CASTILLO COPPER LIMITED

ASX Release

21 July 2017

CASTILLO COPPER LIMITED
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Joe Graziano
Nicole Fernandes

Issued Capital:
402 million shares
21 million options

ASX Symbol:
CCZ

ACQUISTION OF HISTORIC COPPER COBALT MINE & COMPLEMENTARY ASSETS

- **Proposed acquisition of three highly-prospective, complementary assets to double CCZ's 100%-owned mineralised footprint across New South Wales and Queensland**
- **CCZ will be targeting three JORC compliant resources concurrently**
- **Sufficient preliminary data to generate JORC compliant resource for copper-cobalt at historic Cangai Copper Cobalt Mine, located in north-east NSW**
- **Resampling of core from Cangai Copper Cobalt Mine resulted in confirmation of high grade mineralisation of 190,000ppm copper, 1,860ppm zinc and 740ppm cobalt**
- **Modelling underway to calculate JORC compliant resource for zinc-cobalt at Peak Hill project area Broken Hill, NSW, which will now include newly acquired adjacent tenure with continuous mineralisation**
- **Timely, as demand for cobalt copper and zinc supply chains from `stable jurisdictions' is set to continue growing moving forward**
- **Clear scalable strategy to fast-track production and generate cashflow via using third party processors**

The Board of **Castillo Copper Limited** (**CCZ** or **Company**) is delighted to announce that it has signed a binding Heads of Agreement with Total Minerals Pty Ltd (**Total**), which owns three cobalt & copper assets in NSW and Queensland (including the historic Cangai Copper Cobalt Mine in northeast NSW), to acquire all its outstanding issued shares (**Proposed Acquisition**). The key terms of the Proposed Acquisition are outlined in Annexure A.

The Proposed Acquisition is highly strategic to CCZ's forward prospects as:

- The Total assets significantly increase the size of mineralisation and therefore the possible size of three compliant JORC resources;
- Total's three assets are directly complementary to CCZ's current highly prospective project areas;
- Combining the six assets' area will effectively double the size of CCZ's footprint, which materially enhances the commercial scalability of the operation;
- Preliminary data is sufficient, without requiring drilling, to calculate a JORC compliant resource at Cangai Copper Cobalt Mine (**Cangai**) within the Jackaderry project area (NSW) and CCZ Peak Hill project in Broken Hill (NSW);

- Historic mining at Cangai mainly focused on shallow oxide copper with high grade cobalt mineralisation and deeper copper sulphide over looked;
- Collectively, with modelling underway to generate a JORC compliant resource for the Peak Hill project area, CCZ will potentially have an Inferred Resource targeting zinc-copper-cobalt from its NSW assets based on legacy data; and
- Demand for new cobalt supply chains from stable regions, away from the Democratic Republic of Congo, is set to accelerate on growing take-up of electric vehicles and energy storage units.

TOTAL OVERVIEW

Total was formed specifically for the purpose of applying for mineral tenements to explore and develop primarily copper and cobalt production resources in NSW and Queensland. To that end, Total owns three assets, with two granted tenements (Jackaderry and Total Minerals Projects) located in NSW and one in Queensland (Hill of Grace), which is also moving towards grant status.

As at the date of this announcement, Total has six shareholders holding 100,000 shares at the date of this announcement. In consideration for the Proposed Acquisition, Total shareholders will receive 55 million shares in consideration which will equate to circa 12% of CCZ's expanded issued capital on a fully diluted basis.

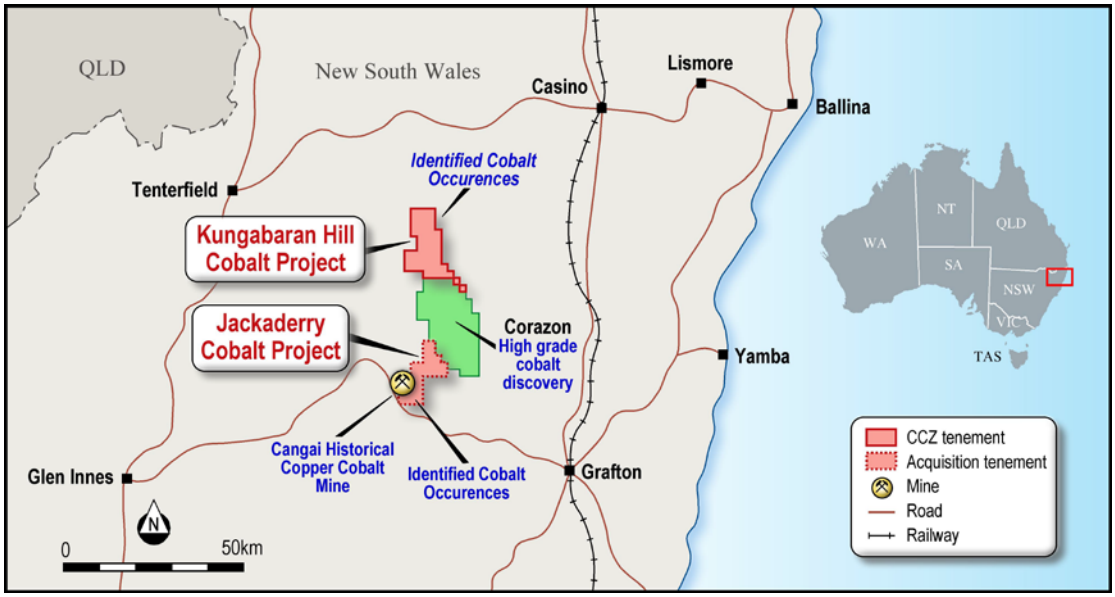
A summary of Total's three assets follows:

JACKADERRY PROJECT, NSW: EL 8625

Background

The Jackaderry Cobalt Project (Figure 1) is located in the New England Origin, which is a significant east Australian mineral province that hosts significant Cu-Au-Co deposits. ASX-listed Corazon's (CZN) 51%-owned Mt Gilmore tenement and CCZ's 100% owned Kungabarin Hill project area are within a 50km radius to the north of the Jackaderry Cobalt Project.

Figure 1: Jackaderry Cobalt Project, NSW



Total Minerals took out the license to explore for cobalt and copper, focusing specifically on the historic Cangai Copper Cobalt Mine and surrounding area.

Cangai Copper Cobalt Mine

Total engaged consultant ROM Resources Pty Ltd (**ROM Resources**) to undertake resampling of historic Cangai drill holes. During May 2017, ROM Resources visited the NSW Geological Survey core storage facility at Londonderry, Western Sydney area, to view, log and resample Cangai cores. Of the ten drill holes completed by various exploration and mining companies (including Western Mining and CRA Exploration) during the period 1974-1995, eight had core stored with the department.

ROM Resources scanned targeted areas with a portable XRF machine and recorded the average grade for a suite of minerals over 0.5-2m intervals. The primary purpose of the sampling was to test for the presence of cobalt which had not been analysed for in previous laboratory testing. A summary of selected results for all holes combined is shown in Table 1. The full results list has been appended (Annexure B).

Table 1: Summary of Cangai XRF Testing

Element	Total Tests	Anomalous Threshold (ppm)	Number of Anomalous Values	Highest Value ppm
Cu	37	500	17	190,000 (19%)
Pb	37	600	3	2,500
Zn	37	600	5	1,860
Co	37	50	4	730

Source: ROM Resources

Note: the grades quoted for cored intervals described in Jackaderry Project - Table 1, Section 2 have been measured using a handheld pXRF Analyser. These grades are indicative grades only as the pXRF Analyser does not have the same degree of accuracy as laboratory generated results. Calibration details for the XRF machine are given in Jackaderry Project - Table 1, Section 1.

ROM Resources considers that if laboratory retesting of the Cangai core for cobalt is achieved then, combined with mine working data and other geological information, sufficient data exists to calculate a copper-cobalt-resource.

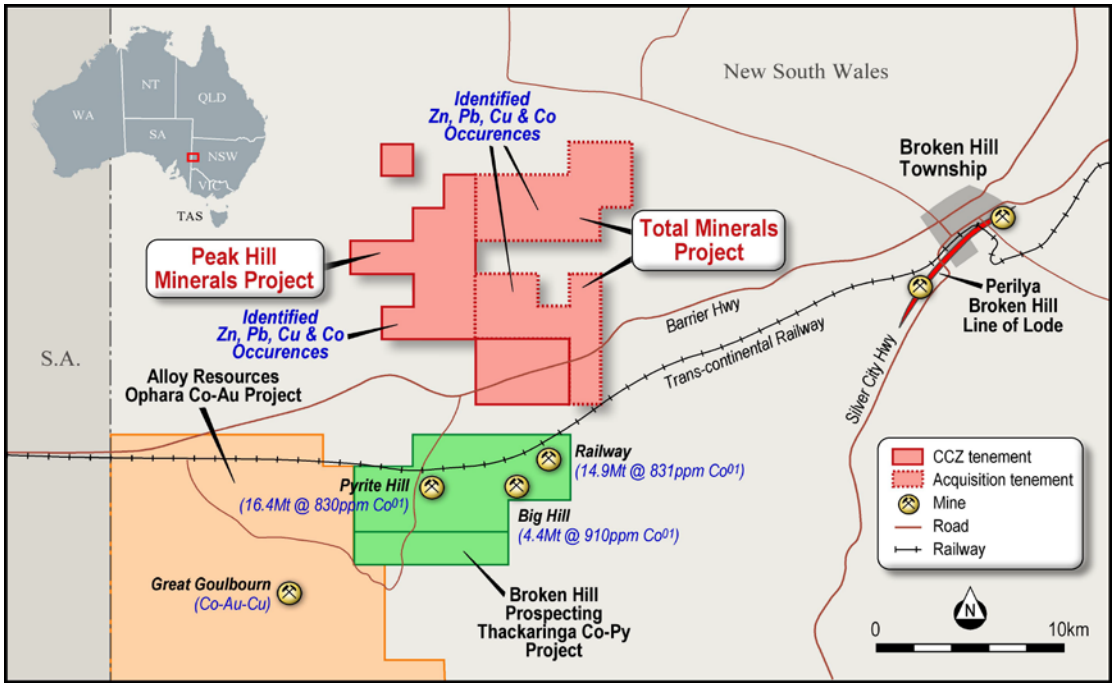
TOTAL MINERALS PROJECT, NSW: EL 8599

Background

The Total Minerals Project is adjacent to CCZ's Peak Hill Minerals Project (Figure 2) and within a 20km radius of Broken Hill. Moreover, it is 10km northeast of Alloy Resources Ophara Project while large Cu-Au-Co deposits have been identified 3km to the south by Broken Hill Prospecting.

CCZ recently announced that it has sufficient preliminary data to prove up a JORC compliant resource for zinc-cobalt (refer ASX Announcement "Excellent Mineralisation at Peak Hill" – 11 July 2017). Notably, numerous high-grade anomalous zones were identified within a strike zone in and surrounding the Peak Hill tenement comprising cobalt (max 1,150ppm), copper (120,000ppm), lead (81,900ppm) and zinc (177,000ppm). Given the Total Minerals project area is contiguous to Peak Hill, there is potentially material upside to expanding the size of any Inferred Resource.

Figure 2: Total Minerals Project, NSW



The Total Minerals Project occurs in an area which is known to have significant cobalt mineralisation in the southern Curnamona Craton, with large resources defined at the Pyrite Hill and Thackaringa deposits. This prospect has similarities to both these cobalt occurrences. However, it is unique in having low-copper and high-gold mineralisation associated with the cobalt surface gossans.

Local geology

The host rocks are several thick (8-27m) units of a quartz-magnetite rock within the Radian Gneiss of the Proterzoic Willyama Group. The footwall at various deposits has been described as a quartz-feldspar-biotite-muscovite gneiss with varying amounts of sillimanite and chlorite. The mineralised zones are quartz-magnetite-pyrite rocks which contain anomalous Au, Ag, Cu, Co, Zn, Mo and S. Anomalous results often extend above and below the quartz-magnetite rock.

Extensive historical surface rock-chip sampling the region confirms mineralisation with maximum values of 1.2% cobalt and 2.4 g/t gold, hosted in a quartz-magnetite rock unit.

Previous investigations

Modern testing of the prospect occurred in 1981 when Australian Anglo American completed two short diamond drill holes DDH OT1 and DDH OT2. Using a 1,000ppm Co cut-off, the following grades were returned;

- **DDH OT1:** -45 degrees towards 215 degrees
  - 40.7m to 64.0m, 23.3 metres @ 0.138% Co; 581 ppm Cu, 0.393g/t Au
- **DDH OT2:** -85 degrees towards 162 degrees
  - 31.6m to 41.4m, 9.8 metres @ 0.145% Co; 694 ppm Cu, 0.307g/t Au
  - 47.4m to 50.4m, 3.0 metres @ 0.153% Co; 247 ppm Cu, 0.359g/t Au

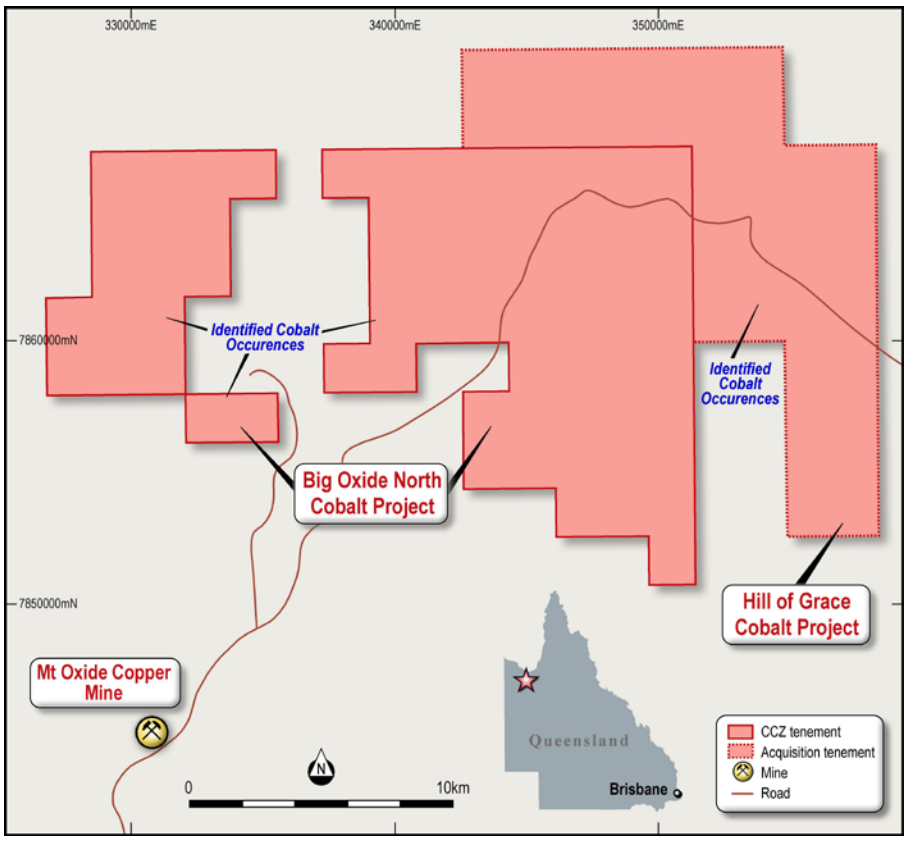
HILL OF GRACE, QUEENSLAND: EPM 26525

Background

The Hill of Grace Project (Figure 3) is an exciting prospect located in the Mt Isa region, northwest Queensland and is west of CCZ's Big Oxide North Project. The project area has not been granted as yet as native title issues are still in the process of being finalised.

However, the project area is close to active Cu-Au explorers, Mt Oxide Pty Ltd and Capricorn Copper Pty Ltd; the latter is in the process of restarting the Mt Gordon/Gunpowder copper mine. The Queensland Department of Natural Resources and Mines has reported that cobalt is associated with copper in brecciated sediment-hosted base metal deposits in northwest Queensland including Mount Isa, Mammoth and Mount Cobalt.

FIGURE 3: HILL OF GRACE PROJECT, QUEENSLAND



Local geology

The Mount Isa ore bodies contain approximately 0.14% cobalt in both the copper and Ag–Pb–Zn ores. Refining recovers <1,000 tpa of cobalt, but circa 10,000 tpa of cobalt is associated with pyrite and is discarded in tailings. Various processes have been investigated for economic recovery of the metal, but none have proved viable. Cobalt production from Mount Isa was reported up until June 2005.

Cobalt credits occur in other Zn and Cu–Au ores of the Mount Isa region, for example Walford Creek. Cobalt has not been recovered at Mount Gordon and remains in the tailings. In 2007, Aditya Birla Minerals Ltd announced an Indicated Resource of 11.5Mt at 2.7% Cu and 5.7% Co for the Mammoth ore body. Cudeco's Rocklands prospect near Cloncurry contains Inferred Resource of 25Mt at 1.57% Cu, 818ppm Co and 0.2ppm Au reference.[1]

[1] Sept 2014 Department of Natural Resources and Mines, QLD
https://www.dnrm.qld.gov.au/__data/assets/pdf_file/0016/238102/cobalt.pdf

PROPOSED ACQUISITION

Consideration

In consideration for the acquisition, CCZ will, at completion:

a) issue 55,000,000 CCZ shares (consideration shares) to the holders of Total shares (**vendors**) as set out in Schedule 1; and
b) enter into a royalty agreement pursuant to which the vendors will be entitled to a net smelter return royalty of 3% in respect of the tenements (**royalty agreement**).

Completion will occur within 5 business days of the fulfilment of the conditions, or such other date as agreed between the parties. Completion must occur under the share sale agreement in respect of all vendors at once.

Pro forma capital structure

The indicative capital structure of the Company post-acquisition of Total is set out in the table below.

Name	Shares	Options	% interest in issued capital (if all performance rights vest)
Current CCZ shareholders	402,498,887		87.98%
Consideration shares	55,000,000		12.02%
Existing options on issue		21,000,000	
Total securities	**457,498,887**	**21,000000**	**100%**

Indicative Timetable

An indicative timetable for completion of the Proposed Acquisition is set out below:

Event	Date (week ending)
Announce transaction	21 July 2017
Finalise share sale agreement	4 August 2017
Completion	18 August 2017

Please note that this timetable is indicative only and the Company reserves the right to amend the timetable as required.

Castillo Copper's Chairman David Wheeler commented: "With the recent desktop reviews highlighting significant upside potential for our Big Oxide North, Peak Hill and Kungabarin Hill project areas, the Board decided to double the footprint via the strategic acquisition of Total. The Board is across developments within in the global lithium-ion battery sector and expects demand for copper cobalt to remain robust moving forward, particularly with the take up of electric vehicles and energy storage units gaining momentum. Moreover, there is a move for a broadening in copper cobalt supply chains from stable jurisdictions like Australia, which augurs favourably for Castillo Copper.

On a proforma basis, Total's three project areas are directly complementary and have the potential to materially expand the Company's resource. Most significantly, however, is the prospect of generating three JORC compliant Inferred Resources in the short term."

For and on behalf of Castillo Copper

David Wheeler

Chairman

Competent Persons Statement

Regarding both the Castillo Copper Ltd and Total Minerals Pty Ltd exploration tenures, the information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mark Biggs, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mark Biggs is employed by ROM Resources Pty Ltd.

Mark Biggs has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mark Biggs consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

ABOUT CASTILLO COPPER

Castillo Copper Limited (ASX: CCZ) is an ASX-listed explorer that has assets in eastern Australia and Chile. The Australian assets, which were acquired outright in July 2017, comprise three highly prospective cobalt-copper-nickel project areas in New South Wales and Queensland, detailed briefly as follows:

- Kungabaran Hill, which is in the New England Orogen in NSW, covers 153 sq km and is prospective for cobalt/copper/nickel;
- Peak Hill, located 16km southwest of Broken Hill, NSW, is prospective for cobalt/copper and covers 57 sq km; and
- Mt Oxide North covers 214 sq km in the Mt Isa region, northwest Queensland, and is prospective for copper/cobalt.

The Board is looking to prove up JORC compliant resources across the Australian project areas then utilise third party processors to fast track product to market.

The wholly-owned Chilean assets comprise of six exploration concessions across a total area of 1,800 hectares that are well known for high grade copper-gold projects.

ANNEXURE A

Key Terms of the Proposed Acquisition

CCZ and Total have entered into a binding Heads of Agreement.

The key terms of the Heads of Agreement are as follows:

1. **Conditions Precedent:** Completion of the Proposed Acquisition is subject to and conditional upon a number of conditions precedent, including:
    a) By 11 August 2017 (or such later date as agreed between CCZ and Total) satisfactory completion by CCZ of all necessary due diligence investigations in respect of Total.
    b) By 11 August 2017 (or such later date as agreed between CCZ and Total) satisfactory completion by Total of all necessary due diligence investigations in respect of CCZ.
    c) The parties being satisfied (acting reasonably) that ASX will not require CCZ to re-comply with Chapters 1 and 2 of the ASX Listing Rules as a result of the transactions contemplated under these heads of agreement
    d) The vendors representing 100% of all Total shares on issue as at the date of the heads of agreement and any persons becoming Total shareholders after entry into these heads of agreement entering into the share sale agreement in relation to all of their Total shares.
    e) Neither CCZ nor Total being in material breach of the terms of the heads of agreement providing no party can rely on its own breach to prevent completion.
    f) Any other third party approvals, regulatory consents or conditions required to give effect to the transactions contemplated by these heads of agreement being obtained
2. **Consideration:** In consideration for the acquisition, CCZ will, and at completion:
    a) issue 55,000,000 CCZ shares (**consideration shares**) to the holders of Total shares (**vendors**) as set out in Schedule 1; and
    b) enter into a royalty agreement pursuant to which the vendors will be entitled to a net smelter return royalty of 3% in respect of the tenements (**royalty agreement**).
3. **Warranties:** the parties have each provided customary warranties for a transaction of this nature.
4. **Exclusivity:** During the term of the Heads of Agreement, neither CCZ nor Total Minerals will enter into negotiations or take action to enter into certain transactions with alternative potential purchasers.
5. **Maintaining the status quo:** during the exclusivity period the parties agree not to enter into any material contract or incur any material liability; declare any dividends; or vary its capital structure; without the prior written consent of the other party.
6. **Formal documents:** the parties agree to negotiate in good faith formal binding agreements to be entered into by CCZ and each of the Vendors on terms consistent with the Heads of Agreement or as otherwise agreed between the parties.

The Heads of Agreement otherwise contains clauses typical for binding agreements of this nature.

ANNEXURE B

Cangai Mine pXRF results (%) for Co, Cu, Zn and Pb

Date	Time	Reading	Co_%	Cu_%	Zn	Pb
01-06-17	12:06:24	#3			0.0221	
01-06-17	12:18:22	#4			0.0361	
01-06-17	12:22:26	#5			0.0213	
01-06-17	12:25:54	#6		0.0128	0.2795	0.002
01-06-17	13:12:54	#9		19.46	0.0712	0.0713
01-06-17	13:14:52	#10		19.14	0.0755	0.0691
01-06-17	13:46:52	#13			0.0219	
01-06-17	13:49:46	#14		0.2355	0.1203	0.0273
01-06-17	13:52:41	#15		0.0099	0.0573	0.0016
02-06-17	10:01:04	#3			0.0232	
02-06-17	10:03:26	#4	0.0324		0.0316	
02-06-17	10:05:45	#5			0.0207	
02-06-17	10:13:25	#6			0.0275	
02-06-17	10:15:27	#7			0.0259	
02-06-17	10:17:34	#8			0.0107	0.0009
02-06-17	10:52:21	#9	0.0742		0.0126	
02-06-17	10:55:10	#10			0.0108	0.0012
02-06-17	10:57:27	#11			0.0172	
02-06-17	11:00:08	#12		0.2522	0.0644	
02-06-17	11:43:22	#13			0.0046	
02-06-17	11:45:13	#14			0.0099	0.0013
02-06-17	11:47:07	#15			0.0089	0.0012
02-06-17	12:50:06	#16			0.0153	
02-06-17	12:52:43	#17		1.3844	12.6	0.224
02-06-17	12:55:02	#18			0.0169	
02-06-17	13:36:41	#19			0.0868	
02-06-17	13:39:43	#20		0.0226	2.0516	0.0016
02-06-17	13:42:19	#21		0.6805	0.3428	0.0252
02-06-17	14:49:04	#22			0.135	
02-06-17	14:51:12	#23			0.1764	0.0022
02-06-17	15:16:37	#24			0.1028	0.0017
02-06-17	15:18:48	#25			0.0153	
02-06-17	15:20:51	#26			0.0126	
02-06-17	15:44:36	#29	0.0247		0.0062	
02-06-17	15:46:52	#31			0.0187	0.0018
02-06-17	15:49:00	#32			0.0212	

JACKADERRY PROJECT

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr>
<td>Sampling techniques</td>
<td>

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 30-g 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.

</td>
<td>

Sampling used in this analysis was all historical from the period 1967-2016. The data was a combination of the NSW Geological Survey surface sampling database and historical annual and relinquishment reports revisited and additional data extracted.
Nearly 870 sample analyses from stream sediment, soil, and rock chip sources were collated and combined.
Many of the sampling programs, especially from the 1990’s did include reference samples and duplicate analyses and other forms of QA/QC checking.
Sampling prior to 1985 generally has higher “below detection limits” and less QA/QC checks.
Regarding historical cores from holes held by the NSW Geological Survey at the Cangai Copper Mine (closed), selected sections have been reanalyzed using pXRF. The grades quoted for cored intervals described in section 2 have been measured using a handheld pXRF Analyser. These grades are indicative grades only as the pXRF Analyser does not have the same degree of accuracy as laboratory generated results.
Sample details from the pXRF machine are listed in Table 1, below. The actual results have been listed in Appendix 2 of the report.

Table 1: Cangai Core pXRF Sample Details
<table>
<tr><th>Date</th><th>Field Label 1</th><th>Mode</th><th>Elapsed Time 1</th><th>Elapsed Time 2</th><th>Elapsed Time Total</th><th>Instrument SN</th><th>Model</th><th>Tube Anode</th><th>User Factor Name</th><th>Unit</th></tr>
<tr><td>01-06-17</td><td>SAMPLE ID#1</td><td>Geochem</td><td>29.29</td><td>59.72</td><td>89.01</td><td>550172</td><td>Delta Premium-50kV</td><td>Au</td><td>Factory -Default</td><td>%</td></tr>
<tr><td>01-06-17</td><td>SAMPLE ID#2</td><td>Geochem</td><td>29.31</td><td>59.64</td><td>88.95</td><td>550172</td><td>Delta Premium-50kV</td><td>Au</td><td>Factory -Default</td><td>%</td></tr>
<tr><td>01-06-17</td><td>SAMPLE ID#3</td><td>Geochem</td><td>29.3</td><td>59.65</td><td>88.95</td><td>550172</td><td>Delta Premium-50kV</td><td>Au</td><td>Factory -Default</td><td>%</td></tr>
<tr><td>01-06-17</td><td>SAMPLE ID#4</td><td>Geochem</td><td>29.68</td><td>59.31</td><td>88.99</td><td>550172</td><td>Delta Premium-50kV</td><td>Au</td><td>Factory -Default</td><td>%</td></tr>
<tr><td>01-06-17</td><td>SAMPLE ID#5</td><td>Geochem</td><td>29.69</td><td>59.31</td><td>89.01</td><td>550172</td><td>Delta Premium-50kV</td><td>Au</td><td>Factory -Default</td><td>%</td></tr>
</table>
</td>
</tr>
</table>

Criteria	JORC Code explanation	Commentary

01-06-17	SAMPLE ID#6	Geochem	29.22	59.8	89.02	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#7	Geochem	29.31	59.78	89.08	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#8	Geochem	29.36	59.55	88.92	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#9	Geochem	29.57	59.8	89.37	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#10	Geochem	29.43	59.71	89.14	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#11	Geochem	29.46	59.84	89.3	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#12	Geochem	29.65	59.32	88.97	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#13	Geochem	29.65	59.52	89.17	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#14	Geochem	29.23	59.85	89.08	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#15	Geochem	29.44	59.8	89.24	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#16	Geochem	29.38	59.75	89.13	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#17	Geochem	29.24	59.87	89.11	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#18	Geochem	29.59	59.72	89.31	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#19	Geochem	29.42	59.69	89.11	550172	Delta Premium-50kV	Au	Factory -Default	%
01-06-17	SAMPLE ID#20	Geochem	29.36		29.36	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#21	Geochem	29.42	59.85	89.27	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#22	Geochem	29.73	59.81	89.54	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#23	Geochem	29.7	59.42	89.12	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#24	Geochem	29.41	59.74	89.15	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#25	Geochem	29.54	59.89	89.43	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#26	Geochem	29.34	59.82	89.16	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#27	Geochem	29.48	59.71	89.19	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#28	Geochem	29.4	59.68	89.09	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#29	Geochem	29.42	59.74	89.17	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#30	Geochem	29.32	59.79	89.11	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#31	Geochem	29.45	59.68	89.13	550172	Delta Premium-50kV	Au	Factory -Default	%
02-06-17	SAMPLE ID#32	Geochem	29.23	59.86	89.09	550172	Delta Premium-50kV	Au	Factory -Default	%

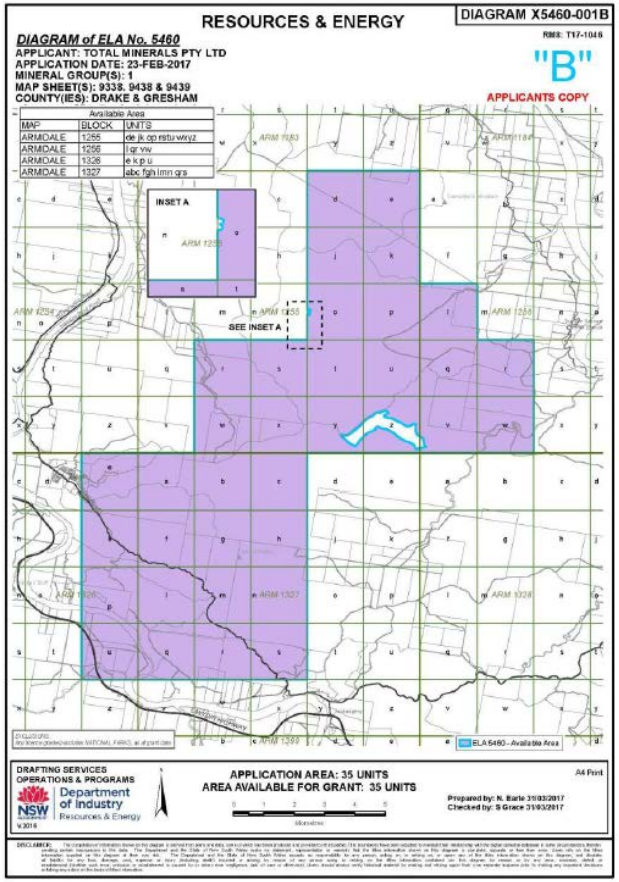
Criteria	JORC Code explanation	Commentary
		02-06-17 SAMPLE ID#33 Geochem 29.5 59.59 89.1 550172 Delta Premium-50kV Au Factory-Default % 02-06-17 SAMPLE ID#34 Geochem 29.62 59.9 89.51 550172 Delta Premium-50kV Au Factory-Default % 02-06-17 SAMPLE ID#35 Geochem 29.58 59.79 89.36 550172 Delta Premium-50kV Au Factory-Default % 02-06-17 SAMPLE ID#36 Geochem 29.68 29.11 88.15 550172 Delta Premium-50kV Au Factory-Default % 02-06-17 SAMPLE ID#37 Geochem 29.21 28.85 87.91 550172 Delta Premium-50kV Au Factory-Default %
Drilling techniques	• *Drill type (eg 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.).*	• There are several drillholes near EL 8625 that could be investigated for relevant and similar geology that are held by the department, and could be retested. • The closest set of drill holes (ten (10) in total) with available core for analysis are in the tenure, at the Cangai copper mine. To the north of EL 8625, seventeen (17) drill holes were completed for copper-gold exploration at the Just-in-Time mine and Coaldale Prospects. Those cores are also available from the NSW Core Library. Drilling was a combination of RAB, RC with limited diamond cored holes.
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.*	• Not applicable in this study as no new drilling was undertaken.
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. • No downhole geophysical logging took place.
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.*	• No new samples were obtained. Historical cores from Cangai Mine lodged with the NSW Geological Survey are generally sawn with half or quarter core remaining. • Industry acceptable standards and blanks were used as certified reference material to ensure satisfactory performance of the pXRF • QAQC results indicate that the sampling is accurate and precise

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
• Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.
• Whether sample sizes are appropriate to the grain size of the material being sampled.</td><td></td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>• 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 (ie lack of bias) and precision have been established.</td><td>• All the analyses bar a few (<75 out 2,600) samples were laboratory tested in various NATA-registered laboratories throughout Australia. Many of the earlier CRA Exploration stream sediment and soil samples were analysed by CRA internal laboratories.
• XRF geochemical data taken from field portable XRF Olympus.
• Duration of sampling 30 seconds per filter (3 filters).
• Calibration of the unit was carried out on the unit at the start of the sampling at the core library.
• The following elements were analysed; Ag, As, Se, Ca, K, S, Ba, Sb, Sn, Cd, Pd, Zr, Sr, Rb, Pb, Hg, Zn, W, Cu, Ni, Co, V, Ti, Au, Fe, Mn, Cr, Sc, Mo, Th, U, Ta.</td></tr>
<tr><td>Verification of sampling and assaying</td><td>• The verification of significant intersections by either independent or alternative company personnel.
• The use of twinned holes.
• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
• Discuss any adjustment to assay data.</td><td>• Over 220 samples have had their assays duplicated.
• None of the historical data has been adjusted.</td></tr>
<tr><td>Location of data points</td><td>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
• Specification of the grid system used.
• Quality and adequacy of topographic control.</td><td>• In general, locational accuracy does vary, depending upon whether the samples were digitised off plans or had their coordinated tabulated. Many surface samples were reported to AGD66 or AMG84 and have been converted to MGA94.
• Locational accuracy therefore varies between 2-50m. The list of historical drillholes investigated is shown in Table 2.
Table 2: Cangai Diamond Drilling
<table>
<tr><th>Company</th><th>Prospect Name</th><th>Hole Name</th><th>Title Code</th><th>Title Number</th><th>Total Depth</th><th>Completion Date</th></tr>
<tr><td>CRA Exploration Pty Ltd,</td><td>Cangai Copper Mine - Grafton</td><td>DD91CG2</td><td>EL</td><td>3665</td><td>421.1</td><td>1991</td></tr>
<tr><td>Western Mining Corporation Ltd,</td><td>Jackadgery - Cangai</td><td>BJAC2</td><td>EL</td><td>1809</td><td>193.5</td><td>1982</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>CRA Exploration Pty Ltd,</td><td>Cangai Copper Mine - Grafton</td><td>DD91CG4</td><td>EL</td><td>3665</td><td>180</td><td>1991</td></tr>
<tr><td>CRA Exploration Pty Ltd,</td><td>Cangai Copper Mine - Grafton</td><td>DD91CG1</td><td>EL</td><td>3665</td><td>15</td><td>1991</td></tr>
<tr><td>Western Mining Corporation Ltd,</td><td>Jackadgery - Cangai</td><td>BJAC1</td><td>EL</td><td>1809</td><td>226.7</td><td>1982</td></tr>
<tr><td>CRA Exploration Pty Ltd,</td><td>Cangai Copper Mine - Grafton</td><td>DD91CG5</td><td>EL</td><td>3665</td><td>275</td><td>1991</td></tr>
<tr><td>CRA Exploration Pty Ltd,</td><td>Cangai Copper Mine - Grafton</td><td>DD91CG3</td><td>EL</td><td>3665</td><td>402.4</td><td>1991</td></tr>
<tr><td>Union Corporation (Australia) Pty Ltd, Mineral wealth NL</td><td>Cangai Copper Mine - Grafton</td><td>DDH2</td><td>ML</td><td>6244</td><td>228.6</td><td>1972</td></tr>
<tr><td>Union Corporation (Australia) Pty Ltd, Mineral wealth NL</td><td>Cangai Copper Mine - Grafton</td><td>DDH5</td><td>ML</td><td>6244</td><td>132.7</td><td>1972</td></tr>
</table>
</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 colspan="2">• The average surface sample spacing across the tenure varies per element, e.g. for cobalt the RMS spacing between sample points is 165m, ranging down to 124m for nickel.
• No sample compositing has been applied.</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 colspan="2">• The current database does not contain any sub-surface samples.</td></tr>
<tr><td>Sample security</td><td>• The measures taken to ensure sample security.</td><td colspan="2">• No additional samples have been obtained at this stage.</td></tr>
<tr><td>Audits or reviews</td><td>• The results of any audits or reviews of sampling techniques and data.</td><td colspan="2">• No audits or reviews have yet been under taken.</td></tr>
</table>

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Castillo Copper holds EL 8625 of 35 units (155 km^2). The tenure has been granted for a period of thirty-six months until 17th July 2020, for Group 1 minerals. The location of the tenure is shown in Figure 1 below: Figure 1: Location of EL 8625 Jackadgery North 

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Previous explorers (Brownlow, 1989; Abraham-Jones, 2012) have noted that a 'basement window' of exposed magmatic hydrothermal alteration and historical copper workings may represent the western and upper extent of a much larger hydrothermal system concealed under Mesozoic cover to the east, prospective for: • Quartz-tourmaline-sulphide-cemented, magmatic-hydrothermal breccia hosted copper-gold-molybdenum-cobalt (Cu-Au-Mo-Co) deposit; • Concealed porphyry copper-gold-molybdenum-cobalt (Cu-Au-Mo-Co) ore body associated with quartz diorite to tonalitic porphyry apophyses proximal to the tourmaline-sulphide cemented breccia's; • Potential also exists for copper-gold (Cu-Au) skarn; Considerable exploration has taken place in and around the Cangai Copper Mine (closed) by several large explorers such as Western Mining and CRA Exploration, the results of which are covered in the Local Geology section.
Geology	• *Deposit type, geological setting and style of mineralisation.*	## Regional Geology The underlying geology is contained within the Coffs Harbour Block, east of the Demon Fault. The major basement unit is the Silurian-Devonian Silverwood Group (locally the Willowie Creek Beds), a mixed sequence of tuffaceous mudstones, intermediate to basic igneous rocks, slates, and phyllites, a low stage of regional metamorphism. Overlying this rock formation is a younger tectonic melange of Early Carboniferous age – the Gundahl Complex of slates, phyllites and schist, with chert, greenstone and massive lithic greywackes. These rocks are intruded by the Early Permian Kaloe Granodiorite, which also in turn is intruded by numerous later-stage mafic dykes.

Criteria	JORC Code explanation	Commentary
		## Local Geology ### CRA Exploration EL3665 1988-1991 CRAE found that the recognition of substantial amounts of pyrrhotite in high grade ore collected from mine dumps led to the reappraisal of previous explorer's ground magnetics. Two soil anomalies were identified @ +60ppm Cu (max 1100ppm) and several strong linear magnetic anomalies (=250nT above background). Soil sampling and detailed ground inspections conducted over the linear magnetic high failed to identify any anomalous geochemistry or a possible source lithology. A 180m diamond drill hole was drilled to test the anomaly. Given the poor results of both the drilling and the follow-up stream sediment sampling, no further work was recommended. The decision was made to relinquish the licence in 1991. ### Western Mining 1992-1994 Western Mining examined over several years the geological form, setting and genesis of the mineralisation at the Cangai Copper Mine. Work carried out consisted of geological mapping, collection of rock chip samples and underground investigations at the mine site. Drill core from a recent CRA exploration program and mine dumps were also inspected. The Cangai Copper Mine is hosted by sedimentary rocks of the Siluro-Devonian Willowie Creek Beds of tuffaceous mudstones, tuffaceous sandstones and conglomerates. Mineralisation appears to be associated with steeply plunging ore shoots in and adjacent to the main shear zone. Massive primary ore consists of chalcopyrite, pyrite and pyrrhotite with lesser sphalerite and minor arsenopyrite and galena. A detailed, well documented report was produced but no reasons were given for the relinquishment of the licence. Whole rock AAS analyses of massive ore (A Radojkovic personal communication 1991) are in general agreement with the observations

Criteria	JORC Code explanation	Commentary
		made in similar primary ore samples collected by the author. Copper values range from about 5% to 15% in primary ore, rising to nearly 30% in a single sample of supergene ore. Zinc values range from less than 1% to nearly 10% while Pb values were typically in the range of 0.05% to 1%. Gold assays range from approximately 0.5 ppm to 3 ppm, being elevated in partially and fully oxidized ore. The presence of cobaltite in primary ore explains the elevated Co values (approximately 300 ppm) in relation to other trace elements selected assays of massive ore are presented in Figure 2. *Figure 2 Rock Chip Sampling at Cangai Copper Mine* Appendix 5 Ore Sample Assays Similar dump samples to those collected by the author were submitted for analysis by CRA Exploration. Selected assays are presented below. Values are ppm unless otherwise stated. 1 2 3 4 5 6 Cu 15.3% 28.6% 12.4% 14.8% 10.6% 11.0% Pb 640 1200 1800 7550 800 2500 Zn 4.68% 1.27% 2.35% 9.50% 6400 5.10% Ag 76 86 30 49 160 150 As 4750 1650 4850 3800 4750 7150 Mn 185 240 370 430 155 150 Au 1.80 2.50 0.72 2.30 1.32 1.85 Fe 30.9% 22.6% 28.2% 32.9% 33.8% 27.4% S 27.5% 3.73% 16.6% 29.6% Co 70 25 300 330 370 300 V <10 <10 Ba <10 20 Ni <5 <5 Bi 30 80 Cd 14 90 Sample description 1 Massive chalcopyrite-pyrite ore 2 Oxide material 3 Massive pyrite chalcopyrite rock with gangue clasts 4 Well banded pyrite-sphalerite ore 5 Weakly banded massive sulfide 6 Weakly banded massive sulfide

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr>
<td>Drill hole Information</td>
<td>

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:

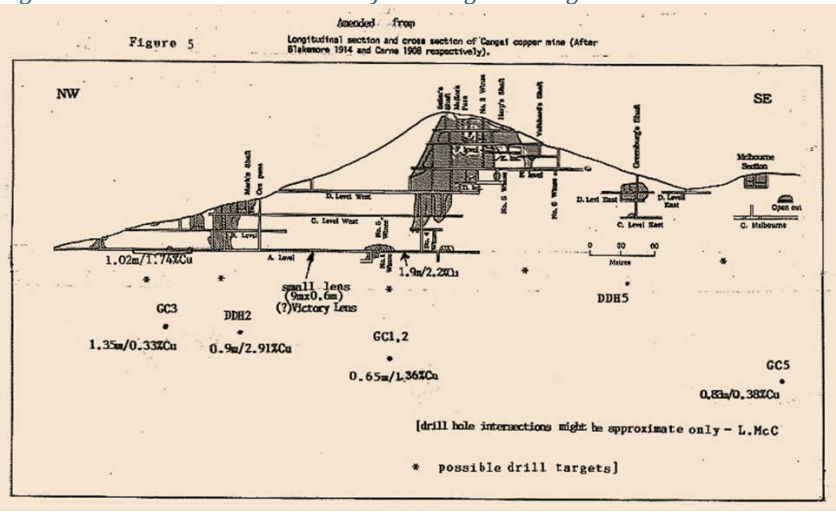
easting and northing of the drill hole collar
elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
dip and azimuth of the hole
down hole length and interception depth
hole length.

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.

</td>
<td>

During late May 2017, ROM Resources personnel visited the NSW Geological Survey core storage facility at Londonderry in the Western Sydney area, to view, log and resample Cangai Mine cores. Of the ten (10) drillholes completed by various exploration and mining companies (including Western Mining and CRA Exploration) during the period 1974-1995, eight (8) had core stored with the Department.
As this was a preliminary visit, and many of the core only had quarter core samples remaining it was decided to scan targeted areas with a portable pXRF machine, and record the average grade for a suite of minerals over that interval which were generally 0.5-2m in length.
The drillholes were sited in and around the mined-out areas and generally the target intervals were of andesite or tuff that had been brecciated and displaying multi-sulphide mineralisation were tested. Some of the intervals tested had normal laboratory results available, but only for Cu, Au, Ag, Pb and Zn. Comparisons have yet to be made with the pXRF values, only to note that pXRF copper values were higher than the comparable assayed interval.
A summary of selected results for all holes combined is given below in Table 3. In all 22 elements were tested.
Total Minerals considers that if laboratory retesting of the core for cobalt is achieved then, combined with the mine working data and other geological information, sufficient data exists to calculate a small copper-cobalt-zinc resource based on the unmined portions of the now closed Cangai Copper Mine.

Table 3: Summary of Cangai pXRF Testing
<table>
<tr><th>Element</th><th>Total Tests</th><th>Anomalous Threshold (ppm)</th><th>Number of Anomalous Values</th><th>Highest Value ppm</th></tr>
<tr><td>Cu</td><td>37</td><td>500</td><td>17</td><td>190,000 (19%)</td></tr>
<tr><td>Pb</td><td>37</td><td>600</td><td>3</td><td>2,500</td></tr>
<tr><td>Zn</td><td>37</td><td>600</td><td>5</td><td>18,600</td></tr>
<tr><td>Co</td><td>37</td><td>50</td><td>4</td><td>730</td></tr>
<tr><td>Au</td><td>37</td><td>5 ppb</td><td>1</td><td>25ppb</td></tr>
<tr><td>Ag</td><td>37</td><td>2</td><td>2</td><td>15</td></tr>
<tr><td>U</td><td>37</td><td>50</td><td>1</td><td>170</td></tr>
</table>
Note: pXRF testing is indicative only, and further laboratory testing is required. It should be noted that the main purpose of the pXRF testing
</td>
</tr>
</table>

Criteria	JORC Code explanation	Commentary
		was to confirm the presence of cobalt which was previously not analysed.
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 compositing has taken place.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Figure 3, below is a cross-section showing the four (4) main near vertical mineralised zones at the Cangai Mine. *Figure 3 NW to SE Cross-section of workings at Cangai Mine*  • Follow-up work is recommended (Phase 2), particularly the anomalous zones (which have been digitized), should become priority targets for geological mapping, ground magnetic and EM surveys.

Criteria	JORC Code explanation	Commentary
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 in the report. 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 avoiding misleading reporting of Exploration Results.*	• No new exploration results have been reported, but regarding the surface sampling, no results other than duplicates or reference standard assays have been omitted.
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 resistivity surveys over parts of the tenure area but this is yet to be collated.
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.*	While further desktop work is still required, as cobalt was not the focus of previous exploration activities, Total Minerals intends to commence suitable fieldwork within the next few months to assist in gathering data that could identify a resource to 2012 JORC standards. Drillhole and assay data will have to be encoded and validated. New laboratory assaying will be required of the historic core to confirm pXRF readings. Conclusions by Western Mining in 1995 noted “that because of uncertainty over shoot pitch and correlation between longitudinal sections generated by the various mining companies it is not clear whether the historic drilling was well suited to test for copper ore extensions”. No JORC Resources have been outlined to date at Cangai, but there is potential for further economic mineralisation of (probably) moderate size: • As lower grade aureoles (3+%) around and below stopes (CRAE's drilling was 90-150m below the deepest level worked); • Blind deposits between the shoots in areas not tested to date (e.g. below the 1m @ 1.74% over 60m in “A” Level northwest of Marks Shoot; • Along the lateral extension of the line of lode as suggested by ground magnetics (part of which may fall outside EL 8625).

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	The database only consists of Excel spreadsheets at this stage, split per element. As evaluations continue, the data will be migrated to a more appropriate relational database
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• No site visits have yet been undertaken
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• This is a preliminary investigation of surface sampling and no mineral resource estimates have yet been, or could be, calculated until the drillhole database has been loaded to a 3D modelling package. • Mineralisation, where present will exist in volcanic rock-hosted breccia's in or near fault intersections and other structural disturbances. • The mineralisation appears to be coincident with the outcrop of ferruginised laterite.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Currently defined surface anomalies are 200-350m long elongated zones contained within a much more extensive mineralised zone.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. Sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.*	• No mineral resource estimates yet determined.

	• *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Only limited moisture analyses were contained in the dataset.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• No cut-off grades yet determined for copper, zinc or cobalt
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Mining factors not yet determined
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• No assumptions made.
Environmen-tal factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Not required as no mineral resource estimated.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the*	• No bulk density measurements obtained so far.

	frequency of the measurements, the nature, size and representativeness of the samples. • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• No resource estimated calculated
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audit has taken place.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• No mineral estimate calculated.

TOTAL MINERALS PROJECT

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

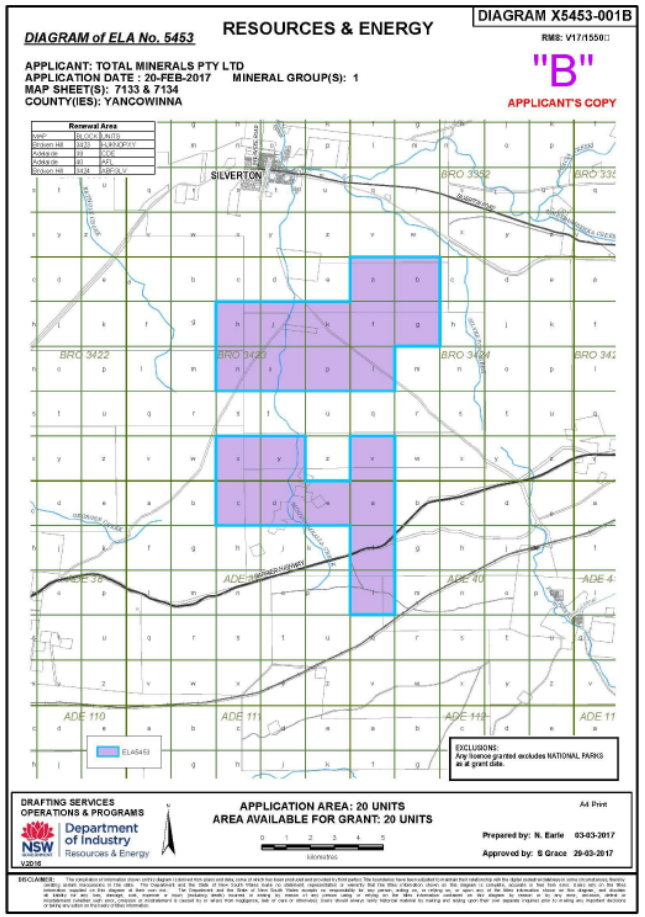
Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Sampling used in this analysis was all historical from the period 1964-2016. The data was a combination of the NSW Geological Survey surface sampling database and historical annual and relinquishment reports revisited and additional data extracted. • Sampling was databased if it occurred inside the EL and in a 1,000m buffer surrounding the EL, to establish anomalous trend directions, if any existed. • Nearly 1,350 sample analyses from stream sediment, soil, and rock chip sources were collated and combined. Of these approximately 430 samples did not reside in the government database and had to be encoded from the source reports (27 in total). • Reference to these reports is given in the associated geology report. • Many of the sampling programs, especially from the 1990's did include reference samples and duplicate analyses and other forms of QA/QC checking. • Sampling prior to 1984 generally has higher "below detection limits" and less QA/QC checks.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Historical drilling consists of auger, rotary air blast, and diamond coring. In and around the tenure are 645 drillholes, however it should be noted that the majority of these are <12m in depth, and the number of holes >12m number around 32, with 22 inside the tenure. No drilling analyses has yet been compiled, and hence did not form part of this study.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential*	• Not applicable in this study as no sub-surface drilling has been investigated yet, and no new drilling took place.

Criteria	JORC Code explanation	Commentary
	loss/gain of fine/coarse material.	
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Most historical drilling that did occur was completed to modern-day standards. • No downhole geophysical logging took place.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No new sampling undertaken.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• All the analyses bar a few (<100 out 1,350) samples were laboratory tested in various NATA-registered laboratories throughout Australia. Many of the earlier CRA Exploration stream sediment and soil samples were analysed by CRA internal laboratories.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Over 213 samples have had their assays duplicated. • None of the historical data has been adjusted.

Criteria	JORC Code explanation	Commentary
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• In general, locational accuracy does vary, depending upon whether the samples were digitised off plans or had their coordinated tabulated. Many samples were reported to AGD66 or AMG84 and have been converted to MGA94. • It is estimated that locational accuracy therefore varies between 2-50m
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The average sample spacing across the tenure varies per element, e.g. for cobalt the RMS spacing between sample points is 179m, ranging down to 95m for zinc. • No sample compositing has been applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The current database does not contain any sub-surface samples. • Geological mapping by various companies has reinforced that the strata dips variously between 20-80 degrees.
Sample security	• *The measures taken to ensure sample security.*	• No new samples have been obtained.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have yet been undertaken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Castillo Copper holds EL 8599 of 20 units (60 km^2). The tenure has been formally granted for the term of thirty-six months until 20th June 2020. The location of the tenure is shown in Figure 1, below: *Figure 1: Location of EL 8599, Southwest of Broken Hill* 

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	**Previous Exploration** Thackaringa lead mineralisation was first discovered in 1875. The concentrated grade was estimated to be 55% Pb and 5500ppm Ag with Cu and Au credits. However, once the Broken Hill orebody was discovered in the 1880s, interest in the Thackaringa field was lost (Aitchison, 1995). **North Broken Hill Limited** North Broken Hill Limited held four (4) exploration licenses over the current tenure area from 1975 to 1983: EL 790; EL 1135; EL 1395; and EL 1564 (Archibald & Burket, 1975), (Holzberger, I.R., 1978), (Leyh, W.R., 1982), (Lees, T.C., 1981). The main exploration targets were lead, zinc, copper, silver, gold and tungsten. Exploration was conducted on a regional scale for Broken Hill-type Pb-Zn-Ag lode horizon. A broad stratigraphic relationship was recognized for the Thackaringa-type mineralisation. Work included geological mapping and rock chip geochemistry. The mine dumps assay results reported 14.6% Pb, 14% Zn, 13.4% Cu, 133ppm Ag (Aitchison, 1995). Between 1982 and 1983, 725 tonnes of dump material were converted into 91 tonnes of concentrate that demonstrated 29.6% Pb, 8.7% Zn and 495 ppm Ag (Aitchison, 1995). **CRA Exploration Pty Limited** CRA Exploration Limited (CRAE) conducted exploration over the current tenure area from 1974 to 1998. The work was conducted for eight (8) exploration licenses: EL 2103; EL 216; EL 0712; EL 4536; EL 4535; EL 1025; EL 1666; and EL 4871. In the 1970s CRAE did extensive dump, soil and stream sediments geochemistry testing for lead, zinc, copper and silver content. One hundred eighteen (118) samples from dump reported average 0.3% Cu.

Criteria	JORC Code explanation	Commentary
		Soil geochemistry (348 samples) demonstrated 29 ppm Cu. Stream sediments showed 45 ppm Cu (Aitchison, 1995). Between 1980 and 1998, CRAE carried out geological mapping, geochemistry sampling, geophysical survey and drilling (206 drillholes within and surrounding the tenure area). Samples were analysed for lead, zinc, copper, cobalt, silver and other elements. **Aberfoyle Resources Limited** Aberfoyle Resources Limited held three (3) exploration licences over the current Peak Hill project area from 1987 to 1994: EL 2919; EL 3202; and EL 3105. Exploration work was focused on identifying lead, zinc and copper mineralisations and included EM and UTEM survey, geochemical analysis of soil and drilling. **Other Work** Many other companies explored within and surrounding the Peak Hill tenement area, including BHP Minerals Limited; Perilya Broken Hill Limited; Platsearch NL; Rimfire Pacific Mining NL; Pasminco Australia Limited; MIM Exploration Pty Limited; Heritage Gold NZ Limited; Consolidated Feldspar Limited; Alliance Fuel Cells Pem Pty Ltd; Broken Hill Operations Pty Ltd; Broken Hill South Limited; and Newmont Holdings Pty Limited. Samples collected by them were analysed mostly for lead, zinc, copper, silver, gold and iron. Occasionally, cobalt assays were reported for some soil and sedimentary samples, mainly being used as an indicator mineral for the above-mentioned major mineralisation styles. **Current Nearby Exploration** The region is being actively explored, with nearby companies and the commodities they are exploring for, are listed in Table 1 below: *Table 1: EL 8599 Current Exploration Neighbouring Companies* **Tenure** / **Company** / **Commodity** **EL 8572** / Castillo Copper Limited / Metallic minerals **EL 8569** / Proton Geoscience Pty Ltd / metallic minerals

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>EL 8484</td><td>Proton Geoscience Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>EL 7162</td><td>Perilya Broken Hill Limited</td><td>metallic minerals</td></tr>
<tr><td>EL 5958</td><td>Rimfire Pacific Mining NL</td><td>metallic minerals</td></tr>
<tr><td>EL 8477</td><td>Dashell Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>EL 8598</td><td>SA Exploration Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>EL 8485</td><td>Proton Geoscience Pty Ltd</td><td>metallic minerals</td></tr>
<tr><td>ML 6302</td><td>Kapitany, Tamas</td><td>garnet</td></tr>
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</td></tr>
<tr><td>Geology</td><td>• Deposit type, geological setting and style of mineralisation.</td><td>
<h3>Regional Geology</h3>
The Broken Hill polymetallic deposits are located within Curnamona Province (Willyama Super group) that hosts several world-class deposits of lead, zinc, silver and copper. The Willyama Supergroup consists of highly-deformed metasedimentary schists and gneisses with abundant quartzo-feldspathic gneisses, lesser basic gneisses and minor ‘lode’ rocks. Prograde metamorphism ranges from andalusite through sillimanite to granulite grade (Stevens, Barnes, Brown, Willis, & L, 1988).
Regionally, the tenure is situated in Broken Hill spatial domain which extends from far western New South Wales into eastern South Australia (Figure 2). The Broken Hill Domain hosts several major fault systems and shear zones, which were formed by various deformation events and widespread metamorphism which has affected the Willyama Supergroup. Major faults in the region include the Mundi Mundi Fault to the west of Broken Hill, the Mulculca Fault to the east, and the Redan Fault to the south. Broken Hill is also surrounded by extensive shear zones including the Stephens Creek, Globe-Vauxhall, Rupee, Pine Creek and Thackaringa-Pinnacles Shear Zones.
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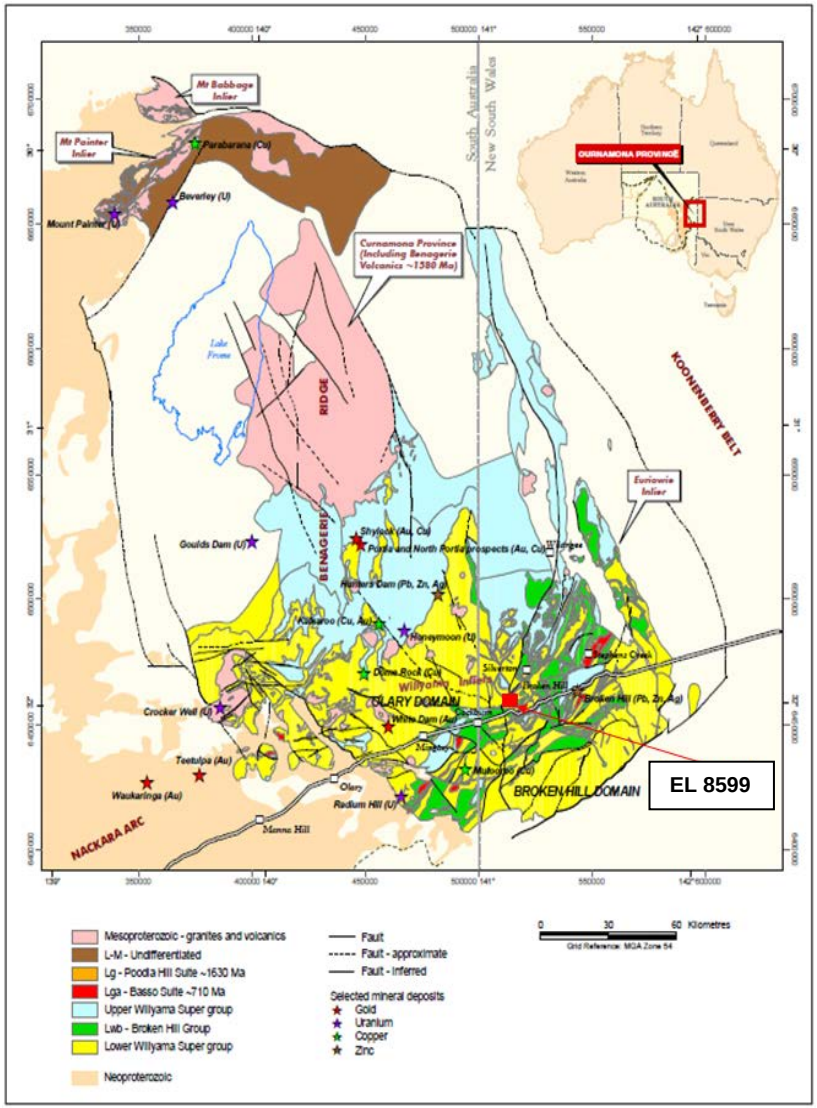
Figure 2: Regional Geological Map



Modified after (Peljo, 2003)

Local Geology

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

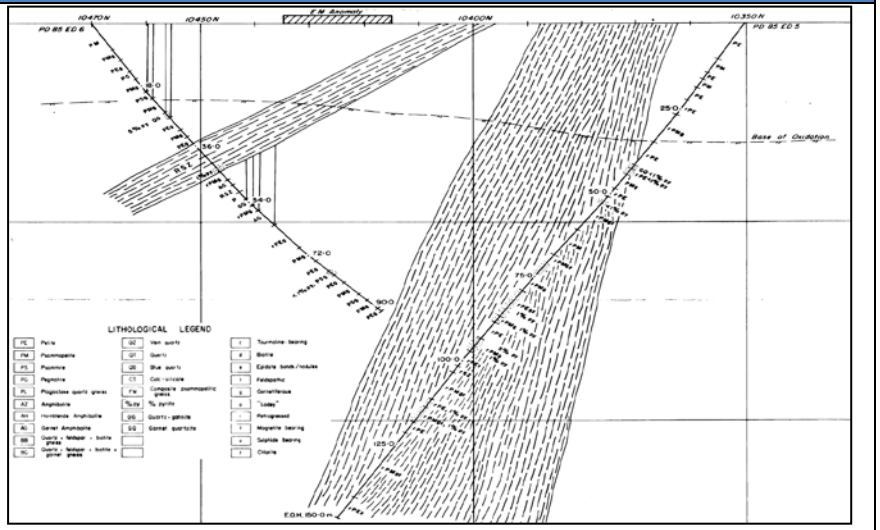
Figure 3: Mineralisation Intersected at Pyrite Hill.

Source: (Broken Hill Prospecting Ltd, 2016)

Seventy two (61) mineral occurrences are located in and around EL 8599. Twenty-five (21) are within the tenure (Barnes, 1980) which includes twenty-one (17) unnamed occurrences that were mined by shallow pits and shafts. Most of them documented uranium and metallic sulphides. Further work is progressing in examining the significance of each mineral occurrence.

Historical drillholes samples were tested for base metals. Figure 4 below shows the results from drillholes PD85ED5 and PD85ED5 drilled in the Edgar Project area of EL 1025, illustrating lithological units and pyrite percentage.

Figure 4: EL 1025 Drillholes PD85ED5 and PD85ED5

Criteria	JORC Code explanation	Commentary
		 *Modified after (Walker, 1985)*
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No new drillholes have been completed yet.
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.*	• No new assays are reported in this announcement

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• As a database of the historical borehole sampling has not yet been compiled and validated, it is uncertain if there is a relationship between the surface sample anomalies to any subsurface anomalous intersections. No existing geological 3D models exist but preliminary investigation has shown that sufficient data may be available to generate a small resource of lead or zinc.
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 in the report. 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 avoiding misleading reporting of Exploration Results.*	• No new exploration results have been reported, but regarding the surface sampling, no results other than duplicates or reference standard assays have been omitted.
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 collated.
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.*	Work has commenced on Phase 1, which is to identify initial surface anomalies and priority zones within the EL 8599, it is recommended that: • The non-sampled zone in the centre of the tenure be defined and sampled; • A more detailed study of historical drillholes should be conducted to determine if enough data exists to estimate a JORC resource; and • A program of field mapping and ground magnetic or EM surveys.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	The database only consists of Excel spreadsheets at this stage, split per element. As evaluations continue, the data will be migrated to a more appropriate relational database
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• No site visits have yet been undertaken
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• This is a preliminary investigation of surface sampling and no mineral resource estimates have yet been, or could be, calculated. • Mineralisation, where present will exist in metamorphic rock-hosted breccia's in or near fault intersections and other structural disturbances. • The mineralisation appears to be coincident with quartz-rich veins.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Currently defined surface anomalies are 100-1,200m long elongated zones contained within a much more extensive mineralised zone. • the most anomalous areas for all four (4) elements (Co, Cu, Pb, Zn) is related to sampling along two (2) intersecting structural zones, the east-west trending Thackaringa-Pinnacles Shear Zone and an unnamed north-east trending zone that traverses EL 8599.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg Sulphur for acid mine drainage characterisation).*	• No mineral resource estimates yet determined.

	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Only limited moisture analyses were contained in the dataset.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• No cut-off grades yet determined for nickel or cobalt
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Mining factors not yet determined
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• No assumptions made.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with*	• No mineral resources yet to be estimated.

	an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• No bulk density measurements obtained so far.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Not relevant to discuss as no mineral estimate yet to be calculated
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audit has taken place.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• No mineral estimate calculated to date.

HILL OF GRACE

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

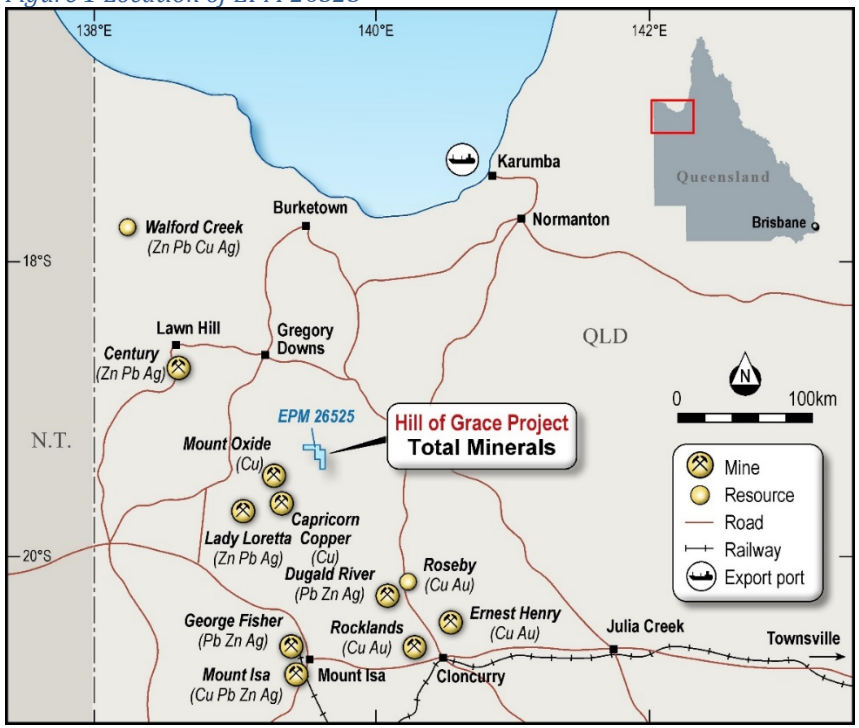
Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30-g 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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Sampling used in this analysis was all historical from the period 1972-2016. The data was a combination of the QLD DNRM 2013 database and historical annual and relinquishment reports revisited and additional data extracted. • Nearly 1,850 sample analyses from stream sediment, soil, and rock chip sources were collated and combined. • Many of the sampling programs, especially from the 1990's did include reference samples and duplicate analyses and other forms of QA/QC checking. • Sampling prior to 1985 generally has higher "below detection limits" and less QA/QC checks.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• There is no historical drilling within EPM 26525, however 300m to the south of the tenure boundary four (4) shallow drillholes (<100m) were completed for the Amanda Gold Project. Data is available but was not used for this analysis due to no cobalt sampling taking place. Drilling was a combination of RAB, RC with limited diamond cored holes.
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.*	• Not relevant to this study as no new samples have been obtained.

Criteria	JORC Code explanation	Commentary
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. • No downhole geophysical logging took place.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No new sampling was obtained for this study.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All the analyses bar a few (<75 out 1,850) samples were laboratory tested in various NATA-registered laboratories throughout Australia. Many of the earlier MIM and Carpentaria Exploration stream sediment and soil samples were analysed
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Over 210 samples have had their assays duplicated. • None of the historical data has been adjusted.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations*	• In general, locational accuracy does vary, depending upon whether the samples were digitised off plans or had their coordinated

Criteria	JORC Code explanation	Commentary
	used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	tabulated. Many samples were reported to AGD66 or AMG84 and have been converted to MGA94. • Locational accuracy therefore varies between 2-50m
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The average sample spacing across the tenure varies per element, e.g. for cobalt the RMS spacing between sample points is 175m, ranging down to 85m for copper. • No sample compositing has been applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The current database does not contain any sub-surface samples.
Sample security	• *The measures taken to ensure sample security.*	• Not relevant as no new samples obtained.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have yet been under taken.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Castillo Copper holds EPMA 26525 of 38 sub-blocks (118 km^2). The tenure is yet to be formally granted, but this is in progress. The location of the tenure is shown Figure 1, below: *Figure 1 Location of EPM 26525* 
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Over twenty-seven (27) reports representing exploration in thirty-five historical tenures that cover or partially cover EPMA 26525 are discussed in brief the report. • Most explorers were searching for Cu-Au-U, and, proving extensions to the several small sub-economic copper deposits that were identified over time (e.g. Big Oxide and Josephine) as can be seen by

Criteria	JORC Code explanation	Commentary
		the intense areas of soil grid sampling on Figure 6 in the report (Harris 1979; Elliot and Eggers 1981; McGeough 1993). The premise by explorers such as Perilya Minerals NL was to reopen the closed Mt. Oxide Copper Mine and to supplement supply with copper ore from the small satellite deposits. Very few explorers considered the area for cobalt, even given anomalous surface sampling recording values as high as 924 ppm within the tenure.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Regionally, the tenure is situated in the apex of the Mount Oxide-Gunpowder spatial domain straddling the Lawn Hill Platform and the Leichhardt River Fault Trough of the Western Fold Belt. Dominant bounding faults are the northeast trending Fiery Creek Fault in the northwest and a similarly trending splay of the Mount Gordon fault in the south east. East of the Valparaisa fault, rocks of the Surprise Creek Formation are present in tight north to northeast trending, south plunging, syncline-anticline fold series. • New exploration tenure adjacent to EPM 26525 has been acquired by privately-held Cobalt X Pty Ltd (who have recently been acquired by Cohiba Minerals Limited (ASX: CHR) (Cohiba Minerals Limited, 2017)), and who have also applied for a small mining lease (ML 100115) covering Cobalt, Copper, Nickel, Lead, Zinc, Gold, and Uranium Ore. The targets are Cu-Au-Co ore bodies in the Esperanza and Surprise Creek Formations of the McNamara Group and the Whitworth Quartzite of Upper Myally Sub-Group of the Mt Isa Orogen.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• No new drillholes have been completed yet.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No new assays are reported in this announcement
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Reported mineralization consists of chalcopyrite, pyrrhotite, chalcocite, and cobaltite. At Mt Oxide and Mt Gordon the two main orebodies are manifest as a breccia and replacement zones associated with interconnecting faults. The Mt Gordon/Mammoth deposit is hosted by brittle quartzites, whereas the Esperanza Deposit is hosted by carbonaceous shales. Mineralisation is associated with the Isan Orogeny (1500 – 1590Ma), while primary sulphides in both deposits include: Chalcopyrite, Pyrite and Chalcocite.
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 in the report. 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.*	• No new exploration results have been reported, but regarding the surface sampling, no results other than duplicates 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 resistivity surveys over parts of the tenure area but this is yet to be collated. The Queensland government has released regional compilations of Aster and Hyperspectral airborne mineral surveys at resolutions (pixel sizes of images) varying between 400 x 400m to 900 x 900m.
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.*	• While further desktop work is still required, as cobalt was not the focus of previous exploration activities, the Board of Total Minerals intends to commence interpretation of the surface sampling dataset for the Hill of Grace project within the next few weeks. Any resource subsequently identified is likely to comprise several satellite deposits within the project area, Total Mineral's strategic intent is to use third

Criteria	JORC Code explanation	Commentary
		party processors and not commit to building a facility onsite.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	The database only consists of Excel spreadsheets at this stage, split per element. As evaluations continue, the data will be migrated to a more appropriate relational database
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• No site visits have yet been undertaken
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• This is a preliminary investigation of surface sampling and no mineral resource estimates have yet been, or could be, calculated. • Mineralisation, where present will exist in sedimentary rock-hosted breccia's in or near fault intersections and other structural disturbances. • The mineralisation appears to be coincident with the outcrop of two steeply dipping rock units, the Surprise Creek and Qualilar Formations, which strike north to north-northeast in the tenures.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Currently defined surface anomalies are 200-1,500m long elongated zones contained within a much more extensive
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. Sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.*	• No mineral resource estimates yet determined.

	• *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Only limited moisture analyses were contained in the dataset.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• No cut-off grades yet determined for copper or cobalt
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Mining factors not yet determined
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• No assumptions made.
Environmen-tal factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Not relevant yet as no mineral resource estimates completed.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the*	• No bulk density measurements obtained so far.

	frequency of the measurements, the nature, size and representativeness of the samples. • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Not relevant yet as no mineral resource estimates completed.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No audit has taken place.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• No mineral estimate calculated.