BLACK CANYON

ASX Announcement

10 June 2021 ASX:BCA

Widespread manganese confirmed at Flanagan Bore prospect in the Pilbara

Outcropping manganese and newly identified historic drilling results further highlight potential to expand known mineralisation

HIGHLIGHTS

- **Field assessment confirms widespread manganese mineralisation and highlights scope to extend mineralisation at Flanagan Bore outlined by previous drilling**
- **Two new highly prospective manganese target areas identified**
- **Surface manganese mineralisation was observed over an area of 1000m x 900m at the FB1 prospect, where recently identified historic drilling intersected significant intervals, including;**
  - **18m @ 11.2% Mn from surface (WD0020)**
  - **3m @ 21% Mn from surface and 20m @ 12.5% Mn from 8m (WD0021)**
  - **24m @ 10.3% Mn from surface (WD0024)**
- **At the FB3 & FB4 Prospects, widespread folded manganese-enriched shales are exposed over a strike of ~400m and have not been drill tested**
- **Surface mineralisation has been identified 500m to the south of thick manganese intervals previously drilled over an area of 1000m x 200m at the LR1 prospect**
- **Highly experienced geologist Jeremy Aldworth appointed Exploration Manager**
- **Drilling is planned for the coming quarter**

Black Canyon (ASX: BCA) is pleased to advise that a field assessment of its Flanagan Bore manganese prospect in the Pilbara has confirmed the presence of extensive mineralisation at surface and highlighted significant scope to grow the known mineralisation in several areas.

Located 120km northeast of Newman, Black Canyon's Flanagan Bore tenement is part of the Company's Carawine Project and is subject to a farm-in and joint venture agreement with Carawine Resources Ltd (ASX:CWX) whereby Black Canyon can earn up to a 75% interest in the Carawine Project tenements.

The field assessment, led by Black Canyon Executive Director Brendan Cummins, confirmed outcropping manganese-enriched shales from the prospective Balfour Formation at the predicted

Registered Address
283 Rokeby Road
Subiaco, WA, 6008

Telephone: +61 8 9426 0666
Email: info@blackcanyon.com.au
Website: www.blackcanyon.com.au

locations and identified several new prospect areas that have not been adequately drill tested (Figure 2). These include the:

- **FB1/FB2 Prospects,** which comprise folded manganese shales with the thicker more prominent bands of manganese-enriched shale forming topographic rises (Figure 5). Data from eight previous drill holes located across a 1000m x 900m footprint at the FB1 prospect confirm grade and thickness potential;
- **FB3/FB4 Prospects,** which show widespread areas of outcropping and sub-cropping manganese-enriched shale exposed over a strike of 400m and mapped down dip a further 650m (Figure 4). There is no evidence of previous drilling in the area.

The 900m x 200m extent and flat lying nature of manganese mineralisation previously drilled at LR1 was confirmed and further surface mineralisation has been identified up to 500m south of the current drill area – refer to Figure 3 (ASX Announcement dated 17/05/2021 "Exploration to Commence over the Pilbara Manganese projects).

In light of the strong results from the field trip, Black Canyon has scheduled drilling to start at Flanagan Bore in the coming quarter.

Black Canyon Executive Director Brendan Cummins said: *"We have immense exploration upside at our Pilbara projects and our strategy to unlock this value has been given a huge boost by the appointment of Jeremy Aldworth as Exploration Manager. I have worked previously with Jeremy, during which time we added significant value through the discovery and expansion of several economic mineral sands resources in Tanzania. We hope to replicate this success at Back Canyon with our portfolio of quality assets in the eastern Pilbara."*

"One such asset is the Flanagan Bore Project which has potential to host significant manganese mineralisation. With one field trip we have be able to reconcile the thick drill intersections ranging 10m to 37m previously encountered at the LR1 prospect. After walking the ground and comparing the geology of the LR1 prospect to the new prospects associated with widespread manganese-enriched shale, we are hopeful that the potential thickness of the target manganese horizon may have similar ranges."

"The potential is further confirmed with the discovery of a shallow plunging fold/limb structures across the Flanagan Bore tenement and we look forward to drill testing these targets in the coming quarter."

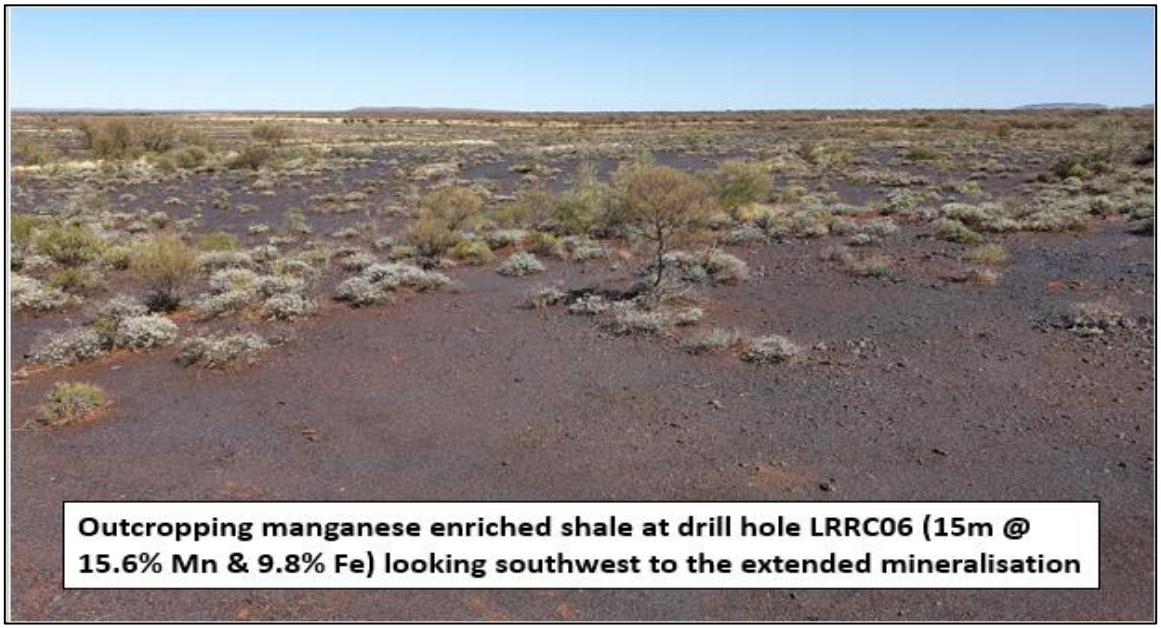


Figure 1. Outcropping Mn enriched shale at the LR1 Prospect

The Company continues to review the extensive historic database across the Carawine project tenements to establish new targets, including several with the potential for high-grade hydrothermal style mineralisation, particularly along the Fig Tree corridor, 35km south of the operating Woodie-Woodie manganese mine. A further field program is planned to evaluate these opportunities in the coming weeks.

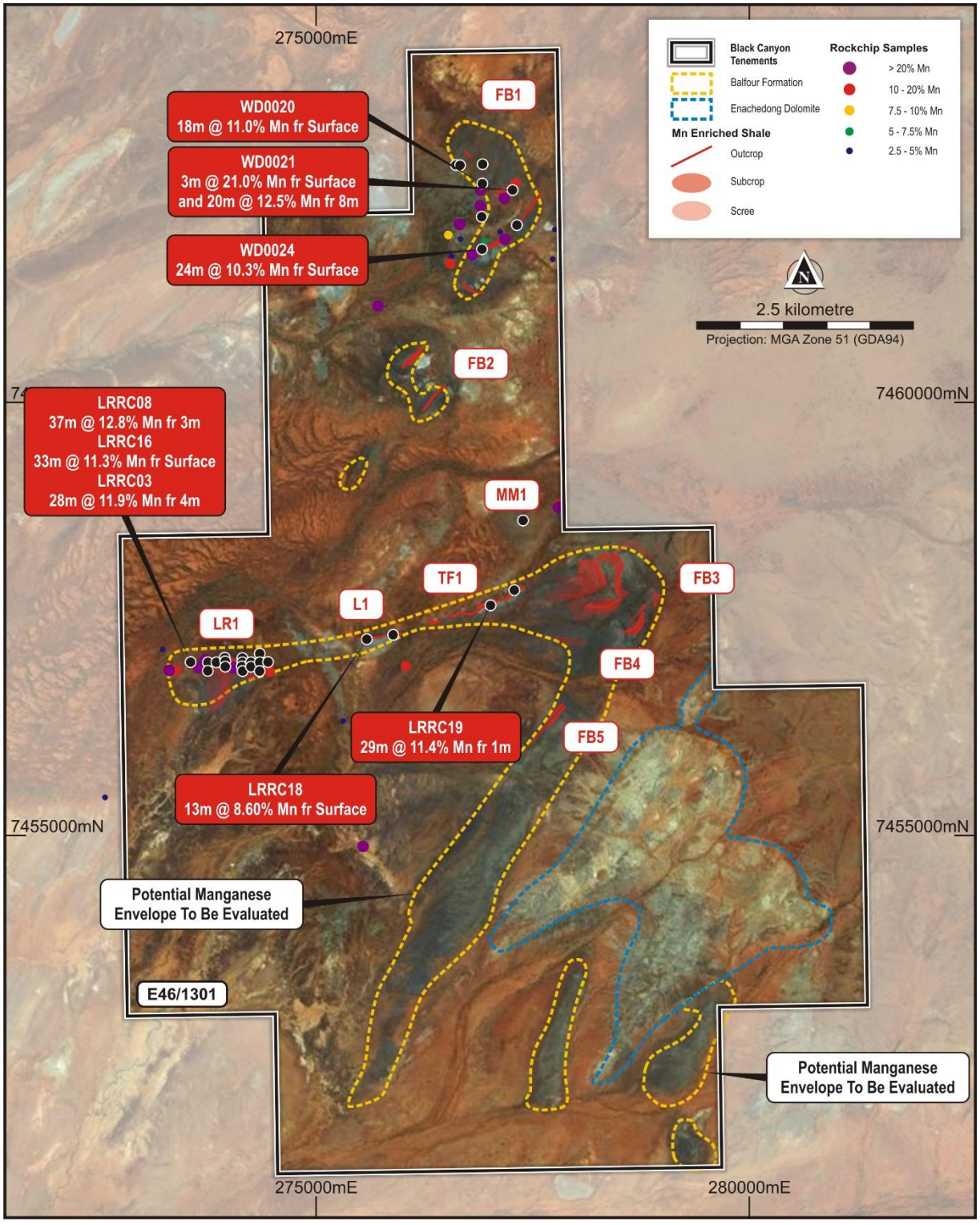


Figure 2. Flanagan Bore with previous significant drill results, mapping updates and prospective manganese envelope yet to be evaluated.

Flanagan Bore Mapping Summary

LR1 prospect

Previous drilling at LR1 encountered thick intervals of manganese-enriched shales with a maximum thickness of 37m. The previous drilling has shown a mineralisation footprint in the order of 900 x 200m and the recent field investigations confirmed the flat-lying nature of the mineralisation and identified sub-cropping mineralisation a further 500m to south that appears to be part of the same horizon (Figure 2). This suggests the prospect is open at least another 500m to the south of the current drilling and remains open to the east under cover.

Significant results from the earlier program include:

- **LRRC08 - 37m @ 12.8% Mn from 3m**
- **LRRC16 - 33m @ 11.3% Mn from surface**
- **LRRC03 - 28m @ 11.9% Mn from 4m**

Further manganese mineralisation maybe encountered under extensive sheetwash areas to the south and around the fold hinge to the north.

FB1/FB2 prospect:

The manganese-enriched shales form a sequence of folds and comprise manganese shales with the thicker more prominent bands of manganese-enriched shale forming topographic rises. The fold noses appear to be buried under shallow cover (Figure 4).

Eight previous drill collars were identified covering an area of 1000m x 900m. The drill data has now been digitally captured and are summarised in Table 1. The mostly vertical down hole intersections ranged in thickness from 3m to 30m with an average weighted grade of 10.5% Mn and 8.2% Fe. Significant results from the previous drilling include:

- **18m @ 11.2% Mn from surface (WD0020)**
- **3m @ 21% Mn from surface and 20m @ 12.5% Mn from 8m (WD0021)**
- **24m @ 10.3% Mn from surface (WD0024)**

Table 1. Previous drill results from the FB1 Flanagan Bore RC drilling campaign.

Hole ID		Drill hole Collar Information						Interval				
	Prospect	East (GDA94)	North (GDA94)	RL	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Mn (%)	Fe (%)
WD0017	FB1	276923	7462748	513.77	42	90	360	No significant mineralisation				
WD0018	FB1	276614	7462740	516.86	48	90	360	2	23	**21**	**10.1**	**8.3**
WD0019	FB1	276662	7462737	517.64	36	90	360	3	14	**11**	**8.1**	**7.8**
WD0020	FB1	276920	7462525	518.22	30	90	360	0	18	**18**	**11.2**	**8.3**
WD0021	FB1	277267	7462451	518.78	36	90	360	0	3	**3**	**21**	**11.4**
							and	8	28	**20**	**12.5**	**8.5**
WD0022	FB1	276912	7462142	518.23	30	90	360	No significant mineralisation				
WD0023	FB1	277318	7462046	514.28	30	90	360	0	30	**30**	**9.2**	**8.3**
WD0024	FB1	276915	7461768	512.49	24	-60	125	0	24	**24**	**10.3**	**8.1**

The drilling was undertaken by Fortescue Metals Group **(WAMEX id A117644)** as part of a much larger group of tenements they held between 2011 and 2018. The acquisition of this drill hole data has

provided a good understanding of the thickness of the prospective Balfour Formation and the potential of the FB1 prospect.

FB3/FB4 prospects

The FB3 prospect is defined by an arcuate synclinal fold nose plunging shallowly to the southwest with widespread areas of outcropping and sub-cropping manganese-enriched shale. The main fold nose is exposed over a strike of 400m and the interpreted shallow down plunge expression mapped up to 650m to the southwest (Figure 3). There is significant manganese-enriched shale remaining on surface at FB3 due to the subsequent weathering and removal of the softer interbedded clays and shales.

The FB4 prospect also shows a 500m long ridge of sub-cropping manganese-enriched shale underlain and interbedded with calcareous manganese shales.

The prospects have not received drilling to date and will be a priority target for drill testing in the next quarter.

FB5 Prospect

The FB5 prospect comprises a shallow west dipping sequence of manganese enriched shale underlain by calcareous manganese rich shales and dolomites progressively to the east. Only a small section of the 5000m long zone of manganese mineralisation has been mapped and the target has high potential to form a substantial zone of manganese enrichment.

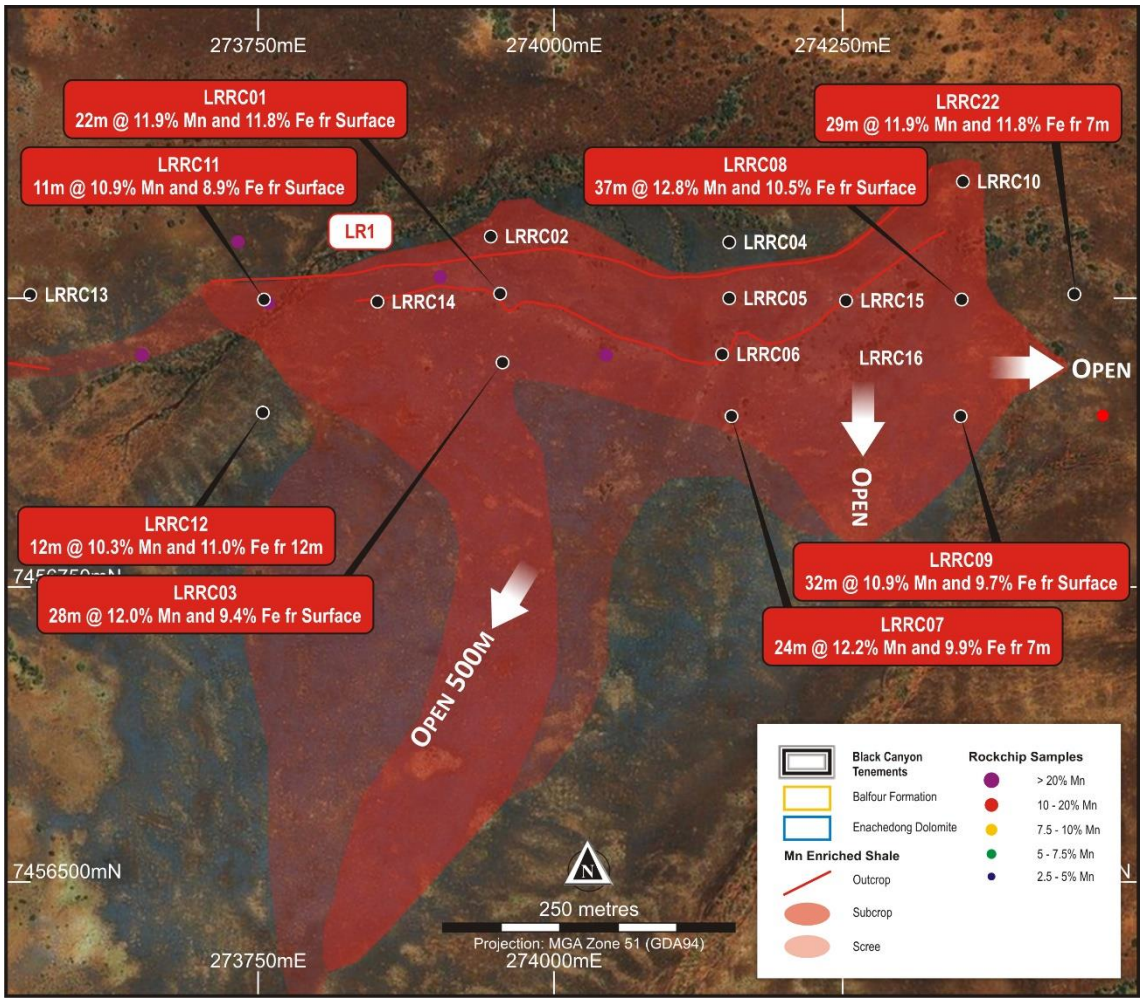


Figure 3. LR1 prospect with previous drill results and mapped subcrop 500m to the south.

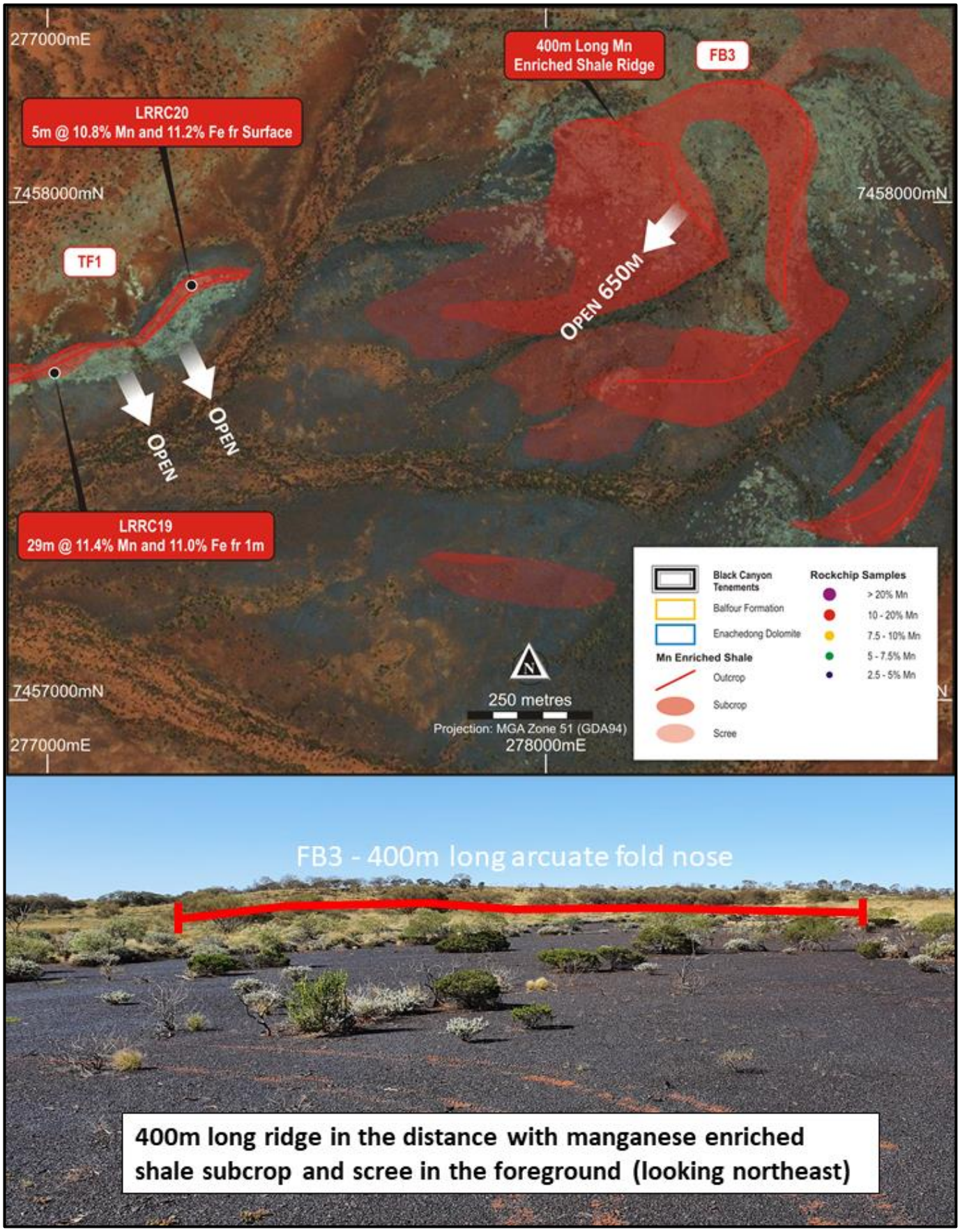


Figure 4. FB3 prospect showing the synclinal folded subcrop and shallow southeast dipping fold limb at TF1.

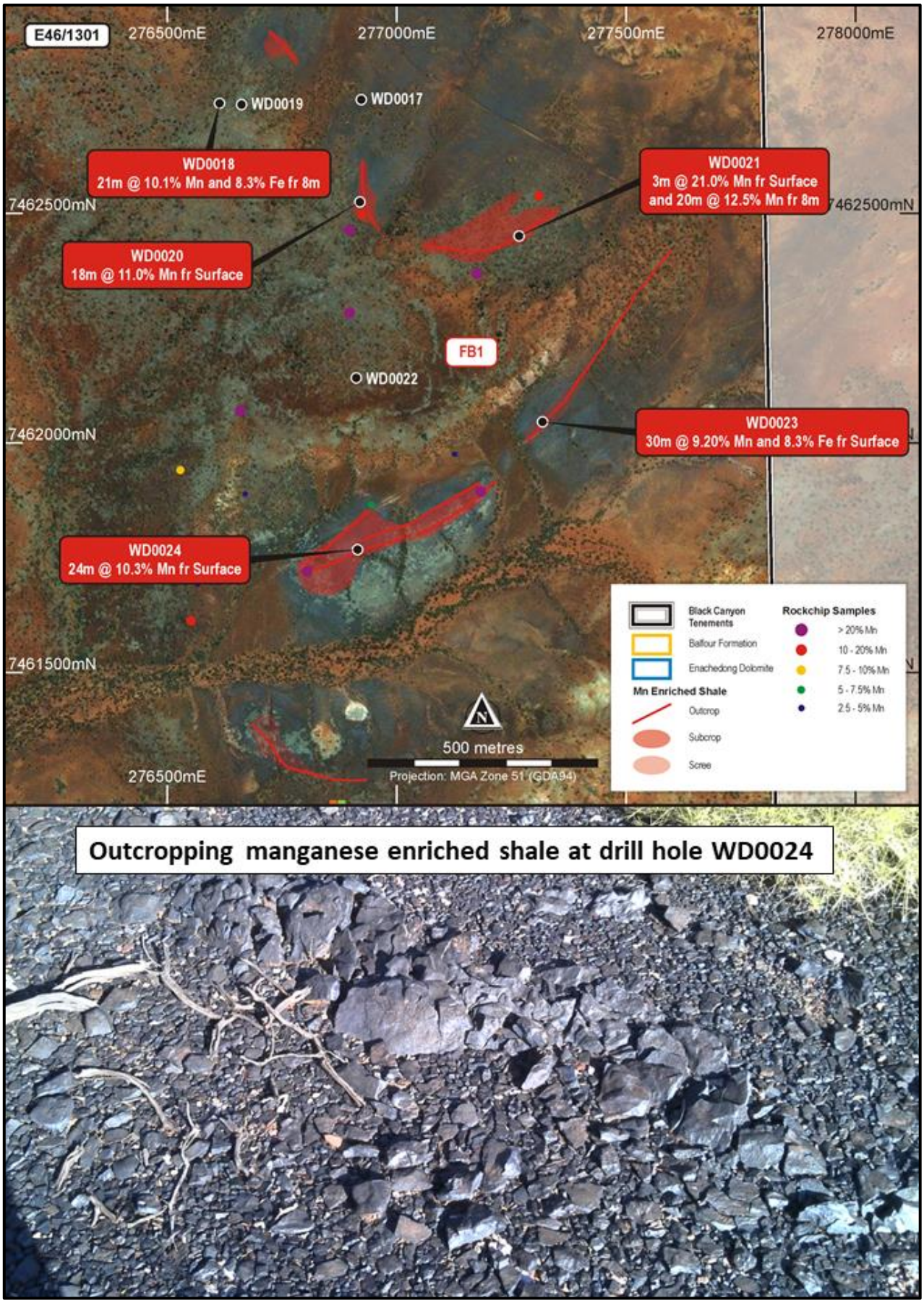


Figure 5. FB1 mapping, previous drill results and subcropping manganese enriched shale.

This announcement is approved for release by the Board of Directors.

ENDS

For Further Information

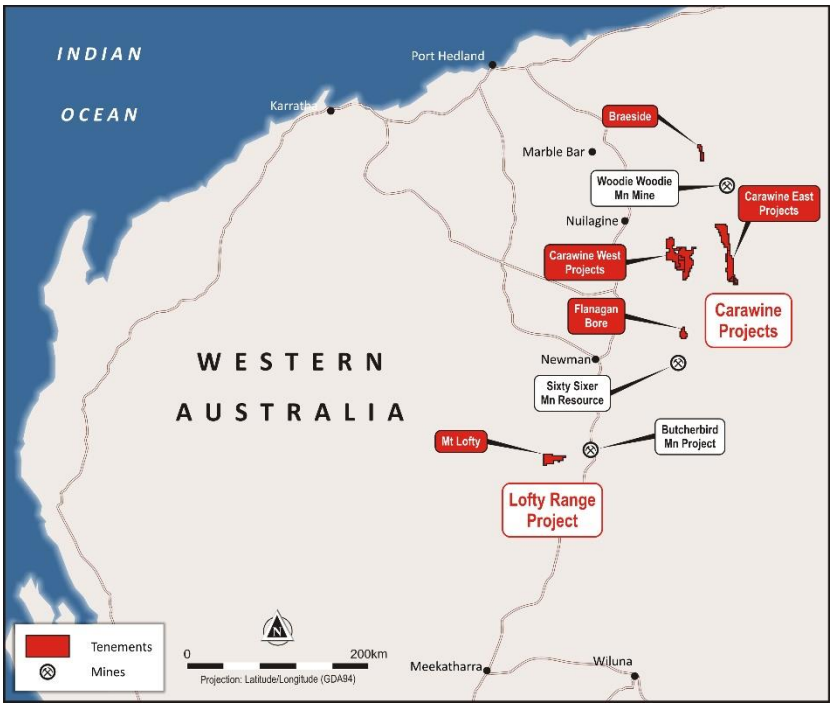
Brendan Cummins	Jay Stephenson
+61 400 799 756	+61 412 474 180

Competent Person Statement

The information in this report that relates to previous 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.

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 800km^2 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 directly for another exploration license adjacent to the Carawine Project that would increase the total land holdings to over 1400km^2 on 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.



The Company has also secured the Lofty Range manganese project located immediately to the west of the Butcherbird manganese deposit being developed by Element 25.

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

APPENDIX 1- JORC Table 1 previous RC drill results from Flanagan Bore

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The historic data is reported to the Western Australian Mines Department and it is a condition of the license that the Tenement holder report information in sufficient detail to enable subsequent parties to reliably use the information • Historic reports have then been accessed from WAMEX and raw files retrieved and entered into a drill data base • The information describes RC drilling and sampling. • In all cases industry standard methods of sample collection appropriate to the period were employed. • In many cases sampling methods are not reported in detail, however it is not expected that measures of representivity are material to the context in which historic results are reported and can be relied upon
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Historic reports of results from RC drilling are referred to in this release • Where the drill diameter is not reported in the text, it is not considered material to the reader's understanding of the results given the context in which historic results are reported. They are assumed to be standard RC drill diameters that range from 4 to 5.5 inches
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Historic reports of results refer to industry standard methods of sample collection appropriate to the period were employed. • In most cases measures relating to sample recovery are not reported, however these are not expected to materially affect the understanding of the historic results given the context in which they are reported.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• The results as presented are not intended to imply sufficient quality for the estimation of a Mineral Resources but are used to understand how prospective historic targets maybe and plan future programs. • FMG provide comprehensive geology reports as part of the WAMEX submission. • Where relevant to the understanding of the results reported, results of geological logging have been included in the text of the report. In such cases it has been assumed that a sufficient proportion of each hole was logged to enable to author to report the information.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	• Unless stated otherwise it is assumed that industry standard methods appropriate to the period for RC drilling were used, and where relevant to the understanding of the results these have been reported in the text. • The FMG report did not describe specifically the sub-sampling technique but is assumed the samples were riffle split at the rig

Criteria	JORC Code explanation	Commentary
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Historic reports of results refer to industry standard assay procedures and methods used, appropriate to the period to which the data relate, and that this has resulted in appropriate levels of accuracy and precision in the data, especially in regard to the context in which the results have been reported. • The author has not been able to view original documents or assay files but is satisfied that the analysis was completed to an acceptable standard in the context in which the results have been reported. • FMG did provide a file with the quality control data undertaken by the laboratory on their CRM and duplicates. • FMG also provided a summary file of the analysis method and elements that were assayed. FMG used Ultratrace using an XRF for an iron ore extended mineral and oxide suite (53 element suite).
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Unless otherwise stated, the reported intersections from historic drilling have been repeated from the original technical reports as referenced in the text, and where possible verified from accompanying raw data, although in this case this was not possible. • No historic assay data has been adjusted.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Unless otherwise stated the accuracy and quality of location data for drill holes is assumed to be sufficient for the form and context in which the data has been reported. • The accuracy of the drill hole locations have been verified with GPS as identified in the field.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Where relevant and material to the understanding of the results these have included in the body of the report. • The results as presented are not intended to imply sufficient quality for the estimation of a Mineral Resources • Confirmatory drilling will enable the Company to use the drill data in the future for mineral resources estimation
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Where considered material to the understanding of the results reported, this information has been included in the body of the report. • FMG drilled the 8 holes on an E-W oriented drill pattern but the holes were not designed onto a regular grid pattern but located according to local geology
Sample security	• *The measures taken to ensure sample security.*	• No information regarding sample security is reported, however given the Projects' locations this is not considered a high risk in the context in which the results are reported.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Other than internal review by Company geologists no audits have been completed. • Beyond that completed to date, further audits are not considered to be required given the context in which the historic data is reported, or the stage of the Projects development.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title*	• The drill holes were drilled with E46/1301 • The drill holes reported are located within the boundaries of the Black Canyon JV license. • Black Canyon has a farm-in and joint venture agreement

Criteria	JORC Code explanation	Commentary
tenure status	*interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	with Carawine Resources Ltd (ASX:CWX), giving Black Canyon the right to earn an initial 51% interest and up to 75% in the Carawine Projects • The tenements from which the drill holes were completed were and will continue to be subject to native title but access has been previously provided
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The previous exploration history is described in the body of the release
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geology and mineralisation is described in the body of the release

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Refer to Table 1 in the release for the a summary of the assay results for the historic drilling
		• No drill data is excluded from Table 1

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Only weighted intervals are included in the text. • Manganese intervals have been reported at 5% Mn cut off allowing 1 m of dilution. • The weighted interval calculation was only applied to the drill holes that encountered Mn mineralisation • No metal equivalent values are used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Unless otherwise stated down hole widths are reported and noted in proximity to the result in the text of the release. • The drill results indicate flat lying to shallow dipping mineralisation but further drilling is required to resolve structural complexities such a folding
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• These have been included in the body of the release where relevant and material to the reader's understanding of the results in regard to the context in which they have been reported.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Information considered material to the reader's understanding of the Exploration Results has been reported. In the body of the text significant results have selectively reported to provide the reader with the potential tenor and widths of the mineralisation • Table 1 within the body of the release reports all of the drill hole results including those that failed to encounter significant mineralisation • Maps have been provided in the release to show the locations of the drill holes within the project
Other substantive	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk*	• All information considered material to the reader's understanding and context of the historic Exploration Results has been reported.

Criteria	JORC Code explanation	Commentary
exploration data	*samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Planned worked programs to verify the mineralisation are presented in the body of this report

APPENDIX 2- JORC Table 1 historic rock chip samples results from the Flanagan Bore

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Point surface samples consisting of rock chips of outcropping bedrock, to a nominal 0.5- 2kg weight. • Each sample was described at the site and time of collection to ensure accurate records of sampled material. Samples were selected based on mineralisation / alteration zones, or to distinguish low level alteration indicating potential mineralisation at depth. • The samples are selective but representative of the outcrop from which they were taken. • Rock chip sampling is an industry wide field technique for establishing metal content to understand potential tenor of the underlying mineralisation.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• Not applicable
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Not applicable
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	• It is assumed the samples have been logged at the time and location of collection, enabling them to be placed in geological context. • FMG did not provide descriptions of the surface samples

Criteria	JORC Code explanation	Commentary
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• Generally samples were collected dry and consisted of multiple chips dislodged and fractured by a geological pick. • Generally samples were between a nominal 0.5-2kg weight and placed directly in to numbered calico bags at the collection point. • Appropriate assay techniques were designated at the point of collection based on the perspective commodity. • Single point samples.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• The FMG surface samples were analysed at Ultratrace using ICP • A total of XRF 64 elements were analysed and all data has been provided by FMG • Ultratrace laboratories are known to use Internal laboratory standards for each job to ensure correct calibration of elements. • Only relevant and material element results are reported. • The assay data has sufficient quality for reporting in the context in which it appears.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Assay results summarised in the context of this release have been rounded appropriately. • No assay data has been adjusted.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• A hand held GPS +/-5m was used to record the samples sites. • RL was not recorded and is not relevant to surface point samples. • Coordinates reported are MGA Zone 51. • Location data is considered to be of sufficient quality for reporting of exploration results at this early stage.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Selective sampling based on field observation and outcrops identified as hosting potential for mineralisation. • Should not be considered representative of the rock mass as a whole but an indication of the local grade at surface
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Samples are representative only of the material sampled and based on surface outcrops it is unknown if the samples have a bias related to orientation of structures or mineralised horizons.

Criteria	JORC Code explanation	Commentary
Sample security	• The measures taken to ensure sample security.	• The samples are generally placed in a calico bag and then secured in a polyweave bag that is zip locked. • This is not considered a high risk given the Project location.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• Not applicable at this early stage of exploration

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

• Criteria	• JORC Code explanation	• Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• The samples were taken from BCA JV license E46/1301) • The samples reported are located within the boundaries of the Black Canyon JV license. • Black Canyon has a farm-in and joint venture agreement with Carawine Resources Ltd (ASX:CWX), giving Black Canyon the right to earn an initial 51% interest and up to 75% in the Carawine Projects. • The tenements from which the samples were taken are subject to native title but are consider non-earth disturbing activities and generally do not require a Heritage Survey
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• The samples presented in the release have been collected by previous Companies and collated by BCA
Geology	• Deposit type, geological setting and style of mineralisation.	• The geology and mineralisation is described in the body of the release
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• Not applicable to rockchips results
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• All sample results are listed in Appendix 3 and shown in the figures within the body of the release.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	• No drill widths or intervals reported
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be	• See body of the release for geology and visual presentation of surface sample assays.

• Criteria	• JORC Code explanation	• Commentary
	limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• All information considered material to the reader's understanding and context of the Exploration Results have been reported. • All rockchip data has been reported in Appendix 3
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• Information relating to the most advanced data from the primary prospects on the tenement have been reported. • Surface investigations have been conducted at this tenement and is summarised in the plan within the body of the report. • All information considered material to the reader's understanding and context of the Exploration Results has been reported.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Planned worked programs include surface mapping and geochemical verification • RC drilling and analysis on selected targets

APPENDIX 3- All historic rock chip samples results from the Flanagan Bore Area

Sample_ID	Company	WAMEX	MGA94_51_East	MGA94_51_North	Prospect	Date Sampled	Mn_pct	Fe_pct	Al_pct	Si_pct
X259509	FMG	A117644	276566	7461693	FB1	2018	0.1	22.3	5.82	23.1
X259510	FMG	A117644	276805	7461723	FB1	2018	34.3	5.04	2.78	10.8
X259516	FMG	A117644	276945	7461866	FB1	2018	6.8	37.4	2.94	7.99
X259517	FMG	A117644	276670	7461890	FB1	2018	0.1	3.48	7.87	32
X259520	FMG	A117644	276660	7462073	FB1	2018	46.3	5.92	1.8	4.53
X259525	FMG	A117644	277310	7462540	FB1	2018	19.0	24.9	2.59	9
X259526	FMG	A117644	277759	7462002	FB1	2018	0.3	1.14	0.49	16
X259529	FMG	A117644	277735	7461657	FB1	2018	0.1	16.4	4.4	28
X259530	FMG	A117644	277826	7461610	FB1	2018	0.3	4.28	1.63	40.4
X259581	FMG	A117644	277184	7461897	FB1	2018	36.3	7.36	2.32	8.48
X259582	FMG	A117644	277182	7461891	FB1	2018	0.0			
X259586	FMG	A117644	276529	7461943	FB1	2018	9.8	21.3	7.87	14
X259589	FMG	A117644	276898	7462466	FB1	2018	24.6	15.1	0.58	15.6
X259590	FMG	A117644	277127	7461976	FB1	2018	0.4	8.6	4.47	34.8
X259591	FMG	A117644	276552	7461615	FB1	2018	11.9	24.8	7.43	10.4
X259593	FMG	A117644	276925	7462498	FB1	2018	18.4	20.8	3.49	12.6
X259594	FMG	A117644	276898	7462287	FB1	2018	27.6	16	4.13	8.22
X636610	FMG	A117644	277175	7462372	FB1	2018	30.1	11.9	2.66	9.17