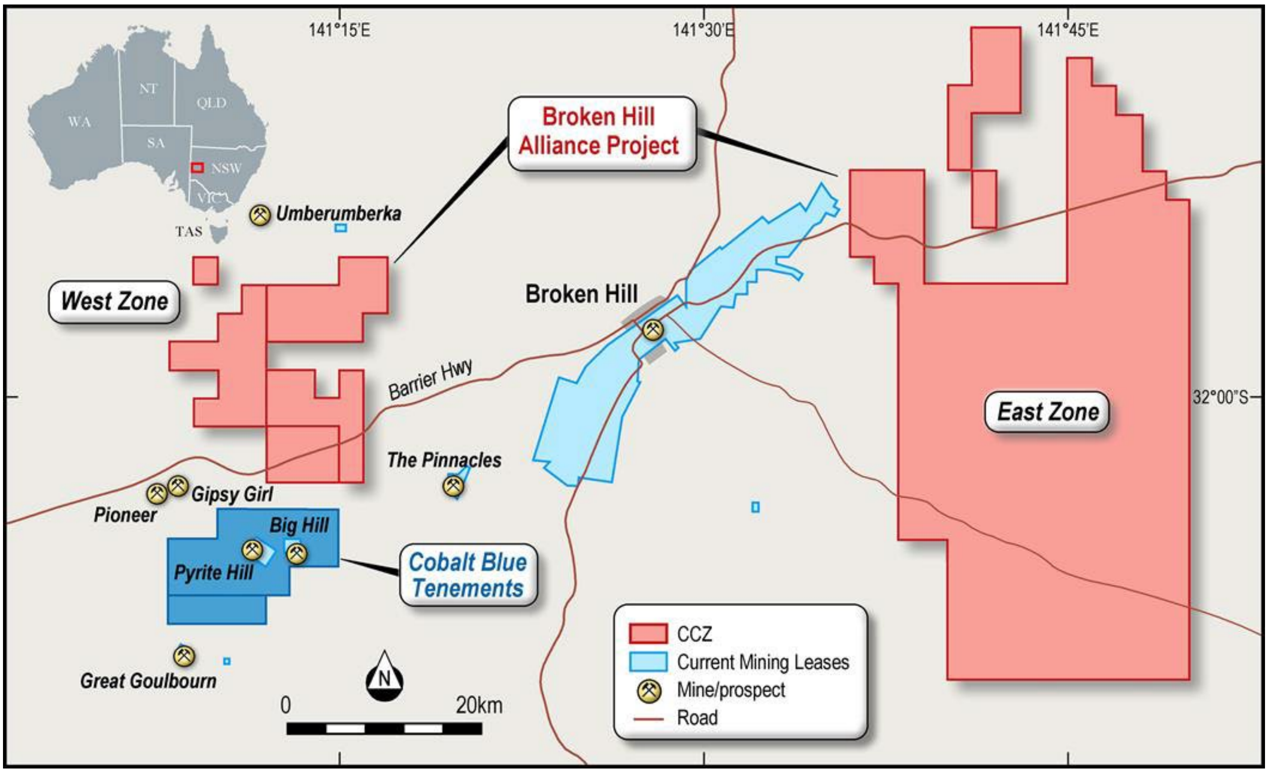
ADDRESS 45 Ventnor Avenue, West Perth, Western Australia 6005

FOR THE LATEST NEWS www.castillocopper.com

CASTILLO COPPER
Exploration with Purpose

APPENDIX A: BHA PROJECT'S EAST ZONE

FIGURE A1: BHA PROJECT



Source: CCZ geology team

APPENDIX B: REE RESULTS / TREO CONVERSION FACTOR

FIGURE B1: TORS & REEFS TANK & FENCE GOSSAN – SIGNIFICANT INTERSECTIONS >500PPM TREO

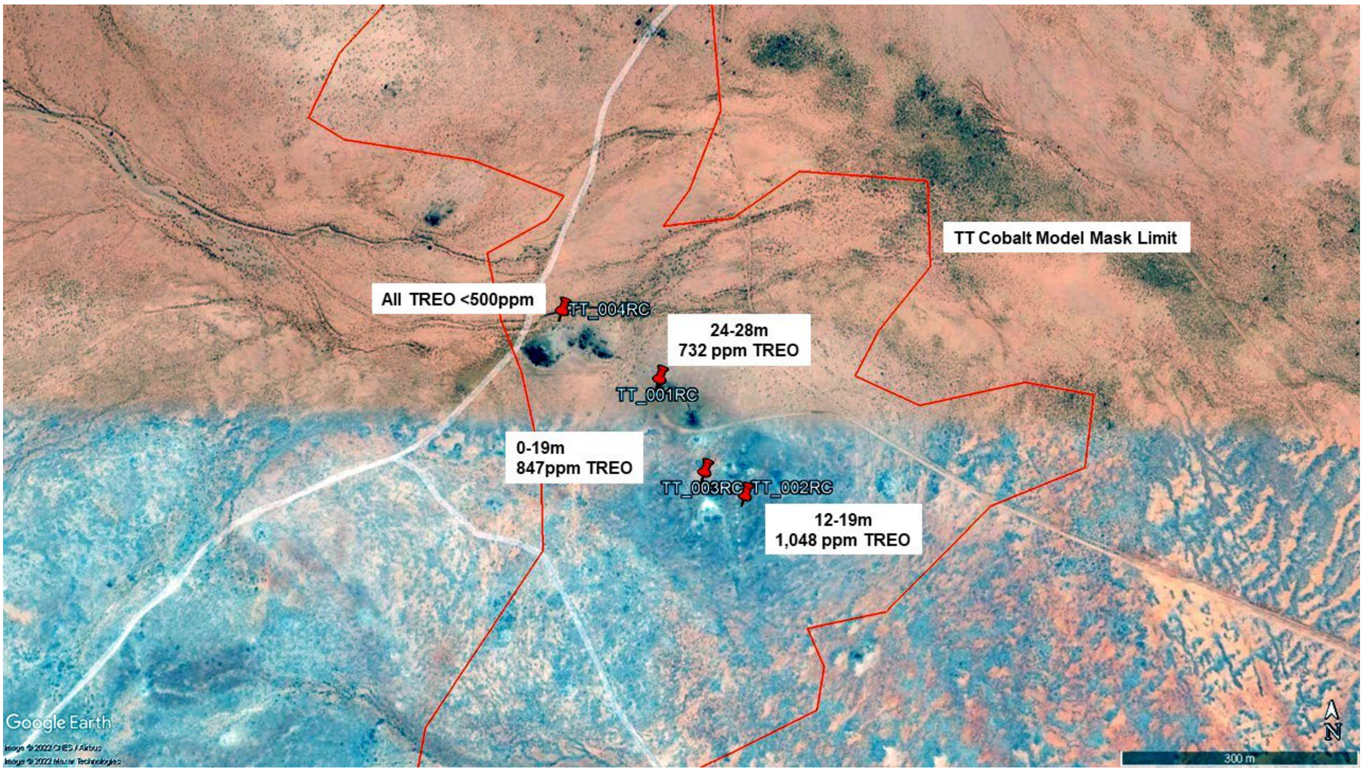
Hole	From (m)	To (m)	Apparent Width (m)	Ag (g/t)	Th (ppm)	U (ppm)	TREO (ppm)1	TREO-Ce (ppm)	LREO (ppm)	HREO (ppm)	CREO (%)	MREO (%)
TT_001RC	24	28	4	0.14	7.2	10.2	732.2	527.69	480.31	251.91	40.8%	27.1%
TT_001RC	39	52	13	0.07	17.3	2.5	531.5	288.62	489.73	41.80	21.7%	25.1%
TT_002RC	12	19	7	0.51	1.0	6.9	1,047.5	642.14	788.61	258.90	33.6%	29.9%
TT_003RC	0	19	19	0.12	2.1	10.5	847.0	624.15	506.59	340.45	45.1%	29.6%
TT_004RC	19	24	6	0.30	19.2	1.2	TREO<500					
TT_004RC	56	59	3	0.70	21.6	1.7	TREO<500					
FG_001RC	0	20	20	0.07	8.3	11.9	609.2	355.22	531.64	77.51	25.7%	29.5%
INCL.	8	12	4	0.05	1.1	10.	1,708.7	1,012.18	1554.52	154.16	29.7%	36.1%
FG_001RC	36	39	3	0.17	14.2	23.0	1,082.3	733.39	784.24	298.02	39.6%	33.7%
FG_001RC	48	59	11	0.03	10.2	13.9	862.1	522.61	762.40	99.65	27.6%	29.0%
FG_002RC	0	19	19	0.02	15.0	9.6	660.8	387.06	579.07	81.68	25.3%	28.0%
FG_003RC	0	20	20	0.04	14.5	22.6	1,779.9	1,133.18	1,472.73	307.20	28.9%	28.8%
FG_003RC	52	84	32	0.05	12.5	15.4	635.5	377.12	537.57	97.91	26.7%	25.7%
FG_004RC	4	32	28	0.02	18.3	8.2	613.9	350.25	541.82	72.08	25.2%	27.8%
FG_004RC	48	56	8	0.08	9.2	24.7	773.1	438.41	626.18	146.97	29.5%	24.0%
FG_004RC	60	64	4	0.04	12.4	8.7	539.8	312.58	454.38	85.45	26.3%	25.5%
RT_001RC	8	19	11	0.45	20.6	6.1	1078.0	825.05	565.34	512.56	48.7%	24.7%
RT_001RC	52	56	4	0.16	41.2	4.1	504.0	282.90	449.27	54.75	24.5%	28.6%

Notes:

1. TT_001RC 39-52m composite also reports 6,388 ppm Ba (Barium); TT_003RC 1,140 ppm Ba.
2. Two of the Lanthanum (La) assay from FG_003R returned >500ppm were re-analysed (514 and 527ppm, respectively).
3. Verification has been undertaken by ROM Resources personnel.
4. Sample results from ALS method ME-MS61R, where some REE are not totally soluble, future 1m assays will use ME-ICP81.

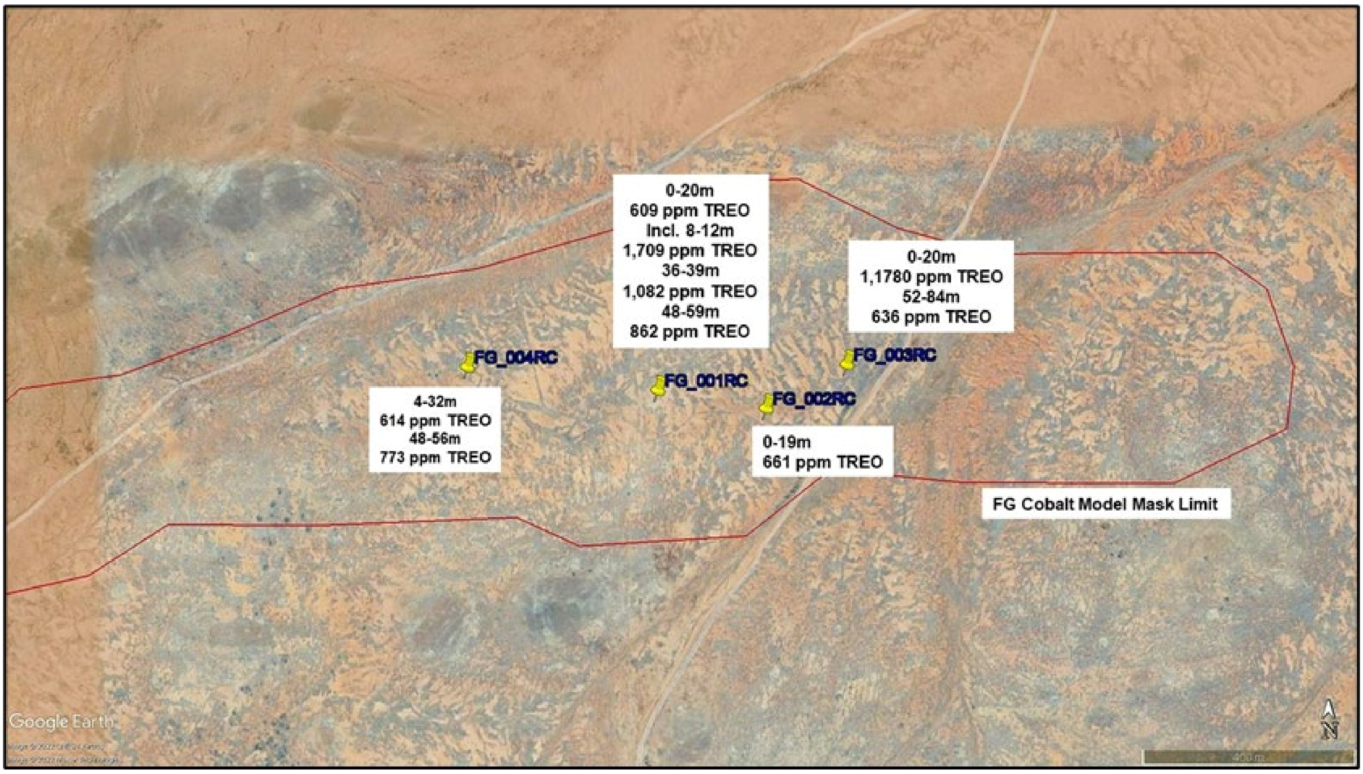
Source: ALS

FIGURE B2: TORS TANK – TREO RESULTS PLAN



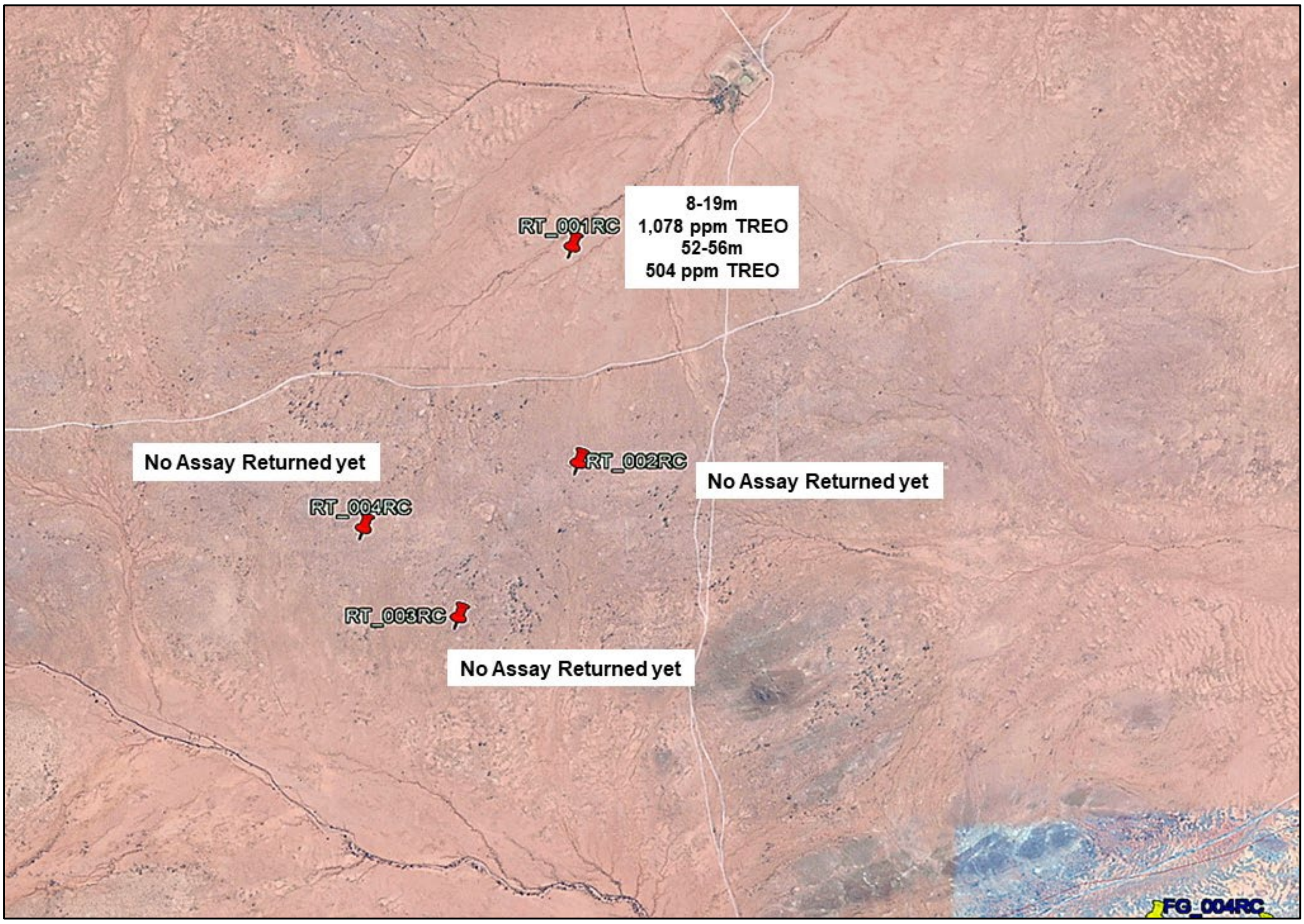
Source: CCZ geology team

FIGURE B3: FENCE GOSSAN – TREO RESULTS PLAN



Source: CCZ geology team

FIGURE B4: REEFS TANK – TREO RESULTS PLAN



Source: CCZ geology team

FIGURE B5: TORS TANK DRILL COLLARS

SiteID	HoleID	Easting (GDA94)	Northing (GDA94)	TDepth (m)	Grid Azimuth	Dip Horizontal	Hole Type	AHD	Start	End
2022_TT_01	TT_004RC	571250	6451480	120	180	-60	RC	189.2	3-Oct-22	4-Oct-22
2022_TT_02	TT_001RC	571370	6451395	120	180	-60	RC	191.8	30-Sep-22	1-Oct-22
2022_TT_03	TT_003RC	571425	6451280	140	180	-60	RC	189.1	2-Oct-22	3-Oct-22
2022_TT_04	TT_002RC	571475	6451250	108	180	-60	RC	187.2	1-Oct-22	2-Oct-22

Source: CCZ geology team

FIGURE B6: FENCE GOSAN DRILL COLLARS

Site ID	HoleID	Easting (GDA94)	Northing (GDA94)	Tdepth (m)	Grid Azimuth	Dip Horizontal	Hole Type	AHD	Start	End
2022_FG_03	FG_002RC	576550	6453755	110	180	-60	RC	169.6	7-Oct-22	8-Oct-22
2022_FG_04	FG_001RC	576350	6453790	120	180	-60	RC	172.7	4-Oct-22	7-Oct-22
2022_FG_06	FG_004RC	576000	6453835	120	170	-60	RC	176.8	9-Oct-22	10-Oct-22
2022_FG_07	FG_003RC	576700	6453835	160	180	-60	RC	170.1	8-Oct-22	9-Oct-22

Source: CCZ geology team

FIGURE B7: REEFS TANK DRILL COLLARS

SiteID	HoleID	East	North	TD	Azimuth	DipV	DipH	Type	AHD	Start	Finish
2022_RT_01	RT_001RC	574105	6456245	120	188	30	-60	RC	183.7	10/10/2022	11/10/2022
2022_RT_02	RT_002RC	574120	6455475	204	188	30	-60	RC	188.2	9/11/2022	10/11/2022
2022_RT_03	RT_003RC	573725	6454930	120	188	30	-60	RC	187.5	10/11/2022	14/11/2022
2022_RT_04	RT_004RC	573420	6455250	120	188	30	-60	RC	191.9	14/11/2022	15/11/2022

Source: CCZ geology team

TREO conversion factor

Conversion of elemental analysis (REE parts per million) to stoichiometric oxide (REO parts per million) was undertaken by ROM geological staff using the below (Figure B6) element to stoichiometric oxide conversion factors.

FIGURE B8: ELEMENT – CONVERSION FACTOR – OXIDE FORM

Rare Earth Element	Factor for Conversion	Rare Earth Oxide Common Form
Ce	1.2284	CeO_2
Dy	1.1477	Dy_2O_3
Er	1.1435	Er_2O_3
Eu	1.1579	Eu_2O_3
Gd	1.1526	Gd_2O_3
Ho	1.1455	Ho_2O_3
La	1.1728	La_2O_3
Lu	1.1371	Lu_2O_3
Nd	1.1664	Nd_2O_3
Pr	1.2083	Pr_6O_{11}
Sm	1.1596	Sm_2O_3
Tb	1.1762	Tb_4O_7
Tm	1.1421	Tm_2O_3
Y	1.2699	Y_2O_3
Yb	1.1387	Yb_2O_3

Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups:

- TREO (Total Rare Earth Oxide) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y2O3 + Lu_2O_3.
- TREO-Ce = TREO – CeO_2
- LREO (Light Rare Earth Oxide) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3
- HREO (Heavy Rare Earth Oxide) = Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Y_2O_3 + Lu_2O_3
- CREO (Critical Rare Earth Oxide) = Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3
- MREO (Magnetic Rare Earth Oxide) = Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3.

Total Rare Earth Oxides (TREO):

To calculate TREO an oxide conversion “factor” is applied to each rare-earth element assay.

The “factor” equates an elemental assay to an oxide concentration for each element. Below is an example of the factor calculation for Lanthanum (La).

Relative Atomic Mass (La) = 138.9055
Relative Atomic Mass (O) = 15.9994
Oxide Formula = La_2O_3
Oxide Conversion Factor = 1/ ((2x 138.9055)/(2x 138.9055 + 3x 15.9994)) Oxide Conversion Factor = 1.173 (3 decimal places)

APPENDIX C: QUALITATIVE DRILL LOGS

FIGURE C1: BHAE QUALITATIVE LOGGING MINERALS PRESENT DRILL-HOLES

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)
FG_001RC			0					No amphibolite logged
FG_002RC	88	94	6	0	1-5	0-3	1-6	In schist, no amphibolite logged in hole
FG_003RC	102	111	9	1-10	0	1-3	1-3	Amphibolite and gneiss
FG_003RC	120	124	4	0	1-10	0-3	0	In schist
FG_004RC	34	48	14	1-15	0-1	2-5	2-5	Amphibolite
FG_004RC	65	82	17	1-10	0	0-5	1-3	Amphibolite
RT_001RC								No amphibolite recorded
RT_002RC								Geological logging being completed
RT_003RC								Geological logging being completed
RT_004RC								Geological logging being completed

Notes:

1. Drillholes RT_002RC to RT_004RC still being assessed by geology team.
2. Ranges of minerals represent qualitative estimation during geological modelling.

Source: CCZ geology team

APPENDIX D: JORC CODE, 2012 EDITION – TABLE

Section 1: Sampling Techniques and Data

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.*	**Diamond Drilling (DDH)** Diamond drilling of HQ diameter (TT_005DD) was completed to 137m recently in the current program and was located 5m away from a RC hole already drilled (TT_003RC). **Reverse Circulation ('RC') Drilling** RC drilling at Fence Gossan 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 516m have been completed to the 10th October 2022, all at the Fence Gossan Prospect. One (1) hole to 120m has been completed at Reefs Tank and the others are in progress. 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	*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, 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	*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.*	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.
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.*	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 at all three areas holes were completed 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	*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.*	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 will be submitted for analysis, but duplicates have been taken at a frequency of 1:20 in samples collected. It is considered water planned to be used for core cutting is unprocessed and unlikely to have introduced sample contamination. 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.

<table>
<tr>
<td></td>
<td><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></td>
<td>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).</td>
</tr>
<tr>
<td><i>Quality of assay data and laboratory tests</i></td>
<td><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>

<i>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.</i>

<i>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.</i></td>
<td>The following rare earth elements were analysed using ME-MS61R

Sample Decomposition is by HF-HNO$_3$-HClO$_4$ acid digestion,

HCl leach (GEO-4A01). The Analytical Method for Silver is shown below:
<table>
<tr><th>Element</th><th>Symbol</th><th>Units</th><th>Lower Limit</th><th>Upper Limit</th></tr>
<tr><td>Silver</td><td>Ag</td><td>ppm</td><td>0.01</td><td>100</td></tr>
</table>
Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES) Inducti Mass Spectrometry (ICP-MS)

A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric, and hydroch topped up with dilute hydrochloric acid and analyzed by inductively coupled plasma ato spectrometry. Following this analysis, the results are reviewed for high concentrations c molybdenum, silver, and tungsten and diluted accordingly.

Samples meeting this criterion are then analyzed by inductively coupled plasma-mass s corrected for spectral interelement interferences.

Four acid digestions can dissolve most minerals: however, although

the term “near total” is used, depending on the sample matrix, not all elements are qua

Results for the additional rare earth elements will represent the acid leachable portion c and as such, cannot be used, for instance to do a chondrite plot.</td>
</tr>
</table>

Geochemical Procedure

Element geochemical procedure reporting units and limits are listed below:

Element	Symbol	Units	Lower Limit	Upper Limit
Molybdenum	Mo	ppm	0.05	10 000
Sodium	Na	%	0.01	10
Niobium	Nb	ppm	0.1	500
Nickel	Ni	ppm	0.2	10 000
Phosphorous	P	ppm	10	10 000
Lead	Pb	ppm	0.5	10 000
Rubidium	Rb	ppm	0.1	10 000
Rhenium	Re	ppm	0.002	50
Sulphur	S	%	0.01	10
Antimony	Sb	ppm	0.05	10 000
Scandium	Sc	ppm	0.1	10 000
Selenium	Se	ppm	1	1 000
Tin	Sn	ppm	0.2	500
Strontium	Sr	ppm	0.2	10 000
Tantalum	Ta	ppm	0.05	100
Tellurium	Te	ppm	0.05	500
Thorium	Th	ppm	0.2	10 000
Titanium	Ti	%	0.005	10
Thallium	Tl	ppm	0.02	10 000
Uranium	U	ppm	0.1	10 000
Vanadium	V	ppm	1	10 000
Tungsten	W	ppm	0.1	10 000

Element	Symbol	Units	Lower Limit	Upper Limit
Yttrium	Y	ppm	0.1	500
Zinc	Zn	ppm	2	10 000
Zirconium	Zr	ppm	0.5	500
Dysprosium	Dy	ppm	0.05	1 000
Erbium	Er	ppm	0.03	1 000
Europium	Eu	ppm	0.03	1 000
Gadolinium	Gd	ppm	0.05	1 000
Holmium	Ho	ppm	0.01	1 000
Lutetium	Lu	ppm	0.01	1 000
Neodymium	Nd	ppm	0.1	1 000
Praseodymium	Pr	ppm	0.03	1 000
Samarium	Sm	ppm	0.03	1 000
Terbium	Tb	ppm	0.01	1 000
Thulium	Tm	ppm	0.01	1 000
Ytterbium	Yb	ppm	0.03	1 000

Element	Symb	Units	Lower Limit	Upper Limit
Aluminum	Al	%	0.01	50
Arsenic	As	ppm	0.2	10 000
Barium	Ba	ppm	10	10 000
Beryllium	Be	ppm	0.05	1 000
Bismuth	Bi	ppm	0.01	10 000
Calcium	Ca	%	0.01	50
Cadmium	Cd	ppm	0.02	1 000
Cerium	Ce	ppm	0.01	500
Cobalt	Co	ppm	0.1	10 000
Chromium	Cr	ppm	1	10 000
Cesium	Cs	ppm	0.05	500
Copper	Cu	ppm	0.2	10 000
Iron	Fe	%	0.01	50
Gallium	Ga	ppm	0.05	10 000
Germanium	Ge	ppm	0.05	500
Hafnium	Hf	ppm	0.1	500
Indium	In	ppm	0.005	500
Potassium	K	%	0.01	10
Lanthanum	La	ppm	0.5	10 000
Lithium	Li	ppm	0.2	10 000
Magnesium	Mg	%	0.01	50

<table>
<tr><td></td><td></td><td>Laboratory inserted standards, blanks and duplicates were analysed per industry standard practice. There was no evidence of bias from these results.</td></tr>
<tr><td><i>Verification of sampling and assaying</i></td><td><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></td><td>None of the drillholes have been twinned, as they are historical holes.
Conversion of elemental analysis (REE parts per million) to stoichiometric oxide (REO parts per million) was undertaken by ROM geological staff using the below (Table D1-1) element to stoichiometric oxide conversion factors (https://www.jcu.edu.au/news/releases/2020/march/rare-earth-metals-an-untapped-resource)

Table D1-1: Element -Conversion Factor -Oxide Form
<table>
<tr><th>Ce</th><th>1.2284</th><th>CeO2</th></tr>
<tr><td>Dy</td><td>1.1477</td><td>Dy2O3</td></tr>
<tr><td>Er</td><td>1.1435</td><td>Er2O3</td></tr>
<tr><td>Eu</td><td>1.1579</td><td>Eu2O3</td></tr>
<tr><td>Gd</td><td>1.1526</td><td>Gd2O3</td></tr>
<tr><td>Ho</td><td>1.1455</td><td>Ho2O3</td></tr>
<tr><td>La</td><td>1.1728</td><td>La2O3</td></tr>
<tr><td>Lu</td><td>1.1371</td><td>Lu2O3</td></tr>
<tr><td>Nd</td><td>1.1664</td><td>Nd2O3</td></tr>
<tr><td>Pr</td><td>1.2083</td><td>Pr6O11</td></tr>
<tr><td>Sm</td><td>1.1596</td><td>Sm2O3</td></tr>
<tr><td>Tb</td><td>1.1762</td><td>Tb4O7</td></tr>
<tr><td>Tm</td><td>1.1421</td><td>Tm2O3</td></tr>
<tr><td>Y</td><td>1.2699</td><td>Y2O3</td></tr>
<tr><td>Yb</td><td>1.1387</td><td>Yb2O3</td></tr>
</table></td></tr>
</table>

		Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups: TREO (Total Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3. TREO-Ce = TREO – CeO2 LREO (Light Rare Earth Oxide) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 HREO (Heavy Rare Earth Oxide) = Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Y2O3 + Lu2O3 CREO (Critical Rare Earth Oxide) = Nd2O3 + Eu2O3 + Tb4O7 + Dy2O3 + Y2O3 MREO (Magnetic Rare Earth Oxide) = Pr6O11 + Nd2O3 + Sm2O3 + Gd2O3 + Tb4O7 + Dy2O3. **Total Rare Earth Oxides (TREO):** To calculate TREO an oxide conversion “factor” is applied to each rare-earth element assay. The “factor” equates an elemental assay to an oxide concentration for each element. Below is an example of the factor calculation for Lanthanum (La): ○ Relative Atomic Mass (La) = 138.9055 ○ Relative Atomic Mass (O) = 15.9994 ○ Oxide Formula = La_2O_3 ○ Oxide Conversion Factor = 1/ ((2x 138.9055)/(2x 138.9055 + 3x 15.9994)) Oxide Conversion Factor = 1.173 (3dp) 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.*	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)

<table>
<tr><td></td><td>Quality and adequacy of topographic control.</td><td>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.</td></tr>
<tr><td>Data spacing and distribution</td><td>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.</td><td>The average sample spacing from the current drilling program across the tenure varies per prospect, and sample type, as listed in Table D1-2, below:

Table D1-2: EL 8434 Drillhole Spacing

<table>
<tr><th>Prospect</th><th>Drillholes Completed</th><th>RMS Drillhole Spacing (m)</th></tr>
<tr><td>The Sisters</td><td>Not yet</td><td></td></tr>
<tr><td>Iron Blow</td><td>Not Yet</td><td></td></tr>
<tr><td>Tors Tank</td><td>4</td><td>127</td></tr>
<tr><td>Fence Gossan</td><td>4</td><td>208</td></tr>
<tr><td>Ziggy’s Hill</td><td>n/a</td><td>n/a</td></tr>
<tr><td>Reefs Tank</td><td>1</td><td></td></tr>
</table>

The Datamine software allows creation of fixed length samples from the original database given a set of stringent rules.</td></tr>
<tr><td>Orientation of data in relation to geological structure</td><td>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.</td><td>Historical drill holes at the BHAE 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 D1-3 and D1-4).

Drilling orientations are adjusted along strike to accommodate folded geological sequences. All Fence Gossan 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.</td></tr>
</table>

Sample security	*The measures taken to ensure sample security.*	Sample security procedures are considered 'industry standard' for the current period. Samples obtained during drilling completed between 4/10/22 to the 10/10/22 were transported by exploration employees or an independent courier directly from Broken Hill to ALS Laboratory, Adelaide. The Company considers that risks associated with sample security are limited given the nature of the targeted mineralisation.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No external audits or reviews have yet been undertaken.

Drilling Summary

The final drilling details for Reefs Tank and the other prospects are shown in Figures D1-1 to D1-3. Figure D1-4 sows the downhole distribution for Cobalt and cerium at Tors Tank. All four RC holes intersected targeted zones of cobalt mineralisation at the Tors Tank and to a lesser degree at the Fence Gossan and Reefs Tank prospects. Cobalt mineralisation was evidenced across sequences comprising clay, amphibolite, schist, and gneiss, with assay closely correlating with previously published qualitative logging and field XRF observations. An HQ fully cored hole (TT_005DD; see main text Figures) was completed to 137.7m next to TT_003RC that returned an 11m cobalt horizon from 8-19m. Castillo Copper expect to receive the final assay results from this cored hole and the Reefs Tank suite within the coming weeks.

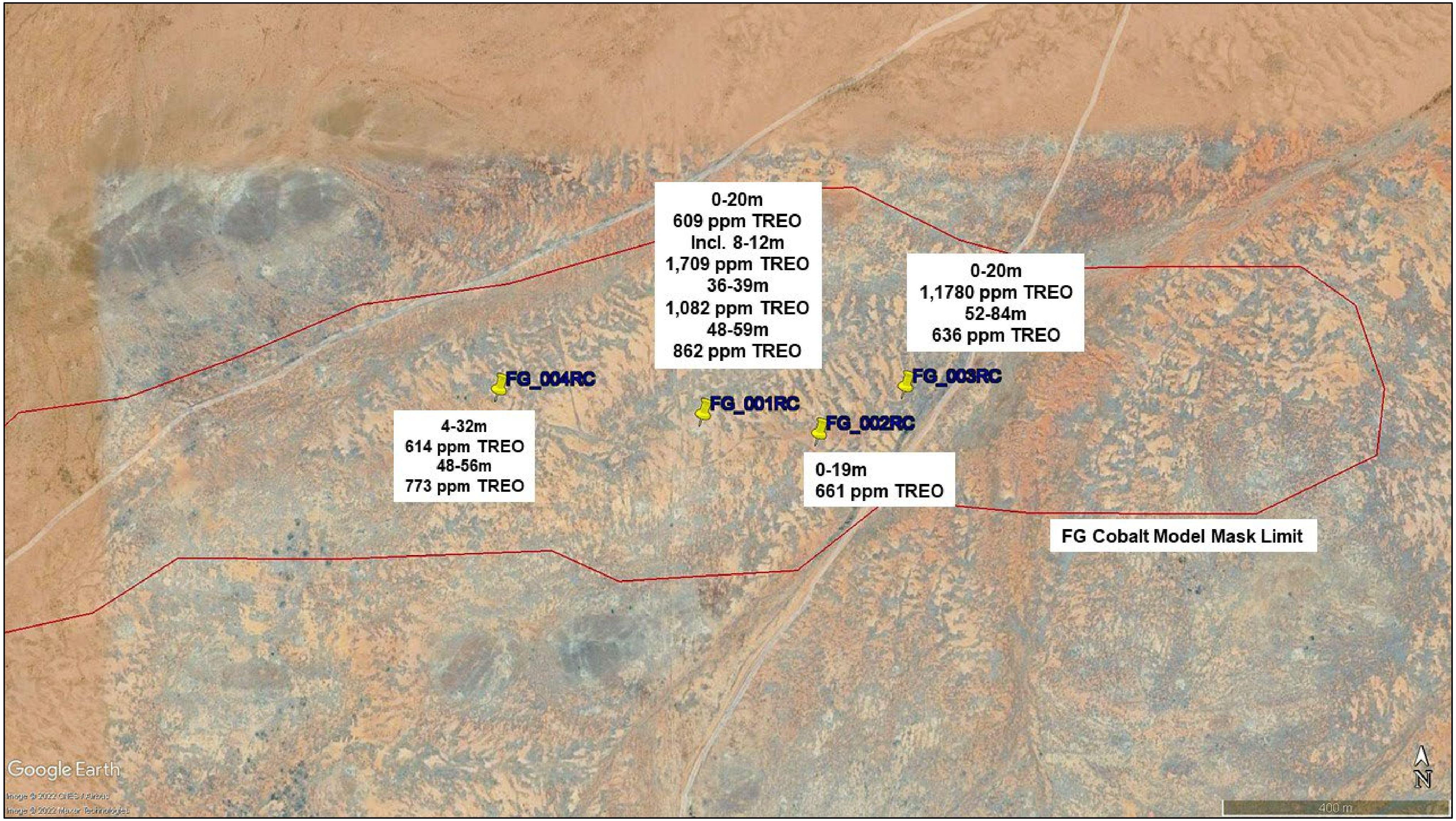
Metallurgical Testing

Planning is now underway for a high level initial metallurgical extraction pilot program, based on approximately 60kg of material, consisting of:

- Construct a testwork composite (0-20m whole received mass)
- Confirm P100 3.35mm crush size, split into 1kg charges
- Head assay (Ce, La, Pr, Nd, Y, SiO_2)
- Grind establishment for fine grind size (assumed P80 53µm)
- A few rougher floats to trial FA2 reagent (w / wo sodium silicate) at elevated temperature
- Assume 6 cons and 1 tail per float, assayed for Ce, La, Pr, Nd, Y, SiO_2

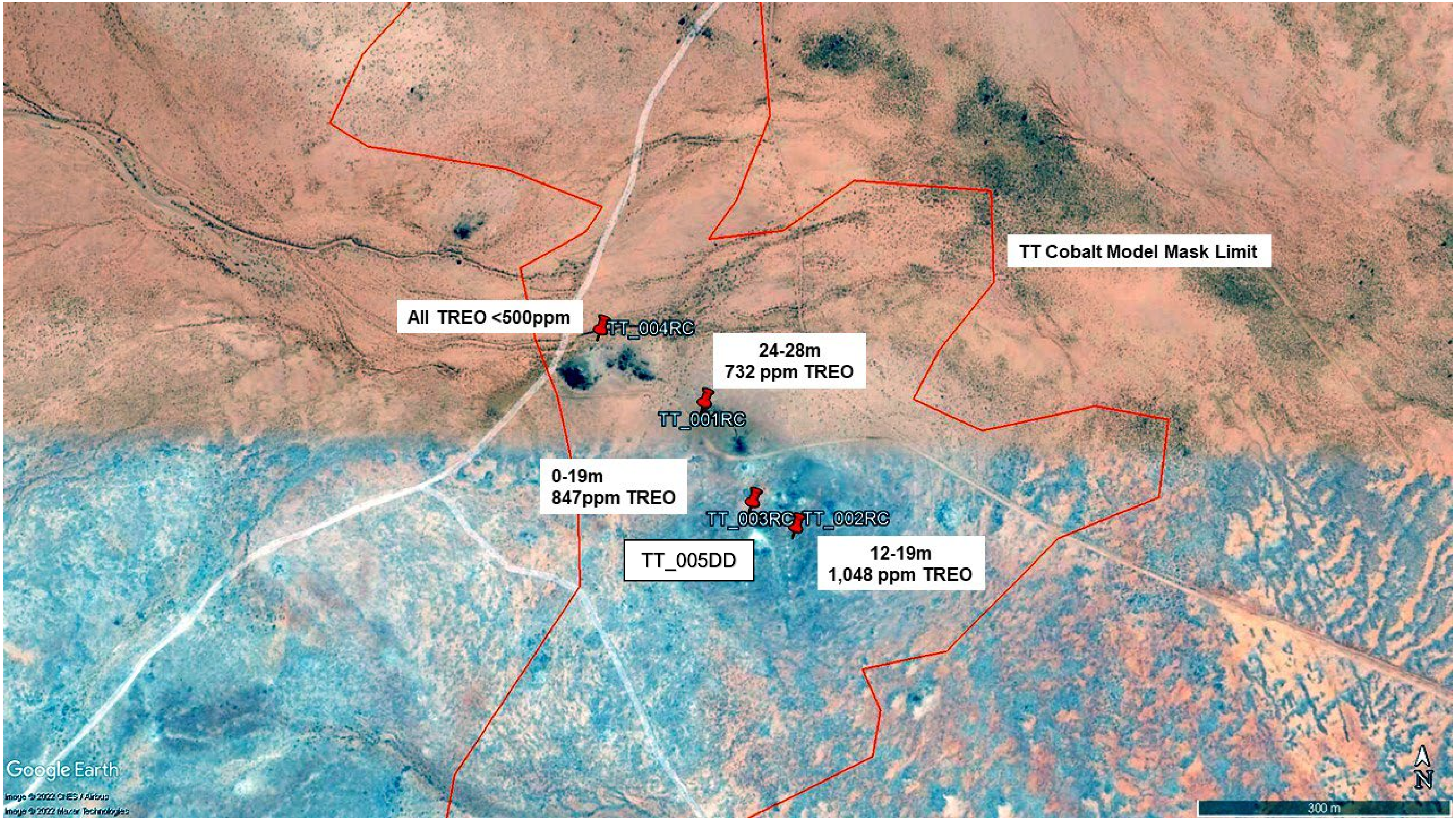
This will give an initial assessment. Given the complicated nature of rare earth element flotation further work would require a specialist consultant to direct the testwork program.

FIGURE D1-1: FENCE GOSSAN DRILLHOLE LOCATION AND TREO RESULTS NOVEMBER 2022



Source: CCZ geology team

FIGURE D1-2: TORS TANK DRILLHOLE LOCATION AND TREO RESULTS NOVEMBER 2022

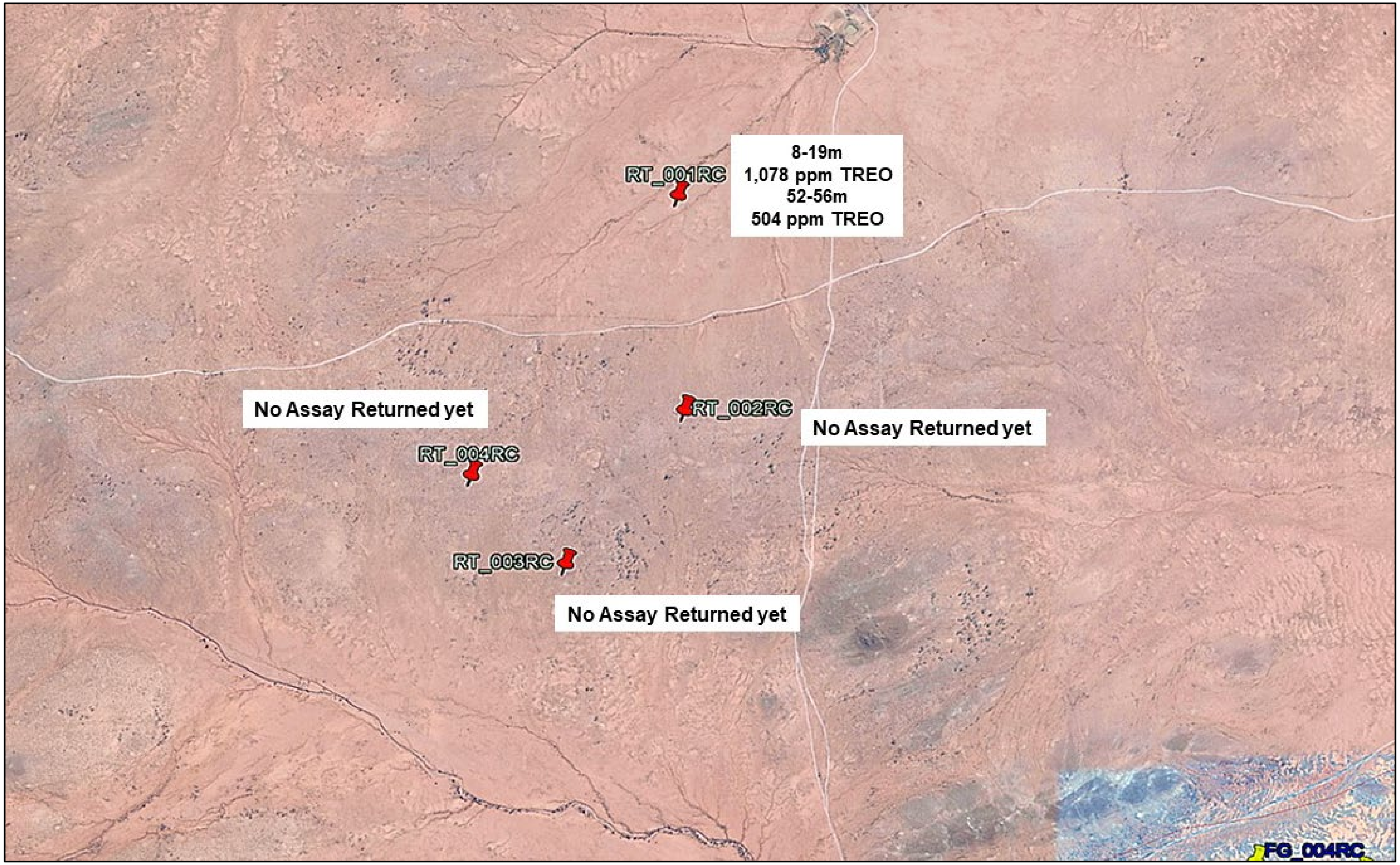


Notes:

1. Current 2022 drillholes shown and deposit block model mask, All holes orientated south at -60 degrees from horizontal.

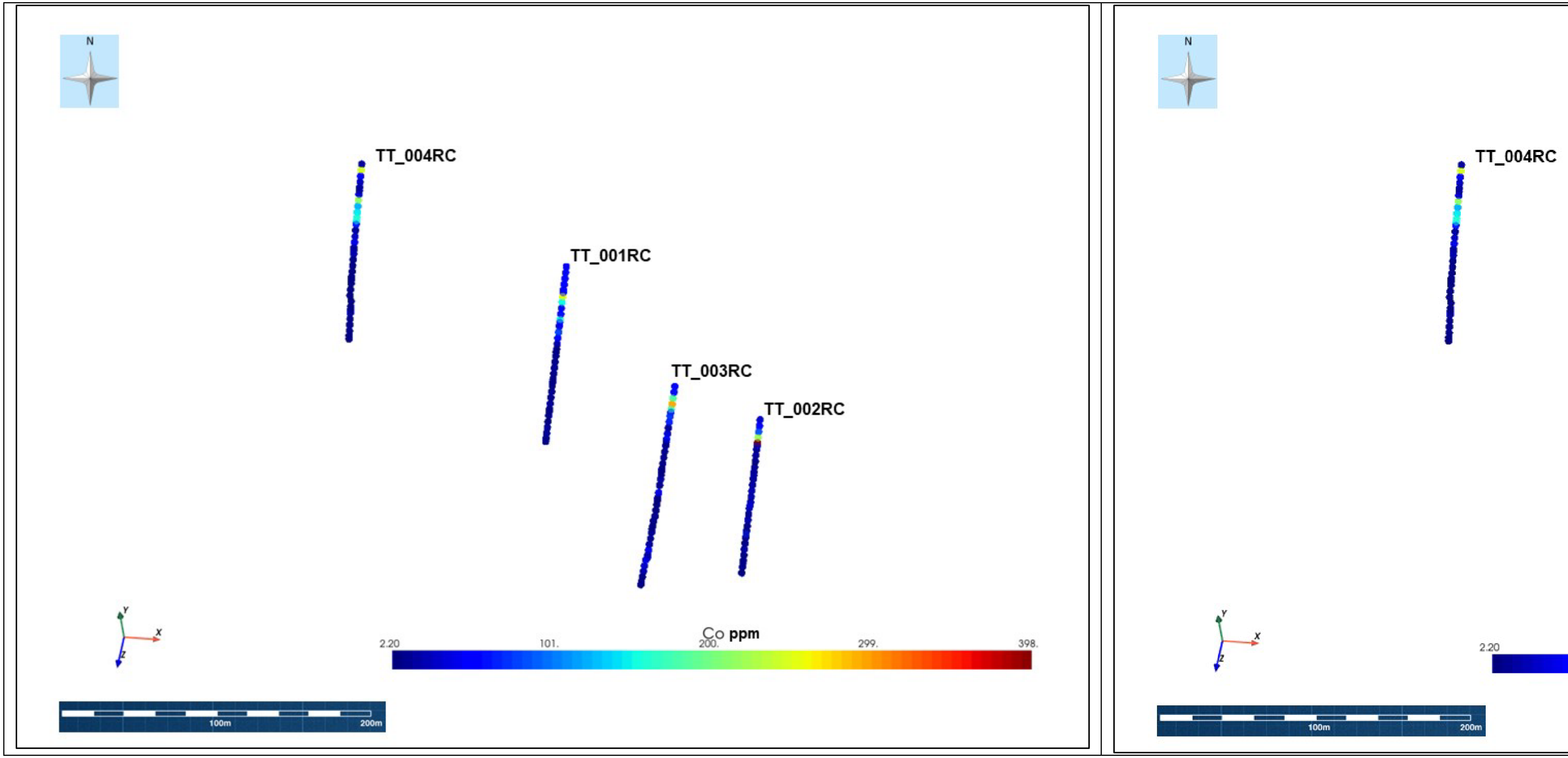
Source: CCZ geology team

FIGURE D1-3: REEFS TANK DRILLHOLE LOCATION AND TREO RESULTS NOVEMBER 2022



Source: CCZ geology team

FIGURE D1-4 TORS TANK DOWNHOLE PLOTS FOR TRACE ELEMENTS COBALT AND CERIUM (ppm)



Source: CCZ geology team

TABLE D1-5: RARE EARTH ELEMENT RETURNED ASSAY (ALS METHOD ME-MS61R)

HOLEID	XRF_SAMPLE / SAMPID	FROM	TO		Ag (ppm)	Th (ppm)	U (ppm)	Ce (ppm)	La (ppm)	Y (ppm)	Dy (ppm)	Er (ppm)	Eu (ppm)	Gd (ppm)	Ho (ppm)	Lu (ppm)	Nd (ppm)	Pr (ppm)	Sm (ppm)	Tb (ppm)	Tm (ppm)	Yb (ppm)	TREO (ppm)	TREO-Ce (ppm)	LREO (ppm)	HREO (ppm)	CREO %	MREO %
TT_001RC	CCZ03772 - CCZ03775	24.00	28.00		0.14	7.2	10.2	166.50	105.00	132.00	19.00	11.40	3.89	17.50	4.01	1.50	87.00	21.60	15.70	2.95	1.55	9.54						
TT_001RC				Avge. Element	0.14	7.2	10.2	166.50	105.00	132.00	19.00	11.40	3.89	17.50	4.01	1.50	87.00	21.60	15.70	2.95	1.55	9.54						
TT_001RC				Avge.Oxide			204.53	123.14	167.63	21.81	13.04	4.50	20.17	4.59	1.71	101.48	26.10	25.06	3.47	1.77	10.86		729.85	525.32	480.31	249.55	41.0%	27.1%
TT_001RC	CCZ03787	39.00	40.00		0.05	19.2	1.7	271.00	132.50	13.70	3.13	1.22	1.79	6.17	0.51	0.20	102.50	28.30	11.95	0.66	0.16	1.06						
TT_001RC	CCZ03788 - CCZ03791	40.00	44.00		0.04	14.0	2.3	188.00	101.50	16.00	3.54	1.61	1.90	6.33	0.60	0.27	78.80	21.50	10.20	0.73	0.23	1.51						
TT_001RC	CCZ03792 - CCZ03795	44.00	48.00		0.07	9.3	3.1	150.00	97.20	17.80	3.44	1.56	1.14	4.94	0.59	0.23	49.80	16.15	6.88	0.64	0.22	1.38						
TT_001RC	CCZ03796 - CCZ03799	48.00	52.00		0.07	26.7	3.0	182.00	95.50	25.80	5.11	2.33	1.40	6.12	0.95	0.29	60.80	18.85	8.83	0.90	0.34	2.03						
TT_001RC				Avge. Element	0.06	17.3	2.5	197.75	106.68	18.33	3.81	1.68	1.56	5.89	0.66	0.25	72.98	21.20	9.47	0.73	0.24	1.50						
TT_001RC				Avge.Oxide			242.92	125.11	23.27	4.37	1.92	1.80	6.79	0.76	0.28	85.12	25.62	10.98	0.86	0.27	1.70		531.76	288.84	489.73	42.03	21.7%	25.1%
TT_002RC	CCZ03886 - CCZ03889	12.00	16.00		0.32	1.0	7.0	426.00	128.00	94.20	20.80	9.41	6.27	23.50	3.78	1.09	133.50	32.10	26.70	3.67	1.29	7.78						
TT_002RC	CCZ03890 - CCZ03892	16.00	19.00		0.69	1.0	6.8	234.00	105.50	137.50	30.10	14.55	7.67	33.80	5.53	1.65	145.00	31.20	30.50	5.14	1.96	12.20						
TT_002RC																												
TT_002RC				Avge. Element	0.51	1.0	6.9	330.00	116.75	115.85	25.45	11.98	6.97	28.65	4.66	1.37	139.25	31.65	28.60	4.41	1.63	9.99						
TT_002RC				Avge.Oxide			405.37	136.92	147.12	29.21	13.70	8.07	33.02	5.33	1.56	162.42	38.24	45.65	5.18	1.86	11.38		1045.03	639.66	788.61	256.42	33.7%	30.0%
TT_003RC	CCZ04252 - CCZ04255	0	4		0.04	6.1	7.3	150.50	52.80	34.00	7.53	3.62	2.54	9.58	1.37	0.49	57.60	14.95	10.25	1.38	0.55	3.47						
TT_003RC	CCZ04256 - CCZ04259	4.00	8.00		0.21	1.6	6.5	212.00	82.50	62.90	16.60	6.11	6.71	27.60	2.63	0.66	157.00	40.70	28.30	3.33	0.83	4.94						
TT_003RC	CCZ04260 - CCZ04263	8.00	12.00		0.19	0.8	14.2	236.00	98.70	90.40	16.95	8.21	5.59	22.90	3.18	1.09	110.00	27.00	22.00	3.04	1.19	7.36						
TT_003RC	CCZ04264 - CCZ04267	12.00	16.00		0.07	1.4	12.2	242.00	132.00	290.00	51.40	30.50	9.28	50.90	11.30	3.81	148.00	33.80	32.20	8.12	4.06	24.90						
TT_003RC	CCZ04268 - CCZ04270	16.00	19.00		0.09	0.6	12.5	66.70	76.70	366.00	45.40	32.90	5.02	35.50	11.05	4.18	59.40	12.05	13.80	6.07	4.32	26.90						
TT_003RC																												
TT_003RC				Avge. Element	0.12	2.09	10.54	181.44	88.54	168.66	27.58	16.27	5.83	29.30	5.91	2.05	106.40	25.70	21.31	4.39	2.19	13.51						
TT_003RC				Avge.Oxide			222.88	103.84	214.18	31.65	18.60	6.75	33.77	6.77	2.33	124.10	31.05	24.71	5.16	2.50	15.39		843.68	620.80	506.59	337.09	45.3%	29.7%
TT_003RC	CCZ04351	99.00	100.00		0.01	26.9	1.8	137.50	70.20	14.50	3.58	1.26	1.53	6.15	0.57	0.15	58.50	16.40	8.80	0.78	0.17	0.96						
TT_003RC	CCZ04352 - CCZ04355	100.00	104.00		0.01	27.4	2.7	158.50	85.00	16.00	3.73	1.30	1.73	6.69	0.59	0.14	66.10	18.75	9.89	0.83	0.16	0.93						
TT_003RC																												
TT_003RC				Avge. Element	0.01	27.2	2.3	148.00	77.60	15.25	3.66	1.28	1.63	6.42	0.58	0.15	62.30	17.58	9.35	0.81	0.17	0.95						
TT_003RC				Avge.Oxide			181.80	91.01	19.37	4.19	1.46	1.89	7.40	0.66	0.16	72.67	21.24	10.84	0.95	0.19	1.08		414.90	233.10	377.55	37.35	23.9%	28.3%
TT_004RC	CCZ04019	19.00	20.00		0.02	23.6	0.7	127.50	49.80	25.80	4.59	2.24	1.14	5.44	0.88	0.25	35.00	10.50	6.48	0.84	0.32	1.72						
TT_004RC	CCZ04020 - CCZ04023	20.00	24.00		0.04	15.6	1.6	107.00	50.40	29.70	5.83	3.07	1.66	6.79	1.12	0.37	39.30	11.30	7.57	1.07	0.43	2.65						
TT_004RC																												
TT_004RC				Avge. Element	0.03	19.6	1.2	117.25	50.10	27.75	5.21	2.66	1.40	6.12	1.00	0.31	37.15	10.90	7.03	0.96	0.38	2.19						
TT_004RC				Avge.Oxide			144.03	58.76	35.24	5.98	3.04	1.62	7.05	1.15	0.35	43.33	13.17	11.21	1.12	0.43	2.49		328.96	184.93	270.50	58.46	26.5%	24.9%
TT_004RC	CCZ04056 - CCZ04058	56.00	59.00		0.70	21.2	1.6	126.00	63.40	22.40	4.43	1.93	1.68	6.61	0.77	0.25	48.10	14.05	8.27	0.90	0.26	1.68						
TT_004RC																												
TT_004RC				Avge. Element	0.70	21.2	1.6	126.00	63.40	22.40	4.43	1.93	1.68	6.61	0.77	0.25	48.10	14.05	8.27	0.90	0.26	1.68						
TT_004RC				Avge.Oxide			154.78	74.36	28.45	5.08	2.21	1.95	7.62	0.88	0.28	56.10	16.98	9.59	1.06	0.30	1.91		361.54	206.76	311.80	49.74	25.6%	26.7%

Source: CCZ geology team

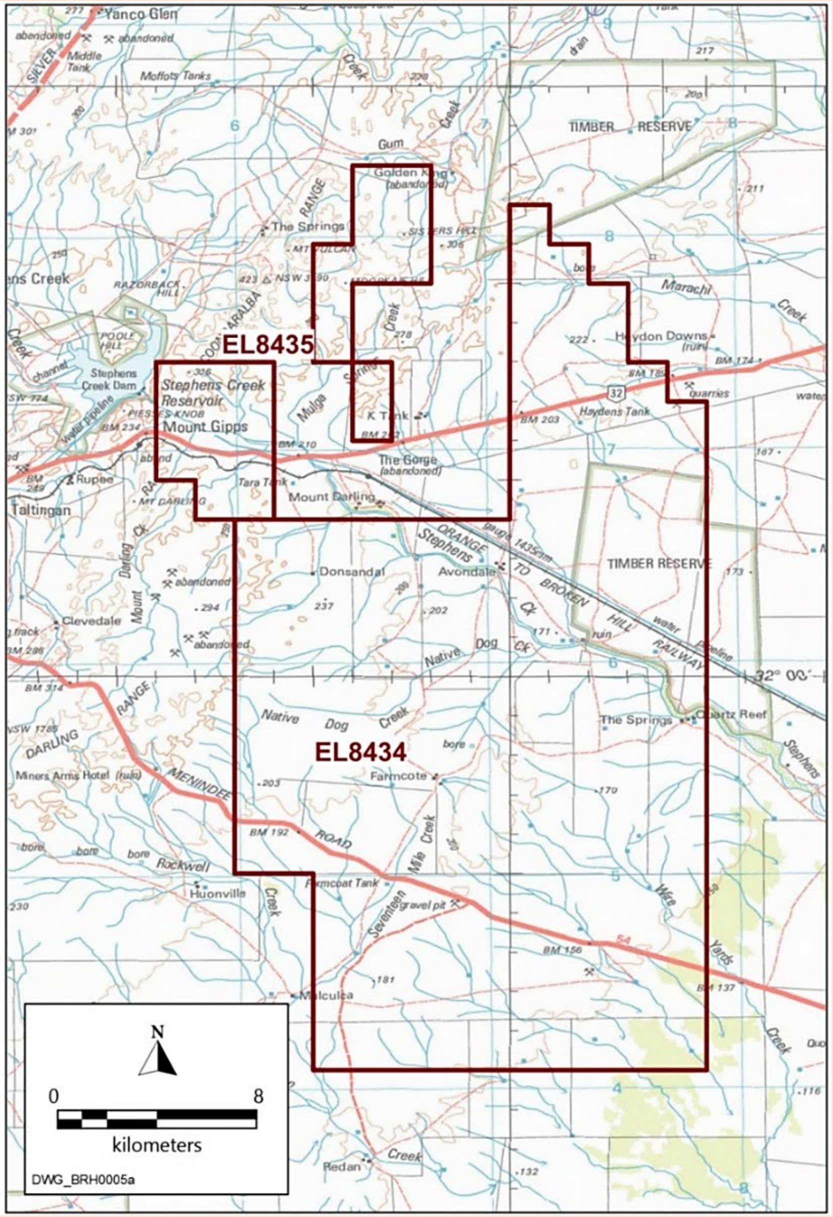
HOLEID	XRF_SAMPLE / SAMPID	FROM	TO		Ag (ppm)	Th (ppm)	U (ppm)	Ce (ppm)	La (ppm)	Y (ppm)	Dy (ppm)	Er (ppm)	Eu (ppm)	Gd (ppm)	Ho (ppm)	Lu (ppm)	Nd (ppm)	Pr (ppm)	Sm (ppm)	Tb (ppm)	Tm (ppm)	Yb (ppm)	TREO (ppm)	TREO-Ce (ppm)	LREO (ppm)	HREO (ppm)	CREO %	MREO %
FG_002RC	CCZ03982 - CCZ03985	0.00	4.00		0.02	10.15	9.9	156.50	83.80	18.70	4.11	1.81	1.53	5.99	0.70	0.21	62.00	18.25	9.36	0.81	0.25	1.55						
FG_002RC	CCZ03986 - CCZ03989	4.00	8.00		0.01	17.35	6.8	234.00	121.50	28.10	6.12	2.93	1.93	8.67	1.13	0.36	88.50	26.20	12.45	1.27	0.40	2.58						
FG_002RC	CCZ04404 - CCZ04407	8.00	12.00		0.02	16.45	8.5	221.00	114.50	28.70	6.55	3.16	2.12	9.75	1.18	0.38	91.70	25.80	13.20	1.35	0.44	2.86						
FG_002RC	CCZ04408 - CCZ04411	12.00	16.00		0.01	10.45	17.6	347.00	198.00	58.30	12.65	5.47	4.22	18.65	2.12	0.58	150.00	41.00	23.80	2.47	0.69	4.08						
FG_002RC	CCZ04412 - CCZ04414	16.00	19.00		0.03	19	5.4	155.50	92.20	46.30	8.01	4.07	1.94	10.75	1.57	0.45	71.50	18.95	12.20	1.52	0.53	3.24						
FG_002RC				Avge. Element	**0.02**	**14.7**	**9.6**	222.80	122.00	36.02	7.49	3.49	2.35	10.76	1.34	0.40	92.74	26.04	14.20	1.48	0.46	2.86						
FG_002RC				Avge.Oxide			273.69	143.08	45.74	8.59	3.99	2.72	12.40	1.53	0.45	108.17	31.46	22.67	1.75	0.53	3.26		660.04	386.35	579.07	80.96		
FG_003RC	CCZ04511 - CCZ04514	0.00	4.00		0.02	16.5	11.1	550.00	297.00	44.70	13.55	4.49	6.67	23.70	2.06	0.47	263.00	72.60	40.40	2.90	0.62	3.54						
FG_003RC	CCZ04515 - CCZ04518	4.00	8.00		0.02	19.3	9.1	452.00	268.00	34.70	12.00	3.76	5.50	21.50	1.80	0.39	209.00	57.70	32.30	2.55	0.52	3.03						
FG_003RC	CCZ04519 - CCZ04522	8.00	12.00		0.02	18.8	9.9	355.00	214.00	31.40	8.84	3.50	3.65	13.85	1.44	0.48	153.50	42.10	22.20	1.77	0.52	3.46						
FG_003RC	CCZ04523 - CCZ04526	12.00	16.00		0.02	21.4	15.3	465.00	298.00	59.90	15.75	6.59	5.80	24.80	2.78	0.79	212.00	56.10	33.70	3.23	0.93	5.72						
FG_003RC	CCZ04527 - CCZ04529	16.00	19.00		0.04	9.5	42.8	690.00	448.00	109.50	29.70	11.55	9.76	43.80	4.91	1.32	306.00	83.20	49.00	5.93	1.68	9.70						
FG_003RC	CCZ04530	19.00	20.00		0.11	1.9	47.6	647.00	510.00	510.00	99.90	65.40	17.10	101.00	22.90	9.02	388.00	95.20	74.30	15.65	9.77	58.70						
FG_003RC				Avge. Element	0.04	14.5	22.6	526.50	339.17	131.70	29.96	15.88	8.08	38.11	5.98	2.08	255.25	67.82	41.98	5.34	2.34	14.03						
FG_003RC				Avge.Oxide				646.75	397.77	167.25	34.38	18.16	9.36	43.92	6.85	2.36	297.72	81.94	48.53	6.28	2.67	15.97	1779.93	1133.18	1472.73	307.20		28.9%
FG_003RC	CCZ04563 - CCZ04566	52.00	56.00		0.17	2.1	40.6	168.00	91.50	63.10	10.05	5.95	2.68	11.90	2.06	0.88	76.70	21.20	12.40	1.72	0.92	5.75						
FG_003RC	CCZ04567 - CCZ04569	56.00	59.00		0.05	4.0	35.3	271.00	171.00	68.20	12.05	5.68	3.27	15.40	2.22	0.74	114.50	32.60	18.20	2.05	0.81	4.81						
FG_003RC	CCZ04570	59.00	60.00		0.04	8.7	25.1	213.00	165.50	90.60	13.05	7.99	2.82	13.95	2.77	1.17	100.50	29.30	15.25	2.11	1.21	7.48						
FG_003RC	CCZ04571 - CCZ04574	60.00	64.00		0.06	9.2	18.7	236.00	165.00	62.60	10.75	5.44	3.11	14.30	2.13	0.70	105.00	30.30	16.25	2.03	0.78	4.71						
FG_003RC	CCZ04575 - CCZ04578	64.00	68.00		0.07	12.7	12.8	218.00	102.50	38.80	6.56	3.49	1.79	8.18	1.30	0.47	68.60	20.50	11.00	1.19	0.53	3.20						
FG_003RC	CCZ04579 - CCZ04582	68.00	72.00		0.03	7.1	10.0	385.00	169.50	42.80	9.65	4.18	3.47	13.30	1.65	0.50	120.00	33.80	19.15	1.82	0.61	3.68						
FG_003RC	CCZ04583 - CCZ04586	72.00	76.00		0.01	15.1	4.3	115.00	60.20	27.20	4.64	2.58	1.49	5.80	0.90	0.36	46.90	13.60	7.88	0.82	0.40	2.52						
FG_003RC	CCZ04587 - CCZ04589	76.00	79.00		0.01	22.1	3.1	152.50	73.50	16.20	3.13	1.38	1.27	5.64	0.54	0.18	55.90	16.25	8.72	0.67	0.20	1.23						
FG_003RC	CCZ04590	79.00	80.00		0.01	23.9	1.8	134.50	68.40	13.90	3.21	1.10	1.69	5.87	0.49	0.13	55.90	15.35	9.03	0.68	0.15	0.85						
FG_003RC	CCZ04591 - CCZ04594	80.00	84.00		0.01	20.3	2.0	122.00	61.00	15.60	3.54	1.30	1.72	6.30	0.57	0.16	54.10	15.10	8.87	0.73	0.17	1.02						
FG_003RC				Avge. Element	0.05	12.5	15.4	210.33	118.57	47.04	8.12	4.20	2.40	10.48	1.56	0.57	82.67	23.66	13.10	1.45	0.62	3.80						
FG_003RC				Avge.Oxide				258.37	139.05	59.74	9.32	4.80	2.78	12.08	1.79	0.65	96.42	28.58	15.14	1.71	0.71	4.33	635.49	377.12	537.57	97.91		26.7%
FG_004RC	CCZ04683 - CCZ04686	4.00	8.00		0.01	20.8	3.9	164.00	81.20	11.80	3.23	1.18	1.57	6.17	0.50	0.13	62.20	19.10	9.60	0.74	0.15	0.89						
FG_004RC	CCZ04687 - CCZ04690	8.00	12.00		0.01	17.1	7.2	407.00	181.50	24.70	9.13	2.92	4.50	16.80	1.32	0.30	183.50	49.90	29.20	2.12	0.36	2.18						
FG_004RC	CCZ04691 - CCZ04694	12.00	16.00		0.01	17.9	7.0	149.00	74.40	32.60	6.98	3.24	2.33	9.90	1.25	0.42	71.70	19.25	12.45	1.36	0.44	2.84						
FG_004RC	CCZ04695 - CCZ04697	16.00	19.00		0.01	20.5	5.5	152.00	78.30	21.30	5.01	1.94	1.87	8.29	0.83	0.24	63.00	17.80	10.20	1.08	0.26	1.61						
FG_004RC	CCZ04698	19.00	20.00		0.01	17.2	6.3	137.00	70.40	27.50	5.67	2.57	1.82	8.15	1.03	0.32	58.70	17.10	9.62	1.10	0.36	2.18						
FG_004RC	CCZ04699 - CCZ04702	20.00	24.00		0.01	16.7	6.9	160.50	80.70	43.70	7.85	4.13	2.08	10.15	1.52	0.45	71.00	19.70	12.05	1.43	0.53	3.19						

Source: CCZ geology team

SECTION 2: REPORTING OF EXPLORATION RESULTS

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.*	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 (Figures D2-1 and D2-2 in Appendix A &B, above). 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. 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 580km^2. 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 68km^2. 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 D2-1).

Figure D2-1: 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 relatable 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.

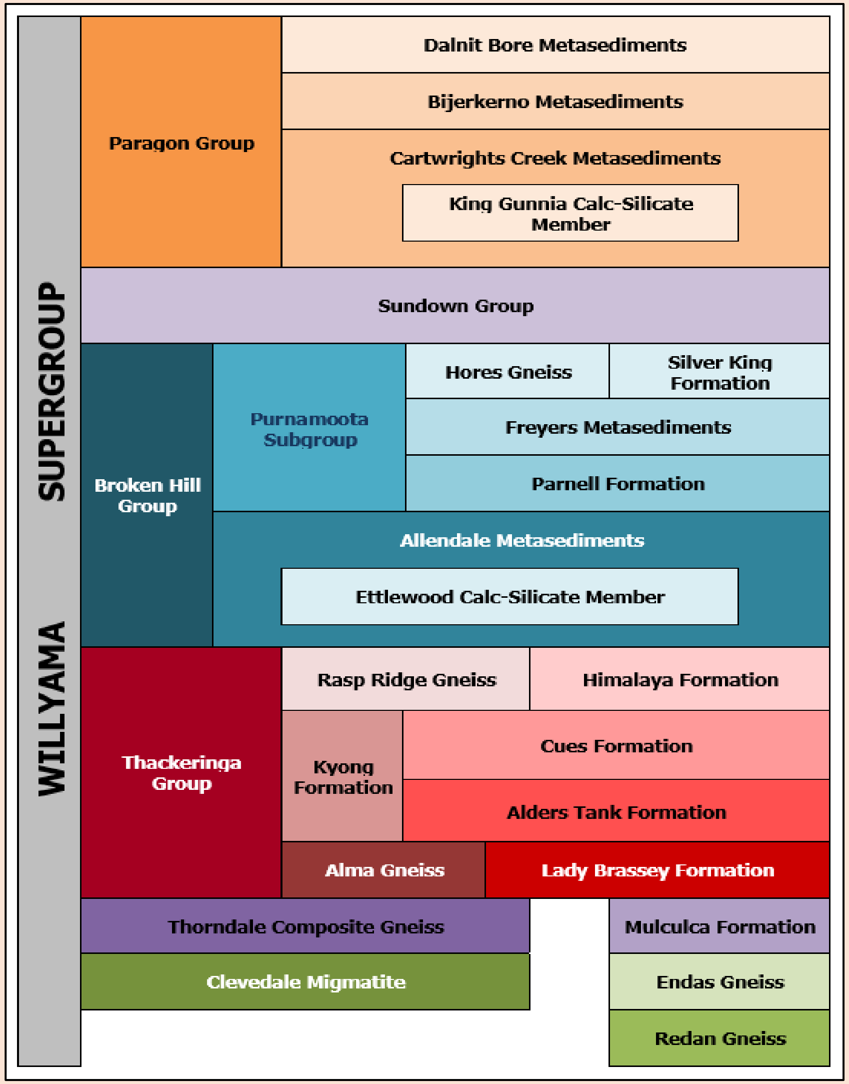
Soil and Chip sampling

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.

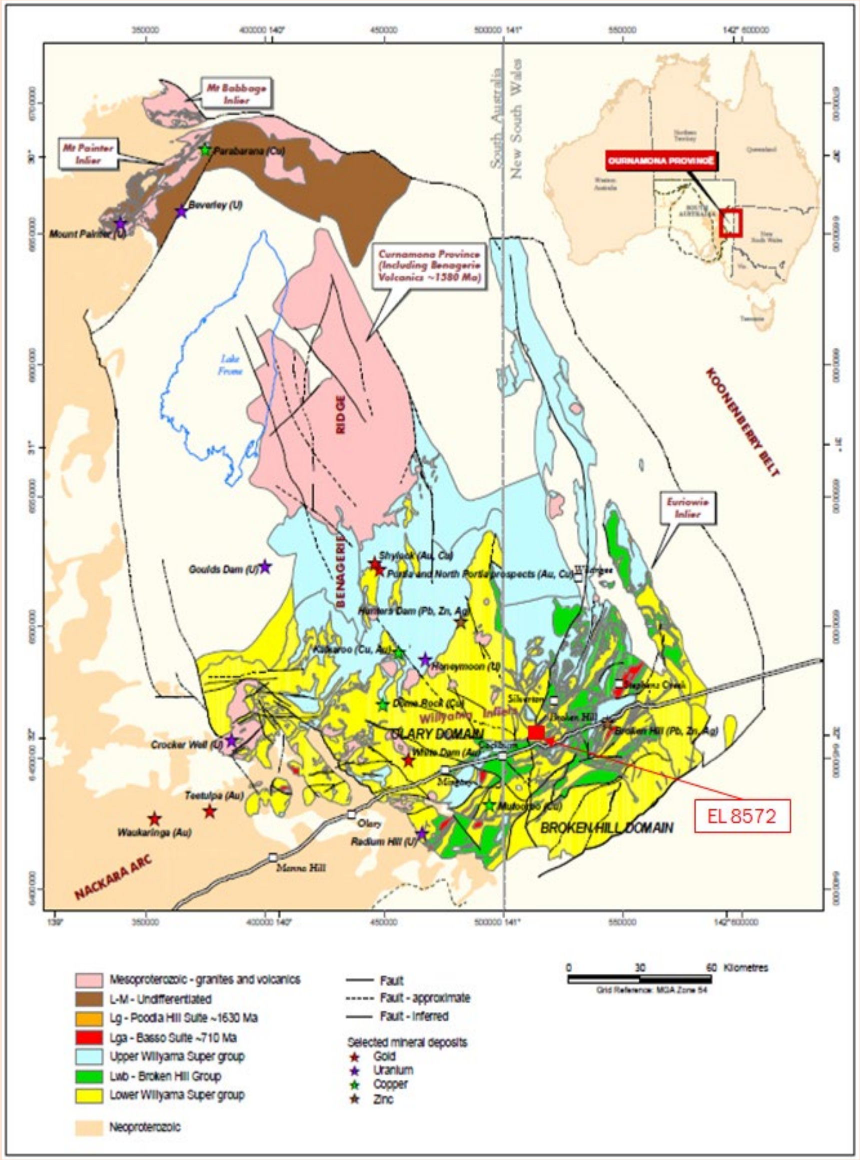
		Each site was annotated with a "Regolith Regime" such that samples from a depositional environment could be distinguished from those on exposed Proterozoic bedrock, which were classified as an erosional environment. The Regolith Regime groups were used for statistical analysis and levelling of the results. The levelled data reveals strong relative anomalies in zinc at VTEM anomaly clusters 10, 12 and 14 plus strong anomalous copper at VTEM 17.
Geology	*Deposit type, geological setting, and style of mineralisation.*	**Regional Geology** The Broken Hill polymetallic deposits are located within Curnamona Province (Willyama Super group) (Figure D2-2) 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). 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 D2-3). 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.

Figure D2-2: Regional Stratigraphy



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

Figure D2-3: 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 volcaniclastic

		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 D2-4) 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 Rantyga 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 Rantyga 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 quartzo-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 Thackeringa Group and the Broken Hill Group. This unit is aged between 1680 to 1707Ma.

Torrowangee Group

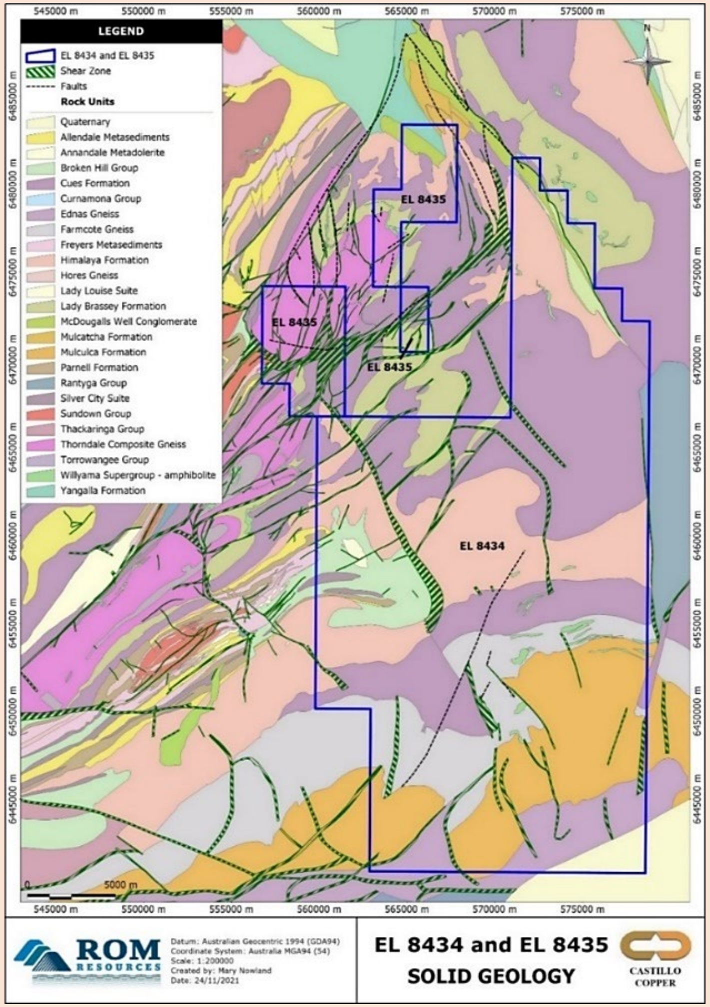
Mulcatcha Formation comprises flaggy, quartzose sandstone with lenticular boulder and arkosic sandstone beds. Yangalla Formation contains boulder beds, lenticular interbedded siltstone, and sandstone. It overlies the Mulcatcha Formation (Geoscience Australia, 2020).

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 D2-4).

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 D2-4: 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* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *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.*	Header information about all drillholes completed at Tors Tank and Fence Gossan have been tabulated in previous ASX releases.
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 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 Geo software in creating fixed length samples.
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.*	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.

	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').	As the strata is tightly folded, the intersected cobalt-rich layers are overstated in terms of apparent thickness, however the modelling 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. In general, most of the cobalt-rich layers have a north-northwest to north strike.
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 released on the ASX (Castillo Copper 2022d, 2022e and 2022f). All historical surface sampling has had their coordinates converted to MGA94, Zone 54.
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 to avoid misleading reporting of Exploration Results.*	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	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Historical explorers have also conducted airborne and ground gravity, magnetic, EM, and 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 cobalt and REE prospects.
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.*	It is recommended that: • The remaining 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 at Fence Gossan. Mapping of pegmatite outcrops is a high priority. • Complete the comprehensive drilling campaign that will comprise RC drilling and specifically target coring the known cobalt and REE

		mineralisation downdip to at least 100m depth at the Iron Blow prospects. The current drilling program is also designed to increase the resource confidence and has its ESF4 applications approved by the NSW Resource Regulator.

References

Biggs, M. S., 2021a, Broken Hill Alliance, NSW Tenure Package Background Geological Information, unpublished report to BH Alliance Pty Ltd, Sep 21, 30pp.

Biggs, M. S., 2021b, EL 8434 and EL 8435, Brief Review of Surface Sample Anomalies Lithium, Rare Earth Elements and Cobalt, unpublished report to BH Alliance Pty Ltd, Nov 21, 18pp.

Biggs, M.S., 2022a, BHA Cobalt Modelling and Mineral Resource Estimate Update, unpublished memo for Castillo Copper by ROM Resources.

Biggs, M.S., 2022b, Broken Hill BHA Tenures Update, Castillo Copper, unpublished memo prepared by ROM Resources, Mar 22, 5pp

Burkett R.D., 1975, Progress Report on Exploration Licenses 780, 781, 782 and 783, Broken Hill Area, NSW for the six months to 23rd November 1975, North Broken Hill Limited for the NSW Geological Survey, (GS1975-328)

Castillo Copper Limited, 2022a, ASX Release Battery metal drill-hole assays unlock BHA East Zone potential / lithium update, 5th January 2022.

Castillo Copper Limited, 2022b, ASX Release Strategic focus to develop significant cobalt mineralisation potential at BHA Project, 9th February 2022.

Castillo Copper Limited, 2022c, ASX Release High grade platinum confirmed at BHA Project, 9th March 2022.

Castillo Copper Limited, 2022d ASX Release Diamond core tests demonstrate high-grade cobalt-zinc potential at Broken Hill, 21 March 2022

Castillo Copper Limited, 2022e ASX Release, Drilling hits targeted cobalt zones & wide pegmatite intercepts at Broken Hill 12 October 2022

Castillo Copper Limited, 2022f ASX Release, Drilling hits more wide pegmatite intercepts at Broken Hill 24 October 2022

Gilfillan J.F., 1971, Report on Exploration by Falconbridge (Australia) Pty Ltd on ATP 3091 Broken Hill Area NSW under option from Minerals Recovery (Australia) N.L., Falconbridge (Australia) Pty Limited, Jan 1971, 93pp

Lees, T.C., 1978, Progress Report on Farmcote Exploration Licenses 780 and 782, Farmcote Area, Broken Hill, NSW for the six months to 23RD November 1978, North Broken Hill Limited for the NSW Geological Survey, (GS1978-043)

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

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

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)

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)

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)

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)

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

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

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

McConachy, G.W., 1997, EL 4792 Redan, Annual Report for the period ending 19/2/1997, Normandy Exploration Limited, unpublished report to the GSNSW, RIN 00002672

Main, J.V., and Tucker D.F., 1981, Exploration Report for Six Month Period 8th November 1980 to 7th May 1981, EL 1106 Rockwell, Broken Hill, NSW, CRA Exploration Pty Ltd, GS1980-080, Jul 1981, 40pp

Mohoney, M., 2018, BHA Broken Hill Project Position Paper, Squadron Resources Pty Ltd., Unpublished report, Mar2018, 8pp

Mortimer R., 2017, Re-interpretation of VTEM Profiles Broken Hill Area, unpublished report by Southern Geoscience Consultants for Squadron Resources Pty Ltd, Oct 17.

Squadron Resources Pty Ltd, 2018, Broken Hill Project Status, August 2018, unpublished confidential presentation by Squadron Resources,

Timms, P.D., and Groves A.J., 2003, Exploration Licence 4846, The Sisters, Annual Report to 29th May 2003, Endeavour Minerals Pty Ltd., RIN

Willis, I.L., Brown, R.E., Stroud, W.J., Stevens, B.P.J., 1983, The Early Proterozoic Willyama Supergroup: stratigraphic subdivision and interpretation of high to low-grade metamorphic rocks in the Broken Hill Block, New South Wales., Geological Society of Australia Journal, 30(2), p195-2