



# BLACK CANYON

## ASX Announcement



27 March 2023

ASX:BCA

## Black Canyon acquires strategic tenement within the prospective Balfour Manganese Field

- Black Canyon to acquire 100% of granted licence E46/1383 (excluding copper rights) to further expand areas under exploration in the region by another 351km<sup>2</sup> to total 1,175km<sup>2</sup>.
- Strategically located in the Balfour Manganese Field extending from the historic mine of Nicholas Downs in the north, including Flanagan Bore and the historic Balfour South Mineral Resource to the south.
- Excellent access to infrastructure including Newman and the Great Northern Highway.
- The licence contains several outcropping manganese enriched prospects including a significant and continuous zone of mineralisation extending over 5km.
- No historic drilling has been completed on the outcropping mineralisation providing a significant opportunity for Black Canyon to discover and deliver Mineral Resources.
- The Company is planning a drill program to investigate the potential size and grade of these new targets.
- Current metallurgical manganese concentrate test work programs for Flanagan Bore are progressing well and baseline environmental surveys recommenced on site.

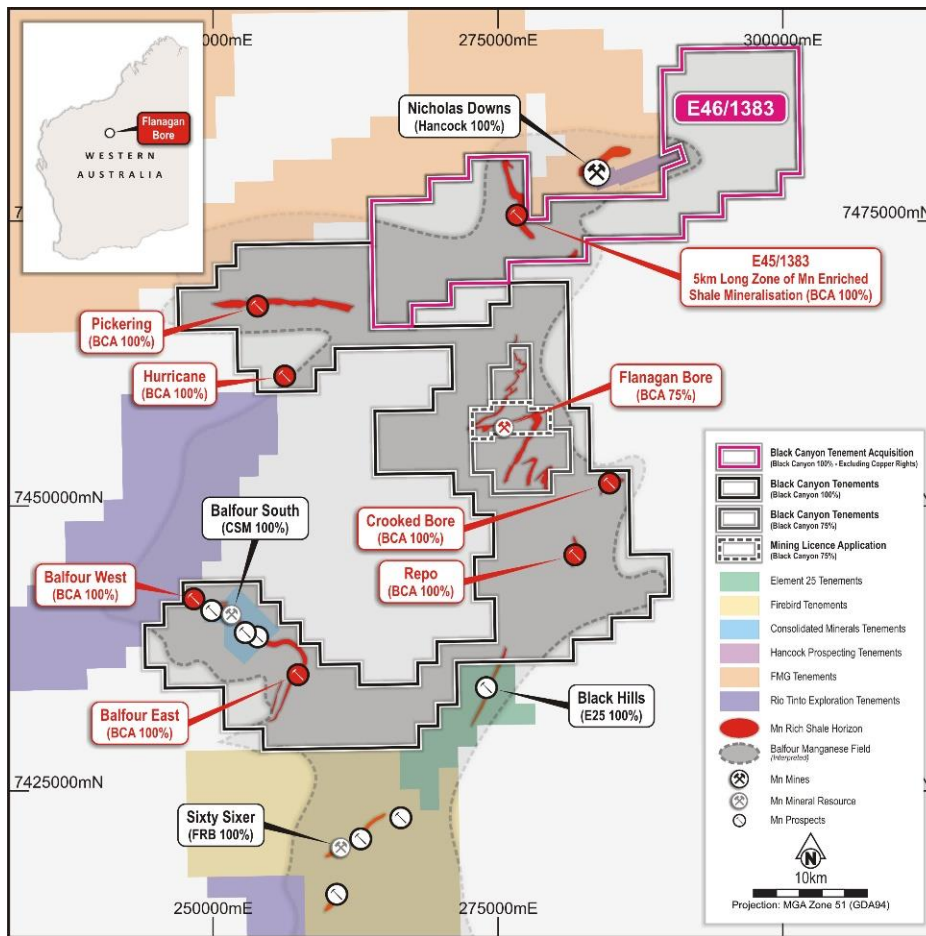
Australian manganese explorer and developer, Black Canyon Limited (**Black Canyon** or the **Company**) (ASX: BCA) is pleased to advise that it is acquiring 100% of granted licence E46/1383 (excluding copper rights as outlined below) adding a further 351km<sup>2</sup> to the Company's prospective manganese portfolio in the eastern Pilbara. The tenements further consolidate prospective manganese enriched shale horizons extending over 75km strike from the manganese Mineral Resources Estimate for Balfour South, Sixty Sixer, Flanagan Bore and the past producing manganese mine of Nicholas Downs (Figure 1).

**Black Canyon's Executive Director Brendan Cummins said:** "With the 100% acquisition of this granted exploration licence, the Company has further consolidated a significant holding in this underexplored region of the growing Balfour Manganese Field. Based on our experience in delivering large Mineral Resource tonnages at Flanagan Bore (BCA 75%) and the mapped outcropping occurrence of manganese enriched shales across our tenement portfolio, we believe there is high potential to discover and delineate substantial Mineral Resources confirming the manganese endowment of this globally significant region. The size and scale of the Balfour Manganese Field and the discoveries to date show considerable promise and this strategic acquisition complements our existing portfolio and contributes to the Company's overall growth and development strategy."

ASX Code: BCA

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**Figure 1. Location of E46/1383, manganese enriched shale horizon (red solid outlines) and distribution of manganese targets and mineral resources across the tenement portfolio.**



**Figure 2. An elevated 500m long outcrop of manganese enriched shale horizon within license E46/1383 (looking to the southeast) from the southern extent of the 5km long zone of mineralisation.**



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With the commencement of the 2023 field season the Company is planning to drill a number of high priority targets on E46/1383, the Balfour east and west targets adjacent the historic Balfour South Mineral Resource and the 10km long Pickering manganese enriched calcareous shale horizon.



*Figure 3. Widespread manganese enriched shale mineralisation within E46/1383 (looking to the southeast).*



*Figure 4. An example of the blocky manganese enriched shale mineralisation located within E46/1383.*

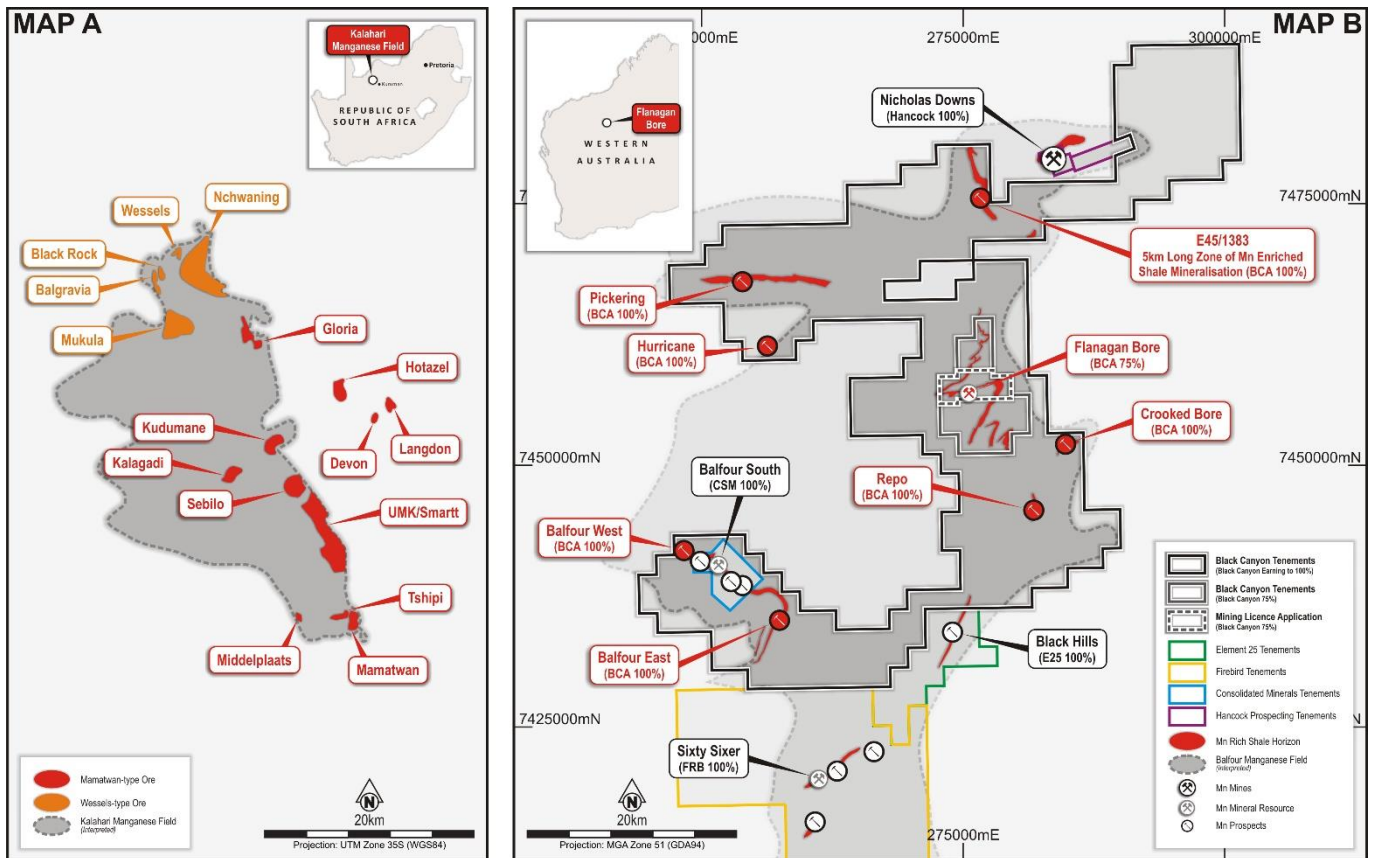
**Discussion on the significance of the Balfour Manganese Field**

As the geological understanding and Mineral Resource potential of the Balfour Manganese Field increases, a number of high-level comparatives to the Tier 1 Kalahari Mineral Field located in South Africa are summarised in Table 1.

*Table 1. Kalahari and Balfour Mineral Field Comparative Table*

Parameter	Kalahari Mineral Field	Balfour Mineral Field
Basin Scale	35km x 15km	70km x 30km
Manganese Ore type	Carbonate & Oxide	Oxide
Mine establishment date	1960's to 2010 (> 20 mines)	2010 (1 mine)
Development stage	Mature	Emerging
Mineral Resource Grades	33-44% Mn	10-20% Mn
Ore Processing	Limited requirement	Beneficiation required such as DMS
Concentrate Grade	37% Mn	30-33% Mn
Mine depths	100 to 300m (Open Pit & Underground)	0 to 40m (Open Pit)
Distance from Port	1000km	600km
Transport logistics	Train and Truck	Truck

In 2022, global manganese ore production totalled 58.9 Mt with African based manganese ore suppliers accounting for approximately 62% of supply and the prolific Kalahari Mineral field accounting for approximately half of all the manganese ore exported from Africa. The 2022 average global grade of manganese concentrates was approximately 36% Mn with the majority of the manganese concentrate grades ranging between 30 and 44% Mn (Source: Confidential - IMNL March 2023 presentation – Latest developments in the global Manganese ore market).



**Figure 5. Comparative image at the same scale showing the mines and extents of the Kalahari Mineral Field (Map A) and for the Balfour Mineral Field (Map B)**

The emerging potential for the Balfour Mineral Field is evident by the size of the geological basin, mineral resources identified to date, distance from port, potential for shallow open pit mining and a likely beneficiated Mn oxide concentrate grade product between 30 and 33% Mn.

Black Canyon has established a dominant footprint in the region and is confident that over time the Balfour Manganese Field will yield further, globally significant discoveries as exploration continues.

### **Summary of the acquisition terms**

Black Canyon has entered into a binding Tenement Sale Agreement ('Agreement') with Access Australia Mining (AAM), a 100% owned subsidiary of Killi Resources (ASX:KLI) to acquire 100% of E46/1383 from the vendor for the following consideration:

1. The issue \$200,000 worth of Black Canyon Ordinary Shares, with the number of Black Canyon Ordinary Shares issued based on the volume weighted average price (VWAP) of Black Canyon Ordinary Shares (Consideration Shares), calculated over 20 trading days before the Execution Date upon the satisfaction of typical conditions precedent that are expected for a tenement sale agreement.
2. Milestone based payment of \$300,000 worth of Black Canyon Ordinary Shares (Deferred Consideration Shares) upon estimation of JORC compliant Mineral Resources from E46/1383 equal to, or greater than 50Mt grading at least 10% Mn. The number of Black Canyon Ordinary Shares to be issued will be based on the volume weighted average price (VWAP) of Shares calculated over 20 trading days before the ASX announcement is released reporting the Milestone has been met.
3. AAM will retain the rights to explore for and mine any copper mineralisation on the tenements under a Mineral Rights Deed that has been executed by Black Canyon and AAM.

The Consideration Shares and Deferred Consideration Shares are subject to 12 months escrow from date of issue.

### **Flanagan Bore Project Update**

Detailed metallurgical test work to deliver a consistent, high-quality manganese concentrate has progressed well. A number of scrubbing, crushing and heavy liquid separation (HLS) tests have been completed on representative LR and FB core samples with the results received to date currently being assessed and compiled. The HLS tests are trending positively which provides confidence with continuing scaled-up test work using larger dense media separation (DMS) processing circuitry.

Environmental surveys have re-commenced on site with autumn flora/vegetation and fauna surveys being carried out over the next 6 weeks. Further Flanagan Bore work programs are subject to the JV Joint Venture Management Committee finalising and approving the proposed initial 12-month budget.

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

For further details:

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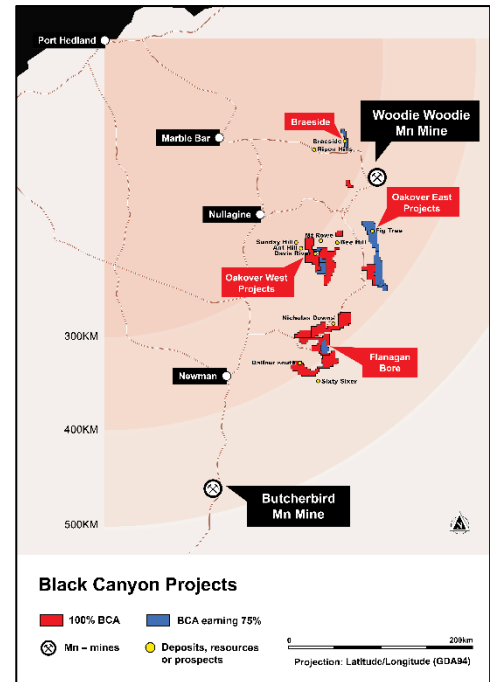
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## About Black Canyon

Black Canyon holds 75% and is the manager of the Carawine joint venture with ASX listed Carawine Resources Limited (ASX:CWX). The Carawine JV Project covers approximately 800km<sup>2</sup> of tenure in Western Australia, located south of the operating Woodie-Woodie manganese mine, providing a large footprint in a proven and producing manganese belt. Black Canyon has also been granted or acquired other exploration licenses (100%) adjacent to the Carawine Projects that increase the total land holdings to over 2,750 km<sup>2</sup>. 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.

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, 13 April 2022, 9 June 2022, 7 September 2022, 15 September 2022, 11 October, 21 & 24 November, 5 December, 28 December and 14 February 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 this release that relate to Exploration Results and Mineral Resources in the original market announcements.

### Competent Person Statement

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