

Market Announcement

26 Oct 2017

October 2017 – Highlights

Cobalt Blue Holdings Ltd A Green Energy Exploration Company



ASX Code:

COB

Commodity Exposure:

Cobalt & Sulphur

Directors & Management:

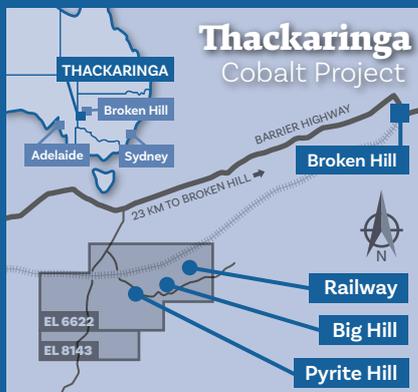
Robert Biancardi	Non-Exec Chairman
Hugh Keller	Non-Exec Director
Trangie Johnston	Non-Exec Director
Matt Hill	Non-Exec Director
Joe Kaderavek	CEO & Exec Director
Ian Morgan	Company Secretary

Capital Structure:

Ordinary Shares at 26/10/2017:	95m
Options (ASX Code: COBO):	21.2m
Market Cap (undiluted):	\$18m

Share Price:

Share Price at 26/10/2017:	\$0.18
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Bulk Metallurgical Testwork – Strong Concentration Results

- Cobalt Blue has now completed gravity and flotation testwork on an 820 kg composite sample of Thackaringa ore.
- Recovery of cobalt to the concentrate was 92%, and the mass recovery to concentrate was 17%. The cobalt recovery represents a strong result and a significant milestone in the development of the Thackaringa project.
- Recovery of cobalt was achieved with coarse crush size of 1.2 mm and gravity separation, indicating low capital and operating costs compared to fine milling and floating the entire ore.
- Cobalt Blue is pleased to announce the appointment of Dr Andrew Tong to manage COB's Feasibility Studies. Dr Tong's background is included in this release.

Pre-Feasibility Testwork Overview

The Thackaringa project is planning to mine ore from three surface deposits. The host rock (silica and feldspars) contains approximately 20% sulphides (mainly pyrite), with cobalt at 900–1000 ppm. Upgrading the ore to a sulphide concentrate is an important step to developing an economically viable project.

Diamond drill core samples were collected in late 2016 and used for testwork in the Scoping Study which was completed June 30 2017. Approximately 820 kg of the ore, representing the Railway and Pyrite Hill deposits, was composited in August 2017, and is being used to test the preferred process for the Pre-Feasibility Study (PFS). The PFS testwork program is designed to deliver 'reliable and repeatable' results at a scale 10–50 times larger than the tests used in the Scoping Study (July 12), where the 'proof-of-concept' was determined. The results will be used to conduct engineering studies and cost estimates for the PFS.

The PFS is examining the processing path shown below:



There are four stages to the metallurgical testwork (post mining):

- Concentrate:** Preparation of a sulphide concentrate from the ore (this market release)
- Calcine:** Calcination (thermal treatment) of the concentrate
- Leach:** Leach the calcine
- Product Recovery**

Processing – Concentrate



Ore was processed by crushing to p100 @ 1.2 mm and passed through a gravity spiral circuit. The tails were screened, with the fines subjected to froth flotation. The gravity and flotation concentrates were combined into a single concentrate. The results are summarised below:

Product	Mass (Kg)	Wt (%)	Co (ppm)	Dist (%)	Fe (%)	Dist (%)	SiO2 (%)	Dist (%)	S (%)	Dis (%)
Feed	819		607		7.94		59.84		7.58	
Combined Gravity + Float Con	139	17.0	3326	92.1	36.03	78.4	14.53	4.3	40.20	92.4
Float Tails	223	27.3	50	2.6	2.55	9.7	67.70	30.9	0.72	3.0
Cyclone Tails	444	54.3	70	5.3	1.73	11.9	69.57	64.3	0.86	4.6

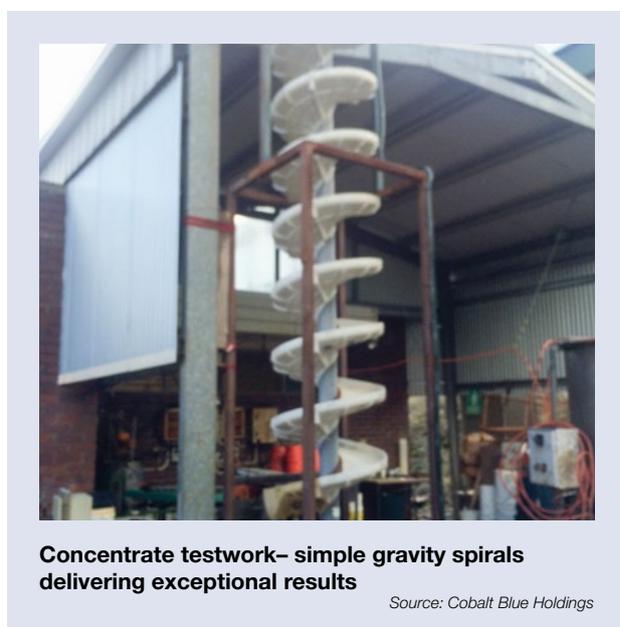
The key outcomes are:

- High cobalt recovery to concentrate of 92% from the ore
- High recovery of cobalt achieved with coarse crush size of 1.2 mm and gravity separation, indicating low capital and operating costs compared to fine milling and floating the entire ore

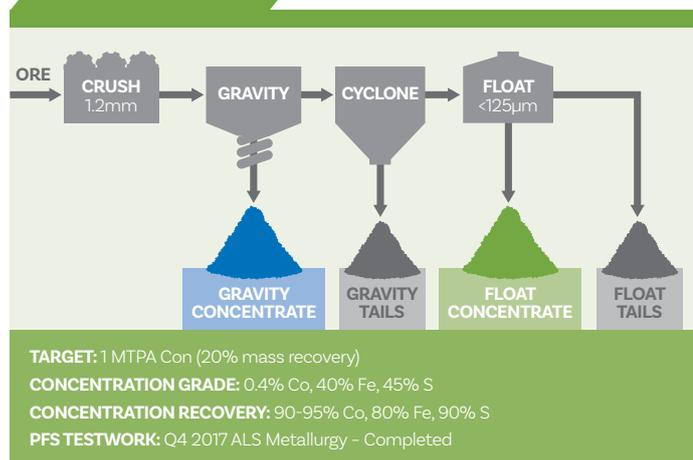
Cobalt Blue's Feasibility Studies Manager, Dr Andrew Tong said:

"The ability to easily produce a concentrate containing 0.3–0.4% cobalt from Thackaringa ore, using predominately gravity separation, is an important first step in determining the economic viability of the project. A low-cost concentrate pathway to reduce the mass by 80%, and still retain over 90% of the cobalt, is essential to delivering a higher grade feed to the refinery. This stands in contrast to other cobalt projects where options are limited for upgrading the run-of-mine ore prior to metallurgical processing e.g. laterites."

A conceptual schematic of the commercial plant concentrate circuit is shown in the following graphic. The aim is to treat 5 MTPA of ore and produce 1 MTPA of concentrate, with a cobalt recovery of 90–95%. The concentrate step will produce a feed material containing ~0.4% cobalt, which will be forwarded to an onsite refinery for production of cobalt sulphate.



Concentrate Stage – Detailed Breakdown



Source: Cobalt Blue Holdings

PFS testwork – looking forward

Overall COB is delighted with the concentration testwork and is looking forward to completing Calcine and Leach (Steps 2 & 3) testwork in the coming weeks. This testwork will be the subject of a separate market announcement. A schedule of the testing program is shown below, and we expect the majority of the program to be completed by the end of December 2017.

PFS – Metallurgical Testwork Breakdown/Schedule

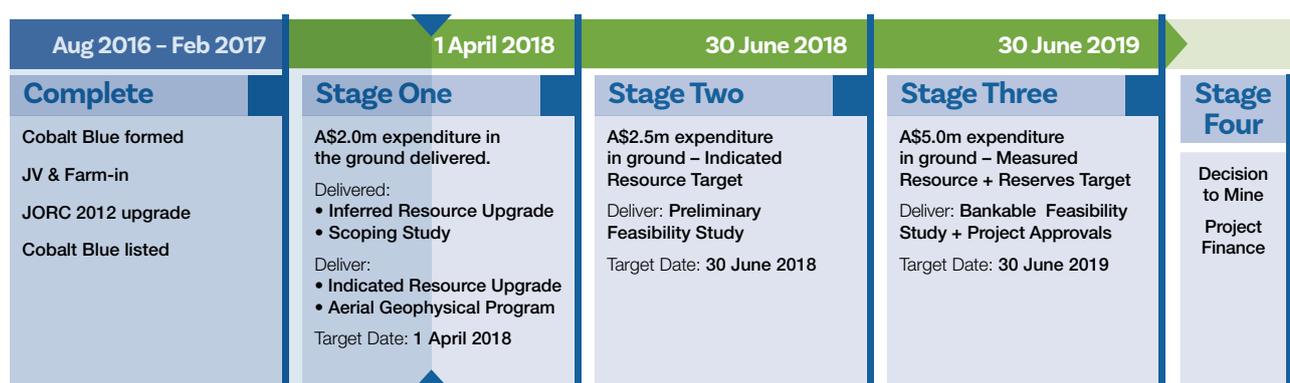
Unit Operation	Scoping Study Options Tested	Pre-Feasibility Study Selected Process Testing	Schedule 2017
Concentration	<ul style="list-style-type: none"> 50–100 kg ore Flotation Gravity Magnetics 	<ul style="list-style-type: none"> 800 kg ore Gravity, flotation, cyclone, rougher float 	September (in progress)
Thermal Treatment	<ul style="list-style-type: none"> 2 kg concentrate Roasting (SO₂ for acid) Decomposition (no acid) – elemental sulphur 	<ul style="list-style-type: none"> 100 kg concentrate Decomposition (no SO₂) – elemental sulphur 	Q4
Leaching	<ul style="list-style-type: none"> 2 kg concentrate High temp POX Atmospheric leach 1 kg calcine Low temp POX Atmospheric leach 	<ul style="list-style-type: none"> 80 kg calcine Low temp POX / Atmospheric leach 	Q4
Product Recovery	Not tested	<ul style="list-style-type: none"> IX + crystallisation 0.5 kg of cobalt 	Q4

Source: Cobalt Blue Holdings

COB remains focussed on proving up the processing and economics of our unique ore. Our goal is to prove a long life mining operation capable of operating at cobalt cycle troughs, whilst generating significant margins at current market pricing.

Thackaringa Project timetable

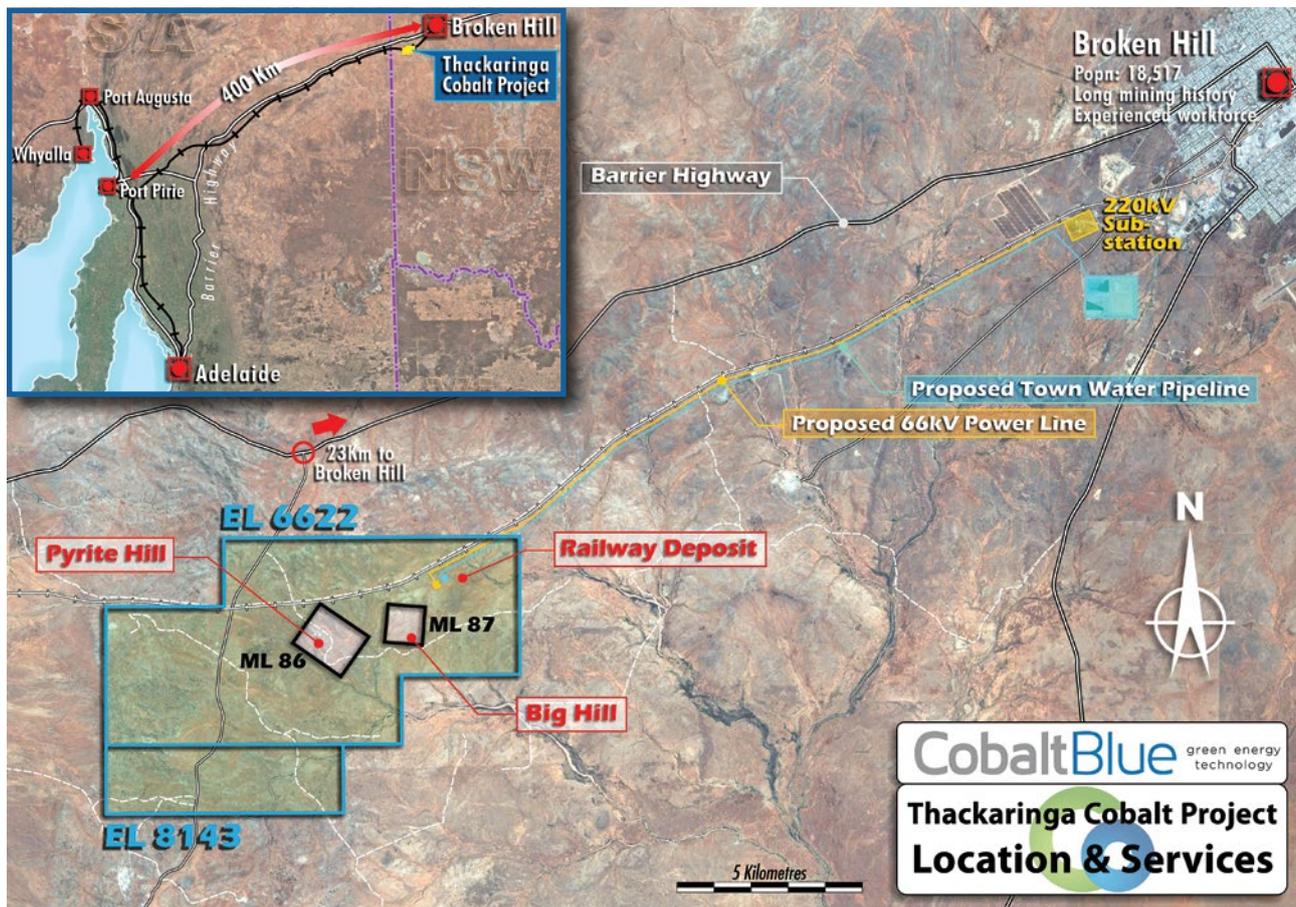
Results to date continue to justify proceeding further along the pathway towards commercial development of the Thackaringa cobalt project. The overall company timeline is shown below:



Source: Cobalt Blue Holdings

The Thackaringa Cobalt Project site and potential services are shown on the following page. The site is situated close to Broken Hill, and is well connected to existing transport routes including the Barrier Highway and the Intercontinental Railway. Availability of water and power supplies further support positive project economics.

Thackaringa Cobalt Project – Location and Potential Services



Source: Cobalt Blue Holdings

Dr Andrew Tong – Background

Andrew is a metallurgist with 15 years of experience in project development, mining and processing activities. He is formerly the CEO of Compass Resources/Northern Territories Resources (2016–2017), and is now a non-executive Director of Northern Territories Resources (2017–present). Prior to that Andrew was the CEO of Goldsmith Resources (Peru) (2014–2015), and director of Australia Gold (2010–2017). Andrew has considerable experience in projects targeting extraction of metals from complex polymetallic feeds or refractory minerals such as pyrite. He has developed and patented metallurgical processes, managed testwork programs and project studies, and is a welcome addition to the COB team.

Cobalt Blue Background

Cobalt Blue (“COB”) is an exploration company focussed on green energy technology and strategic development to upgrade its mineral resource at the Thackaringa Cobalt Project in New South Wales from Inferred to Indicated status. This strategic metal is in strong demand for new generation batteries, particularly lithium-ion batteries now being widely used in clean energy systems.

COB is undertaking exploration and development programs on the Thackaringa Cobalt Project pursuant to a farm-in joint venture agreement entered into with Broken Hill Prospecting Limited (“BPL”). Subject to the achievement of milestones, COB will be entitled to acquire 100% of the Thackaringa Cobalt Project.

The Thackaringa Project, 23 km west of Broken Hill and 400km by rail from Port Pirie consists of four granted tenements (EL6622, EL8143, ML86 and ML87) with total area of 63km². The main targets for exploration are well known and document large-tonnage cobalt-bearing pyrite deposits. The project area is under-explored, with the vast majority of historical exploration directed at or around the outcropping pyritic cobalt deposits at Pyrite Hill and Big Hill.

Potential to extend the Mineral Resource at Pyrite Hill, Big Hill, Railway and the other prospects is high. Numerous other prospects within COB’s tenement package are at an early stage and under-explored.

Looking forward, we would like our shareholders to keep in touch with COB updates and related news items, which we will post on our website, the ASX announcements platform, as well as social media such as Facebook (f) and LinkedIn (in). Please don't hesitate to join the 'COB friends' on social media and also to join our newsletter mailing list at our website.



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Competent Person's Statement

The information in this report that relates to exploration results, Mineral Resources and Targets is based on information compiled by Mr Anthony Johnston, BSc (Hons), who is a Member of the Australian Institute of Mining and Metallurgy and who is a non-executive director of Cobalt Blue Holdings Limited, the Chief Executive Officer of Broken Hill Prospecting Limited and the Technical Manager of the Joint Venture. Mr Johnston has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 & 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Johnston consents to the inclusion in the announcement of the matters based on his information in the form and context that the information appears.

Previously Released Information

This ASX announcement refers to information extracted from the following report, which is available for viewing on COB's website <http://www.cobaltblueholdings.com>

- 12 July 2017: Scoping Study update – Strong Potential for Commercialisation after Processing Testwork
- 5 June 2017: Significant resource upgrade for the Thackaringa Cobalt Project
- 25 May 2017: Stage One Drilling Program delivers robust results – resource upgrade to follow
- 4 May 2017: 2017 Update – Strong Drilling Results Continue
- 27 March 2017: Assays confirm Thackaringa as a Significant Cobalt-Pyrite Project

COB confirms it is not aware of any new information or data that materially affects the information included in the original market announcements, and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. COB confirms that the form and context in which the Competent Person's findings presented have not been materially modified from the original market announcement.