# Market Update

1 November 2018

Cobalt Blue Holdings Limited
A Green Energy
Exploration
Company



ASX Code:

COB

#### **Commodity Exposure:**

**Cobalt & Sulphur** 

#### **Directors & Management:**

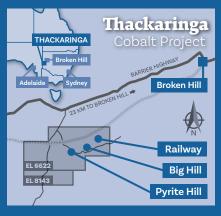
Robert BiancardiNon-Exec ChairmanHugh KellerNon-Exec DirectorJoe KaderavekCEO & Exec DirectorMatt HillNon-Exec DirectorRobert WaringCompany Secretary

#### **Capital Structure:**

Ordinary Shares at 31/10/2018: 116.2m
Options (ASX Code: COBO): 24.3m
Market Cap (undiluted): \$25.6m

#### Share Price:

**Share Price** at 31/10/2018: **\$0.22** 



#### **Cobalt Blue Holdings Limited**

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### October 2018 - Highlights

# Thackaringa Feasibility Study Drilling Campaign Commences

2018–2019 drilling campaign underway to target improved Mineral Resource classification and growth.

#### **KEY POINTS:**

- Cobalt Blue Holdings Limited (ASX:COB) has commenced the largest single drilling campaign to date at Thackaringa in excess of 15,000 metres will be drilled over the coming six months. Previously, between 2H 2016 and 1H 2018, COB has drilled a total of 20,445 metres consisting of 38 Diamond Drill (DD) holes, 93 Reverse Circulation (RC) drill holes, and three RC drill holes with diamond tails over three campaigns.
- The campaign has commenced with two DD and two RC drill rigs currently working on site; with 755 metres completed to date at Pyrite Hill.
- In separate negotiations, Essential Water has indicated that 1.2GL per annum of raw water is available for the Thackaringa Cobalt Project. A further 0.3 GL per annum could also be supplied with a minor capital upgrade to Essential Water's trunk main supply network. (The estimated water requirements specified in the PFS was 1.3 GL per annum).

Figure 1. **High grade pyrite mineralisation intersected during** the current drilling campaign (assay results pending).







#### 2018-2019 Drilling Program Aims

The drilling campaign has five broad aims:

- 1. Improved Mineral Resource classification defining Measured Resources.
- 2. Growth of Mineral Resources exploration along margins of existing mineralised bodies.
- 3. Confirmation of the location of infrastructure and site layout geotechnical, hydrogeological and sterilisation drilling for project infrastructure and process plant civil works.
- 4. Overburden definition identification of oxide and/or transition layer(s).
- 5. Blue-sky exploration follow up previously identified geophysical anomalies.

#### **Improved Resource Classification**

Based on the results of the PFS, COB is aiming to define a component of Measured Mineral Resources. This will require in-fill drilling at approximately 40 metre spacing to improve geological confidence and data density. During the Mining Study, Measured Mineral Resources will be evaluated for conversion to Proven Ore Reserves. Typically, the target quantity for Proven Ore Reserves would be sufficient to provide ore for the initial three to five year period of the proposed project production.

Additional in-fill drilling will target improved classification of Inferred to Indicated Mineral Resources. Indicated Mineral Resources will be evaluated for conversion into Probable Ore Reserves during the Mining Study.

#### **Mineral Resource Growth**

In the upcoming campaign, COB is aiming to increase the Inferred Mineral Resources by targeting down-dip extensions at the Pyrite Hill deposit and shallow strike extensions at the Big Hill and Railway deposits. COB is targeting a 20+ year mine life with growth of the overall Mineral Resource a key component of achieving this target. For clarity, future additional drilling campaigns are expected to be undertaken following completion of the 2H 2018 to 1H 2019 program which is described in this announcement.

Exploration targets identified for current and future phases of exploration drilling are summarised in Table 1.

Table 1. Exploration targets identified for assessment during current and future phases of exploration drilling as released 13 September 2018.

		Tonnes (Mt)		Grade (Co ppm)	
Deposit	Target Area	Lower	Upper	Lower	Upper
Pyrite Hill	Α	6.6	13.7	900	950
Big Hill	В	0.7	2.6	650	750
Big Hill	С	0.1	0.4	600	700
Railway	D	3.3	8.1	700	800
Railway	E	0.3	2.5	900	1,100
Total	-	11.0	27.3	820	900

**Note:** Minor rounding errors may have occurred in the compilation of this table. The potential quantity and grade of these target is conceptual in nature.

There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in determination of a Mineral Resource.

#### **Oxidation Boundary Definition**

COB will drill near-surface holes to better define the oxide and/or transition oxide-sulphide layers which represent shallow overburden (10–25 metres) on top of the fresh sulphide ore. To date (in the PFS and Scoping Study), oxidised and partially oxidised material was excluded from the reported Mineral Resources and subsequently proposed mining and processing studies. The drilling campaign will identify if any cobalt is present through the oxidation profile, and if so, related metallurgical studies will then be undertaken.

#### Infrastructure and Site Layout

COB will complete additional drilling for the purposes of geotechnical, hydrological and hydrogeological assessment related to infrastructure, mining and process plant planning.

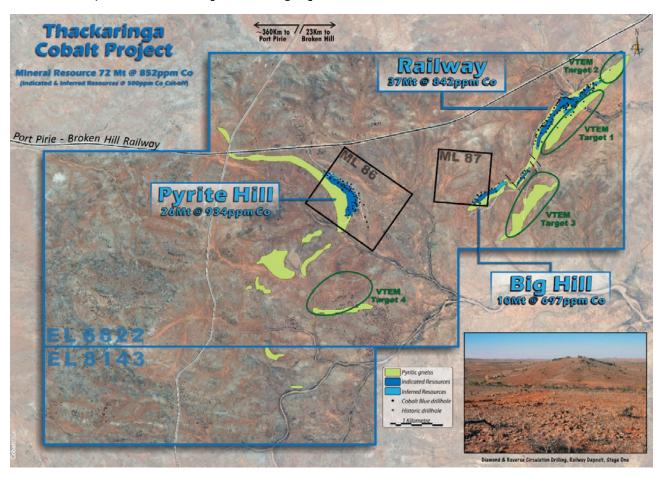




#### **Blue-sky exploration**

In September 2017, the entire project area (63km²) was surveyed using a heliborne electromagnetic (EM) survey (VTEM-Max) at a nominal 100 metre line spacing. Several strong EM responses outside of the existing Mineral Resources (Pyrite Hill, Railway and Big Hill) were identified and cross-checked with coincident geophysical (Induced Polarisation) and geochemical anomalism (see Figure 2). In the current drilling campaign, COB will undertake some preliminary drilling at these targets and further downhole geophysics (down-hole electromagnetics – 'DHEM') as warranted.

Figure 2. Priority exploration targets identified through processing of the heliborne electromagnetic ('EM') survey (VTEM-Max) completed during September 2017.



#### **Campaign Update**

Drilling operations have commenced in October with the mobilisation of a versatile drilling fleet comprising two DD and two RC rigs. To date a total of 755 metres have been completed including 230 DD metres and 525 RC metres. DD drilling will support the continuation of geotechnical and geometallurgical studies within the broader feasibility framework while RC drilling will predominantly service the infill program.

The staged campaign is initially focused on the Pyrite Hill deposit which hosts a combined Indicated and Inferred Mineral Resource of 26Mt at 934ppm cobalt and 10.3% sulphur (at a cut-off of 500ppm cobalt and as released 19 March 2018 'Thackaringa – Significant Mineral Resource upgrade'). By capitalising on the existing and favourable drilling density, the infill program will target conversion of the Indicated Mineral Resource component (currently representing 85% of the Pyrite Hill Mineral Resource) to a Measured classification in accordance with the JORC 2012 Code.

Opportunities for Mineral Resource growth at Pyrite Hill will target down-dip extensions where the deposit remains open at depth below 50mRL (approximately 250m below surface) (see Table 1 – target A).

It is anticipated the rigs will be deployed to the Railway deposit in late November with the program sharing similar objectives to that of the current Pyrite Hill drilling. Shallow parallel/strike extensions will be targeted by a nominal component of extensional drilling (see Table 1 – target D & E) with further infill drilling to support an improved Mineral Resource classification.





Figure 3. Diamond drilling operations at Pyrite Hill.



Figure 4. Reverse circulation and diamond drilling operations at Pyrite Hill.

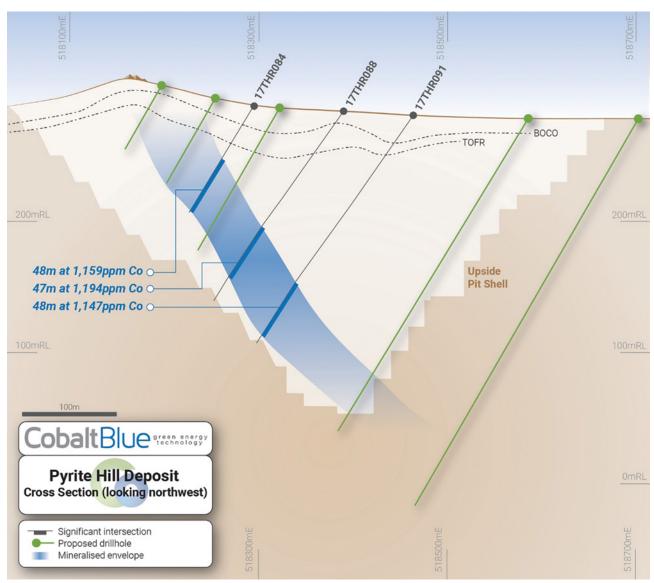






Figure 5. Pyrite Hill deposit cross section (looking north-west) showing strong continuity of mineralisation at depth where the Mineral Resource estimate and pit optimisation were limited by drilling extent. Infill and extensional drill holes are illustrated commensurate to the broader campaign objectives.

Significant intersections are as released 24 January 2018 'Significant Thackaringa Drilling Program complete – Resource Upgrade pending' and the inputs and results underpinning the 'upside pit shell' are as released 4 July 2018 'Thackaringa Pre-Feasibility Study Announced'.



#### **Essential Water Update**

Essential Water is a water retailer and distributer for the Broken Hill district, supplying treated water, recycled water and untreated water to retail and industrial customers. COB has been consulting with Essential Water for 18 months in order to source raw water required for the Thackaringa Cobalt Project. Essential Water has now confirmed that 1.2GL per annum of (unfiltered industrial) water is available for the Thackaringa Cobalt Project, with an additional 0.3 GL per annum available with a minor capital upgrade to the trunk main network. The estimated water requirements specified in the PFS was 1.3 GL per annum. This does not represent a guarantee of supply, but rather a milestone along the path to a formal service and supply agreement which will be negotiated when the project proceeds to commercial implementation status.

#### Cobalt Blue has the following beneficial interests in the tenements:

- EL 6622 70% beneficial interest
- EL 8143 70% beneficial interest
- ML 86 70% beneficial interest
- ML 87 70% beneficial interest





## **Cobalt Blue Background**

Cobalt Blue Holdings Limited (ASX:COB) is an exploration and project development 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 in a Joint Venture (70% interest) with Broken Hill Prospecting Limited (ASX:BPL) (30% interest) to develop the Thackaringa Cobalt Project.

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 () 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.



Joe Kaderavek Chief Executive Officer info@cobaltblueholdings.com P: (02) 8287 0660

### **Previously Released Information**

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

- 24 October 2018: COB decides not to exercise its rights to proceed further under Thackaringa Joint Venture Farmin Earning Period Provisions
- 18 September 2018: CEO's Letter to Shareholders
- 13 September 2018: Bankable Feasibility Study Commences with Drilling Campaign and Project Optimisation Studies
- 05 September 2018: Thackaringa TJV Completion of Stage 2 Earning Obligations
- 04 July 2018: Thackaringa Pre Feasibility Study Announced
- 20 April 2018: Thackaringa JV Stage One Completed
- 19 March 2018: Thackaringa Significant Mineral Resource Upgrade
- 05 March 2018: PFS Calcine and Leach Testwork Complete Strong Results
- 24 January 2018: Significant Thackaringa Drilling Program complete Resource Upgrade pending
- 27 December 2017: PFS Bulk Metallurgical Testwork Progress Update
- 04 December 2017: Railway Drilling Program confirms grade continuity at depth and strike
- 26 October 2017: Bulk Metallurgical Testwork Strong Concentration Results
- 27 September 2017: CEO's Letter to Shareholders September 2017
- 12 July 2017: Scoping Study update Strong Potential for Commercialisation after Processing Testwork

### Competent Person's Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Peter Buckley, a Competent Person who is a Member of The Australian Institute of Geoscientists (MAIG). Mr Buckley is employed by Left Field Geoscience Services and engaged by Cobalt Blue Holdings on a consulting basis.

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