ASX Release
28 June 2018

MAIDEN KUMINA JORC MINERAL RESOURCE

- **Maiden JORC Mineral Resource estimates completed at Kumina A (Channel Iron Deposit – CID), E and J (both Bedded and Detrital Deposits – BID and DID)**
- **Inferred Mineral Resource of 78.3Mt at 59.1% Fe at a 57% Fe cut-off, or 115.2Mt at 58.0% Fe at a 53% Fe cut-off**
- **Average quality specifications of the 78.3Mt Mineral Resource are: 59.1% Fe, 2.9% Al_2O_3, 4.9% SiO_2, 0.10% P and 7.1% LOI**
- **Testwork will establish potential to upgrade ore above 60% Fe and for lump ore production**
- **Significant exploration upside remains at Kumina – numerous additional BID/DID targets recently identified by leading industry exploration experts**
- **Kumina partnership and funding solutions now being advanced**

BCI Minerals Limited (ASX: BCI) ("BCI" or the "Company") is pleased to report a maiden JORC Mineral Resource estimate for the Kumina tenements, comprising estimates for deposits A, E and J.

Commenting on the Mineral Resource estimates, BCI Managing Director, Alwyn Vorster, said: *"Proving up three deposits at Kumina to Resource status within nine months of acquisition is a positive result, particularly given these 'forgotten' tenements came with zero exploration information when acquired in late 2017.*

"We now have a very promising group of deposits, including a significant tonnage of bedded iron mineralisation with a grade of >59% Fe and relatively low impurities, providing a credible ore source in the current iron ore market environment. Kumina also has substantial exploration upside, with many prospective targets remaining untested, and we see it as an attractive standalone development opportunity. The Kumina resource quality is equal or better than many ore sources from the central Pilbara area, and the distance by existing road from Kumina to Port Hedland is shorter than the distance from our Iron Valley tenement (an operating mine) to Port Hedland, making profitable trucking or rail solutions possible.

"Our overall iron ore tenement package rivals that of any other Pilbara junior, and this places BCI in a good position from which to participate in future transactions in the sector. BCI is now working to secure funding and partner solutions to accelerate development of Kumina. Our aim is to minimise ongoing iron ore expenditure and create additional earnings to the existing Iron Valley royalty, which can support the development of our salt and potash interests."

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Overview of the Kumina Tenements

The Kumina tenements comprise three granted exploration licences covering an area of approximately 480km^2 located approximately 100km south of Karratha and 50km north-east of BCI's Bungaroo South Deposit (refer to Figure 1). The tenements, which were acquired in September 2017, host numerous channel iron deposit ("CID") targets and higher grade bedded iron deposit ("BID") targets with associated detrital iron deposit ("DID") mineralisation (refer to Figure 2).

Figure 1: Location of the Kumina Tenements

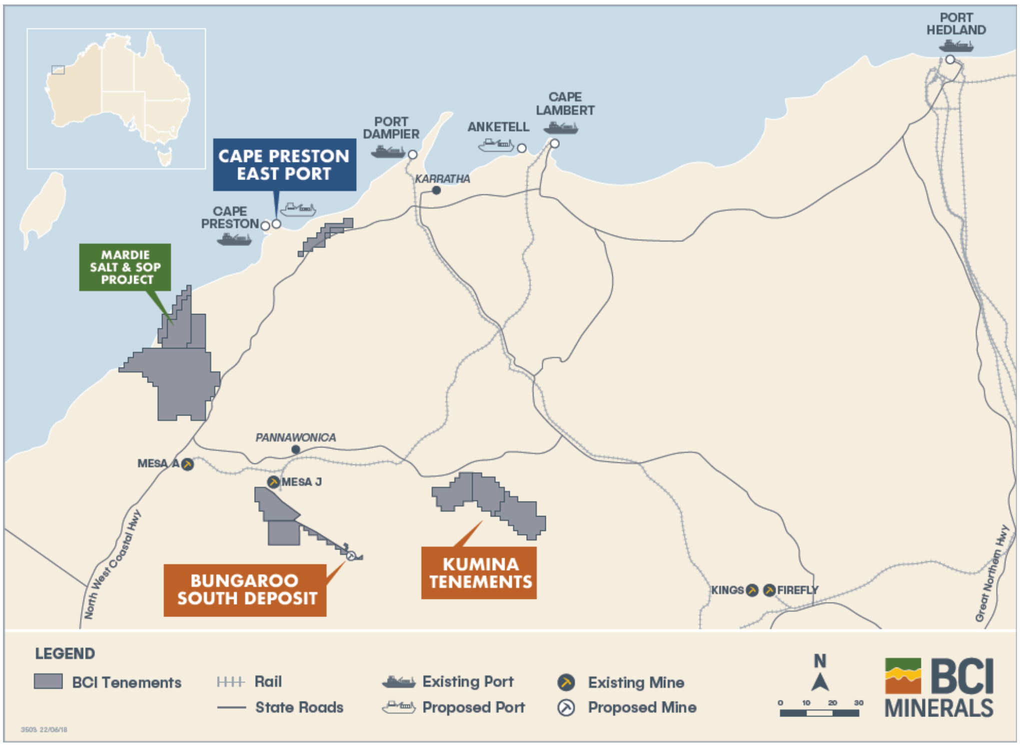
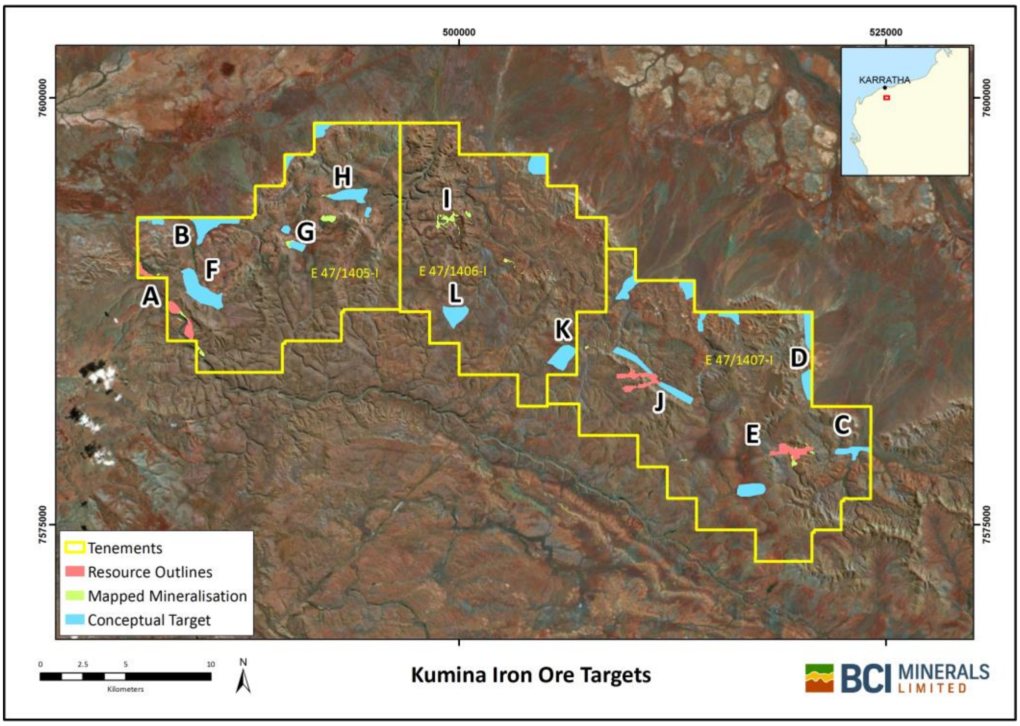


Figure 2: Kumina Iron Ore Target Areas



Note: the target areas depicted in Figure 2 are for presentation purposes and are conceptual in nature.

Mineral Resource Estimate

The Inferred Mineral Resource estimates for the Kumina A, E and J deposits are set out in Table 1 below at a cut-off of 53% Fe.

Table 1: Inferred Mineral Resource Estimate at 53% Fe Cut-off

Deposit	Classification	Cut-off Fe %	Mt	Fe %	CaFe %	Al_2O_3 %	SiO_2 %	P %	LOI %
Kumina A	Inferred	53	39.0	57.3	62.6	2.9	6.2	0.09	8.4
Kumina E	Inferred	53	34.4	58.0	62.4	3.5	5.4	0.09	7.1
Kumina J	Inferred	53	41.9	58.5	62.9	3.2	5.3	0.13	7.0
Total	**Inferred**	**53**	**115.2**	**58.0**	**62.6**	**3.2**	**5.7**	**0.10**	**7.5**

As shown in Table 2, the Mineral Resource also includes a higher grade subset at a cut-off of 57% Fe.

Table 2: Inferred Mineral Resource Estimate at 57% Fe Cut-off

Deposit	Classification	Cut-off Fe %	Mt	Fe %	CaFe %	Al_2O_3 %	SiO_2 %	P %	LOI %
Kumina A	Inferred	57	23.2	58.5	63.5	2.6	5.4	0.07	7.8
Kumina E	Inferred	57	22.8	59.2	63.4	3.2	4.7	0.09	6.7
Kumina J	Inferred	57	32.2	59.4	63.7	2.9	4.6	0.13	6.8
Total	**Inferred**	**57**	**78.3**	**59.1**	**63.6**	**2.9**	**4.9**	**0.10**	**7.1**
Sub-total – E & J	***Inferred***	***57***	***55.0***	***59.3***	***63.6***	***3.0***	***4.7***	***0.11***	***6.8***

The Mineral Resource estimates have been prepared by SRK Consulting. The JORC Table 1 report for the Mineral Resource estimates is presented in Appendix 2 and a summary of material information is presented below.

The regional geology of the Kumina tenements predominantly comprises Brockman Iron Formation with lesser amounts of Mount McRae Shale, Mount Sylvia Formation and Wittenoom Formation occurring along the northern margins of the tenements, which are situated in the Hamersley Province.

At Kumina A, CID mineralisation is mostly contained within tertiary aged paleo-drainage channels, which present as a topographic highs or mesas and in some areas are covered by recent alluvium.

BID mineralisation associated with Kumina E and Kumina J is mostly contained within the Proterozoic aged Joffre Member of the Brockman Iron Formation (“BIF”). The DID mineralisation, which has formed from mechanical transport, generally occurs in topographic lows in close proximity to the enriched BIF mineralisation.

Drilling was undertaken using a reverse circulation (“RC”) drill rig fitted with either a 142mm or 146mm diameter face sampling hammer. The majority of holes were drilled vertically, with a small number angled at 60° to the south or north to test outcropping mineralisation. Holes were drilled at an approximate spacing of 50m or 100m north-south and 100m or 200m east-west.

RC drilling chips were collected via a cone splitter, with one 4kg (average) sample taken for each 2m sample length. Samples were dried at 105ºC for 24 hours before being crushed to a nominal -3mm size, then pulverised to 95% passing 105 microns. Sub samples were then collected and analysed by X-ray fluorescence spectroscopy for key elements and by Thermo-Gravimetric Analysis for total Loss on Ignition ("LOI").

The Mineral Resource estimates were prepared using conventional block modelling and geostatistical estimation techniques. A parent cell size of 25m x 25m x 2m (XYZ) was selected and sub-celling was not used. The volume model and estimation datasets were spatially transformed (flattened and dilated) prior to estimation. The discretised parent cell grades were estimated using ordinary block kriging. The domain wireframes were used as hard boundary estimation constraints. Search orientations and weighting factors were derived from variographic studies conducted on the transformed data for each deposit. A multiple-pass estimation strategy was utilised, with kriging neighbourhood analysis used to assist with the selection of search distances and sample number constraints. Extrapolation was limited to approximately half the nominal drill spacing.

Two cut-off grades have been used in the estimation of Mineral Resources. A lower cut-off grade of 53% Fe was used for all deposits to report the Mineral Resources with an average overall grade of at least 58% Fe and a higher cut-off grade of 57% Fe was used to report the Mineral Resources with an average overall grade of at least 59% Fe.

The Mineral Resources have been classified as Inferred based on a range of factors, with the major controlling factors being the sample spacing and the absence of density data.

Detailed studies and testwork has not yet been completed. Therefore, mining and metallurgical methods and parameters have not been considered to date.

BCI's Total Hematite Mineral Resources

Following completion of the maiden Mineral Resource estimate at Kumina, BCI has a substantial overall hematite Mineral Resource on BCI-owned tenements of more than 600Mt.

Table 3: Total Hematite Mineral Resources

Deposit	Cut-off Fe %	Mt	Fe %	CaFe %	Al_2O_3 %	SiO_2 %	P %	LOI %
Iron Valley	50	229.9	58.4	62.8	3.2	5.2	0.17	7.0
Bungaroo South and Satellites	50	283.3	56.5	61.4	2.7	7.8	0.14	8.1
Kumina	53	115.2	58.0	62.6	3.2	5.7	0.10	7.5
Total	**Various**	**628.4**	**57.5**	**62.1**	**3.0**	**6.5**	**0.14**	**7.6**

Note: Mineral Resources for Iron Valley, Bungaroo South and its Satellite Deposits are reported as at 30 June 2017 as announced in BCI's 2017 Annual Report. BCI is not aware of any new information or data that materially affects the information included in BCI's 2017 Annual Report about those Mineral Resources.

Kumina Upside Potential and Next Steps

The Kumina tenements are considered highly prospective, with multiple targets identified to date.

Drilling so far has only tested targets A, C, E and J, which were identified from first past reconnaissance on the Kumina tenements and contained significant outcropping mineralisation.

Other existing high priority targets for the next phase of drilling include target I, a complex faulted and folded area with widespread mapped BID and DID mineralisation supported by positive rock chip results (refer to ASX announcement dated 19 February 2018), as well as targets G and H, which comprise areas of outcropping BID/DID mineralisation which potentially extend undercover.

Detailed geophysical and structural work is planned over coming months with the aim of increasing the overall understanding of the Kumina tenements, firming up existing drill targets and identifying new areas of interest. This work has already commenced and BCI has engaged the support of leading iron ore consultants and academics to assist in generating new targets. The conclusions so far indicate that the Kumina tenements remain highly prospective for further iron ore discoveries and that the possibility of a major deposit discovery on undercover targets cannot yet be ruled out.

The Mineral Resources reported for Kumina A, E and J are based on in-situ tonnes and grades, and therefore don't factor in the potential for grade and impurities to be improved through beneficiation. BCI plans to commence initial metallurgical testwork to provide an early indication of upgradability to >60% Fe product.

BCI expects a proportion of lump ore will be present in BID/DID deposits E and J based on characteristics of the outcropping mineralisation and comparable deposits in the Pilbara. This is also planned to be firmed up through future metallurgical testwork.

BCI has to date considered Kumina as part of the planned development of the broader Buckland Project. In addition to this, Kumina could also be developed as a lower cost standalone operation. BCI has extended its partnership and funding discussions to parties with existing or planned infrastructure solutions who are seeking additional tonnes and/or higher-grade ore for blending. BCI's aim is to secure an arrangement that minimises future expenditure on its iron ore assets and creates additional low risk iron ore earnings.

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Managing Director	Chief Financial Officer	Investor Relations Manager

ABOUT BCI MINERALS

BCI Minerals Limited (ASX:BCI) ("BCI") is an Australian-based resources company that is developing an industrial minerals business supported by iron ore earnings.

BCI's focus is on advancing its 100% owned Mardie Project, a potential salt and sulphate of potash ("SOP") operation located on the West Pilbara coast in the centre of Australia's key salt production region. BCI has completed a positive Pre-Feasibility Study on a solar evaporation operation producing 3.5Mtpa salt and 75ktpa SOP and intends to complete a Definitive Feasibility Study in 2019.

Iron Valley is an operating iron ore mine located in the Central Pilbara region of Western Australia, which is operated by Mineral Resources Limited (ASX:MIN). Iron Valley is generating quarterly royalty earnings for BCI.

Buckland is an iron ore development project located in the West Pilbara region of Western Australia, comprising potential mines at Bungaroo South (258Mt Resource[1]) and Kumina (115Mt Resource[2]), and a proposed 20Mtpa Cape Preston East Port facility.

In addition to these projects, BCI is a joint venture partner of Kalium Lakes Limited (ASX:KLL) in the Carnegie Potash Project, and owns exploration tenements at Marble Bar and Black Hills in the Pilbara, Peak Hill in WA's Midwest region, and Munglinup in southern WA.

The Company's portfolio also includes potential iron ore royalties over the Nullagine (FMG), Koodaideri South (Rio Tinto) and Extension (AAMC) tenements.

KEY STATISTICS

Shares on issue:	395.0 million	
Cash and cash equivalents:	$17.5 million	as at 31 March 2018
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.bciminerals.com.au	

[1] Refer to BCI's 2017 Annual Report for further details. BCI is not aware of any new information or data that materially affects the information included in that document about the Bungaroo South Resource.
[2] Refer to BCI's announcement dated 28 June 2018. BCI is not aware of any new information or data that materially affects the information included in that announcement.

APPENDIX 1: COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results and data that was used to compile the Mineral Resource estimates at Kumina is based on, and fairly represents, information which has been compiled by Mr Ian Shackleton. Mr Shackleton is a Member of the Australasian Institute of Geoscientists and a full-time employee of BCI Minerals Limited. Mr Shackleton 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 Shackleton consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

The information in this report that relates to estimation of the Mineral Resource estimates at Kumina is based on, and fairly represents, information which has been compiled by Mr Rodney Brown. Mr Brown is a Member of the Australasian Institute of Mining and Metallurgy and a full-time employee of SRK Consulting. Mr Brown 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 Brown consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

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 (e.g. 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Reverse Circulation (“RC”) drilling chips were collected via a cone splitter. • One 4kg (average) sample taken for each 2m sample length and collected in pre-numbered calico bags. Quality of sampling continuously monitored by field geologist during drilling. • A sample mass of 4kg (average) was sent to the laboratory where it was dried, crushed and pulverised (total preparation) to produce a sub sample for analysis by X-ray fluorescence spectroscopy (“XRF”) for key elements and by Thermo-Gravimetric Analysis (“TGA”) for total Loss on Ignition (“LOI”). • To monitor the representivity of the samples collected, 1 duplicate was taken for every 50 samples (1:50). • Sampling was carried out under BCI protocols and QAQC procedures as per industry best practices.
Drilling Techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	• Drilling was performed by Core Drilling Services, Foraco Australia and Strike Drilling using RC drill rigs fitted with either a 142 mm or 146mm diameter face sampling hammer. • The majority of holes were drilled vertically, with a small number angled at 60° to the south or north to test outcropping mineralisation.

Criteria	JORC Code Explanation	Commentary
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.*	• RC sample recovery is recorded by the field geologist and is based on how much of the sample is returned from the cone splitter. This is recorded as very good (90%), good (80%), Moderate (50%), Poor (25%), Very poor (10%). • The condition of the sample recovered from the drilling process was also recorded as either dry, moist, wet or saturated. • To ensure maximum sample recovery and representivity, the field geologist is present during drilling and monitors the sampling process. Any issues are immediately rectified. • There were no significant sample recovery issues encountered during drilling. • Several twin RC drill holes have been completed and the results were reviewed with no sample bias identified.
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.*	• Logging of RC samples was completed for every 2m interval corresponding with the 2m sample interval using BCI Standard Logging Procedures. This level of detail supports appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Geophysical down-hole gamma data using a Reflex EZ-Gamma™ has been collected on selected drill holes to support geological information and stratigraphic interpretation. • Geophysical down-hole logging comprising gamma, density, resistivity, magnetic susceptibility and magnetic deviation were collected by Wireline Services Group on 17 selected holes at deposits E East & J to aid in the geological interpretation and support resource modelling.

Criteria	JORC Code Explanation	Commentary
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 Technique:* • RC chip samples of approximately 4kg are collected via a cone splitter for each 2m interval drilled in a pre-numbered calico bag. Samples are kept dry where possible. • The sample sizes are appropriate to correctly represent the mineralisation based on the style of mineralisation, the thickness and consistency of intersections, the sampling methodology and percent value assay ranges for the primary elements. *Sample Preparation:* • Sample dried at 105ºC for 24 hrs. • Crushed to nominal -3mm. • Pulverised to 95% passing at 105µm. *Quality Control Procedure:* • Duplicate sample inserted 1 every 50 samples (1:50). • Certified Reference Material assay standards inserted 1 every 50 samples (1:50). • Overall QAQC insertion rate of 1:25. • Laboratory duplicates are taken where large samples required splitting. • Laboratory repeats are taken and standards inserted at predetermined levels by the laboratory.

Criteria	JORC Code Explanation	Commentary
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• All samples were submitted to Bureau Veritas Laboratory in Perth and were assayed for the iron ore suite (14 elements) by XRF and LOI by TGA. • Laboratory procedures are in line with industry standards and appropriate for iron ore deposits. • Samples are dried at 105ºC for 24 hrs before being crushed using a Boyd crusher to a nominal -3mm size, then pulverised to 95% passing 105 microns using a LM2 mill. Sub samples are collected to produce a 0.67-0.69g sample that is dried further, fused at 105ºC for 60 minutes, poured into a platinum mould and placed into the XRF machine for analyses and reporting. • Certified Reference Material assay standards and field duplicates are used for quality control. • There were no discernible issues with sample representivity and all duplicates samples for the significant intersections reported were within 10% of the original sample value. • Certified Reference Material assay standards having a good range of values, were inserted at pre-defined intervals by BCI and randomly by the laboratory at set levels. Results highlight that sample assay values are within acceptable accuracy and precision ranges. • The Competent Person has visited the laboratory, inspecting sample preparation and analytical practices.
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.*	• Significant drilling intersections have been independently verified by alternative company personnel. • The Competent Person has visited site and inspected the sampling process in the field. • Primary data for the drilling is captured on a field Toughbook laptop computer using LogChief software. The software has validation routines to minimise data entry errors. • Data is sent to Perth and stored in a secure, centralised Datashed database. • No adjustments or calibrations were made to any data in the announcement.

Criteria	JORC Code Explanation	Commentary
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.*	• All survey data are reported according to MGA94 Zone 50, with elevations based on AHD. • Drill hole collars were surveyed by Land Surveys using a Leica GS15 GPS Antenna as a Base Station and a RTK Rover. Elevations are in AHD with an expected accuracy of +/-20mm for the vertical and +/-10mm for the horizontal position using this equipment. • Surface topography for deposits E and J was generated from an aerial survey undertaken using an UAV by Land Surveys. The aerial survey was processed to generate ortho-rectified imagery with a nominal ground sample distance of approximately 5cm and 0.5m surface contours. All vegetation, infrastructure and artefacts were removed from the surface model to generate a clean DTM. • Surface topography for deposit A was generated using the drill collars surveys using the RTK DGPS and DEM derived from an aeromagnetic flown by Fugro Airborne Surveys for Mineralogy Pty Ltd in March 2013. • Down hole surveys were completed for selected holes (nominally every very third hole) using either a Reflex EZ-Trac™ or an Axis Champ Gyro™ instrument to record the azimuth and declination of the hole. The Reflex tool was used primarily to confirm the verticality of the hole as magnetic lithologies impacted the azimuth. The instrument confirmed that all holes were all within 1-2º of vertical. The Axis tool was used on selected vertical and angled (notionally -60 degree) holes to confirm that hole deviation was within acceptable limits (<3 degrees over 100m depth). All holes surveyed were considered not to have deviated significantly and were within acceptable tolerances.
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.*	• Drill spacing on an approximate 50/100m (N-S) and 100/200m (E-W). • The drill spacing is considered sufficient to establish the degree of geological and grade continuity applied under the 2012 JORC code. • All drill samples were collected at 2m intervals and there has been no subsequent compositing of samples.

Criteria	JORC Code Explanation	Commentary
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.*	• Drill holes are spatially arranged across the mapped CID, BID and DID. • At deposit A, the CID is interpreted to be generally flat-lying and the vertical orientation of the drilling is designed to give an orthogonal intersection of the CID. • At deposits E and J, the DID is interpreted to be generally flat-lying and the vertical orientation of the drilling is designed to give an orthogonal intersection of the DID. The Banded Iron Formation (BIF) hosting the BID mineralisation at the target was interpreted to have a very gentle dip towards the south and drilling of vertical holes is considered to give an approximate orthogonal intersection of mineralisation. • As such, the orientation of drilling and samples collected is not considered to have introduced a sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Samples are packed into sealed plastic bags and then placed inside sealed Bulka bags. The samples are then delivered to a despatch point in Karratha by employees of BCI. • The samples are then transported to Perth using a third-party freight company and delivered to the laboratory (Bureau Veritas). • Once received at the laboratory, samples are stored in a secure yard until analysed. • The laboratory receipts the samples against sample dispatch/submission documents and issues a reconciliation report for every sample dispatch.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Sampling techniques are reviewed by company geologists on a regular basis to ensure best practise techniques are implemented.

Section 2 – Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
General 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.*	• Exploration Results reported are from E47/1405 and E47/1407. • E47/1405 and E47/1407 are held by BC Pilbara Iron Ore Pty Ltd, which is a 100% owned subsidiary of BCI. The tenements were granted on 20/10/2008 for a period of 10 years. BCI plans to apply for an extension of term prior to expiry of the tenement and anticipates there will be no impediments to this being granted. • The tenement is situated within the Kuruma and Marthudunera Native Title Claim (WC 1999/12) and Yindjibarndi Aboriginal Corporation (WR 2017/001). • The tenements are current and in good standing with all statutory commitments being met as and when required. • There are no known impediments to obtaining a licence to operate pending the normal approvals process. • Mineralogy Pty Ltd has an iron ore royalty of 2.0% FOB revenue on the first 100 million tonnes of iron ore mined, increasing to 3.5% of FOB revenue on any iron ore in excess of 100 million tonnes mined and a 3.5% royalty on the value of any other mineral sold from the tenement.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration for iron ore within the tenements is limited to: – Remote sensing techniques such as Quickbird and aeromagnetic surveys by Mineralogy Pty Ltd. – Geological mapping and limited rock chip sampling by BHP Limited in 1972. – 14 diamond/RC holes by Australian Hanna Pty Ltd between 1975 and 1982, exploring for Banded Iron Formation hosted magnetite near Targets B, E, I & J. This data is being reviewed currently to determine the relevance to focusing the exploration.

Criteria	JORC Code Explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The regional geology predominantly comprises Brockman Iron Formation with lesser amounts of Mount McRae Shale, Mount Sylvia Formation and Wittenoom Formation occurring along the northern margins of the tenements, which are situated in the Hammersley Province. • At deposit A, CID mineralisation intersected in drilling is mostly contained within Tertiary aged paleo-drainage channels, which present generally as topographic highs or mesas and in some circumstances areas are covered by Recent alluvium. • BID mineralisation associated with deposits E and J intersected in drilling is mostly contained within the Proterozoic aged Joffre Member of the Brockman Formation. The DID mineralisation, which has formed from mechanical transport, generally occur in topographic lows in close proximity to the enriched BIF mineralisation.
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 exploration results are reported in this announcement. Refer to ASX announcements dated 23-Jan-18, 19-Feb-18, 9-May-18 and 24-May-18.

Criteria	JORC Code Explanation	Commentary
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 exploration results are reported in this announcement.
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 exploration results are reported in this announcement.
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.*	• No exploration results are reported in this announcement. Refer to ASX announcements dated 23-Jan-18, 19-Feb-18, 9-May-18 and 24-May-18.
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 exploration results are reported in this announcement.

Criteria	JORC Code Explanation	Commentary
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.*	• BCI is not aware of any meaningful and material exploration datasets that are additional to those used in the Mineral Resource estimates.
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.*	• Assessment and early stage exploration work is planned to continue at other iron ore targets on the Kumina tenements, which is expected to be followed up with further drilling programmes.

Section 3 – Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The survey data were provided to BCI by the contractor in spreadsheet files. The laboratory data were provided to BCI by Bureau Veritas as CSV and locked PDF files. • The survey, logging, and geochemical datasets used to prepare the Mineral Resource estimates were provided to SRK by BCI in an MS Access database. • SRK imported the files into Studio RM for merging and validation, which included numerical range checks on survey and interval data, library code lists, and visual checks. SRK also conducted spot checks of the assay data against the laboratory PDFs.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Competent Person sign-off for the Mineral Resource estimates is jointly shared by Ian Shackleton (BCI employee), who assumes responsibility for data quality and the geological interpretation, and Rodney Brown (SRK employee), who assumes responsibility for the resource modelling. • Mr Shackleton visited site as part of the drilling programs to observe and supervise the geological logging, sampling and associated QA/QC practices. Mr Shackleton also observed and supervised the drilling to ensure that representative samples were being collected. Mr Shackleton inspected the Bureau Veritas laboratory prior to the commencement of the analytical testwork. • Mr Brown has not conducted a site visit.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The geological interpretation is considered consistent with datasets, as well as with the broadly accepted understanding within the mining community of the regional geology and the characteristics of CID, DID, and BIDs within the Pilbara region. Estimation domain definition was based on a combination of geological logging and geochemical data. • Domain geometry was observed to be relatively consistent and predictable over the extents of the drill coverage, with relatively good continuity evident between drill holes. SRK does not consider that the existing data would support an equally plausible interpretation that delineated significantly different grades or tonnages.

Criteria	JORC Code Explanation	Commentary
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• At Kumina A, Mineral Resources have been defined in three separate paleochannels that occur over a north-westerly strike length of approximately 5.5 km. The defined strike length of each channel is approximately 1 km, the width approximately 600 m, and the depth approximately 30 m. The channels are approximately 1 km apart. • Within the defined mineralised zones, CID was encountered in approximately 80% of the holes, and generally outcropped. In a small number of holes (< 10%) the CID was covered by a thin layer of gravels or alluvium. • For Kumina A estimation control, the following sub-horizontal domains were defined (from the surface down): − Overburden; − CID; − Channel material; − BIF; − Shale. • Kumina E has an east-west strike extent of 2.5km, a width of up to 150m, and an average thickness of approximately 15m. • Kumina J is hosted within an east-west fold structure, with both the southern and northern limbs having strike extents of approximately 2.5km and widths of up to 150m. The average thickness of enriched mineralisation is approximately 20m although, in places, folding has resulted in thicknesses of up to 90m. • The Kumina E and J deposits outcrop or are, in places, covered by a thin layer of alluvium. • For Kumina E and J estimation control, the following sub-horizontal domains were defined (from the surface down): − Enriched iron domain; − Transition zone (characterised by a reduction in iron and an increase in silica); − High silica domain.

Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
	• *The assumptions made regarding recovery of by-products.*
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		• The Mineral Resource estimates were prepared using conventional block modelling and geostatistical estimation techniques.
		• A total of five separate models were prepared to represent the defined extents of the mineralisation, comprising three models for the Kumina A region, one model for Kumina E, and one model for Kumina J. The resource modelling and estimation study was performed using Datamine's Studio RM, Supervisor, and X10.
		• The drill spacing and the domain geometry was used to assist with the selection of a parent cell size of 25m x 25m x 2m (XYZ). The parent cell dimensions were considered to be suitable to accurately represent the interpreted domain volumes, and sub-celling was not used. The volume model and estimation datasets were spatially transformed (flattened and dilated) prior to estimation.
		• The original sample data were collected on 2m intervals, and no compositing was conducted. Probability plots were used to assess for outlier values, and grade cutting was not considered necessary.
		• The discretised parent cell grades were estimated using ordinary block kriging. The domain wireframes were used as hard boundary estimation constraints. Search orientations and weighting factors were derived from variographic studies conducted on the transformed data for each deposit. A multiple-pass estimation strategy was invoked, with kriging neighbourhood analysis (KNA) used to assist with the selection of search distances and sample number constraints. Extrapolation was limited to approximately half the nominal drill spacing.
		• The model contains local estimates for Al_2O_3, CaO, Cu, Fe, K_2O, MgO, Mn, Na_2O, P, S, SiO_2, TiO_2, Cl, LOI425, LOI650, and LOI1000.
		• Model validation included:
		  – Visual comparisons between the input sample and estimated model grades;
		  – Global and local statistical comparisons between the sample and model data;
		  – An assessment of estimation performance measures, including kriging efficiency, slope of regression, and percentage of cells estimated in each search pass.
		  – A comparison of the sample and estimated model cell Oxide totals.
		• The model validation checks indicated acceptable agreement between the input data and the estimated model grades.

Criteria	JORC Code Explanation	Commentary
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The resource estimates are expressed on a dry tonnage basis, and in situ moisture content has not been estimated. A description of density estimation is presented below.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The main constituent of interest is Fe, and Mineral Resource estimates have been prepared at Fe cut-off grades of 53% and 57% for all deposits. • The estimates reported at the two cut-off grades are not exclusive (i.e. the tonnage at the higher cut-off is a subset of the tonnage at the lower cut-off). • The lower cut-off grade of 53% Fe was used to report the total Mineral Resource at an average grade of at least 58% Fe. • The higher cut-off grade of 57% Fe was used to report the total Mineral Resources at an average grade of at least 59% Fe. • The cut-offs yield Fe and contaminant resource grade estimates that are of a similar tenor to those reported for other CID, DID, and BID deposits in the Pilbara.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Detailed mining studies have not yet been completed. It is expected that ore will be extracted using conventional selective open pit mining methods, which includes hydraulic excavator mining, and dump truck haulage. Mining dilution assumptions have not been factored into the resource estimates.

Criteria	JORC Code Explanation	Commentary
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical testwork has not been conducted on material from the Kumina deposits. The grade tenor of both Fe and the deleterious constituents (including SiO_2, Al_2O_3, P, and S) are similar to those of other CID, BID and DIDs in the Pilbara region. • It is expected that metallurgical test programs will be conducted as the project moved to more detailed levels of technical study.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• It is anticipated that material included in the resource will be mined under the relevant environmental permitting, which will be defined as a part of future scoping and feasibility studies. Characterisation testwork has not been conducted to assess the potential environmental impacts, and it is expected that this will be performed as the project progresses to more detailed levels of assessment. • The characterisation of contamination potential is expected to be completed during future studies. The likelihood of acid generation is considered low, given the weathered nature of the profile and the geochemical characteristics of the host rocks.

Criteria	JORC Code Explanation	Commentary
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• No density testing has been performed on samples collected from Kumina deposits. For tonnage estimation, the following default dry bulk densities were used for the modelled lithologies: – Overburden 2.0 t/m^3 – CID 2.8 t/m^3 – Channel material 2.7 t/m^3 – Enriched BID/DID 3.0 t/m^3 – Transitional BID/DID 2.8 t/m^3 – BIF 2.7 t/m^3 – Shale 2.6 t/m^3 • Based on the lithological descriptions and site observations by BCI staff, these density values appear to be plausible and consistent with those expected for the stated lithologies. They are not dissimilar to densities used for similar deposits in the region. The uncertainty in density has been taken into consideration when assigning classifications to the Mineral Resource estimates.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The resource classifications have been applied based on a consideration of the confidence in the geological interpretation, the quality and quantity of the input data, and the confidence in the estimation technique, and the likely economic viability of the material. • Sample spacing and the absence of density data are considered to be the major controlling factors on classification. Mineral Resources have not been defined for material contained in the other lithologies because of uncertainty over economic viability. • The result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• No independent audits or reviews have been conducted on the latest resource estimates.

Criteria	JORC Code Explanation	Commentary
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The resource estimates have been prepared and classified in accordance with the guidelines that accompany the JORC Code (2012), and no attempts have been made to further quantify the uncertainty in the estimates. • The field program did not include any procedures that enabled an accurate quantification of any preferential material loss that may have occurred during sample extraction. • No density testing has been performed and the tonnage estimates are based on densities assumed to be suitable for the types of material observed. • The resource quantities should be considered as regional or global estimates only. The accompanying models are considered suitable to support future exploration and resource delineation studies, and as inputs in to conceptual mine planning studies. The models and estimates are not considered suitable for studies that place significant reliance upon the local estimates.