

## NJV ORE RESERVES AND MINERAL RESOURCES

BC Iron Limited (ASX:BCI) (“BC Iron” or “the Company”) is pleased to report Ore Reserves and Mineral Resources for the Nullagine Iron Ore Joint Venture (“NJV”) as at 31 December 2013 in accordance with JORC (2012) guidelines.

The NJV is an unincorporated joint venture between BC Iron (75% interest) and Fortescue Metals Group Limited (“Fortescue”) (25% interest) located approximately 140 kilometres north of Newman in the Pilbara region of Western Australia. The NJV has been mining direct shipping ore (“DSO”) iron ore since operations commenced in November 2010.

As at 31 December 2013:

- NJV Ore Reserves were 33.3 million tonnes at 57.1% Fe;
- DSO Mineral Resources were 44.6 million tonnes at 57.1% Fe; and
- CID Mineral Resources were 112.2 million tonnes at 53.3% Fe.

**Table 1: Ore Reserve Estimate (100% NJV)**

Classification	Mt	Fe%	CaFe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	P%	S%	LOI%
Proved	15.0	57.3	65.0	1.8	2.9	0.014	0.012	11.9
Probable	18.3	56.9	64.8	2.0	3.0	0.014	0.011	12.2
<b>TOTAL</b>	<b>33.3</b>	<b>57.1</b>	<b>64.9</b>	<b>1.9</b>	<b>3.0</b>	<b>0.014</b>	<b>0.011</b>	<b>12.0</b>

**Table 2: DSO Mineral Resource (100% NJV)**

Classification	Mt	Fe%	CaFe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	P%	S%	LOI%
Measured	17.6	57.2	64.8	2.0	3.0	0.015	0.012	11.8
Indicated	20.2	57.0	64.9	2.0	2.9	0.014	0.011	12.1
Inferred	6.8	57.0	64.1	2.6	3.9	0.023	0.014	11.1
<b>TOTAL</b>	<b>44.6</b>	<b>57.1</b>	<b>64.7</b>	<b>2.1</b>	<b>3.1</b>	<b>0.016</b>	<b>0.012</b>	<b>11.9</b>

**Table 3: CID Mineral Resource (100% NJV)**

Classification	Mt	Fe%	CaFe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	P%	S%	LOI%
Measured	25.6	54.6	62.3	3.0	4.1	0.016	0.013	12.4
Indicated	40.0	53.8	61.6	3.3	4.5	0.017	0.012	12.8
Inferred	46.6	52.1	58.8	5.4	6.6	0.024	0.018	11.3
<b>TOTAL</b>	<b>112.2</b>	<b>53.3</b>	<b>60.6</b>	<b>4.1</b>	<b>5.3</b>	<b>0.020</b>	<b>0.015</b>	<b>12.1</b>

*Note: DSO Mineral Resources are inclusive of Ore Reserves and CID Mineral Resources are inclusive of DSO Mineral Resources. Some rounding of metrics can occur.*

BC Iron previously reported Ore Reserves and Mineral Resources as at 30 June 2013 in accordance with JORC (2004) guidelines. There have been no material changes to the methodology or assumptions underlying the estimates. The 30 June 2013 estimates have been depleted based on mining completed as at 31 December 2013.

A summary of material information is set out below and the JORC (2012) guidelines Table 1 is provided in Appendix 1.

### **Summary of Material Information – Mineral Resources**

The deposits which comprise the NJV are channel iron deposits (“CID”), presented as topographic highs or mesas. The mesas vary in strike length from 400 to 3,600 metres, and are commonly 200 to 400 metres in width. Mineralisation often outcrops at surface and typically extends to a depth of 10 to 15 metres below surface.

Drilling consists of a total of 5,713 holes, including 5,649 reverse circulation (“RC”) holes and 64 diamond core holes. RC drilling utilises a 5.5 inch diameter face sampling hammer, with holes ranging in depth from 3 to 134 metres. Diamond drilling ranges from PQ to HQ in size, with hole depths of 11 to 92 metres. The vast majority of holes were vertically oriented given the sub-horizontal nature of the CID deposits.

Early RC samples were split using a three tier riffle splitter to gain a one-eighth split sample. Later RC drilling utilised an RC drill rig with a cone splitter attached. Diamond core was cut at one metre intervals and samples were prepared by crushing to approximately 10 millimetres using a jaw crusher, then pulverised using an LM5 grinding mill to achieve 90% passing 75 microns. Sample preparation for RC samples excluded the jaw crushing stage. Pulverised material is sampled and a fused bead created, before being analysed using X-ray fluorescence (“XRF”) techniques.

Measured Mineral Resources are classified as having been drilled to 25 by 25 metre spacing or closer and Indicated Mineral Resources are drilled to 50 by 100 metre spacing or closer, which, in both cases, supports geological and grade continuity and has a confidence level sufficient to allow the application of Modifying Factors to support detailed mine planning. Inferred Mineral Resources are drilled at a spacing of greater than 50 by 100 metres.

For the purpose of generating mineralised envelopes, material with grades of greater than 45% Fe coincides with geologically-logged CID and material with grades of greater than 55% Fe is considered DSO. Sectional interpretation of mineralised envelopes was undertaken and then used to generate wireframes. For all major mesas, Mineral Resources were estimated using ordinary kriging and inverse distance methods, with a block size equal to half the drill spacing dimension. For regional mesas where limited drill information exists and where Modifying Factors cannot be reasonably assumed, a polygonal estimate has been applied. In such cases the estimate has been classed as Inferred Mineral Resource. A bulk density of 2.84t/m<sup>3</sup> was calculated by the calliper method and applied to all mineralisation. Estimation was carried out on major elements Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, S LOI and minor elements CaO, K<sub>2</sub>O, Mg, Mn, Na<sub>2</sub>O and Cu. The CID Mineral Resource is reported using a 45% Fe cut-off grade. The DSO Mineral Resource is reported using cut-off grades between 52% and 56% Fe, which were selected to achieve a 57% Fe specification grade.

## Summary of Material Information – Ore Reserves

Mineral Resources at the NJV were first converted to Ore Reserves in accordance with JORC (2004) guidelines as part of a feasibility study completed in 2009. The current Ore Reserve estimate is based on Mineral Resources as at 31 December 2013.

Ore Reserves were estimated by completing pit optimisations and subsequent detailed pit designs. Two cut-off grades were applied, with waste characterised as being below 55% Fe or above 3% Al<sub>2</sub>O<sub>3</sub>. These parameters were derived to achieve a product grade of 57% Fe and 2% Al<sub>2</sub>O<sub>3</sub>, which is the desired product specification for the NJV based on marketing studies.

Mining at the NJV is undertaken using surface miners with a minimum mining width of 3.5 metres based on equipment size and a minimum bench width of 20 metres to cater for safe and efficient load and haul activities. Mining dilution of 2.5% to 5.0% (mesa dependent) and mining recovery of 100% (all mesas) are considered appropriate factors based on production data to date.

Current undiluted Ore Reserves are comprised entirely of DSO material. A dry crushing and screening process is being utilised at the NJV, which was selected based on bulk sampling and metallurgical test work undertaken as part of the feasibility study. Processing recoveries are effectively 100%.

All material assumptions relating to costs are based on existing agreements with contractors. The terms of these agreements are considered commercially sensitive and are not publicly disclosed. However, BC Iron has provided C1 cash cost guidance of A\$46-50 per wet metric tonne over the life of mine. C1 cash costs exclude royalties, marketing and corporate costs.

Mining approvals, permits and licences were granted prior to the commencement of operations. Further approvals are sought as and when required. All arrangements to facilitate mining, production and sale of the NJV product are in place, including agreements with contractors and an infrastructure agreement with Fortescue for the provision of rail and port services. Agreements with all key stakeholders are in place and active.

### Competent Persons Statement

The information in this report that relates to Exploration Results is based on, and fairly represents, information which has been compiled by Mr Paul Hogan who is a Member of the Australasian Institute of Mining and Metallurgy and an employee of BC Iron Nullagine Pty Ltd. Mr Hogan 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 Hogan 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 the Mineral Resource estimates at Outcamp, Bonnie East, Coongan, Dandy and Warrigal is based on, and fairly represents, information which has been compiled by Mr Robert Williams who is a Member of the Australasian Institute of Mining and Metallurgy and an employee of BC Iron. Mr Williams 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 Williams 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 the Mineral Resource estimates at Warrigal North, Ornamental, Roys, Trig, Soda and Shaw River is based on, and fairly represents, information which has been compiled by Mr Paul Hogan who is a Member of the Australasian Institute of Mining and Metallurgy and an employee of BC Iron Nullagine Pty Ltd. Mr Hogan 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 Hogan 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 the Ore Reserve estimate is based on, and fairly represents, information which has been compiled by Mr Blair Duncan who is an employee of BC Iron and a Member of the Australasian Institute of Mining and Metallurgy. Mr Duncan 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 Duncan consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

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**FOR FURTHER INFORMATION:**

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## About BC Iron Limited

BC Iron is an iron ore development and mining company with key assets in the Pilbara region of Western Australia. The Company's core focus is the Nullagine Iron Ore Project, an unincorporated 75:25 joint venture with Fortescue Metals Group Limited. The NJV uses Fortescue's infrastructure at Christmas Creek, 50km south of the Nullagine mine, to rail its ore to Port Hedland from where it is shipped directly to customers overseas.

BC Iron has had outstanding success since listing in December 2006. Iron ore exports commenced in February 2011 and since April 2013, the NJV has been operating at a nameplate production rate of 6Mtpa. BC Iron was added to the S&P/ASX 200 Index in December 2013.

The Company's key focus moving forward is on total shareholder return, continued strong operational performance at the NJV and measured consideration of business development opportunities.

### KEY STATISTICS

<b>Shares on issue:</b>	124.0 million	
<b>Cash &amp; equivalents:</b>	\$196.7 million	as at 31 December 2013
<b>Board:</b>	Tony Kiernan	Chairman and Non-Executive Director
	Morgan Ball	Managing Director
	Andy Haslam	Non-Executive Director
	Malcolm McComas	Non-Executive Director
	Terry Ransted	Non-Executive Director
	Peter Wilshaw	Non-Executive Director
	Mike Young	Non-Executive Director
	Anthea Bird	Company Secretary
	Linda Edge	Company Secretary
<b>Major shareholders:</b>	Tribeca Investments	6.3%
	National Australia Bank	6.1%
	AustralianSuper	6.1%
	Ausbil Dexia	6.0%

Website: [www.bcion.com.au](http://www.bcion.com.au)

## APPENDIX 1: JORC CODE, 2012 EDITION – TABLE 1 REPORT

### SECTION 1 SAMPLING TECHNIQUES AND DATA

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

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>The Channel Iron Deposit (“CID”) mesas have been drilled by a combination of diamond drill holes (“DD”), and reverse circulation (“RC”). Sampling has been done on a 1m basis for resource drilling and half metre basis for grade control drilling. Quality has been supervised by a geologist at all times and measures taken to reduce any contamination.</li> <li>Sample representivity is maintained by the use of riffle splitter or cone splitter for RC while DD was sawn in half along the vertical axis with one half sent to the laboratory for analysis.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>The project database consists of 64 diamond core and 5,649 RC drill holes.</li> <li>Diamond drilling ranges in size from PQ to HQ, and holes depths range from 11m to 92m.</li> <li>RC drilling within the resource area utilises a 5.5 inch diameter face sampling hammer, and ranges in depth from 3m to 134m.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Core recoveries and rock quality designations are logged and collated in the database. Overall core recoveries are 95%. RC samples are visually checked for recovery, moisture and contamination.</li> <li>Water injection during RC and lift-off from bottom each metre assists recovery and representivity.</li> <li>No sample recovery issues have impacted on a potential sample bias.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>Logging of DD and RC samples records lithology, mineralogy, alteration and colour. Core was photographed both wet and dry and geotechnical measurements taken.</li> <li>All resource and grade control holes have been geologically logged to a standard that is appropriate for the category of resource being reported.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>Drill core was cut at metre intervals and core samples were submitted to Genalysis for multi-element analysis (23 analytes) using X-ray fluorescence (“XRF”) analytical methods.</li> <li>Early RC samples were split using a 3 tier riffle splitter to gain a 1/8<sup>th</sup> split sample for submission. Later grade control campaigns were sampled with a cone splitter. The CID mesas sit proud of the surrounding plains, and as such drilling into the water table is rarely observed.</li> <li>Quality assurance and quality control (“QAQC”) procedures included the insertion of field duplicates, and certified reference material (standards) at a combined frequency of 6 samples per 100, which is considered standard industry practice. Laboratory QAQC (standards and duplicates) were analysed at a frequency of 1 per 20 BC Iron samples.</li> <li>The sample preparation of diamond core followed standard industry practice, involving crushing to ~10mm with a jaw crusher, pulverisation of the entire sample using an LM5 grinding mill to achieve 90% passing 75micron size. Pulverised material was sampled and a fused bead created. The sample preparation process for RC samples was identical, without the coarse jaw crushing stage.</li> <li>The sample size is considered appropriate for CID mineralisation.</li> </ul>

<b>Criteria</b>	<b>Commentary</b>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>• Samples from all drilling programs have undergone analysis for a typical iron ore suite of elements. The samples have been analysed using XRF spectroscopy with a 4 point loss of ignition using thermogravimetric analysis. The analysis has been undertaken in Perth, Western Australia, by certified laboratories; Genalysis Laboratory Services, Bureau Veritas Kalassay, Bureau Veritas Ultra trace and SGS Australia.</li> <li>• No assays in the database have been determined through handheld XRF devices or any geophysical tool.</li> <li>• BC Iron QAQC processes involve submission of coarse standards (certified reference material) to assess the pulverisation stage of the sample preparation. Pulp standards are submitted to assess the analytical accuracy and field duplicates are submitted to assess the analytical precision. Repeat analyses are completed by the laboratory in every assay job. In all cases the results of the QAQC processes have indicated the data is fit for use in resource estimation.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• Bulk rejects from intervals in early drill campaigns were stored in a bag farm onsite which allowed reference as does core and RC chip trays once the assay data is returned.</li> <li>• There are approximately 100 twin hole pairs separated by less than 7.5m drilled throughout the resource area. Most are RC/RC twins while some are DD/RC twins. Comparisons vary from excellent to poor with the main criteria for difference appearing to be related to short range changes in geology, particularly clay content.</li> <li>• Data entry is verified by the geologist, sampler and database administrator prior to upload to the database. Assay are stored as csv files, and validated prior to inclusion into the drill hole database. Validation includes review of the total assay calculation, and a review of QAQC.</li> <li>• No assay adjustments/factoring/calibrations have occurred.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• All holes have been surveyed by real time kinematic (“RTK”) differential GPS in the GDA94 / MGA zone50 grid system. Surveys have been completed by qualified consultant or BC Iron surveyors.</li> <li>• Given the sub-horizontal nature of the CID deposits, the holes are vertically orientated. Down hole survey is not completed given the relatively shallow nature of the drill holes which have an average depth of approximately 17m.</li> <li>• The topographic surface has been determined by Light and Detection Ranging (Lidar) surveys completed by Fugro and Whelans. This is standard industry practice, and is considered appropriate for the local topography.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• Resource drilling to Indicated Mineral Resource status is conducted on a sample spacing of 50m by 100m for the initial resource drilling, and is closed in to 25m by 25m for grade control. Some areas of the Bonnie East deposit have been drilled on a 25m by 12.5m spacing. Some regional mesas have been drilled at a sparse spacing &gt;100m which has allowed for inference of geological continuity, consistent with Inferred Mineral Resource.</li> <li>• No composite samples have been used in the estimation.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• The vertical orientation of drilling is designed to give an orthogonal intersection of the mineralised CID package.</li> <li>• No bias is expected in a flat lying mineralised setting.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• Sample security is not considered a material risk and no specific measures were taken to ensure security.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• A review of the sampling processes and the associated data was conducted by Golder Associates in 2008 when completing the maiden Mineral Resource estimate.</li> </ul>

## SECTION 2 REPORTING OF EXPLORATION RESULTS

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

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>BC Iron or its wholly owned subsidiary, BC Iron Nullagine Pty Ltd (“BCIN”), are the registered owners of the following exploration licences; E45/2717, E46/522, E46/523, E46/651, E46/652, E46/653, E46/655, E46/656, E46/657. BC Iron is the registered owner of mining leases M46/515, M46/522 and M46/523.</li> <li>These tenements form part of the Nullagine Iron Ore Joint Venture (“NJV”), an unincorporated joint venture between BC Iron (75% interest) and Fortescue Metals Group Limited (“Fortescue”) (25% interest). The NJV is located approximately 140km north of Newman in the Pilbara region of Western Australia.</li> <li>A mining agreement has been entered into with the Palyku people and an infrastructure agreement has been entered into with the Nyiaparli people.</li> <li>The NJV has been in operations since mining commenced in November 2010.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>No historic exploration has been recorded in the database for these tenements.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Channel iron deposits present as topographic highs in the shape of the palaeochannels. Flat top mesas of high grade iron stand proud of rolling saprolitic hills of mafic origin and sandy plains of granitic weathering.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>As outlined in Section 1, there are 5,713 drill holes in the project database. Of these only two (2) holes have been drilled at a -60° inclination. The remaining 5,711 holes have been drilled vertically to intersect the sub-horizontal mineralisation in an orthogonal manner. Average drill hole depth is 17m.</li> <li>There are no exploration results or drill hole intercepts reported in this Ore Reserve and Mineral Resource estimate. BC Iron has released relevant exploration updates to the ASX on the following dates; 13/3/2007, 3/5/2007, 21/5/2007, 5/6/2007, 17/9/2007, 12/10/2007, 16/11/2007, 23/1/2008, 1/9/2008, 30/9/2008, 2/12/2008 and 25/1/2012.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>Not applicable – no exploration results or drill hole intercepts are discussed in this Ore Reserve and Mineral Resource estimate.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>Not applicable – no exploration results or drill hole intercepts are discussed in this Ore Reserve and Mineral Resource estimate.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>No exploration results or drill hole intercepts are discussed in this Ore Reserve and Mineral Resource estimate. Relevant plans, cross-sections and long-sections have been released in previous announcements of exploration updates to the ASX on the above dates (See Section 2 “Drill Hole Information”)</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Not applicable – no exploration results or drill hole intercepts are discussed in Ore Reserve and Mineral Resource estimate.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Not applicable – no exploration results or drill hole intercepts are discussed in Ore Reserve and Mineral Resource estimate.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>Not applicable – no exploration results or drill hole intercepts are discussed in this Ore Reserve and Mineral Resource estimate.</li> </ul>



## 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	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>Geological logging and sampling data is entered electronically at the time of collection, using library values and validation tools as part of the data entry software. Data is also validated by a database administrator prior to upload to the database.</li> <li>Assay data files are generated electronically by the laboratory and emailed to BC Iron, so at no stage is there a manual data entry step which could introduce errors.</li> <li>Surveyed collar pickups are downloaded directly from RTK GPS instruments which negates data entry. The surveyed collar pickups are validated by the database administrator prior to their inclusion into the database.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>The Competent Persons for this Mineral Resource statement are full-time employees of BC Iron and visit the site on a regular basis.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>Interpretation is based on geological knowledge acquired through drilling and mining since the operations commenced in November 2010. Classification of resource estimations is based on drill spacing &amp; geological and grade continuity.</li> <li>The geological interpretation of mineralised boundaries is considered robust and alternative interpretations do not have the potential to impact significantly on the Mineral Resource.</li> <li>Logged lithological information has been considered at the interpretation and estimation stages.</li> <li>The CIDs are Tertiary aged deposits with no identified structural control. Local grade variability has been identified through grade control drilling and production reconciliations.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>The Mineral Resources are contained within preserved palaeochannels which are now topographic highs (mesas) with a curvi-linear strike. The mesas vary in strike length from 400m to 3.6km, and are commonly 200 to 400m in width. The CID resources often outcrop at surface and typically extend to approximately 10 to 15m below surface.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>Maiden Mineral Resource estimates were completed by Golder Associates in 2008 using Vulcan software and the Ordinary Kriging (“OK”) estimation technique. Subsequent updates of major mesas use both OK and Inverse Distance Weighting (“IDW”) methods.</li> <li>For regional mesas beyond the current mine plan, where limited drill information exists and where Modifying Factors cannot be reasonably assumed, a polygonal estimate has been applied. In such cases the estimate has been classed as Inferred Mineral Resource.</li> <li>Estimation is carried out on major elements Fe, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, P, S LOI and minor elements CaO, K<sub>2</sub>O, Mg, Mn, Na<sub>2</sub>O and Cu. There are no by-products, therefore no such assumptions are required.</li> <li>The block size used reflects half the drill spacing dimension.</li> <li>No assumptions have been made regarding selective mining units.</li> <li>Correlation plots are generated for the main elements and can be used to assess domaining. No regression equations have been derived from the plots to estimate any elements, rather each element is estimated using composite information.</li> <li>Interpretation is completed using geology and mineralisation. All material &gt;55% Fe is considered DSO and all material &gt;45% Fe is considered CID. Sectional interpretation of the mineralisation was undertaken. The sectional interpretations are then used to generate wireframes and the drill hole intervals within the wireframes coded to a database. Assays are composited based on the coded intervals. The wireframes are also used as hard boundaries for estimation into the model.</li> <li>Domaining of the DSO and CID from the remainder of the channel in effect removes low or high outliers. This is supported by histograms and assessment of the coefficient of variation.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>When modelling a grade control estimate over a deposit, the estimate is reconciled against previous Mineral Resource estimates.</li> <li>Validation is completed visually by assessing sections and plans, looking at estimated grades and comparing to drill hole composite input. Mean grades are calculated on a domain basis for both the composites and estimate, and trend analyses are completed for easting, northing and elevation to assess average grades for both the composites and model output. Project reconciliations to date are within acceptable limits considering the nature and style of the deposit.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li>Tonnages are estimated on a dry basis.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>The CID Mineral Resource is reported using a 45% Fe cut-off grade.</li> <li>The DSO Mineral Resource is reported using cut-off grades between 52% and 56% Fe. The cut-off grades were selected to achieve a 57% Fe specification grade.</li> </ul>
<i>Mining factors or assumptions</i>	No assumptions on mining method were made. Mining commenced in November 2010 using surface mining units and a conventional load and haul fleet of mobile equipment.
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>A standard crushing and screening operation was assumed for the DSO Mineral Resource estimate, and operations commenced in November 2010.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>No tailings are produced during the crushing and screening of the DSO material. Waste material is inert.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>A bulk density of 2.84t/m<sup>3</sup> was applied to all mineralisation in the models based upon the results of 91 core samples. The bulk density was calculated using the caliper method where the length of core was measured and numerous caliper measurements were recorded for the diameter. The core was dried in an oven before being weighed and divided by the calculated volume.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>Mineral Resources have been classified into Measured, Indicated and Inferred categories based on drill hole spacing, sample interval, geological interpretation and representivity of all available assay data.</li> <li>Measured Mineral Resources are classed as having drilling at no greater than 25m by 25m spacing which supports both geological and grade continuity, and with a confidence level sufficient to allow the application of Modifying Factors to support detailed mine planning.</li> <li>Indicated Mineral Resources are classed as having drilling at no greater than 50m by 100m spacing which supports both geological and grade continuity, and with a confidence level sufficient to allow the application of Modifying Factors to support long term mine planning.</li> <li>Inferred Mineral Resources are classed as having drilling at a spacing exceeding 50m by 100m (based on limited geological evidence and sampling).</li> <li>The Mineral Resource estimate classification appropriately reflects the Competent Person's view of the deposit.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>A review and update of the initial Mineral Resource estimate (prior to the commencement of operations) was undertaken by Golder Associates in 2009.</li> <li>No formal independent audit of the current Mineral Resource estimate has been undertaken, however a number of internal reviews and audits have been completed.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li>The Mineral Resource estimate is considered robust in light of current production reconciliation data and standard geostatistical estimation methods.</li> <li>The Mineral Resource estimate is a global assessment of the NJV.</li> <li>The accuracy and confidence limits are based on the cut-off grade analysis employed in the technical evaluation and from reconciliation of current production data. The limits are considered robust and appropriate.</li> </ul>

## SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<ul style="list-style-type: none"> <li>The Mineral Resource Estimate as at 31 December 2013 was used for the conversion of a portion of that Mineral Resource to Ore Reserve status.</li> <li>The Mineral Resource Estimate reported is inclusive of the Ore Reserves.</li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>The Competent Persons for this Mineral Resource and Ore Reserve Statement are full-time employees of BC Iron or BCIN and visit the site on a regular basis.</li> </ul>
<i>Study status</i>	<ul style="list-style-type: none"> <li>A Feasibility Study was completed in 2008, prior to the commencement of mining operations. This study reported an Ore Reserve in accordance with the JORC (2004) guidelines.</li> <li>Since the commencement of mining operations in November 2010, production data has been reconciled on a monthly basis to inform and update the physical and economic models which are used as the basis for reporting in accordance with JORC (2012) guidelines.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>Cut-off grades and quality parameters were derived and applied after consideration of product marketability, recoveries and costs associated with mining, processing, site administration, transport, and royalties.</li> <li>To achieve a target product head grade of 57% Fe and 2% Al<sub>2</sub>O<sub>3</sub>, two cut-off grades were applied; where waste is characterised as either less than 55% Fe or greater than 3% Al<sub>2</sub>O<sub>3</sub>. Stockpiling of material in the 55-57% Iron grade range is periodically employed to accommodate local geological variability and is used for on-site blending.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>The Mineral Resources were converted partially to Ore Reserves based on spatial pit optimisations and subsequent detailed pit designs which form the basis for the current mine plan. Inferred Mineral Resources are not included in the Ore Reserves.</li> <li>The Nullagine channel iron deposits are situated at the top of mesa structures, the waste to ore ratios are moderate to low (average 1.2:1). Following technical and economic evaluation, a direct excavation with rock cutting technology (surface miners) was chosen as the preferred mining method. This mining method has been employed since operations commenced in November 2010 and is considered appropriate to the geometry and style of mineralisation.</li> <li>A geotechnical study was undertaken as part of the Feasibility Study, which recommended an overall pit slope design of 45° based on rock mass quality and defect orientation. This recommendation was incorporated in the detailed pit designs used at the operations. A 10% gradient on pit access ramps and internal pit ramps is used.</li> <li>Grade control drilling is undertaken on 25m by 25m spacing with a vertical interval of less than one metre, which is considered appropriate for the geometry and style of mineralisation, and the mining equipment used. Infill drilling is undertaken when further definition is required.</li> <li>Mining performance to date has met expectations and assumptions are within the expected ranges for this mining method. Production data and the associated reconciliation figures indicate that 2.5% to 5% mining dilution (local pit dependent) and 100% mining recovery (all pits) are appropriate factors to use in estimating the Ore Reserve.</li> <li>Minimum mining width used during operations is 3.5m based on machine width (Wirtgen surface miners) and drum width (Vermeer surface miners), and minimum bench width is 20m to cater for safe and efficient load and haul activities.</li> <li>The existing site infrastructure caters for the current mining method. The construction of internal haul roads will be required as the schedule dictates.</li> </ul>

<b>Criteria</b>	<b>Commentary</b>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>• Current undiluted Ore Reserves are comprised 100% DSO. Ore is crushed and screened with a fixed main plant and a smaller mobile plant. Both plants produce an all in minus 10mm fines product. Approximately 50% of ore feed is at product size after surface mining (i.e. passing 10mm sizing). Oversize from mesa edge mining methods (excavator cutting/rock breaking and surface mining) is handled by jaw crushers located at the front end of both crushing &amp; screening plants.</li> <li>• This is considered well-tested standard industry practice considering the nature and quality of the mineralisation.</li> <li>• Bulk sampling and metallurgical test work was undertaken as part of the Feasibility Study prior to production. This identified simple geometallurgical domains. These domains were used for technical marketing and production planning. Production data to date suggests that the geometallurgical domaining is appropriate for the nature and style of mineralisation.</li> </ul>
<i>Environmental</i>	<ul style="list-style-type: none"> <li>• Mining approvals, permits and licenses were granted prior to the commencement of current operations. The applications and submissions relating to these permissions include an assessment of waste rock characterisation and information relating to environmental baseline surveys and impact assessment. A dedicated environmental department comprised of full-time employees of BC Iron undertakes regular environmental monitoring and ensure all clearing and work permits are in place for new areas of disturbance.</li> </ul>
<i>Infrastructure</i>	<ul style="list-style-type: none"> <li>• The NJV has entered into an infrastructure agreement with Fortescue for ore to be railed from Christmas Creek to Port Hedland and then exported through Fortescue's port. Fortescue provides these services.</li> <li>• A private 58km sealed haul road connects the mine to the Christmas Creek rail loadout facility.</li> <li>• Existing onsite infrastructure (including accommodation village, mine operations centre, fixed plant and internal haul roads) supports the current operation.</li> </ul>
<i>Costs</i>	<ul style="list-style-type: none"> <li>• The Feasibility Study included a capital cost estimate derived from formal tenders received from third party suppliers. As the NJV is in operations, upfront capital costs have already been incurred.</li> <li>• Operating cost estimates in the Feasibility Study were derived from first principles and formal tenders received from a range of third party suppliers.</li> <li>• Current cost assumptions are based on existing agreements with contractors. The terms of these agreements are considered commercially sensitive and are not publicly disclosed. However, BC Iron has provided C1 cash cost guidance of A\$46-50 per wet metric tonne over the life of mine. C1 cash costs exclude royalties, marketing and corporate costs.</li> <li>• Full allowance is made for product quality risk based on metallurgical test work, technical marketing and product sales to date.</li> <li>• Price and foreign exchange assumptions are based on the analysis of independent forecasts from a range of third party providers.</li> <li>• Full allowance is made for all Government and private royalties.</li> <li>• Production cost data from the existing operation is monitored and reconciled on a monthly basis to ensure suitability of assumptions.</li> </ul>
<i>Revenue factors</i>	<ul style="list-style-type: none"> <li>• All revenue factor assumptions are based on inputs from the current production plan, pricing received from spot sales and under other third party agreements.</li> <li>• Price and foreign exchange assumptions are based on the analysis of independent forecasts from a range of third party providers.</li> </ul>
<i>Market assessment</i>	<ul style="list-style-type: none"> <li>• In-house and independent analysis of future commodity markets is undertaken on a periodic basis.</li> <li>• Studies to date, together with information from the current operation suggest that, at the time of reporting, extraction could be reasonably justified for the life of the current mining plan.</li> </ul>

<b>Criteria</b>	<b>Commentary</b>
<i>Economic</i>	<ul style="list-style-type: none"> <li>• Cash flows were modelled on a real basis and therefore inflation was not considered.</li> <li>• Depreciation and tax were calculated based on relevant accounting standards.</li> <li>• An appropriate post-tax real discount rate was applied to cash flows to generate the NPV, with sensitivity analyses conducted on price, exchange rate, capital costs and operating costs.</li> <li>• As operations have commenced, the economic model is updated on a regular basis for planning purposes. The current financial model demonstrates that the NJV has a significant NPV.</li> <li>• Sensitivity analyses to the significant assumptions continue to be undertaken. NPV ranges from these sensitivity analyses are considered for long term planning purposes and Ore Reserve reporting.</li> </ul>
<i>Social</i>	<ul style="list-style-type: none"> <li>• Operations commenced in November 2010. Contractual agreements with all key stakeholders are in place and active. These agreements include a mining agreement with the Palyku people and an infrastructure agreement with the Nyiaparli people.</li> </ul>
<i>Other</i>	<ul style="list-style-type: none"> <li>• Operations commenced in November 2010. As part of the Feasibility Study and project financing, a risk register was developed to identify and control project risk (naturally occurring and otherwise).</li> <li>• All material legal agreements, marketing arrangements and governmental approvals are in place and current for the existing operations.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>• The Ore Reserve classification is considered appropriate given the nature of the deposit, geological confidence, economic modelling and significant production reconciliation data. The Ore Reserve classification appropriately reflects the Competent Person's view of the deposit.</li> <li>• None of the Ore Reserve is derived from Inferred Mineral Resources.</li> <li>• None of the Probable Ore Reserve is derived from Measured Mineral Resources.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• A review of the initial Ore Reserve was undertaken by Coffey Mining in 2009, prior to the commencement of operations.</li> <li>• Coffey Mining also reviewed the Ore Reserves as independent technical expert for the lenders who provided debt funding for the transaction with Fortescue in December 2012.</li> <li>• A number of internal reviews and audits have also been undertaken.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li>• The Ore Reserve estimate is considered robust in light of current production reconciliation data and estimation methods. No statistical analysis procedures have been applied.</li> <li>• The Ore Reserve report is a global assessment of the NJV based on the contracted infrastructure agreement with Fortescue (life of mine contract).</li> <li>• The accuracy and confidence limits are based on the current mine design and cut-off grade analysis employed in the technical and economic evaluation and from reconciliation of current production data. The limits are considered robust and appropriate.</li> </ul>