



# BLACK CANYON

## QUARTERLY REPORT



30 January 2024

ASX:BCA

## December Quarter Activities Report

### BALFOUR MANGANESE FIELD PROJECTS (BCA 100%)

- Balfour Manganese Field (BMF) Global Mineral Resource Estimate (MRE) increased to **314 Mt @ 10.5% Mn containing 33.1 Mt of manganese** (7% Mn cut-off) classified as Measured (32%) Indicated (48%) and Inferred (20%).<sup>1</sup>
- The higher-grade subset comprising **99 Mt @ 12.9% Mn containing 12.8 Mt of manganese** (11% Mn cut-off) classified as Measured (25%) Indicated (30%) and Inferred (45%).
- Maiden MRE of **103 Mt @ 10.4% Mn containing 10.7 Mt of manganese** (7% Mn cut-off) from.<sup>2</sup>
  - **KR1 - 79 Mt @ 10.0% Mn** (100% Indicated)
  - **KR2 - 24 Mt @ 11.9% Mn** (Inferred)
- Maiden MRE of **40 Mt @ 11.9% Mn containing 4.7 Mt of manganese** (7% Mn cut-off) from.
  - **Balfour East - 32 Mt @ 11.9% Mn** (Inferred)
  - **Damsite - 7 Mt @ 12.1% Mn** (Inferred)
- MRE's across 100% BCA owned tenements total **143 Mt @ 10.8% Mn containing 15.5 Mt of manganese** (7% Mn cut-off).

### HIGH PURITY MANGANESE SULPHATE MONOHYDRATE (HPMSM) (BCA 100%)

- KR1 leach test yielded a 97% extraction rate and through phased purification produced a **> 32% Mn content HPMSM** exceeding minimum specification.
- Hydrometallurgical testwork completed on manganese oxide samples from KR1 within the BMF has generated HPMSM meeting battery grade specification of **> 99% HPMSM Purity** and within specification impurities levels.<sup>3</sup>

### WANDANYA PROJECT (BCA 100%)

- Detailed sampling over the Wandanya (E46/1407) tenement (BCA 100%) has delivered further high-grade rock chip samples - up to **58.5% manganese (Mn)**.
- Four samples taken between 80 and 100m apart (across and along strike) returned **53.3%, 58.5%, 57.9% and 57.8% Mn**.<sup>4</sup>

<sup>1</sup> ASX Announcement 12 December 2023 – Global Manganese Mineral Resource Estimate Exceed 300 Mt

<sup>2</sup> ASX Announcement 27 November 2023 – KR1 and KR2 Mineral Resource Estimate Exceeds 100 Mt

<sup>3</sup> ASX Announcement 24 October 2023 – Battery Grade Manganese Sulphate >99% Purity Achieved



# BLACK CANYON

Australian manganese explorer, Black Canyon Limited (**Black Canyon** or the **Company**) (ASX:BCA), is pleased to present its quarterly activities report for the three months to 31 December 2023.

## ACTIVITIES REPORT

Black Canyon is focused on manganese exploration and development in WA's Pilbara region. The Company has a portfolio of tenements that are prospective for manganese mineralisation such as "Woodie-Woodie" hydrothermal (high-grade Mn) and "Supergene Balfour" style manganese deposits (medium-grade Mn/Fe). The projects are capable of producing manganese concentrate and high purity manganese sulphate monohydrate (HPMSM) for the steel industry and cathodes of batteries used by electric vehicles respectively.

The Company's projects comprise more than 2,400km<sup>2</sup> of prospective tenure in a premier mining jurisdiction (East Pilbara), close to the operating Woodie Woodie and Butcherbird manganese mines.

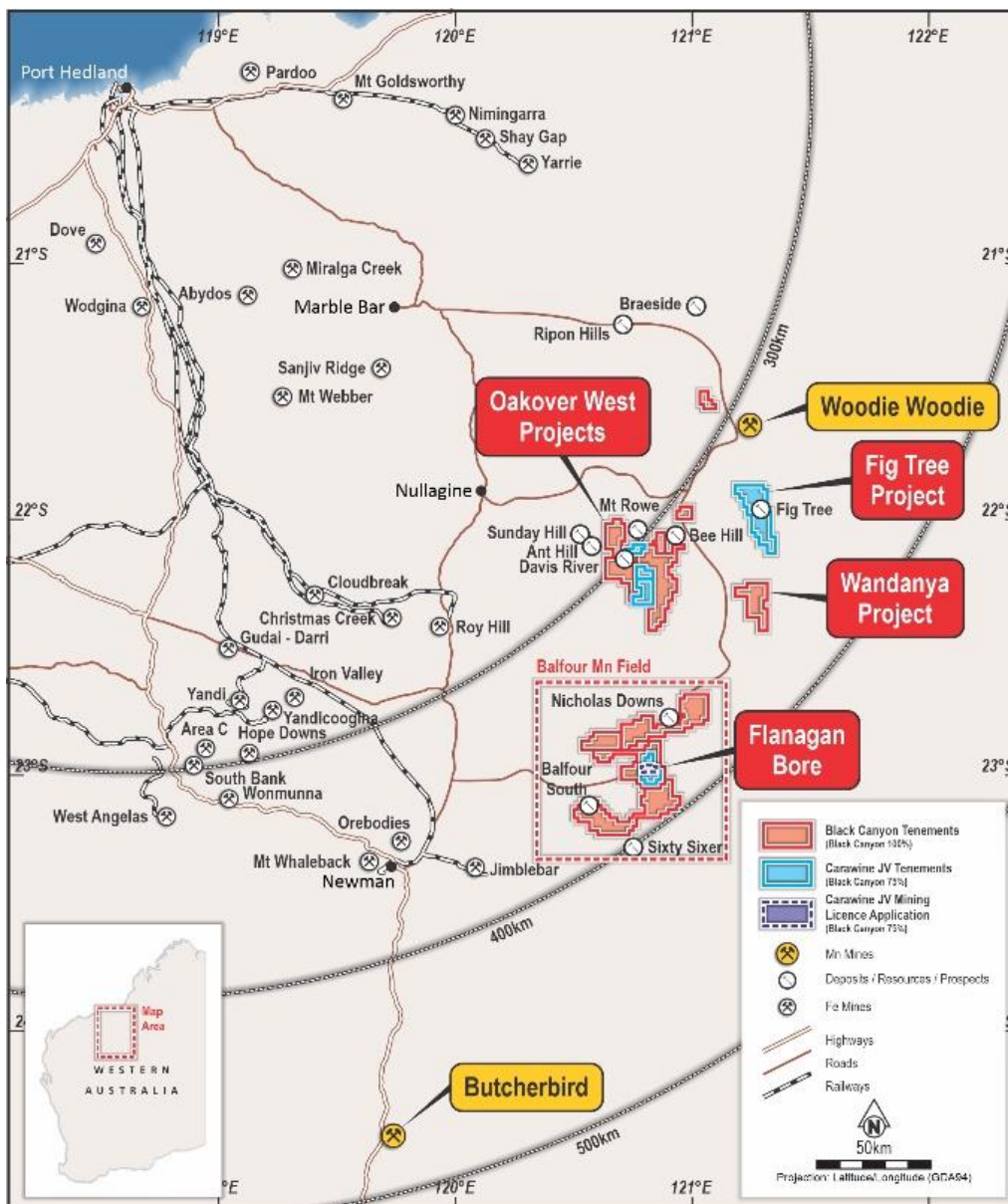


Figure 1: Location of BCA's Manganese Project in the Pilbara Region of WA

**BALFOUR MANGANESE PROJECT**

**Updated Global Mineral Resource Estimate**

Exploration and mineral resource drilling across the Balfour Manganese Field has been highly successful for the Company, which has now delineated a Global Mineral Resource Estimate totalling **314Mt @ 10.5% Mn containing 33.1 Mt of manganese**. Importantly, a higher-grade component has been established, totalling **99 Mt @ 12.9% Mn containing 12.8 Mt of Manganese**.

*Table 1. Summary of Global Mineral Resources across the Balfour Manganese Field, December 2023*

<b>Summary of Mineral Resources <sup>(1-3)</sup></b>							
<b>Deposit</b>	<b>Mineral Resource Category</b>	<b>Material (Mt)</b>	<b>In Situ Mn (Mt)</b>	<b>Mn (%)</b>	<b>Fe (%)</b>	<b>Si (%)</b>	<b>Al (%)</b>
FB3 <sup>4</sup>	Measured	52	5.5	10.5	10.4	16.9	4.3
LR1 <sup>4</sup>	Measured	47	4.9	10.3	8.4	16.7	4.6
<b>Total</b>	<b>Measured</b>	<b>100</b>	<b>10.4</b>	<b>10.4</b>	<b>9.4</b>	<b>16.8</b>	<b>4.4</b>
KR1 <sup>5</sup>	Indicated	79	7.8	10.0	7.9	18.0	5.4
FB3 <sup>4</sup>	Indicated	63	6.3	10.0	9.6	16.8	4.4
LR1 <sup>4</sup>	Indicated	8	0.9	11.3	9.4	6.9	1.8
<b>Total</b>	<b>Indicated</b>	<b>150</b>	<b>15.1</b>	<b>10.1</b>	<b>8.7</b>	<b>16.9</b>	<b>4.8</b>
KR2 <sup>5</sup>	Inferred	24	2.9	11.9	10.6	19.2	5.0
Balfour East <sup>5</sup>	Inferred	32	3.9	11.9	8.5	18.6	4.9
Damsite <sup>5</sup>	Inferred	7	0.9	12.1	9.6	17.2	4.2
<b>Total</b>	<b>Inferred</b>	<b>64</b>	<b>7.6</b>	<b>11.9</b>	<b>9.4</b>	<b>18.7</b>	<b>4.9</b>
<b>Grand Total</b>		<b>314</b>	<b>33.1</b>	<b>10.5</b>	<b>9.1</b>	<b>17.2</b>	<b>4.7</b>

Notes to Table 1:

- (1) Mineral resources reported at a cut-off grade of 7% Mn.
- (2) Appropriate rounding has been applied.
- (3) Refer to Appendix 1 JORC Table 1, Sections 1 to 3 and Appendix 2 for further details.
- (4) Flanagan Bore deposits, which Black Canyon owns 75%
- (5) Deposit that Black Canyon owns 100%

As the Company progresses development and feasibility studies, having access to shallow, high-grade manganese Mineral Resources has the potential to add significant value for HPMSM feedstock material and manganese concentrates.

**Table 2 – Summary of Higher-grade Global Mineral Resources across the Balfour Manganese Field, December 2023**

<b>Summary of Mineral Resources <sup>(1-3)</sup></b>							
<b>Deposit</b>	<b>Mineral Resource Category</b>	<b>Material (Mt)</b>	<b>In Situ Mn (Mt)</b>	<b>Mn (%)</b>	<b>Fe (%)</b>	<b>Si (%)</b>	<b>Al (%)</b>
FB3 <sup>4</sup>	Measured	14	1.9	13.2	11.5	18.2	4.5
LR1 <sup>4</sup>	Measured	11	1.5	13.1	9.7	16.8	4.5
<b>Total</b>	<b>Measured</b>	<b>25</b>	<b>3.3</b>	<b>13.1</b>	<b>10.7</b>	<b>17.5</b>	<b>4.5</b>
KR1 <sup>5</sup>	Indicated	15	2.0	13.1	9.8	18.0	6.2
FB3 <sup>4</sup>	Indicated	10	1.3	12.7	10.8	18.1	4.8
LR1 <sup>4</sup>	Indicated	5	0.6	12.9	9.9	6.1	1.6
<b>Total</b>	<b>Indicated</b>	<b>30</b>	<b>3.9</b>	<b>12.9</b>	<b>10.2</b>	<b>16.2</b>	<b>5.0</b>
KR2 <sup>5</sup>	Inferred	14	1.9	13.6	11.2	18.2	4.6
Balfour East <sup>5</sup>	Inferred	25	3.0	12.4	8.8	18.8	4.9
Damsite <sup>5</sup>	Inferred	5	1.0	12.8	9.8	17.0	4.0
<b>Total</b>	<b>Inferred</b>	<b>44</b>	<b>5.7</b>	<b>12.8</b>	<b>9.7</b>	<b>18.4</b>	<b>4.7</b>
<b>Grand Total</b>		<b>99</b>	<b>12.8</b>	<b>12.9</b>	<b>10.1</b>	<b>17.5</b>	<b>4.8</b>

Notes to Table 2:

- (1) Mineral resources reported at a cut-off grade of 11% Mn.
- (2) Appropriate rounding has been applied.
- (3) Refer to Appendix 1 JORC Table 1, Sections 1 to 3 and Appendix 2 for further details.
- (4) Flanagan Bore deposits under which Black Canyon owns 75%
- (5) Deposit under which Black Canyon owns 100%

**KR1 and KR2 Maiden Mineral Resource Estimate (BCA 100%)**

A maiden MRE was completed for the KR1 and KR2 deposits totalling **103 Mt @ 10.4% Mn containing 10.7 Mt of manganese**:

- KR1 of **79 Mt @ 10.0% Mn** (100% Indicated)
- KR2 of **24 Mt @ 11.9% Mn** (Inferred)

The MREs at KR1 and KR2 are hosted in mostly outcropping manganese enriched shales and form topographically elevated features. The resources have been estimated based on RC drilling completed by Black Canyon comprising 112 holes for 3,419 m of drilling.

At KR1, the Mineral Resource estimate is based on 200 m spaced lines drillhole traverses and 100 m spaced drillhole centres. The drill data shows the manganese enriched shale geology and grades are continuous downhole and across strike, which supports the Indicated Mineral Resource classification at this drill spacing.

At KR2, the Mineral Resource estimate is based on 200 m spaced lines drillhole traverses and 200 m spaced drillhole centres. The drill data shows the manganese enriched shale geology and grades are continuous downhole and across strike, which supports the Inferred Mineral Resource classification at this drill spacing.

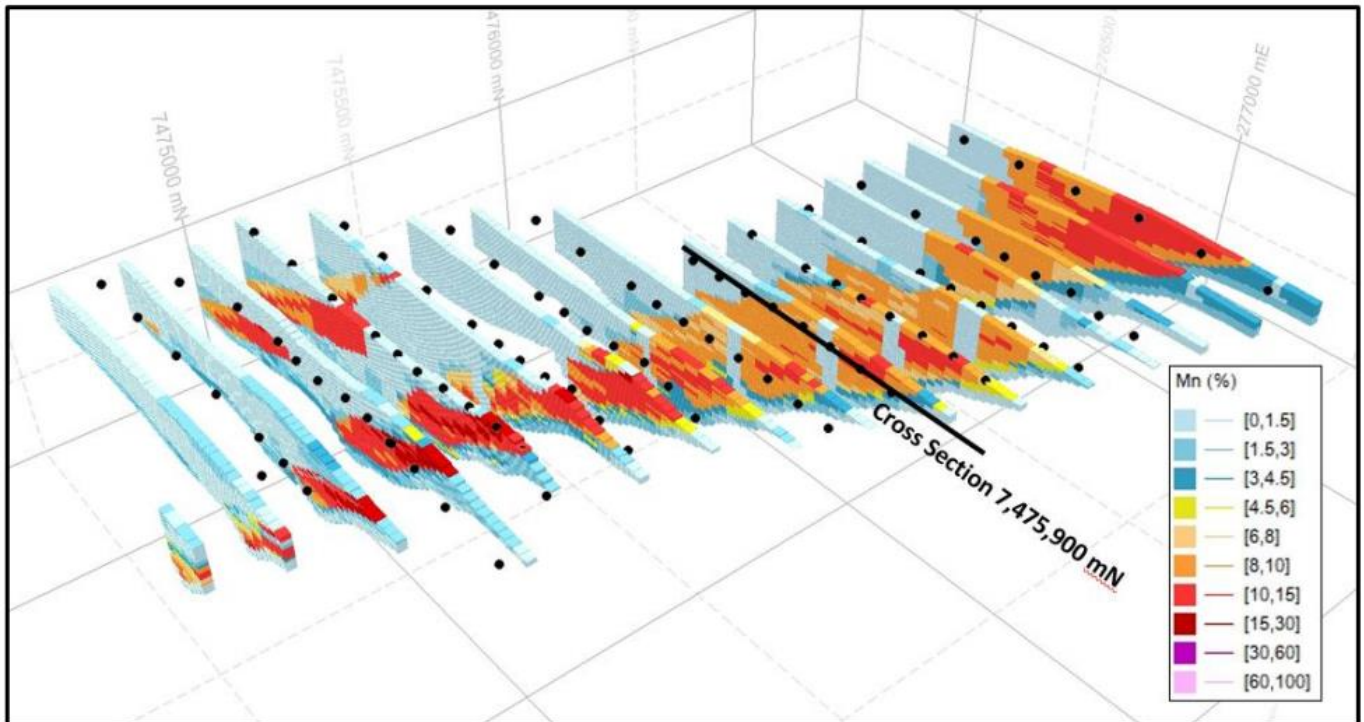


Figure 2 – Oblique view of the KR1 Mineral Resource model and coloured by Mn grade (%).

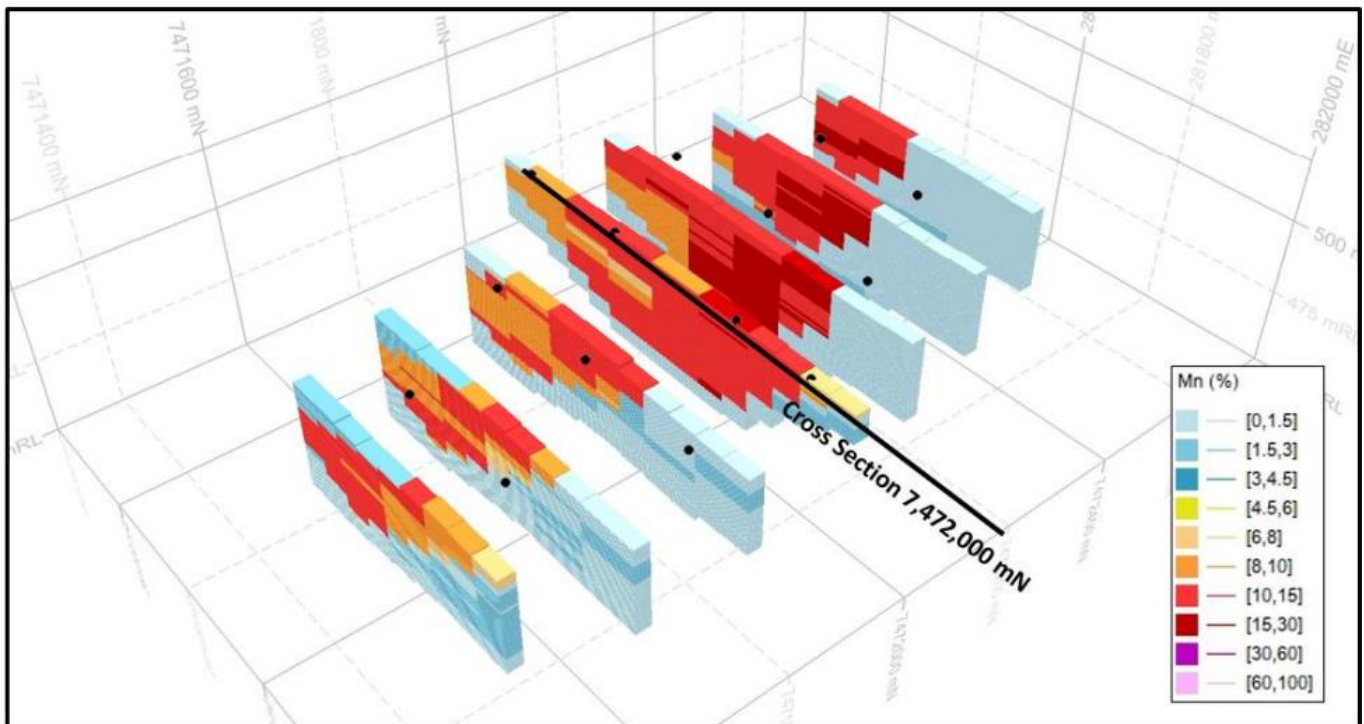


Figure 3 – Oblique view of the KR2 Mineral Resource model coloured by Mn grade (%).

**Balfour East and Damsite - Maiden Mineral Resource Estimates (BCA 100%)**

Maiden MRE's were estimated for the Damsite and Balfour East deposits during the reporting period totalling **40 Mt @ 11.9% Mn containing 4.7 Mt of manganese**:

- Balfour East - **32 Mt @ 11.9% Mn** (Inferred)
- Damsite - **7 Mt @ 12.1% Mn** (Inferred)

The Mineral Resources at Balfour East and Damsite are hosted in mostly outcropping and sub cropping manganese enriched shales and form subtle topographically elevated features. The Mineral Resources defined at Balfour East and Damsite have been estimated utilising a subset of the RC drilling completed by Black Canyon, comprising 84 holes for 2,896 m of drilling.

At Balfour East, the MRE is based on two traverses perpendicular to one another that were designed to follow-up the long axis of the outcrop and provide two step-out holes either side of the outcrop. The drill holes were completed on either 200 or 100 m spaced drill hole centres. The early-stage drill data shows the manganese enriched shale geology and grades are continuous downhole, along and across strike, which supports the Inferred Mineral Resource classification at this drill spacing. The mineralisation is open along and cross strike, but further drilling is required to confirm the extents.

At Damsite, the MRE is based on traverses completed on three north south oriented 200 m spaced lines and 100 m spaced drill hole centres. The drill data shows the manganese enriched shale geology and grades are continuous downhole, across and along strike, which supports the Inferred Mineral Resource classification at this drill spacing. The mineralisation is open to the north.

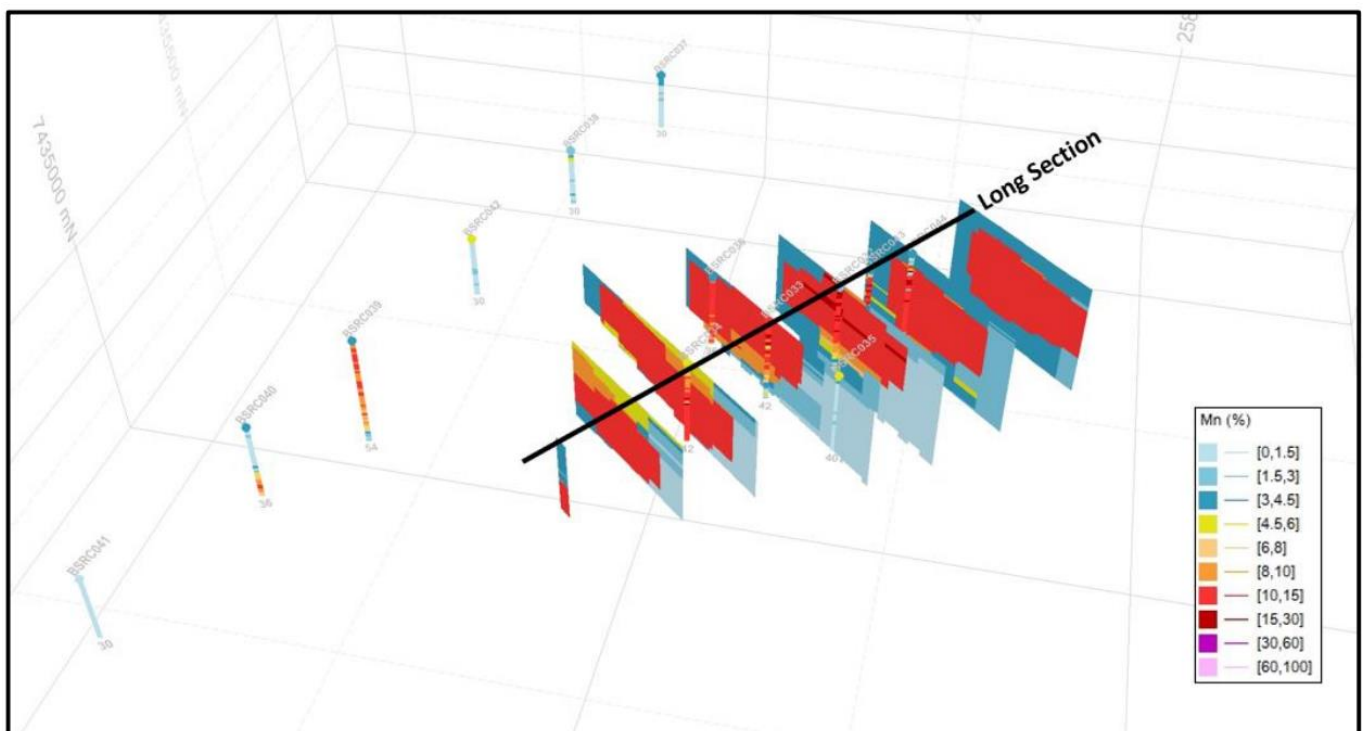


Figure 4 – Oblique view of the Balfour East Inferred Mineral Resource Estimate model and coloured by Mn grade (%).

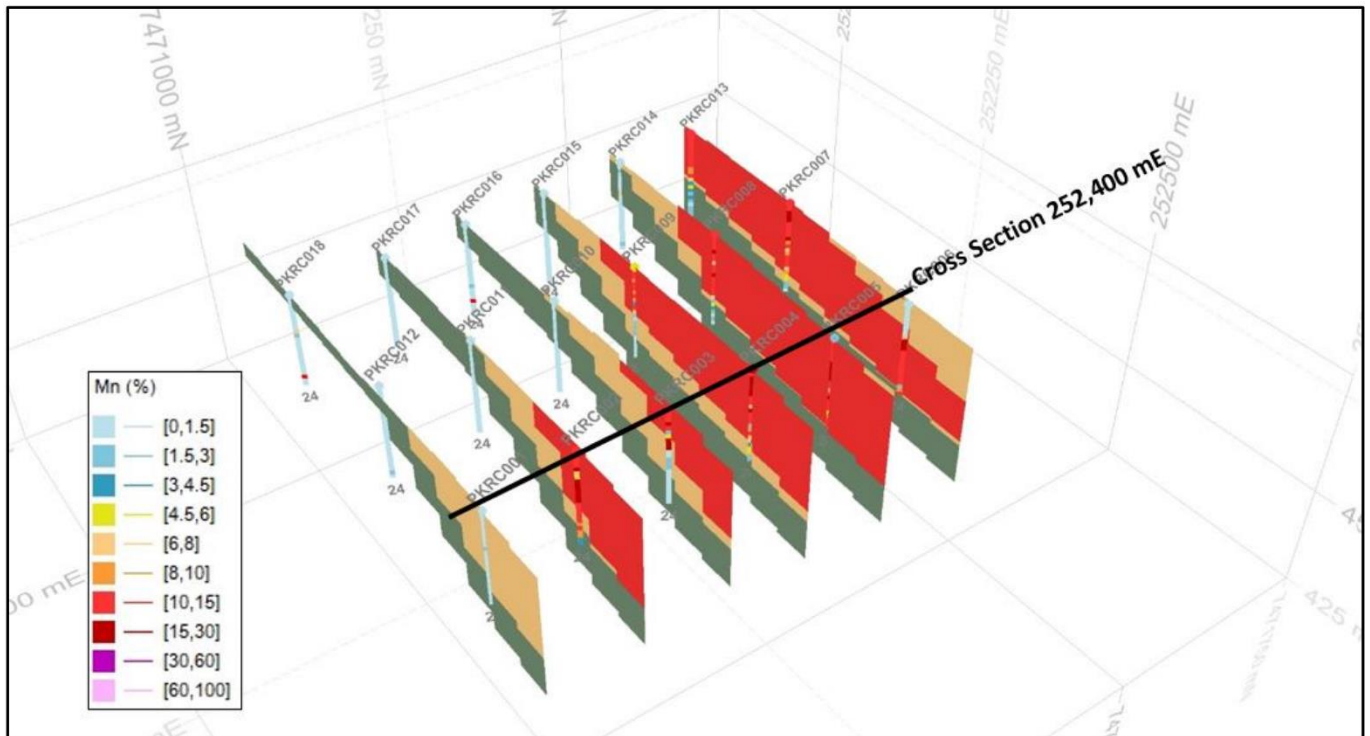


Figure 5 – Oblique view of the Damsite Inferred Mineral Resource Estimate model coloured by Mn grade (%).

## PRODUCTION OF HPMSM (BCA 100%)

Black Canyon successfully completed feedstock variability studies of the amenability of material from KR1, Damsite, Pickering, Hurricane and Balfour East to simple beneficiation and reductive acid leaching, as a first step towards the production of HPMSM.

Following a successful leaching phase, the data was reviewed and the KR1 sample was selected for multistage precipitation/purification, followed by chemical extraction to concentrate the manganese in solution prior to crystallisation to generate HPMSM.

Significant HPMSM testwork outcomes include:

- Manganese enriched shale ores from the Company's 100% owned tenements can be upgraded with simple beneficiation and will likely be further upgraded through the application of DMS.
- Demonstrated that direct reductive acid leach methodology is suitable to extract manganese from manganese oxide ores as opposed to conventional low temperature roasting commonly utilised in China.
- Reductive acid leach recovery extraction rates ranged from 86% up to 99%, with KR1 yielding an extraction rate of 97%, demonstrating high efficiency from the chemical reaction.
- Multistage purification/precipitation utilising widely used industry technology can successfully produce HPMSM.
- Impurity levels within specification as benchmarked against FastMarkets HPMSM domestic Chinese specifications where greater than 95% of global HPMSM supply is currently produced.
- Battery Grade HPMSM with > 32% Mn and > 99% purity from the KR1 prospect exceeds minimum specifications of 32% Mn.



*Figure 6 – Battery Grade HPMSM crystal produced from the KR1 Prospect.*

Currently, China dominates the HPMSM market, with over 90% of global production. Similar to other cathode precursor materials, the requirement for security and diversification of supply will become a material factor inducing the establishment of additional supply outside of China, primarily for the American and European car manufacturing industries.

The US Government has a critical mineral list that the Biden Administration identified as critical for domestic energy, electronics and defence that includes manganese. The Inflation Reduction Act approved by the US Government and the Free Trade Agreement between the US and Australia enables direct US investment into Australian critical mineral projects and will substantially incentivise electric vehicle and clean energy industries to establish operations in the US. This has continued to positively impact US and European investment in the development of new cathode or battery pack production capacity in parallel with joint ventures between automakers and battery manufacturers to meet growing EV demand.

The potential benefit to Black Canyon is the expansion of the manganese sulphate market beyond China and an interest from car and battery manufacturers in gaining access to long term physical supplies of manganese from a Tier 1 location like Australia.



## **REVERSE CIRCULATION (RC) DRILL PROGRAM (BCA100%)**

### **Pickering and Damsite**

During the quarter the Company received assay results from Pickering and Damsite following the 7,000m RC drill program completed in July 2023.

At Pickering the Company tested a previously undrilled section of outcropping to sub-cropping supergene manganese mineralisation using four N-S oriented lines, 400 or 800m apart with drillholes spaced at 100m centres evaluating 2000m of strike. The overall Pickering target can be traced along strike for about 10km so there remains significant potential to complete further drilling to expand the target size.

The mineralised shale at Pickering is between 300 and 500m wide, extending 10m to 48m downhole with a high portion of holes ending in mineralisation. The mineralised horizon is interpreted to be dipping shallowly to the north and strong geological and mineralised continuity is demonstrated along strike over several hundred metres.

At the previously undrilled Damsite target it was tested with three N-S oriented lines, 200m apart with holes spaced at 100m centres evaluating 400m of strike. The mineralisation at Damsite is interpreted to be shallowly dipping to the north and has a cross strike width of about 300m, a strike extent of at least 500m and is open to the north. The drilling is closed off to the east where a north-south fault is interpreted to truncate the mineralised horizon.

Significant results are listed below:

- PKRC002 22m @ 12.8% Mn from surface including:  
6m @ 16.0% Mn from 7m
- PKRC004 19m @ 12.4% Mn from surface including:  
7m @ 16.4% Mn from 0m
- PKRC005 24m @ 13.1% Mn from surface until EOH including:  
5m @ 16.4% Mn from 6m
- PKRC019 24m @ 11.1% Mn from surface until EOH
- PKRC024 48m @ 10.9% Mn from surface
- PKRC032 24m @ 11.5% Mn from surface until EOH
- PKRC039 24m @ 11.3% Mn from surface until EOH

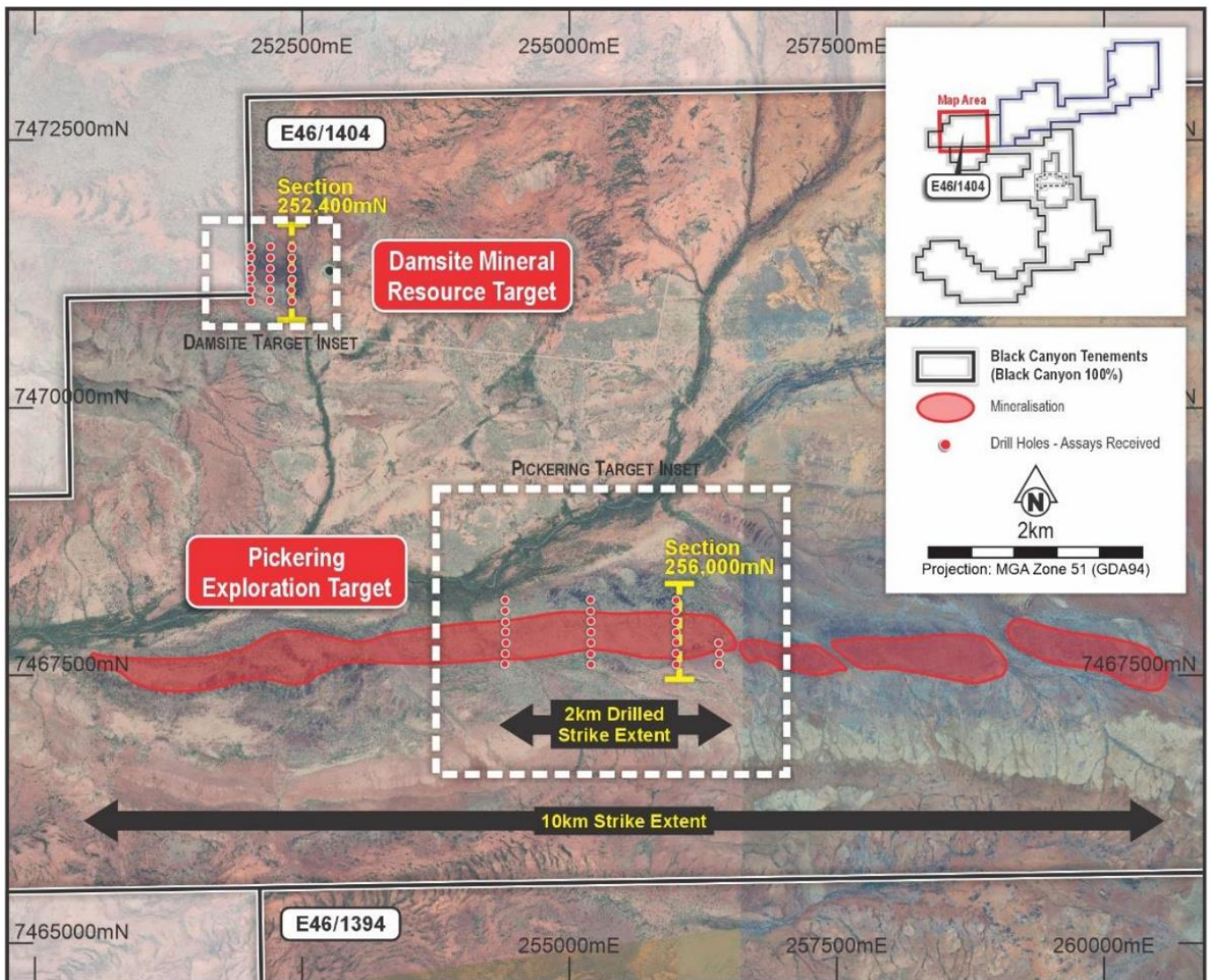


Figure 7 – Location map of the Pickering and Damsite targets

### KR2 Discovery - RC Drill Assay Results

During the reporting period the Company received final assay results from the KR2 discovery. A total of 14 holes for 378m were drilled into the KR2 target.

The Company tested a previously undrilled 500m long section of outcropping supergene manganese mineralisation at KR2 using five E-W oriented lines, 200m apart with drillholes spaced at 200m centres evaluating 800m of strike.

Widespread, continuous manganese mineralisation was encountered with stronger zones of surface manganese enrichment intersected along 400m of outcrop. The mineralised shale is between 400 and 500m wide, extending 10m to 35m downhole with four holes ending in mineralisation.

At this stage, due to limited drilling completed on the KR2 prospect, the geometry of the mineralisation is not fully understood but a northwest strike is presumed, which based on drilling is at least 800m long. The mineralisation appears to be open in all directions apart to the northeast where two holes have been drilled and did not encounter manganese mineralisation.

Significant results include:

- KRRC099 27m @ 13.4% Mn from surface including:  
15m @ 16.3% Mn from 5m
- KRRC101 24m @ 10.7% Mn from surface
- KRRC103 36m @ 15.5% Mn from surface, including:  
23m @ 17.3% Mn from 4m
- KRRC105 30m @ 10.6% Mn from surface
- KRRC106 30m @ 13.7% Mn from surface, including:  
6m @ 15.5% Mn from surface
- KRRC109 13m @ 11.6% Mn from 0m

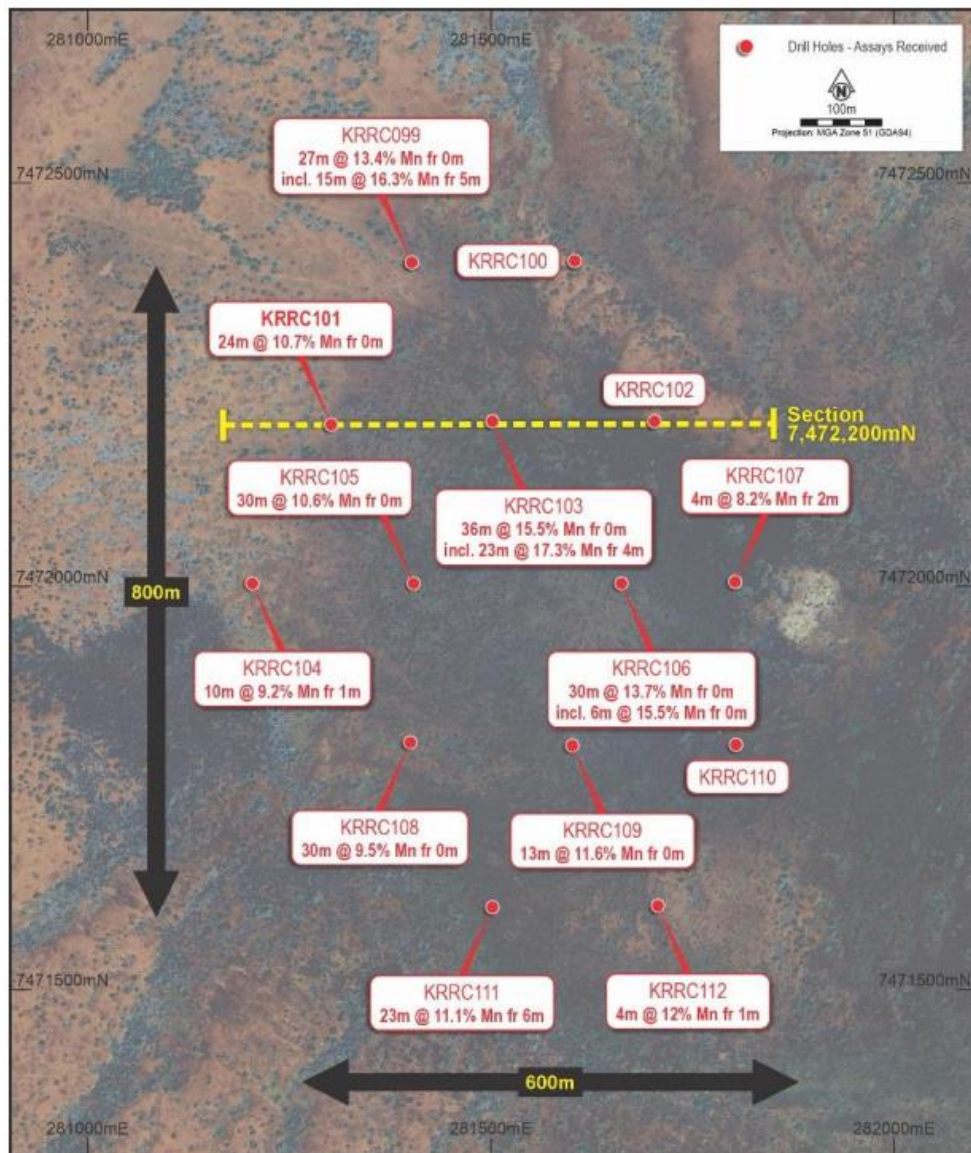


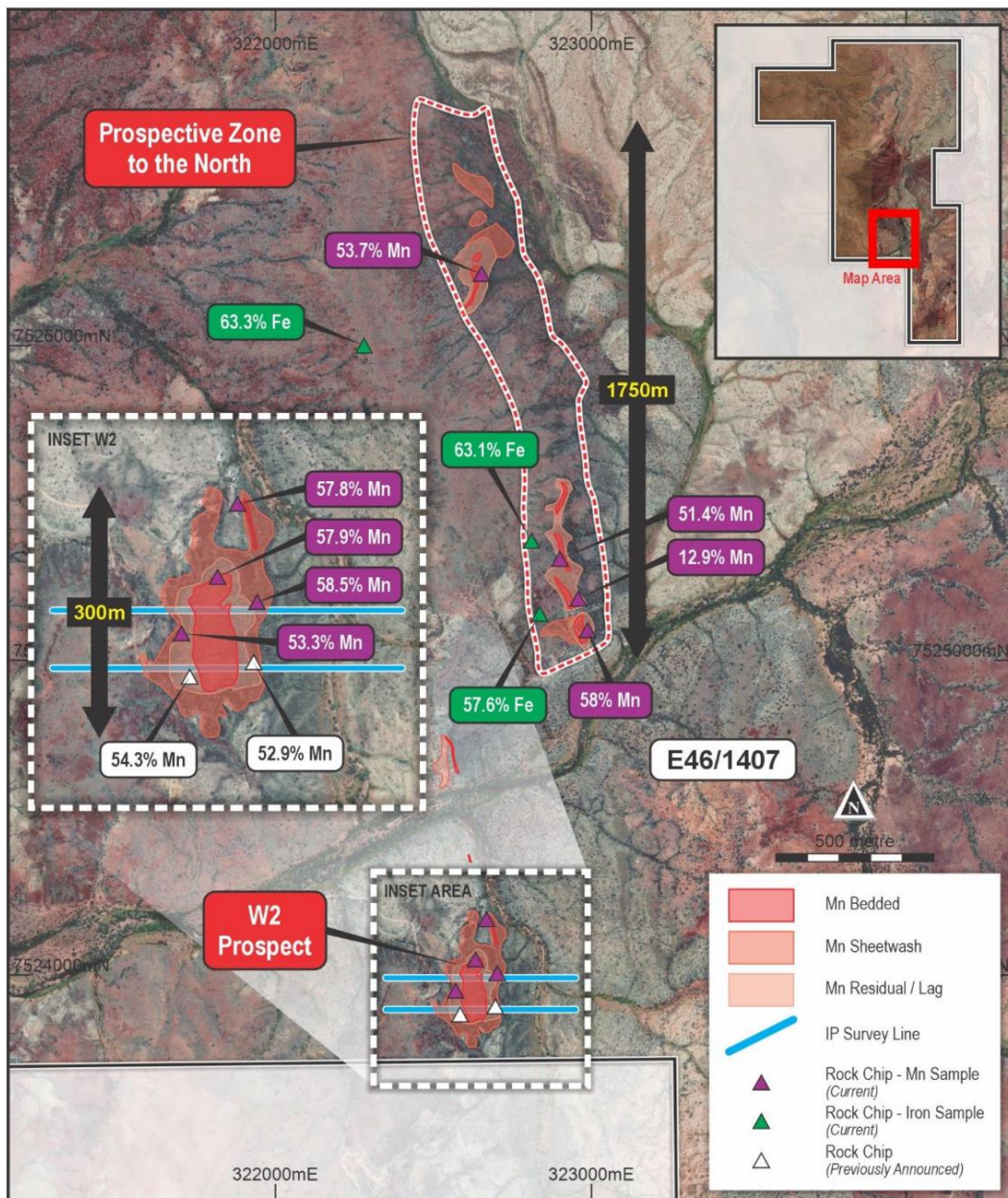
Figure 8 – Drill plan, cross-section location and significant results received from KR2.

**WANDANYA PROJECT (BCA 100%)**

**HIGH-GRADE ROCK CHIP SAMPLES**

Assay results were received from detailed sampling completed over the Wandanya Tenement, which delivered high-grade results including, 53.3%, 58.5%, 57.9% and 57.8% Mn.

The new samples, in conjunction with previously reported high-grade samples, confirm the main body of bedded to massive mineralisation at the W2 prospect is ~300m long and 150m wide. Further mineralisation has been mapped and sampled to the north over a strike length of 1,750m.



**Figure 9 – W2 prospect, Wandanya Project (E46/1407) showing high-grade manganese and iron results.**

Detailed mapping of mineralisation at the W2 prospect confirmed in situ shallow dipping high-grade bedded mineralisation locally overlain by a veneer of re-cemented residual lag and wider areas of transported manganese dominant sheetwash. The area is structurally complex, with NE and NW-trending

cross cutting faults dislocating the main mineralised horizon. Several rock chip samples taken across the mineralisation between 80 to 100m apart confirm the tenor of the mineralisation. The high-grade manganese samples were gathered from weakly bedded to massive botryoidal manganese enrichment, which is widespread across the main 300m long zone of mineralisation.

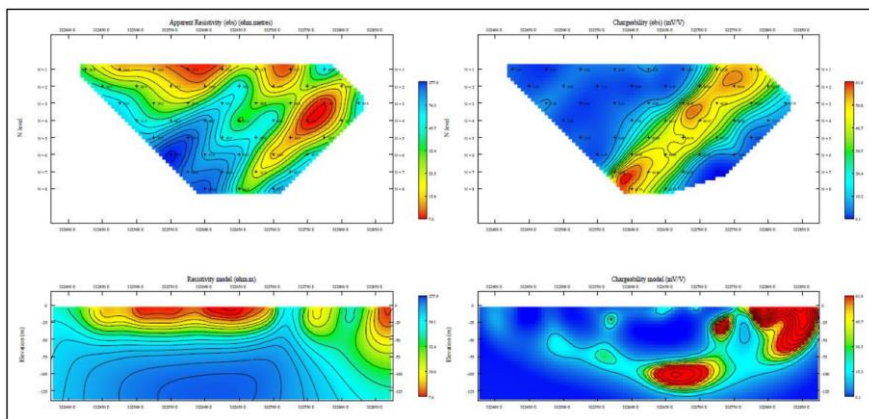
Several moderate to high-grade iron-rich samples were also identified as part of the mapping and sampling program. The grades range between 51.5% Fe to 63.3% Fe and are dominated by hematite with secondary goethite/limonite. The mineralisation appears to be hosted in a sedimentary horizon (not a banded iron formation) of unknown thickness and was mapped along strike for over 500m. Further exploration is required to establish the significance of this iron mineralisation.

*Table 3 – Rock chip samples from E46/1407 – Wandanya*

Sample ID	East GDA94	North GDA94	Tenement	Prospect	Mn %	Fe %	Al %	Si %	P %	Description
WDRC001	322838	7525151	E46/1407	W2	0.1	<b>57.6</b>	0.6	7.1	0.02	Iron enriched lag sample
WDRC002	322990	7525099	E46/1407	W2	<b>58.0</b>	0.5	0.3	1.0	0.02	High-grade weakly bedded manganese
WDRC003	322960	7525199	E46/1407	W2	12.9	1.8	1.6	31.2	0.01	Manganese chert
WDRC004	322812	7525382	E46/1407	W2	0.1	<b>63.1</b>	0.6	3.4	0.02	High-grade iron rich sediment
WDRC005	322282	7526000	E46/1407	W2	0.2	<b>63.3</b>	0.4	3.2	0.02	High-grade iron rich sediment
WDRC006	322654	7526227	E46/1407	W2	<b>53.7</b>	1.6	0.9	1.1	0.01	Manganese rich kanga
WDRC007	322902	7525325	E46/1407	W2	<b>51.4</b>	8.0	0.5	0.9	0.01	High-grade weakly bedded manganese
WDRC008	322572	7523959	E46/1407	W2	<b>53.3</b>	4.0	0.9	1.4	0.01	High-grade massive manganese
WDRC009	322704	7524014	E46/1407	W2	<b>58.5</b>	0.4	0.3	0.6	0.01	High-grade massive manganese
WDRC010	322670	7524185	E46/1407	W2	<b>57.8</b>	0.3	0.3	0.8	0.01	High-grade bedded manganese
WDRC011	322635	7524058	E46/1407	W2	<b>57.9</b>	0.4	0.6	0.3	0.01	High-grade weakly bedded manganese
WDRC012	323633	7532085	E46/1407		0.3	<b>51.5</b>	0.3	11.6	0.01	Moderate-grade iron rich sediment

A dipole-dipole IP survey was completed and comprised two east-west lines located 100m apart. The results highlighted a strong chargeable anomaly located to the east of the main body of mineralisation and may represent a down dip extension. A deeper discrete chargeable anomaly was detected between 50 and 100m below the main body of mineralisation and warrants further investigation. The main body of mineralisation at W2 is highlighted by a well-defined resistivity low, imaged to approximately 20m depth.

Drilling is planned for the Wandanya project subject to completing a Heritage Survey scheduled for early 2<sup>nd</sup> quarter at the end of the wet season.



*Figure 10 – W2 prospect DDIP line 7,523,900mN with 50m dipole spacing showing a resistive anomaly related to the main body of the W2 manganese mineralisation and chargeable anomaly partly below the main body of mineralisation that spans between 322,550mE to 322,700mE.*

## CARAWINE JV ACTIVITIES (BCA 75%)

### FLANAGAN BORE ENVIRONMENTAL SURVEYS

The 2023 Autumn and Spring flora and vegetation surveys across the potential operation disturbance envelope and wider area were completed in the previous quarter and no additional site surveys were completed in the December quarter. Preliminary reports have been received that are currently being finalised. As reported in the last quarter a number of lower and higher priority species were observed within some parts of the proposed Disturbance Envelope, but no Threatened Flora were recorded.

Draft reports are being finalised from the subterranean fauna surveys (stygo fauna and troglo fauna) completed across the Disturbance Envelope and broader tenement area of E46/1301. The project is not likely to impact unique stygo fauna species identified across the broader tenement area. Some unique troglo fauna species have been identified within the Disturbance Envelope and assessments of the potential project impact and mitigation strategy on the identified species are being considered.

Autumn fauna surveys completed across the Disturbance Envelope and broader tenement area of E46/1301 and beyond the tenement boundary are approaching reporting finalisation. Several priority species and one threatened fauna species were recorded within the broader tenement and beyond the tenement boundary. No priority or threatened fauna species were identified over the deposit areas or the immediate surrounds. Baseline data gathering will continue, in parallel with an assessment of project impacts to the identified species, if any.

Drill site rehabilitation was completed at Flanagan Bore across the drill pads completed at FB1, FB2, FB3, FB5, LR1 and selected hydrology bores.

### CARAWINE JV STATUS

Black Canyon has earned 75% in the Carawine JV Project tenements and is subject to a joint venture agreement with Carawine Resources Ltd (ASX:CWX) with both parties contributing to JV expenditure according to their interests. The Carawine JV parties are yet to formally approve a work program and budget for further activities, with disagreement in relation to the inclusion of HPMSM development. To date this matter has not been resolved. Black Canyon is of the view that downstream processing activities utilising manganese concentrates, beyond “mine gate” are not part of the JV. Discussions between the parties continue and the JV is currently operating under a minimum tenement expenditure basis to ensure the tenements are maintained in good standing.

Black Canyon has discovered substantial additional shale hosted manganese deposits and has delivered upon its strategy to delineate multiple deposits that have the potential to produce manganese concentrate and HPMSM feedstock from 100% BCA owned tenements independent of the JV projects.

## CORPORATE

### CASH

The Company's consolidated cash at hand was \$1.43m as of 31 December 2023 with no debt.

### SUMMARY OF EXPENDITURE

The majority of the expenditure was on Exploration and Evaluation \$337k and Admin and Corporate costs totalling \$91k. This information is presented in the Quarterly Cashflow Report (Appendix 5b).

### DECEMBER QUARTER ASX RELEASES

Additional details pertaining to information reported in his Quarterly report, including JORC 2012 reporting tables where applicable, can be found in the ASX announcements lodged with the ASX during the quarter:

12/12/2023	Global Manganese Mineral Resource Estimates Exceed 300 Mt
27/11/2023	KR1 and KR2 Mineral Resource Estimate Exceeds 100 Mt
14/11/2023	Wandanya High-Grade Manganese Rockchip Results
24/10/2023	Battery Grade High Purity Manganese Sulphate Achieved
18/10/2023	Drill results confirm more Manganese Discoveries
12/10/2023	Manganese Discovery at KR2 confirmed with drilling

### KEY ACTIVITIES PLANNED FOR THE MARCH 2024 QUARTER

During the March 2024 quarter, the Company plans to:

- Review regional exploration plans targeting hydrothermal and manganese enriched shales styles of mineralisation.
- Continue up scaled hydrometallurgical testwork on KR1 and KR2 manganese oxide ores to confirm and further refine the initial battery grade HPMSM testwork completed to date.
- Continue to review location options for a HPMSM within Australia with a focus on planned locations that provide synergistic advantages such as manufacturing hubs, infrastructure, reagents and low power costs.
- Commence Manganese Concentrate Scoping Study update based on the expanded mineral resources estimates that will examine a number of options including single or multi-pit openings, central processing plant, production rates and transport solutions.
- Complete reporting of Autumn flora/vegetation and fauna field surveys for baseline environmental studies, implement follow-up surveys if required and continue baseline monitoring.
- Plan initial autumn flora/vegetation and fauna surveys across new mineral resources
- Finalise Heritage Surveys dates for the Wandanya high grade manganese targets
- Continue engagement for third parties interested in offtake or involvement in producing HPMSM and manganese concentrate products.

**ASX ADDITIONAL INFORMATION**

1. ASX Listing Rule 5.3.1– Mining exploration activities and investment activity expenditure during the quarter was \$337,000. Full details of the activity during the quarter are set out in this report.
2. ASX Listing Rule 5.3.2 – Mining production and development activity expenditure for the quarter was Nil and there were no substantive mining exploration activities for the quarter.
3. ASX Listing Rule 5.3.3 – Tenement Schedule

Project	Tenement	Beneficial Interest at start of quarter	Beneficial Interest at end of quarter
Carawine Joint Venture tenements	E46/1116-I	75%	75%
	E46/1119-I	75%	75%
	E46/1301	75%	75%
	MLA46/546	75%	75%
	E46/1069-I	75%	75%
Davis Creek	EL46/1382	100%	100%
Pickering Creek	EL46/1404	100%	100%
Davis North	EL46/1406	100%	100%
Wandanya	EL46/1407	100%	100%
Warawagine	EL45/5954	100%	100%
Bee Hill West	EL46/1422	100%	100%
Balfour South	EL46/1396	100%	100%
Hurricane	EL46/1394	100%	100%
Billanooka	EL46/1488	100%	100%
KR	EL46/1383	100%	100%

Note EL – granted Exploration License.  
 ELA – Exploration license in application.  
 MLA – Mining License in application.

4. ASX Listing Rule 5.4.5 – Payments to related parties of the Company during the quarter and outlined in the Appendix 5B include \$57,000 for Salaries, Director Fees and Consulting Fees paid to Directors.

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

For further details:

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## 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.

The information in this report that relates to metallurgical test work results is based on information reviewed by Mr David Pass, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Pass is an employee of BatteryLimits and consultant to Black Canyon Limited. Mr Pass has sufficient experience relevant to the mineralogy and type of deposit under consideration and the typical beneficiation thereof to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr Pass consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Black Canyon Limited

ABN

63 150 714 739

Quarter ended ("current quarter")

31 December 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation	(337)	(1,389)
(b) development		
(c) production		
(d) staff costs		
(e) administration and corporate costs	(99)	(347)
1.3 Dividends received (see note 3)		
1.4 Interest received	12	24
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Government grants and tax incentives	-	193
1.8 Other (provide details if material)		
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(424)</b>	<b>(1,519)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities		
(b) tenements		
(c) property, plant and equipment		
(d) exploration & evaluation		
(e) investments		
(f) other non-current assets		

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
2.2 Proceeds from the disposal of:		
(a) entities		
(b) tenements		
(c) property, plant and equipment		
(d) investments		
(e) other non-current assets		
2.3 Cash flows from loans to other entities		
2.4 Dividends received (see note 3)		
2.5 Other (provide details if material)		
<b>2.6 Net cash from / (used in) investing activities</b>	-	-

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	-	1,950
3.2 Proceeds from issue of convertible debt securities		
3.3 Proceeds from exercise of options		
3.4 Transaction costs related to issues of equity securities or convertible debt securities	-	(131)
3.5 Proceeds from borrowings		
3.6 Repayment of borrowings		
3.7 Transaction costs related to loans and borrowings		
3.8 Dividends paid		
3.9 Other (provide details if material)		
<b>3.10 Net cash from / (used in) financing activities</b>	-	<b>1,819</b>

<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	1,856	1,133
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(424)	(1,519)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4 Net cash from / (used in) financing activities (item 3.10 above)	-	1,819

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>1,432</b>	<b>1,432</b>

<b>5.</b>	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1	Bank balances	517	952
5.2	Call deposits	915	904
5.3	Bank overdrafts		
5.4	Other (provide details)		
<b>5.5</b>	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>1,432</b>	<b>1,856</b>

<b>6.</b>	<b>Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1	Aggregate amount of payments to related parties and their associates included in item 1	57
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<p><i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i></p> <p>Fees include Salaries, Director Fees and Consulting Fees to Executive Director and Non-Executive Directors</p>		

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

<b>7. Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i>		
<i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1	Loan facilities	
7.2	Credit standby arrangements	
7.3	Other (please specify)	
7.4	<b>Total financing facilities</b>	
7.5	<b>Unused financing facilities available at quarter end</b>	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

<b>8. Estimated cash available for future operating activities</b>	<b>\$A'000</b>	
8.1	Net cash from / (used in) operating activities (item 1.9)	(424)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(424)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,432
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,432
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	3.38
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>		
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
N/A		
8.8.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
N/A		

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

### Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

30 January 2024

Date: .....

Authorised by: The Board  
(Name of body or officer authorising release – see note 4)

### Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.