The Companies Officer
Australian Securities Exchange Ltd
Level 40, Central Park
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PERTH WA 6000

23 August 2019

Dear Madam or Sir

Fortescue Ore Reserves and Mineral Resources Update: Operating Properties

Fortescue Metals Group (ASX:FMG, Fortescue) presents the Ore Reserves and Mineral Resources statement for its Hematite and Magnetite operating properties at 30 June 2019.

Ore Reserves and Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, December 2012 (the JORC Code) as required by the Australian Securities Exchange. The annual summary will be included in Fortescue's 2019 Annual Report and should be read in conjunction with the enclosed supporting technical information (Attachment 1 – Hematite Ore Reserves and Mineral Resources Report and Attachment 2 – Magnetite Ore Reserves and Mineral Resources Report).

Hematite Ore Reserves and Mineral Resources – Operating Properties

	Reporting	30 June 2019		30 June 2018	
	Basis	Million Tonnes	Fe %	Million Tonnes	Fe %
Ore Reserves	(Dry Product)	2,288	57.5	2,250	57.4
Mineral Resources	(Dry In-Situ)	6,175	56.3	6,122	56.4

Operating Properties include the Chichester and Solomon Hubs as well as the Eliwana deposit (part of the Western Hub). Ore deposit types include Bedded Iron (BID), Channel Iron (CID) and Detrital Iron (DID) mineralisation.

A Mineral Resource update for the Iron Bridge Magnetite project was completed by Snowden Mining Industry Consultants in 2019 and provided in an ASX release dated 2 April 2019.

Chief Executive Officer Elizabeth Gaines said, "We are pleased to report our Hematite Ore Reserves and Resources at our operating properties maintained at over six billion tonnes, supporting the sustainability of our core iron ore assets across our Solomon and Chichester Hubs, as well as our developing Western Hub."

"Our Eliwana Mine and Rail Project in the Western Hub is now underway, in addition to our Iron Bridge Magnetite Project which is developing Australia's largest JORC compliant magnetite resource."

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Yours sincerely
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Background

The Iron Bridge Project is owned through an unincorporated joint venture (UJV) between FMG Magnetite Pty Ltd (69 per cent) and Formosa Steel IB Ltd (31 per cent). FMG Magnetite Pty Ltd is a subsidiary of FMG Iron Bridge Ltd, a Hong Kong registered company owned by Fortescue (88 per cent) and a subsidiary of Baosteel Resources International Company Limited (12 per cent). Formosa Steel IB Pty Ltd is a 100% wholly owned entity of Formosa Plastics Group.

Fortescue
The New Force in Iron Ore

Ore Reserves and Mineral Resources Update Operating Properties

Fortescue
The New Force in Iron Ore

Attachment 1
Hematite Ore Reserves and Mineral Resources Report

Fortescue Hematite Mineral Resource Reporting as at 30th June 2019
Chichester Deposits (Cloudbreak, Christmas Creek & Kutayi)

Geology

The Cloudbreak, Christmas Creek and Kutayi deposits lie within the Chichester Ranges, in northern Western Australia. Iron mineralisation is hosted by the Nammuldi Member which is the lowest member of the late Archaean aged Marra Mamba Iron Formation (MMIF). The Nammuldi Member is characterised by extensive, thick and podded iron rich bands, separated by equally extensive units of siliceous and carbonate rich chert and shale. The Nammuldi Member in the Chichester Range is interpreted to be up to 60 metres in true thickness. Underlying the Nammuldi Member rocks are black shales and volcanic rocks belonging to the Jeerinah Formation. Extended periods of tectonic activity have variably folded and faulted these rocks, together with weak metamorphism. Subsequent erosion and hardcapping or lateritic processes have altered these rocks, and present outcrop of Nammuldi Member represents a ridge of low-lying hills (relief up to 30 metres) throughout the prospect areas. These ridges are recognised as the Chichester Ranges.

Drilling within the prospects has proved that the Nammuldi target horizon extends below cover away from the hills. In these regions (recognised mineralisation has been intersected more than 6 kilometres from the outcrop) the target iron formation can be overlain by Tertiary age colluvium and alluvium (younger than 65 Million years). This colluvium can contain both cemented and un-cemented detrital products of iron enriched material, BIF, chert and shale within a matrix of finer grained sediments (including clays). Percolation of groundwater through the weathering profiles has resulted in precipitation of both calcrete and ferricrete creating resistant horizons within the extensive regolith. More proximal to the Fortescue Marsh to the south, the Tertiary sediments become finer grained and more clay dominant, with some recognised calcareous zones. A simplified geological cross section through the Chichester Ranges is shown in Figure 1. A typical stratigraphic section of the Chichester Ranges is shown in Figure 2.

Figure 1

Simplified Schematic geological section through Chichester Ranges

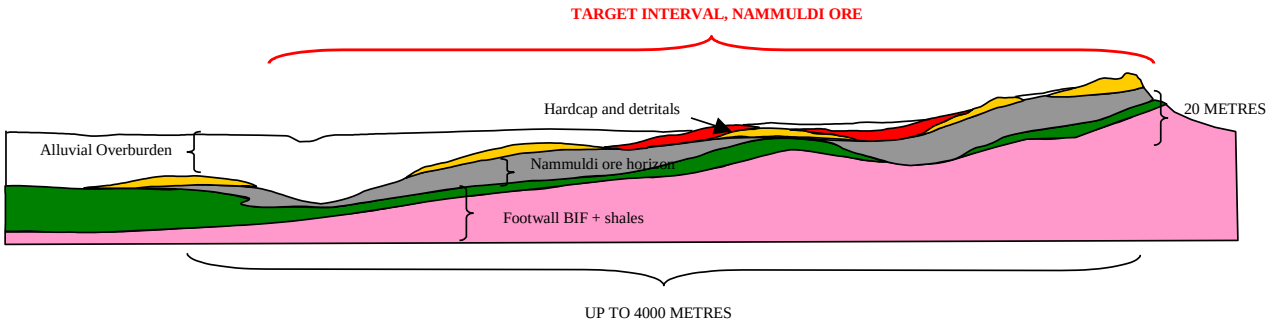
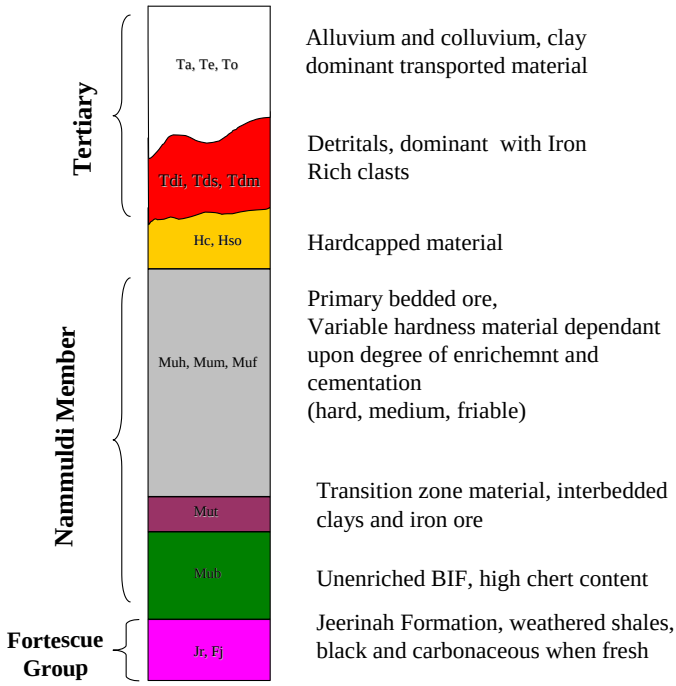


Figure 2

Typical stratigraphic section of Chichester Ranges ore intersection



Structure

The structural geology of the area is predominantly concealed with limited outcrop exposure. However, small scale faulting and folding (metre offsets) can be observed in some outcrops, and larger-scale faults are interpreted from aeromagnetics and regional mapping, plus drilling results. There is currently no evidence to suggest that the faulting or folding crosscuts the mineralisation. In places faults may be the conduit for the mineralisation (hypogene model).

Iron Mineralisation Styles

The mineralisation is characteristically hematite and goethite (with variable degrees of alteration between these minerals). Main gangue minerals are kaolinite, quartz and gibbsite, with minor gangue including carbonates, either calcite or dolomite.

Iron is enriched from the parent rock (Banded Iron Formation, BIF) by processes of supergene and, or hypogene enrichment. In both processes, the original iron is present as magnetite bands within the BIF (iron banded with cherts and lesser carbonates), and oxidation of the magnetite to hematite and goethite occurs. Contemporaneous with the iron enrichment, the original gangue minerals are partially to fully leached out or replaced by iron minerals, giving an overall increasing content of iron minerals depending upon the degree of enrichment. A volume loss of up to 35% can occur with enrichment due to loss of gangue minerals.

Microplaty hematite (MplH) is recognised in varying degrees throughout Fortescue's Chichester Range deposits. This is interpreted to occur due to hypogene enrichment of the MMIF in proximity to tectonic structures (faults or tight folds), which have allowed upward fluid flow, and low-grade metamorphism of the parent rock, resulting in extensive hematite mineralisation.

The majority of the iron mineralisation is martite-goethite resulting from supergene enrichment of a BIF substantially rich with magnetite (oxidised to martite) in the parent rock.

Hardcapping (ferricrete development) of portions of the mineralisation has been identified in mapping and drilling. This process, formed at latter stages of geological development (Tertiary), has changed the physical and geochemical properties of the upper portions of the mineralisation (up to 10 metres thickness). Hardcapped material has a higher density being pervasively cemented by goethite, commonly has vitreous goethite included in the matrix, and can be quite vuggy. An associated increase in gangue content may be seen in hardcap due to the near surface processes of ferricretisation.

Current Drainage

Ephemeral drainages dissect the Chichester Ranges, generally in a southerly draining direction and commonly display alluvial sediments characterised by silt and sand sized sediments. These shallow drainages become more meandering and braided on the shallower topography towards the Fortescue March. The Fortescue Marsh is a wide shallow basin (up to 13 kilometres wide) associated with a widening of the Fortescue River, which during flood events fills with water and can remain filled for extended periods. The surface of this feature is Quaternary clay rich sediments.

Data and Mineral Resource Estimation

The Mineral Resource estimate for each deposit is based solely on reverse circulation (RC) drilling (in addition, numerous diamond drill holes have been drilled, some of these were twinned with RC drill holes to check geological and grade continuity, the remainder were drilled to provide material for metallurgical test work or as downhole geophysical calibration holes). Drill hole spacing ranges from 800 x 200m to 50 x 50m depending on the stage of development ahead of mining. For Grade Control (GC) drilling, holes are drilled on a 25m x 25m pattern. Drill hole collar locations were surveyed using a base station differential GPS with collar accuracies to within 5cm (laterally and vertically).

Exploration RC samples and the majority of GC samples were collected over 1m intervals using cone splitters from which ~3kg of material was pulverised to produce a sub-sample for analysis. Field quality control procedures involved insertion of assay standards and collection of duplicate samples at the rig. Sample pulps were analysed for Fe, Al_2O_3, SiO_2, TiO_2, CaO, MgO, Na_2O, K_2O, Mn/MnO, P, S, As, Pb, Zn, Cu and Cl by XRF and 3-point LOI (at 370, 650 & 1,000°C) by thermogravimetric methods. This is considered to be close to “a total analysis”.

Geochemical and geological logging data were used to define geological domains within each deposit, 3-D wireframes were then used to code the drilling data and define samples within each geological domain. Model limits were controlled by drill hole data extents and Mining Lease boundaries. Statistics were determined for each analyte within each domain, this confirmed that each domain was statistically discrete and justified the use of hard boundaries in statistical analysis and modelling.

An indicator method was used to define high grade zones within each stratigraphic unit. For Cloudbreak and Christmas Creek the Resource Models were constructed using a 25mE x 25mN x 1mRL parent block size with sub-celling to 12.5mE x 12.5mN x 1mRL to aid in following the folded domains and to allow integration of Grade Control Models. Grade Control Models were constructed with a parent block size of 12.5mE x 12.5mN x 1mRL and no sub-celling. At Kutayi the Resource Model was constructed using 50mE x 100mN x 1mRL blocks. All estimation was undertaken using Ordinary Kriging (OK) at parent cell scale. Multiple estimation search passes were used for each domain. Hard boundaries were applied between all estimation domains. Validation of the block models (using visual, statistical and trend analysis methods) shows good correlation of the input data to the estimated grades.

The mineralised domains have demonstrated sufficient geological and grade continuity to support the definition of Mineral Resource and Ore Reserves and the classification applied under the JORC Code. Drill spacing and data integrity, geological complexity, estimation risk and mineralisation continuity based on the semi-variogram ranges of influence were used to determine Mineral Resource classifications.

For Mineral Resource reporting purposes the Cloudbreak and Christmas Creek Resource Models were regularised to a 12.5mE x 12.5mN x 1mRL block size prior to the GC Models being merged. The resulting combined Resource/GC Models were then flagged with the mined-out surface (as at April 30th 2019), mining complete exclusion zones and heritage restricted areas (where appropriate). Adjustments were then made to the Measured Mineral Resources to subtract the mined tonnage (assumed at average grade) for May and June, and to add in the stockpiled tonnes.

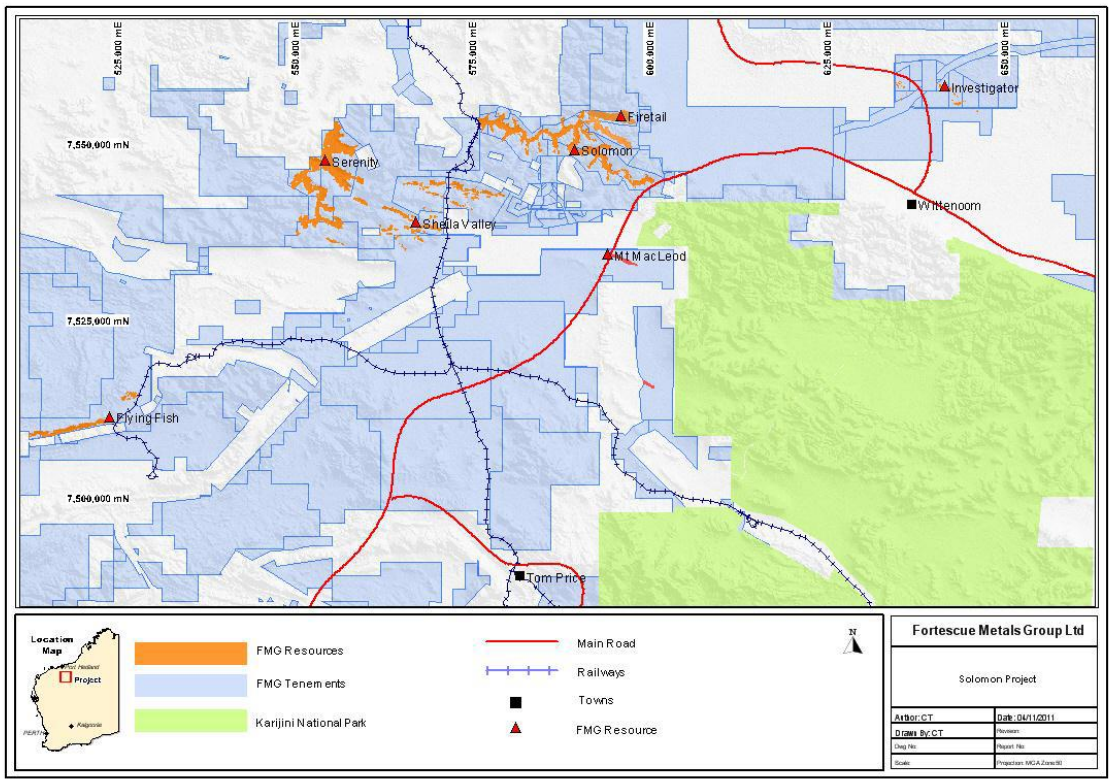
Solomon Deposits (Firetail, Kings & Queens)

Geological Setting

The Solomon Project area is situated approximately 60 kilometres to the north of the Tom Price township in the northern Hamersley ranges (Figure 3). Outcropping geology in the project area is dominated by the Dales Gorge, Whaleback Shale and Joffre Members of the Brockman Iron Formation which hosts large BID throughout the Hamersley Province. The Firetail deposit contains the major tonnages of BID at Solomon, where geological favourable environments have allowed for the formation and preservation of large tonnages of iron mineralisation.

Incised into this bedrock geology are regional palaeochannel systems, predominantly one to two kilometres in width, and stretching for tens of kilometres. During the Miocene period deep chemical weathering and erosion of the generally iron rich material into these fluvial channels formed CID. Through Fortescue's interpretation of drill hole results, the CID can be subdivided into an upper 'hard CID' and a lower 'ochreous CID'. Clay lenses are observed as semi-discrete bands often several meters thick, sometimes of a poddy nature although often traceable between drill holes. Approximately 40 km of buried CID is preserved in the Kings CID system, with a further 25 km of CID located in the Serenity deposit to the west. Other CID occurrences are also known throughout the Solomon project area. The material overlying the CID (and other areas) has been eroded from adjacent mineralised and un-mineralised bedrock. This clastic material is concentrated into horizons of elevated iron grade termed DID, which forms part of the sequence of overlying late Tertiary aged alluvial and colluvial deposits.

Figure 3 – Location of the Solomon Deposits



Data and Mineral Resource Estimation

The Mineral Resource estimates for each deposit are based solely on Reverse Circulation (RC) drilling. Drill hole spacing includes areas at 400 x 100m, 200 x 100m, 100 x 50m and 50 x 50m, with some areas infilled at 25 x 25m. Drill hole collar locations were surveyed using a base station differential GPS with collar accuracies to within 10cm (laterally and vertically). In addition, diamond drills holes have been drilled

to provide material for metallurgical test work and some were twinned with RC drill holes to check geological and grade continuity. A number of RC/RC twins were also drilled, again to check geological and grade continuity. No major bias was identified.

Exploration RC samples were collected over 1m intervals using cone splitters from which ~3kg of material was pulverised to produce a sub-sample for analysis. Field quality control procedures involved assay standards and duplicates, 'field' standards were inserted at a rate of 1 in 100 samples, pulp standards at 1 per lab batch and duplicates at a rate of 1 in 30 samples. Sample pulps were analysed for Fe, Al_2O_3, SiO_2, TiO_2, CaO, MgO, Na_2O, K_2O, Mn/MnO, P, S, As, Pb, Zn, Cu and Cl and 3-point LOI (at 370, 650 & 1,000°C) by thermogravimetric methods (note: for some samples only the 1,000°C LOI measurement was made). This is considered to be close to a "total analysis".

Geochemical and geological logging data were used to define geological domains within each deposit (Table 1), 3-D wireframes were used to code the drilling data and define samples within each geological domain. Model limits were controlled by drill hole data extents and Mining/Exploration Lease boundaries. Statistics were determined for each analyte within each domain, this confirmed that each domain was statistically discrete and justified the use of hard boundaries in statistical analysis and modelling.

Table 1 - Geological Domains within the Resource Models

Firetail North	Firetail South	Kings	Queens
Detritals	Detritals	Detritals	Detritals
CID Lower	Hardcap	Hardcap (CID)	Oakover
J1	CID Lower	CID Upper	Hardcap
J2	Joffre	CID Lower	CID Upper
J3	Whaleback Shale	Bedded	CID Lower
Whaleback Shale	D4	Joffre	Peat
D4	D3	D4	Bedded
D3	D2	D3	Dolerite Dykes
D2	D1	D2	
D1	Mt. McRae Shale	D1	
Mt. McRae Shale		Whaleback Shale	
		Mt. McRae Shale	

An indicator method was used to define high grade zones within each stratigraphic unit. The block models were constructed using a parent block size appropriate for the drill hole spacing. In the Firetail South area, sub-celling to 5.0mE x 5.0mN x 0.25mRL was used, in Kings and Firetail North a minimum block size of 12.5mE x 12.5mN x 1mRL was used and in the Queens area parent cells of 50mE x 25mN x 1mRL with sub-celling to 12.5mE x 12.5m N x 1mRL was used. All estimation was undertaken using Ordinary Kriging (OK) at parent cell scale. Multiple estimation search passes were used for each domain. Hard boundaries were applied between all estimation domains. Validation of the block models (using visual, statistical and trend analysis methods) shows good correlation of the input data to the estimated grades.

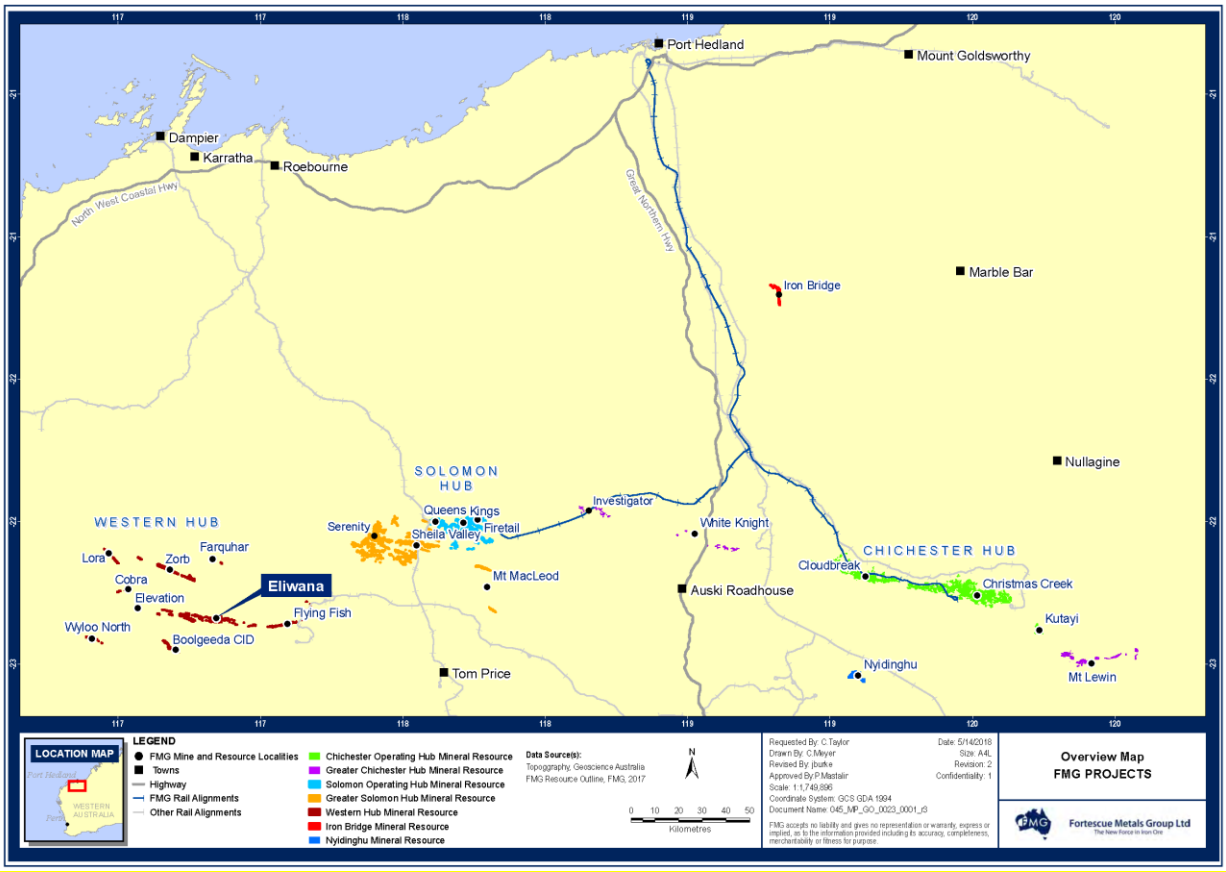
The mineralised domains have demonstrated sufficient geological and grade continuity to support the definition of Mineral Resource and Ore Reserves and the classification applied under the JORC Code. Drill spacing and data integrity, geological complexity, estimation risk and mineralisation continuity based on the semi-variogram ranges of influence were used to determine Mineral Resource classifications.

Eliwana (part of Western Hub)

Project location

The Eliwana deposit is located approximately 100km north-west of Tom Price and 120km west of Fortescue's Solomon operations in the Pilbara region of Western Australia (Figure 4).

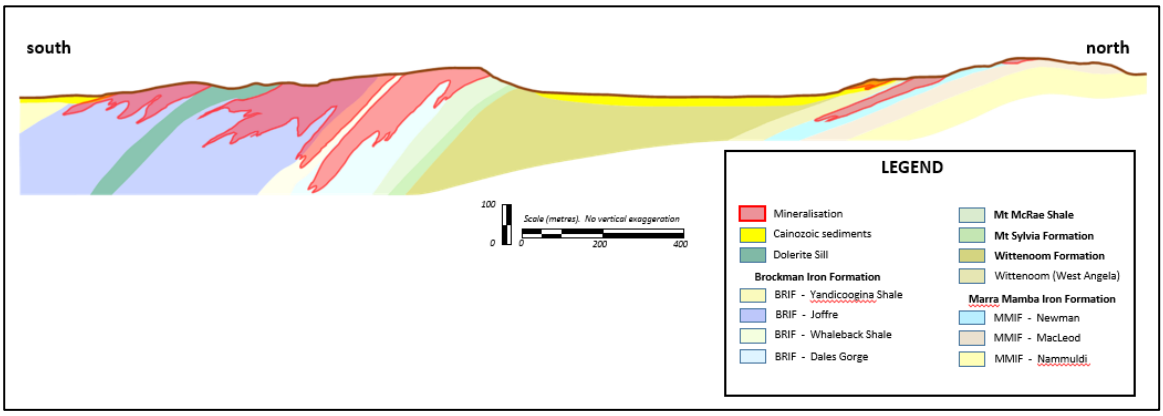
Figure 4 - Fortescue Mineral Resource overview



Geology

The Eliwana deposit is situated on the southern limb of the Jeerinah anticline in the western Hamersley Province. The deposit covers a narrow zone that follows the outcrop of mineralised Brockman and Marra Mamba Iron Formations. Tertiary sediments occur in the valley separating these outcropping formations. Mineralisation predominantly occurs as bedded iron deposits (BID) with some detrital iron deposits (DID). Mineralisation is distributed variably within an area of approximately 40km along strike and 3.5km across strike. Mineralisation occurs at surface and extends to depths of 350m below surface (Figure 5).

Figure 5 - Eliwana schematic geological cross section



Data and Mineral Resource Estimation

Drill samples at Eliwana are from Reverse Circulation (RC) drilling rigs with cone splitters. RC drill holes have been drilled on a nominal 50m × 25m, 50m × 50m, 100m × 50m, 100m × 100m, 200m × 100m, 400m × 100m and 800m × 100m spaced grid.

All data is captured electronically and has to pass extensive quality assurance and quality control (QAQC) procedures. QAQC is an ongoing analysis and includes validation of drill hole collar coordinates, field standards, laboratory standards, field duplicates, twin holes as well as 'round robin' checks between laboratories. No major issues were identified with precision, accuracy or bias. The estimations incorporate all of the validated RC holes drilled in the area by Fortescue that have collar and assay information loaded into the acQuire database. Geological logging, geochemistry and geophysical data were used to identify the stratigraphic units which were then modelled in 3D.

Grades estimated in the models were Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI 371, LOI 650, LOI 1000 and LOI total. Variography and detailed statistics using Snowden Supervisor software was used to determine the estimation parameters for the grade modelling. Ordinary Kriging and inverse distance cubed were used as modelling techniques to estimate grades. Estimation was done using Vulcan software.

The estimates have been classified as Measured, Indicated and Inferred Mineral Resources and reported in accordance with the JORC Code, 2012 Edition. The classification is derived from consideration of the confidence in geological and mineralisation continuity, sample spacing, sample statistics, estimation parameters, interpretational uncertainties, mapping and the potential for economic extraction.

Table 2 - Hematite Operational Mineral Resources (as at 30th June 2019)

	June 2019						June 2018					
	In-Situ Tonnes (mt)	Iron Fe %	Silica SiO_2 %	Alumina Al_2O_3 %	Phos P %	Loss On Ignition LOI %	In-Situ Tonnes (mt)	Iron Fe %	Silica SiO_2 %	Alumina Al_2O_3 %	Phos P %	Loss On Ignition LOI %
Cloudbreak												
Measured	460	56.6	5.69	3.44	0.058	8.6	479	56.7	5.55	3.48	0.057	8.7
Indicated	414	56.2	6.66	3.43	0.060	8.0	428	56.1	6.69	3.43	0.059	8.0
Inferred	123	56.4	6.31	3.60	0.054	7.7	134	56.4	6.42	3.56	0.053	7.7
Total	**997**	**56.4**	**6.17**	**3.45**	**0.058**	**8.3**	**1,041**	**56.4**	**6.13**	**3.47**	**0.058**	**8.3**
Christmas Creek												
Measured	556	56.9	6.28	3.13	0.047	7.9	515	56.9	6.28	3.09	0.047	7.8
Indicated	935	56.1	6.59	3.70	0.051	7.9	1,004	56.1	6.58	3.72	0.051	7.9
Inferred	463	55.6	6.90	3.80	0.055	7.9	501	55.6	7.05	3.75	0.054	7.8
Total	**1,954**	**56.2**	**6.57**	**3.56**	**0.051**	**7.9**	**2,020**	**56.2**	**6.62**	**3.57**	**0.051**	**7.9**
Sub-total Chichester Hub												
Measured	1,016	56.8	6.01	3.27	0.052	8.2	994	56.8	5.93	3.28	0.052	8.2
Indicated	1,349	56.1	6.61	3.62	0.054	7.9	1,433	56.1	6.61	3.64	0.053	7.9
Inferred	586	55.8	6.77	3.75	0.055	7.8	635	55.8	6.92	3.71	0.054	7.8
Total	**2,951**	**56.3**	**6.44**	**3.53**	**0.053**	**8.0**	**3,061**	**56.3**	**6.45**	**3.53**	**0.053**	**8.0**
Firetail												
Measured	14	57.9	6.28	3.34	0.121	6.9	8	57.5	5.91	3.43	0.123	7.8
Indicated	195	58.1	6.86	2.67	0.119	6.8	170	58.1	6.79	2.81	0.113	6.7
Inferred	110	56.1	8.02	3.74	0.106	7.4	133	57.2	7.36	3.35	0.107	7.0
Total	**319**	**57.4**	**7.23**	**3.07**	**0.115**	**7.0**	**310**	**57.7**	**7.01**	**3.06**	**0.111**	**6.8**
Kings and Queens												
Measured	183	54.8	7.48	3.31	0.086	10.4	152	54.9	7.96	3.02	0.087	9.9
Indicated	1,137	55.1	8.25	3.34	0.079	9.0	919	55.3	7.98	3.40	0.072	8.9
Inferred	585	54.6	8.71	3.72	0.079	8.7	669	55.0	8.00	3.47	0.082	9.2
Total	**1,905**	**54.9**	**8.32**	**3.44**	**0.080**	**9.0**	**1,741**	**55.1**	**7.99**	**3.39**	**0.077**	**9.1**
Sub-total Solomon Hub												
Measured	197	55.1	7.39	3.15	0.089	10.1	160	55.0	7.86	3.04	0.088	9.8
Indicated	1,331	55.5	8.05	3.25	0.085	8.7	1,089	55.7	7.79	3.31	0.078	8.6
Inferred	694	54.9	8.60	3.72	0.083	8.5	802	55.4	7.89	3.45	0.086	8.9
Total	**2,223**	**55.3**	**8.16**	**3.39**	**0.085**	**8.7**	**2,051**	**55.5**	**7.84**	**3.34**	**0.082**	**8.8**
Eliwana												
Measured	229	60.0	4.89	2.61	0.141	5.8	**229**	**60.0**	**4.89**	**2.61**	**0.141**	**5.8**
Indicated	122	58.4	5.44	2.77	0.096	7.2	**113**	**58.5**	**5.40**	**2.81**	**0.098**	**7.1**
Inferred	650	58.1	5.76	3.40	0.102	7.0	**668**	**58.4**	**5.70**	**3.21**	**0.107**	**6.7**
Total	**1,001**	**58.6**	**5.52**	**3.14**	**0.110**	**6.7**	**1,010**	**58.8**	**5.48**	**3.03**	**0.114**	**6.6**
Total Hematite Operational Mineral Resources												
Measured	1,442	57.0	6.02	3.15	0.071	8.1	1,383	57.1	5.98	3.14	0.071	8.0
Indicated	2,802	55.9	7.24	3.40	0.071	8.2	2,634	56.0	7.05	3.47	0.066	8.2
Inferred	1,930	56.2	7.09	3.62	0.081	7.8	2,105	56.5	6.90	3.45	0.083	7.9
Total	**6,175**	**56.3**	**6.91**	**3.41**	**0.074**	**8.1**	**6,122**	**56.4**	**6.76**	**3.39**	**0.073**	**8.0**

Notes:

- Mineral Resources are compared with those at 30th June 2018.
- Chichester Mineral Resources are quoted at a cut-off grade of 53.5% Fe, Solomon Hub and Eliwana Mineral Resources are reported at a cut-off grade of 51.5%.
- Mineral Resources are inclusive of Ore Reserves and Stockpiles

Fortescue Hematite Ore Reserve Reporting as at 30th June 2019

Ore Reserves

Fortescue Ore Reserves are based on integrating contributions from the various mine-sites and assembling bedded iron deposit (BID) and channel iron deposit (CID) into blended saleable products at the port.

The BID products are Western Pilbara Fines (WPF), Fortescue Blend (FB) and Super Special Fines (SSF). The CID product is Kings CID (KCID). Within the primary BID and CID product streams, controlled blending of non-primary ore types occurs on an opportunistic basis to optimise product outcomes.

Due to the deposit integration inherent in the Ore Reserve, the following supporting data is comprehensive and addresses the Ore Reserve generation process collectively for all deposits.

A separate JORC Table 1 (Section 4) was prepared specifically for Eliwana in 2018, however the description below relates to the integrated mining operation that includes all contributing operations.

Mining Models

Mining Models consist of regularised resource models overprinted with grade control models. Application of reconciliation grade adjustment factors to incorporate historical mining losses and dilution into the in-situ estimates is used to generate estimates of Run of Mine (ROM) ore. Conversion of ROM to Product by the ore processing facilities (OPFs) is achieved by the application of OPF upgrade factors. This process is summarised as

1. The Resource models are regularized to a block size consistent with both the Resource Model and Grade Control (GC) Model block size (typically 12.5m x 12.5m x 1m).
2. Grade Control models – built to an origin and orientation consistent with the Resource Models - are merged into the regularized resource models, creating the Merged Models.
3. The Merged Models are regularized to a block size consistent with the selective mining unit (SMU) that is appropriate to mining method that will be applied for each style of deposit (eg 25m x 25m x 3m).
4. Factoring of in-situ grades is based on reconciliation between the underlying models (Resource or GC) and actual diluted plant feed, back-calculated from sales. Twelve months of historical model performance is used to derive factored grades in the Mining Models. Grade adjustment factors for Fe and major impurities (SiO_2 and Al_2O_3) are typically minor.
5. Application of respective OPF mass yield and upgrade factors. The Chichester OPF upgrade factors are based on a combination of actual OPF performance and metallurgical test-work. The Solomon CID mining models incorporate theoretical Kings OPF yields and upgrade factors based on metallurgical test-work. The Firetail and Eliwana OPFs are operating in “dry” mode and therefore have no beneficiation factors applied.

Scheduling Inventory

Pit optimisation software is used to determine how the mining inventory varies as a function of ore cut-off grade (Fe) and limiting strip-ratio for selected ultimate pit wall slopes.

A combination of selected Fe cut-off and limiting strip ratio is then used to identify the starting geometry for the pit design. Higher strip-ratio peripheral shells are used to identify where ramps should be located without unnecessarily compromising value.

Due to the large lateral extensions and flat and shallow nature of the deposits in the Chichesters it is not feasible, nor necessary, to maintain detailed ultimate pit designs for the entire deposits. Life of Mine (LOM) planning is carried out using Lerchs-Grossman pit optimisation geometries (with conservative slope angles)

to generate inventories based on limiting strip ratios. Detailed pit designs are developed closer to the time of mining of the deposit parts, incorporating the required ramp and wall geometries to facilitate safe, practical and efficient mining.

Solomon and Eliwana mining is by conventional drill and blast followed by excavators, and Life of Mine (LOM) ultimate pit designs are generated and used as the bounding geometry for Ore Reserves estimation.

In all cases, Inferred material is converted to waste, generating mining costs but contributing no revenue.

Mine Scheduling

Mine scheduling is integrated across all Fortescue properties to maximise value. Chichester mineralisation is combined with Solomon BID (principally from Firetail, and in future with Eliwana) to manufacture the BID blended products - WPF, FB and SSF. The CID product, KCID is predominantly sourced from the Kings and Queens deposits and will include a proportion of BID and detrital iron deposit (DID) mineralisation incidental to mining the CID channels.

Scheduling aims to maintain the target blended ore quality and maximise NPV. In general terms this equates to deferring higher strip ratio, higher mining cost mineralisation until later in the collective scheduled mine life. A commercial linear programming package is used to identify the integrated mining sequence that will deliver the maximum NPV for the nominated constraints. Major constraints include the nominated ore tonnage and blend quality and the maximum OPF treatment rates that, in turn, are matched to the logistics capacity of the Fortescue rail and port system.

Blending between sites takes advantage of impurity synergies that maximise the ore supply relative to products being sourced from single sites. The proportion of each of the collective BID and CID products will change with time depending on the respective ore quality being delivered from individual deposits. The constituent products are manufactured at the port by blending individual trains onto port stockpiles.

The scheduling inventory is initially collected into ore “bins” based on Fe and impurity cut-offs. Since mineralisation distributions and presentation varies with time, so too may the shorter term effective ore cut-off grade. The Ore Reserve cut-off can be approximated by an Fe-only cut-off that closely approximates that portion of the scheduling inventory that is converted into product over the life of the Ore Reserve schedule (see below).

Financial Analysis

The scheduling programme utilises unit revenue (per product brand) and cost (per deposit per activity) information to allow an NPV to be targeted and to allow relative NPV values to be assigned to schedule alternatives, however these do not constitute a robust valuation. Further financial analysis to determine more realistic absolute financial indicators and sensitivity analysis is performed separately using the quantity and quality data extracted from the scheduler. This analysis is performed by the Finance team using audited business valuation models and assumptions.

A +/-30% sensitivity of the main financial drivers was carried out on the base case valuation and was demonstrated to be robustly NPV positive under all cases tested.

Ore Reserve Statement

The Fortescue hematite Ore Reserve is quoted on a dry product basis as of 30 June 2019. Individual BID deposits included in the Ore Reserve include Cloudbreak, Christmas Creek, Kutayi, Firetail and Eliwana.

The Kings and Queens Ore Reserves are principally CID mineralisation.

Due to opportunistic blending and stockpiling, the Ore Reserve is not reported at a fixed cut-off. However, the reported Ore Reserve quantity and quality can be closely approximated by the following Fe cut-ff grades:

Site	Cut-Off Grade (%Fe)
Cloudbreak	53.5
Christmas Creek	53.5
Firetail	53.5
Kings	52.0
Queens	53.0
Eliwana	55.5

Ore Reserves are summarised in Table 3.

Table 3 - Hematite Ore Reserves as at 30th June 2019

	June 2019						June 2018					
	Product Tonnes (mt)	Iron Fe %	Silica SiO_2 %	Alumina Al_2O_3 %	Phos P %	Loss On Ignition LOI %	Product Tonnes (mt)	Iron Fe %	Silica SiO_2 %	Alumina Al_2O_3 %	Phos P %	Loss On Ignition LOI %
Cloudbreak												
Proved	231	57.6	5.29	2.69	0.055	8.27	270	57.3	5.45	2.86	0.053	8.38
Probable	255	57.4	5.82	2.67	0.063	7.67	276	57.1	6.09	2.81	0.059	7.69
Total	**486**	**57.5**	**5.57**	**2.68**	**0.059**	**7.96**	**546**	**57.2**	**5.78**	**2.83**	**0.056**	**8.03**
Christmas Creek												
Proved	340	56.9	6.07	2.75	0.048	7.59	302	57.0	5.96	2.77	0.040	7.72
Probable	492	57.5	5.18	2.96	0.054	7.61	528	57.1	5.52	3.09	0.046	7.68
Total	**832**	**57.3**	**5.54**	**2.88**	**0.052**	**7.60**	**831**	**57.1**	**5.68**	**2.97**	**0.044**	**7.69**
Sub-total Chichester Hub												
Proved	570	57.2	5.75	2.73	0.051	7.86	572	57.1	5.72	2.81	0.046	8.03
Probable	748	57.5	5.40	2.86	0.057	7.63	804	57.1	5.71	2.99	0.050	7.68
Total	**1,318**	**57.4**	**5.55**	**2.80**	**0.055**	**7.73**	**1,376**	**57.1**	**5.72**	**2.92**	**0.049**	**7.82**
Firetail												
Proved	8	59.5	5.69	2.58	0.115	6.07	4	58.7	6.24	2.71	0.113	6.60
Probable	118	59.1	6.02	2.24	0.112	6.61	90	59.3	5.66	2.45	0.107	6.68
Total	**126**	**59.1**	**6.00**	**2.26**	**0.113**	**6.57**	**94**	**59.2**	**5.68**	**2.46**	**0.107**	**6.67**
Kings and Queens												
Proved	102	56.0	6.29	2.72	0.078	10.54	91	55.9	7.23	2.57	0.074	9.96
Probable	539	56.9	6.68	2.69	0.070	8.79	475	57.1	6.50	2.69	0.064	8.76
Total	**641**	**56.8**	**6.62**	**2.70**	**0.071**	**9.07**	**566**	**56.9**	**6.61**	**2.67**	**0.066**	**8.95**
Sub-total Solomon Hub												
Proved	110	56.3	6.24	2.71	0.080	10.22	95	56.0	7.18	2.57	0.076	9.82
Probable	657	57.3	6.56	2.61	0.077	8.40	565	57.4	6.36	2.65	0.071	8.42
Total	**768**	**57.2**	**6.52**	**2.63**	**0.078**	**8.66**	**660**	**57.2**	**6.48**	**2.64**	**0.072**	**8.62**
Eliwana												
Proved	136	60.8	4.39	2.41	0.137	5.41	**79**	**61.1**	**4.22**	**2.51**	**0.144**	**5.21**
Probable	66	58.7	5.28	2.64	0.096	7.10	**135**	**59.5**	**5.27**	**2.37**	**0.115**	**6.27**
Total	**202**	**60.1**	**4.68**	**2.49**	**0.124**	**5.96**	**213**	**60.1**	**4.88**	**2.42**	**0.126**	**5.88**
Total Hematite Ore Reserves												
Proved	816	57.7	5.59	2.67	0.069	7.77	746	57.4	5.75	2.75	0.060	7.96
Probable	1,471	57.5	5.91	2.74	0.068	7.95	1,504	57.5	5.92	2.81	0.064	7.83
Total	**2,288**	**57.5**	**5.80**	**2.72**	**0.068**	**7.89**	**2,250**	**57.4**	**5.86**	**2.79**	**0.063**	**7.87**

Notes in reference to table

- The diluted mining models used to report the 2019 Ore Reserves are based on Christmas Creek Mineral Resource model reported in 2016, Firetail Mineral Resource model revised in 2018, Queens Mineral Resource model completed in 2019, Cloudbreak Mineral Resource model completed 2016 and Kings Mineral Resource model released in 2017, Kutayi Mineral Resource model released in 2014 and Eliwana Mineral Resource model completed in 2019.
- Diluted mining models are validated by reconciliation against historical production.
- Proved Ore Reserves are inclusive of ore stockpiles at the mines totalling approximately 31.3mt on dry product basis.
- The Chichester Ore Reserve is inclusive of the Cloudbreak, Christmas Creek and Kutayi BID deposits. Selected Christmas Creek Ore Reserves will be directed to the Cloudbreak OPF to optimise upgrade performance and balance Cloudbreak and Christmas Creek OPF lives.
- Tonnage information has been rounded and as a result the figures may not add up to the totals quoted.

JORC Code, 2012 Edition – Table 1
Fortescue Chichester Deposits (Cloudbreak, Christmas Creek & Kutayi)

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	The deposits were sampled using Reverse Circulation (RC) and Diamond drill holes (DD). Drill hole spacing ranges from 800m x 200m to a staggered 50m x 50m pattern. In the area of the test pit this was reduced to 12.5m x 12.5m (plus some at 6.5m x 6.5m). Grade Control (GC) drilling uses a 25m x 25m pattern. RC samples only were used for resource estimation. Approximately 30% of holes were down hole geophysically logged. Initial exploration holes were assayed from collar to end of hole. Partway through the exploration program the sampling regime was modified and analysis was restricted to samples with visually higher Fe, infill GC holes are sampled in a similar manner. This may mean that not all potentially mineralised material has been analysed.
	All holes were surveyed by qualified surveyors using a Base station Differential GPS, with collar accuracies to within 5 centimetres (laterally and vertically). Analytical standards were used to assist in checking laboratory results. Field duplicates are used to assist with determining sampling quality at the rig. Geophysical probes are calibrated on a regular basis (using static methods and specific calibration holes).
	For RC drilling, samples from 0.5m or 1m intervals pass through cyclone and cone splitter, 2-3kg sample collected in calico bag (~6-7% of samples total volume). Samples from mineralised zones (plus ~5m above and below), as selected, are sent for analysis.
Drilling techniques	Standard face sampling hammer drilling samples from ~130mm or ~140mm diameter RC drill holes used for Resource Estimation. Over 200 diamond drill holes have been completed. Some of these were drilled as twins to RC holes, the rest were drilled to provide samples for metallurgical test work, provide geotechnical information or for down hole geophysical data calibration purposes. Most holes were PQ size, core was not oriented as the majority of the holes were drilled vertically. No diamond drill hole data has been used for grade estimation. Drilling of large diameter (Bauer) holes (0.78 or 1m) commenced during the Exploration phase and ceased in ~2010. These holes were limited to shallow parts of the deposit (by working depth of rigs). Samples were primarily used for metallurgical test work, data from these holes was not used in creation of Resource and GC models.
Drill sample recovery	The quality of each sample is recorded at the time of logging and categorised as either poor, moderate or good.
	No significant issues with sample collection system identified during Exploration drilling or subsequent infill programs. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	Approximately 40 RC drill holes were twinned with diamond drill holes. In general there was good correlation between both grade and geology.
	There is assumed to be no expected relationship between sample recovery and grade.
Logging	Geological logging was completed by personnel experienced in iron mineralisation, logging considered to be adequate for resource estimation.
	Quantitative – chemical analysis of samples logged as mineralised, down hole geophysical surveys of approximately 30% of drill holes. Qualitative – logging is completed over the whole drill hole, based on this 'ore' +/- 3-4m surrounding waste is submitted for analysis. Detailed texture logging of GD drilling ceased during 2017, a smaller data set is now collected. There is some risk of material being mis-logged and therefore not analysed.

Criteria	Commentary
	Effectively 100% for RC during Exploration, limited to mineralised intersections +/- 3-4m surrounding waste during infill programs.
Sub-sampling techniques and sample preparation	The majority of diamond holes were drilled to provide material for metallurgical testwork. No assays from diamond holes were used in the estimate.
	Samples are collected in labelled bags from each 1m of drilling, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of gear between samples. Wet samples are allowed to dry before being processed. For drill rigs using riffle splitters, once wet samples are encountered, the splitter is changed to a chisel splitter. Larger samples are collected and later split.
	All sub-sample preparation undertaken by the laboratory performing the sample analysis.
	Field QC procedures involved the use of certified reference material as assay standards together with the collection of duplicate samples.
	During Exploration drilling, field (rig) duplicates were collected at a rate of 1 in 20 samples at Cloudbreak and Christmas Creek, and at a rate of 3 in 100 samples at Kutayi. Analysis of duplicates did not indicate that there were any issues. QA/QC reports are available. For Grade Control drilling, field (rig) duplicates were originally collected every 50 samples, subsequently increased to every 33 samples. Sample numbers are pre-determined, therefore it is possible that not all duplicates will be analysed. Monthly QA/QC reports are now routinely prepared.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Quality of assay data and laboratory tests	Various laboratories have been used, including SGS (Christmas Creek and Perth), Ultra Trace and Intertek (Cloudbreak, Solomon, and Perth) and Genalysis (Perth)). All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. All chemical analysis by XRF using 'standard iron ore suite' (reported as Fe, Al_2O_3, SiO_2, TiO_2, CaO, MgO, Na_2O, K_2O, MnO (Exploration) or Mn (Grade Control), P and S). Also 3-point LOI (370, 650 & 1,000°C) by thermogravimetric methods. This is considered to be close to “a total analysis”. From early 2013 As, Pb, Zn, Cu and Cl have also routinely been included in sample analysis.
	Details of geophysical tools used for down hole geophysical analysis are available in the drill hole database.
	Exploration (Cloudbreak and Christmas Creek) - Field (rig) duplicates collected 1 in 20 samples. Standards submitted at 1 in every 50 samples. Analysis of duplicates and standards did not indicate that there were any issues. QA/QC reports were prepared. Exploration (Kutayi) - Field (rig) duplicates collected 3 in 100 samples. Standards submitted at 1 in every 100 samples. Analysis of duplicates and standards did not indicate that there were any issues. QA/QC reports were prepared. Grade Control - Field (rig) duplicates collected 1 in 50 samples. Standards submitted at 1 in every 100 samples (historically). Since ~Q1 2009, field duplicates collected 1 in 33 samples and standards submitted 1 in 50. Sample numbers for duplicates & standards are pre-determined, if they occur in waste in a drill hole they may not end up being submitted to the laboratory for analysis. QA/QC is performed on laboratory analyses prior to accepting the data in the acQuire database. Monthly QA/QC reports are now routinely prepared. Concerns over the quality of a few of the historical standards have been raised. Through investigation it appears that this is due to standard preparation methods, size of standards, and homogenisation issues (similar problems have not been noted in

Criteria	Commentary
	newer standards). Also issues with inadequate round-robin testing resulting in over-precise certified values.
Verification of sampling and assaying	Significant intersections have been visually inspected by senior Fortescue personnel and by independent consultants.
	Approximately 40 RC drill holes were twinned with diamond drill holes. In general there was good correlation between both grade and geology.
	Several different methods/systems have been used to store sample data (including GBIS and an 'in-house' system). The sample data is now stored in customised acQuire drill hole databases, which include a series of automated electronic validation checks. Fortescue data entry procedures are documented. Only trained personnel perform further manual data validation.
	Conversion of MnO% to Mn% for grade estimation has been made where necessary (mainly exploration data). Samples reporting below detection limits were given the value of half the detection limit.
Location of data points	All holes were surveyed by qualified surveyors using a Base station Differential GPS, with collar accuracies to within 5 centimetres (laterally and vertically) (or better at Kutayi). Holes for which there is no collar survey data, or where the collar RL is significantly different from the topographic surface, are excluded from Resource and GC modelling.
	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The Cloudbreak and Christmas Creek deposits lie within UTM zone 50, The Kutayi deposit lies within UTM zone 51. Drill hole collar elevations are also validated against local topographic data.
	The topography was created from 1 metre contours from LIDAR data (Cloudbreak and Christmas Creek) and 2 metres from a Landgate 20 metre DEM (Kutayi). Vertical accuracy of the LIDAR data is +/-0.2 metres.
Data spacing and distribution	NOTE: No Exploration Results Reported. Data spacing reported below is for reported Mineral Resources. Exploration Drilling - Ranges from 800 x 200m down to staggered 50 x 50m. In the area of the test pit this was reduced to 12.5 x 12.5m (plus some at 6.5 x 6.5m). Grade Control Drilling - Infill commences at 100 x 100m (where Exploration drilling missing), with subsequent infill at 50 x 50m and 25 x 25m. All RC holes were drilled vertically.
	Considered adequate for Resource Modelling. Studies demonstrated that Mineral Resource Classification is closely related to drill hole spacing.
	Samples are not composited prior to analysis.
Orientation of data in relation to geological structure	Sampling considered unbiased in terms of possible geological structures. Drilling is perpendicular to (ie vertical) main geological structure controlling mineralisation (bedding, horizontal).
	No sampling bias is apparent.
Sample security	Consignment notes (sample submission information) generated for each batch of samples. Samples trucked to Perth laboratories, samples delivered directly to site laboratories.
Audits or reviews	Several audits have been undertaken with varying recommendations. Those relating to Exploration drilling concluded that there were no major risk factors relating to the sampling and assaying of the Exploration data. An audit of grade control drilling at Cloudbreak highlighted the lack of routine formal QA/QC reporting. Preparation of monthly QA/QC reports is now standardised and implemented across all operational sites.

Criteria	Commentary
	An independent audit of the CC Resource model has been conducted and found no fatal flaws, in process or output.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Cloudbreak deposit is located within the following 100% owned Fortescue Exploration and Mining Leases: E45/2497, E45/2498, E46/590, M45/1082, M45/1083, M45/1102, M45/1103, M45/1104, M45/1105, M45/1106, M45/1107, M45/1124, M45/1125, M45/1126, M45/1127, M45/1128, M45/1138, M45/1139, M45/1140, M45/1142, M45/1263, M46/356, M46/357, M46/401, M46/404, M46/407, M46/408, M46/409, M46/410, M46/411, M46/449, M46/450, M46/452, M46/453 and M46/454. The Cloudbreak project area is within the external boundaries of the Nyiyaparli and Palyku registered native title determinations. In 2005, Fortescue entered into comprehensive Land Access Agreements (LAA) with the Nyiyaparli and Palyku traditional owners. The LAAs facilitate the certain grant of all required Fortescue tenure and related approvals. In consideration, Fortescue provides the traditional owners with: training, employment, business opportunity, and consultation on a range of project–related matters including regular meetings, comprehensive Aboriginal heritage identification and management procedures. On 15 December 2016, an indigenous Land Use Agreement (ILUA) between Fortescue and the Nyiyaparli People was registered on the National Native Title Tribunal's (NNTT's) Register of Indigenous Land Use Agreements. On 3 November 2017, an ILUA between Fortescue and Palyku People was registered on the NNTT's Register of Indigenous Land Use Agreements. The Christmas Creek deposit is located within the following 100% owned Fortescue Exploration and Mining Leases: E46/566, E46/612, M46/320, M46/321, M46/322, M46/323, M46/324, M46/325, M46/326, M46/327, M46/328, M46/329, M46/330, M46/331, M46/332, M46/333, M46/334, M46/335, M46/336, M46/337, M46/338, M46/339, M46/340, M46/341, M46/342, M46/343, M46/344, M46/345, M46/346, M46/347, M46/348, M46/349, M46/350, M46/351, M46/352, M46/353, M46/354, M46/355, M46/402, M46/403, M46/405, M46/406, M46/412, M46/413, M46/414, M46/415, M46/416, M46/417, M46/418, M46/419, M46/420, M46/421, M46/422, M46/423, M46/424 and M46/534. The Fortescue Christmas Creek mine and resource development proposed activity area will be undertaken within the Nyiyaparli native title determination area. Fortescue signed a Land Access Agreement (LAA) with the Nyiyaparli People on the 10th of October 2005 which facilitates Fortescue's exploration and mining activities within the Nyiyaparli determination area. To ensure compliance with the Aboriginal Heritage Act 1972 (AHA) Fortescue conducts both archaeological and ethnographic surveys over all land prior to the commencement of ground disturbing works. Within the Christmas Creek mining and resource area heritage surveys have identified places that are highly significant to the Nyiyaparli People; and in some instances, neighbouring Traditional Owner Groups. This includes the ethnographic place Mankarlyirrkurra (ETH-NYI11-001), and Heritage Restricted Zones associated with Kakutungutanta CB10-093 (HRZ-0132) and CB09-292 (HRZ-0005), which should be excluded from the mining resource area into the future. Fortescue Marsh has significance to the Nyiyaparli People and neighbouring Traditional Owner groups. The creek lines that run through the Christmas Creek mining and resource area towards Fortescue Marsh and the quality/flow of water entering the marsh system are important to the Traditional Owner groups. In accordance with our LAA with the Nyiyaparli People Fortescue has an obligation to minimise impact to creeks and has committed to avoiding Kandama Creek (Christmas Creek, HRZ-006) and portions of Kakutungutanta Creek (HRZ-0259 and HRZ-0007) which should be

Criteria	Commentary
	excluded from the mining resource area into the future. Wherever possible, when creeks must be temporarily diverted for mining purposes they should be re-established following completion of the project operations. Fortescue has agreed not to undertake exploration or mining on the Fortescue Marsh without the consent of the Nyiyaparli People, and is committed to ensuring the flow and quality of water entering the marsh system is not affected by mining activities. Most notably this is focused on the protection of known ethnographic 'Yintha' sites along the Marsh edges, which are fed by creek flows into the Marsh. This is currently managed by consultation with the group and the implementation of various water management methods including monitors, diversions, containments and conveyance. These water management methods must be continued and maintained during the development of Christmas Creek mine to ensure compliance with the Nyiyaparli LAA. The Kutayi deposit is located with the 100% owned Fortescue Mining Lease M46/533. It is also within the Nyiyaparli native title determination area.
	The tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	Both BHP and Hancock Prospecting Pty Ltd (HPPL) have undertaken exploration for iron within the project boundaries. No historical data has been used by Fortescue.
Geology	The majority of the iron mineralisation is hosted by the Nammuldi Member which is the lowest member of the late Archaean aged Marra Mamba Iron Formation (MMIF). The Nammuldi Member is characterised by extensive, thick and podded iron rich bands, separated by equally extensive units of siliceous and carbonate rich chert and shale. The Nammuldi Member in the Chichester Range is interpreted to be up to 60 metres in true thickness. Underlying the Nammuldi Member rocks are black shales and volcanic rocks belonging to the Jeerinah Formation. Limited iron mineralisation also occurs in the overlying Tertiary alluvial material.
Drill hole information	Collar details of the RC holes used in the Cloudbreak, Christmas Creek and Kutayi estimates are not reported here.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Cloudbreak and Christmas Creek please refer to: *Section 3 Estimation and Reporting of Mineral Resources*
Relationship between mineralization widths and intercept lengths	No exploration results are being reported. Please refer to: *Orientation of data in relation to geological structure* in *Section 1 Sampling Techniques and Data* for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the release.
Balanced reporting	No exploration results are being reported
Other substantive exploration data	No exploration results are being reported.
Further work	Further infill drilling is planned for at all deposits. Extensions to known mineralisation may exist at all deposits.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
	Since 2011 all drill hole data has been captured and stored in acQuire drill hole databases. Field (texture) logging data is captured electronically, assay and down hole

Criteria	Commentary
Database integrity	geophysical data are uploaded directly from source files. Sample numbers are unique to each site and pre-numbered and barcoded sample bags are used. These methods are all aimed at minimising data errors. Exploration data older than this has been transferred between a number of different data storage systems, there is a risk that some of it may have been lost or compromised in the process (but this data only represents a small subset of the overall data used for Resource and GC modelling).
	All drill hole data used to update the resource models were reviewed by Fortescue geologists. Complete drill holes and individual samples were excluded if any problems with the data were noted (eg erroneous drill hole co-ordinates, suspect assays, missing texture data etc). Data exclusion is considered to have been minimal. The acQuire drill hole databases include semi-automated validation procedures designed to minimise data errors.
Site visits	Site visits were undertaken by senior Fortescue personnel and by independent consultants during Exploration drilling programs. Site visits by the current Competent Person are undertaken on a semi-regular basis to discuss drilling/modelling progress and any other issues.
Geological interpretation	For the updated resource models, four geological zones were interpreted on the basis of geochemistry: overburden, hanging wall, ore zone and footwall. There is some risk of mis-interpretation in areas of wider spaced drilling where assay data is limited, this is not considered to be material. In future model updates texture logging from the wider spaced drilling should also be reviewed to refine definition of the overburden/hanging wall contact. For the Grade Control models, up to 14 geological zones are interpreted on the basis of geochemistry and down hole geophysical logging: overburden (separating CID where possible), U8, U7U, U7l, U6, U6l, U5, U5l, U4, U3, U2, U1 & Roy Hill Shale. The U7U, U7l, U6, U6l & U5 units correspond to the ore zone of the Resource Models.
	Interpretation based on geochemistry of RC drill samples and down hole gamma logging.
	The updated resource models are an alternative interpretation of the drill hole data used to create earlier resource models and incorporate additional drill hole data.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	There are a number of factors which have an impact of geological and grade continuity: • Faults (geology and grade) – minor impact • Creeks (grade and to a lesser extent geology) – slightly more significant impact (evidenced by a reduction of iron grades at both sites and erosion of the ore body, primarily at Christmas Creek but also locally at Cloudbreak) • Late stage hardcapping/weathering of mineralisation • Localised late stage supergene Mn mineralisation
Dimensions	Cloudbreak and Christmas Creek - Up to ~80km along strike and up to 5km plan width. Upper limit of mineralised domain is located between 0m to 125m below the surface. Lower limit of mineralised domain is located between 1m and 130m below the surface. The average thickness of the mineralised domain is 7.0m and the range of thickness is 1m to 28m. Kutayi – Mineralisation occurs in an area covering approximately 4.5km (N-S) and 3.5km (E-W). Mineralisation extends from surface to depths of up to around 50m. The defined mineralised units are approximately between 1m and 40m thick.
Estimation and modelling techniques	Grade estimation using Ordinary Kriging (OK) was completed using Vulcan™ software for 14-18 analytes (see above). Drill hole sample data was flagged using three dimensional wireframes.

Criteria	Commentary
	Variography undertaken on 1m drill hole composites in unfolded space. Initial variography on Fe indicator values (<48% Fe = 0, >48% Fe = 1), was used to create wireframe solids of areas within the ore zone with indicator values >0.4 (note 48% Fe was selected after substantial testing to get the 'best' fit of block grade Fe distribution vs the composite data distribution). The drill hole composites were re-flagged using these solids to give 'high grade' and 'low grade' data sets. Additional variography was then undertaken for Fe, SiO_2, Al_2O_3, P and LOI on these data sets. Variograms were generally robust (low nuggets, long horizontal ranges and short Z ranges), 'low grade' variography was used for waste domains. A separate Mn indicator was also created (at 1%) and used to control estimation of Mn. Quantitative kriging neighbourhood analysis used to establish optimum search and estimation parameters. Each geological domain was interpolated separately, the ore zone domain was separately interpolated for high and low grade areas. Mn modelled separately with no geological domaining.
	Reconciliation of previous model against production showed a loss of tonnage, decreased iron grade and increased contaminant grades. Preliminary reconciliation of the updated models against historic production shows a marked improvement.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, Al_2O_3, SiO_2, TiO_2, CaO, MgO, Na_2O, K_2O, Mn/MnO, P, S, LOI 370, LOI 650 and LOI 1000 has been estimated. Pb, As, Cl and Cu have also been estimated but as they are not sampled at the same density as the previously discussed analytes, they are not considered as accurate. A program of selected analysis of waste material for potentially deleterious elements (eg Se, As) has commenced (these are not currently included in the Resource Models). Routine analysis for arsenic (by Intertek) is now part of the grade control drilling program, this data will be included in future models when sufficient information is available to allow interpolation.
	Following kriging neighbourhood analysis, statistical investigations and discussions with Fortescue staff, for Cloudbreak and Christmas Creek, a parent block size of 25m x 25m x 1m was selected (drill hole spacing varies from 800mx 200m to 6.25m x 6.25m in some small areas). To allow for integration of grade control block models and to aid in following the folded geometry of the geological domains, sub-celling to 12.5m x 12.5m x 1m was allowed. For the GC Models a block size of 12.5m x 12.5m x 1m is used (drill hole spacing nominally 25m x 25m). For Kutayi, a parent block size of 50mE x 100mN x 1m was selected (reflecting half the nominal drill hole spacing and orientation of mineralisation).
	No selective mining units were assumed in these estimates.
	No assumptions about correlations between variables were made in these estimates.
	Drill hole samples were geologically flagged using the interpreted domain wireframes. These domains were used as hard boundaries to select samples populations for variography and estimation.
	For both Resource Models, some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	All models (Resource and GC) are validated as follows: • Block geology vs geological surfaces; • Visual comparison of block grades vs drill hole data (all analytes, 50m sections); • Review of average grades by geology (blocks vs composites); • Grade Trend plots on eastings, northings and rl for all analyses (100m slices (eastings & northings), 1m slices (vertically));

Criteria	Commentary
	• Block total assay check; • Un-estimated block check; • Reconciliation against production (where possible).
Moisture	The tonnages are estimated on a dry basis.
Cut-off parameters	Cut-offs were not used to define domains, they are used to report Mineral Resources.
Mining factors or assumptions	The models are considered suitable for the current mining method (drill & blast nominally on 3m benches).
Metallurgical factors or assumptions	It has been assumed that current OPF's will continue to be used in the future.
Environmental factors or assumptions	A program of waste characterisation sampling is now in place as part of the requirements allowing mining. No significant concentrations of environmentally deleterious elements have been identified to date.
Bulk density	Densities are average above water table (AWT) down hole geophysical strand (stratigraphic) densities. Although the current down hole geophysical density data has not been fully calibrated with diamond core measurements, reconciliation against historic production data is considered reasonable. Densities in all resource models are dry.
	Down hole geophysical probes measure the in-situ bulk density which accounts for void spaces. The measurements are grouped by geological domains.
	The densities used are similar to known densities of other deposits in the region.
Classification	Overall Resource Model limits were designed to minimise extrapolation of drilling data, all material within the model boundaries could at least be classified as Inferred. The following range of criteria were considered in determining the final resource classification over each model: • Geological and mineralisation continuity; • Data quality; • Drill hole spacing; • Modelling technique; • Estimation properties including search strategy, number of informing data and average distance of data from blocks; The Mineral Resource classification methodology used also incorporated a number of parameters derived from the kriging algorithms in combination with drill hole spacing and continuity and size of mineralised domains.
	Appropriate account has been taken of all these factors in creation of the updated resource models. Block model validations show good correlation of the drill hole data to the estimated grades.
	The Mineral Resource classification reflects the views of the Competent Person.
Audits or reviews	An external audit of both the CB and CC resource models has been completed, no fatal flaws were identified. Several external audits of the Grade Control modelling process have been undertaken.
Discussion of relative accuracy/ confidence	Statistical/geostatistical procedures have not been used to quantify the relative accuracy of the resources. However, comparisons with local grade control models show that on average tonnage and grades are similar (in some areas grade control models show reduced tonnages when compared with the resource models, in other areas the opposite is the case).

Criteria	Commentary
	Resource models are global in that they include as much of each deposit as is covered by sufficient drilling to support geological and grade continuity.
	Comparisons with production data are available for mined areas. Currently these only cover limited areas of the resources. The updated resource models show an improved reconciliation against production data.

Competent Person's Statements

The information in this report that relates to Chichester Mineral Resources is based on information compiled by Mr David Frost-Barnes, a Competent Person who is a Member of The Australasian Institute of Mining & Metallurgy. Mr Frost-Barnes is a full-time employee of Fortescue Metals Group Limited. Mr Frost-Barnes has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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 Frost-Barnes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1
Fortescue Solomon Deposits (Firetail, Kings and Queens)
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	The deposits were sampled using Reverse Circulation (RC) and Diamond drill holes (DD). Approximate drill hole spacings are as follows: Firetail – 200m x 100m and 50m x 50m. Kings – 400m x 100m, 200m x 100m, 100m x 100m, 100m x 25m and 25m x 25m. Queens – 400m x 50m and 100m x 50m. Grade control drilling uses a 25m x 25m pattern. RC samples only were used for resource estimation. Where possible, all holes undergo down hole geophysical logging.
	All holes were surveyed by qualified surveyors using a Base station Differential GPS, with collar accuracies to within 3-10 centimetres (laterally and vertically). Analytical standards used to assist in checking laboratory results. Field duplicates are used to assist with determining sampling quality at the rig. Geophysical probes are calibrated on a regular basis using static methods and specific calibration holes.
	RC drilling, samples from 1m intervals pass through cyclone and cone splitter, 2-3kg sample collected in calico bag (~6-7% of samples total volume). Samples from mineralised zones (plus ~5m above and below), as selected by a geologist, are sent for analysis, all other samples are moved to a bag farm.
Drilling techniques	Standard face sampling hammer drilling samples from ~130mm or ~140mm diameter RC drill holes used for Resource Estimation. All holes are drilled vertically with the exception of 14 inclined holes at Firetail North targeting Joffre mineralisation. Diamond drill holes were drilled as twins to reverse circulation holes and for metallurgical test work, they were not incorporated into resource models. Core size was predominantly PQ with some 6 inch holes. All diamond holes were drilled vertically, the core was not oriented. Drilling of large diameter (Bauer) holes (0.78 or 1m) commenced during the Exploration phase and ceased in ~2010. These holes were limited to shallow parts of the deposit (by working depth of rigs). Samples were primarily used for metallurgical test work, data from these holes was not used in creation of Resource and GC models.
Drill sample recovery	The quality of each sample is recorded at the time of logging and categorised as either poor, moderate or good.
	No major issues with sample collection system identified during drilling. Minimal loss of fines was achieved through the use of an automated sample collection and splitting system.
	Twin holes were drilled to compare grades, no significant sample bias was identified.
Logging	Geological logging was completed by geologists experienced in iron mineralisation, logging considered to be adequate for resource estimation.
	Detailed geological logging captured the following qualitative and quantitative information: mineralogy, sample quality, colour and numerous physical characteristics. This data is relevant for both mineral resource estimation and future mining and processing.
	100% of drilled meters logged.
Sub-sampling techniques and sample preparation	Majority of diamond holes drilled to provide material for density determinations and for metallurgical test work. Whole core was used for metallurgical test work.
	Samples are collected in labelled bags from each 1m of drilling, which are stored onsite or sent for analysis. These samples are collected using a cone or multi-tier riffle splitter of dry cuttings installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of gear

Criteria	Commentary
	between samples. Wet samples are allowed to dry before being processed. For drill rigs using riffle splitters, once wet samples are encountered, the splitter is changed to a chisel splitter. Larger samples are collected and later split.
	All sub-sample preparation undertaken by the laboratory performing the sample analysis.
	Coarse standards were inserted at rates of 1 per 50 samples.
	Field (rig) duplicates were collected at a rate of 1 in 33 samples.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS Perth, Ultra Trace or the on-site laboratory for analysis. All laboratories now have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. The three point LOI was not undertaken for all samples with only the LOI 1000 being completed. A three point LOI was subsequently carried out on all samples with a Fe grade greater than 50%. This is considered to be close to "a total analysis". From early 2013 As, Pb, Zn, Cu and Cl have also routinely been included in sample analysis.
	Details of geophysical tools used for down hole geophysical analysis are available in the drill hole database.
	Field duplicates were collected 3 in 100 samples. Standards submitted at 1 in every 50 samples. Analysis of duplicates and standards did not indicate there any major issues. QA/QC reports were prepared for the project areas. Concerns over the quality of a few of the historical standards have been raised. Through investigation it appears that this is due to standard preparation methods, size of standards, and homogenisation issues (similar problems have not been noted in newer standards). Also issues with inadequate round-robin testing resulting in over-precise certified values.
Verification of sampling and assaying	Significant intersections have been visually inspected by senior Fortescue personnel and by independent consultants.
	Twin holes have been completed to check the variance of the ore body and sampling. Results show good correlation between the original RC hole and the twin hole.
	Sample data is now stored in customised acQuire drill hole databases, which include a series of automated electronic validation checks. Fortescue data entry procedures are documented. Only trained personnel perform further manual data validation.
	Conversion of MnO% to Mn% for grade estimation has been made where necessary (mainly exploration data). Samples reporting below detection limits were given the value of half the detection limit.
Location of data points	Drill hole collar locations have been surveyed using a differential GPS (by Navaids Pty Ltd and VEKTA Pty Ltd), with an accuracy of better than +/- 10 cm for Easting and Northing and RL for the majority of drill holes. Down hole survey data is available for drill holes which have been down hole geophysically surveyed by PWS (now WSG), as the majority of drill holes are vertical and less than 200m in total depth, deviations from vertical are negligible. Collar survey data is validated against planned coordinates and dtm surface. Holes for which there is no collar survey data, or where the collar RL is significantly different from the topographic surface, are excluded from Resource and GC Modelling.
	Grid co-ordinates are Map grid of Australia (GDA94), heights are in Australia Height Datum. Area is within UTM zone 50, AusGeoid98 used to obtain separation between GDA94 spheroid and the Geoid.

Criteria	Commentary
	The topography was created from 1 metre contours from LIDAR data. Vertical accuracy of the LIDAR data is +/-0.2 metres.
Data spacing and distribution	Firetail: Drill hole data on nominal 200m x 100m spacing for assays and geology with 100m x 50m, 50m x 50m and 25m x 25m sections of infill and some more sparsely drilled 400m x 100m areas. Kings: Drill hole data on nominal 200m x 100m spacing for assays and geology with 100m x 50m and 50m x 50m sections of infill and some more sparsely drilled 400m x 100m areas. The drilling is on an imprecise grid spacing with three different grid orientations. Queens: Drill hole data on nominal 200m x 50m spacing for assays and geology with 100m x 50m sections of infill and some more sparsely drilled 400m x 100m areas. The drilling is on an imprecise grid spacing with two different grid orientations. For all deposits Grade Control (GC) drilling is on a nominal 25m x 25m grid.
	This level of data density is sufficient to define geological and grade continuity for a mineral resource estimate. Locally, the drilling pattern may be inadequate to fully define bedded mineralisation. In some areas, there are also uncertainties in detritals/bedded interface.
	No sample compositing was conducted for this estimation.
Orientation of data in relation to geological structure	Firetail: Drilling grid oriented perpendicular to the local bearing of mineralisation, all but 14 holes are vertical (the inclined holes were drilled to test for mineralisation in the Joffre). This results in no significant sampling bias. Kings & Queens: Drill hole data have been drilled as vertical holes in grid orientations sub-parallel to the local bearing of the orebody, and thus the mineralisation (paleochannel). This results in no significant sampling bias.
	No sampling bias is apparent.
Sample security	Use of consignment notes (sample submission information), direct delivery to site laboratories.
Audits or reviews	Fortescue has had a sampling audit by Snowden (in the Chichester's), there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this area.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The Firetail deposit is located within the following 100% owned Fortescue Exploration and Mining Leases: E47/1334, E47/3762, M47/1413 (M47/1546 Pending), M47/1431 (M47/1545 Pending), M47/1453 (M47/1543 Pending), M47/1473 (M47/1549 Pending) and M47/1513. The Kings deposit is located within the following 100% owned Fortescue Exploration and Mining Leases: E47/1334, M47/1409 (M47/1542 Pending), M47/1411 (M47/1541 Pending), M47/1431 (M47/1545 Pending), M47/1453 (M47/1543 Pending), M47/1474 (M47/1550 Pending), M47/1475 (M471554 Pending) and M47/1511. The Queens deposit is located within the following 100% owned Fortescue Exploration and Mining Leases: E47/1333, E47/1821, M47/1410 (M47/1540 Pending), M47/1411 (M47/1541 Pending), M47/1493 (Pending) M47/1573 (Pending) and M47/1577.
	The Solomon project area intersects with the Eastern Guruma native title determination area and the Yindjibarndi #1 native title determination area.

Criteria	Commentary
	Fortescue signed a Land Access Agreement (**LAA**) with the Wintawari Guruma Aboriginal Corporation on behalf of the Eastern Guruma native title holders on 15 December 2009, which facilitates Fortescue's exploration and mining activities, including the grant of tenure and processing of approvals within the determination area. Through the LAA the Eastern Guruma People have secured financial compensation; training, employment and business opportunities; as well as Aboriginal cultural heritage protection beyond that afforded by legislation. Fortescue does not have an executed agreement with the Yindjibarndi native title holders over the tenure associated with the Solomon Mineral Resource and Ore Reserve; however, Fortescue conducts regular heritage surveys and consultation with Yindjibarndi People, ensuring legislative compliance. Fortescue meets regularly with Yindjibarndi people to consult on a range of project-related matters and has developed an excellent working relationship with Yindjibarndi people through the Wirlu-Murra Yindjibarndi Aboriginal Corporation (**WMYAC**). In partnership with the WMYAC, Fortescue has delivered contracts for road maintenance, earthworks, airport transfers & across various operational sites in the Pilbara, including the Solomon Project, providing a valuable revenue stream for the community and a variety of job opportunities. Fortescue has further committed $3 million to a cultural project (Gamburlarna Project), driven by Yindjibarndi people & supported by the WA National Trust, which includes community initiatives in Roebourne & on Yindjibarndi country.
	The tenure is currently in good standing and no impediments are known to exist.
Exploration done by other parties	Both BHP and Hamersley Iron have undertaken exploration for iron within the project boundaries. No historical data has been used by Fortescue.
Geology	Mineralisation within the Solomon area is hosted by buried Channel Iron Deposits (CID), Bedded mineralisation (BID and Detrital mineralisation (DID). Outcropping geology in the area is the Dales Gorge, Whaleback Shale and Joffre Members of the Brockman Iron Formation which contain the BID mineralisation. Incised into this bedrock geology are the large Channel systems which contain the DID and CID mineralisation.
Drill hole information	Collar details of the RC holes used in these estimates are not reported here.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Mineral Resources for these deposits please refer to: *Section 3 Estimation and Reporting of Mineral Resources*
Relationship between mineralization widths and intercept lengths	No exploration results are being reported. Please refer to: *Orientation of data in relation to geological structure* in *Section 1 Sampling Techniques and Data* for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the release.
Balanced reporting	No exploration results are being reported and this is not pertinent to the reporting of Mineral Resources.
Other substantive exploration data	No exploration results are being reported and this is not pertinent to the reporting of Mineral Resources.
Further work	Further infill drilling is planned for all deposits. Extensions to known mineralisation may exist in all deposit areas.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database (a secure and industry standard system), which includes a series of automated electronic validation checks.
	Only trained personnel perform further manual validation which passes on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by a single person. Prior to modelling, further validation was performed on the dataset being used. No issues were uncovered in this final validation step.
Site visits	Site visits, by both the Competent Person and resource modelling/estimation geologist(s), are undertaken on a semi-regular basis to discuss drilling/modelling progress and issues.
Geological interpretation	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, this is not considered to be material.
	Geological interpretation based on geological logging and geochemistry of RC drill samples.
	The stratigraphy of the deposits is well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the resource estimates. Further close spaced drilling may improve the confidence in the stratigraphic interpretation of the BID mineralisation in the Kings & Queens deposits.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	Kings & Queens: The major source of error is at detrital/bedded and detrital/CID interface. The structure and stratigraphy is unknown in the bedded material over much of the deposits.
Dimensions	Firetail: The bedded mineralisation has a strike length of 7km and outcrops on the north and south limbs of an anticline. Mineralisation is strata bound, has an average thickness of 20m and extends to a depth of 100m below surface in places. Kings: The CID mineralisation has a strike length of 20 km and a width of 1 - 2km. Though the CID mineralisation outcrops in the southeast corner of the deposit, the majority of the CID mineralisation is buried and occurs at depths of up to 40m below surface and the defined mineralised units are between 1m and 65m thick Queens: The CID mineralisation has a strike length of 10km and a width of 0.5 - 1km. The CID mineralisation is buried and occurs at depths of up to 60m below surface and the defined mineralised units are between 1m and 65m thick.
Estimation and modelling techniques	Ordinary Kriging was used to estimate grades. Estimation was undertaken using Vulcan™ software. The model areas extend half the distance of drill spacing away from the drilling. Kriging parameters were derived from semivariograms using Supervisor software. The deposit was domained by stratigraphy, local orientation of the paleochannel, and mineralised/un-mineralised zones.
	Comparison with previous resource estimates generally showed an increase in tonnes with slight decrease in Fe grades together with a slight increase in contaminant grades. Insufficient production data to date (Firetail and Kings) for reconciliation.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, Al_2O_3, SiO_2, TiO_2, CaO, MgO, Na_2O, K_2O, Mn/MnO, P, S, LOI 370, LOI 650 and LOI 1000 has been estimated.

Criteria	Commentary
	A program of selected analysis of waste material for potentially deleterious elements (eg Se, As) has commenced (these are not currently included in the Resource Models. Routine analysis for As, Zn, Pb, Cu and Cl is now part of the grade control drilling program, this data will be included in future models when sufficient information is available to allow interpolation.
	Firetail: Ordinary kriging into parent cells of 25mE x 25mN x 1mRL. In Firetail South, sub blocking down to 5m x 5m x 0.25m was used along domain boundaries to better define the domain interface. Kings: Ordinary kriging into block sizes of 12.5m x 12.5m x 1m and panel sizes of 50mE x 100mN x 1mRL and 100mE x 50mN x 1mRL. Queens: Ordinary kriging into parent cells of 50mE x 25mN x 1mRL. Sub blocking down to 12,5m x 12.5m x 1m was used along domain boundaries to better define the domain interface. For the GC Models a parent block size of 12.5m x 12.5m x 1m was used.
	No selective mining units were assumed in these estimates.
	No assumptions about correlations between variables were made in these estimates, however significant correlation between certain variables was noted during statistical analysis of the drilling data
	The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator cut-offs for Fe, SiO_2 and Al_2O_3 for the individual stratigraphic units. These cut-offs were based on data population statistics and visual validation. A 'geozone' code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Grades were top cut for estimation based on high coefficient of variation values as well as other statistical characteristics of the distributions for the Firetail and Queens Resource Models. Grade cutting is not used in GC models nor in the Kings Resource Model.
	Visual validation of the block model coding of the geozones was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the geozones and grade were completed in Vulcan™ by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are well within an acceptable range. Trend analysis graphs have been created for each of the mineralised geozones. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data. Areas with a large number of samples correlate much better with the model grade than do areas with few samples.
Moisture	The tonnages are estimated on a dry basis.
Cut-off parameters	Cut-offs were not used to define domains, they are used to report Mineral Resources.
Mining factors or assumptions	It has been assumed that current mining methods will continue to be used in the future, the block size in the models is appropriate for this.
Metallurgical factors or assumptions	It has been assumed that current OPF's will continue to be used in the future.

Criteria	Commentary
Environmental factors or assumptions	A program of waste characterisation sampling is now in place as part of the requirements allowing mining. No significant concentrations of environmentally deleterious elements have been identified to date.
Bulk density	Kings: Density has been calculated from physical diamond core measurement throughout the deposit. Average densities by geological unit and mineralisation have been applied globally to the model. Physical density measurements are measured from diamond PQ core. Density measurements are taken at least 4 weeks after the core has been drilled to drive off any excessive moisture. Although the core has not been oven dried the core has been dried in the high temperatures, high evaporation rates and low humidity of the Pilbara would have driven off any free moisture. No good quality down hole geophysics density is available in the Kings area, therefore no comparisons could be made with the diamond measurement. Firetail & Queens: Density has been calculated from physically measured diamond core and down hole geophysical gamma-gamma measurements conducted at Firetail & Queens. Average densities by geological unit and mineralisation have been applied globally to the model. Physical density measurements are measured from diamond PQ core. Density measurements are taken at least 4 weeks after the core has been drilled to drive off any excessive moisture. Although the core has not been oven dried the core has been dried in the high temperatures, high evaporation rates and low humidity of the Pilbara would have driven off any free moisture. Geophysical density data is collected and validated with caliper data to ensure down hole data integrity.
	Where used, the down hole geophysical probes measure the in-situ bulk density which accounts for void spaces. The measurements are grouped by geological domains.
	The densities used are similar to known densities for current and historic mines, of similar geology and mineralisation, across the Pilbara.
Classification	Firetail & Kings: The resources are classified as Measured, Indicated and Inferred. This takes into account drill spacing and data integrity, geological complexity, and estimation risk and mineralisation continuity based on the semi-variogram ranges of influence. Queens: The resource is classified as Indicated and Inferred. This takes into account drill spacing and data integrity, geological complexity, and estimation risk and mineralisation continuity based on the semi-variogram ranges of influence.
	Appropriate account has been taken of all these factors in creation of the updated resource models. Block model validations show good correlation of the drill hole data to the estimated grades.
	The Mineral Resource classification reflects the views of the Competent Person.
Audits or reviews	An external audit of the updated Kings Resource Model has been completed, no major issues with the model were identified, internal peer reviews of the other models have been completed. Several external audits of the Grade Control modelling process have been undertaken.
Discussion of relative accuracy/ confidence	Statistical/geostatistical procedures have not been used to quantify the relative accuracy of the resources. However, comparisons with local grade control models show that on average tonnage and grades are comparable (in some areas grade control models show reduced tonnages when compared with the resource models, in other areas the opposite is the case). Resource models are global in that they include as much of each deposit as is covered by sufficient drilling to support geological continuity. An external audit of the resource estimation methodology used by Fortescue at the Solomon Project has been undertaken by a respected Consultancy group. Overall, the methods used to categorise the Kings and Firetail Mineral Resource estimates were

Criteria	Commentary
	considered to be fair, reasonable and consistent with industry standards in the iron ore sector. Recommendations included further twin hole drilling; deeper drill holes to be down hole surveyed; statistical comparison to use de-clustered sample data; additional bulk density measurements required using other techniques.

Competent Person's Statements

The information in this report that relates to Chichester Mineral Resources is based on information compiled by Mr David Frost-Barnes, a Competent Person who is a Member of The Australasian Institute of Mining & Metallurgy. Mr Frost-Barnes is a full-time employee of Fortescue Metals Group Limited. Mr Frost-Barnes has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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 Frost-Barnes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1
Fortescue Western Hub Deposits (Eliwana)
Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	The deposits were sampled using Reverse Circulation (RC) and Diamond Drill (DD) holes. Over 2,800 RC holes have been drilled and used in the model. Over 70 diamond drill holes have also been completed in the area these were used for bulk density, geotechnical and metallurgical test work. No diamond drill samples were used for the Mineral Resource grade estimate. RC samples sent for analytical work were selected based on potential ore-grade material with a reasonable envelope both above and below this interval. Where possible, most holes undergo down-hole geophysical logging.
	Analytical standards were used to assist in checking laboratory results. Field duplicates were used to assist with determining sampling quality at the rig. Geophysical probes were calibrated on a regular basis using static methods and specific calibration holes. Drill hole locations were determined by survey contractors.
	All samples were taken on 1m intervals from reverse circulation drill holes. A sample weighing approximately 1 to 3 kilograms was collected for each metre which was transported to a commercial laboratory and then pulverised for XRF analysis.
Drilling techniques	Reverse circulation drill holes of approximately 140mm diameter were completed using a standard face sampling hammer. The majority of the RC holes are vertical with only 14 being drilled on an angle. All diamond holes were triple tube and had either a PQ or 6 inch drill bit size. 28 diamond holes were drilled on an angle and were orientated using core barrel mounted tools.
Drill sample recovery	The quality of the RC samples from each metre drilled was recorded by the logging geologist at the time of drilling and categorised as either poor, moderate or good. 82% of samples were recorded as good, 3% were recorded as moderate and 2% were recorded as poor. 13% of samples were not recorded. Core recovery was recorded during geotechnical logging for all diamond holes and was considered to be of an acceptable level.
	No major issues with the sample collection system were identified during drilling. For RC holes, minimal loss of fines was achieved through the use of an automated sample collection and splitting system. Triple tube sampling was used for diamond holes to minimise core loss.
	There is assumed to be no expected material relationship between sample recovery and grade.
Logging	Logging was completed by geologists, metallurgists and geotechnical engineers experienced in iron ore mineralisation. The standard of logging is suitable to support an estimate of Mineral Resources.
	Stratigraphy, mineralogy, recovery, hardness, colour, moisture and sample quality were recorded qualitatively for both RC and diamond holes. Geotechnical logging was completed on diamond holes. Chip trays from RC holes were collected on an intermittent basis and diamond holes have been photographed. Down-hole televiewer data for RC and diamond holes has also been interpreted for geotechnical purposes.
	All drill holes were geologically logged.
Sub-sampling techniques and sample preparation	RC drilling samples are collected in labelled bags, which are stored onsite or sent for analysis. These samples are collected using a cone splitter installed directly beneath the cyclone. Wet samples are collected using the same technique as dry samples, with thorough cleaning of sampling system between samples. Wet samples are allowed to dry before being processed.
	The sample collected from the cone splitter represents approximately 6 to 7% of the total sample interval. Cone splitters are the preferred splitting system used by Fortescue as they generally give the most representative sample in both dry and wet conditions.
	At the laboratory, samples were weighed, dried and pulverised to either 90% passing through 106 microns (Ultra Trace and SGS) or 85% passing through 75 microns (Genalysis).

	Coarse field standards (approximately 1 in 100 samples) and laboratory standards (1 per lab job) were used as a quality control measure at different sub-sampling stages.
	Rig duplicate samples are taken at an average of 3 rig duplicate samples per approximately 100 samples sent to the laboratory. An analysis of these duplicate samples indicates that they are of good quality and repeatable.
	No formal analysis of the appropriateness of sample size compared to grain size has been completed but the sampling regime is considered to be industry best practice.
Quality of assay data and laboratory tests	All samples were sent to SGS, Genalysis or Ultra Trace laboratories for analysis. All laboratories have National Association of Testing Authorities, Australia (NATA) accreditation. The standard elements tested were Fe, SiO_2, Al_2O_3, P, MnO/Mn, MgO, CaO, TiO_2, Na_2O, S and K_2O by X Ray Fluorescence (XRF) and a three point LOI thermo gravimetric analysis at 371, 650 and 1000 degrees Celsius. This is considered a total analysis. As, Pb, Zn, Cu and Cl have also routinely been analysed in more recent sample submission.
	No geophysical tools were used to determine any element concentrations used in the estimate.
	Field duplicates were collected at a rate of approximately 3 in 100 samples. Standards are submitted at approximately 1 in every 100 samples. Analysis of duplicates did not indicate any major issues. Analysis of laboratory standard results indicates high confidence in XRF analysis at each laboratory. Analysis of field standards have indicated results are generally acceptable however issues with laboratory sample preparation and standard certification have been noted. Field standard and duplicate results are monitored for all laboratory submissions and reported on monthly and annually. Ongoing discussions with field personnel and laboratory staff are completed in order to mitigate any issues.
Verification of sampling and assaying	Significant intersections have been visually verified by Fortescue's Exploration and Resource Geology Managers.
	An RC/RC twin hole study has been completed on over 50 sets of holes throughout the project area. In general the level of grade and geology correlation between holes noted was acceptable.
	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. Fortescue data entry procedures are documented and readily available. Only trained personnel perform further manual validation in order to confirm results reflect field collected information and geology.
	Samples returning below detection limits were given the result of half the detection limit. Missing data was set to -99 and those samples were excluded from statistical analysis and estimation.
Location of data points	Drill hole collar locations have been surveyed using a differential GPS by Down Under Surveys, with an accuracy of better than 3 cm for Easting and Northing and 5 cm in elevation. Down hole surveys have been completed on approximately 12% of drill holes. Collar survey data is validated against planned coordinates and the topographic surface.
	Grid coordinates given for each point are Map Grid of Australia (GDA94) and heights are in the Australian Height Datum. The project area lies inside UTM zone 50.
	The topography was created from 0.5m or 2m contours produced from 1 metre LIDAR data. Vertical and horizontal accuracy of this data is+/-0.15 metres.
Data spacing and distribution	The grade estimate used predominantly vertical RC drill holes which occur nominally on 50m × 25m, 50m × 50m, 100m × 50m, 100m × 100m, 200m × 100m, 400m × 100m and minor 800m × 100m spacings with some more sparsely drilled areas for assays and geology.
	This level of drill spacing is sufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimate and the classification applied as deemed by the Competent Person.
	No sample compositing was conducted for this estimation.

Orientation of data in relation to geological structure	Drill holes have been predominantly drilled as vertical holes in drill lines sub-perpendicular to the local bearing of the ore body. The mineralisation is sub-horizontal and these vertical holes are sufficient to imply geological and grade continuity.
	No material relationship is apparent between sampling bias and geological orientation.
Sample security	To ensure sample security consignment notes (sample submission information) have been used and direct delivery to site laboratories has been carried out.
Audits or reviews	All sampling has been carried using Fortescue standard procedures.
	For analogous deposits Fortescue has had a sampling audit conducted by Snowden. For this project there were no major risk factors relating to the sampling and assaying of the data. Similar rigs and splitter systems were utilised in this deposit.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	FMG Pilbara Pty Ltd is a wholly owned subsidiary of Fortescue Metals Group Ltd and owns 100% of all mineral rights in the tenements which cover the project area: M47/1509 (M47/1553 Pending), M47/1522, M47/1523, M47/1524, M47/1537, P47/1667, P47/1668 and P47/1670. With the exception of M47/1553, these are all live, granted tenements.
	The tenements are within the Puutu Kunti Kurrama and Pinikura (PKKP) native title determination (WAD6007/2001). Fortescue has a current Land Access Agreement with the PKKP native title holders.
	The tenure is currently generally in good standing and no impediments are known to exist.
Exploration done by other parties	Exploration work prior to Fortescue within the Eliwana project area has been conducted since the mid-1970s. Several companies have held ground within the region including Robe River Mining Company Pty. Ltd., Hamersley Iron Pty. Ltd., Talisman Mining Ltd. and De Beers Australia Exploration Ltd. No historical data has been used by Fortescue.
Geology	The Eliwana project is situated on the southern limb of the Jeerinah anticline in the western Hamersley Province. Geographically, the Eliwana deposit covers a relatively narrow (average width of approximately 2km) zone which follows the outcropping of mineralised Marra Mamba and Brockman Iron Formations.
Drill hole Information	Collar details of the RC drill holes used in the Eliwana estimate are not being reported here. Significant intersections have been released previously.
Data aggregation methods	No exploration results are being reported. For methods used in the estimation of Eliwana please refer to: *Section 3 Estimation and Reporting of Mineral Resources.*
Relationship between mineralisation widths and intercept lengths	No exploration results are being reported. Please refer to: *Orientation of data in relation to geological structure* in *Section 1 Sampling Techniques and Data* for the geometry of mineralisation with respect to drill hole angle.
Diagrams	The Mineral Resource extents are shown in the report.
Balanced reporting	No exploration results are being reported and this is not pertinent to the reporting of Mineral Resources.
Other substantive exploration data	The density study carried out at Eliwana is discussed in: *Section 3 Estimation and Reporting of Mineral Resources.*
	Geological surface mapping of the Eliwana project has been carried out by Fortescue geologists. Dip and strike measurements, stratigraphy and mineralisation have been recorded into a database.
	Down hole geophysics has been carried out on some drill holes including: televiewer, natural gamma, magnetic susceptibility and gamma gamma density.

	The estimated groundwater level has been recorded in most RC drill holes.
Further Work	Further infill drilling and metallurgical test work is planned for Eliwana. Extensions to known mineralisation may occur in the Eliwana area.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	Sample data is stored using a customised acQuire database, which includes a series of automated electronic validation checks. acQuire is a secure and an industry standard strength database.
	Only trained personnel perform further manual validation on the data in order to confirm results reflect field collected information and geology. In order to ensure integrity of the database, any changes to the database only occur after a review of the suggested changes are authorised, and these changes can only be performed by an authorised person. Prior to modelling, further validation was performed on the dataset being used.
Site visits	The Competent Person and Competent Persons team conducts regular site visits to inspect the model area, RC drill hole logging and sampling practices. Discussions are held regularly with site geologists.
Geological interpretation	Logging and geological interpretation was completed by geologists experienced in iron mineralisation. Geology over the majority of the deposit is relatively straight forward. There is some risk of misinterpretation in areas of wider spaced drilling with limited assay data, however, this is not considered to be material.
	Geological interpretation is based on geological logging, down hole geophysics and geochemistry of RC drill samples.
	The stratigraphy of Eliwana is reasonably well known and it is envisaged that any alternative geological interpretation, with or without further drilling, would not have a material impact on the Mineral Resource estimate. Extrapolation of mineralisation has been restricted to approximately half of the nominal drill spacing.
	All samples are flagged with their host geological zone, only samples with the same geological zone as the block to be estimated can be used in grade estimation.
	The grade and geological continuity is generally good compared with analogous areas. The main factors affecting continuity are stratigraphy, structure, erosion and weathering.
Dimensions	Mineralisation is distributed variably within an area of approximately 40km in an east west direction and 3.5km in a north south direction. Mineralisation occurs at surface and extends to depths of up to 350 metres below the ground surface. The reported tonnes and grade in the Mineral Resource occur at depths of up to 350 metres.
Estimation and modelling techniques	Ordinary kriging was used to estimate all mineralised domains and inverse distance cubed for all waste domains. Estimation was done using Vulcan software. Mineralisation was extrapolated approximately half the distance of drill spacing away from the drilling. The deposit was domained by stratigraphy, local strike/orientation and mineralised/un-mineralised zones.
	Check estimates were completed in selected areas of the deposit using inverse distance cubed. Strings from the previous resource estimate were initially used to aid in the geological interpretation. An increase of 137 million tonnes with negligible variation in grade has occurred when compared to the previous Inferred Mineral Resource. The increase in tonnes is predominantly due to drilling within new areas.
	No assumptions regarding the recovery of by-products have been made.
	The iron ore suite of Fe, SiO_2, Al_2O_3, P, Mn, MgO, CaO, TiO_2, Na_2O, S, K_2O, LOI Total, LOI 371, LOI 650 and LOI 1000 has been estimated. In addition, As, Pb, Zn, Cu and Cl are also estimated where this data is available.

	Size and orientation of parent blocks reflected predominantly half to a quarter of the nominal drill spacing and orientation of mineralisation. Sub blocking was used along domain boundaries to better define the domain interface.
	Up to three estimation passes were used for each element, gradually increasing search ellipse distances with each pass. Search distances along strike and across strike varied between each domain. These were primarily defined by sample spacing within each domain and determined by neighbourhood iterative tests.
	No assumptions behind the modelling of selective mining units have been made.
	Correlation between some elements has been noted during statistical analysis. Similar variogram parameters were achieved for mineralised domains that had elements with a correlation coefficient of > 0.7 or < -0.7.
	The definition of mineralised zones within each stratigraphic unit was accomplished using an indicator approach. The probability of any zone being mineralised was estimated using appropriate geochemical indicator thresholds for Fe, SiO_2 and Al_2O_3 for the individual stratigraphic units. These thresholds were based on data population statistics and visual validation. A domain code was assigned to each sample, defined by the stratigraphic unit and mineralisation.
	Some element grades were top-cut during estimation based on coefficient of variation values higher than 1.2.
	Visual validation of the block model coding of the domains was completed prior to estimation. Once estimated, the grade of all elements was also visually validated. Visual validation of both the domains and grade were completed in Vulcan by comparing section and plan slices of the block model against the drill holes. Statistics for the mean grade of the mineralised blocks within each stratigraphic unit were compared to the mean grade of the mineralised samples within each stratigraphic unit. Overall, the mean values between the model and samples are within an acceptable range. Trend analysis graphs have been created for each of the mineralised domains. These have been generated in Northing, Easting and RL, for all elements. The trend analysis graphs show the modelled grade vs. the raw data grade at a particular slice in space. The trend analysis charts show that overall, the model grade is consistent with the raw data and shows no bias. Areas with a large number of samples correlate much better with the model grade than do areas with few samples.
Moisture	Tonnages are estimated on a dry basis.
Cut-off parameters	Cut-offs were not used to define domains, they are used to report Mineral Resources.
Mining factors or assumptions	It is assumed that mining will be carried out with medium to large scale mining equipment using 5 metre bench heights, though bench heights may vary depending on mining studies. These methods will be similar to analogous Fortescue deposits such as Firetail where conventional: truck & shovel/excavator; drill & blast and; grade control methods are used. The impact of dilution will be assessed as part of the mining studies.
Metallurgical factors or assumptions	It is assumed that similar metallurgical techniques to analogous Fortescue operations such as Firetail will be utilised. The expectation is that it will be a process as applied at Firetail. Final processing methods will be defined by further mining studies.
Environmental factors or assumptions	Fortescue has an extensive environmental and heritage approvals process. Waste is considered to be inert and formed waste dumps will conform to WA standards. Waste will be formed as dumps or into mining voids. In the case of acid and fibre mitigation, Fortescue has industry standard procedures. Some beneficiation may take place but reject is considered to be inert and there are no foreseen problems with tailings disposal. It is assumed material will be transported to an ore processing facility and use tailings disposal infrastructure.
Bulk density	Density has been measured from down-hole gamma-density and diamond core throughout the deposit. Whilst on site down-hole geophysical tools are calibrated fortnightly in a designated test diamond drill hole. Density values have either been estimated or applied globally to the model. Ordinary kriging was used for mineralised domains and inverse distance was used for unmineralised domains when density has been estimated. A formula was then applied to the estimated values to yield a dry bulk density. For areas where density was applied globally,

	average rounded densities by geological unit and mineralisation have been compared with analogous areas/deposits and applied globally.
	Down-hole geophysical probes measure the insitu bulk density which accounts for void spaces. These measurements are not corrected for moisture but are validated against known dry bulk densities from diamond core drilled in the area. Down-hole geophysical measurements are grouped by geological and mineralisation domains.
	The densities used are similar to known densities for current and historical mines, of similar geology and mineralisation, across the Pilbara.
Classification	The Mineral Resource has been classified as Measured, Indicated and Inferred. This takes into account drill spacing, data integrity, geological complexity, grade estimation quality and interpreted risk.
	The Mineral Resource classification reflects the views of the competent persons.
Audits or reviews	Internal peer reviews have been completed during all stages of the estimate. An external audit of a previous Inferred Mineral Resource for Eliwana was completed by Snowden with no significant flaws identified. Similar processes have been used for this estimate.
Discussion of relative accuracy/ confidence	Estimation uncertainty analysis has been completed on certain areas of the deposit using sub-set estimates and the estimation variance. The volumes of the areas tested are approximately equivalent to annual and quarterly rates of production. The accuracy noted is similar to analogous Fortescue operational deposits and the confidence level of the Mineral Resource is appropriate as deemed by the Competent Person.
	No production data is available at this stage.

Competent Person's Statements

The information in this report that relates to Eliwana Mineral Resources is based on information compiled by Mr Stuart Robinson who is a Fellow of The Australasian Institute of Mining and Metallurgy, and Mr Nicholas Nitschke and Ms Erin Retz who are Members of The Australasian Institute of Mining and Metallurgy. Mr Stuart Robinson, Mr Nicholas Nitschke and Ms Erin Retz are full-time employees of Fortescue Metals Group Ltd. Mr Robinson, Mr Nitschke and Ms Retz have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking 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 Robinson, Mr Nitschke and Ms Retz consent to the inclusion in this report of the matters based on this information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1
Combined Fortescue Hematite Deposits (Excluding Eliwana)
Section 4 Estimation and Reporting of Ore Reserves

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td>Mineral Resource estimate for conversion to Ore Reserves</td><td>The Chichester and Solomon individual resource models described in Section 3, depleted by mining to 31 April 2019, are the basis for the conversion to Ore Reserves (which are subsequently adjusted for an additional 2 months of mining depletion to reflect Ore Reserves position at end of June 2019). These models are regularised, merged with Grade Control Models and adjusted based on reconciliation history to create the Mining Models that form the basis for Ore Reserve reporting.
Mineral Resources are inclusive of the Ore Reserves quoted here.</td></tr>
<tr><td>Site visits</td><td>Periodic site visits are undertaken by the Competent person to monitor on-going mining and processing operations relevant to estimation of Ore Reserves.</td></tr>
<tr><td>Study status</td><td>Cloudbreak and Christmas Creek Ore Reserves relate to operating properties that have been established for over 9 years. The Firetail deposit has been mined and processed for approximately six years while mining and processing has occurred at the Kings CID deposit for five years. Routine integrated short, medium and long term planning activities are carried out according to a company planning calendar, including annual life-of-mine (LOM) and Ore Reserve plans. The technical feasibility of mining and processing activities is well understood based on the operating history for both the Chichester and the Solomon deposits. Where possible, material Modifying Factors are derived from actual operating history to maximise the confidence in plan and Reserve outcomes. The LOM and associated Ore Reserve plans include an ore sales product strategy, ore definition and cut-offs, mine and waste designs and schedules, infrastructure designs including roads, drainage, remote crushing, dewatering, tails dams and the like, closure designs and schedules, fleet and manpower requirements, operating and capital costs and financial analysis. Due to the site operating history and the 170Mt per annum installed infrastructure, the Chichester and Solomon Ore Reserve estimations are considered to be equivalent or better than a “definitive” feasibility study standard. Shorter term plans (1 to 3 years) are supported by a detailed budgeting process.</td></tr>
<tr><td>Cut-off parameters</td><td>The company produces a number of standard BID and CID blended products that are delivered by rail and assembled at the Fortescue Port Hedland ore stockyards from contributions of each mine-site. A linear programming approach is adopted where “ore bins” are created and the maximum tonnage of blended ore is assembled that meets the product specification of each of the BID and CID brands. Since the quality of mineralisation varies with time at each deposit and site, the cut-off grade(s) can also vary with time to achieve the required product outcome. Due to the methodology, and opportunistic blending, a fixed cut-off is not used for Ore Reserve reporting. However, Fe cut-off and SiO_2 cut-off for each major ore type deposit can be applied to approximate the Ore Reserve outcome. The Fe grade that most closely approximates the Ore Reserve for all deposits is 53.5%
<table>
<tr><td>Cloudbreak</td><td>53.5</td></tr>
<tr><td>Christmas Creek</td><td>53.5</td></tr>
<tr><td>Firetail</td><td>53.5</td></tr>
<tr><td>Kings</td><td>52.0</td></tr>
<tr><td>Queens</td><td>53.0</td></tr>
<tr><td>Eliwana</td><td>55.5</td></tr>
</table></td></tr>
<tr><td>Mining factors or assumptions</td><td>Both the Chichester and Solomon resource models are estimated into parent block and sub-cells and are regularised to a common block size to match the Grade Control (GC) models (typically 12.5m x 12.5m x 1m) to allow for model merging.
After regularisation, the resource models are merged with Grade Control models (built to a common origin and orientation as the GC models) to reflect the greatest level of detailed information available for each deposit.</td></tr>
</table>

Criteria	Commentary
	Both the Chichester and Solomon merged models are then regularised to the most appropriate block size to simulate the expected mining selectivity, dilution and ore loss for the mining method applied at each deposit (eg 25m x 25m x 3m). The resulting models are compared with sales data over the prior twelve months to derive reconciliation factors (for both the Resource and GC modelled areas) that are then applied to the in-situ regularised tonnage and quality attributes to create the adjusted Run Of Mine (ROM) estimates of tonnage and grade in the "Mining Model". Ore Processing Facility (OPF) upgrade factors (predicted based on test-work and/or reconciled from actual OPF upgrade performance) are then applied to the ROM data to create a "product" data set. There is no beneficiation associated with ore directed to the Firetail OPF at Solomon, so the ROM values constitute the product data set. It is this product dataset that is used as the basis for both LOM and Ore Reserve plans and Ore Reserve reporting. Chichester pit geometry with an average overall slope angle of approximately 40 degrees are optimised based on the latest available excavator mining models with inferred materials included in the optimisation. Due to the Chichester ore body flat and shallow nature, no detailed ultimate pit designs are maintained, optimised pit shells are used directly for mine scheduling. Solomon pits are fully designed geometries with dimensions consistent with the scale of mining equipment employed, and geotechnical and operational considerations made. The LOM plan fully includes Inferred mineralisation. For the Ore Reserve plan, only Measured and Indicated Mineral Resources are considered. Inferred mineralisation is treated as waste for the purposes of scheduling, reporting and financial valuation of the Ore Reserve.
Metallurgical factors or assumptions	Cloudbreak (CB) and Christmas Creek (CC) mineralisation is all treated through 3 existing wet processing plants at a collective Reserve design rate of 90 (wet) Mt of product per annum. Processing consists of primary, secondary and tertiary crushing; screening, and downstream beneficiation based on particle sizing and density. Low grade reject is directed to wet tailings disposal facilities. The processes are well tested and the sites have developed an operating history for both mass yield and element upgrades for typical OPF feed to supplement historical test-work. Specifically, CB OPF yields and upgrades are based on recent test work carried out on diamond drill core. This program aimed to better predict up-coming mineralisation types. Previous 12 months operating history is then used to augment these factors. CC OPF yields and upgrades are based on the last 12 months operating history which demonstrates a sustained ability to achieve these factors over the longer term. Kings OPF factors were developed to reflect recent test-work and the last 12 months operating history. Firetail OPF is a dry plant with 100% yield and no upgrading.
Environmental	The CB and CC mines and associated infrastructure were initially approved under the *Iron Ore (Fortescue Chichester Pty Ltd) Agreement Act 2006* (State Agreement) per CB Ministerial Statement 721 and CC Ministerial Statement 707 and subsequent amendments. Scope of these approvals included mine pits, ore processing facilities, tailings storage facilities, above ground landforms, rail, conveyors, camps, roads, water abstraction and injection infrastructure and other infrastructure associated with mining. Significant changes relative to these primary approvals are subject to assessment by both State and Commonwealth entities including the WA Environmental Protection Authority (EPA) and other State authorities and the Department of the Environment and Energy (DoEE). Such revision to the Cloudbreak mine was approved by Ministerial Statement 0899 in June 2012 and the Federal Approval EPBC 2010/5696 in November 2012. A revised Christmas Creek Proposal was approved by Ministerial Statement 1033 in August 2016 and EPBC 2013/7055 in January 2017. Operating licences (L8199/2007/2 for CB and L8454/2010/2 for CC) and various Works Approvals issued by the WA Department of Water and Environmental Regulation (DWER) are in place for both sites.

Criteria	Commentary
	The Solomon project was initially referred to the EPA under Part IV of the Environmental Protection Act (EP Act) in July 2010 and State Ministerial approval was granted in April 2011 subject to the conditions of Ministerial Statement (MS) 862. Subsequent project amendments to MS 862 addressed an increase to the railway footprint (2011) and additional bore field clearing (2013). The project was also assessed and approved by the ~~(~~DoEE~~)~~ under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). A revised Solomon Proposal was approved by Ministerial Statement 1062 in October 2017 and EPBC 2014/7275 in June 2018. The Solomon project is also subject to regulation by the DWER through Part V of the EP Act and Fortescue holds a number of Works Approvals and a Licence for the site. Construction of the mine(s) and associated infrastructure is also subject to assessment and approval by way of Mining Proposals as required under Section 82A(2) of the Mining Act 1978 administered by the Department of Mines, Industry Regulation and Safety. Fortescue also holds a number of licences under the Rights in Water and Irrigation Act 1914 for the abstraction of groundwater issued by DWER. Future amendments to existing approvals and licences will be sought on a routine basis as more information is gathered during the course of normal mining and processing operations.
Infrastructure	All mine sites are well established with all required infrastructure and services already in place. As the centre of gravity of ore mining operations moves further away from existing OPF's, additional remote crushing and ore conveying facilities and associated infrastructure will be established on an as-needed basis to offset higher ore haulage costs. The scheduling optimisation process has included the capex required for mine development and transport for Queens deposit development at Solomon and the Kutayi deposit at the Chichesters. The capital cost of construction of the Eliwana mine and associated infrastructure has also been included in the Ore Reserves Schedule.
Costs	The majority of planned capital costs to support operations are sunk. Future capital costs, including sustaining capital are subject to normal annual budget financial analysis standards. Operating costs are derived based on operating history and LOM cost target prediction. Rail freight and port handling costs are internal costs and are forecast based on operating history. Sea freight rates are forecast based on operating history and external sources. OPF treatment costs are based on operating history and LOM cost target prediction. An iron ore fines royalty of 7.5% is payable for non-beneficiated product. For that portion of OPF product that meets the beneficiation criterion the lower royalty of 5% is allowed. The resulting overall average royalty rate is approximately 7.3%. No private royalties are payable.
Revenue factors	Forecast metal prices and exchange rates are based on analysis of internal and external sources. Forecast sales prices and adjustments used to determine Ore Reserves consider market prices for equivalent products, value-in-use assessment plus global industry capacity and consumption trends. The forward price profile is commercially sensitive and is not disclosed. The individual Cloudbreak, Christmas Creek and Firetail BID OPF products are blended at the port to create Western Pilbara Fines (WPF), Fortescue Blend (FB) and Super Special Fines (SSF). These products are sold based on Fe content at a price adjustment to the 62% Fe benchmark price. The Kings OPF treats Channel Iron Deposit (CID) plus minor detrital and bedded (DID and BID) ore to produce Kings (KCID) CID products. The KCID product is sold based on Fe content at a price adjustment to the 62% Fe benchmark price.
Market assessment	The majority of current and future Fortescue iron ore sales are expected to be to Chinese customers with an increasing proportion to other Asian customers. Demand in this market is driven by internal consumption. Fortescue has demonstrated it can compete successfully with other suppliers and adapt products to match changing market requirements. Current Fortescue product blend

Criteria	Commentary
	ratios are maintained over the near term (approx. 5 years) and then determined by schedule optimisation to decide the optimum product ratios to deliver highest Net Present Value (NPV).
Economic	Economic analysis is based on discounted cash flow assessment to derive the NPV of the Ore Reserves plan. The NPV robustness is tested by carrying out a +/-30% sensitivity analysis of the major financial drivers (price, foreign exchange rate, opex, capex and discount rate). These sensitivity analyses demonstrate that the Ore Reserves meet the required internal Fortescue investment criteria and deliver positive NPV outcomes. The details of the economic inputs are commercially sensitive and are not disclosed.
Social	The Cloudbreak and Christmas Creek project areas are within the external boundaries of the Nyiyaparli and Palyku native title determinations. In 2005, Fortescue entered into comprehensive Land Access Agreements (LAA) with the Nyiyaparli and Palyku traditional owners. The LAA's facilitate the certain grant of all required Fortescue tenure and related approvals. In consideration, Fortescue provides the traditional owners with: training, employment, business opportunity, and consultation on a range of project–related matters including regular on-country meetings, comprehensive Aboriginal heritage identification and management procedures, and cash compensation. In 2016, Fortescue entered into Indigenous Land Use Agreements (ILUA) with the Kariyarra, Palyku and Nyiyaparli People. An ILUA is a statutory agreement arising out of the Native Title Act 1993 (Cth). Once registered, the ILUA binds all persons 'who hold or may hold' native title over the relevant areas of land and waters. The ILUAs also empower the Government to dispense with the statutory timeframes required for native title processes before granting new tenure to Fortescue. In this way, the ILUAs provide greater certainty to Fortescue's existing and future tenement holdings. On 15 December 2016, the ILUA between Fortescue and the Nyiyaparli People was registered on the National Native Title Tribunal's Register of Indigenous Land Use Agreements. On 3 November 2017, the ILUA between Fortescue and Palyku was registered and on 8 March 2018, the ILUA between Fortescue and Kariyarra was registered on the National Native Title Tribunal's Register of Indigenous Land Use Agreements. The ILUAs augment rather than replace the LAAs. The Solomon project area is within the Eastern Guruma and the Yindjibarndi #1 native title determination area. In 2009, Fortescue entered into a comprehensive Land Access Agreement (LAA) with the Eastern Guruma traditional owners. The LAA facilitates the certain grant of all required Fortescue tenure and related approvals. In consideration, Fortescue provides the Eastern Guruma People with training, employment, business opportunity, consultation on a range of project–related matters including regular on-country meetings, comprehensive Aboriginal heritage identification and management procedures, and cash compensation. Fortescue has developed an excellent working relationship with Yindjibarndi People through the Wirlu-Murra Yindjibarndi Aboriginal Corporation (WMYAC). In partnership with the WMYAC Fortescue has delivered significant training, employment, business development opportunity to Yindjibarndi people and protection of heritage areas identified as being important to Yindjibarndi People. Fortescue has secured all tenure required to access and develop the Solomon Mineral Resource and Ore Reserve through the processes provided under the Native Title Act 1993 (Cth), and is confident that this will continue into the future.
Other	Approvals status is addressed under the environmental section. There are reasonable grounds to assume that required Government approvals will continue to be granted within the timeframes anticipated in the mine schedules supporting the Ore Reserve reporting. There are no material legal agreements or marketing agreements that are anticipated to impact on the Ore Reserve.

Criteria	Commentary
	This year, Mr Chris Fowers was lead CP, and estimates were compiled under his direction, with and Mr Martin Slavik as assisting CP and Mr Jamie Davies as CP-in-training.
Classification	Proven Ore Reserves stated are all derived from Measured Mineral Resources. The majority of Measured Mineral Resources and Proved Ore Reserve are located in areas that have been infill drilled on a close-spaced 25m x 25m grade control (GC) pattern. Probable Ore Reserves are all derived from Indicated Mineral Resources, and no Inferred Mineral Resource has been converted to Ore Reserve. The Competent Person agrees that the classification properly represents the risk associated with the Ore Reserve estimate.
Audits or reviews	An Ore Reserve Estimation Audit focusing on the contribution made by the Valley of Kings (VK) deposit to the EOFY2019 Fortescue Hematite Ore Reserve was carried out by external Golders Consultants in May and June 2019. No material issues with the input data, assumptions or output from the Ore Reserves Estimation process, were identified during this review. A number of recommendations were made for process improvement, and many of these have been adopted. The internal Fortescue Ore Reserve process includes progressive multi-disciplinary technical peer review and is a sub-set of the annual LOM planning process. Annual auditing of various aspects of Mineral Resources and Ore Reserves estimation is carried in accordance with the Resources and Reserves Audit Calendar, overseen by the Audit and Risk Management Committee (ARMC) of Fortescue Board of Directors.
Discussion of relative accuracy/ confidence	The Fortescue mine sites contributing to Ore Reserves have been active for a number of years at full mining and processing rates with production data collected and reconciled against Mining model predictions. The reconciliation data is used to measure against and, when necessary, recalibrate the Mining models that the Ore Reserves estimates are derived from. The operating history of the last 12 months of mining in the Chichesters and Solomon areas has been incorporated into the reconciliation process and is reflected in the factors applied to the mining models used for this year's Ore Reserves estimate.

Competent Person's Statements

The information in this report that relates to the Fortescue Ore Reserve is based on information compiled and reviewed by Mr Chris Fowers (lead Competent Person), Mr Martin Slavik (assisting Competent Person) and Mr Jamie Davies (Competent Person-in-training). All Competent Persons are Members of The Australasian Institute of Mining and Metallurgy. Mr Fowers, Mr Slavik and Mr Davies are full-time employees of Fortescue Metals Group Limited. Mr Fowers and Mr Slavik have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Fowers and Mr Slavik consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1
Eliwana Hematite Deposit
Section 4 Estimation and Reporting of Ore Reserves

Criteria	Commentary
Mineral Resource estimate for conversion to Ore Reserves	The Eliwana individual resource model described in Section 3, is the basis for the conversion to Ore Reserves position at end of June 2019. The model is regularised to create the Mining Model that forms the basis for Ore Reserve reporting. Mineral Resources are inclusive of the Ore Reserves quoted here.
Site visits	The competent person visited Eliwana in April 2019
Study status	Eliwana is a greenfields operation. Production will begin in 2020. The feasibility study was completed in 2018.
Cut-off parameters	The cut-off grade for Marra Mamba and Brockman ores at Eliwana is greater than or equal to 55.5% Fe.
Mining factors or assumptions	The Mineral Resource models for Eliwana were regularised to a block size of 25 m E x 25 m N x 5 m RL for the Marra Mamba deposits, 25 m E x 25 m N x 10 m RL for West End (Brockman deposit) and 25 m E x 25 m N x 6 m RL for the other Brockman deposits, which was determined to be the selective mining unit following analysis of a range of selective mining units. Dilution and mining recovery were modelled by applying the regularisation process to the sub-block geological model. Pit optimisations, utilising Limiting Strip Ratio (LSR) methodology were undertaken. This optimisation utilised the regularised Mineral Resource model together with cost, revenue and geotechnical inputs. The resultant pit shells were used to develop detailed pit designs with due consideration of geotechnical, geometric and access constraints. These pit designs were used as the basis for production scheduling and economic evaluation. Conventional mining methods (truck and shovel) similar to other Fortescue operating mines are utilised. Geotechnical design recommendations for the Eliwana Feasibility Study have been supplied based on geotechnical studies of 16 fully cored and geotechnically logged diamond drill holes (totalling 5,940 m). The resultant design recommendations produce inter-ramp slope angles varying between 27 and 56 degrees depending on the local rock mass, hydrogeology, and structural geological conditions.
Metallurgical factors or assumptions	The Eliwana ore is to be processed through a dry crush and screen plant with 100% yield and no upgrading.
Environmental	The Environmental Review Document (ERD) includes a detailed impact assessment and description of proposed mitigation and management measures for the environmental factors identified in the Environmental Scoping Document. The Eliwana Proposals were referred to the Western Australia Environmental Protection Authority (EPA) under Section 38 of the EP Act on the 3rd and 7 July 2017 for the Rail and Mine proposals respectively. The EPA determined both Proposals required assessment under Part IV of the EP Act and set the level of assessment at Public Environmental review (PER). The EPA released its report, recommending the projects be approved, on 29 April and 24 June 2019. The projects are currently under consideration by the WA Minister for the Environment for approval. Both Proposals were also referred under Section 68 of the EPBC Act to the DoEE on 23 August 2017. The DoEE determined that both Proposals had the potential to impact upon Matters of National Environmental Significance and were therefore considered to be controlled actions.
Infrastructure	Proposed infrastructure includes; • Ore Processing Facility and associated conveyors • Stockyard and Train Loadout facilities

Criteria	Commentary
	• Railway extension between Eliwana and Solomon • Roads and drainage • Camp • Airport • Buildings/yards/fuel/lube • Borefields/water supply/distribution • Water treatment plants • Power Supply and distribution • IT and Communications • AN Facility • Mine Roads and associated infrastructure • Surface and pit water management • Waste storage areas • ROM and Stockpile areas
Costs	Eliwana operating costs were benchmarked against similar operating Fortescue mine sites. The capital costs for Eliwana are based on the Feasibility Study, utilising experience from the construction of existing similar Fortescue projects in the Pilbara, Western Australia. Transportation costs were based on existing operating experience at Fortescue sites in the Pilbara, Western Australia. Allowances have been made for royalties to the Western Australian government.
Revenue factors	Eliwana ore will be a contributor to the existing Fortescue product suite - Western Pilbara Fines (WPF), Fortescue Blend (FB) and Super Special Fines (SSF). These products are sold based on Fe content at a price adjustment to the 62% Fe benchmark price. Forecast sales prices and adjustments used to determine Ore Reserves consider market prices for equivalent products, value-in-use assessment plus global industry capacity and consumption trends. The forward price profile is commercially sensitive and is not disclosed.
Market assessment	The majority of current and future Fortescue iron ore sales are expected to be to Chinese customers with an increasing proportion to other Asian customers. Demand in this market is driven by internal consumption. Fortescue has demonstrated it can compete successfully with other suppliers and adapt products to match changing market requirements. Current Fortescue product blend ratios are maintained over the near term (approx. 5 years) and then determined by scheduling optimiser to decide the optimum product ratios to deliver highest Net Present Value (NPV).
Economic	Economic analysis is based on discounted cash flow assessment to derive the NPV of the Ore Reserves plan. The NPV robustness is tested by carrying out a +/-30% sensitivity analysis of the major financial drivers (price, foreign exchange rate, opex, capex and discount rate). These sensitivity analyses demonstrate that the Ore Reserves meet the required internal Fortescue investment criteria and deliver positive NPV outcomes. The details of the economic inputs are commercially sensitive and are not disclosed.
Social	Eliwana is located within the Puutu Kunti Kurrama and Pinikura (PKKP) and Eastern Guruma Native Title Determination areas. Fortescue signed an LAA with Wintawari Guruma Aboriginal Corporation, Eastern Guruma's Prescribed Body Corporate' on 15 December 2009, which facilitates Fortescue's exploration and mining activities within the Native Title Determination area. Fortescue meets with and consults regularly with the Traditional Owners over all

Criteria	Commentary

	aspects relating to the identification, protection and management of their cultural heritage, consistent with Heritage Legislation and the Cultural Heritage Principles agreed between Fortescue and the Traditional Owners as set out in the LAA.
	Fortescue signed a Land Access Agreement (LAA) with the PKKP people on 28 May 2010, which facilitates Fortescue's exploration and mining activities within the Native Title Determination area. Fortescue also engages in regular consultation with the PKKP People, to ensure traditional owners remain informed about the progress of Fortescue projects. This ensures that, under DAA Cultural Heritage Due Diligence Guidelines, all Fortescue works are conducted consistent with Heritage Legislation and industry standard Cultural Heritage Principles.
	Heritage surveys commissioned for the MDE and involve anthropologists, archaeologists and representatives from the Traditional Owners. The surveys are consistent with the requirements and expectations for heritage surveys as defined in the EPA Guidance Statement Number 41: Assessment of Aboriginal Heritage (EPA, 2004c) and the Aboriginal Heritage Act 1972. The surveys identified over 500 archaeological sites and six ethnographic sites within the MDE. Archaeological sites are places where evidence of the past activities of Aboriginal groups or people has been preserved; they typically comprise artefacts and/or features. While ethnographic sites are places known to Traditional Owners as part of their cultural traditions, and typically have mythological or ceremonial meaning.
	
	Avoidance
	• Disturbance to sites of archaeological or ethnographic significance will be avoided where practicable and in accordance with the requirements of the Aboriginal Heritage Act 1972.
	
	Minimisation
	• Disturbance to sites of archaeological or ethnographic significance will be planned and managed in consultation with Traditional Owners and the DAA as detailed in the Fortescue Guideline for the Management of Aboriginal Cultural Heritage (45-PL-HE-0002).
	• Fortescue will continue to consult with the relevant Native Title Groups and obtain approval under Section 18 of the *Aboriginal Heritage Act 1972* as required, prior to the disturbance of any heritage sites. Heritage Sites will be managed in accordance with the *Management of Aboriginal Cultural Heritage, Fortescue Project Areas, Revision 2 (*100-GU-HE-0003*)*.
	• Fortescue also uses key heritage principles outlined in the existing LAAs for all exploration and expansion work yet to be finalised with the Traditional Owners, including work in the Proposal area. In addition, Fortescue regularly consults with the Traditional Owners for matters relating to the protection and management of cultural heritage sites, as well as establishing staff training and education on Aboriginal heritage and cultural awareness
	• In relation to amenity impacts, Fortescue will minimise dust emissions, as far as practicable, through implementation of the Fortescue *Mine and Rail Dust Management Plan* (45-PL-EN-0030), which includes the following requirements:
	  ○ use of water carts on high traffic areas
	  ○ incorporation of dust control measures into project design
	  ○ progressive rehabilitation
	  ○ ambient dust monitoring where appropriate.
	• Noise and vibration will be managed in accordance with the *Mine and Rail Noise Management Plan* (100-PL-EN-0028).
	
	Rehabilitation/Revegetation
	• Rehabilitation and closure of the Proposal will be undertaken to meet land use outcomes agreed in consultation with Native Title Groups.
	
	Offset

Criteria	Commentary
	• As part of previous projects, Fortescue has contributed to community services and facilities, regional development and local procurement of goods and services (FMG, 2008). • Fortescue has a target to achieve spending of 10% of total procurement with Aboriginal businesses by 2021 (currently 7% in FY19). In FY19, Fortescue spent approximately A$230 million with 54 Aboriginal businesses. Since its inception in 2011, Fortescue's Billion Opportunities initiative has awarded contracts, sub-contracts and new works worth A$2.3 billion to 117 Aboriginal-owned businesses and joint ventures. • Aboriginal people currently make up 15.0 % of Fortescue's mining operational workforce. Fortescue has a target of achieving an employment rate of 20 % for Aboriginal people across Fortescue by 2020 (Fortescue Metals Group Limited, 2017). • Training and employment of Aboriginal people is undertaken through the Fortescue funded Vocational Training and Employment Centre (VTEC) in South Hedland and Roebourne/Karratha (FMG, 2011b). Training programs include Fortescue values and safety commitments, leadership, teamwork and communication development, time management and information technology skills, financial management and health/wellbeing courses with wrap around support and mentoring throughout– all designed to prepare students for successful employment. Since the establishment of VTEC in 2006, Fortescue has provided training and employment opportunities and support to more than 1,500 Aboriginal people (Fortescue Metals Group Limited, 2017)
Other	Approvals status is addressed under the environmental section. There are reasonable grounds to assume that required Government approvals will continue to be granted within the timeframes anticipated in the mine schedules supporting the Ore Reserve reporting. There are no material legal agreements or marketing agreements that are anticipated to impact on the Ore Reserve.
Classification	Proven Ore Reserves stated are all derived from Measured Mineral Resources. The majority of Measured Mineral Resources and Proved Ore Reserve are located in areas that have been infill drilled on a close-spaced 25m x 25m grade control (GC) pattern. Probable Ore Reserves are all derived from Indicated Mineral Resources, and no Inferred Mineral Resource has been converted to Ore Reserve. The Competent Person agrees that the classification properly represents the risk associated with the Ore Reserve estimate.
Audits or reviews	No external audits have been performed on the Ore Reserves estimate, however the deposit Resource modelling has been audited and validated by External independent consultants. Internal Fortescue peer review process and internal Fortescue technical reviews have been completed as part of the Feasibility Studies. These reviews concluded that the fundamental data collection techniques and assumptions used are appropriate.
Discussion of relative accuracy/ confidence	Fortescue operates multiple mines in the Pilbara region of Western Australia. The Ore Reserve estimation techniques utilised for Eliwana deposits are consistent with those applied at the existing operations. Reconciliation of actual production with planning model estimates for individual deposits is generally within 2 percent for tonnes and grades on an annual basis. This result is indicative of a robust Ore Reserve estimation process.

Competent Person's Statements

The information in this report that relates to the Fortescue Ore Reserve is based on information compiled and reviewed by Mr Chris Fowers (lead Competent Person), Mr Martin Slavik (assisting Competent Person)

and Mr Jamie Davies (Competent Person-in-training). All Competent Persons are Members of The Australasian Institute of Mining and Metallurgy. Mr Fowers, Mr Slavik and Mr Davies are full-time employees of Fortescue Metals Group Limited. Mr Fowers and Mr Slavik have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Fowers and Mr Slavik consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Fortescue
The New Force in Iron Ore

Attachment 2
Magnetite Ore Reserve and Resources Report

Iron Bridge Magnetite Mineral Resources and Ore Reserves Reporting
as at 30th June 2019

Magnetite Mineral Resources and Ore Reserves

Details of updated Mineral Resources and Ore Reserves were provided in an ASX release entitled 'Iron Bridge Magnetite Mineral Resources and Ore Reserves Update: Operating Properties' (2nd April 2019). There has been no change to the stated Mineral Resources and Ore Reserves so they have not been re-stated in this document.