



BLACK CANYON

ASX Announcement



21 September 2022

ASX:BCA

Corporate Presentation – RIU conference

Black Canyon (ASX: BCA) is pleased to release the following presentation that Executive Director, Mr Brendan Cummins presented at the CRU New World Metals Investment Series, on Wednesday 21 September.

The video of the presentation will be available from the company's website at www.blackcanyon.com.au once received.

This announcement has been approved by the Board of Black Canyon Limited.

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BLACK CANYON

PILBARA FOCUSED MANGANESE EXPLORER

Brendan Cummins – Executive Director

September 2022

Disclaimer & Forward Looking Statements

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Some of the statements contained in this presentation are forward-looking statements. Forward looking statements include but are not limited to, statements concerning estimates of expected costs, statements relating to the advancement of the Company's investments and other statements which are not historical facts. Although the Company believes that its expectations reflected in the forward-looking statements are reasonable, such statements involve risk and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. Various factors could cause actual results to differ from these forward-looking statements include the potential that the Company's projects may experience technical, geological, metallurgical and mechanical problems, changes in product prices and other risks not anticipated by the Company or disclosed in the Company's published material.

COMPETENT PERSONS STATEMENT

The information in this report that relates to exploration results and exploration targets and results is based upon information reviewed by Mr Brendan Cummins who is a member of the Australian Institute of Geoscientists (AIG). Mr Cummins is an Executive Director of Black Canyon Ltd and 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 Cummins consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Scoping Study Cautionary Statement

The Scoping Study referred to in this presentation has been undertaken for the purpose evaluating the potential development of the Flanagan Bore Manganese Project, Pilbara region, Western Australia. It is a preliminary technical and economic study of the potential viability of the Flanagan Bore Manganese Project. The Scoping Study outcomes, Production Targets and forecast financial information referred to in the release are based on low level technical and economic assessments that are insufficient to support estimation of Ore Reserves. The Scoping Study is presented to an accuracy level of +/- 35%. While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the Production Target itself will be realised. Further exploration and evaluation and appropriate studies are required before Black Canyon will be in a position to estimate Ore Reserves or to provide any assurance of any economic development case. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study. All (100%) of the Mineral Resources scheduled for extraction over the 20 year mine life in Scoping Study production targets are classified as Indicated. Only 40% of the Global Mineral Resource has been scheduled for mining in this Scoping Study. No Inferred Mineral Resources have been used in the Scoping Study.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). For full details on the Mineral Resource estimate, please refer to the ASX announcement of 13 April 2022. Black Canyon confirms that it is not aware of any new information or data that materially affects the information included in that release and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not been changed. This Scoping Study is based on the material assumptions outlined in the announcement. These include assumptions about the availability of funding. While Black Canyon considers that all the material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, funding in the order of \$44 million will likely be required. Investors should note that there is no certainty that Black Canyon will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Black Canyon's existing shares. It is also possible that Black Canyon could pursue other strategies such as project finance, strategic partners, a sale or partial sale of its interest in the Flanagan Bore Project. The Flanagan Bore Project is part of the Carawine Joint Venture ("Carawine JV"), with Carawine Resources Ltd ("CWX" ASX:CWX). The respective interests of each party currently being Black Canyon 51% and CWX 49%. Black Canyon is the manager of the joint venture and is earning up to a further 24% interest in the Carawine JV projects to 75%. Under the terms of the Carawine JV, following Black Canyon earning a 75% interest, CWX will have the right to contribute to further expenditure, or dilute its interest.

This announcement contains forward-looking statements. Black Canyon has concluded that it has a reasonable basis for providing these forward-looking statements and believes it has a "reasonable basis" to expect it will be able to fund development of the Flanagan Bore Manganese Project. However, a number of factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely of the results of this study

BCA

ASX Code

\$4.75M

Cash *(As of 30 Jun 2022)*

51.4m

Shares on Issue

\$13.4M

Market Cap *(As at 16/09/2022)*

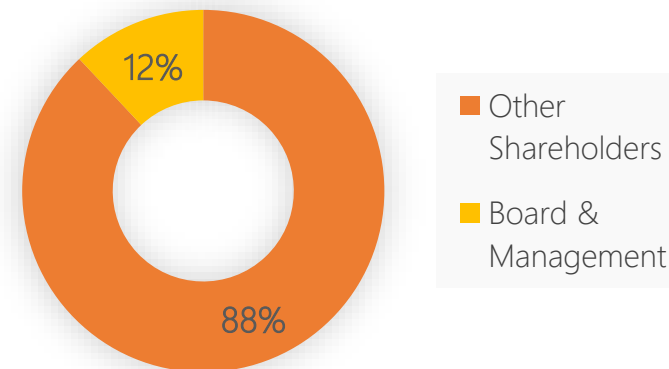
3.04M

Unlisted Options *(\$0.25 exercise)*

\$8.6m

Enterprise Value

BCA Shareholders



Top 20 shareholders – 37%



Experienced Board



Graham Ascough

(Non-Executive Chairman)

Geophysicist

Mr Ascough is a resources executive and geophysicist with more than 30 years' experience. He is presently Non-Executive Chairman of Musgrave Minerals Ltd, Sunstone Metals Ltd and PNX Metals Ltd.



Brendan Cummins

(Executive Director)

Geologist

Mr Cummins has over 25 years' experience across precious, base metals and bulk commodities. He is also a Consulting Geologist to recently construction funded Strandline Resources Ltd.



Simon Taylor

(Non-Executive Director)

Geologist

Mr Taylor is a geologist with over 25 years' experience in exploration, project assessment and development. He is Managing Director of Oklo Resources Ltd and a Non-Executive Director of Chesser Resources Ltd and Stellar Resources Ltd.



Adrian Hill

(Non-Executive Director)

Finance

Mr Hill is a senior executive with over 25 years' experience in strategic and finance roles in the resources, energy infrastructure and investment banking industries. He has an established record in strategy development, corporate structuring and capital raising.

Primed for Growth



Manganese focused

Essential component into the steel industry and growing EV battery component



Premier location

Tier 1 location - Western Australia
Projects located in East Pilbara, existing Mn mines of Woodie Woodie, Butcherbird and export infrastructure at Port Hedland



Mineral Resources

Mineral Resource announced at LR1 and FB3 – 104 Mt @ 10.5% Mn. Higher Grade portion 33Mt @ 12.8% Mn
Significant upside remains on other targets and tenements



Strategy to develop

Proven pathway to discover and develop manganese mines. Completion of the Flanagan Bore Scoping Study
Longer term plans for downstream processing – battery precursor manganese sulphate
Flanagan Bore Scoping Study



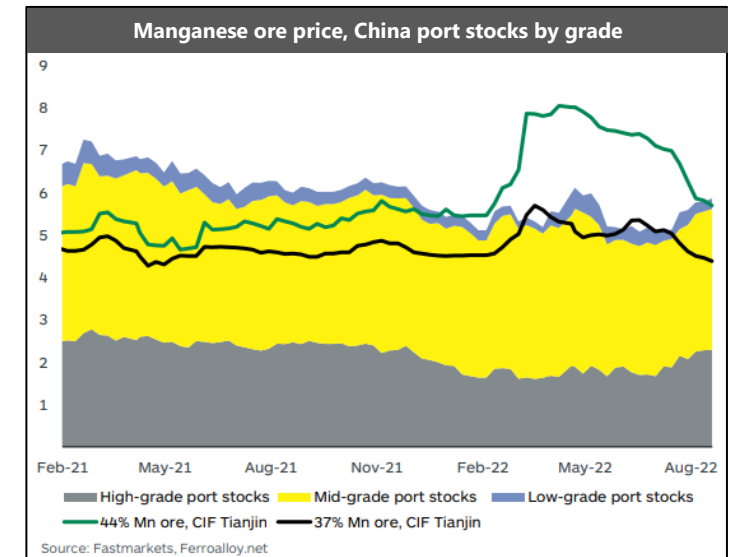
Experience counts

Strong record of exploration success and project development studies
Building an execution Team

Manganese – critical to a low carbon future

Essential for steel and critical for EV Li-ion batteries

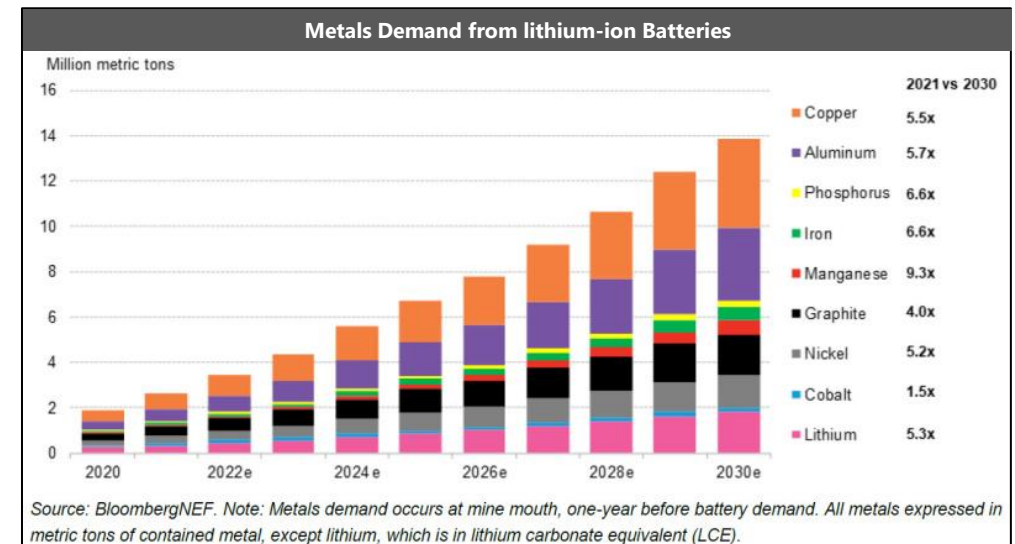
- ▶ Manganese (Mn) is the fourth most consumed metal in the world by tonnage
- ▶ Approximately 90% is used in steel manufacturing with Mn alloys added to prevent corrosion, resist abrasion, and increase hardenability.
- ▶ Smelting Mn ore to make a ferro or silico manganese alloy used in steel (15kg Mn/t rebar). Baseload demand continues from China with the emergence of India
- ▶ Demand for Mn in the rapidly growing EV battery market with Nickel-Manganese-Cobalt (NMC) cathodes widely used in EV Li-ion batteries
- ▶ Each NMC battery contains 10 to 30% manganese in the battery that equates to 10 to 90kg depending on battery chemistry and pack size
- ▶ Emergence of LFMP batteries – adds manganese to LFP batteries to increase energy density at a similar manufacturing cost. High volume, lower cost applications for cheaper EV's



Source: South32 2022 full year results presentation (Slide 27)

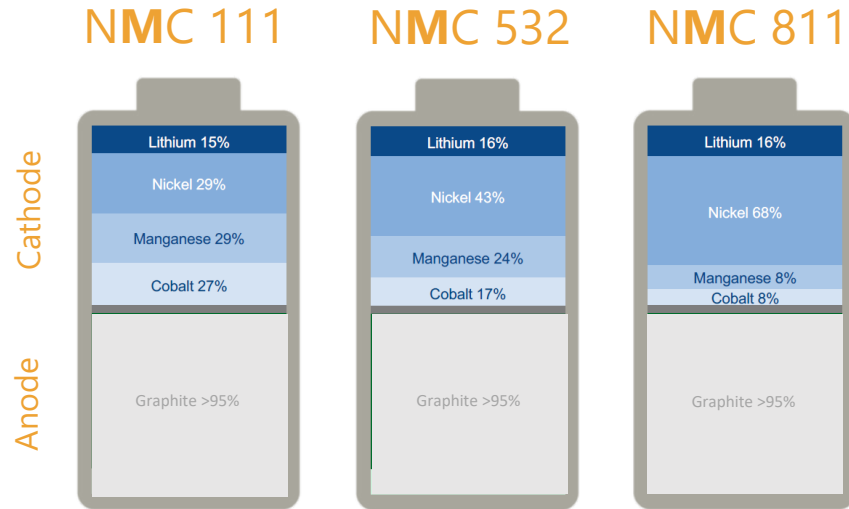
Key Market Drivers

- ▶ Strict emission requirements and bans on fuel powered engines imposed by Chinese and European Governments
- ▶ Government subsidies and funding supporting growth.
- ▶ More models - major car manufacturers such as Ford, GM, VW/Audi, Volvo and Stellantis committing to EV's in addition to market leader Tesla and others transitioning 100% to EV's.
- ▶ Cost competitive electric vehicles – approaching price parity with ICE
- ▶ Diversification of supply to increase the providers of precursor battery materials and the manufacture of EV batteries outside of China



Manganese – an emerging energy mineral

Ternary (NMC) Li-ion batteries



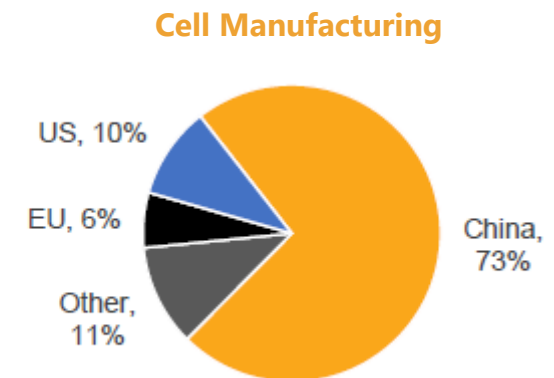
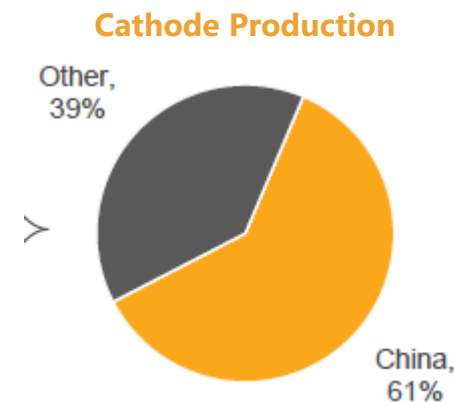
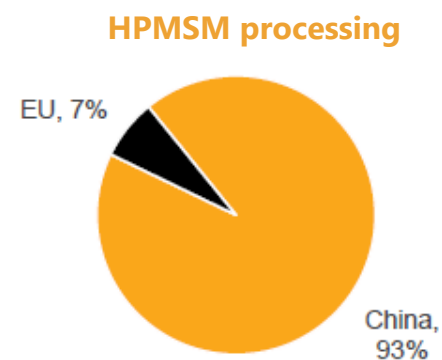
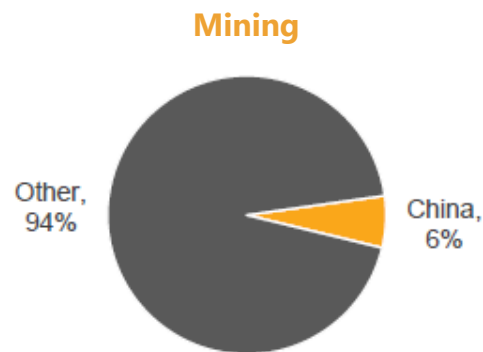
Source: Pallinghurst-Traxys

More manganese to feed the battery technology evolution

- ▶ LFMP batteries increase energy density and km range. LFP batteries were previously used for energy storage or within high-volume EV's with low km range requirements.
- ▶ CATL leads the way, in July 2022 announced the M3P battery which adds Mn to LFP batteries increasing the range to 700km without substantially increasing the manufacturing cost
- ▶ Other major battery manufacturers such as BYD and LG continue to research LFMP chemistries
- ▶ Other high Mn content batteries such as the NMC 370 (70% manganese in the cathode) is under development by BASF
- ▶ Many battery developers seeking to remove cobalt and reduce nickel content in the cathode



Strong need emerging for supply diversification



Portfolio Overview – 2,400km² under tenure

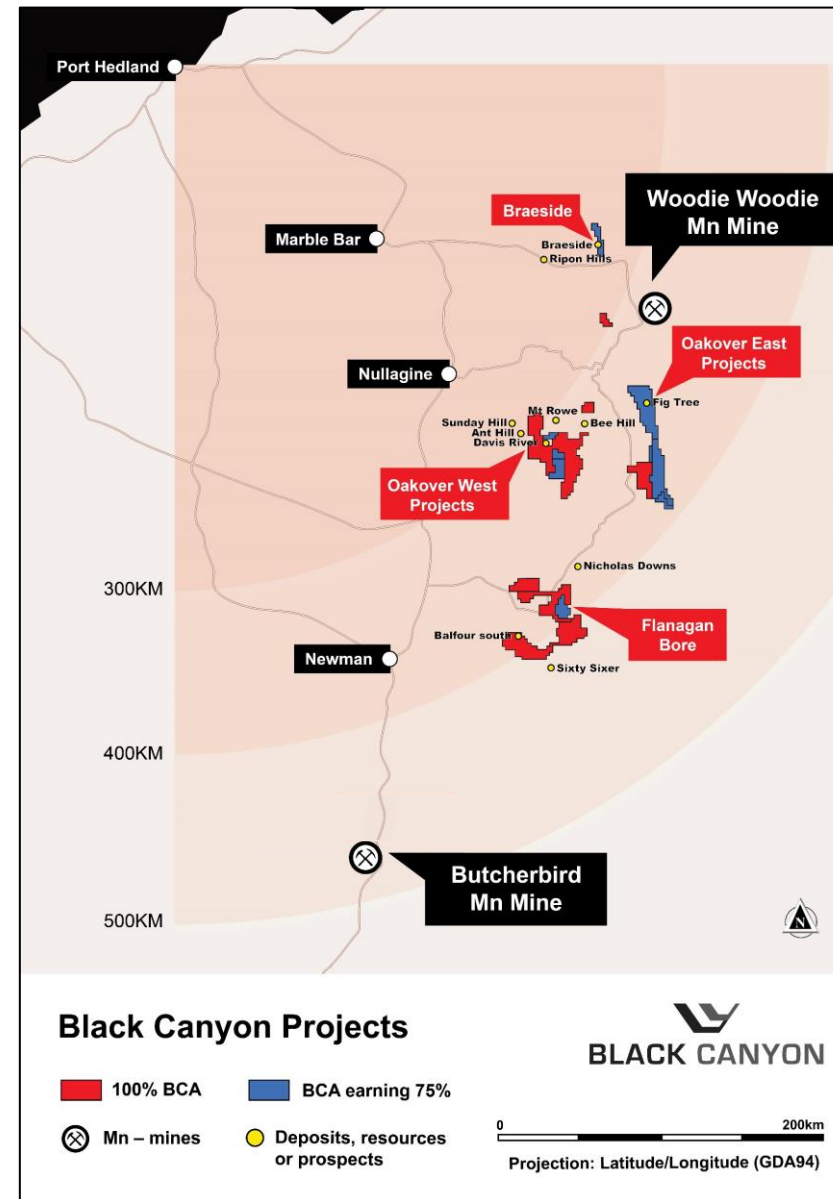
Exploring for “Woodie-Woodie” hydrothermal (high-grade Mn) and “Supergene Balfour” style manganese deposits (med-grade Mn/Fe)
Leveraging of existing transport infrastructure

Black Canyon (100%)

- ▶ Large exploration footprint to become the dominant ASX listed manganese focused explorer/developer in the Pilbara
- ▶ 8 tenements totalling 1585km² (7 granted and 1 under application)
- ▶ Continue to evaluate opportunities with target generation based on geological criteria and proximity to infrastructure

Carawine JV (earning 75%)¹

- ▶ 8 granted tenements across 4 project areas covering 793km² in the east Pilbara in JV with ASX listed Carawine Resources (ASX:CWX)
- ▶ Drill ready targets leveraging off existing drill data and geophysical surveys provided by historic explorers
- ▶ Early success at Flanagan Bore with a new discovery at FB3, a JORC compliant maiden Mineral Resource Estimates and Scoping Study in less than 12 months



Hydrothermal Style



Supergene Style



1. BCA has earned 51% and earning 75% by spending \$2.5m over 3 years. Refer to BCA ASX release 04/04/2022 Black Canyon earns 51% interest in the Carawine JV

Flagship Project - Flanagan Bore (Carawine JV)

Ticks the boxes – scale, outcropping geology, grade & thickness

- Delivers a large-scale, high quality manganese Mineral Resource from surface with outcropping higher-grade zones that shows impressive geological and grade continuity, both of which are extremely positive factors for resource optimisation and potential mining scenarios
- Infill drilling completed mid 2022 to increase resource confidence and grow the MRE

Mineral Resource Summary at LR1 and FB3¹

Summary of Mineral Resources - Global

| Deposit | Mineral Resource Category | Material (Mt) | In Situ Mn (Mt) | BD (gcm ³) | Mn (%) | Fe (%) | Si (%) | Al (%) |
|--------------------|---------------------------|---------------|-----------------|------------------------|-------------|------------|-------------|------------|
| FB3 | Indicated | 67 | 7 | 2.4 | 10.4 | 10.3 | 17.6 | 4.5 |
| LR1 | Indicated | 37 | 4 | 2.4 | 10.8 | 8.9 | 18.3 | 5.0 |
| Grand Total | | 104 | 11 | 2.4 | 10.5 | 9.8 | 17.9 | 4.7 |

Notes:

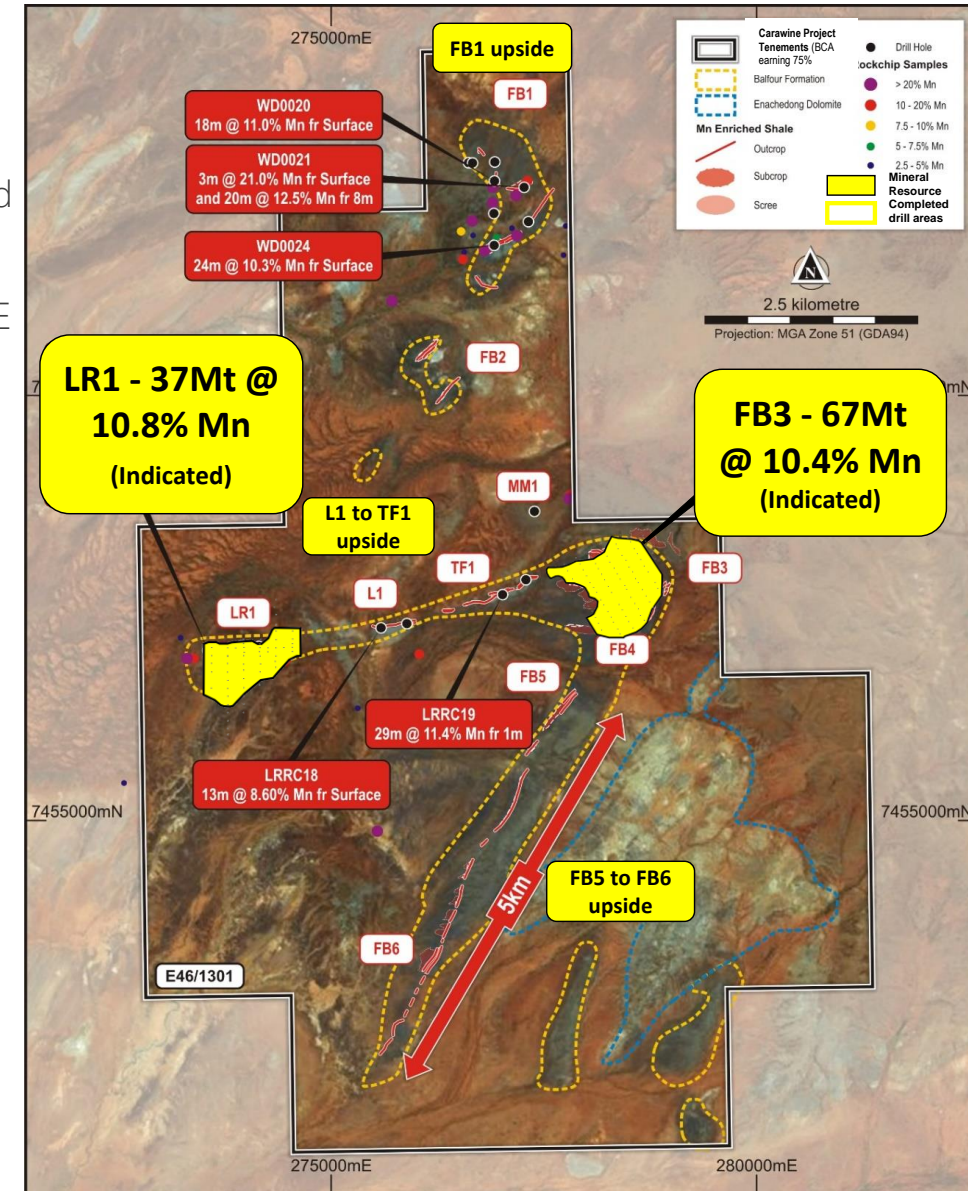
(1) Mineral resources reported at a cut-off grade of 7% Mn

Summary of Mineral Resources – Higher-grade Subset

| Deposit | Mineral Resource Category | Material (Mt) | In Situ Mn (Mt) | BD (gcm ³) | Mn (%) | Fe (%) | Si (%) | Al (%) |
|--------------------|---------------------------|---------------|-----------------|------------------------|-------------|-------------|-------------|------------|
| FB3 | Indicated | 19 | 2 | 2.4 | 12.7 | 11.5 | 18.5 | 4.6 |
| LR1 | Indicated | 15 | 2 | 2.4 | 12.9 | 9.9 | 18.4 | 4.9 |
| Grand Total | | 33 | 4 | 2.4 | 12.8 | 10.8 | 18.5 | 4.8 |

Notes:

(1) Mineral resources reported at a cut-off grade of 11% Mn



1. BCA ASX Announcement 13/04/2022 Mineral Resource Estimate at Flanagan Bore Exceeds 100 Mt

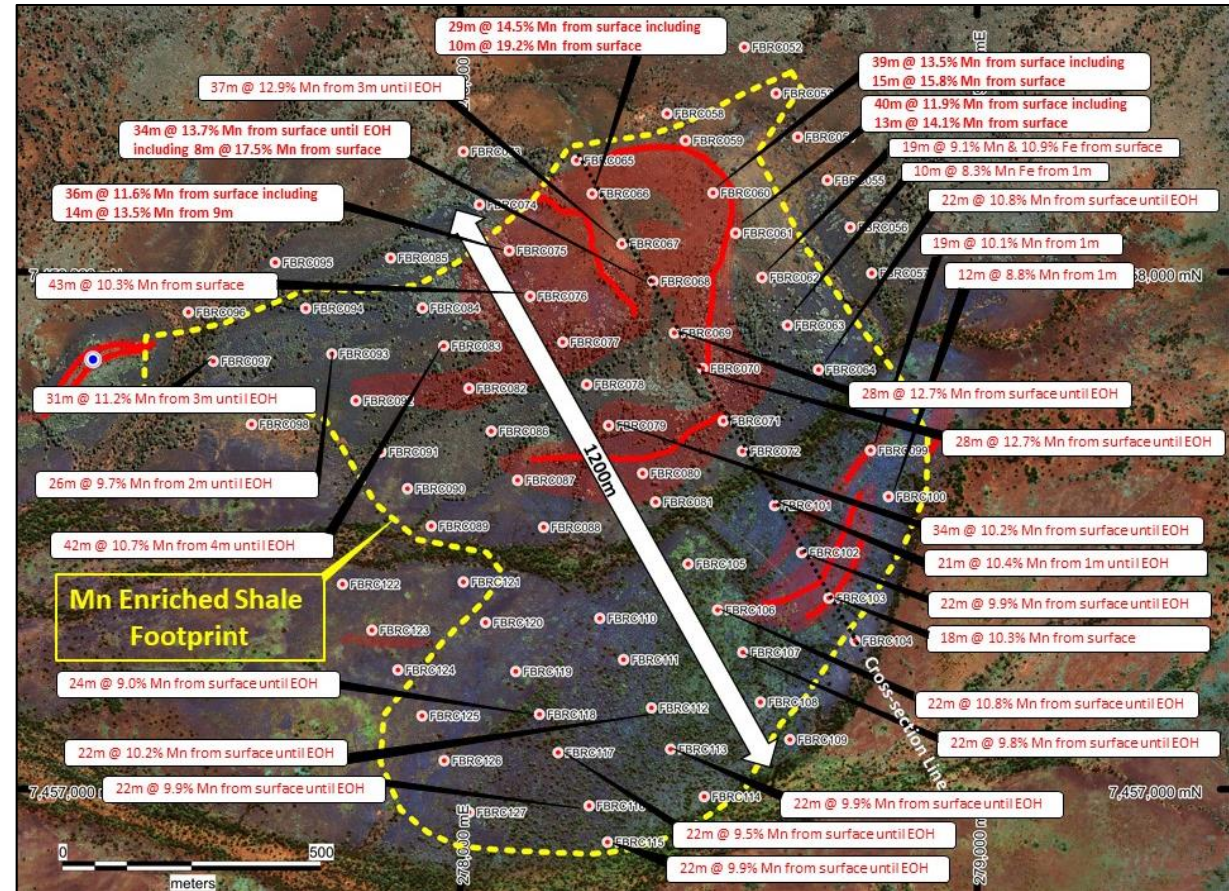
Flanagan Bore FB3 - 67Mt @ 10.4% Mn

FB3 Deposit – RC drilling results

- ▶ 39m @ 13.5% Mn from surface (FBRC060)
 - ▶ Including 15m @ 15.8% Mn from surface
- ▶ 40m @ 11.9% Mn from surface (FBRC061)
 - ▶ Including 13m @ 14.1% Mn from surface
- ▶ 29m @ 14.5% Mn from surface (FBRC066)
 - ▶ Including 10m @ 19.2% Mn from surface
- ▶ 34m @ 13.7% Mn from surface (FBRC068)
 - ▶ Including 8m @ 17.5% Mn from surface
- ▶ 36m @ 11.6% Mn from surface (FBRC075)
 - ▶ Including 14m @ 13.5% Mn from 9m



BCA ASX Announcement 02/03/2022 Manganese Discovery at FB3 - Flanagan Bore Project



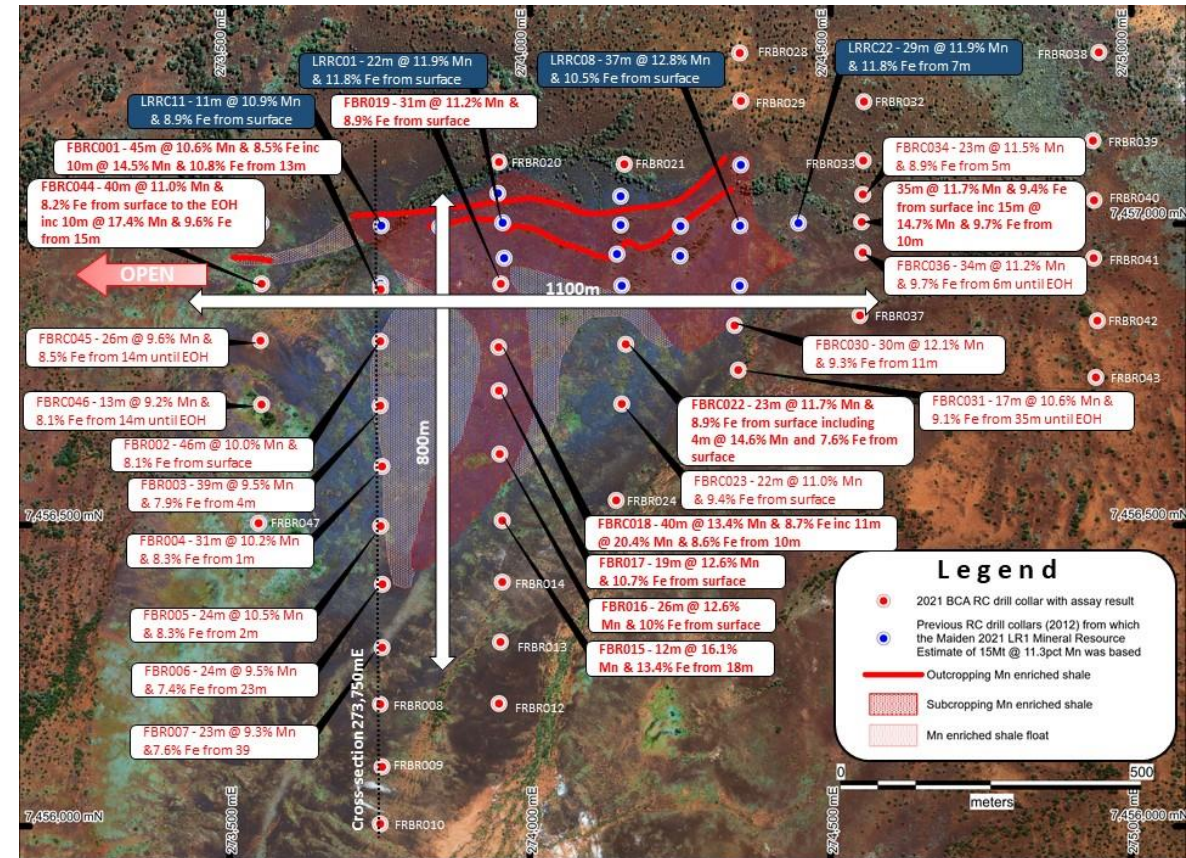
The mineralisation at FB3 is defined within an open southwest plunging synclinal fold.

Higher manganese grade zones are coincident with an increase in topography across the fold nose and northern limb.

Flanagan Bore LR1 - 37Mt @ 10.8% Mn

LR1 Deposit – RC drilling results

- ▶ 40m @ 13.4% Mn from surface (FBRC018), incl.
 - ▶ 11m @ 20.4% Mn from 10m
- ▶ 47m @ 10.6% Mn from 10m (FBRC001), incl.
 - ▶ 10m @ 14.5% Mn from 13m
- ▶ 35m @ 11.7% Mn from surface (FBRC035) incl.
 - ▶ 15m @ 14.7% Mn from 10m
- ▶ 40m @ 11.0% Mn from surface until EOH (FBRC044) incl.
 - ▶ 10m @ 17.4% Mn & 9.6% Fe from 15m



BCA ASX Announcement 08/02/2022 Thick Manganese Intersections from Drilling at Flanagan Bore and 21/02/2022 Further Thick Manganese Intersections at Flanagan Bore

Mineralisation associated with thick, continuous shallowly dipping manganese-enriched shale. The LR1 footprint is 1100m long and up to 800m wide based on drill results.

Flanagan Bore – Metallurgical Studies

Positive sighter level test work

- ▶ Significant manganese grade uplifts from feed grades of 11.7% and 13.7% Mn upgraded to approximately 19% and 26% Mn through scrubbing and washing - an important first step for beneficiation.
- ▶ Heavy Liquid Separation (HLS) (used to simulate dense media separation (DMS)) achieved grades up to 35.5% Mn from the FB03 composite sample.
- ▶ Ore sorting achieved grades of up to 31.3% Mn from the FB03 composite sample.
- ▶ Detailed Feasibility level metallurgical test work commencing focussing on DMS

Mn Ore Product marketing

- ▶ Preliminary discussions with marketing specialists indicate manganese concentrates with key characteristics similar to ores from Flanagan Bore would be suitable for silicomanganese or ferromanganese alloying as feedstocks into the steel manufacturing industry

Battery precursor studies commencing

- ▶ Initial manganese concentrate leaching test work to be undertaken as part of an overall strategy to add value through downstream processing to potentially produce high-purity manganese sulphate monohydrate for the growing electric vehicle battery market
- ▶ Planning a Scoping level study to evaluate the economics of processing Mn fines into high-purity manganese sulphate monohydrate
- ▶ Hydrometallurgical studies commencing

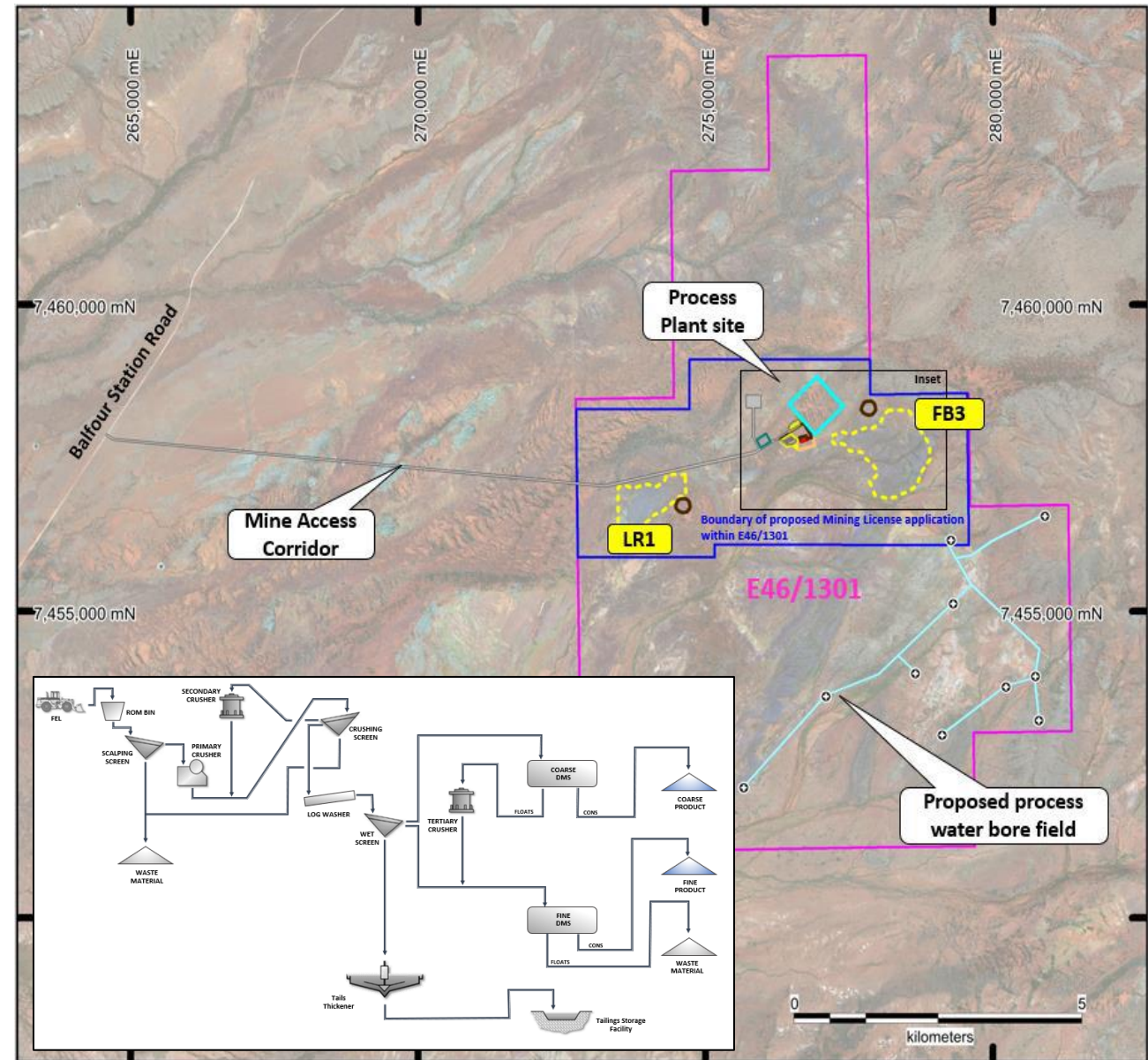
BCA ASX Announcement 08/02/2022 Thick Manganese Intersections from Drilling at Flanagan Bore, 21/02/2022 Further Thick Manganese Intersections at Flanagan Bore and 09/06/2022 Initial metallurgical tests deliver Mn concentrate grades in excess of 30%



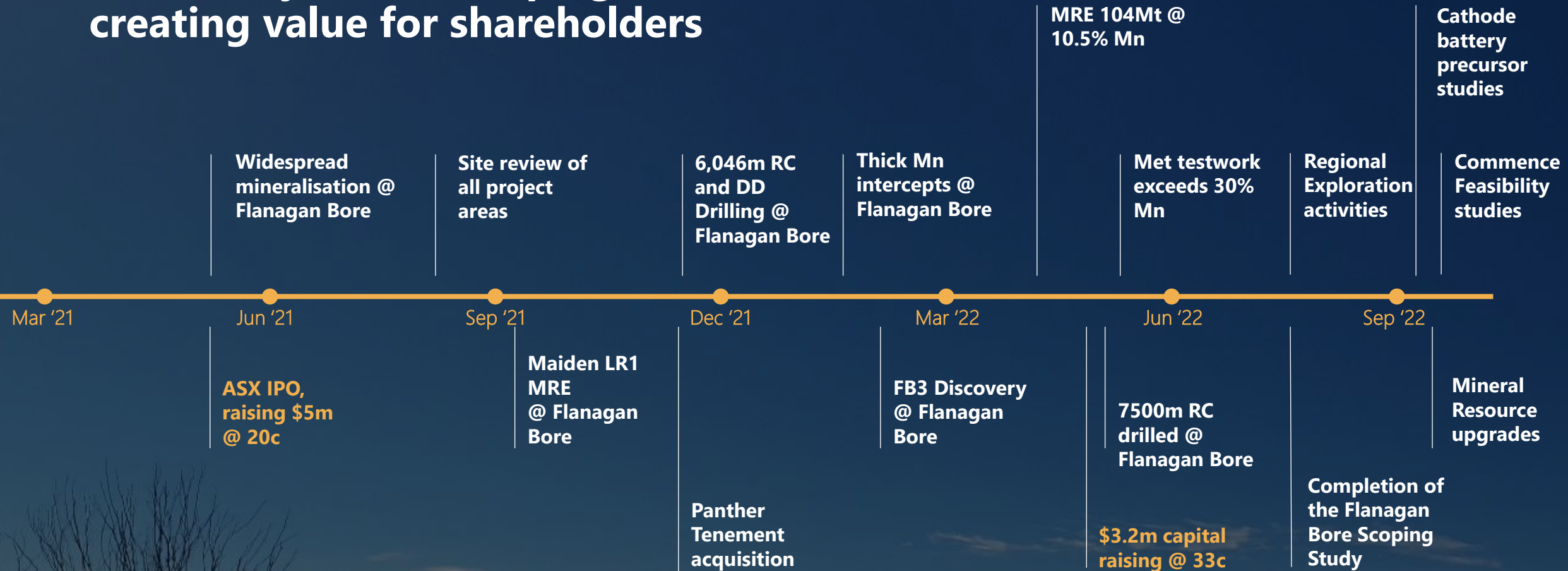
Flanagan Bore Scoping Study – August 2022

Key Financial and Project Metrics

| | |
|-------------------------------------|--------------------------|
| NPV ₈ (before tax, real) | A\$134 million |
| IRR (before tax) | 67% |
| Production Targets (LOM) | 36.1Mt @ 11.7% Mn |
| Initial Mine Life @ 1.8Mtpa | 20 Years |
| Annual Mn concentrate production | 500kt |
| Project Capital Expenditure | A\$44 million |
| Payback Period | <2 Years |
| Total LOM Revenue | A\$2,282 million |
| Total LOM EBITDA | A\$420 million |
| AISC (CIF, A\$/t Mn conc) | A\$192 |

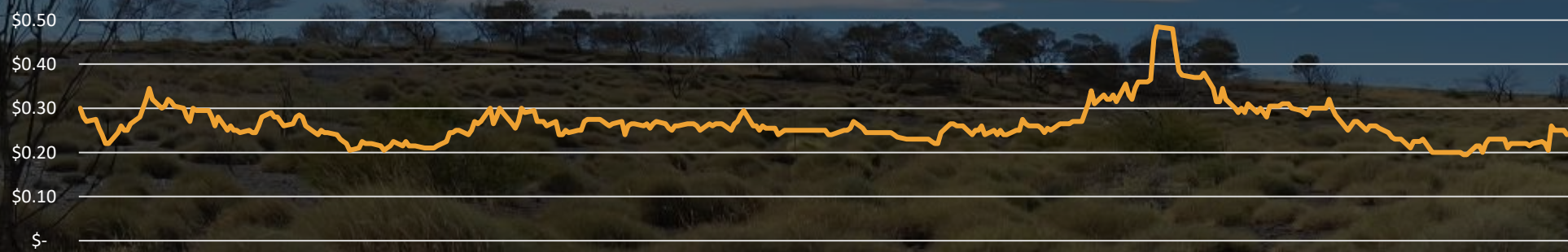


Black Canyon - developing assets and creating value for shareholders



MRE 104Mt @ 10.5% Mn

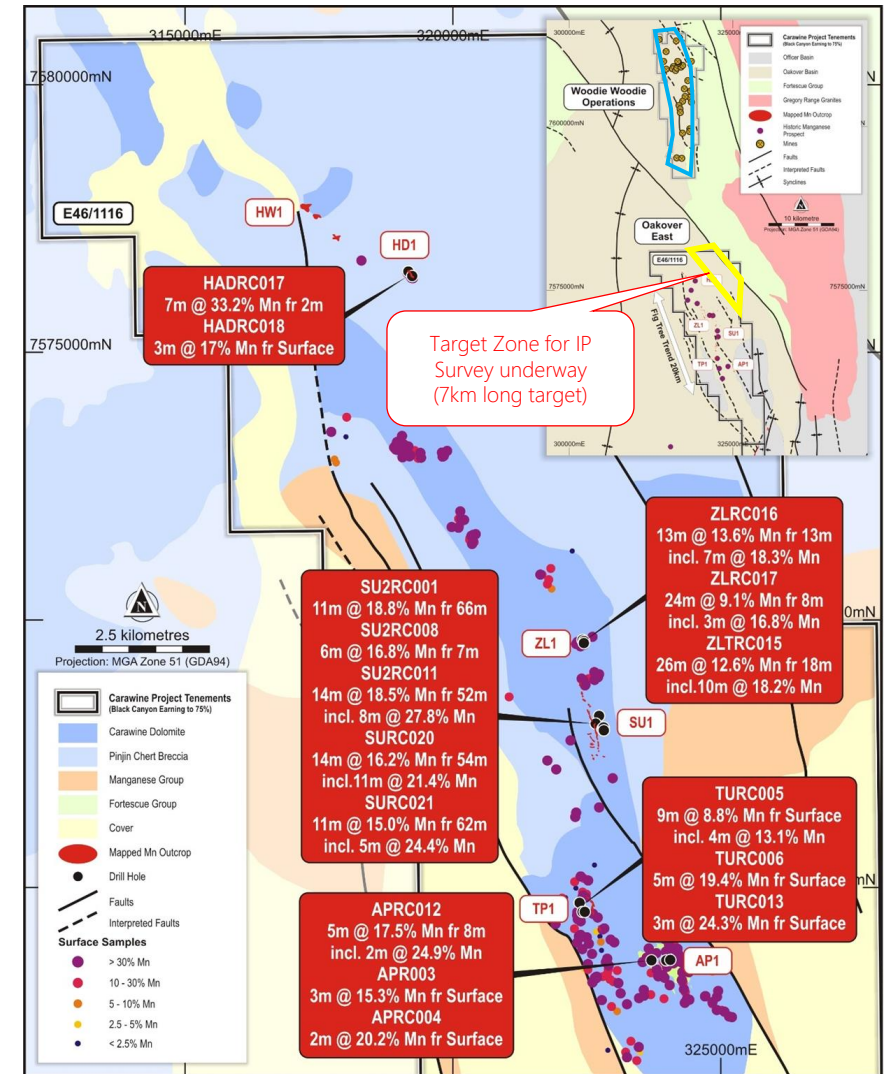
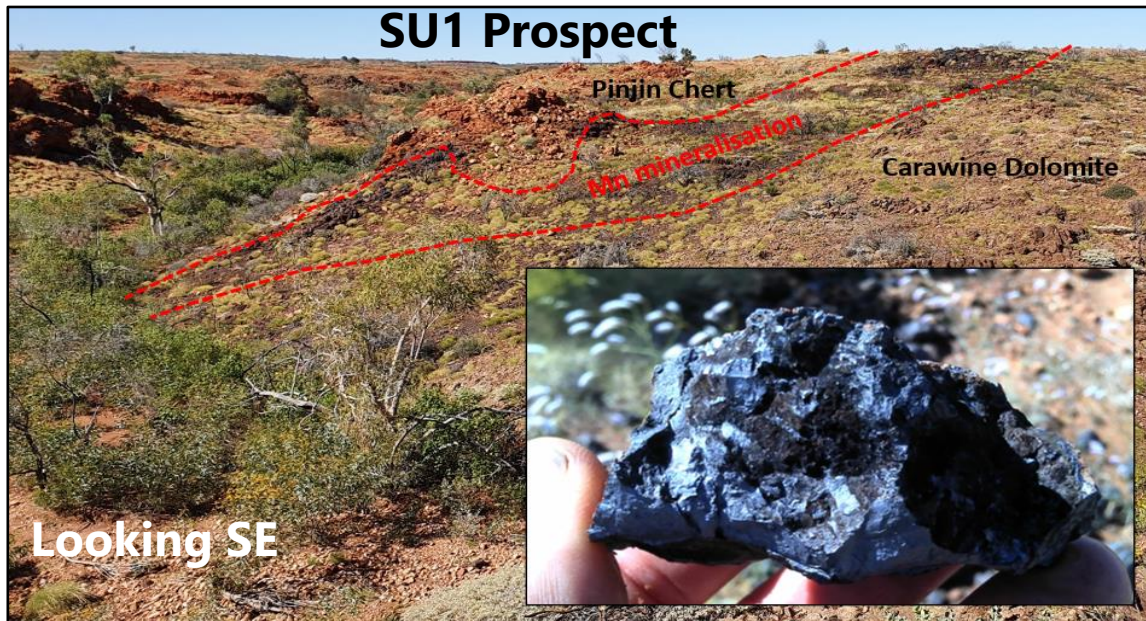
Share price performance



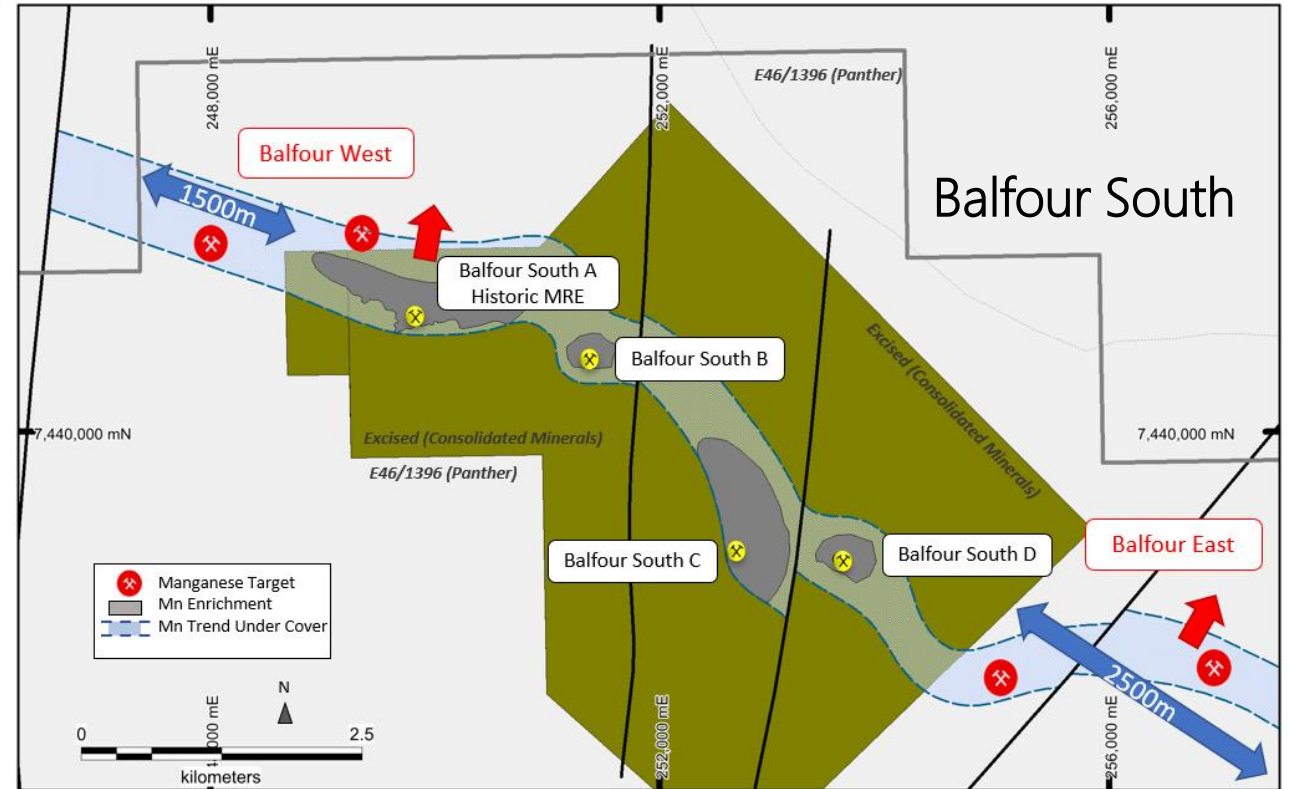
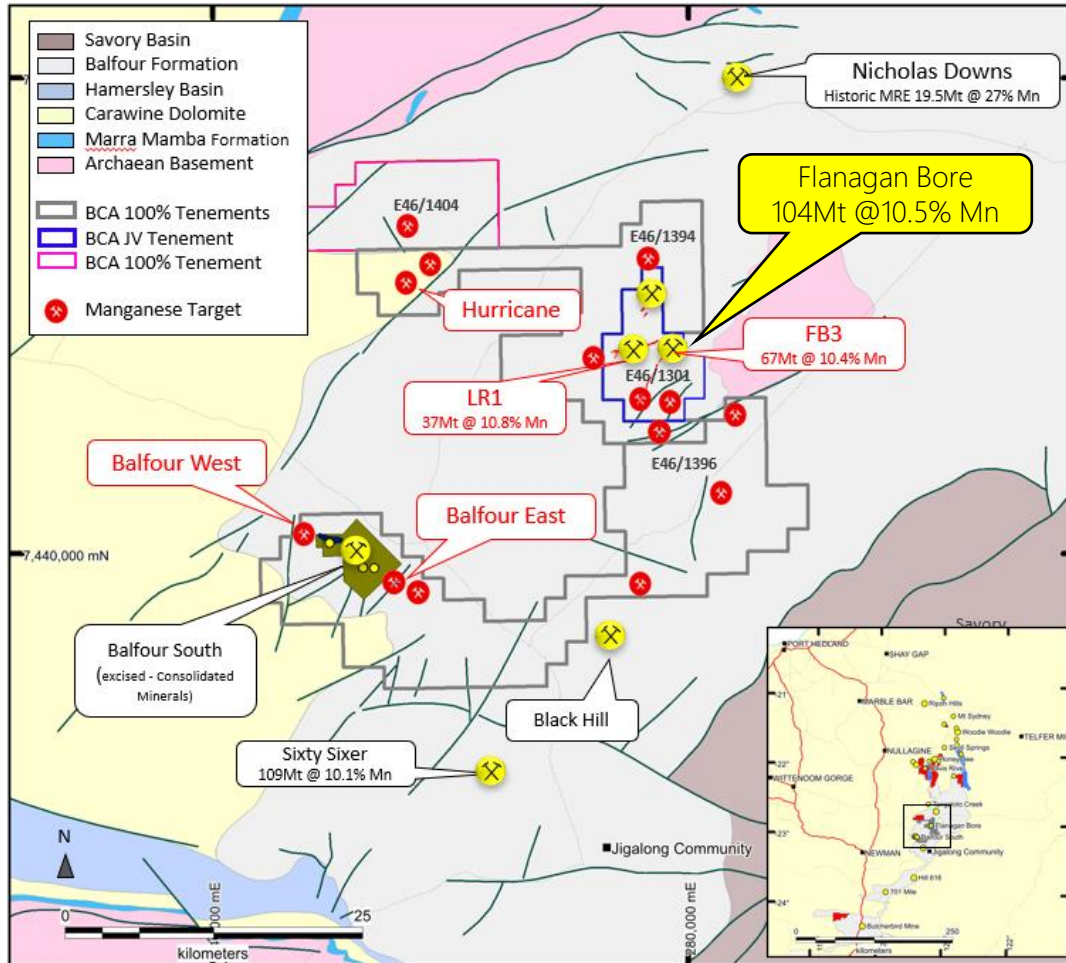
Oakover East (Carawine JV)

Targeting high grade hydrothermal Mn

- ▶ Previous drilling has identified north-south striking zones of ore grade Mn mineralization, located 35km south of Woodie Woodie
- ▶ Continuity of the mineralised horizon along the strike of the Pinjian Chert and Carawine Dolomite contact is identified over 20km
- ▶ Mineralisation remains untested in addition to large areas of prospective geology that have not been subjected to detailed ground geophysical surveys and follow-up drilling along the Pinjian Chert/Carawine Dolomite contact



Balfour Regional



BCA ASX Announcement 07/03/2022 BCA Completes Acquisition of Panther Exploration



BLACK CANYON

Why invest in Black Canyon?



Manganese is essential to the steel industry and a key battery mineral, with strong growth forecast



Well-funded, tight capital structure with a clear strategy to add value and grow the Company through discovery, development and downstream processing



Significant exploration programs to continue across the projects in 2022/23 that includes mapping, MRE updates, heritage surveys, GAIP on selected targets and follow-up resource or discovery drill programs.



Rapid delineation of Mineral Resources, delivery of the positive Flanagan Bore Scoping study with commencement of detailed Feasibility and supporting de-risking activities including Mineral Processing, Hydrology, Environment, Permitting and Stakeholder engagement.



Downstream strategy to produce HPMSM to facilitate diversification of supply supporting the value add strategy



Contact Us



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