

Ta Khoa Nickel Project: Successful Completion of Concentrator Pilot Programme



Figure 1: TKN Pilot Plant, Ban Phuc, Vietnam

Blackstone Minerals Limited (“Blackstone” or the “Company”) is pleased to announce the completion of the Ta Khoa Nickel (“TKN”) plant pilot programme and significant progress toward completion of the variability testwork programme at the existing mine site in Vietnam. The completion of the TKN pilot programme is in addition to completing the Ta Khoa Refinery (“TKR”) pilot programme (Refer to ASX announcement 15 November 2022). This demonstrates completion of all scheduled piloting activities for the Ta Khoa Project.

Work conducted to date has confirmed the baseline flowsheet to treat ore through to concentrate from the nickel mine. Both pilot and variability testwork programmes have successfully achieved or exceeded pre-feasibility study (“PFS”) testwork assumptions. These important milestones for the site metallurgy and project team will enable consolidation of data and learnings to progress the TKN mine and concentrator definitive feasibility study (“DFS”).

Key highlights of the programme are:

- 97,280 labour hours of operation without injury,
- Achieved PFS recovery assumptions, improving average nickel grade from PFS assumed 8.0% to 10.2% (Refer to ASX announcement 28 February 2022),
- Achieved concentrate grade between 8.0% to 20.0% nickel,
- Produced 172 dry metric tonnes of concentrate,
- Completed over 350 bench scale flotation tests and over 100 baseline variability flotation tests,
- Recovery upside within the existing concentrator plant of up to +6% points when compared against pilot plant recoveries for the same lithologies,
- 5,795 tonnes of feed via existing concentrator plant and pilot plant,
- Over 300 hours of operation of existing concentrator and pilot plant,

- Successfully generated over 7.5 tonnes of concentrate samples for the Ta Khoa Refinery DFS pilot programme.

Piloting and Testwork Programme Overview

The following major activities were part of the piloting and testwork programme:

- Confirmed various circuit configurations and reagent regimes,
- Confirmation of ore comminution characteristics and power consumption,
- Completion of third-party technical review of the TKN DFS piloting and testwork programme, including onsite supervision by GR Engineering Services,
- Completion of a bulk sample drive and metallurgical drilling programme supporting a comprehensive metallurgy programme for the TKN DFS,
- Completion of trials and production of concentrate through the existing plant,
- Successfully tested Glencore and Metso vendor equipment for DFS flowsheet development,
- Variability testwork programme ongoing.



Figure 2: Vendor piloting - Jameson Cell trials producing improvements in Nickel and MgO concentrate grades



Figure 3 - Vendor piloting - Pressure filtration testwork trials

The DFS testwork programme, inclusive of process variability testwork and reporting, is due to be completed by CY 2023.

Blackstone Minerals' Managing Director, Scott Williamson, commented:

"Testwork at Ban Phuc is approaching completion and continues to build our understanding of the disseminated sulphide ore body whilst addressing key recommendations arising from independent review of the PFS works. The programme has been conducted safely at our site facilities and is providing substantial knowledge, training, and understanding for our project and technical teams. Importantly, the results to date validate, support and in many areas improve on PFS assumptions and criteria that will underpin our definitive feasibility study. Outputs confirm that our project flowsheet will be suitable for processing of Ban Phuc ores to deliver critical feedstock for our downstream refinery, confirming our strategy for developing the Ta Khoa Project, being an integrated mine to pCAM project."

Authorised by the Managing Director on behalf of the Board.

For more information, please contact,

Scott Williamson

Managing Director
+61 8 9425 5217

scott@blackstoneminerals.com.au

Graham Rigo

Executive
+61 8 9425 5217

graham@blackstoneminerals.com.au

About Blackstone

Blackstone Minerals Ltd (ASX: BSX / OTCQX: BLSTF / FRA: B9S) is focused on building an integrated battery metals processing business in Vietnam that produces Nickel:Cobalt:Manganese precursor products for Asia's growing lithium-ion battery industry.

Blackstone will produce the lowest emission precursor as verified by Minviro and the Nickel Institute (refer ASX announcement 15 September 2022).

The existing business has a modern nickel mine built to Australian standards, which successfully operated as a mechanised underground nickel mine from 2013 to 2016. This will be complemented by a larger concentrator, refinery and precursor facility to support integrated production in-country.

To unlock the flowsheet, the Company is focused on a partnership model and is collaborating with groups who are committed to sustainable mining, minimising the carbon footprint and implementing a vertically integrated supply chain.

The Company's development strategy is underpinned by the ability to secure nickel concentrate and Ta Khoa is emerging as a nickel sulphide district with several exploration targets yet to be tested.



Figure 1. Ta Khoa Project Location

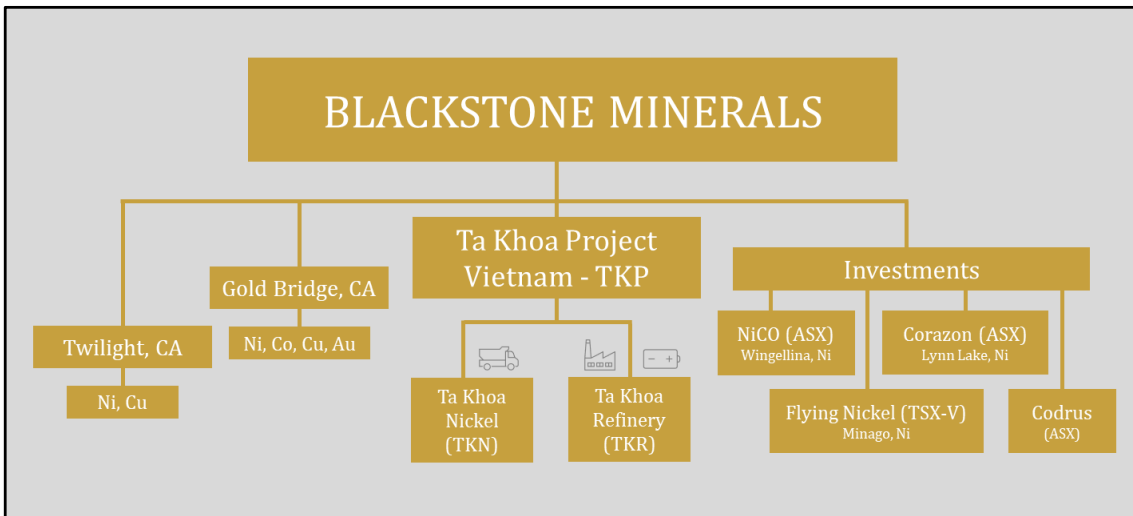


Figure 2: Blackstone Minerals Business Structure Schematic

Competent Persons Statement

The metallurgical information in this report is based on information compiled by Mr Nick Vines. Mr Vines is a Member of the Australasian Institute of Mining and Metallurgy and a Director of metallurgical consultancy Strategic Metallurgy Pty Ltd. Mr Vines has sufficient experience that is relevant to the styles of mineralisation and types 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" (JORC Code). Mr Vines consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For personal use only

Information in this report that relates to previously reported Exploration Results has been cross-referenced in this report to the date that it was reported to ASX. Blackstone Minerals Limited confirms that it is not aware of any new information or data that materially affects information included in the relevant market announcements.

For personal use only