

EXPLORATION UPDATE – MARBLE BAR PROJECT

- BCI's Marble Bar Project contains prospective Archean greenstone formation on the margin of the Mt Edgar Granite, which hosts numerous historical gold mines and deposits
- Recent BCI geological mapping has identified two highly prospective gold bearing trends with a total strike length of 15km on BCI's tenements
- Mapping, rock-chip and soil sampling completed at an initial high-priority area Douglas Find – where a prospector has recovered 154 gold nuggets and gold bearing rocks
- Detailed soil sampling programme across broader gold trend ongoing and Phase 1 drill programme planned to commence in December

BC Iron Limited (ASX:BCI) ("BCI" or "the Company") is pleased to provide an update on gold exploration activities at its Marble Bar Project, which commenced recently following a comprehensive review of the Company's exploration tenements.

The Marble Bar Project, located approximately 150km south-east of Port Hedland and approximately 20km north-east of the Marble Bar townsite, was identified in the review as being prospective for both gold and lithium.



Figure 1: Marble Bar Project Location

BC Iron Limited	Level 1, 15 Rheola Street	GPO Box 2811	т	+61 8 6311 3400	Е	info@bciron.com.au
ABN 21 120 646 924	West Perth WA 6005	West Perth WA 6872	F	+61 8 6311 3449	w	www.bciron.com.au

The Marble Bar Project covers Archean greenstone on the margin of the Mt Edgar Granite. The sheared greenstone on the margin of the granite is host to numerous historical gold mines, deposits and prospects including Warrawoona (Calidus Resources), Talga Talga (Novo Resources), Comet (Haoma Mining), Bamboo Creek project (Haoma Mining) and Razorback (privately-held) (refer to Figure 1 above).

BCI's gold exploration focus is on the northern part of the project area between the Talga Talga and Razorback prospects, where two gold trends (northern and southern) have been identified and a significant number of gold nuggets, and quartz and ironstone rocks with visible gold have been discovered on BCI tenements by a Section 40E prospector during 2016 and 2017 (refer to Figures 2 and 3).



Figure 2: Geology, gold nugget locations and BCI sampling areas

Figure 3: Gold bearings rocks and nuggets recovered by prospector on BCI's tenements



Northern Trend

Initial mapping and interpretation of aeromagnetic images identified the northern trend, where the banded iron formation ("BIF") unit which hosts the Razorback prospect extends west onto BCI's tenements for a total strike length of approximately 7km. A new target, known as Douglas Find, has been identified where the BIF unit has been intensely folded and fractured and contains bands of gossan (refer to Figures 4 and 5). Douglas Find is located approximately 0.5km south-west of the existing Scotty Well prospect, where historical workings are present. BCI considers the area which includes Douglas Find and Scotty Well as a high-priority target area.

A number of the gold nuggets and gold bearing rocks recovered by the prospector were within this high-priority target area (refer to Figure 6). During July to October 2017, 19 nuggets ranging from 0.7-4.5 grams in size were recovered from one location near Douglas Find, and 127 nuggets ranging from 0.1-12.3 grams in size were recovered from two locations near Douglas Find in 2016. A further 8 nuggets were recovered near Scotty Well during 2017, which ranged in size from 0.7-2.9 grams.

Figure 4: Folded BIF at Douglas Find



Figure 5: Gossanous quartz at Douglas Find



Figure 6: Gold nuggets and gold bearing rocks recovered by prospector at Douglas Find



BCI has completed rock-chip sampling and soil sampling over the high-priority target area, with assays currently being processed by the laboratory. BCI is planning to commence an initial drilling programme of up to 10 holes for approximately 1,200m upon receipt of assay results from the sampling programme. Heritage clearance of potential drill-hole locations is underway.

A more detailed sampling programme over a much larger area is currently underway along the entire strike length of the BIF unit to generate additional targets for drilling.

Southern Trend

Interpretation of aeromagnetic images also identified the southern gold trend which extends east from the Talga Talga prospect onto BCI's tenements for a total strike length of approximately 8km (refer to Figure 2). Historical drilling by previous owners at Talga Talga delivered a result of 7m at 14.4g/t gold from 54m. This gold trend is hosted by a package of ultramafic and chert rocks that have been significantly sheared and folded. Gold nuggets were also recovered by the prospector from numerous sites adjacent to the trend. BCI has undertaken initial reconnaissance mapping and limited rock-chip sampling in this area. Further work is planned pending results.

BCI's Managing Director, Alwyn Vorster, commented: "Although at an early stage, we are encouraged by initial work at our Marble Bar Project. The discovery of so many gold nuggets across multiple sites highlights the potential for a meaningful gold mineral system. BCI will test this potential by exploring the multiple target areas identified so far.

"Exploration at our Marble Bar tenements is part of an increasing focus on BCI's 100%-owned Pilbara exploration tenements, which are prospective for gold, base metals and lithium. Exploration on these tenements can potentially play an important part in BCI's diversification strategy."

- ENDS -

For further information: Alwyn Vorster Managing Director BC Iron Limited Telephone: +61 8 6311 3400

ABOUT BCI

BCI is an ASX-listed resources company that is managing a portfolio of mineral interests.

BCI's strategy is to maximise value from its iron ore portfolio, create a presence in gold and/or base metals, and become an influential Australian player in the agricultural and industry minerals industry.

Iron ore remains the Company's core focus, with the key assets of Iron Valley and Buckland providing a complementary mix of existing earnings and growth potential.

Iron Valley is an iron ore mine located in the Central Pilbara, which is operated by Mineral Resources Limited (ASX: MIN) and is generating royalty earnings for the Company.

Buckland is a 100%-owned strategic iron ore development project located in the West Pilbara region, comprising proposed mines at Bungaroo South, Kumina and other deposits, and a proposed private infrastructure solution incorporating a haul road and transhipment port at Cape Preston East.

The Company's iron ore portfolio also includes potential royalties over the Nullagine, Koodaideri South and Extension tenements.

BCI is establishing an agricultural and industrial minerals business, which currently includes a joint venture over the Carnegie Potash Project with Kalium Lakes Limited (ASX: KLL) and the 100%-owned Mardie Salt Project, which has a completed scoping study.

BCI is also seeking to create a presence in gold and/or base metals, primarily targeting its 100% owned regional exploration tenements and acquiring new project level interests in Australian assets.

KEY STATISTICS

Shares on issue:	395.0 million	
Cash and cash equivalents:	\$23.6 million	as at 30 September 2017
Board:	Brian O'Donnell	Non-Executive Chairman
	Alwyn Vorster	Managing Director
	Michael Blakiston	Non-Executive Director
	Jenny Bloom	Non-Executive Director
	Martin Bryant	Non-Executive Director
	Andy Haslam	Non-Executive Director
Major shareholders:	Wroxby Pty Ltd	27.7%

Website: www.bciron.com.au

Competent Persons Statement

The information in this report that relates to Exploration Results at Marble Bar is based on, and fairly represents, information which has been compiled by Mr Martin Bennett, who is a Member of the Australasian Institute of Geoscientists and a full-time employee of BC Iron Limited. Mr Bennett has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being 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 Bennett consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

Easting	Northing	Number	Weights (grams)	Figure Ref
800,483	7,679,933	19	0.7-4.5	
800,536	7,680,203	71	0.1-18.4	Figure 6 (left)
800,618	7,680,150	56	0.1-12.4	Figure 6 (right)
800,942	7,679,419	2	1.6-1.9	
801,100	7,680,346	8	0.7-2.9	
801,491	7,677,737	1	0.6	
801,558	7,679,793	1	2.3	
801,895	7,678,135	1	7.6	
801,901	7,677,857	3	2.5-18.6	
801,918	7,678,182	1	5.5	
801,927	7,680,067	3	0.4-1.3	
801,927	7,680,067	11	0.2-27.3	Figure 3 (centre)
802,043	7,677,952	9	0.4-3.9	
802,103	7,677,941	2	1.2, 1.8	
802,711	7,679,256	37	0.1-3.1	
802,743	7,678,390	66	0.1-2.3	Figure 3 (right)
802,874	7,678,587	1	4.7	
802,971	7,681,186	3	0.4-78.9	Figure 3 (left)
803,062	7,679,530	11	0.7-2.9	
803,578	7,681,141	22	0.1-2.1	
803,738	7,680,507	21	0.3-1.9	
803,844	7,679,996	1	3.9	
805,431	7,680,623	18	0.1-2.7	

Appendix 1: Details of Gold Nuggets and Rock Specimens with Visible Gold

Appendix 2: JORC Code, 2012 Edition – Table 1 Report

Section 1 – Sampling Techniques and Data

(Criteria in this section apply to all following 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. 	 A third-party prospector used a metal detector to find gold nuggets and rocks with visible gold over the E45/4309, E45/4328, E45/4631 tenements. Nuggets and gold bearing rocks were typically found within 50cm of the surface. Nuggets and gold bearing rocks were removed using hand held tools such as a spade and mattock. A total of 368 nuggets and gold bearing rocks were recovered by the prospector during 2016 and 2017. The individual specimens ranged in size from 0.1-78.9 grams. Total weight is unknown.
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). 	
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. No drilling has been undertaken.

Criteria	JORC Code Explanation	Commentary
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 presence of nuggets and gold bearing rocks is used as a guide only and the information is not intended to support a Mineral Resource estimate. The prospector noted the gold was either in nuggets or located in a quartz or ironstone lithology. Locations were recorded using a handheld GPS.
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. 	Sub-sampling and quality control techniques are not applicable, and the data is not being used for a Mineral Resource estimate.
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 nuggets and gold bearing rocks were weighed by the prospector prior to handover to the Perth Mint for minting. No BCI personnel were involved in the weighing procedure and therefore the accuracy of the weights cannot be verified.

Criteria	JORC Code Explanation	Commentary
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. 	 The nuggets and gold bearing rocks were weighed by the prospector prior to handover to the Perth Mint for minting. BCI is satisfied as to the accuracy of the information following review of the "Section 40E Advice of Minerals Recovered" submitted by the prospector, discussions with the prospector and inspection of a number of the nugget / rock locations. However, given no BCI personnel were present during the discovery or weighing, the information cannot be definitively verified. No drilling has been undertaken.
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. 	 Locations were recorded using a handheld GPS in the MGA 94 grid datum (Zone 50). The locations of the nuggets and gold bearing rocks are used as a guide for future exploration. They are not used in a Mineral Resource estimate. While the topography does have relevance to where the nuggets and gold bearing rocks were found, the quality and adequacy of the surface topography is not applicable as the information is not being used in a Mineral Resource estimate.
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. 	 Not applicable. The locations of the nuggets and gold bearing rocks do not allow inference as to the potential size of any gold mineralisation. Information relating to the nuggets and gold bearing rocks will be used to guide future exploration in the area and is not being used in a Mineral Resource estimate. No compositing has occurred.
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. 	 The specimen locations are used as a guide for future exploration and not for estimating a Mineral Resource, so commentary on bias relating to geological veining/structure is irrelevant. No drilling has been undertaken.
Sample security	The measures taken to ensure sample security.	• The nuggets and gold bearing rocks remained in possession of the prospector until being handed to the Perth Mint for processing.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• The geology and geomorphology in the locations of the nuggets and gold bearing rocks have been reviewed by BCI geologists.

Section 2 – Reporting of Exploration Results

Critorio	IOBC Code Explanation	Commontony
Criteria General tenement and land tenure status	 JORC Code Explanation 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. 	 Commentary E45/4309, E45/4328 and E45/4631 are held by Metal Holdings Pty Ltd which is a 100% owned subsidiary of BC Iron Limited. The tenement applications were lodged in 2013 (E45/4309 and E45/4328) and 2015 (E45/4631) and accompanied the required Section 58 document in accordance with WA Mining Act. E45/4309 and E45/4328 were granted in February 2015 and E45/4631 was granted in July 2016. All tenements are in good standing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Gold nuggets and rocks with visible gold were found by an independent prospector who held valid Section 40E permits to prospect on the BCI tenure. Previous work includes small scale mining (1880s to 1940s), mostly in the northern part of the project area, and mining of alluvial tin in the southern part of the project (mostly in the Moolyella mining area south of the BCI tenement. More recent work by other companies includes soil and rock chip sampling, with a broad >30 ppb gold anomaly being defined by Montezuma Resources in the north-eastern part of E45/4309. Three holes were drilled by Compass Resources in the north-eastern part of E45/4309 as a follow-up to anomalous rock chip samples (up to 140g/t), with the best drill result being 1m @ 4.6 g/t Au.
Geology	• Deposit type, geological setting and style of mineralisation.	 The tenements are located within the East Pilbara Granite-Greenstone Terrane. The tenements cover the contact between the Mt Edgar Granite Batholith and the metamorphosed Archaean mafic volcanics, felsic volcanics (including the Duffer Formation) and metasediments of the Warrawoona Group which wrap around the Mt Edgar Granite. Mapping underway by BCI is indicating a correlation between the specimen locations and chert/BIF and ultramafic lithologies that have also been mapped at 1:100,000 scale by GSWA.

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

Criteria	JORC Code Explanation	Commentary
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. 	 No drilling has been completed. Information relating to the nuggets and gold bearing rocks is shown in the table in Appendix 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. 	 No average weighting of grade has been completed. No high grade or low grade cutting has been completed. Metal equivalence is not applicable to this 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 drilling has been completed.
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. 	Maps are presented in the ASX announcement.

Criteria	JORC Code Explanation	Commentary
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. 	 No drilling has been completed, so BCI is not reporting drill intersections. Information relating to the nuggets and gold bearing rocks has been reported as per the "Section 40E Advice of Minerals Recovered", further information provided by the prospector and site investigations undertaken by BCI. The reporting in this announcement is considered to be balanced.
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.	Historic exploration results are currently being compiled and will be reviewed against future exploration results.
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. 	 A mapping, rock-chip sampling and soil sampling program is currently underway. Locations of the completed and planned sample areas are shown in the ASX announcement. Drilling is planned to commence shortly, with results from the mapping, rock-chip sampling and soil sampling programme in conjunction with the nugget locations to guide proposed drill hole locations.