

Helen Degeling

Precompetitive Geoscience

The Secret to Australia's
Exploration Success

ASX: COB



Disclaimer

This document may contain forward-looking statements. Such statements are not guarantees and involve known and unknown risks and other matters outside the control of Cobalt Blue Holdings Limited (“COB” or “the Company”). Actual values, results or events may be materially different to those expressed or implied in this document. Given these uncertainties, readers should not rely on forward-looking statements. This document does not constitute an offer or, invitation in relation to the dealing in securities in the Company and does not constitute investment advice or a recommendation of particular investments to any person. Readers should conduct their own investigations and perform their own analysis before making a decision in relation to an investment in the Company. To the fullest extent permitted by law, the Company makes no representation or warranty, express or implied, as to the accuracy or completeness of any information or other representations contained in this document. No responsibility for any errors or omissions from this document arising out of negligence or otherwise is accepted.



The Importance of Mineral Exploration

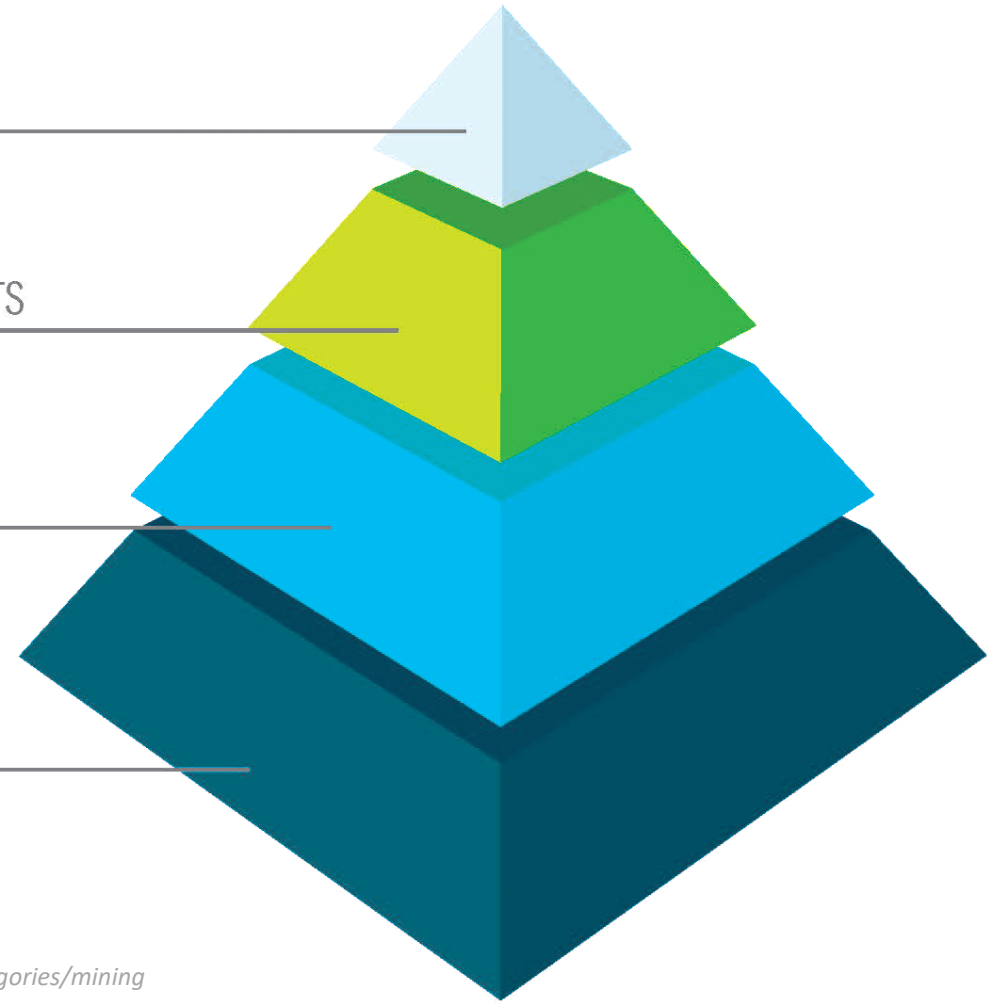
*For every 500–1000 exploration projects, we will get **ONE** producing mine.*

ONE PRODUCING MINE

10 DEVELOPMENT PROJECTS

100 TARGETS FOR
ADVANCED EXPLORATION

FROM 500 - 1000 GRASS
ROOTS EXPLORATIONS



*Image credit: The Fraser Institute
<https://www.fraserinstitute.org/categories/mining>*



Timeframe from greenfields to resource

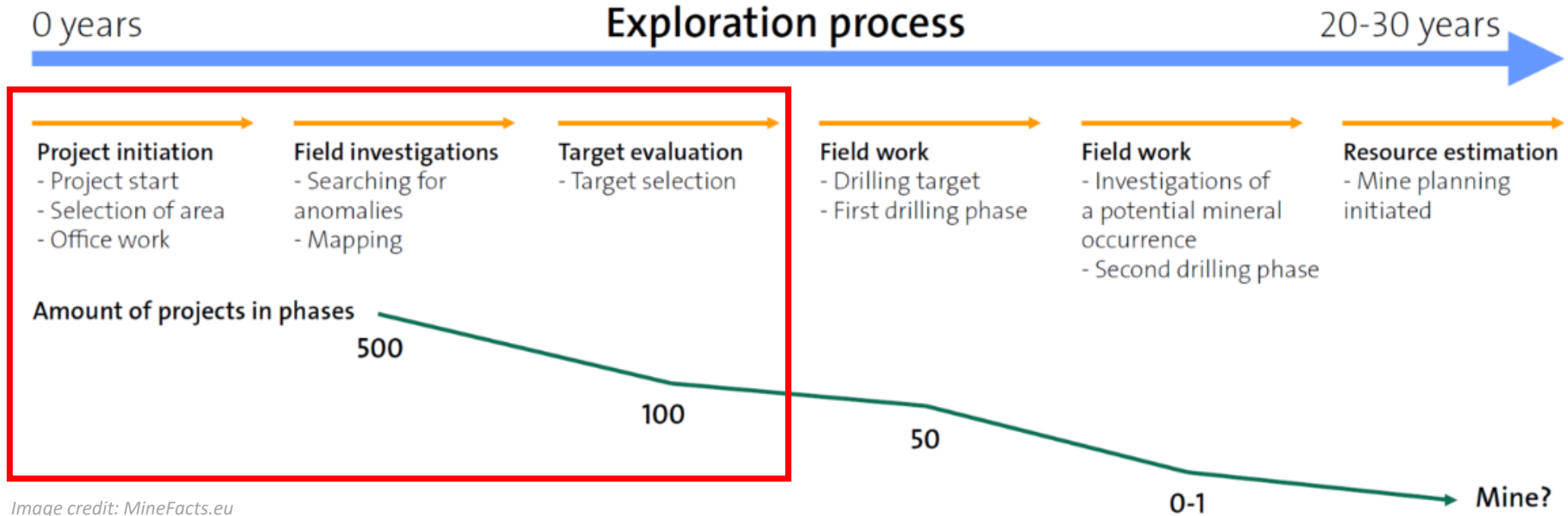
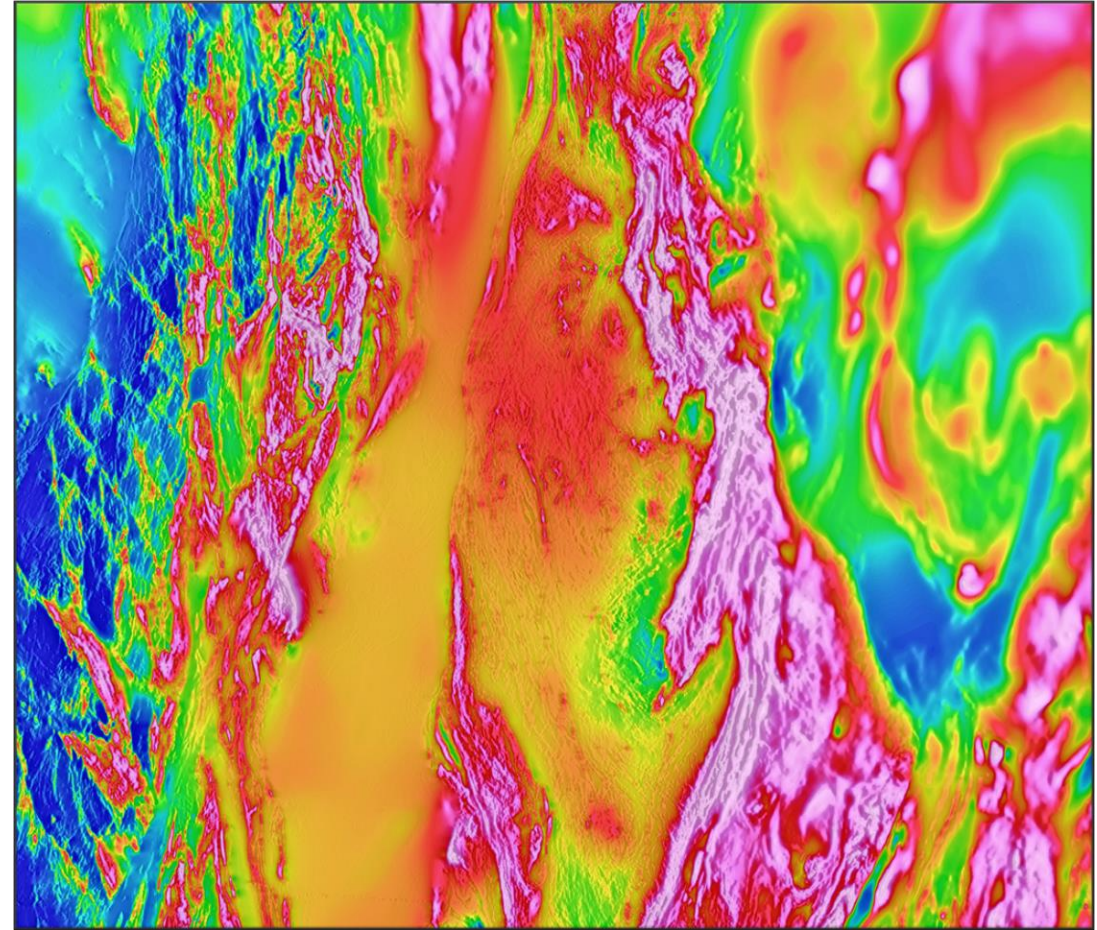
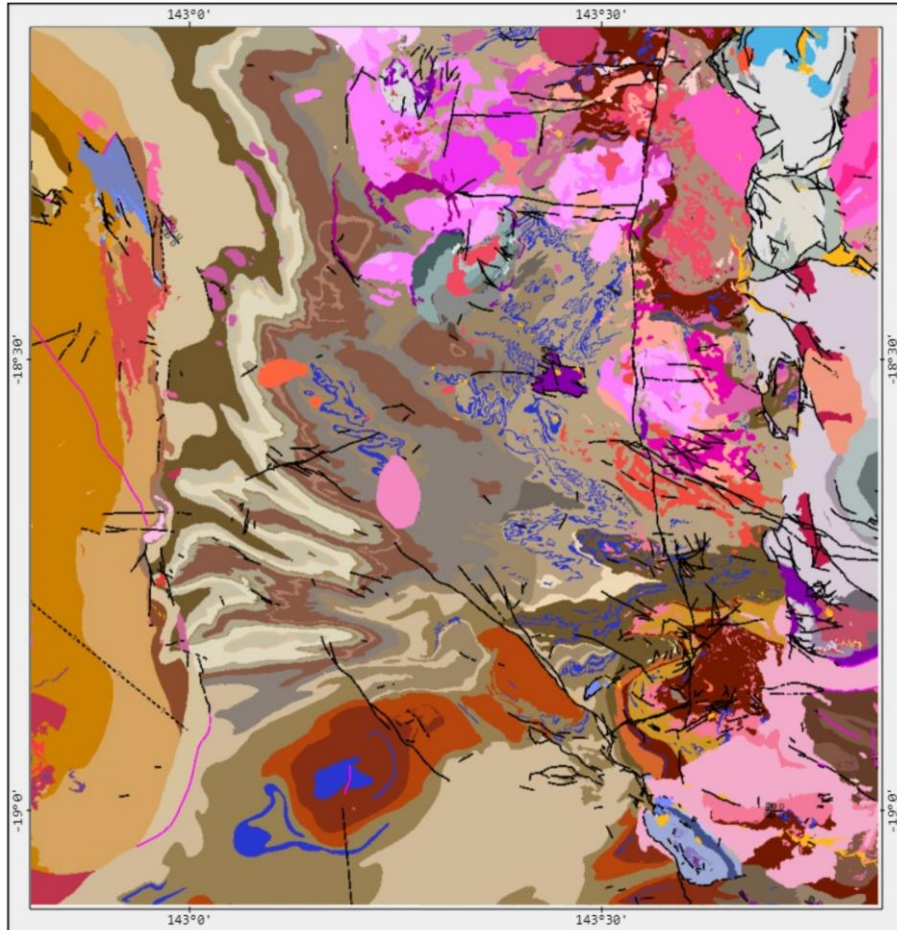


Image credit: MineFacts.eu



Precompetitive data creates opportunities



Mines and Mineral Deposits (MINEDEX)

Search for information on **mines, mineral deposits** and **prospects**.

Search for...

Search all



EPM 9400 (BLACK CRAB)

**FIRST AND FINAL REPORT FOR THE PERIOD
OF TENURE 21/5/93 TO 24/12/93**

Author : C.L. Stegman
Submitted to : Chief Geologist
Date : February, 1994
Copies to : Department of Minerals & Energy, Brisbane
CRAE Library, Canberra
CRAE Library, Brisbane
CRAE Library, Mount Isa

Search 175368 datasets

Explore by data type

Spectral 27	Seismic 1354	Report 93685	Radiometric 764	Map collection 10723	Magnetotelluric 13
Magnetic 1014	Gravity-gradiometry 19	Gravity 111	Geochemistry 7275	Electromagnetic 156	Electrical 3



southeast striking structures, parallel to the major fault. Previous explorers have concentrated on such outcropping smaller features, with no comprehensive geochemical approach undertaken to date. Potential exists for hidden and/or poorly exposed, structurally controlled and stratabound base metal mineralisation associated with the Wonomo Fault and numerous smaller north-east cross cutting faults and in the adjacent Mt Isa Group sediments.

Conclusions and Recommendations

The results returned from soil and rock geochemistry and from the reconnaissance field work at Gordon Extended do not merit further exploration work. Copper mineralisation is not apparently coincident with hydrothermal alteration comparable to Isa style systems or Lady Annie/Mount Kelly style systems. Where present, copper appears highly localised suggesting hydrothermal systems are of insufficient size to generate a sizeable copper orebody.

The EPM was therefore surrendered to the Department of Mines and Energy on 17 October 2008.





*Ethical and reliable cobalt
for a more sustainable world*

ASX: COB



Our aim: clean, responsible cobalt supply

Broken Hill Cobalt Project

Targeted project life +20 years

- Mineral Resource of 118Mt* for 81,400t cobalt
- 3,500 tpa of cobalt (as MHP)
- 300,000 tpa of Elemental Sulphur

Kwinana Cobalt-Nickel Refinery

- Cobalt Sulphate and Nickel Sulphate

Waste Streams Project

- Identification of opportunities to re-process metalliferous waste and tailings around Australia and the world.

Patented minerals processing tech for treating pyrite feedstocks

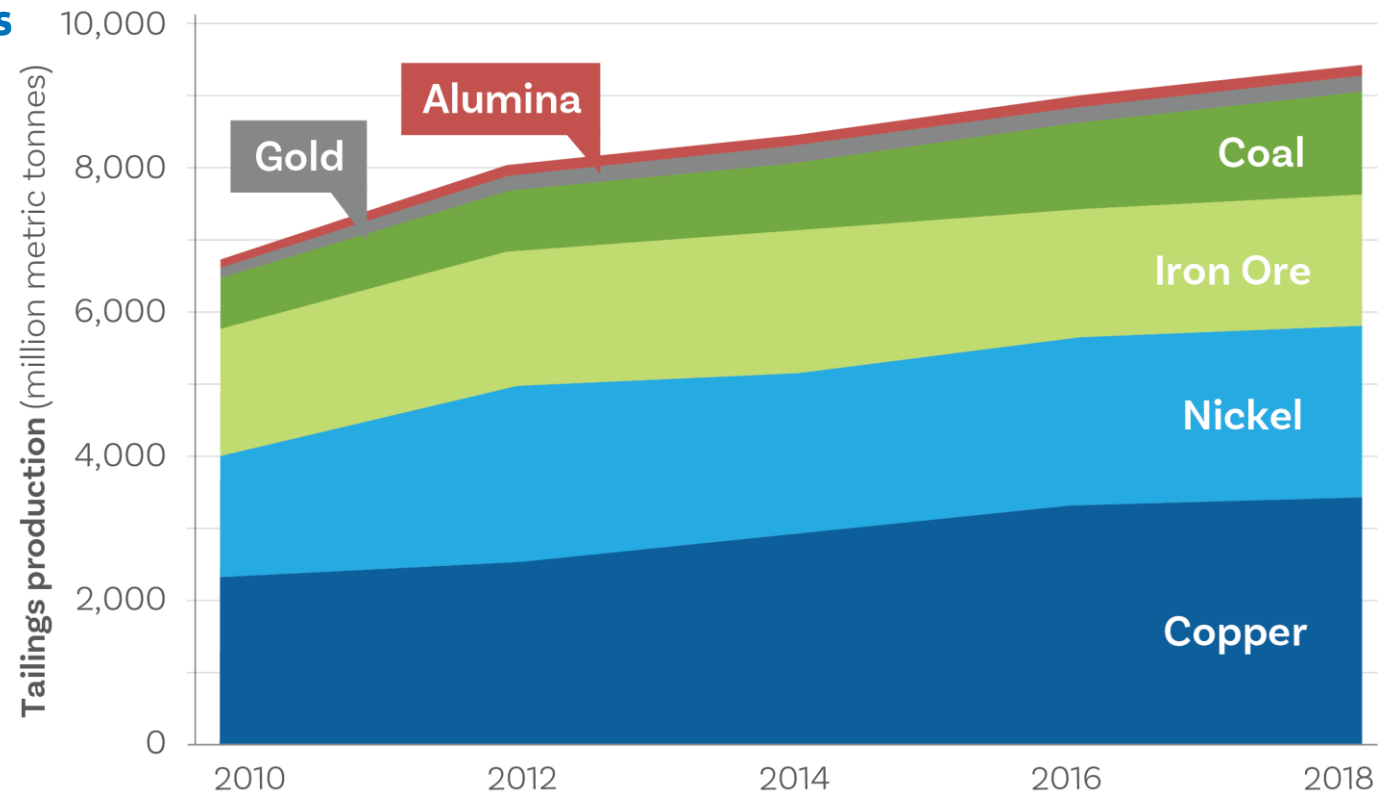
- 90–95% recovery of cobalt from ore to product.



Mine Waste: Size of the Problem

Estimate of global annual tailings production by commodity

- 3.4 billion tonnes tailings produced annually from copper tailings in 2018.
- Copper by far the most
- Declining grades, increasing demand, mean the volume of tails per tonne Cu produced is going up.



Source: International Council on Mining and Metals; Roadmap for Tailings Reduction, 2022



Secondary Prospectivity Project

Critical Minerals in Mine Waste

- SMI-GSQ project lead by Assoc Prof Anita Parbhakar-Fox
- Examines mine waste sites across Queensland to identify economic accumulations of critical minerals to determine if mine waste is a viable resource
- 2019 to 2023 and ongoing



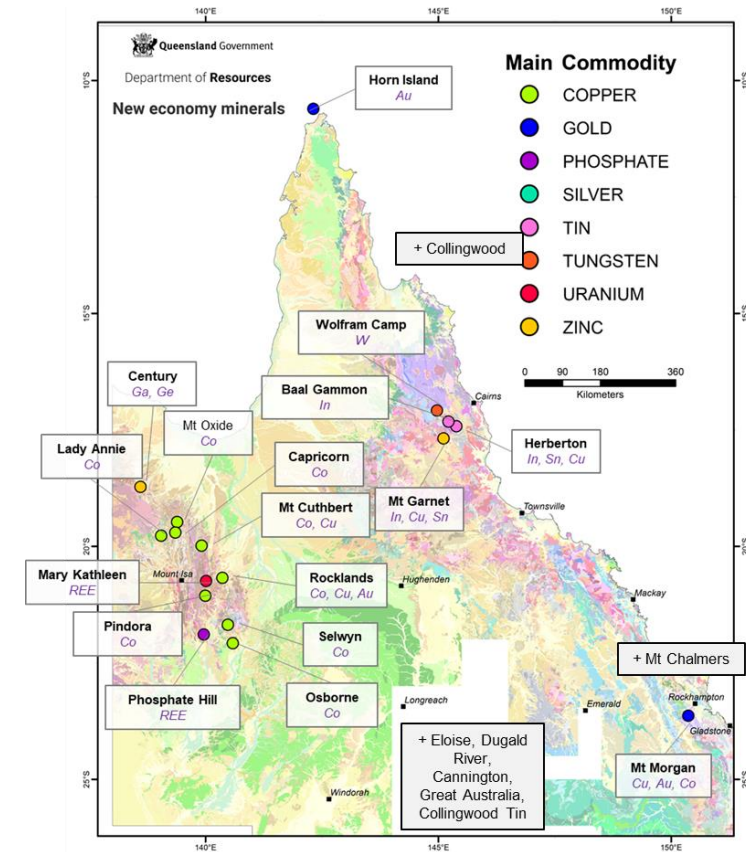
Queensland
Government

THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA
Sustainable Minerals Institute

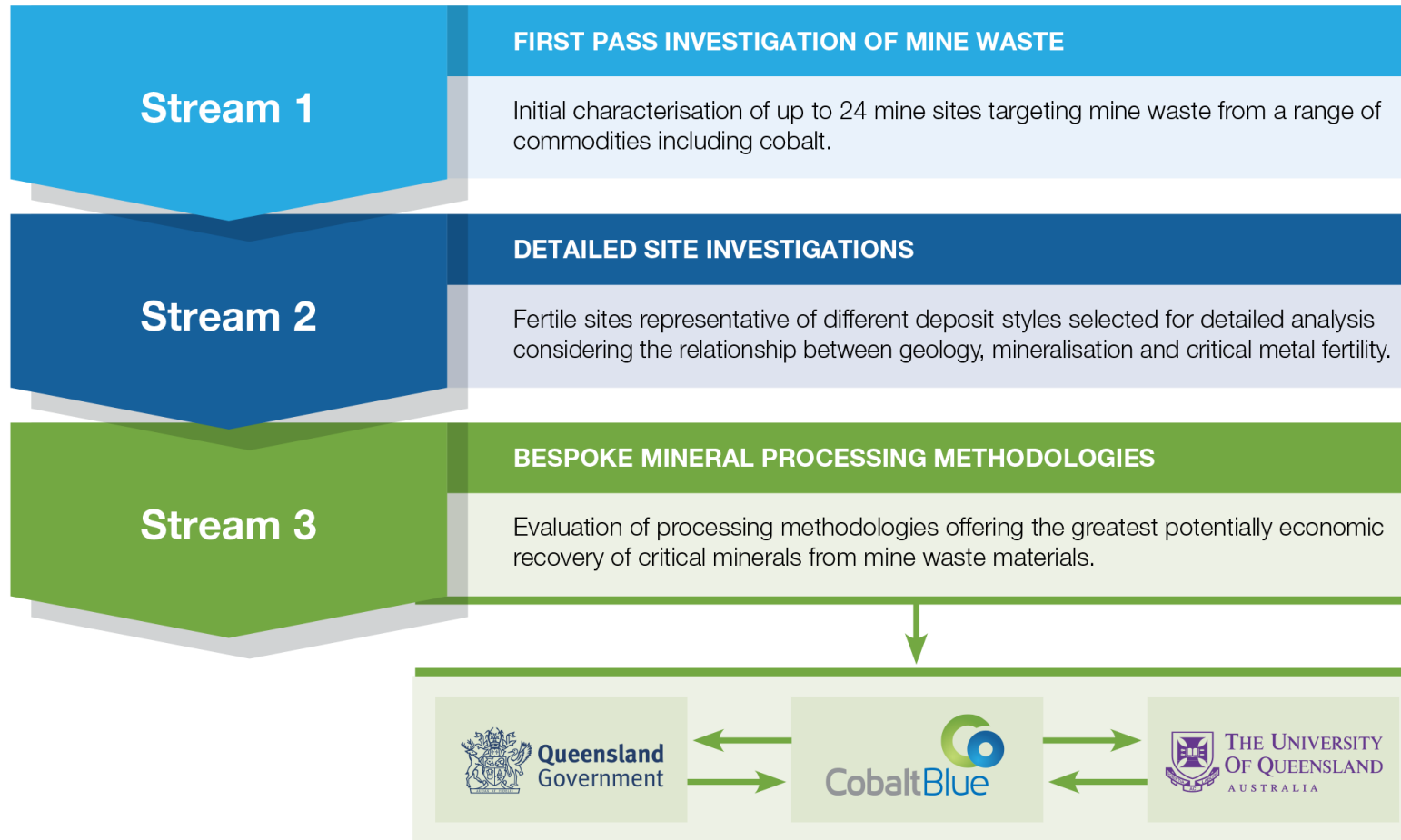


Image credit: Dominic Brown, GSQ

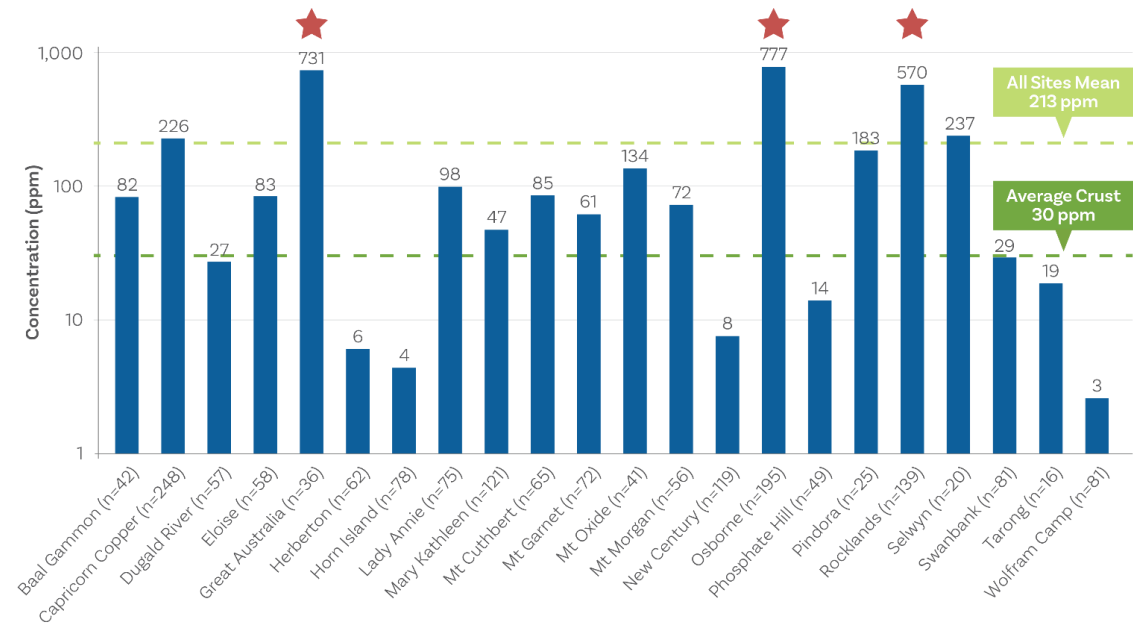
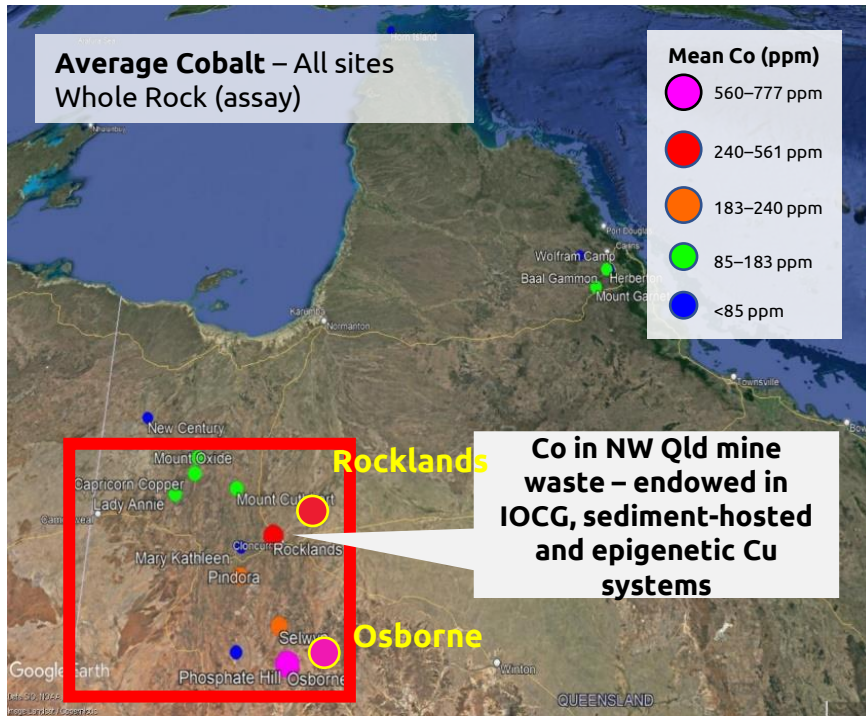
Image credit: A. Parbhakar-Fox



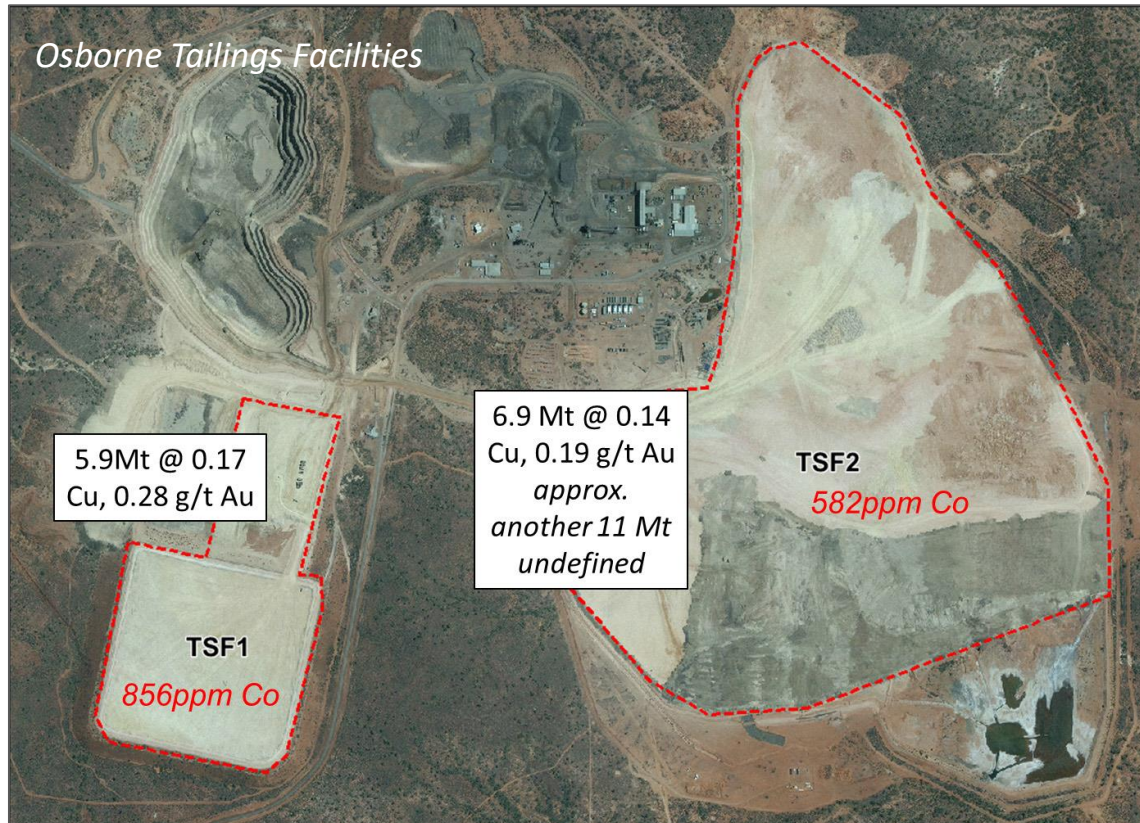
GSQ-UQ secondary prospectivity project



Cobalt in North West Queensland



Osborne testwork



Two flowsheets tested:

Tails → float → POX

Tails → kiln → POX (COB Process)

	Float	POX	TOTAL recovery
Cobalt	90%	46%	41.4%
Copper	74%	98%	72.5%

	Kiln	POX	TOTAL recovery
COBALT	99%	90%	89.1%
COPPER	99%	90%	89.1%

Further recovery of cobalt and copper required from leach solutions.



Cobalt Blue: Waste Streams Project

Project Aim

- To generate opportunities for re-mining of key battery metals from mine waste
- To work with existing operations to develop synergies for secondary metal extraction
- Turning 'trash' into 'treasure'
- Novel use of precompetitive data



Flin Flon tailings project

Market Update
26 June 2023

Cobalt Blue Holdings Limited
A Green Energy Exploration Company

ASX Code: **COB**

Highlights

Flin Flon Tailings Testwork Agreement with Hudbay Minerals Inc.

New South Wales, Australia 2023 – Cobalt Blue Holdings Limited (COB) (ASX: COB) is pleased to announce that it has entered into a testwork co-operation agreement (the "Testwork Agreement") with Hudbay Minerals Inc. ("Hudbay") with respect to Hudbay's wholly-owned Flin Flon tailings storage facility located in the Province of Manitoba, Canada (the "Tailings Facility").

COB has agreed to utilize its proprietary minerals processing technology to assess the ability to recover gold, silver, copper, zinc, cobalt and sulphur from a pyrite/pyrrhotite concentrate produced from the tailings. COB's proprietary technology offers the potential to convert the sulphides into elemental sulphur, which is stable and benign. The testwork program is expected to take up to 4 months to complete once the tailings sample is received from Hudbay. COB will receive a fee for undertaking the testwork program, which is expected to cover its costs.

In 2021, Hudbay identified the opportunity to reprocess Flin Flon tailings and has recently completed a confirmatory drilling program covering approximately two-thirds of the Tailings Facility (see Hudbay press release dated 2 November 2022 "Hudbay Provides Exploration Update and Announces Initial Mineral Resource Estimate at 'Lagav'"; available on Hudbay's website).

COB Strategy

COB has recently issued guidance on the rollout of its strategy (see ASX announcement dated 13/02/2023 "COB – CEO's Letter to Shareholders", available on COB's website). This strategy has three building blocks:

1. Broken Hill Cobalt Project (BHCP)
2. Cobalt-Nickel Refinery
3. Cobalt in Waste Streams Project

"Reprocessing mining waste containing pyrite and recovering metals remains a focus for our business. Generally, the opportunities include cobalt-containing pyrite, along with other base and precious metal sulphides such as copper, zinc and gold," said Joe Kaderavsek, COB's Chief Executive Officer.

COB has successfully developed a processing technology for recovering cobalt from pyrite at the BHCP. The 2020 BHCP project update reported cobalt recoveries of 85-98% from one to final cobalt sulphate product (see ASX announcement dated 16/7/2020 "Broken Hill Cobalt Project (BHCP) Update 2020" available on COB's website).

COB holds no equity interest in Hudbay or in the Flin Flon Tailings Facility.

Cobalt Blue Holdings Limited
ACN: 161 448 601
Address: Suite 1123, 100 Miller Street, North Sydney NSW 2060
Tel: (61) 02 937 3660
Web: www.cobaltblueholdings.com
Email: info@cobaltblueholdings.com
Facebook: Cobalt Blue Energy
Twitter: cobaltblueholdings



Cobalt Blue

www.cobaltblueholdings.com

ASX: COB

