



BLACKSTONE

M I N E R A L S

CORPORATE PRESENTATION (ASX: BSX)

For Further Information:

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January 2020

Summary of Opportunity - Ta Khoa Magmatic Ni Sulfide District and Ban Phuc Ni (Cu Co PGE) Deposit, Vietnam

- **The Board and Management of Blackstone believe the Ta Khoa district and Ban Phuc mine represent a rare opportunity to invest in a premier, infrastructure advantaged, district scale, Nickel PGE (Cu Co) sulfide project, with a downstream Nickel sulfate value add opportunity, located in an emerging hub for Electric Vehicle Lithium-ion battery manufacturing**
- ***Ta Khoa is the premier Nickel PGE (Cu Co) sulfide district in the South East Asia region with significant infrastructure advantages*** via the existing Ban Phuc mine and processing facilities, and access to low cost underutilised hydroelectricity and a trained labour force
- ***Ban Phuc is 1 of 25 Nickel sulfide prospects*** in the highly prospective Blackstone controlled Ta Khoa Nickel PGE (Cu Co) district, Son La Province, Vietnam
- ***Targeting Q2 2020 for delivery of initial JORC compliant resource for the Ban Phuc*** disseminated Nickel PGE (Cu Co) deposit → Resource drilling advancing rapidly with very positive results to date
- ***Advancing an independent scoping study*** evaluating development options for the Ban Phuc bulk mineable disseminated deposit and adjacent high-grade Nickel PGE (Cu Co) prospects → targeting delivery in H2 2020
- ***The objective is to produce a high value nickel sulfate product*** for the Li-ion EV battery manufacturing hub being developed in the port city of Hai Phong², where leading manufacturing companies have existing large-scale electronics manufacturing facilities → In-country downstream processing
- ***Funding secured*** to deliver a maiden resource and scoping study for the Ban Phuc disseminated Nickel sulfide deposit, with approximately A\$4.95M¹ in treasury and access to an additional A\$2M through a Controlled Placement Agreement (CPA)³ with Acuity Capital
- ***Additional high-calibre portfolio*** of Nickel sulfide, Copper-Gold-Cobalt and Gold projects in North America and Australia that are being advanced for drill testing or joint venture

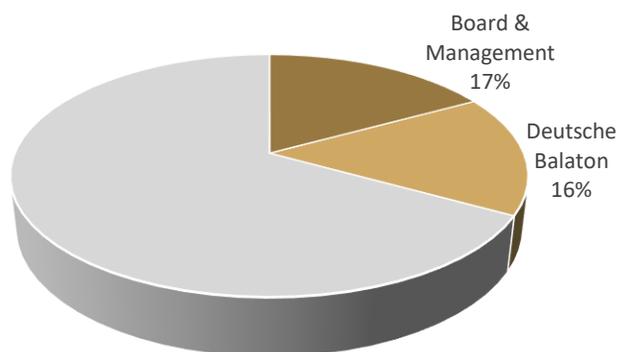
¹ Treasury as of September Quarterly Report

² See news release LG Chem announcing development of US\$2B EV battery plant in Hai Phong, Vietnam

³ BSX has full control of the CPA placement and sole discretion over the quantum of shares to issue, the issue price and the timing (if any), the CPA is valid for 24 month. For further details see BSX announcement dated 16th August 2019

ASX Code	BSX
Shares on Issue	191.7m
Last Share Price (15 Jan 2020)	17c
Market Capitalisation	A\$32.6m
Cash	A\$4.9m¹
Options	26.2m
Average Daily Vol. (shares)	680k
Top 20 Shareholders	50%

Substantial Shareholders



Blackstone Minerals is a leading battery and precious metals exploration and development company focused on the flagship Ta Khoa Nickel PGE (Cu Co) sulfide project

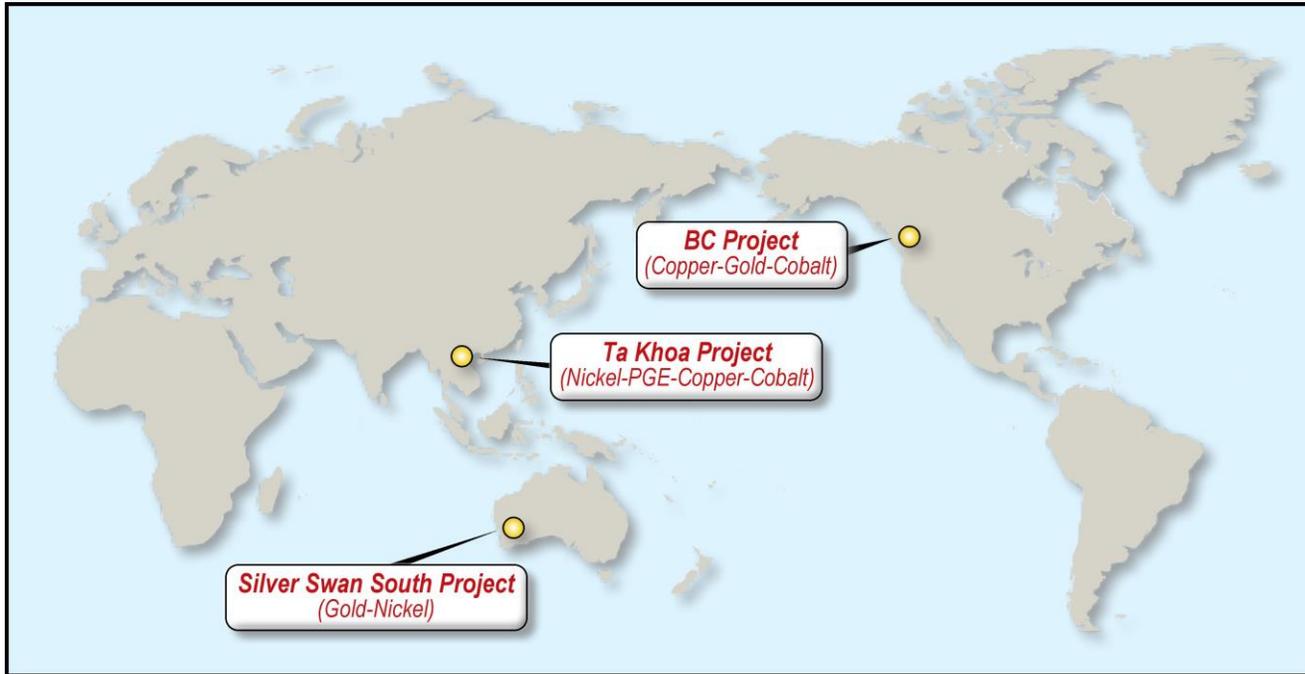
Board of Directors

Hamish Halliday	Non-Executive Chairman	Over 20 years corporate and technical experience, founder of Adamus Resources Ltd, a A\$3M float which became a multi-million ounce emerging gold producer and eventual takeover by Endeavour Mining for >\$160M.
Scott Williamson	Managing Director	Mining Engineer with a Commerce degree from the West Australian School of Mines and Curtin University, over 10 years' experience in technical and corporate roles in the mining and finance sectors.
Andrew Radonjic	Technical Director	Mine Geologist and Mineral Economist with over 25 years' experience with a focus on gold and nickel exploration and mining, MD of Venture Minerals Ltd (ASX: VMS), lead the Feasibility Study of the Mount Lindsay Tin-Tungsten-Magnetite project.
Steve Parsons	Non-Executive Director	Corporate and technical experience, proven track record of shareholder wealth, founding MD of Gryphon Minerals, multi-million ounce gold discovery in West Africa, grew to a market cap of >\$500M, current MD of Bellevue Gold Ltd (ASX: BGL), multi-million ounce discovery in WA.

Management

Michael Naylor	Joint Company Secretary	Chartered Accountant with over 20 years' experience in corporate advisory and management, previously an Executive Director of battery metals companies in Australia and Canada, Executive Director of Bellevue Gold Ltd (ASX: BGL), multi-million ounce gold discovery in WA.
Jamie Byrde	Joint Company Secretary	Chartered Accountant with over 14 years' experience in accounting, company secretarial and corporate advisory roles specialising in Financial Accounting and Reporting and Corporate Governance, currently the Company Secretary for Venture Minerals Ltd and Alicanto Minerals Ltd.
Dr Stuart Owen	Exploration Manager	BSc & PhD in Geology with over 20 years' experience in mineral exploration, Senior Geologist that discovered the Paulsens Mine (+1Moz), at Adamus discovered the Southern Ashanti Gold deposits (+2Moz) and at Venture discovered the Mt Lindsay Tin-Tungsten-Magnetite deposits.
Stephen Nano	Technical & Corporate Development Advisory	Geologist with over 30 years' experience, recently the CEO of Mirasol, a project generator delivering JV partnerships with spend of >\$40M (Newcrest, First Quantum, Yamana Gold, Oceana Gold, Hochschields Mining) which grew to a market cap of >\$150M.

Project Portfolio



Ta Khoa Nickel District / Ban Phuc Nickel PGE (Cu Co) Sulfide Deposit

→ Option to Purchase 90%

- Ban Phuc mining leases and deposits, 34.8km² of exploration and mining leases with multiple Ni PGE (Cu Co) prospects, a well maintained 450ktpa mill, concentrator and mine facilities built to international standards in 2013 for US\$136m
- Blackstone to deliver a JORC compliant, large-scale, bulk mineable sulfide resource with potential high grade “sweetener” associated with the King Cobra discovery
- Leverage existing mine infrastructure +/- new technology to deliver a high value Ni (Mn Co) Sulfate product into Vietnam based Lithium-ion battery manufacturing industry

BC Copper-Gold-Cobalt Project → 100% owned 367 km² in British Columbia

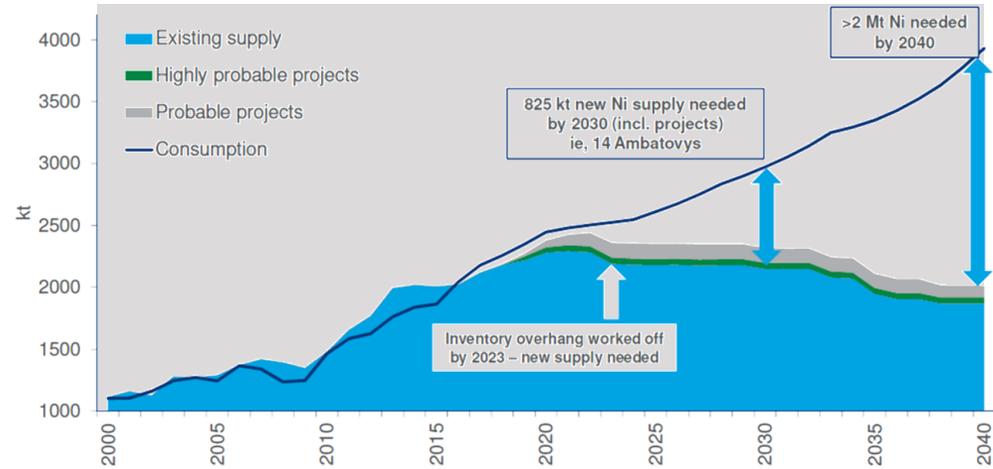
- District-scale tenure with 48km strike length of untested prospective geology in high-grade Bralorne Gold district (4.4Moz @ 17g/t Au) of British Columbia
- Recent mapping, rock chip sampling and IP geophysics returned very high-grade Cu-Au assays underlain by porphyry scale chargeability anomalies
- Drill ready targets to be tested in the 2020 field season, Blackstone is actively seeking joint venture partners

Silver Swan South → 100% owned 38.5 km² in Eastern Goldfields of Western Australia

- Drill ready targets for both nickel sulfide and gold along strike of major gold and nickel sulfide mines, accessed via sealed road ~40km from Kalgoorlie, Western Australia
- Aircore drilling 500m x 300m gold anomaly with best result to date of 10m @ 3.2 g/t Au, located 8 km along trend from Northern Star’s (ASX: NST) +5Moz Kanowna Belle mine
- Nickel sulfide targets located 10 km along trend from Poseidon Nickel’s (ASX: POS) Black Swan open pit disseminated (10Mt @ 1% Ni) and Silver Swan underground massive sulfide (655kt @ 9.5% Ni) resources and mine facilities

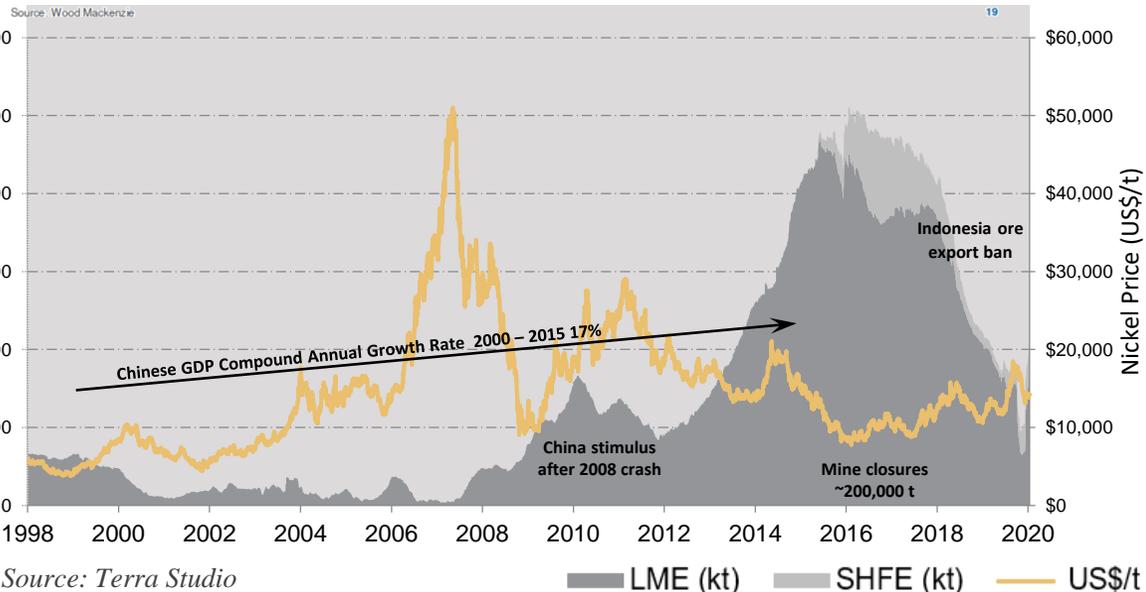
Summary of Lithium-ion battery technology and Ni (Co) Demand Predicted from the EV Revolution

Future additional supply requirement



→ **Nickel and Cobalt are used in the most dominant battery chemistries for electric vehicles (EVs) – NMC (Ni Mn Co) and NCA (Ni Co Al)**

- Cathode and battery manufacturers are moving towards higher nickel and lower cobalt chemistries (migration from NMC 111/622 to NMC811)
- NMC 811 is predicted to make up 75% of the NMC battery mix by 2025
- Blackstone objective is to be the “first mover” to deliver nickel sulfate into Vietnam’s Lithium-ion battery industry during the imminent demand growth coming from EVs



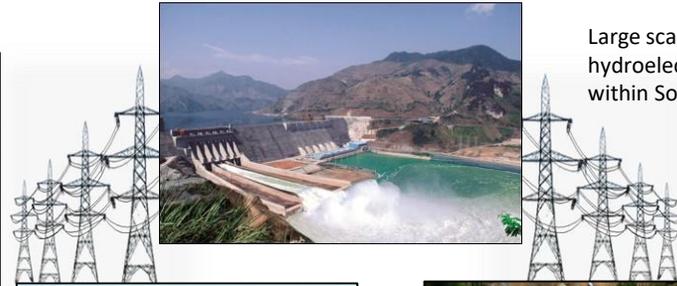
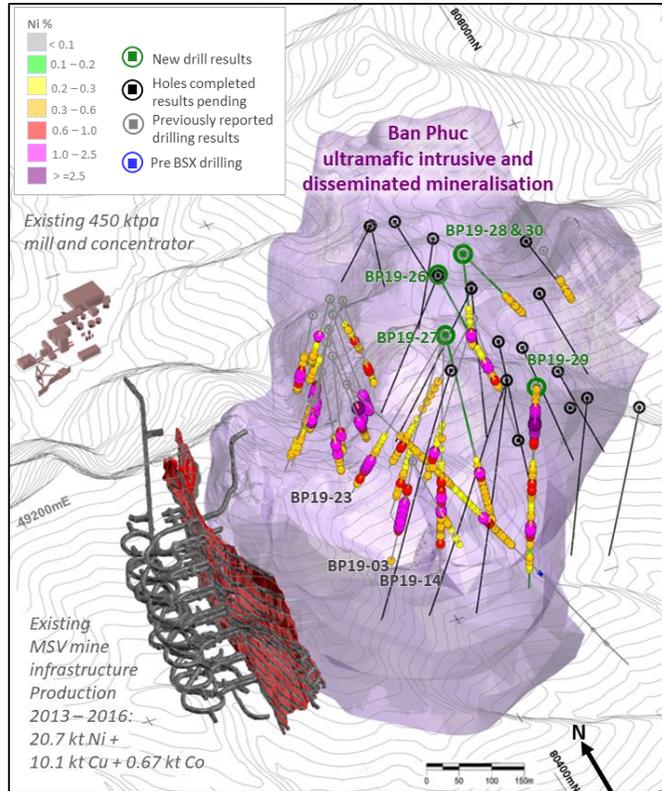
Source: Terra Studio

	NCA	NMC
Cathode Materials	Lithium Nickel Cobalt Aluminium	Lithium Nickel Cobalt Manganese
Companies	Panasonic (Tesla)	Samsung SDI, LG Chem, SK Innovation

NMC Cathode Chemistry (300kg battery)		
	Cobalt (kg)	Nickel (kg)
NMC 111	23.7	23.6
NMC 622	14.8	44.2
NMC 811	7.4	58.7

Ta Khoa Nickel PGE (Cu Co) Sulfide Project

Large Scale, Infrastructure Advantage, Epicentre of Asia Electronics and EV Manufacturing



Large scale modern underutilised hydroelectric power generation within Son La province, Vietnam



Vietnam is the centre of a large electronics manufacturing industry with world leaders including LG & Samsung with manufacturing facilities in Hanoi & Hai Phong



LG Chem and Vinfast US\$2B alliance¹ to build EV battery plant in Hanoi, Vietnam



→ **Initial Resource drill out well advanced Ban Phuc DSS Ni PGE (Cu Co) Sulfide**

- 25 additional prospects in Ta Khoa district
- Include high grade MSV targets
- Underground access to DSS in place via previously mined MSV deposit

→ **Evaluating Bulk mining options**

- Metallurgical testing in progress
- Initial Scoping study advancing
- Potential to be a low or zero carbon project with electric fleet options combined with renewable hydroelectric power

→ **Mining Infrastructure in place → bulk mineable option upgrade**

- 450ktpa concentrator
- Permitted tailings facility
- 250 person Camp
- Assay Lab
- Skilled cost-effective workforce

→ **Evaluating Down Stream Ni Sulfate Option**

- Processing of Ta Khoa sulfide concentrate to high purity Nickel Sulfate for Li-ion battery cathodes
- MOU signed² between Blackstone and Ecopro to partner on developing a Ni Sulfate plant in Vietnam

¹ Reuters April 7 2019 S.Korea's LG Chem sets up joint venture with Vietnam's VinFast

² Blackstone Minerals ASX announcement December 2 2019

Blackstone Ta Khoa/Ban Phuc Option Agreement Terms



- *Option to purchase 90% Ta Khoa Nickel District and Ban Phuc Mine Processing Facilities*
- *BSX has attributable exploration spend to date approaching the A\$1M trigger required to trigger a 12 month extension to the option period (total 24 months)*
- *Local partner COXAMA, a private Vietnamese industrial conglomerate with primary operations in Son La Province owns a 10% free carried interest in the Project*



Option to purchase agreement with AMR Nickel Ltd for 90% interest:

- Ban Phuc mining licence including Ban Phuc disseminated Nickel sulfide deposit
- 34.8km² Ta Khoa district exploration licence surrounding Ban Phuc
- Well maintained 450ktpa mill and processing facility build in 2013 to international stds
- Fully-permitted tailings facility with excess capacity and expansion options
- Established workshops, fabrication, equipment stores and maintenance facilities
- Modern 250-person mine camp and Internationally certified assay laboratory

Terms:

- 12-month option period to May 2020 (May 2021 with A\$1M exploration spend)
- Option instalments of US\$100k/quarter (total US\$400K) to be spent in accordance with Blackstone's approved expenditure budget
- Option exercised by issuing A\$1M of shares in Blackstone at VWAP for the 30 trading days immediately preceding the date of exercise
- Blackstone can extend the option period to 24 months by spending a minimum of A\$1M on exploration within the first 12 months



Vietnam: Strong Manufacturing Lead Economy and Government Support for Mining



Opportunity for Blackstone to reduce or remove mining export tariffs by “downstream” production of Nickel sulfate for in-country EV Lithium-ion battery manufacturing industry

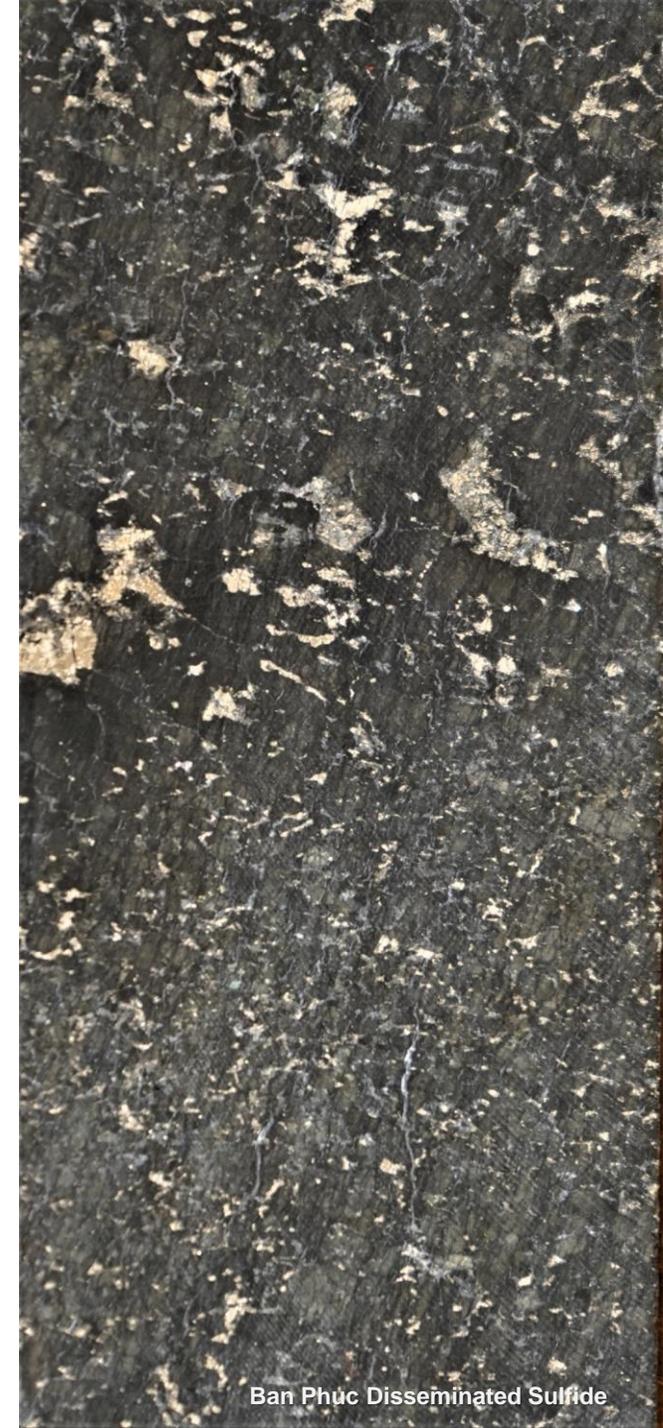
Strong Economic Growth, Foreign Investment and Trade Policies

- GDP growth of 7.1% and foreign direct investment of \$15.8b (2018)
- Well-developed transport, telecommunications and power infrastructure including underutilised modern hydroelectric power generation nearby the Ban Phuc mine
- Strong Investment ties to South Korea, Japan, Australia, Canada and ASEAN block including significant electronics manufacturing industry led by Samsung and LG
- Existing partnership between LG Chem and Vinfast to build EV Lithium-ion battery manufacturing facility in port city of Hai Phong

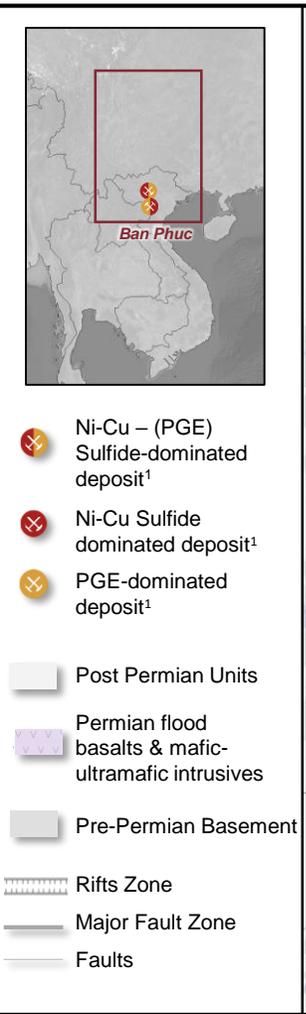
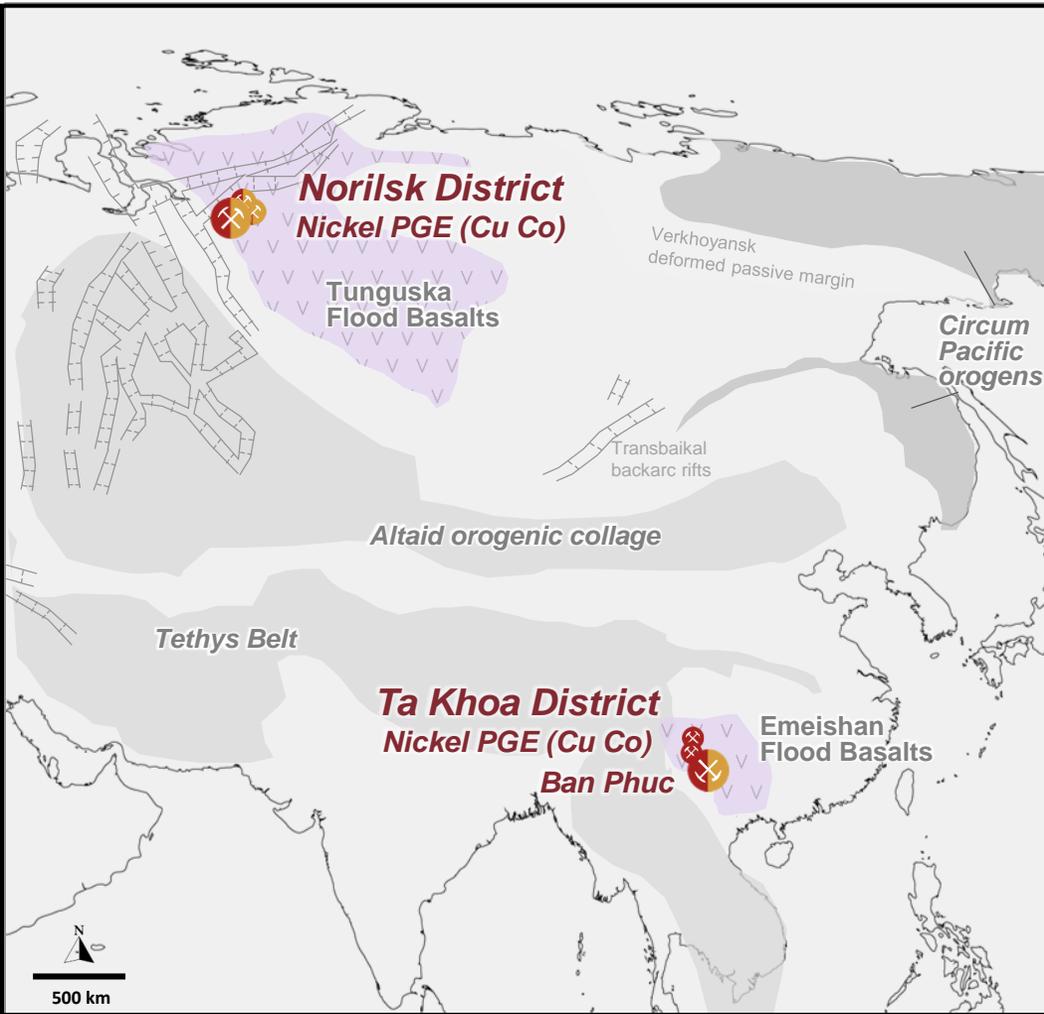
Mining in Vietnam

- Well established but to date Vietnamese private and public company dominated mining industry
- Mining legislation recognises 100% foreign ownership of mining operations
- Established process driven exploration and mining tenure system
- In July 2018 the National Mining Development Plan specifically identified Ban Phuc Nickel as one of the countries key projects, facilitating approvals process for project development

Ta Khoa Nickel District: Deposit Analogies, District Geology and Exploration Results



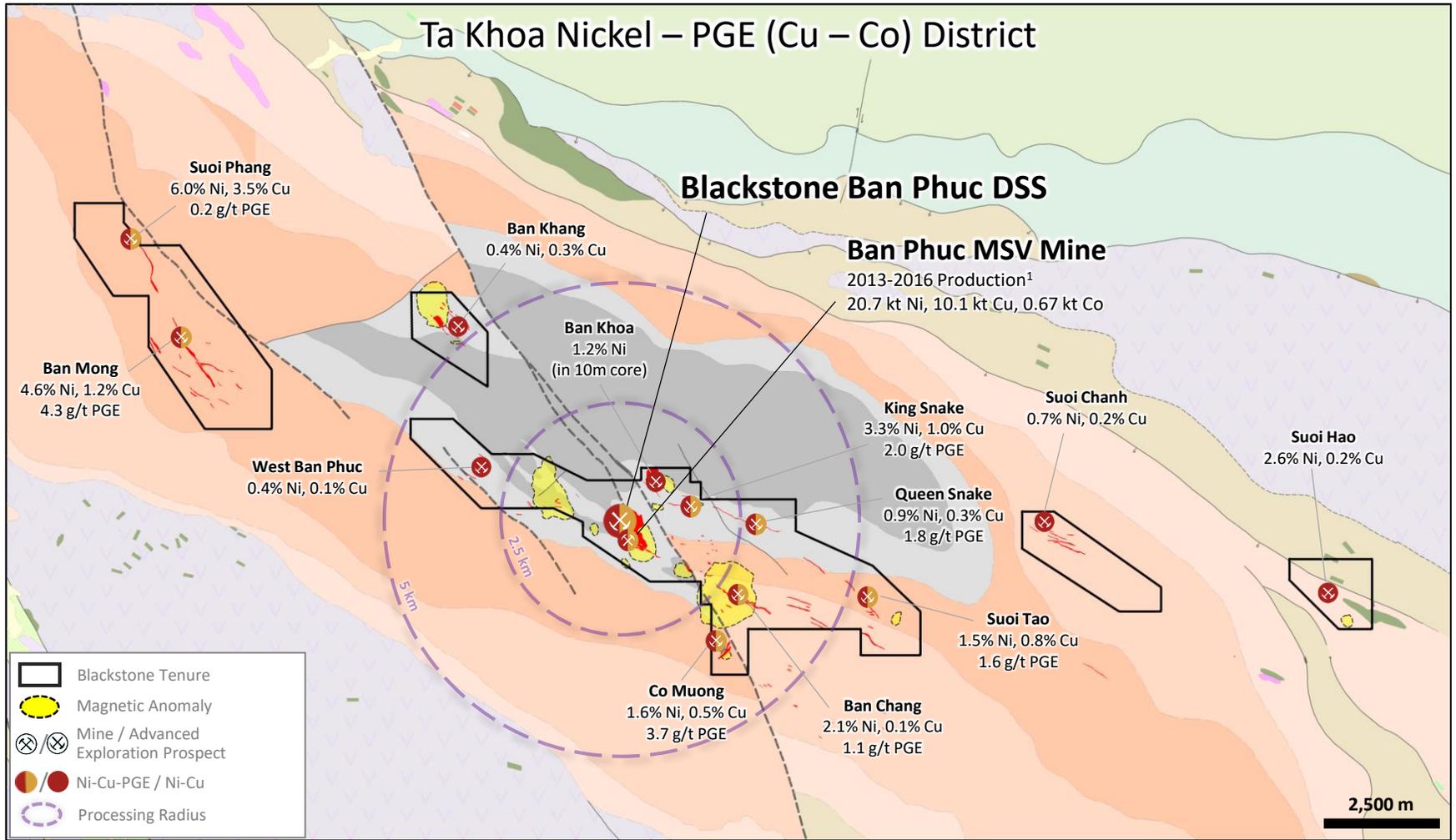
Ta Khoa Nickel District Geological Setting and Deposit Model



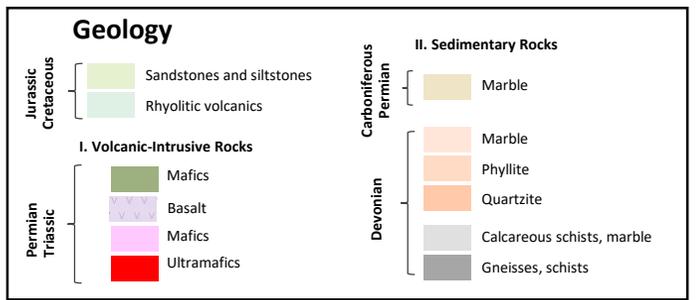
- Ta Khoa Nickel District analogy with world class Norilsk District
- Middle to Late Permian age associated with extensive flood basalts
- Intra-cratonic rift setting
- Significant palladium, platinum, (rhodium?) mineralisation

1. Modified after Yakubchuk and Nikishin, 2004
 2. Modified after Wang et al., 2018
 3. Earth Science Australia: http://earthsci.org/mineral/mindep/ma_sulp/ma_sulp.html

Ta Khoa Nickel – PGE District - Opportunity



- District scale nickel sulfide PGE (Cu Co) project
- Over 25 advanced stage massive sulfide vein (MSV) targets and a number of large bulk-tonnage disseminated sulfide (DSS) prospects
- Blackstone initial focus on Ban Phuc disseminated, potentially bulk-mineable deposit
- Prioritising targets within a 5km “processing radius” of Ban Phuc 450ktpa concentrator



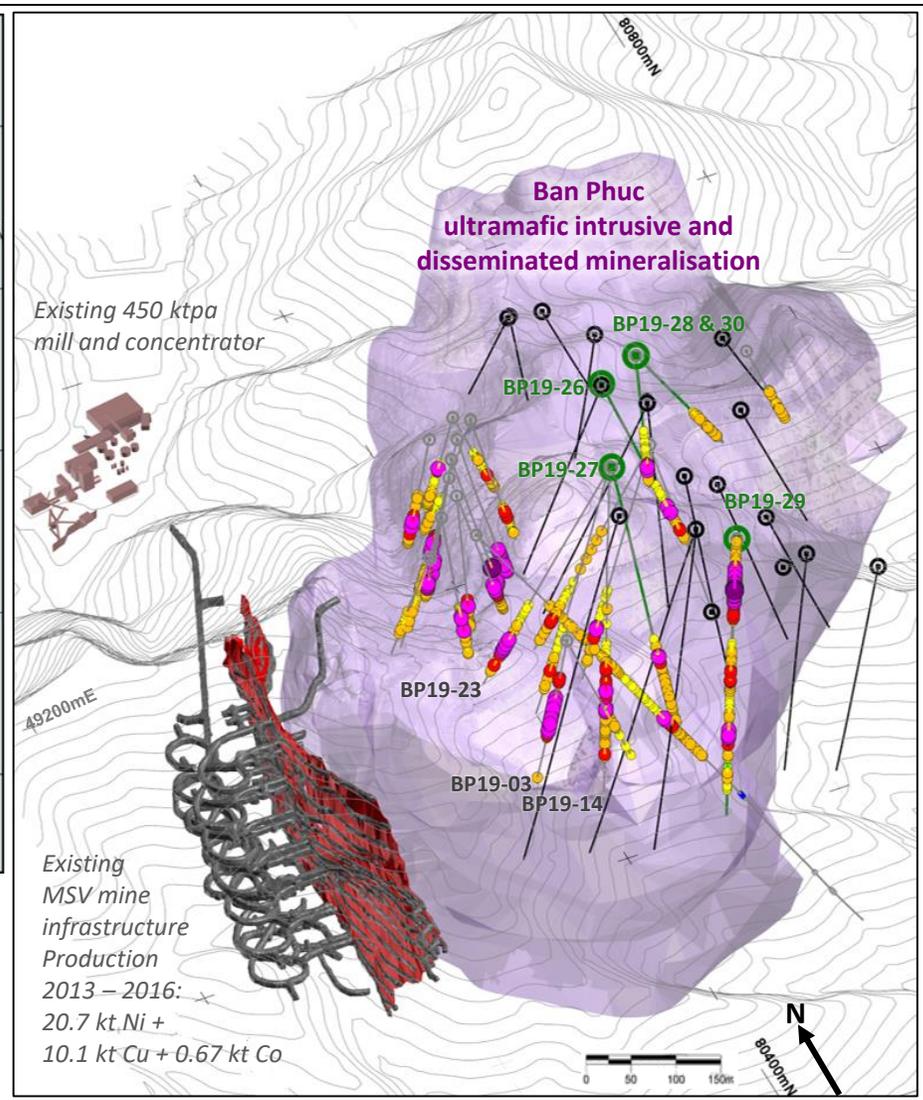
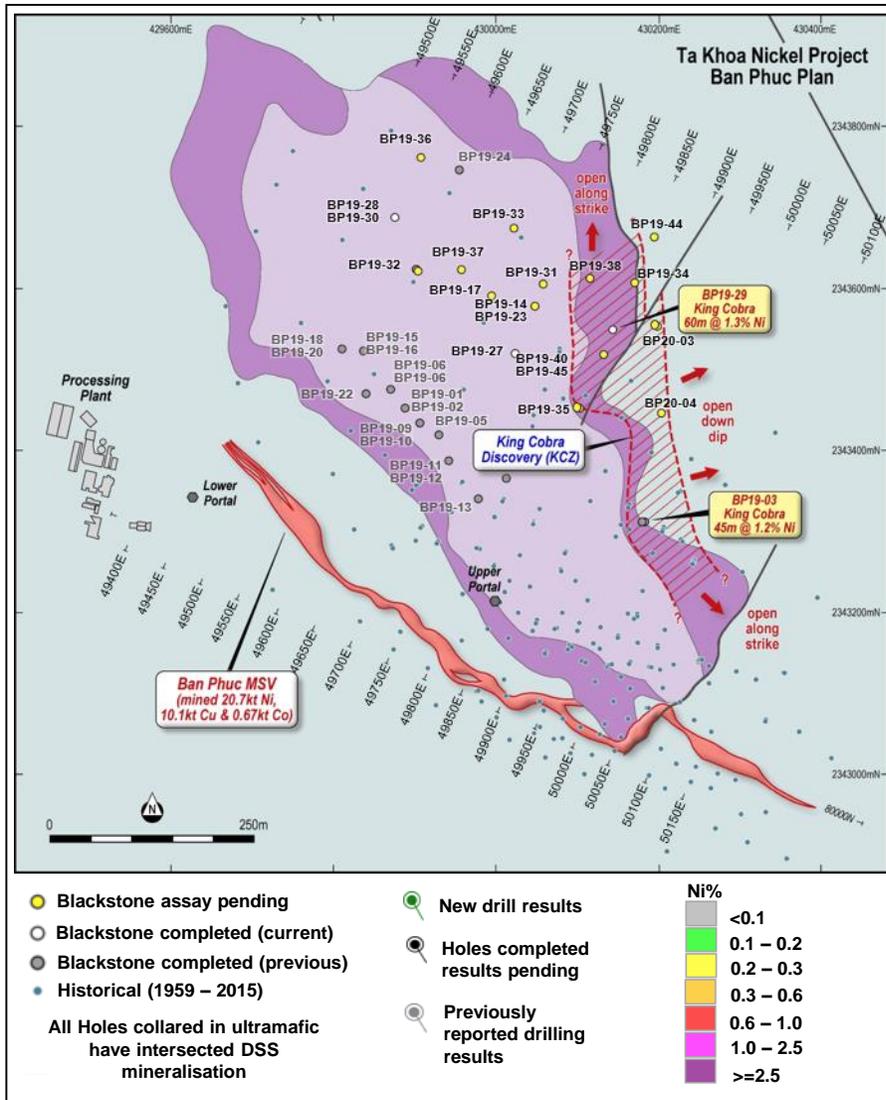
1. Blackstone ASX Announcement, 18 December 2019, Blackstone Discovers King Cobra Nickel Sulfide Zone at Ta Khoa Nickel Project

Ta Khoa Nickel PGE (Cu Co) Sulfide Project

Latest Ban Phuc drill results; King Cobra Discovery

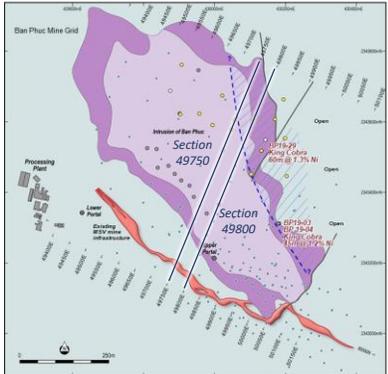
Ban Phuc Drillhole Locations – Plan View

Ban Phuc 3D-View Drill Results and Infrastructure

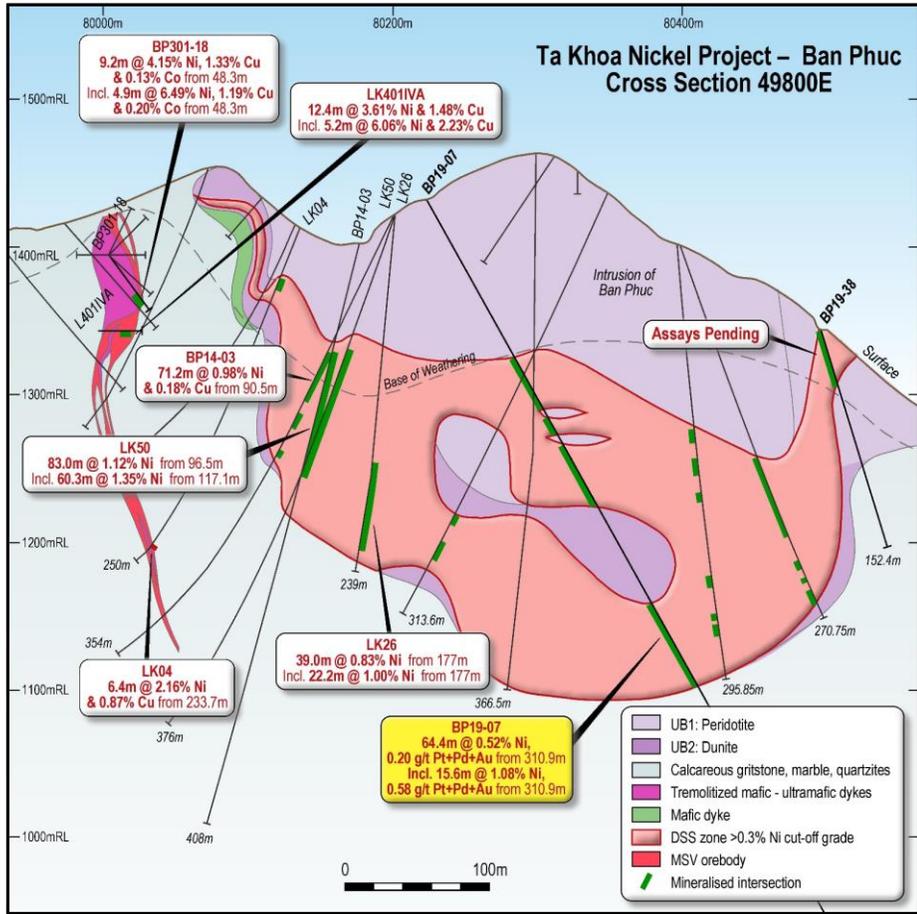
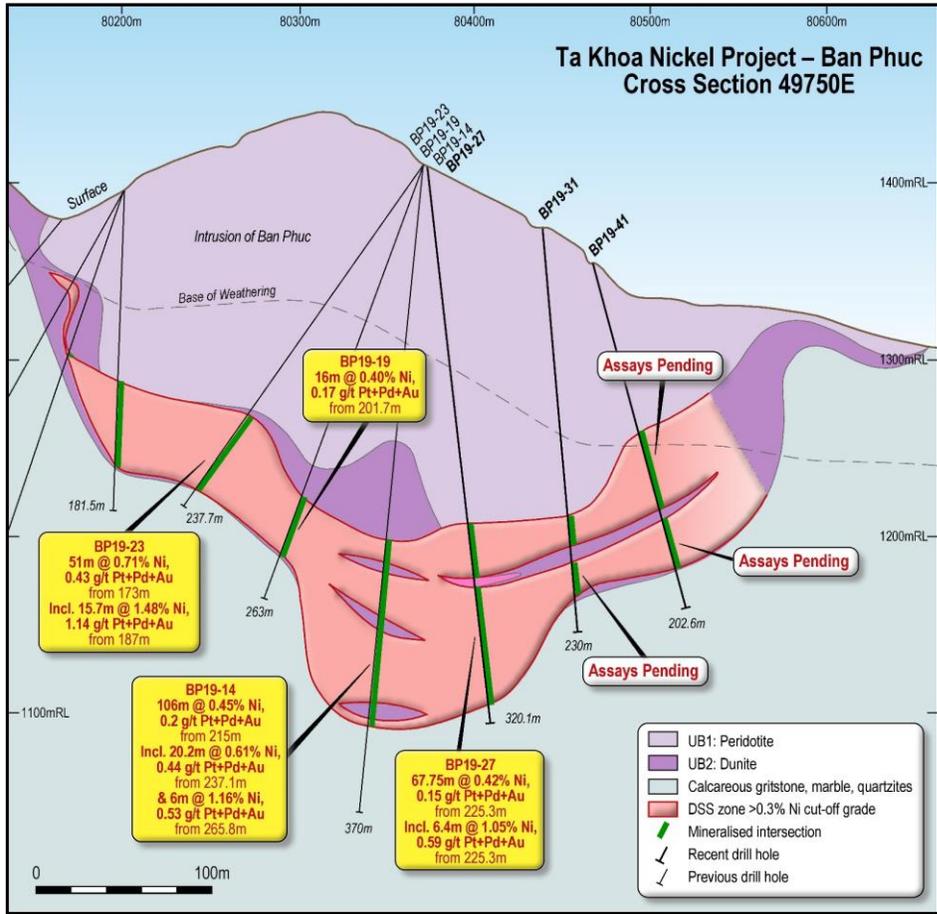


- Aggressive Blackstone drill program in progress with four rigs on site
 - Blackstone has drilled 47 holes for 9327m since August 2019
 - Very encouraging assay results to date including discovery of the King Cobra high-grade zone
 - **BP19-29: 59.8m @ 1.29% Ni + 0.22% Cu + 0.29 g/t PGE¹**
Includes 13.9m @ 2.25% Ni + 0.4% Cu + 0.54 g/t PGE and 142m @ 0.41% Ni + 0.04% Cu + 0.11 g/t PGE
Includes 11.9m @ 1.09% Ni + 0.22% Cu + 0.37 g/t PGE
 - **BP19-03: 45.5m @ 1.2% Ni + 0.17% Cu + 0.35 g/t PGE**
 - **BP19-14: 106m @ 0.45% Ni + 0.04% Cu + 0.2 g/t PGE**
Includes 20.2m @ 0.61% Ni + 0.04% Cu + 0.44 g/t PGE
 - **BP19-23: 51m @ 0.71% Ni + 0.08% Cu + 0.43 g/t PGE**
Includes 15.7m @ 1.48% Ni + 0.22% Cu + 1.14 g/t PGE
 - **BP19-07: 64.4m @ 0.52% Ni + 0.05% Cu + 0.2 g/t PGE**
Includes 15.6m @ 1.08% Ni + 0.15% Cu + 0.58 g/t PGE
- ¹PGE: Pt (ppm) + Pd (ppm) + Au (ppm)

Ban Phuc Disseminated Sulfide (DSS)



- Large tonnage, bulk mining scenario
- Open Pit & Underground potential
- Shallow, high grade starter pit options
- Significant potential for Pt+Pd+Au by-product credits
- Low strip ratio open pit mining or large bulk underground mining
- Potential to utilise existing underground infrastructure for open pit or underground mine access



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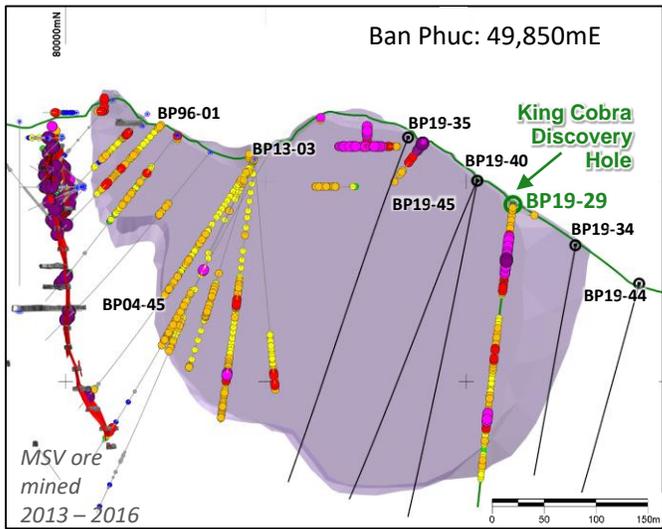
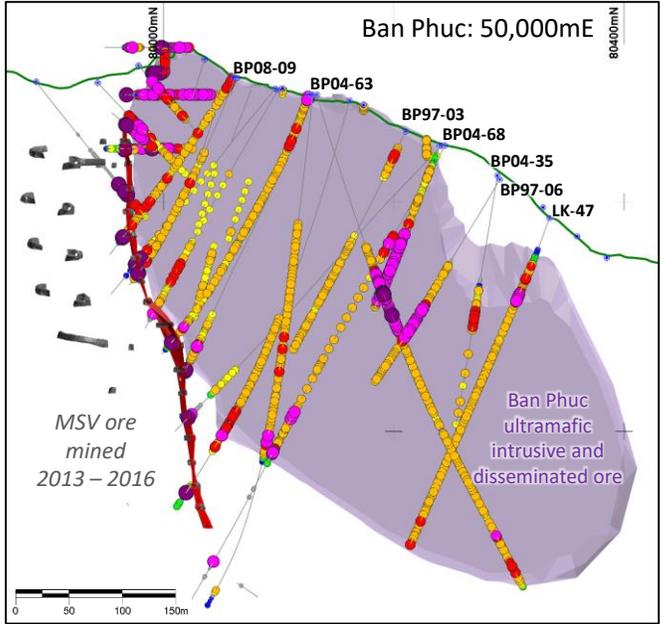
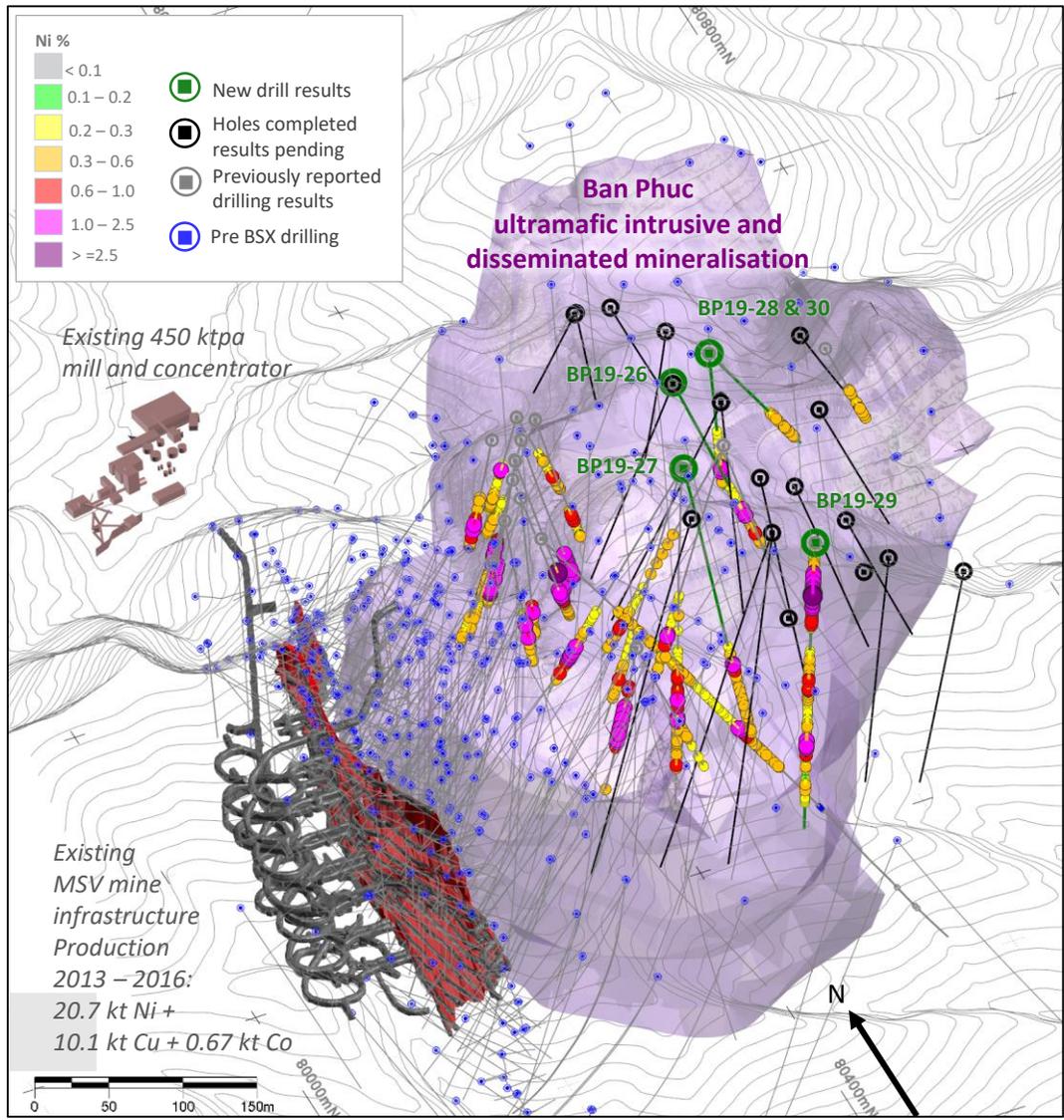
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Ta Khoa Scoping Study and Downstream Opportunities



Ban Phuc 450ktpa Concentrator

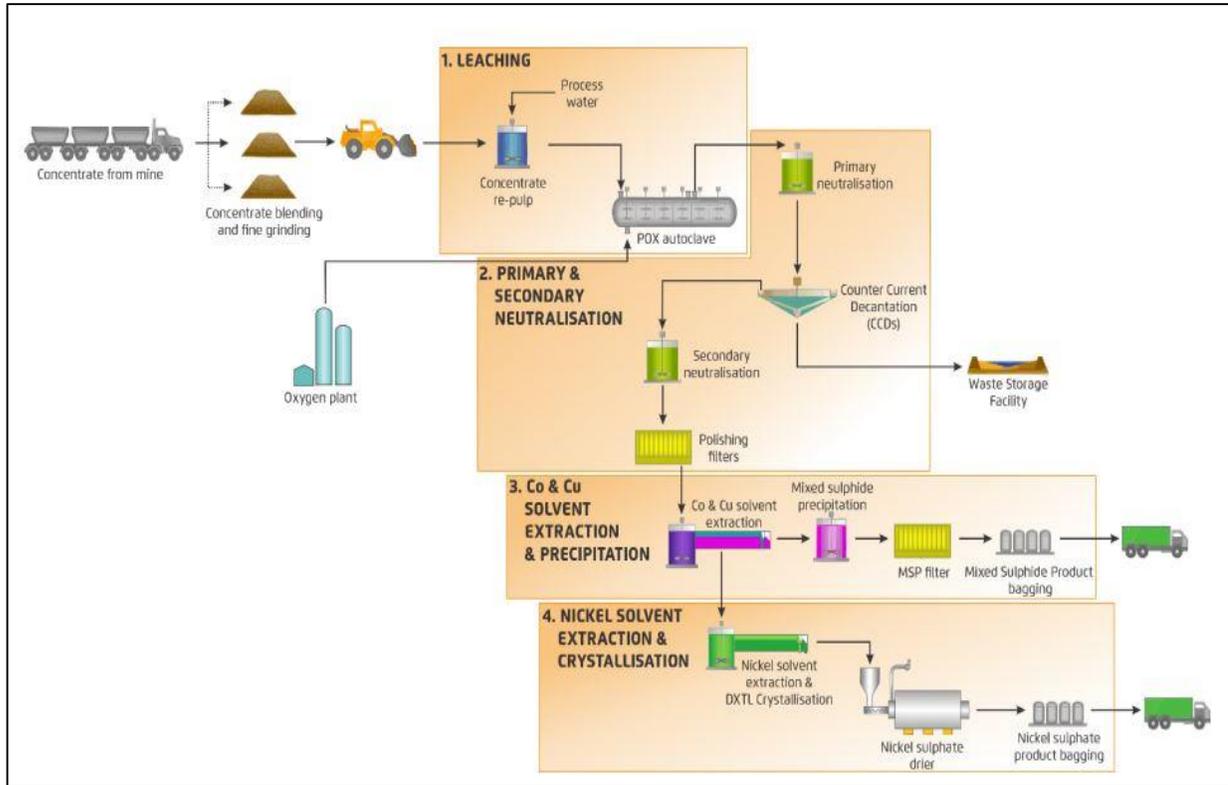
Leveraging Previous Drilling for Initial Disseminated Resource



→ Validating drillholes to incorporate into initial Ban Phuc resource estimate

- Leveraging extensive database of pre-Blackstone surface sampling and drilling at the Ban Phuc disseminated sulfide (DSS) orebody
- Pre-Blackstone 310 holes drilled into Ban Phuc for 49,743m up to 2016

Ta Khoa Downstream Nickel Sulfate Refinery

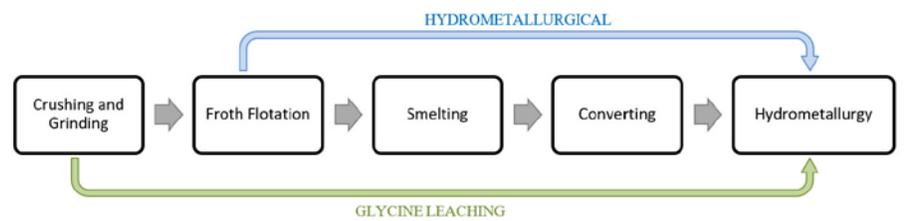


Source: Independence Group

Blackstone is advancing an initial scoping study in parallel with resource drilling that includes plans for a Nickel Sulfate Refinery in Vietnam

- Metallurgical text work commenced on disseminated mineralisation
- Competitive input costs based on bulk mining, low cost hydropower and competitive labour costs
- Mill and concentrator upgrade required for bulk mining scenario
- Nickel Sulfate production via off the shelf pressure oxidation and Ni-Cu-Co Solvent extraction and crystallization
- Blackstone is participating in a Curtin University collaborative study for a ground-breaking low cost environmentally benign Glycine Leach process that could radically reduce development and processing costs to deliver a Nickel Sulfate product

Conventional Processes and New Glycine Process



Low Operating Cost Environment vs Equivalent Western Operations

- Using historic operating costs for narrow vein mining at Ban Phuc vs a similar mine in Australia → costs approx. 25% lower in Vietnam
- It is anticipated that this differential will also be reflected in the operating costs of a bulk mineable operation compared to western jurisdictions
- A further reduction of overall operating cost could be achieved at Ban Phuc with the reduction or removal of the 20% tariff by downstream processing of the sulfide concentrate to a nickel sulfate product in-country
- Ban Phuc is well positioned to be a low-cost nickel sulfate producer for the Asia-Pacific EV Lithium-ion battery market

	Ban Phuc (Actuals)	Western (Equivalent)	Comments
Mining Cost (US\$/t)	US\$49/t	US\$100/t	Narrow vein mechanised underground mining
Processing & Transport Cost (US\$/t)	US\$27/t	US\$45/t	Hydro grid power at Ban Phuc offers significantly lower processing costs
General & Admin Cost (US\$/t)	US\$10/t	US\$25/t	General & Admin Costs excluding head office costs
Tariffs & Royalties (US\$/t)	US\$50/t	US\$10/t	High tariffs in Vietnam can be reduced with downstream processing
Total Site Operating Cost (US\$/t)	US\$136/t	US\$180/t	~25% overall lower operating costs vs equivalent western operations

Blackstone Comparison to ASX-listed Nickel Sulfide Company Valuations

Over the coming months Blackstone will deliver a maiden resource and an initial scoping study. This has the potential to deliver growth in market capitalisation bringing Blackstone in line with other more advanced ASX-listed nickel sulfide peers:

	Blackstone (ASX: BSX)	Centaurus (ASX: CTM)	Poseidon (ASX: POS)	Panoramic (ASX: PAN)	Mincor (ASX: MCR)
Strategic Partner	✓	✗	✗	✗	✗
Concentrator	✓	✗	✓	✓	✗
Resource	✗	✓	✓	✓	✓
Study	✗	✗	✓	✓	✓
EV/Resource (A\$/lb)	?	\$0.05	\$0.10	\$0.17	\$0.42
EV/Reserve (A\$/lb)	?	\$3.32	\$0.43	\$0.63	\$3.03
Market Cap (A\$m)	\$32m	\$45m	\$108m	\$198m	\$237m

Source: PCF Capital Group



Ban Phuc
Massive Nickel Sulfide

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Ban Phuc
Exploration Drilling



Ban Phuc
Massive Nickel Sulfide



Ban Phuc
Disseminated Nickel Sulfide

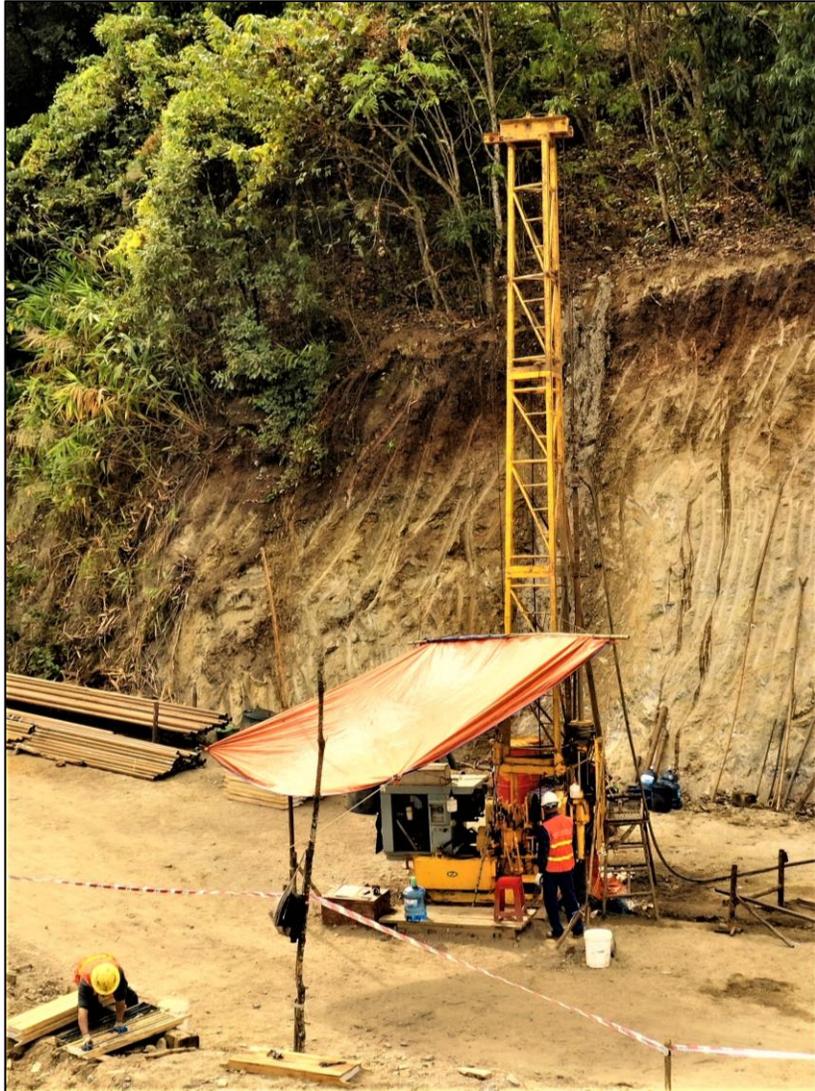


Ban Phuc
King Cobra Discovery



Ban Phuc
450ktpa Concentrator

Ta Khoa Nickel District – Anticipated News Flow



Consistent News Flow anticipated from Blackstone’s ongoing aggressive exploration program at the Ta Khoa Nickel PGE (Cu Co) Project:

- King Cobra Discovery drilling continues at depth targeting potential “feeder zone” mineralisation (ongoing)
- Ban Phuc DSS drilling continues to systematically drill out Blackstone’s maiden resource at the Ta Khoa Nickel Project (ongoing)
- Systematic modern geophysics using in-house EM and IP systems to identify blind targets for priority drill testing (ongoing)
- Target undrilled MSV and DSS prospects (i.e. Ban Khoa, King Snake et. al) initially within a 5km radius of the existing processing facility (Q2 2020)
- Preliminary metallurgical testwork and maiden resource for the Ban Phuc DSS (Q2 2020)
- Scoping Study incorporating bulk mineable Ban Phuc DSS and downstream nickel refinery to produce nickel sulfate (Q3 2020)

- An international portfolio of high-quality **battery and precious metals exploration projects** across South East Asia, North America and Australia
- Exploring the Ta Khoa Nickel Project, **South East Asia's Premier Nickel Sulfide District** and resource drilling the large Ban Phuc disseminated Nickel PGE (Cu Co) deposit
- Targeting delivery of a **maiden resource and initial scoping study for the Ban Phuc disseminated deposit** including an upgrade of the existing mill and concentrator to produce a high-quality Nickel PGE (Cu Co) sulfide concentrate under a large-scale bulk mining scenario
- **Scoping study will include downstream processing options to produce a high purity nickel sulfate** product in-country targeting the in-country and Asia Pacific EV manufacturing market
- Blackstone has a conservative share structure and is **well funded to deliver** on the Ban Phuc disseminated resource drilling, initial scoping study and maiden resource
- Well credentialed board and management team with a **proven track record of discovery** and creating shareholder wealth

Disclaimer

Forward Looking Statement

- This presentation may contain certain forward looking statements and projections regarding:
 - estimated, resources and reserves;
 - planned production and operating costs profiles;
 - planned capital requirements; and
 - planned strategies and corporate objectives.
- Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. They are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors many of which are beyond the control of Blackstone Minerals Limited. The forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved.
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Competent Person Statement

- The information in this report that relates to Exploration Results is based on information compiled by Mr Andrew Radonjic, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Andrew Radonjic is the Technical Director of the company. Mr Andrew Radonjic has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Andrew Radonjic consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

No New Information or Data

- This presentation contains references to Exploration Results and Exploration Targets, all of which have been cross referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially effects the information in the said announcement.



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