



# BLACK CANYON

## ASX Announcement



23 May 2022

ASX:BCA

## Flanagan Bore Mineral Resource infill and extension drilling commences

### HIGHLIGHTS

- A 7,500m reverse circulation (RC) drilling program has commenced at Flanagan Bore to infill and extend the existing Indicated Mineral Resource of 104Mt @ 10.5% (11Mt of contained manganese) at the FB3 and LR1 deposits
- The infill drilling will target high-grade zones identified across the FB3 and LR1 deposits totalling 33Mt @ 12.8% Mn to upgrade the Mineral Resource from Indicated to Measured
- Extension drilling will be undertaken to delineate potential additional shale enriched manganese tonnage located along strike between the FB3 and LR1 deposits
- The Mineral Resource classification upgrade will provide a high level of confidence required to commence more detailed development studies planned for the Project
- Metallurgical test work continues with initial results expected in June as the Company awaits assay results and compilation of the test work data.

Australian manganese explorer, Black Canyon Limited (**Black Canyon** or the **Company**) (ASX:BCA), is pleased to announce it has commenced a large infill and extensional RC drill program across the previously announced Mineral Resource at Flanagan Bore comprising **104Mt @ 10.5% Mn (Indicated)** containing **11Mt of manganese** (Table 1).

The infill drill program is designed to focus on an outcropping high-grade manganese subset of the Mineral Resource estimate comprising **33Mt @ 12.8% Mn** (Table 2) across the FB3 and LR1 deposits.

**Black Canyon Executive Director, Brendan Cummins, said:** "Following on from our successful maiden drill program in December 2021, and resulting large-scale, high quality manganese Mineral Resource estimate announced in April, Black Canyon has fast tracked the mobilisation of an RC drill rig to commence the infill and extension drilling at Flanagan Bore.

"We are also taking this opportunity to complete a first pass drill program on outcropping manganese enriched shales linking the LR1 and FB3 deposits to identify potential shallow higher-grade mineralisation and to grow the Mineral Resources across the project. The Company is aiming to finalise the Mineral Resource upgrades in readiness for anticipated detailed feasibility studies."

ASX Code: BCA

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The overall drill spacing will be reduced from 200m spaced lines and 100m centred holes to 100m spaced lines and 100m centred holes. Significantly, the doubling of the drill density should enable the current Indicated classified Mineral Resources to be upgraded to Measured, which is suitable for detailed feasibility and associated mining and processing studies.

Flanagan Bore is part of the Company's Carawine JV and is subject to a farm-in and joint venture agreement with Carawine Resources Ltd (ASX:CWX). Having earned a 51% interest, Black Canyon is now earning up to 75% in the Carawine Project tenements by sole-funding an additional \$2.5m of exploration expenditure. The Flanagan Bore Project is located approximately 400 km southeast of Port Hedland in the east Pilbara region of Western Australia.

**Table 1. Global Mineral Resource estimate for the FB3 and LR1 deposits at Flanagan Bore April 2022\***

| Summary of Mineral Resources <sup>(1)</sup>                |                           |               |                 |            |             |            |             |            |
|--|---------------------------|---------------|-----------------|------------|-------------|------------|-------------|------------|
| Deposit  | Mineral Resource Category | Material (Mt) | In Situ Mn (Mt) | BD (gcm3)  | 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        |
| <b>Grand Total</b>   |                           | <b>104</b>    | <b>11</b>       | <b>2.4</b> | <b>10.5</b> | <b>9.8</b> | <b>17.9</b> | <b>4.7</b> |
| <b>Notes:</b>  |                           |               |                 |            |             |            |             |            |
| (1) Mineral resources reported at a cut-off grade of 7% Mn |                           |               |                 |            |             |            |             |            |

\* refer to ASX Announcement 13 April 2022 for further details

**Table 2. High-grade Zone Mineral Resource estimate from the FB3 and LR1 deposits at Flanagan Bore April 2022\***

| Summary of Mineral Resources <sup>(1)</sup>                 |                           |               |                 |            |             |             |             |            |
|---|---------------------------|---------------|-----------------|------------|-------------|-------------|-------------|------------|
| Deposit   | Mineral Resource Category | Material (Mt) | In Situ Mn (Mt) | BD (gcm3)  | 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        |
| <b>Grand Total</b>  |                           | <b>33</b>     | <b>4</b>        | <b>2.4</b> | <b>12.8</b> | <b>10.8</b> | <b>18.5</b> | <b>4.8</b> |
| <b>Notes:</b>   |                           |               |                 |            |             |             |             |            |
| (1) Mineral resources reported at a cut-off grade of 11% Mn |                           |               |                 |            |             |             |             |            |

\* refer to ASX Announcement 13 April 2022 for further details

The metallurgical test work results are yet to be finalised as the Company awaits assays results and compilation of the data. It is anticipated that the results will be available in early June.

The objectives of the scoping level sighter test work completed by BCA is to establish early stage material characteristics, scrubbing and sizing analysis, variability, recoveries, potential flowsheet design options (Ore-sorting and/or Dense Media Separation (DMS)) and product marketability. A more comprehensive metallurgical test work from FB3 and LR1 mineralisation styles is planned once the results of this initial program have been reviewed.



Figure 1. RC drill rig at the LR1 deposit

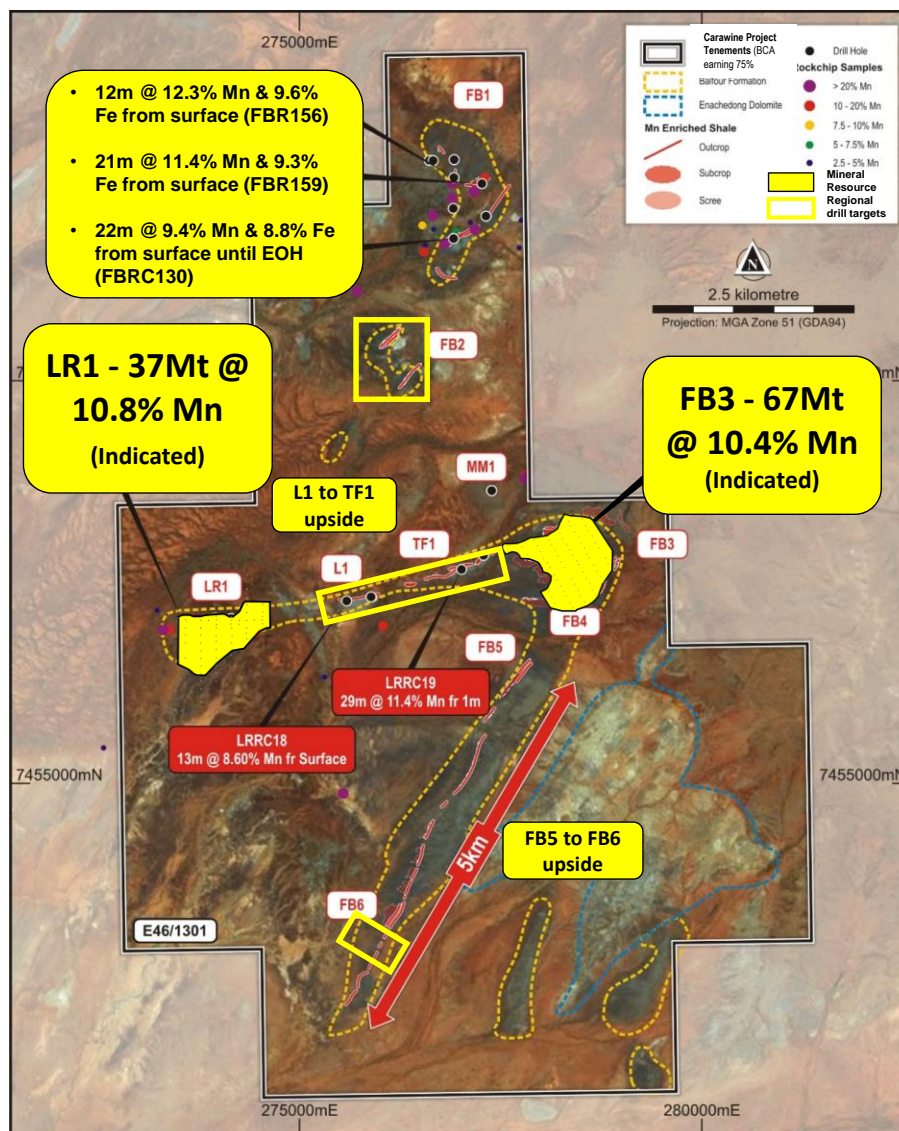


Figure 2. Flanagan Bore Project - FB3 & LR1 Mineral Resource outlines and additional drill targets at FB1, L1, TF1 and FB6 (Black Canyon (51%) earning up to 75%)

### **Additional targets at Flanagan Bore**

The manganese mineralisation at Flanagan Bore related to the LR1 and FB3 deposits is associated with a regional northeast trending open synclinal fold (Figure 2). Additional manganese-enriched shale units have been identified along the limbs that have not been systematically drill tested. The fold appears to be semi-continuous along 10 km of strike from LR1 to FB3 and associated fold limbs to FB5 and FB6.

Additional targets that the Company plan to drill as part of the current RC drill program are summarised below and presented in Figure 2:

- **L1 and TF1 Prospects:** located along strike to the east of the LR1 deposit and extending to FB3, the L1 and TF prospects have four historical drillholes and more recently four holes the Company completed in the December 2021 drill program. The results have been encouraging and similar to those already drilled into LR1 and FB3, however there remains 2,000m of strike that requires more systematic drill testing. A total of 11 lines spaced 200m apart are planned to be drilled along this target zone.
- **FB2 Prospect:** located south of the FB1 prospect and has never previously been drill tested. Manganese enriched shales outcrop and form a low rise above the predominantly shallow cover sequence. Mineralisation appears to be related to folded manganese shales with thicker, more prominent bands of manganese-enriched shale forming topographic rises. The structural complexity at FB2 may be responsible for enhancing the manganese grade that will be evaluated.
- **FB5/FB6 Prospects:** A single line of RC drilling was completed at FB5 targeting outcropping and sub-cropping manganese-enriched shale (ASX Announcement 23 March 2022). The drillholes confirmed the northwest dipping manganese enriched shale with a cross strike width of at least 400m intersected. The drilling completed at FB5 has only tested a small section of the 5km long zone of mapped manganese mineralisation that extends to the southwest towards the FB6 prospect. On this basis, the FB6 target area will be drilled with a single line of drill holes to confirm manganese enrichment.

The Company is looking forward to drill testing these targets to improve the tonnage potential and understanding at Flanagan Bore.

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

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## About Black Canyon

Black Canyon has entered into a farm-in and joint venture with ASX listed Carawine Resources Limited (ASX:CWX) to acquire a majority interest in the Carawine Project in Western Australia. The Carawine Project covers approximately 800 km<sup>2</sup> of tenure located south of the operating Woodie-Woodie manganese mine, providing a large footprint in a proven and producing manganese belt. Black Canyon has also applied for and acquired other exploration licenses adjacent to the Carawine Project that would increase the total land holdings to over 2600 km<sup>2</sup> upon grant. In addition to manganese, the Carawine Project also hosts multiple copper occurrences including the Western Star prospect which comprises a large zone of surface copper enrichment.

Manganese and copper continue to have attractive fundamentals with growing utilisation in the battery mineral sector and challenging supply conditions.

## Compliance Statements

## Reporting of Exploration Results and Previously Reported Information

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation reviewed by Mr Brendan Cummins, Executive Director of Black Canyon Limited. Mr Cummins is a member of the Australian Institute of Geoscientists, and he has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been 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 Cummins consents to the inclusion in this release of the matters based on the information in the form and context in which they appear. Mr Cummins is a shareholder of Black Canyon Limited.

The information in this report that relates to Mineral Resources is based on, and fairly represents, information and supporting documentation prepared by Mr Greg Jones, (Consultant to Black Canyon and Geological Services Manager for IHC Mining). Mr Jones is a Fellow of the Australian Institute of Mining and Metallurgy and has sufficient experience of relevance to the style of mineralisation and type of deposit under consideration, and to the activities undertaken to qualify as a Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Jones consents to the inclusion in this report of the matters based on the information in the form and context in which they appear.

For further information, please refer to ASX announcements dated 17 May 2021, 10 June 2021, 7 July 2021, 5 October 2021, 4 January 2022, 8 February 2022, 21 February 2022, 2 March 2022, 23 March 2022 and 13 April 2022 which are available from the ASX Announcement web page on the Company’s website. The Company confirms that there is no new information or data that materially affects the information presented in the JORC Table 1 appendices that relate to Exploration Results and Mineral Resources in the original market announcements.

